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P698I



United States
Department of
Agriculture

Agricultural
Research
Service

Plant Inventory No. 199, Part II

Plant Materials Introduced
July 1 to December 31, 1990
(Nos. 541500 to 546348)



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CONTENTS

Inventory	3
Index	
Scientific names	684
Common names	689
Acronyms	691

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

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10301 Baltimore Blvd
Beltsville, MD 20705-2351

PI 541500 to 541504. *Pyrus communis* L. ROSACEAE Pear

Donated by: Hill, Russel, 23675 A Grange Street, Covelo, California, United States. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received February 29, 1988.

PI 541500 **origin:** United States. **cultivar:** Fox. Perennial. Cultivar. Cutting.

PI 541501 **origin:** United States. **developer country:** United States. **cultivar:** June Sugar. Perennial. Cultivar. Cutting.

PI 541502 **origin:** United States. **developer country:** Europe. **cultivar:** Louise Bonne d'Avanches. **pedigree:** Uncertain. Perennial. Cultivar. Cutting.

PI 541503 **origin:** United States. **cultivar:** Sheldon. Perennial. Cultivar. Cutting.

PI 541504 **origin:** United States. **cultivar:** Tyson. Perennial. Cultivar. Cutting.

PI 541505 to 541506. *Pyrus communis* L. ROSACEAE Pear

Donated by: Bear Creek Nursery, Northport, Washington, United States. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received March 08, 1988.

PI 541505 **origin:** United States. **developer country:** United States. **origin institute:** St. Lawrence Nurseries, Potsdam, New York 13676. **cultivar:** Nova. Perennial. Cultivar. Cutting.

PI 541506 **origin:** United States. **cultivar:** Tyson. Perennial. Cultivar. Cutting.

PI 541507. *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 April 04, 1988.

origin: United States. **pedigree:** Seedling selection. Perennial. Breeding Material. Cutting.

PI 541508 to 541509. *Pyrus communis* L. ROSACEAE Pear

Donated by: Gebhardt Orchards, Central Point, Oregon, United States.
remarks: *Pyrus* accessions at NCGR-Corvallis being numbered.
Received April 04, 1988.

PI 541508 **origin:** United States. **origin institute:** Gebhart Orchard, 446 Beebe Road, Central Point, Oregon 97502.
cultivar: Anjou - Gebhart Red. **pedigree:** Sport of Gebhart Red Anjou. Perennial. Cultivar. Cutting.

PI 541509 **origin:** United States. **origin institute:** Gebhart Orchard, 446 Beebe Road, Central Point, Oregon 97502.
cultivar: Bosc - Gebhart Russetless. **pedigree:** Sport on young Bosc tree. Perennial. Cultivar. Cutting.

PI 541510 to 541523. *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 April 25, 1988.

PI 541510 **origin:** United States. **developer country:** Europe.
cultivar: Fin de Siecle. **pedigree:** Uncertain.
Perennial. Cultivar. Cutting.

PI 541511 **origin:** United States. **developer country:** Europe.
cultivar: Muscat. **pedigree:** Uncertain. Perennial.
Cultivar. Cutting.

PI 541512 **origin:** United States. **developer country:** Europe.
cultivar: Juteuse de Chailly. **pedigree:** Uncertain.
Perennial. Cultivar. Cutting.

PI 541513 **origin:** United States. **developer country:** France.
cultivar: Jeanne d'Arc. **pedigree:** Buerre Diel x Doyenne du Comice. Perennial. Cultivar. Cutting.

PI 541514 **origin:** United States. **developer country:** Europe.
cultivar: Duchesse Bererd. **pedigree:** Uncertain.
Perennial. Cultivar. Cutting.

PI 541515 **origin:** United States. **developer country:** Belgium.
cultivar: Beurre de Naghin. Perennial. Cultivar.
Cutting.

PI 541516 **origin:** United States. **developer country:** Europe.
cultivar: Doree de Bourgogne. **pedigree:** Uncertain.
Perennial. Cultivar. Cutting.

PI 541510 to 541523-continued

- PI 541517 **origin:** United States. **developer country:** Europe.
cultivar: President Deviolaine. **pedigree:** Uncertain.
Perennial. Cultivar. Cutting.
- PI 541518 **origin:** United States. **developer country:** Europe.
cultivar: Sept en Guele. **pedigree:** Unknown. Perennial.
Cultivar. Cutting.
- PI 541519 **origin:** United States. **developer country:** Belgium.
cultivar: Passe Colmar. **pedigree:** Unknown. Perennial.
Cultivar. Cutting.
- PI 541520 **origin:** United States. **developer country:** Switzerland.
cultivar: Swiss Bergamotte. **pedigree:** Variegated sport
of Bergamotte Suisse. Perennial. Cultivar. Cutting.
- PI 541521 **origin:** United States. **developer country:** France.
cultivar: Pierre Corneille. **pedigree:** Buerre Diel x
Doyenne du Comice. Perennial. Cultivar. Cutting.
- PI 541522 **origin:** United States. **developer country:** France.
origin institute: Baltet Nursery, Troyes, California.
cultivar: Charles Ernest. Perennial. Cultivar.
Cutting.
- PI 541523 **origin:** United States. **developer country:** Europe.
cultivar: Bergamotte de Baillargues. **pedigree:**
Uncertain. Perennial. Cultivar. Cutting.

PI 541524 to 541532. *Pyrus communis* L. ROSACEAE Pear

Donated by: Harrison, Richard, Route 1 Box 433, Marianna, Florida,
United States. **remarks:** *Pyrus* accessions at NCGR-Corvallis being
numbered. Received June 10, 1988.

- PI 541524 **origin:** United States. **developer country:** France.
cultivar: Delbard Premier. Perennial. Cultivar.
Cutting.
- PI 541525 **origin:** United States. **developer country:** Italy.
cultivar: Precoce di Frorano. Perennial. Cultivar.
Cutting.
- PI 541526 **origin:** United States. **developer country:** Italy.
cultivar: Mirandino Mutatao. Perennial. Cultivar.
Cutting.
- PI 541527 **origin:** United States. **developer country:** Italy.
cultivar: Precoce di Cassano. Perennial. Cultivar.
Cutting.

PI 541524 to 541532-continued

- PI 541528 **origin:** United States. **developer country:** France.
cultivar: Claude Blanchet. **pedigree:** Unknown.
Perennial. Cultivar. Cutting.
- PI 541529 **origin:** United States. **developer country:** Italy.
cultivar: San Giovanni. **pedigree:** Unknown. Perennial.
Cultivar. Cutting.
- PI 541530 **origin:** United States. **developer country:** Italy.
cultivar: Tamilosa Mica. Perennial. Cultivar. Cutting.
- PI 541531 **origin:** United States. **developer country:** Italy.
cultivar: Delbard Precoce. Perennial. Cultivar.
Cutting.
- PI 541532 **origin:** United States. **developer country:** Italy.
cultivar: Iazzolo. **pedigree:** Unknown. Perennial.
Cultivar. Cutting.

PI 541533. *Pyrus communis* L. ROSACEAE Pear

Donated by: McCormack, Malcom, Walnut Grove, California, United States. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received August 22, 1988.

origin: United States. **developer country:** United States.
origin institute: Oregon State University, Exp. Sta.,
Medford, Oregon. **cultivar:** Anderson. **pedigree:** Rose of
July x Bartlett. Perennial. Cultivar. Cutting.

PI 541534. *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 26, 1988.

origin: United States. **cultivar:** Doyenne du Comice -
Regal Red. **pedigree:** Red sport of Comice. Perennial.
Cultivar. Plant.

PI 541535 to 541536. *Pyrus communis* L. ROSACEAE Pear

Donated by: Kinney, Lyle, Medford, Oregon, United States. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received January 09, 1989.

PI 541535 to 541536-continued

PI 541535 **origin:** United States. **cultivar:** Doyenne du Comice - Crimson Gem. **pedigree:** Dark red sport of Regal Red. **other id:** Patent Pending. **group:** PEND. **restricted:** PAT. Perennial. Cultivar. Cutting.

PI 541536 **origin:** United States. **cultivar:** Doyenne du Comice - Crimson Gem #2. **pedigree:** Dark red sport of Regal Red. **other id:** Plant Patent ?. **group:** PLNT. **restricted:** PAT. Perennial. Cultivar. Cutting.

PI 541537 to 541538. *Pyrus communis* L. ROSACEAE Pear

Donated by: Raintree Nurseries, Morton, Washington, United States. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received January 19, 1989.

PI 541537 **origin:** United States. **cultivar:** Orcas. **pedigree:** Chance seedling. Perennial. Cultivar. Cutting.

PI 541538 **origin:** United States. **developer country:** Canada. **cultivar:** Rescue. **pedigree:** Unknown, chance seedling. Perennial. Cultivar. Cutting.

PI 541539. *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 January 30, 1989.

origin: United States. **developer country:** France. **origin institute:** Department Orne, Alencon, Virginia. **cultivar:** Figue d'Alencon. Perennial. Cultivar. Cutting.

PI 541540 to 541543. *Pyrus communis* L. ROSACEAE Pear

Donated by: Ellis, Mary, Brogdale Expt. Hort. Sta., National Fruit Trials, Brogdale Road, Faversham, Kent, England, United Kingdom. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received February 15, 1989.

PI 541540 **origin:** United Kingdom. **origin institute:** Laxton Bros. Ltd., Bedford, England. **cultivar:** Laxton's Record. **pedigree:** Marie Louise x Doyenne du Comice. Perennial. Cultivar. Cutting.

PI 541540 to 541543-continued

- PI 541541 **origin:** United Kingdom. **origin institute:** Laxton Bros. Ltd., Bedford, England. **cultivar:** Laxton's Early Market. **pedigree:** Marie Louise x Doyenne d'Ete. Perennial. Cultivar. Cutting.
- PI 541542 **origin:** United Kingdom. **origin institute:** Laxton Bros. Ltd., Bedford, England. **cultivar:** Laxton's Foremost. **pedigree:** Marechal du Cour x Fertility. Perennial. Cultivar. Cutting.
- PI 541543 **origin:** United Kingdom. **origin institute:** Laxton Bros. Ltd., Bedford, England. **cultivar:** Laxton's Superb. **pedigree:** Buerre Superfin x William's Bon Chretien. Perennial. Cultivar. Cutting.

PI 541544 to 541558. *Pyrus communis* L. ROSACEAE Pear

Donated by: Lanterman, Dr. W.S., Saanichton Research and Plant, Quarantine Station, Saanichton, British Columbia, Canada. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received February 28, 1989.

- PI 541544 **origin:** Canada. **cultivar:** General Tottleben. Perennial. Cultivar. Cutting.
- PI 541545 **origin:** Canada. **developer country:** United Kingdom. **cultivar:** Princess. **pedigree:** OP seedling of cultivar Louise Bonne. Perennial. Cultivar. Cutting.
- PI 541546 **origin:** Canada. **developer country:** Canada. **origin institute:** Agriculture Canada, Experiment Station, Ontario. **cultivar:** Ottawa 291. Perennial. Breeding Material. Cutting.
- PI 541547 **origin:** Canada. **developer country:** United States. **origin institute:** University of Minnesota, Fruit Breeding Farm, Excelsior, Minnesota. **cultivar:** Golden Spice. **pedigree:** Unknown. Perennial. Cultivar. Cutting.
- PI 541548 **origin:** Canada. **cultivar:** Gifford. Perennial. Cultivar. Cutting.
- PI 541549 **origin:** Canada. **cultivar:** Pioneer #3. Perennial. Cultivar. Cutting.
- PI 541550 **origin:** Canada. **developer country:** France. **cultivar:** Remy Chaternay. Perennial. Cultivar. Cutting.
- PI 541551 **origin:** Canada. **developer country:** France. **cultivar:** Poirier Fleurissant Tard. Perennial. Cultivar. Cutting.

PI 541544 to 541558-continued

- PI 541552 **origin:** Canada. **cultivar:** Doyenne Perrault. Perennial. Cultivar. Cutting.
- PI 541553 **origin:** Canada. **developer country:** France. **cultivar:** Jeanne d'Arc. **pedigree:** Buerre Diel x Doyenne du Comice. Perennial. Cultivar. Cutting.
- PI 541554 **origin:** Canada. **cultivar:** Frangipane. **pedigree:** Unknown. Perennial. Cultivar. Cutting.
- PI 541555 **origin:** Canada. **developer country:** Italy. **cultivar:** Fiorenza. Perennial. Cultivar. Cutting.
- PI 541556 **origin:** Canada. **cultivar:** Ure. Perennial. Cultivar. Cutting.
- PI 541557 **origin:** Canada. **developer country:** Italy. **cultivar:** Coscia. **pedigree:** Chance seedling. Perennial. Cultivar. Cutting.
- PI 541558 **origin:** Canada. **developer country:** Italy. **cultivar:** Spina Carpi. **pedigree:** Unknown. Perennial. Cultivar. Cutting.

PI 541559. *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 May 25, 1989.

origin: United States. **origin institute:** Oregon State University, Experiment Station, Medford, Oregon.
pedigree: Comice x Louis Pasteur. Perennial. Breeding Material. Cutting.

PI 541560 to 541562. *Pyrus communis* subsp. *caucasica* (Fed.) Browicz
ROSACEAE Pear

Donated by: Lombard, Dr. Porter, Oregon State University, Department of Horticulture, Cordley Hall 2042, Corvallis, Oregon, United States. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received February 21, 1981.

PI 541560 **origin:** USSR. **developer country:** United States. **origin institute:** Oregon State University, Experiment Station, Medford, Oregon. **cultivar:** Mag 5. **pedigree:** Seedling selection from seed collected in Russia. Perennial. Breeding Material. Plant.

PI 541560 to 541562-continued

PI 541561 **origin:** USSR. **developer country:** United States. **origin institute:** Oregon State University, Experiment Station, Medford, Oregon. **cultivar:** Mag 2. **pedigree:** Seedling selection from seedlot collected in Russia. Perennial. Breeding Material. Plant.

PI 541562 **origin:** USSR. **developer country:** United States. **origin institute:** Oregon State University, Experiment Station, Medford, Oregon. **cultivar:** Mag 6. **pedigree:** Seedling selection from seed collected in Russia. Perennial. Breeding Material. Plant.

PI 541563. *Pyrus communis* subsp. *caucasica* (Fed.) Browicz 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.

origin: USSR. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seed collected in Russia. Perennial. Breeding Material. Plant.

PI 541564. *Pyrus communis* subsp. *caucasica* (Fed.) Browicz 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.

origin: USSR. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Uncertain, seedling selection?. Perennial. Breeding Material. Cutting.

PI 541565. *Pyrus communis* subsp. *caucasica* (Fed.) Browicz ROSACEAE
Pear

Donated by: Vitkovskij, Prof. V.L, N.I. Vavilov Institute, 44 Herzen Str., Leningrad, Soviet Union. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received March 16, 1987.

origin: USSR. **pedigree:** Collected from the wild in the Soviet Union. Perennial. Wild. Seed.

PI 541566. *Pyrus communis* subsp. *caucasica* (Fed.) Browicz ROSACEAE
Pear

Donated by: Hortus Botanicus Acad. Sci., Tashkent, Uzbek Republic, Soviet Union. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received April 15, 1987.

origin: USSR. **pedigree:** Open-pollinated from botanical collection. Perennial. Cultivated. Seed.

PI 541567. *Pyrus communis* var. *pyraster* 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.

origin: United States. **developer country:** Europe.
pedigree: Uncertain. Perennial. Uncertain. Plant.

PI 541568 to 541569. *Pyrus communis* var. *pyraster* 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 541568 **origin:** Hungary. **developer country:** United States.
origin institute: Arnold Arboretum, Jamaica Plain, Massachusetts. **pedigree:** Seedling selection from seedlot collected wild in Hungary. Perennial. Breeding Material. Plant.

PI 541569 **origin:** Hungary. **developer country:** United States.
origin institute: Morton Arboretum, Lisle, Illinois.
pedigree: Seedling selection from seedlot collected wild in Hungary. Perennial. Breeding Material. Plant.

PI 541570 to 541582. *Pyrus cordata* Desv. 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 541570 **origin:** Turkey. **developer country:** United States.
origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seed collected in Turkey. Perennial. Breeding Material. Plant.

PI 541570 to 541582-continued

- PI 541571 **origin:** Turkey. **developer country:** United States.
origin institute: Oregon State University, Dept.
Horticulture, Corvallis, Oregon. **pedigree:** Seedling
selection from seed collected in Turkey. Perennial.
Breeding Material. Plant.
- PI 541572 **origin:** Turkey. **developer country:** United States.
origin institute: Oregon State University, Dept.
Horticulture, Corvallis, Oregon. **pedigree:** Seedling
selection from seedlot collected in Turkey. Perennial.
Breeding Material. Plant.
- PI 541573 **origin:** Turkey. **developer country:** United States.
origin institute: Oregon State University, Dept.
Horticulture, Corvallis, Oregon. **pedigree:** Seedling
selection from seedlot collected in Turkey. Perennial.
Breeding Material. Plant.
- PI 541574 **origin:** Turkey. **developer country:** United States.
origin institute: Oregon State University, Dept.
Horticulture, Corvallis, Oregon. **pedigree:** Seedling
selection from seedlot collected in Turkey. Perennial.
Breeding Material. Plant.
- PI 541575 **origin:** Turkey. **developer country:** United States.
origin institute: Oregon State University, Dept.
Horticulture, Corvallis, Oregon. **pedigree:** Seedling
selection from seedlot collected in Turkey. Perennial.
Breeding Material. Plant.
- PI 541576 **origin:** Turkey. **developer country:** United States.
origin institute: Oregon State University, Dept.
Horticulture, Corvallis, Oregon. **pedigree:** Seedling
selection from seedlot collected in Turkey. Perennial.
Breeding Material. Plant.
- PI 541577 **origin:** France. **developer country:** United States.
origin institute: Oregon State University, Dept.
Horticulture, Corvallis, Oregon. **pedigree:** Seedling
selection from seedlot collected wild in France.
Perennial. Breeding Material. Plant.
- PI 541578 **origin:** France. **developer country:** United States.
origin institute: Oregon State University, Dept.
Horticulture, Corvallis, Oregon. **pedigree:** Seedling
selection from seedlot collected wild in France.
Perennial. Breeding Material. Plant.

PI 541570 to 541582-continued

PI 541579 **origin:** France. **developer country:** United States.
origin institute: Oregon State University, Dept.
Horticulture, Corvallis, Oregon. **pedigree:** Seedling
selection from seedlot collected wild in France.
Perennial. Breeding Material. Plant.

PI 541580 **origin:** France. **developer country:** United States.
origin institute: Oregon State University, Dept.
Horticulture, Corvallis, Oregon. **pedigree:** Seedling
selection from seedlot collected wild in France.
Perennial. Breeding Material. Plant.

PI 541581 **origin:** France. **developer country:** United States.
origin institute: Oregon State University, Dept.
Horticulture, Corvallis, Oregon. **pedigree:** Seedling
selection from seedlot collected wild in France.
Perennial. Breeding Material. Plant.

PI 541582 **origin:** France. **developer country:** United States.
origin institute: Oregon State University, Dept.
Horticulture, Corvallis, Oregon. **pedigree:** Seedling
selection from seedlot collected wild in France.
Perennial. Breeding Material. Plant.

PI 541583 to 541587. *Pyrus cordata* Desv. ROSACEAE

Donated by: Zielinski, Dr. Q.B., Oregon State University, Dept.
Horticulture, Corvallis, Oregon, United States. **remarks:** *Pyrus*
accessions at NCGR-Corvallis being numbered. Received April 08,
1983.

PI 541583 **origin:** France. **pedigree:** Collected from the wild in
France. **collected:** December 18, 1967. **locality:** Poor
rocky land near Angers Exp. Sta. Perennial. Wild.
Seed.

PI 541584 **origin:** France. **pedigree:** Collected from the wild in
France. **collected:** December 18, 1967. **locality:** Poor
rocky land near Angers Exp. Sta. Perennial. Wild.
Seed.

PI 541585 **origin:** France. **pedigree:** Collected from the wild in
France. **collected:** December 18, 1967. **locality:** Poor
rocky land near Angers Exp. Sta. **latitude:** 47 deg. N.
longitude: 03 deg. E. Perennial. Wild. Seed.

PI 541586 **origin:** France. **pedigree:** Collected from the wild in
France. **collected:** December 18, 1967. **locality:** Poor
rocky land near Angers Exp. Station. Perennial. Wild.
Seed.

PI 541583 to 541587-continued

PI 541587 **origin:** France. **pedigree:** Collected from the wild in France. **locality:** Poor rocky land near Angers Exp. Sta. Perennial. Wild. Seed.

PI 541588 to 541589. *Pyrus cordata* Desv. 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 November 23, 1983.

PI 541588 **origin:** Turkey. **pedigree:** Collected from the wild in Turkey. **locality:** Antalya Vegetable Farm. **latitude:** 39 deg. N. **longitude:** 36 deg. E. Perennial. Wild. Seed.

PI 541589 **origin:** Turkey. **pedigree:** Collected from the wild in Turkey. **locality:** Anatlya Vegetable Farm. **latitude:** 39 deg. N. **longitude:** 36 deg. E. Perennial. Wild. Seed.

PI 541590 to 541591. *Pyrus cordata* Desv. 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 541590 **origin:** Turkey. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection A from seedlot collected in Turkey. Perennial. Breeding Material. Cutting.

PI 541591 **origin:** Turkey. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection B from seedlot collected in Turkey. Perennial. Breeding Material. Cutting.

PI 541592. *Pyrus cossonii* Rehder ROSACEAE Willow-leaved 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 541592-continued

origin: USSR. **developer country:** United States. **origin institute:** Oregon State University, Experiment Station, Medford, Oregon. **pedigree:** Seedling selection from seedlot collected in the USSR. Perennial. Breeding Material. Cutting.

PI 541593. *Pyrus cossonii* Rehder 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: USSR. **developer country:** United States. **origin institute:** Oregon State University, Experiment Station, Medford, Oregon. **pedigree:** Seedling selection from seedlot collected in the USSR. Perennial. Breeding Material. Cutting.

PI 541594. *Pyrus cossonii* Rehder ROSACEAE

Donated by: Royal Botanical Gardens, Kew, England, United Kingdom. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received April 08, 1983.

origin: United Kingdom. **pedigree:** Open pollinated from botanical collection. Perennial. Cultivated. Seed.

PI 541595. *Pyrus dimorphophylla* Makino ROSACEAE

Donated by: Callan, Dr. Nancy, Western Agricultural Research Center, 531 NE Quast Lane, Corvallis, Montana, United States. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received March 24, 1982.

origin: Asia. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seed collected in Asia (Japan?). Perennial. Breeding Material. Plant.

PI 541596 to 541598. *Pyrus dimorphophylla* Makino 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 541596 to 541598-continued

- PI 541596 **origin:** United States. **origin institute:** Oregon State University, Department of Horticulture, Corvallis, Oregon. **Perennial.** **Breeding Material.** **Plant.**
- PI 541597 **origin:** United States. **origin institute:** Oregon State University, Department of Horticulture, Corvallis, Oregon. **Perennial.** **Breeding Material.** **Plant.**
- PI 541598 **origin:** United States. **origin institute:** Oregon State University, Department of Horticulture, Corvallis, Oregon. **Perennial.** **Breeding Material.** **Plant.**

PI 541599 to 541609. *Pyrus dimorphophylla* Makino 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 541599 **origin:** Japan. **developer country:** United States. **origin institute:** Oregon State University, Experiment Station, Medford, Oregon. **pedigree:** Seedling selection from seed collected in Japan. **Perennial.** **Breeding Material.** **Plant.**
- PI 541600 **origin:** Asia. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seed from seedling selection from Asian seedlot. **collected:** October 10, 1964. **Perennial.** **Breeding Material.** **Seed.**
- PI 541601 **origin:** Japan. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seedlot collected in Japan. **Perennial.** **Breeding Material.** **Plant.**
- PI 541602 **origin:** Japan. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seed collected wild in Japan. **Perennial.** **Breeding Material.** **Plant.**
- PI 541603 **origin:** Japan. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Probably a seedling selection from seed collected in Japan. **Perennial.** **Breeding Material.** **Plant.**

PI 541599 to 541609-continued

- PI 541604 **origin:** United States. **origin institute:** Oregon State University, Experiment Station, Medford, Oregon. **pedigree:** P. dimorphophylla x self seedling selection. Perennial. Breeding Material. Plant.
- PI 541605 **origin:** Japan. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection B from seed collected in Japan. Perennial. Breeding Material. Plant.
- PI 541606 **origin:** Japan. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection C from seed collected in Japan. Perennial. Breeding Material. Plant.
- PI 541607 **origin:** Japan. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection B from seed collected in Japan. Perennial. Breeding Material. Plant.
- PI 541608 **origin:** Japan. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection C from seed collected in Japan. Perennial. Breeding Material. Plant.
- PI 541609 **origin:** Japan. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection B from seed collected in Japan. Perennial. Breeding Material. Plant.

PI 541610. *Pyrus dimorphophylla* Makino 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 January 17, 1984.

origin: Japan. **developer country:** United States. **origin institute:** Oregon State University, Research Station, Medford, Oregon. **pedigree:** Seedling selection from seed collected in Japan. Perennial. Breeding Material. Plant.

PI 541611. *Pyrus dimorphophylla* Makino ROSACEAE

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.

origin: United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon.
pedigree: Seedling selection. Perennial. Breeding Material. Plant.

PI 541612. *Pyrus dimorphophylla* Makino ROSACEAE

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 January 22, 1986.

origin: United States. **developer country:** Asia.
pedigree: Uncertain. Perennial. Uncertain. Cutting.

PI 541613 to 541616. *Pyrus elaeagrifolia* Pallas 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 541613 **origin:** Turkey. **developer country:** United States.
origin institute: Oregon State University, Experiment Station, Medford, Oregon. **pedigree:** Seedling selection from seed collected in Turkey. Perennial. Breeding Material. Plant.

PI 541614 **origin:** Turkey. **developer country:** United States.
origin institute: Oregon State University, Experiment Station, Medford, Oregon. **pedigree:** Seedling selection from seed collected wild in Turkey. Perennial. Breeding Material. Plant.

PI 541615 **origin:** Turkey. **developer country:** United States.
origin institute: Oregon State University, Experiment Station, Medford, Oregon. **pedigree:** Seedling selection from seed collected in Turkey. Perennial. Breeding Material. Plant.

PI 541616 **origin:** Turkey. **developer country:** United States.
origin institute: Oregon State University, Experiment Station, Medford, Oregon. **pedigree:** Seedling selection from seed collected in Turkey. Perennial. Breeding Material. Plant.

PI 541617. *Pyrus elaeagrifolia* Pallas ROSACEAE

Donated by: Callan, Dr. Nancy, Western Agricultural Research Center, 531 NE Quast Lane, Corvallis, Montana, United States. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received March 24, 1982.

origin: UNCERTAIN. **developer country:** United States.
origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Probably a seedling selection from wild seed. Perennial. Breeding Material. Plant.

PI 541618 to 541628. *Pyrus elaeagrifolia* Pallas 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 541618 **origin:** United States. **pedigree:** Collected from the wild in Oregon. **collected:** October 07, 1982. **locality:** Corvallis. Perennial. Wild. Seed.

PI 541619 **origin:** United States. **pedigree:** Collected from the wild in Oregon. **collected:** 1980. **locality:** Corvallis. Perennial. Wild. Seed.

PI 541620 **origin:** Europe. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seed from seedling selection from Eurasian seedlot. Perennial. Breeding Material. Seed.

PI 541621 **origin:** Europe. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seed from seedling selection from Eurasian seedlot. Perennial. Breeding Material. Seed.

PI 541622 **origin:** UNCERTAIN. **pedigree:** Collected from the wild. Perennial. Wild. Seed.

PI 541623 **origin:** Turkey. **pedigree:** Collected from the wild in Turkey. **locality:** Cankaya. **latitude:** 39 deg. N. Perennial. Wild. Seed.

PI 541624 **origin:** Turkey. **pedigree:** Collected from the wild in Turkey. **collected:** November 26, 1963. **latitude:** 29 deg. N. Perennial. Wild. Seed.

PI 541625 **origin:** UNCERTAIN. **pedigree:** Collected from the wild. Perennial. Wild. Seed.

PI 541618 to 541628-continued

PI 541626 **origin:** Turkey. **developer country:** United States.
origin institute: Oregon State University, Dept.
Horticulture, Corvallis, Oregon. **pedigree:** Seedling
selection from seedlot collected in Turkey. Perennial.
Breeding Material. Plant.

PI 541627 **origin:** Turkey. **developer country:** United States.
origin institute: Oregon State University, Dept.
Horticulture, Corvallis, Oregon. **pedigree:** Seedling
selection from seed collected in Turkey. Perennial.
Breeding Material. Plant.

PI 541628 **origin:** Turkey. **developer country:** United States.
origin institute: Oregon State University, Dept.
Horticulture, Corvallis, Oregon. **pedigree:** Seedling
selection B from seed collected in Turkey. Perennial.
Breeding Material. Plant.

PI 541629. *Pyrus elaeagrifolia* Pallas ROSACEAE

Donated by: Vitkovskij, Prof. V.L, N.I. Vavilov Institute, 44 Herzen
Str., Leningrad, Soviet Union. **remarks:** *Pyrus* accessions at
NCGR-Corvallis being numbered. Received March 16, 1987.

origin: USSR. **pedigree:** Collected from the wild in the
Soviet Union. Perennial. Wild. Seed.

PI 541630. *Pyrus elaeagrifolia* Pallas ROSACEAE

Donated by: Hortus Botanicus Acad. Sci., Tashkent, Uzbek Republic,
Soviet Union. **remarks:** *Pyrus* accessions at NCGR-Corvallis being
numbered. Received April 15, 1987.

origin: USSR. **pedigree:** Open-pollinated from botanical
collection. Perennial. Cultivated. Seed.

PI 541631. *Pyrus elaeagrifolia* Pallas 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 18, 1989.

origin: Turkey. **developer country:** United States.
origin institute: Oregon State University, Dept.
Horticulture, Corvallis, Oregon. **pedigree:** Seedling
selection from seed collected in Turkey. Perennial.
Breeding Material. Plant.

PI 541632 to 541633. *Pyrus fauriei* C. Schneider 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 541632 **origin:** Korea. **developer country:** United States. **origin institute:** Oregon State University, Experiment Station, Medford, Oregon. **pedigree:** Seedling selection from seedlot collected in Korea. Perennial. Breeding Material. Plant.

PI 541633 **origin:** Korea, Republic of. **developer country:** United States. **origin institute:** Oregon State University, Experiment Station, Medford, Oregon. **pedigree:** Seedling selection from seedlot collected in Korea. Perennial. Breeding Material. Plant.

PI 541634. *Pyrus fauriei* C. Schneider 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: Korea. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seed collected in Korea. Perennial. Breeding Material. Plant.

PI 541635. *Pyrus fauriei* C. Schneider ROSACEAE

Donated by: Callan, Dr. Nancy, Western Agricultural Research Center, 531 NE Quast Lane, Corvallis, Montana, United States. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received March 24, 1982.

origin: Korea. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **cultivar:** OSU 69. **pedigree:** Seedling selection from seedlot collected in Korea. Perennial. Breeding Material. Plant.

PI 541636 to 541652. *Pyrus fauriei* C. Schneider 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 541636 to 541652-continued

- PI 541636 **origin:** Korea, Republic of. **pedigree:** Collected from the wild in in Korea. **collected:** September 04, 1981. **locality:** Suweon, mountains, rocky coarse granite over clay subsoil. **latitude:** 37 deg. 17 min. N. **longitude:** 127 deg. 01 min. E. **elevation:** 60m. Perennial. Wild. Seed.
- PI 541637 **origin:** Korea, Republic of. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from OP seed collected wild in Korea. Perennial. Breeding Material. Plant.
- PI 541638 **origin:** Korea. **pedigree:** Collected from the wild in Korea. Perennial. Wild. Seed.
- PI 541639 **origin:** Korea. **pedigree:** Collected from the wild in Korea. **collected:** 1979. Perennial. Wild. Seed.
- PI 541640 **origin:** Korea. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seed from seedling selection from Korean seedlot. Perennial. Breeding Material. Seed.
- PI 541641 **origin:** Korea. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seedlot collected in Korea. Perennial. Breeding Material. Plant.
- PI 541642 **origin:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection of MA x W-6 No. 4. Perennial. Breeding Material. Plant.
- PI 541643 **origin:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection of MA x W-6 No. 5. Perennial. Breeding Material. Plant.
- PI 541644 **origin:** Korea, Republic of. **developer country:** United States. **origin institute:** Oregon State University, Experiment Station, Medford, Oregon. **pedigree:** Seedling selection from seed collected wild in Korea. Perennial. Breeding Material. Plant.
- PI 541645 **origin:** Korea, Republic of. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Self cross of seed collected in Korea (CPYR 1280). Perennial. Breeding Material. Plant.

PI 541636 to 541652-continued

- PI 541646 **origin:** Korea, Republic of. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection A of open pollinated seed from Korea. Perennial. Breeding Material. Plant.
- PI 541647 **origin:** Korea, Republic of. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection A of open pollinated seed from Korea. Perennial. Breeding Material. Plant.
- PI 541648 **origin:** Korea, Republic of. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection B of seed collected from Korea. Perennial. Breeding Material. Plant.
- PI 541649 **origin:** Korea, Republic of. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection B from open pollinated seed from Korea. Perennial. Breeding Material. Plant.
- PI 541650 **origin:** Korea, Republic of. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection B from seed from Korea. Perennial. Breeding Material. Plant.
- PI 541651 **origin:** Korea, Republic of. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection B from seed from Korea. Perennial. Breeding Material. Plant.
- PI 541652 **origin:** Korea. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from Korean seedlot. **local name:** Rootstock Pear. Perennial. Breeding Material. Plant.

PI 541653. *Pyrus fauriei* C. Schneider ROSACEAE

Donated by: Dudley, T.R., USDA-ARS-NER, National Arboretum, 3501 New York Ave. NE, Washington, District of Columbia, United States.
remarks: *Pyrus* accessions at NCGR-Corvallis being numbered. Received January 02, 1986.

PI 541653-continued

origin: Korea, Republic of. **pedigree:** Collected from the wild in Korea. **locality:** Costal environment. **latitude:** 36 deg. N. **longitude:** 128 deg. E. Perennial. Wild. Seed.

PI 541654 to 541655. *Pyrus fauriei* C. Schneider ROSACEAE

Donated by: Miller, C. Ferris, Chollipo Arboretum, 344-16 Yonhui-Dong, Seoul, Korea, Republic of. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received May 01, 1986.

PI 541654 **origin:** Korea, Republic of. **pedigree:** Seedlot collected from the wild in Korea. **locality:** Nampo-ri, Poan-myon, Puan-gun, Chollo Putko Province. **latitude:** 36 deg. N. **longitude:** 128 deg. E. Perennial. Wild. Seed.

PI 541655 **origin:** Korea, Republic of. **pedigree:** Collected from the wild in Korea. **locality:** Mongsan-ni, Manggyong-myong, Kimije-gun, Chollo Putko Prov. **latitude:** 36 deg. N. **longitude:** 128 deg. E. Perennial. Wild. Seed.

PI 541656. *Pyrus fauriei* C. Schneider ROSACEAE

Donated by: Cho, H. M., Horticultural Experiment Station, Suweon, Korea, Republic of. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received December 02, 1987.

origin: Korea, Republic of. **pedigree:** Collected from the wild in Korea. **locality:** Near Horticultural Experiment Station, Suweon. **latitude:** 37 deg. N. **longitude:** 127 deg. E. **elevation:** 200m. Perennial. Wild. Seed.

PI 541657 to 541661. *Pyrus fauriei* C. Schneider ROSACEAE

Donated by: Robbins, Patricia, USDA-ARS, NCGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon, United States. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received January 25, 1989.

PI 541657 **origin:** Korea, Republic of. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seed collected in Korea. Perennial. Breeding Material. Plant.

PI 541657 to 541661-continued

PI 541658 **origin:** Korea, Republic of. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seed collected in Korea. Perennial. Breeding Material. Plant.

PI 541659 **origin:** Korea, Republic of. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seed collected in Korea. Perennial. Breeding Material. Plant.

PI 541660 **origin:** Korea, Republic of. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seed collected in Korea. Perennial. Breeding Material. Plant.

PI 541661 **origin:** Korea, Republic of. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seed collected in Korea. Perennial. Breeding Material. Plant.

PI 541662. *Pyrus gharbiana* Trabut 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: Morocco. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seedlot collected in Morocco. Perennial. Breeding Material. Plant.

PI 541663 to 541667. *Pyrus gharbiana* Trabut 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 541663 **origin:** Morocco. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seed collected in Morocco. Perennial. Breeding Material. Plant.

PI 541663 to 541667-continued

PI 541664 **origin:** Morocco. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seedlot collected in Morocco. Perennial. Breeding Material. Plant.

PI 541665 **origin:** Morocco. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seed collected wild in Morocco. Perennial. Breeding Material. Plant.

PI 541666 **origin:** Morocco. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seed collected wild in Morocco. Perennial. Breeding Material. Plant.

PI 541667 **origin:** Morocco. **pedigree:** Collected from the wild in Morocco. **collected:** September 30, 1965. **locality:** Taourirt. **latitude:** 34 deg. 25 min. N. **longitude:** 02 deg. 53 min. W. Perennial. Wild. Seed.

PI 541668. *Pyrus gharbiana* Trabut ROSACEAE

Donated by: Zielinski, Dr. Q.B., Oregon State University, Dept. Horticulture, Corvallis, Oregon, United States. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received April 08, 1983.

origin: Morocco. **pedigree:** Collected from the wild in Morocco. **latitude:** 34 deg. 32 min. N. **longitude:** 05 deg. 50 min. W. Perennial. Wild. Seed.

PI 541669. *Pyrus gharbiana* Trabut ROSACEAE

Donated by: Long Ashton Research Station, Kent, England, United Kingdom. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received March 03, 1986.

origin: United Kingdom. **origin institute:** Long Ashton Research Station, Long Ashton, Kent, England. Perennial. Breeding Material. Cutting.

PI 541670. *Pyrus glabra* Boiss. 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: Turkey. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seedlot collected in Turkey. Perennial. Breeding Material. Plant.

PI 541671. *Pyrus hondoensis* Kikuchi & Nakai 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: Asia. **developer country:** United States. **origin institute:** Oregon State University, Experiment Station, Medford, Oregon. **pedigree:** Seedling selection from seedlot collected in Asia. Perennial. Breeding Material. Plant.

PI 541672. *Pyrus hondoensis* Kikuchi & Nakai ROSACEAE

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.

origin: Asia. **developer country:** United States. **origin institute:** Washington State University, Tree Fruit Research Center, Wenatchee, Washington. **pedigree:** Probably a seedling selection. Perennial. Breeding Material. Plant.

PI 541673. *Pyrus hondoensis* Kikuchi & Nakai 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 08, 1983.

origin: Japan. **developer country:** United States. **origin institute:** Oregon State University, Research Station, Medford, Oregon. **pedigree:** Seedling selection from seed collected in Japan. Perennial. Breeding Material. Plant.

PI 541674 to 541681. *Pyrus hondoensis* Kikuchi & Nakai 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 541674 **origin:** Japan. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seed originally collected in Japan. Perennial. Breeding Material. Plant.
- PI 541675 **origin:** Japan. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seed originally collected in Japan. Perennial. Breeding Material. Plant.
- PI 541676 **origin:** Japan. **developer country:** United States. **origin institute:** Oregon State University, Experiment Station, Medford, Oregon. **pedigree:** Seedling selection from seed collected wild in Japan. Perennial. Breeding Material. Plant.
- PI 541677 **origin:** Japan. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seed originally collected in Japan. Perennial. Breeding Material. Plant.
- PI 541678 **origin:** Japan. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seed collected in Japan. Perennial. Breeding Material. Plant.
- PI 541679 **origin:** Japan. **pedigree:** Collected from the wild in Japan. **local name:** Iwate Yamanashi. **latitude:** 36 deg. N. **longitude:** 136 deg. E. Perennial. Wild. Seed.
- PI 541680 **origin:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** *P. hondoensis* 117-28B x *P. hondoensis* W-6. Perennial. Breeding Material. Seed.
- PI 541681 **origin:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** *P. hondoensis* W-6 x *P. hondoensis* 17456. **local name:** Rootstock Pear. Perennial. Breeding Material. Plant.

PI 541682. *Pyrus hondoensis* Kikuchi & Nakai 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 May 10, 1983.

origin: Japan. **origin institute:** Ministry of Agriculture, Iwate Prefecture, Tsukuba. **pedigree:** Iwate No.4 x Iwate No.6 hand crossed. Perennial. Breeding Material. Seed.

PI 541683 to 541687. *Pyrus hondoensis* Kikuchi & Nakai 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 541683 **origin:** Japan. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection A from seedlot collected in Japan. Perennial. Breeding Material. Cutting.

PI 541684 **origin:** Japan. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection B from seedlot collected in Japan. Perennial. Breeding Material. Cutting.

PI 541685 **origin:** Japan. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection C from seedlot collected in Japan. Perennial. Breeding Material. Cutting.

PI 541686 **origin:** Japan. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection D from seedlot from Japan. Perennial. Breeding Material. Cutting.

PI 541687 **origin:** Japan. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection E from seedlot from Japan. Perennial. Breeding Material. Cutting.

PI 541688. *Pyrus hondoensis* Kikuchi & Nakai ROSACEAE

Donated by: Iizuka, Muneo, Ministry of Agriculture and Forestry, Horticultural Research Station, 1519 Nakahara-Shimojuku, Kanagawa, Japan. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received March 09, 1988.

origin: Japan. **origin institute:** Ministry of Agriculture, Experiment Station, Hiratsuka, Kanagawa.
pedigree: *P. hondoensis* artificially selfed in phytotron. Perennial. Breeding Material. Seed.

PI 541689. *Pyrus hondoensis* Kikuchi & Nakai ROSACEAE

Donated by: Sanada, T., Ministry of Ag., Fisheries & Forestry, Fruit Tree Research Station, Ibaraki, Japan. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received April 18, 1988.

origin: Japan. **origin institute:** Ministry of Agriculture, Fruit Tree Research Station, Fujimoto, Ibaraki. Perennial. Breeding Material. Seed.

PI 541690. *Pyrus hondoensis* Kikuchi & Nakai 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 18, 1989.

origin: Japan. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Iwate No.4 x Iwate No.6. Perennial. Breeding Material. Plant.

PI 541691 to 541704. *Pyrus hondoensis* Kikuchi & Nakai ROSACEAE

Donated by: Robbins, Patricia, USDA-ARS, NCGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon, United States. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received January 25, 1989.

PI 541691 **origin:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon.
pedigree: *P. hondoensis* 23A x *P. hondoensis* W-6 seedling. Perennial. Breeding Material. Plant.

PI 541692 **origin:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon.
pedigree: *P. hondoensis* 23A x *P. hondoensis* W-6 seedling. Perennial. Breeding Material. Plant.

PI 541691 to 541704-continued

- PI 541693 **origin:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon.
pedigree: P. hondoensis 23A x P. hondoensis W-6 seedling.
Perennial. Breeding Material. Plant.
- PI 541694 **origin:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon.
pedigree: P. hondoensis 23A x P. hondoensis W-6 seedling.
Perennial. Breeding Material. Plant.
- PI 541695 **origin:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon.
pedigree: P. hondoensis 23A x P. hondoensis W-6 seedling.
Perennial. Breeding Material. Plant.
- PI 541696 **origin:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon.
pedigree: P. hondoensis 117-28B x P. hondoensis W-6 seedling.
Perennial. Breeding Material. Plant.
- PI 541697 **origin:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon.
pedigree: P. hondoensis 117-28B x P. hondoensis W-6 seedling.
Perennial. Breeding Material. Plant.
- PI 541698 **origin:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon.
pedigree: P. hondoensis 117-28B x P. hondoensis W-6.
Perennial. Breeding Material. Plant.
- PI 541699 **origin:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon.
pedigree: P. hondoensis 117-28B x P. hondoensis W-6.
Perennial. Breeding Material. Plant.
- PI 541700 **origin:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon.
pedigree: P. hondoensis 117-28B x P. hondoensis W-6.
Perennial. Breeding Material. Plant.
- PI 541701 **origin:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon.
pedigree: P. hondoensis 117-28B x P. hondoensis W-6.
Perennial. Breeding Material. Plant.
- PI 541702 **origin:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon.
pedigree: P. hondoensis 117-28B x P. hondoensis W-6.
Perennial. Breeding Material. Plant.

PI 541691 to 541704-continued

PI 541703 **origin:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon.
pedigree: P. hondoensis 117-28B x P. hondoensis W-6.
Perennial. Breeding Material. Plant.

PI 541704 **origin:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon.
pedigree: P. hondoensis 117-28B x P. hondoensis W-6.
Perennial. Breeding Material. Plant.

PI 541705 to 541717. Pyrus hybrid ROSACEAE Pear

Donated by: Lombard, Dr. Porter, Oregon State University, Department of Horticulture, Cordley Hall 2042, Corvallis, Oregon, United States. **remarks:** Pyrus accessions at NCGR-Corvallis being numbered. Received February 21, 1981.

PI 541705 **origin:** United States. **developer country:** United States.
cultivar: Campas No.1. **pedigree:** P. pyrifolia hybrid.
Perennial. Cultivar. Plant.

PI 541706 **origin:** United States. **developer country:** United States.
cultivar: Campas No.2. **pedigree:** P. pyrifolia hybrid.
Perennial. Cultivar. Plant.

PI 541707 **origin:** United States. **developer country:** France.
cultivar: Cincincis. **pedigree:** P. pyrifolia x P. communis.
Perennial. Cultivar. Plant.

PI 541708 **origin:** United States. **developer country:** United States.
cultivar: Dixie. **pedigree:** Le Conte x P. pyrifolia.
Perennial. Cultivar. Plant.

PI 541709 **origin:** United States. **cultivar:** Estella. **pedigree:** Kieffer x P. communis. **local name:** Rootstock Pear.
Perennial. Cultivar. Plant.

PI 541710 **origin:** United States. **developer country:** United States.
cultivar: Eureka. **pedigree:** Seckel x Kieffer.
Perennial. Cultivar. Plant.

PI 541711 **origin:** United States. **developer country:** United States.
cultivar: Garber. **pedigree:** P. pyrifolia hybrid.
Perennial. Cultivar. Plant.

PI 541712 **origin:** United States. **cultivar:** Good Christian.
pedigree: Chance seedling. Perennial. Cultivar. Plant.

PI 541713 **origin:** United States. **developer country:** Europe.
cultivar: Greisa No.1. **pedigree:** P. pyrifolia hybrid.
Perennial. Cultivar. Plant.

PI 541705 to 541717-continued

PI 541714 **origin:** United States. **developer country:** United States.
cultivar: Kieffer. **pedigree:** P. pyrifolia x Bartlett.
Perennial. Cultivar. Plant.

PI 541715 **origin:** United States. **developer country:** United States.
origin institute: Pennsylvania State University,
Pennsylvania. **cultivar:** Richard Peters. **pedigree:**
Kieffer seedling (P. pyrifolia x Bartlett). Perennial.
Cultivar. Plant.

PI 541716 **origin:** United States. **developer country:** United States.
origin institute: Cornell University, Agricultural
Experiment Station, Ithaca, New York. **cultivar:** Smith.
pedigree: P. pyrifolia hybrid. Perennial. Cultivar.
Plant.

PI 541717 **origin:** United States. **developer country:** Asia.
cultivar: Variolosa. **pedigree:** P. pashia x P. communis.
local name: 'Variolosa'. Perennial. Primitiv-cv. Plant.

PI 541718. Pyrus hybrid 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.

origin: China. **pedigree:** Collected from the wild in
China. Perennial. Wild. Plant.

PI 541719. Pyrus hybrid ROSACEAE Pear

Donated by: Stark III, Paul, Stark Bros. Nurseries, Orchard Co.,
Louisiana, Missouri, United States. **remarks:** Pyrus accessions at
NCGR-Corvallis being numbered. Received March 31, 1981.

origin: United States. **origin institute:** Stark Bros.
Nurseries, Louisiana, Missouri. **pedigree:** P. calleryana
D-6 x P. pashia OP. Perennial. Breeding Material.
Seed.

PI 541720 to 541721. Pyrus hybrid 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 541720 to 541721-continued

PI 541720 **origin:** United States. **developer country:** United States. **origin institute:** Missouri State University, Agricultural Experiment Station, Mountain Grove, Missouri. **cultivar:** Missouri No. 83. Perennial. Cultivar. Plant.

PI 541721 **origin:** Turkey. **developer country:** United States. **origin institute:** Oregon State University, Experiment Station, Medford, Oregon. **pedigree:** Seedling selection from Olez seedlot 3 collected in Turkey. Perennial. Breeding Material. Plant.

PI 541722 to 541727. Pyrus hybrid 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 541722 **origin:** United States. **developer country:** United States. **origin institute:** University of Tennessee, Agricultural Experiment Station, Knoxville, Tennessee. **cultivar:** Ayres. **pedigree:** Garber x Anjou. Perennial. Cultivar. Plant.

PI 541723 **origin:** United States. **developer country:** United States. **cultivar:** Douglas. **pedigree:** OP Kieffer (x Duchess d'Angouleme?). Perennial. Cultivar. Plant.

PI 541724 **origin:** United States. **cultivar:** Mandan 58-4. **pedigree:** Patten x Parker, hybrid. Perennial. Breeding Material. Plant.

PI 541725 **origin:** United States. **cultivar:** Mandan 62-1. Perennial. Breeding Material. Plant.

PI 541726 **origin:** United States. **developer country:** United States. **origin institute:** Missouri State University, Agricultural Experiment Station, Pontotoc, Mississippi. **cultivar:** Pontotoc. **pedigree:** P. communis x P. ussuriensis or P. pyrifolia. Perennial. Cultivar. Cutting.

PI 541727 **origin:** United States. **developer country:** United States. **cultivar:** Sodak. **pedigree:** P. sinensis x Margueritte Marillat. Perennial. Cultivar. Plant.

PI 541728 to 541802. Pyrus hybrid 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 541728 **origin:** United States. **origin institute:** Oregon State University, Lewis-Brown Farm, Corvallis, Oregon.
pedigree: Nijisseiki x Old home decline susceptible.
local name: Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 541729 **origin:** United States. **origin institute:** Oregon State University, Experiment Station, Medford, Oregon.
pedigree: P. calleryana x P. fauriei. Perennial. Breeding Material. Plant.
- PI 541730 **origin:** Asia. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** P. calleryana x P. fauriei. Perennial. Breeding Material. Plant.
- PI 541731 **origin:** United States. **origin institute:** Oregon State University, Experiment Station, Medford, Oregon.
pedigree: P. dimorphylla x P. calleryana. **local name:** Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 541732 **origin:** United States. **origin institute:** Oregon State University, Experiment Station, Medford, Oregon.
pedigree: P. dimorphylla x P. calleryana. **local name:** Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 541733 **origin:** United States. **origin institute:** Oregon State University, Experiment Station, Medford, Oregon.
pedigree: P. dimorphylla x P. calleryana. **local name:** Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 541734 **origin:** United States. **origin institute:** Oregon State University, Experiment Station, Medford, Oregon.
pedigree: P. dimorphylla x P. fauriei. **local name:** Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 541735 **origin:** United States. **origin institute:** Oregon State University, Experiment Station, Medford, Oregon.
pedigree: P. dimorphylla x P. fauriei. **local name:** Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 541736 **origin:** United States. **origin institute:** Oregon State University, Experiment Station, Medford, Oregon.
pedigree: P. dimorphylla x P. fauriei. **local name:** Rootstock Pear. Perennial. Breeding Material. Plant.

PI 541728 to 541802-continued

- PI 541737 **origin:** United States. **pedigree:** Collected from the wild in Oregon. **collected:** October 03, 1966. **locality:** Talent, Southern Oregon. Perennial. Wild. Seed.
- PI 541738 **origin:** United States. **origin institute:** Oregon State University, Experiment Station, Medford, Oregon. **pedigree:** P. fauriei x P. betulaefolia-1. **local name:** Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 541739 **origin:** United States. **origin institute:** Oregon State University, Experiment Station, Medford, Oregon. **pedigree:** P. fauriei x P. betulaefolia-1. **local name:** Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 541740 **origin:** United States. **origin institute:** Oregon State University, Experiment Station, Medford, Oregon. **pedigree:** P. fauriei x P. heterophylla. **local name:** Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 541741 **origin:** Japan. **pedigree:** Collected from the wild in Japan. **collected:** 1965. **locality:** Kara Mamenashi. **latitude:** 36 deg. N. **longitude:** 136 deg. E. Perennial. Wild. Seed.
- PI 541742 **origin:** Australia. **pedigree:** P. calleryana x pashia hybrid collected wild in Australia. Perennial. Wild. Seed.
- PI 541743 **Pyrus communis** L. ROSACEAE Pear
origin: United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Bartlett x P. communis French open pollinated. **collected:** December 31, 1963. Perennial. Breeding Material. Seed.
- PI 541744 **origin:** Yugoslavia. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seedlot collected in Yugoslavia. Perennial. Breeding Material. Plant.
- PI 541745 **origin:** Yugoslavia. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seedlot collected in Yugoslavia. Perennial. Breeding Material. Plant.
- PI 541746 **origin:** United States. **origin institute:** Oregon State University, Experiment Station, Medford, Oregon. **pedigree:** P. serrulata x P. heterophylla. Perennial. Breeding Material. Plant.

PI 541728 to 541802-continued

- PI 541747 **origin:** Europe. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** P. fauriei x P. heterophylla. Perennial. Breeding Material. Seed.
- PI 541748 **origin:** Europe. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** P. fauriei x P. heterophylla. Perennial. Breeding Material. Seed.
- PI 541749 **origin:** Australia. **pedigree:** P. indica x P. calleryana wild hybrid. **latitude:** 23 deg. S. **longitude:** 135 deg. E. Perennial. Wild. Seed.
- PI 541750 **origin:** India. **pedigree:** P. indica x P. pashia hybrid. Perennial. Wild. Seed.
- PI 541751 **origin:** Australia. **origin institute:** Dept. of Agriculture, Castlemaine, Victoria. **pedigree:** P. pashia x P. betulaeifolia. **collected:** April 1965. Perennial. Breeding Material. Seed.
- PI 541752 **origin:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** P. persica x P. sinaiaca W-6. **collected:** January 01, 1967. Perennial. Breeding Material. Seed.
- PI 541753 **origin:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Nijisseiki x Old Home W-6. **local name:** Rootstock Pear. **collected:** 1964. Perennial. Breeding Material. Seed.
- PI 541754 **origin:** China. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Open pollinated. **collected:** January 03, 1966. Perennial. Breeding Material. Seed.
- PI 541755 **origin:** Turkey. **pedigree:** Collected from the wild in Turkey. **collected:** November 1962. **locality:** Ankora. **latitude:** 40 deg. N. **longitude:** 32 deg. 54 min. E. **elevation:** 1000m. Perennial. Wild. Seed.
- PI 541756 **origin:** Afghanistan. **pedigree:** Collected from the wild in Afghanistan. **collected:** September 04, 1974. Perennial. Wild. Seed.

PI 541728 to 541802-continued

- PI 541757 *Pyrus pyrifolia* (Burm. f.) Nakai ROSACEAE Pear
origin: Asia. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Japanese Gold. Russet x Mikado. **local name:** Rootstock Pear. Perennial. Breeding Material. Seed.
- PI 541758 **origin:** Asia. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Cheih Li x Jap. Gold. Russet. **local name:** Rootstock Pear. Perennial. Breeding Material. Seed.
- PI 541759 **origin:** Turkey. **pedigree:** Collected from the wild in Turkey. **locality:** Sakarya & Kostamonu Prov. Perennial. Wild. Seed.
- PI 541760 **origin:** United States. **origin institute:** Oregon State University, Experiment Station, Medford, Oregon. **pedigree:** Chieh Li x Jap. Gold Russet. **local name:** Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 541761 **origin:** United States. **origin institute:** Oregon State University, Experiment Station, Medford, Oregon. **pedigree:** Chieh Li x Jap. Gold. Russet. **local name:** Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 541762 *Pyrus pyrifolia* (Burm. f.) Nakai ROSACEAE Pear
origin: United States. **origin institute:** Oregon State University, Experiment Station, Medford, Oregon. **pedigree:** Jap. Gold. Russet x Mikado. **local name:** Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 541763 *Pyrus pyrifolia* (Burm. f.) Nakai ROSACEAE Pear
origin: United States. **origin institute:** Oregon State University, Experiment Station, Medford, Oregon. **pedigree:** Japanese Golden Russett x Mikado. **local name:** Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 541764 *Pyrus pyrifolia* (Burm. f.) Nakai ROSACEAE Pear
origin: United States. **origin institute:** Oregon State University, Experiment Station, Medford, Oregon. **pedigree:** Jap. Gold. Russet x Mikado. **local name:** Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 541765 *Pyrus pyrifolia* (Burm. f.) Nakai ROSACEAE Pear
origin: United States. **origin institute:** Oregon State University, Experiment Station, Medford, Oregon. **pedigree:** Hawaii x Jap. Gold. Russet. **local name:** Rootstock Pear. Perennial. Breeding Material. Plant.

PI 541728 to 541802-continued

- PI 541766 *Pyrus pyrifolia* (Burm. f.) Nakai ROSACEAE Pear
origin: United States. **origin institute:** Oregon State University, Experiment Station, Medford, Oregon.
pedigree: Hawaii x Jap. Gold. Russet. **local name:** Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 541767 **origin:** United States. **origin institute:** Oregon State University, Experiment Station, Medford, Oregon.
pedigree: Nijisseiki x Old Home. **local name:** Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 541768 **origin:** Australia. **origin institute:** Victoria Extension Station, Dept. Horticulture, Victoria. **pedigree:** P. pashia x P. calleryana. Perennial. Breeding Material. Plant.
- PI 541769 **origin:** Australia. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** P. pashia x P. betulaefolia seedling selection. Perennial. Breeding Material. Plant.
- PI 541770 **origin:** Australia. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** P. betulifolia x P. calleryana seedling selection. **local name:** Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 541771 **origin:** Australia. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** P. betulaefolia-2 x P. calleryana-2. **local name:** Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 541772 **origin:** United States. **origin institute:** Oregon State University, Experiment Station, Medford, Oregon. Perennial. Breeding Material. Plant.
- PI 541773 **origin:** Australia. **origin institute:** Victoria Extension Station, Dept. Horticulture, Victoria. **pedigree:** P. pashia x P. calleryana. **local name:** Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 541774 **origin:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** P. betulaefolia x P. calleryana-5. **local name:** Rootstock Pear. Perennial. Breeding Material. Plant.

PI 541728 to 541802-continued

- PI 541775 **origin:** United States. **origin institute:** Oregon State University, Experiment Station, Medford, Oregon.
pedigree: P. betulaefolia x P. pyrifolia seedling A.
local name: Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 541776 **origin:** United States. **origin institute:** Oregon State University, Experiment Station, Medford, Oregon.
pedigree: P. ussuriensis x P. calleryana seedling selection. **local name:** Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 541777 **origin:** United States. **origin institute:** Oregon State University, Experiment Station, Talent, Oregon.
pedigree: Nelis x P. betulaefolia seedling selection A.
local name: Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 541778 **origin:** United States. **origin institute:** Oregon State University, Experiment Station, Talent, Oregon.
pedigree: Burkett x P. betulaefolia seedling selection.
local name: Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 541779 **origin:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon.
pedigree: P. dimorphophylla x P. fauriei seedling A.
local name: Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 541780 **origin:** United States. **origin institute:** Oregon State University, Experiment Station, Talent, Oregon.
pedigree: P-79 x P. betulaefolia seedling selection.
Perennial. Breeding Material. Plant.
- PI 541781 **origin:** United States. **origin institute:** Oregon State University, Experiment Station, Talent, Oregon.
pedigree: P-12 x P. betulaefolia seedling selection A.
Perennial. Breeding Material. Plant.
- PI 541782 **origin:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon.
pedigree: P. betulaefolia-2 x P. calleryana-2 seedling selection. Perennial. Breeding Material. Plant.
- PI 541783 **origin:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon.
pedigree: P. betulaefolia-2 x P. calleryana-5 seedling selection. **local name:** Rootstock Pear. Perennial. Breeding Material. Plant.

PI 541728 to 541802-continued

- PI 541784 **origin:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** P. betuifolia-2 x P-12 seedling selection. **local name:** Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 541785 **origin:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** P. betulifolia-2 x Farmingdale. **local name:** Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 541786 **origin:** United States. **origin institute:** Oregon State University, Experiment Station, Talent, Oregon. **pedigree:** Burkett x P. betulifolia seedling selection. **local name:** Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 541787 **origin:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Old Home x P. betulaefolia-1. Perennial. Breeding Material. Plant.
- PI 541788 **origin:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Old Home x P. betulaefolia-1. **local name:** Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 541789 **origin:** United States. **origin institute:** Oregon State University, Experiment Station, Medford, Oregon. **cultivar:** OPR 141. **pedigree:** P. ussuriensis x P. pyrifolia hybrid seedling selection. **local name:** Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 541790 **origin:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** P. betulaefolia-1 x P-12 seedling selection. **local name:** Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 541791 **origin:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** P. betulaefolia-1 x P-79 seedling selection. **local name:** Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 541792 **origin:** United States. **pedigree:** Seedling selection. Perennial. Breeding Material. Plant.
- PI 541793 **origin:** United States. **pedigree:** Seedling selection. Perennial. Breeding Material. Plant.

PI 541728 to 541802-continued

- PI 541794 **origin:** United States. **pedigree:** Seedling selection. Perennial. Breeding Material. Plant.
- PI 541795 **origin:** United States. **pedigree:** Seedling selection. Perennial. Breeding Material. Plant.
- PI 541796 **origin:** United States. **pedigree:** Seedling selection. Perennial. Breeding Material. Plant.
- PI 541797 **origin:** Australia. **origin institute:** Dept. Agriculture, Extension Station, Victoria. **pedigree:** P. pashia x P. calleryana. **local name:** Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 541798 **origin:** United States. **origin institute:** Oregon State University, Exp. Station, Medford, Oregon. **pedigree:** P. betulaeifolia x P. pyrifolia seedling selection B. **local name:** Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 541799 **origin:** United States. **origin institute:** Oregon State University, Exp. Station, Medford, Oregon. **pedigree:** P. ussuriensis x P. calleryana seedling selection B. **local name:** Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 541800 **origin:** United States. **origin institute:** Oregon State University, Experiment Station, Talent, Oregon. **pedigree:** Nelis x P. betulifolia seedling selection B. **local name:** Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 541801 **origin:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** P. dimorphophylla x P. fauriei seedling selection B. **local name:** Rootstock Pear. Perennial. Breeding Material. Plant.
- PI 541802 **origin:** United States. **origin institute:** Oregon State University, Experiment Station, Talent, Oregon. **pedigree:** P-12 x P. betulifolia OP seedling selection B. **local name:** Rootstock Pear. Perennial. Breeding Material. Plant.

PI 541803. Pyrus hybrid 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 May 10, 1983.

PI 541803-continued

origin: Japan. **origin institute:** Ministry of Agriculture, Iwate Prefecture, Tsukuba. **pedigree:** Iwate Yamamashi x Sotoorihime hand crossed. Perennial. Breeding Material. Seed.

PI 541804. Pyrus hybrid ROSACEAE Pear

Donated by: Peterson, Dr. Ronald, South Dakota State University, Dept. of Hort. and Forstry, Box 2207, Brookings, South Dakota, United States. **remarks:** Pyrus accessions at NCGR-Corvallis being numbered. Received January 13, 1987.

origin: United States. **origin institute:** South Dakota State University, Hort, Forestry, Landscape and Parks, Brookings, South Dakota. **cultivar:** Gourmet. **pedigree:** South Dakota F15 x Ewart (parentage of SD F15 unknown). **restricted:** PAT. Perennial. Cultivar. Cutting.

PI 541805. Pyrus hybrid ROSACEAE Pear

Donated by: Rombough, Lon, 4285 Claxter Ct. N.E., Salem, Oregon, United States. **remarks:** Pyrus accessions at NCGR-Corvallis being numbered. Received January 16, 1987.

origin: United States. **cultivar:** Koyoma Pear. **pedigree:** Nijusseiki x P. communis European Cultivar. Perennial. Cultivar. Cutting.

PI 541806 to 541809. Pyrus hybrid ROSACEAE Pear

Donated by: Lamb, Dr. R. C., New York State University, Experiment Station, Geneva, New York, United States. **remarks:** Pyrus accessions at NCGR-Corvallis being numbered. Received January 20, 1987.

PI 541806 **origin:** United States. **origin institute:** Cornell University, Agricultural Experiment Station, Geneva, New York. **cultivar:** NY 10255. **pedigree:** Bartlet x Ill # 65 (P. ussuriensis). Perennial. Breeding Material. Cutting.

PI 541807 **origin:** United States. **origin institute:** Cornell University, Agricultural Experiment Station, Geneva, New York. **cultivar:** NY 10262. **pedigree:** Seckel x Ill #65 (P. ussuriensis). Perennial. Breeding Material. Cutting.

PI 541806 to 541809-continued

PI 541808 **origin:** United States. **origin institute:** Cornell University, Agricultural Experiment Station, Geneva, New York. **cultivar:** NY 10355. **pedigree:** Bartlett x NY 10255. Perennial. Breeding Material. Cutting.

PI 541809 **origin:** United States. **origin institute:** Cornell University, Agricultural Experiment Station, Geneva, New York. **cultivar:** NY 10353. **pedigree:** Russet Flemish Beauty x NY 10257 (Bartlett x Ill. #65). Perennial. Breeding Material. Cutting.

PI 541810. *Pyrus* hybrid ROSACEAE Pear

Donated by: Yanagihara, Seiji, IBPGR, Thapathali, Katmandu, Nepal. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received March 31, 1987.

origin: Nepal. **pedigree:** Collected from the wild in Nepal. **collected:** January 01, 1986. **latitude:** 28 deg. N. **longitude:** 84 deg. 30 min. E. Perennial. Wild. Seed.

PI 541811 to 541812. *Pyrus* hybrid ROSACEAE Pear

Donated by: Peterson, Dr. Ronald, South Dakota State University, Dept of Hort. and Forestry, Box 2207, Brookings, South Dakota, United States. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received March 31, 1987.

PI 541811 **origin:** United States. **origin institute:** South Dakota State University, Brookings, South Dakota. **cultivar:** South Dakota F 15. **pedigree:** Uncertain, probably a hybrid. Perennial. Breeding Material. Cutting.

PI 541812 **origin:** United States. **origin institute:** South Dakota State University, Brookings, South Dakota. **cultivar:** South Dakota E 31. **pedigree:** Uncertain, probably a hybrid. Perennial. Breeding Material. Cutting.

PI 541813. *Pyrus* hybrid ROSACEAE Pear

Donated by: Nito, Dr. Yuichi, 2821 14th South, Seattle, Washington, United States. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received February 18, 1988.

origin: China. **developer country:** United States. **pedigree:** Open pollinated seed of cultivar Shi-Hua-Li. Perennial. Breeding Material. Seed.

PI 541814. Pyrus hybrid 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 18, 1989.

origin: Turkey. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seed collected in Turkey. Perennial. Breeding Material. Plant.

PI 541815 to 541824. Pyrus hybrid ROSACEAE Pear

Donated by: Robbins, Patricia, USDA-ARS, NCGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon, United States. **remarks:** Pyrus accessions at NCGR-Corvallis being numbered. Received January 25, 1989.

PI 541815 **origin:** Afghanistan. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seed collected in Afghanistan. Perennial. Breeding Material. Plant.

PI 541816 **origin:** Afghanistan. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seed collected in Afghanistan. Perennial. Breeding Material. Plant.

PI 541817 **origin:** Afghanistan. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seed collected in Afghanistan. Perennial. Breeding Material. Plant.

PI 541818 **origin:** Afghanistan. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seed collected in Afghanistan. Perennial. Breeding Material. Plant.

PI 541819 **origin:** Afghanistan. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seed collected in Afghanistan. Perennial. Breeding Material. Plant.

PI 541815 to 541824-continued

- PI 541820 **origin:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon.
pedigree: Seedling selection from OP seed collected near Talent, OR. Perennial. Breeding Material. Plant.
- PI 541821 **origin:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon.
pedigree: Seedling selection from OP seed collected near Talent, OR. Perennial. Breeding Material. Plant.
- PI 541822 **origin:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon.
pedigree: Seedling selection from OP seed collected near Talent, OR. Perennial. Breeding Material. Plant.
- PI 541823 **origin:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon.
pedigree: Seedling selection from OP seed collected near Talent, OR. Perennial. Breeding Material. Plant.
- PI 541824 **origin:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon.
pedigree: Seedling selection from OP seed collected near Talent, OR. Perennial. Breeding Material. Plant.

PI 541825 to 541834. *Pyrus koehnei* C. Schneider 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 541825 **origin:** United States. **developer country:** United States.
origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seed collected in California. Perennial. Breeding Material. Cutting.
- PI 541826 **origin:** United States. **developer country:** United States.
origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seed collected in California. Perennial. Breeding Material. Cutting.
- PI 541827 **origin:** United States. **developer country:** United States.
origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seedlot collected in California. Perennial. Breeding Material. Plant.

PI 541825 to 541834-continued

- PI 541828 **origin:** United States. **developer country:** United States.
origin institute: Oregon State University, Dept.
Horticulture, Corvallis, Oregon. **pedigree:** Seedling
selection from seedlot collected in California.
Perennial. Breeding Material. Plant.
- PI 541829 **origin:** United States. **developer country:** United States.
origin institute: Oregon State University, Dept.
Horticulture, Corvallis, Oregon. **pedigree:** Seedling
selection from seedlot collected in California.
Perennial. Breeding Material. Plant.
- PI 541830 **origin:** United States. **developer country:** United States.
origin institute: Oregon State University, Dept.
Horticulture, Corvallis, Oregon. **pedigree:** Seedling
selection (B) from seed collected wild in Calif.
Perennial. Breeding Material. Plant.
- PI 541831 **origin:** United States. **developer country:** United States.
origin institute: Oregon State University, Dept.
Horticulture, Corvallis, Oregon. **pedigree:** Seedling
selection (A) from seed collected wild in Calif.
Perennial. Breeding Material. Plant.
- PI 541832 **origin:** United States. **developer country:** United States.
origin institute: Oregon State University, Dept.
Horticulture, Corvallis, Oregon. **pedigree:** Seedling
selection. Perennial. Breeding Material. Plant.
- PI 541833 **origin:** United States. **developer country:** United States.
origin institute: Oregon State University, Dept.
Horticulture, Corvallis, Oregon. **pedigree:** Seedling
selection from seed collected in California. Perennial.
Breeding Material. Plant.
- PI 541834 **origin:** Taiwan. **developer country:** United States.
origin institute: Oregon State University, Dept.
Horticulture, Corvallis, Oregon. **pedigree:** Seedling
selection from seedlot collected in Taiwan. Perennial.
Breeding Material. Plant.

PI 541835 to 541839. *Pyrus koehnei* C. Schneider ROSACEAE

Donated by: Beutel, James A., University of California, Department
of Pomology, Davis, California, United States. **remarks:** *Pyrus*
accessions at NCGR-Corvallis being numbered. Received April 08,
1983.

- PI 541835 **origin:** Taiwan. **pedigree:** Open pollinated (in
California). **collected:** November 1968. Perennial.
Cultivated. Seed.

PI 541835 to 541839-continued

- PI 541836 **origin:** Taiwan. **pedigree:** Open pollinated (in California). **collected:** November 1968. Perennial. Cultivated. Seed.
- PI 541837 **origin:** China. **pedigree:** Open pollinated (at U.C. Riverside, California). **collected:** November 1968. Perennial. Cultivated. Seed.
- PI 541838 **origin:** China. **pedigree:** Fruits open pollinated (at Riverside, California). **collected:** November 1968. Perennial. Cultivated. Seed.
- PI 541839 **origin:** Taiwan. **pedigree:** Open-pollinated (in California). Perennial. Cultivated. Seed.

PI 541840 to 541841. *Pyrus korshinskyi* Litv. ROSACEAE

Donated by: Hortus Botanicus Acad. Sci., Tashkent, Uzbek Republic, Soviet Union. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received April 15, 1987.

PI 541840 **origin:** USSR. **pedigree:** Open-pollinated from botanical collection. Perennial. Cultivated. Seed.

PI 541841 **origin:** USSR. **pedigree:** Open-pollinated from botanical collection. Perennial. Cultivated. Seed.

PI 541842. *Pyrus korshinskyi* subsp. *bucharica* (Litv.) Bondarenko ex Korovina ROSACEAE

Donated by: Long Ashton Research Station, Kent, England, United Kingdom. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received March 03, 1986.

origin: United Kingdom. **origin institute:** Long Ashton Research Station, Long Ashton, Kent, England. Perennial. Breeding Material. Cutting.

PI 541843 to 541852. *Pyrus mamorensis* Trabut 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 541843 to 541852-continued

- PI 541843 **origin:** Morocco. **developer country:** United States.
origin institute: Oregon State University, Dept.
Horticulture, Corvallis, Oregon. **pedigree:** Seedling
selection from seedlot collected in Morocco. Perennial.
Breeding Material. Plant.
- PI 541844 **origin:** Morocco. **developer country:** United States.
origin institute: Oregon State University, Dept.
Horticulture, Corvallis, Oregon. **pedigree:** Seedling
selection from seed collected wild in Morocco.
Perennial. Breeding Material. Plant.
- PI 541845 **origin:** Morocco. **developer country:** United States.
origin institute: Oregon State University, Dept.
Horticulture, Corvallis, Oregon. **pedigree:** Seedling
selection from seed collected wild in Morocco.
Perennial. Breeding Material. Plant.
- PI 541846 **origin:** Morocco. **developer country:** United States.
origin institute: Oregon State University, Dept.
Horticulture, Corvallis, Oregon. **pedigree:** Seedling
selection from seed collected wild in Morocco.
Perennial. Breeding Material. Plant.
- PI 541847 **origin:** Morocco. **developer country:** United States.
origin institute: Oregon State University, Dept.
Horticulture, Corvallis, Oregon. **pedigree:** Seedling
selection from seed collected in Morocco. Perennial.
Breeding Material. Plant.
- PI 541848 **origin:** Morocco. **developer country:** United States.
origin institute: Oregon State University, Dept.
Horticulture, Corvallis, Oregon. **pedigree:** Seedling
selection from seed collected in Morocco. Perennial.
Breeding Material. Plant.
- PI 541849 **origin:** Morocco. **developer country:** United States.
origin institute: Oregon State University, Dept.
Horticulture, Corvallis, Oregon. **pedigree:** Seedling
selection from seed collected wild in Morocco.
Perennial. Breeding Material. Plant.
- PI 541850 **origin:** Morocco. **developer country:** United States.
origin institute: Oregon State University, Dept.
Horticulture, Corvallis, Oregon. **pedigree:** Seedling
selection from seed collected wild in Morocco.
Perennial. Breeding Material. Plant.

PI 541843 to 541852-continued

PI 541851 **origin:** Morocco. **developer country:** United States.
origin institute: Oregon State University, Dept.
Horticulture, Corvallis, Oregon. **pedigree:** Seedling
selection from seed collected wild in Morocco.
Perennial. Breeding Material. Plant.

PI 541852 **origin:** Morocco. **developer country:** United States.
origin institute: Oregon State University, Dept.
Horticulture, Corvallis, Oregon. **pedigree:** Seedling
selection from seedlot collected in Morocco. Perennial.
Breeding Material. Plant.

PI 541853 to 541854. *Pyrus mamorensis* Trabut ROSACEAE

Donated by: Zielinski, Dr. Q.B., Oregon State University, Dept.
Horticulture, Corvallis, Oregon, United States. **remarks:** *Pyrus*
accessions at NCGR-Corvallis being numbered. Received April 08,
1983.

PI 541853 **origin:** Morocco. **pedigree:** Collected from the wild in
Morocco. **collected:** November 24, 1965. **locality:** Momor
Mountains. **latitude:** 32 deg. N. **longitude:** 05 deg. 50
min. W. Perennial. Wild. Seed.

PI 541854 **origin:** Morocco. **pedigree:** Collected from the wild in
Morocco. **locality:** Momor Mountains. **latitude:** 32 deg.
N. **longitude:** 05 deg. 50 min. W. Perennial. Wild.
Seed.

PI 541855. *Pyrus mamorensis* Trabut ROSACEAE

Donated by: Long Ashton Research Station, Kent, England, United
Kingdom. **remarks:** *Pyrus* accessions at NCGR-Corvallis being
numbered. Received March 03, 1986.

origin: United Kingdom. **origin institute:** Long Ashton
Research Station, Long Ashton, Kent, England. Perennial.
Breeding Material. Cutting.

PI 541856. *Pyrus mamorensis* Trabut 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 541856-continued

origin: Morocco. **developer country:** United States.
origin institute: Oregon State University, Dept.
Horticulture, Corvallis, Oregon. **pedigree:** Seedling
selection from seed collected in North Africa.
Perennial. Breeding Material. Cutting.

PI 541857. *Pyrus mamorensis* Trabut ROSACEAE

Donated by: Dennis, Dr. Frank, Michigan State University, Department
of Horticulture, East Lansing, Michigan, United States. **remarks:**
Pyrus accessions at NCGR-Corvallis being numbered. Received January
10, 1989.

origin: Morocco. **pedigree:** Collected from the wild in
Morocco. **collected:** December 01, 1988. **locality:**
Between Rabat and Meknes, among cork oaks. **latitude:** 32
deg. N. **longitude:** 05 deg. 50 min. W. Perennial. Wild.
Seed.

PI 541858. *Pyrus mamorensis* Trabut ROSACEAE

Donated by: Zielinski, Dr. Q.B., Oregon State University, Dept.
Horticulture, Corvallis, Oregon, United States. **remarks:** Pyrus
accessions at NCGR-Corvallis being numbered. Received January 18,
1989.

origin: Morocco. **developer country:** United States.
origin institute: Oregon State University, Dept.
Horticulture, Corvallis, Oregon. **pedigree:** Seedling
selection from seed collected in Morocco. Perennial.
Breeding Material. Plant.

PI 541859. *Pyrus nivalis* Jacq. 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.

origin: United States. **origin institute:** Oregon State
University, Experiment Station, Medford, Oregon.
cultivar: P-91. **pedigree:** Seedling selection. **local
name:** Rootstock Pear. Perennial. Breeding Material.
Plant.

PI 541860. *Pyrus nivalis* Jacq. 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: UNCERTAIN. **developer country:** United States. **origin institute:** Oregon State University, Experiment Station, Medford, Oregon. **pedigree:** Probably a seedling selection. Perennial. Breeding Material. Plant.

PI 541861. *Pyrus nivalis* Jacq. 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 08, 1983.

origin: UNCERTAIN. **developer country:** United States. **origin institute:** Oregon State University, Experiment Station, Medford, Oregon. **pedigree:** Probably a seedling selection. Perennial. Breeding Material. Plant.

PI 541862 to 541864. *Pyrus nivalis* Jacq. 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 541862 **origin:** Europe. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seed collected somewhere in Europe. Perennial. Breeding Material. Plant.

PI 541863 **origin:** Netherlands. **pedigree:** Open pollinated from botanical collection. Perennial. Cultivated. Seed.

PI 541864 **origin:** Netherlands. Perennial. Breeding Material. Plant.

PI 541865. *Pyrus nivalis* Jacq. ROSACEAE

Donated by: Zielinski, Dr. Q.B., Oregon State University, Dept. Horticulture, Corvallis, Oregon, United States. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received April 08, 1983.

PI 541865-continued

origin: France. **pedigree:** Collected from the wild in France. **collected:** June 05, 1963. **locality:** Near Angers Experiment Station. **latitude:** 47 deg. 30 min. N.
Perennial. Wild. Seed.

PI 541866. *Pyrus nivalis* Jacq. ROSACEAE

Donated by: Royal Botanical Gardens, Kew, England, United Kingdom.
remarks: *Pyrus* accessions at NCGR-Corvallis being numbered.
Received April 08, 1983.

origin: United Kingdom. **pedigree:** Open-pollinated from botanical collection. Perennial. Cultivated. Seed.

PI 541867. *Pyrus nivalis* Jacq. 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.

origin: Yugoslavia. **developer country:** United States.
origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seedlot collected in Yugoslavia.
Perennial. Breeding Material. Cutting.

PI 541868. *Pyrus nivalis* Jacq. ROSACEAE

Donated by: Vitkovskij, Prof. V.L, N.I. Vavilov Institute, 44 Herzen Str., Leningrad, Soviet Union. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received March 16, 1987.

origin: USSR. **pedigree:** Collected from the wild in the Soviet Union. Perennial. Wild. Seed.

PI 541869. *Pyrus nivalis* Jacq. ROSACEAE

Donated by: Hortus Botanicus Acad. Sci., Taschkent, Uzbek Republic, Soviet Union. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received April 15, 1987.

origin: USSR. **pedigree:** Open-pollinated from botanical collection. Perennial. Cultivated. Seed.

PI 541870. *Pyrus nivalis* Jacq. 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.

origin: United States. **origin institute:** Oregon State University, Experiment Station, Medford, Oregon.
pedigree: 3n *P. nivalis* seedling selection. Perennial.
Breeding Material. Cutting.

PI 541871. *Pyrus pashia* Buch.-Ham. ex D. Don 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: United States. Perennial. Uncertain. Plant.

PI 541872. *Pyrus pashia* Buch.-Ham. ex D. Don ROSACEAE

Donated by: Anderson, Dr. Peter, Missouri State University, State Fruit Experiment Station, Mountain Grove, Missouri, United States. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received May 01, 1982.

origin: United States. **origin institute:** Oregon State University, Department of Horticulture, Corvallis, Oregon. Perennial. Breeding Material. Plant.

PI 541873 to 541889. *Pyrus pashia* Buch.-Ham. ex D. Don 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 541873 **origin:** Pakistan. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seed collected wild in W. Pakistan. Perennial. Breeding Material. Plant.

PI 541874 **origin:** Pakistan. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seed collected wild in W. Pakistan. Perennial. Breeding Material. Plant.

PI 541873 to 541889-continued

- PI 541875 **origin:** India. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seed collected wild in India. Perennial. Breeding Material. Plant.
- PI 541876 **origin:** India. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seedlot collected wild in India. Perennial. Breeding Material. Plant.
- PI 541877 **origin:** India. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection of OP seed collected in India. Perennial. Breeding Material. Cutting.
- PI 541878 **origin:** Australia. **origin institute:** Dept. of Agriculture, Castlemaine, Victoria. **pedigree:** Open pollinated. **collected:** 1966. Perennial. Breeding Material. Seed.
- PI 541879 **origin:** Australia. **origin institute:** Dept. of Agriculture, Castlemaine, Victoria. **pedigree:** Open pollinated. **collected:** 1966. Perennial. Breeding Material. Seed.
- PI 541880 **origin:** Pakistan. **pedigree:** Collected from the wild in Pakistan. **collected:** 1962. **locality:** Muree Hills. **latitude:** 30 deg. N. **longitude:** 70 deg. E. Perennial. Wild. Seed.
- PI 541881 **origin:** India. **pedigree:** Collected from the wild in India. **latitude:** 20 deg. N. **longitude:** 78 deg. E. Perennial. Wild. Seed.
- PI 541882 **origin:** Australia. **origin institute:** Victoria Extension Station, Dept. Horticulture, Victoria. **pedigree:** Seedling selection. Perennial. Breeding Material. Plant.
- PI 541883 **origin:** Australia. **origin institute:** Victoria Extension Station, Dept. Horticulture, Victoria. **pedigree:** P. pashia x P. indica. Perennial. Breeding Material. Plant.
- PI 541884 **origin:** Pakistan. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling sel. A from open pollinated seed from Pakistan. Perennial. Breeding Material. Plant.

PI 541873 to 541889-continued

- PI 541885 **origin:** Pakistan. **developer country:** United States.
origin institute: Oregon State University, Dept.
Horticulture, Corvallis, Oregon. **pedigree:** Seedling sel.
B from open pollinated seed from W.Pakistan. Perennial.
Breeding Material. Plant.
- PI 541886 **origin:** Australia. **developer country:** United States.
origin institute: Oregon State University, Dept.
Horticulture, Corvallis, Oregon. **pedigree:** Seedling
selection B from seed collected in Australia. Perennial.
Breeding Material. Plant.
- PI 541887 **origin:** Australia. **developer country:** United States.
origin institute: Oregon State University, Dept.
Horticulture, Corvallis, Oregon. **pedigree:** Seedling
selection C from seed collected in Australia. Perennial.
Breeding Material. Plant.
- PI 541888 **origin:** Pakistan. **developer country:** United States.
origin institute: Oregon State University, Dept.
Horticulture, Corvallis, Oregon. **pedigree:** Seedling
selection B of seed collected in W. Pakistan. Perennial.
Breeding Material. Plant.
- PI 541889 **origin:** Pakistan. **developer country:** United States.
origin institute: Oregon State University, Dept.
Horticulture, Corvallis, Oregon. **pedigree:** Seedling
selection C from seed collected in Pakistan. Perennial.
Breeding Material. Plant.

PI 541890. *Pyrus pashia* Buch.-Ham. ex D. Don ROSACEAE

Donated by: Hortus Botanicus Acad. Sci., Taschkent, Uzbek Republic,
Soviet Union. **remarks:** *Pyrus* accessions at NCGR-Corvallis being
numbered. Received April 15, 1987.

origin: USSR. **pedigree:** Open-pollinated from botanical
collection. Perennial. Cultivated. Seed.

PI 541891 to 541895. *Pyrus* hybrid ROSACEAE

Donated by: Thompson, Dr. Maxine, Oregon State University,
Department of Horticulture, Corvallis, Oregon, United States.
remarks: *Pyrus* accessions at NCGR-Corvallis being numbered.
Received January 12, 1989.

- PI 541891 **origin:** Pakistan. **pedigree:** Collected from the wild in
Pakistan. **collected:** October 01, 1988. **latitude:** 30
deg. N. **longitude:** 70 deg. E. Perennial. Wild. Seed.

PI 541891 to 541895-continued

- PI 541892 *Pyrus pashia* Buch.-Ham. ex D. Don ROSACEAE
origin: Pakistan. **pedigree:** Collected from the wild in Pakistan. **collected:** October 19, 1988. **latitude:** 30 deg. N. **longitude:** 70 deg. E. Perennial. Wild. Seed.
- PI 541893 *Pyrus pashia* Buch.-Ham. ex D. Don ROSACEAE
origin: Pakistan. **pedigree:** Collected from the wild in Pakistan. **collected:** October 11, 1988. **latitude:** 30 deg. N. **longitude:** 70 deg. E. Perennial. Wild. Seed.
- PI 541894 *Pyrus pashia* Buch.-Ham. ex D. Don ROSACEAE
origin: Pakistan. **pedigree:** Collected from the wild in Pakistan. **collected:** October 01, 1988. **latitude:** 30 deg. N. **longitude:** 70 deg. E. Perennial. Wild. Seed.
- PI 541895 *Pyrus pashia* Buch.-Ham. ex D. Don ROSACEAE
origin: Pakistan. **pedigree:** Collected from the wild in Pakistan. **collected:** October 10, 1988. **latitude:** 30 deg. N. **longitude:** 70 deg. E. Perennial. Wild. Seed.

PI 541896. *Pyrus pseudopashia* T. T. Yu 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: China. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seedlot collected wild in China. **collected:** January 01, 1924. Perennial. Breeding Material. Plant.

PI 541897 to 541899. *Pyrus pyrifolia* (Burm. f.) Nakai ROSACEAE Asian 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 541897 **origin:** United States. **developer country:** Japan.
cultivar: Hawaii. Perennial. Cultivar. Plant.
- PI 541898 **origin:** United States. **developer country:** Japan.
cultivar: Japanese Golden Russet. Perennial. Cultivar. Plant.

PI 541897 to 541899-continued

PI 541899 **origin:** Asia. **developer country:** United States. **origin institute:** Oregon State University, Experiment Station, Medford, Oregon. **pedigree:** Seedling selection from seed collected in Asia. Perennial. Breeding Material. Plant.

PI 541900. *Pyrus pyrifolia* (Burm. f.) Nakai ROSACEAE Oriental 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.

origin: United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection. Perennial. Breeding Material. Plant.

PI 541901 to 541902. *Pyrus pyrifolia* (Burm. f.) Nakai ROSACEAE Oriental 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 541901 **origin:** United States. **origin institute:** Oregon State University, Department of Horticulture, Corvallis, Oregon. Perennial. Breeding Material. Plant.

PI 541902 **origin:** United States. **origin institute:** Oregon State University, Department of Horticulture, Corvallis, Oregon. Perennial. Breeding Material. Plant.

PI 541903. *Pyrus pyrifolia* (Burm. f.) Nakai ROSACEAE Asian 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.

origin: United States. **developer country:** Mexico. **cultivar:** Monterrey. **pedigree:** Probably Pineapple x *P. communis*. Perennial. Cultivar. Plant.

PI 541904 to 541909. *Pyrus pyrifolia* (Burm. f.) Nakai ROSACEAE Asian 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 541904 **origin:** United States. **developer country:** China. **cultivar:** Seuri Li. Perennial. Cultivar. Plant.

PI 541905 **origin:** United States. **cultivar:** Szumi. Perennial. Cultivar. Plant.

PI 541906 **origin:** United States. **developer country:** China. **cultivar:** Huang Guar. Perennial. Cultivar. Plant.

PI 541907 **origin:** United States. **developer country:** China. **cultivar:** Czui. Perennial. Cultivar. Plant.

PI 541908 **origin:** United States. **developer country:** United States. **origin institute:** South Dakota State University, Agricultural Experiment Station, Brookings, South Dakota. **cultivar:** Okolo. **pedigree:** Seedling selection. Perennial. Cultivar. Plant.

PI 541909 *Pyrus ussuriensis* Maxim. ROSACEAE Asian Pear
origin: United States. **developer country:** China. **cultivar:** Chin Li. Perennial. Cultivar. Plant.

PI 541910. *Pyrus pyrifolia* (Burm. f.) Nakai ROSACEAE Oriental Pear

Donated by: Park, Mr. K, Hawaii, United States. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received April 08, 1983.

origin: United States. **pedigree:** Mikado x Hawaii hybrid. Perennial. Breeding Material. Seed.

PI 541911 to 541925. *Pyrus pyrifolia* (Burm. f.) Nakai ROSACEAE Oriental 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 541911 **origin:** Korea, Republic of. **pedigree:** Collected from the wild in Korea, possible hybrid. **collected:** September 07, 1981. **locality:** Cheongju, coarse granite soil, pH4 to 5, steep slope. **latitude:** 37 deg. N. **longitude:** 127 deg. E. **elevation:** 340m. Perennial. Wild. Seed.

PI 541911 to 541925-continued

- PI 541912 **origin:** Korea, Republic of. **pedigree:** Collected from the wild in Korea. **collected:** September 09, 1981. **locality:** Woal Ark Mountains, steep slope in mixed trees & vines. **latitude:** 37 deg. N. **longitude:** 127 deg. E. **elevation:** 500m. Perennial. Wild. Seed.
- PI 541913 **origin:** Korea, Republic of. **pedigree:** Collected from the wild in Korea. **collected:** September 09, 1981. **locality:** Chungju, Woal Ark Mountains, steep slope, low temp -30oC. **latitude:** 37 deg. N. **longitude:** 127 deg. E. **elevation:** 550m. Perennial. Wild. Seed.
- PI 541914 **origin:** Afghanistan. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seed collected in Afghanistan. Perennial. Breeding Material. Plant.
- PI 541915 **origin:** Asia. **pedigree:** Open pollinated seed from botanical collection. Perennial. Cultivated. Seed.
- PI 541916 **origin:** Asia. **pedigree:** Collected from the wild in Asia. Perennial. Wild. Seed.
- PI 541917 **origin:** Japan. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Open pollinated seed of cultivar Chojuro. **collected:** 1965. Perennial. Breeding Material. Seed.
- PI 541918 **origin:** UNCERTAIN. **pedigree:** Collected from the wild. Perennial. Wild. Seed.
- PI 541919 **origin:** Korea, Republic of. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Scion from seedling A from OP seed from Korea. Perennial. Breeding Material. Plant.
- PI 541920 **origin:** United States. **origin institute:** Pacific Coast Nursery, Portland, Oregon. **pedigree:** Probably a seedling selection. Perennial. Breeding Material. Plant.
- PI 541921 **origin:** United States. **origin institute:** Pacific Coast Nursery, Portland, Oregon. **pedigree:** Probably a seedling selection. Perennial. Breeding Material. Plant.
- PI 541922 **origin:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection. Perennial. Breeding Material. Plant.

PI 541911 to 541925-continued

PI 541923 **origin:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection. Perennial. Breeding Material. Plant.

PI 541924 **origin:** Korea. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seed collected in Korea. Perennial. Breeding Material. Plant.

PI 541925 **origin:** Korea, Republic of. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection B from OP seed from Korea. Perennial. Breeding Material. Plant.

PI 541926 to 541928. *Pyrus pyrifolia* (Burm. f.) Nakai ROSACEAE
Oriental Pear

Donated by: Donoho, Dr. Clive, University of Georgia, Agricultural Experiment Station, Athens, Georgia, United States. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received April 08, 1983.

PI 541926 **origin:** United States. **pedigree:** Open-pollinated from yard planting. **collected:** 1963. Perennial. Cultivated. Seed.

PI 541927 **origin:** United States. **pedigree:** Open pollinated from yard planting. **collected:** 1963. Perennial. Cultivated. Seed.

PI 541928 **origin:** United States. **pedigree:** Open pollinated from yard planting. **collected:** September 24, 1964. Perennial. Cultivated. Seed.

PI 541929. *Pyrus pyrifolia* (Burm. f.) Nakai ROSACEAE Oriental 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.

origin: Pakistan. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seedlot collected in Pakistan. Perennial. Breeding Material. Cutting.

PI 541930. *Pyrus pyrifolia* (Burm. f.) Nakai ROSACEAE Oriental Pear

Donated by: Cho, H. M., Horticultural Experiment Station, Suweon, Korea, Republic of. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received December 02, 1987.

origin: Korea, Republic of. **pedigree:** Collected from the wild in Korea. **locality:** Near Horticultural Experiment Station, Suweon. **latitude:** 37 deg. N. **longitude:** 127 deg. E. **elevation:** 200m. Perennial. Wild. Seed.

PI 541931. *Pyrus pyrifolia* (Burm. f.) Nakai ROSACEAE Asian 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 26, 1988.

origin: United States. **developer country:** Japan. **origin institute:** Ministry of Agriculture and Forestry, Division of Fruit Breeding, Fruit Tree Research Center, Yatabe, Ibaraki, Oregon 300-21. **cultivar:** Hosui. **pedigree:** (Kikusi x Yakumo) x Yakumo. Perennial. Cultivar. Plant.

PI 541932 to 541943. *Pyrus pyrifolia* (Burm. f.) Nakai ROSACEAE Oriental Pear

Donated by: Robbins, Patricia, USDA-ARS, NCGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon, United States. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received January 25, 1989.

PI 541932 **origin:** Korea, Republic of. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seed collected in Korea. Perennial. Breeding Material. Plant.

PI 541933 **origin:** Korea, Republic of. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seed collected in Korea. Perennial. Breeding Material. Plant.

PI 541934 **origin:** Korea, Republic of. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seed collected in Korea. Perennial. Breeding Material. Plant.

PI 541932 to 541943-continued

- PI 541935 **origin:** Korea, Republic of. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seed collected in Korea. Perennial. Breeding Material. Plant.
- PI 541936 **origin:** Korea, Republic of. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seed collected in Korea. Perennial. Breeding Material. Plant.
- PI 541937 **origin:** Korea, Republic of. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seed collected in Korea. Perennial. Breeding Material. Plant.
- PI 541938 **origin:** Korea, Republic of. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seed collected in Korea. Perennial. Breeding Material. Plant.
- PI 541939 **origin:** Korea, Republic of. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seed collected in Korea. Perennial. Breeding Material. Plant.
- PI 541940 **origin:** Korea, Republic of. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seed collected in Korea. Perennial. Breeding Material. Plant.
- PI 541941 **origin:** Korea, Republic of. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seed collected in Korea. Perennial. Breeding Material. Plant.
- PI 541942 **origin:** Korea, Republic of. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seed collected in Korea. Perennial. Breeding Material. Plant.

PI 541932 to 541943-continued

PI 541943 **origin:** Korea, Republic of. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seed collected in Korea. Perennial. Breeding Material. Plant.

PI 541944 to 541945. *Pyrus regelii* Rehder 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 541944 **origin:** United States. **developer country:** USSR. Perennial. Uncertain. Plant.

PI 541945 **origin:** USSR. **pedigree:** Probably seedling selection from OP seed from botanical col. Perennial. Cultivated. Plant.

PI 541946. *Pyrus regelii* Rehder 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: USSR. **developer country:** United States. **origin institute:** Oregon State University, Experiment Station, Medford, Oregon. **pedigree:** Seedling selection from seedlot collected in the USSR. Perennial. Breeding Material. Plant.

PI 541947. *Pyrus regelii* Rehder ROSACEAE

Donated by: Long Ashton Research Station, Kent, England, United Kingdom. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received March 03, 1986.

origin: United Kingdom. **origin institute:** Long Ashton Research Station, Long Ashton, Kent, England. Perennial. Breeding Material. Cutting.

PI 541948. *Pyrus salicifolia* Pallas ROSACEAE Willow-leaved 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.

origin: United States. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from OP seed from botanical collection. Perennial. Breeding Material. Plant.

PI 541949. *Pyrus salicifolia* Pallas ROSACEAE Willow-leaved Pear

Donated by: Pourtet, J., Angers, France. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received April 08, 1983.

origin: France. **pedigree:** Collected from the wild in France. **collected:** 1963. **locality:** Angers Experiment Station. **latitude:** 47 deg. 30 min. N. Perennial. Wild. Seed.

PI 541950 to 541952. *Pyrus salicifolia* Pallas ROSACEAE Willow-leaved 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 541950 **origin:** United States. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from OP seed from botanical collection. Perennial. Breeding Material. Plant.

PI 541951 **origin:** United States. **developer country:** United Kingdom. **origin institute:** George Jackman and Sons Nursery, Working, England. **cultivar:** Pendula. **pedigree:** Seedling selection. Perennial. Cultivar. Plant.

PI 541952 **origin:** Australia. **pedigree:** Collected from the wild in Australia. **latitude:** 23 deg. S. **longitude:** 135 deg. E. Perennial. Wild. Seed.

PI 541953. *Pyrus salicifolia* Pallas ROSACEAE Willow-leaved 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 541953-continued

origin: USSR. **pedigree:** Collected from the wild in the Soviet Union. Perennial. Wild. Seed.

PI 541954 to 541955. *Pyrus* sp. ROSACEAE Asian 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 541954 **origin:** United States. **developer country:** United States. **origin institute:** USDA/ARS, Chico, California. **cultivar:** Orient. **pedigree:** *P. hybrid*, *P. communis* x sp. from China. Perennial. Cultivar. Plant.

PI 541955 *Pyrus ussuriensis* Maxim. ROSACEAE Asian Pear
origin: United States. **developer country:** China.
cultivar: Tau Ma Li. Perennial. Cultivar. Plant.

PI 541956 to 541960. *Pyrus* sp. 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 541956 **origin:** China. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Kansu x self. Perennial. Breeding Material. Plant.

PI 541957 *Pyrus communis* subsp. *caucasica* (Fed.) Browicz ROSACEAE
origin: United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **local name:** Rootstock Pear. Perennial. Breeding Material. Plant.

PI 541958 *Pyrus communis* L. ROSACEAE
origin: United States. **pedigree:** OP seed from escaped Anjou pear. **latitude:** 47 deg. N. **longitude:** 03 deg. W. Perennial. Wild. Seed.

PI 541959 **origin:** UNCERTAIN. **pedigree:** Uncertain, perhaps originally collected wild. Perennial. Cultivated. Plant.

PI 541960 **origin:** United States. **origin institute:** Oregon State University, Experiment Station, Medford, Oregon. **cultivar:** MM-38. **local name:** Rootstock Pear. Perennial. Breeding Material. Plant.

PI 541961. *Pyrus* sp. ROSACEAE

Donated by: Schultz, Bill, Cardwell Hill Drive, Philomath, Oregon, United States. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received February 27, 1986.

origin: United States. **pedigree:** Seedling selection or chance seedling. Perennial. Breeding Material. Cutting.

PI 541962. *Pyrus* sp. ROSACEAE Asian 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.

origin: United States. **developer country:** Korea, Republic of. **origin institute:** Horticultural Exp. Sta., Suweon, Oregon. **cultivar:** A-Ri-Rang. **pedigree:** Chojuro x Chungsilri. Perennial. Cultivar. Cutting.

PI 541963. *Pyrus* sp. ROSACEAE

Donated by: McDonnell, Paul, 1024 N Hayes Avenue, Oak Park, Illinois, United States. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received January 20, 1987.

origin: United States. **pedigree:** Asian Pear seedling selection. Perennial. Cutting.

PI 541964. *Pyrus* sp. ROSACEAE

Donated by: Thompson, Dr. Maxine, Oregon State University, Department of Horticulture, Corvallis, Oregon, United States. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received January 12, 1989.

origin: Pakistan. **cultivar:** Tan Chi II. **pedigree:** Uncertain, probably open pollinated. **collected:** October 01, 1988. **latitude:** 30 deg. N. **longitude:** 70 deg. E. Perennial. Cultivated. Seed.

PI 541965 to 541966. *Pyrus ussuriensis* Maxim. ROSACEAE Asian Pear

Donated by: Klein, Jack, Jack Klein Nursery, 15215 SE Webfoot, Dayton, Oregon, United States. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received January 30, 1989.

PI 541965 to 541966-continued

PI 541965 **origin:** United States. **developer country:** China.
cultivar: Nangon Li. Perennial. Cultivar. Cutting.

PI 541966 Pyrus sp. ROSACEAE Asian Pear
origin: United States. **developer country:** China. **origin institute:** Huhoot Experiment Station, Oregon. **cultivar:** Huhoot Li. Perennial. Cultivar. Cutting.

PI 541967 to 541972. Pyrus sp. ROSACEAE

Donated by: Lanterman, Dr. W.S., Saanichton Research and Plant, Quarantine Station, Saanichton, British Columbia, Canada. **remarks:** Pyrus accessions at NCGR-Corvallis being numbered. Received February 28, 1989.

PI 541967 **origin:** Canada. Perennial. Breeding Material. Cutting.

PI 541968 **origin:** Canada. Perennial. Breeding Material. Cutting.

PI 541969 **origin:** Canada. Perennial. Breeding Material. Cutting.

PI 541970 **origin:** Canada. Perennial. Breeding Material. Cutting.

PI 541971 **origin:** Canada. Perennial. Breeding Material. Cutting.

PI 541972 **origin:** Canada. Perennial. Breeding Material. Cutting.

PI 541973. Pyrus syriaca Boiss. 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: Israel. **developer country:** United States.
origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seed collected in Israel. Perennial. Breeding Material. Plant.

PI 541974 to 541979. Pyrus syriaca Boiss. 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 541974 to 541979-continued

- PI 541974 **origin:** Israel. **developer country:** United States.
origin institute: Oregon State University, Dept.
Horticulture, Corvallis, Oregon. **pedigree:** Seedling
selection from seed collected in Israel. Perennial.
Breeding Material. Plant.
- PI 541975 **origin:** Israel. **developer country:** United States.
origin institute: Oregon State University, Dept.
Horticulture, Corvallis, Oregon. **pedigree:** Seedling
selection from seed collected wild in Israel. Perennial.
Breeding Material. Plant.
- PI 541976 **origin:** Israel. **developer country:** United States.
origin institute: Oregon State University, Dept.
Horticulture, Corvallis, Oregon. **pedigree:** Seedling
selection from seed collected in Israel. Perennial.
Breeding Material. Plant.
- PI 541977 **origin:** Israel. **developer country:** United States.
origin institute: Oregon State University, Dept.
Horticulture, Corvallis, Oregon. **pedigree:** Seedling
selection from seed collected wild from Israel.
Perennial. Breeding Material. Plant.
- PI 541978 **origin:** Iran. **pedigree:** Collected from the wild in Iran.
collected: 1971. Perennial. Wild. Seed.
- PI 541979 **origin:** Iran. **pedigree:** Collected from the wild in Iran.
collected: 1970. Perennial. Wild. Seed.

PI 541980 to 541982. *Pyrus syriaca* Boiss. ROSACEAE

Donated by: Thompson, Dr. Maxine, Oregon State University,
Department of Horticulture, Corvallis, Oregon, United States.
remarks: *Pyrus* accessions at NCGR-Corvallis being numbered.
Received January 16, 1984.

- PI 541980 **origin:** Syria. **pedigree:** Seed collected from the wild in
Syria. **collected:** October 26, 1983. **locality:** NE of
Damascus in Al Arab Mts. **latitude:** 33 deg. 30 min. N.
longitude: 36 deg. 18 min. E. **elevation:** 1100m.
Perennial. Wild. Seed.
- PI 541981 **origin:** Syria. **pedigree:** Seed collected from the wild in
Syria. **collected:** January 16, 1983. **locality:** NE of
Damascus. **latitude:** 38 deg. 30 min. N. **longitude:** 36
deg. 18 min. E. **elevation:** 1100m. Perennial. Wild.
Seed.

PI 541980 to 541982-continued

PI 541982 **origin:** Syria. **pedigree:** Seed collected from the wild in Syria. **collected:** October 26, 1983. **locality:** NE of Damascus. **latitude:** 33 deg. 30 min. N. **longitude:** 36 deg. 18 min. E. **elevation:** 1100m. Perennial. Wild. Seed.

PI 541983. *Pyrus syriaca* Boiss. ROSACEAE

Donated by: Thompson, Dr. Maxine, Oregon State University, Department of Horticulture, Corvallis, Oregon, United States.
remarks: *Pyrus* accessions at NCGR-Corvallis being numbered. Received January 16, 1986.

origin: Syria. **pedigree:** Seed collected from the wild in Syria. **collected:** January 16, 1983. **locality:** East of Suwayda, In Al Arab Mts. **latitude:** 32 deg. 55 min. N. **longitude:** 45 deg. E. **elevation:** 1500m. Perennial. Wild. Seed.

PI 541984. *Pyrus ussuriensis* Maxim. ROSACEAE

Donated by: Anderson, Dr. Peter, Missouri State University, State Fruit Experiment Station, Mountain Grove, Missouri, United States.
remarks: *Pyrus* accessions at NCGR-Corvallis being numbered. Received May 01, 1982.

origin: United States. **origin institute:** Oregon State University, Department of Horticulture, Corvallis, Oregon. Perennial. Breeding Material. Plant.

PI 541985 to 542002. *Pyrus ussuriensis* Maxim. ROSACEAE Asian 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 541985 **origin:** United States. **developer country:** China.
cultivar: Ba Li Hsiang. Perennial. Cultivar. Plant.

PI 541986 **origin:** United States. **developer country:** China.
cultivar: Cheih Li. Perennial. Cultivar. Plant.

PI 541987 **origin:** United States. **developer country:** China.
cultivar: Chien Pa Li. Perennial. Cultivar. Plant.

PI 541985 to 542002-continued

- PI 541988 **origin:** China. **developer country:** United States. **origin institute:** Oregon State University, Experiment Station, Medford, Oregon. **pedigree:** Seedling of cultivar Guar Li. Perennial. Breeding Material. Plant.
- PI 541989 **origin:** United States. **developer country:** China. **cultivar:** Hau Kai. Perennial. Cultivar. Plant.
- PI 541990 **origin:** United States. **developer country:** China. **cultivar:** Huang Hsiang Sui Li. Perennial. Cultivar. Plant.
- PI 541991 **origin:** United States. **developer country:** China. **cultivar:** Hung Guar Li. Perennial. Cultivar. Cutting.
- PI 541992 **origin:** United States. **developer country:** China. **cultivar:** Huang Hsiang Sui Li. Perennial. Cultivar. Plant.
- PI 541993 **origin:** United States. **developer country:** China. **cultivar:** Hung Li. **pedigree:** P. ussuriensis x P. phaeocarpa. Perennial. Cultivar. Plant.
- PI 541994 **origin:** United States. **developer country:** China. **cultivar:** Lo Suan Li. Perennial. Cultivar. Plant.
- PI 541995 **origin:** United States. **developer country:** China. **cultivar:** Ma Ti Huang. Perennial. Cultivar. Plant.
- PI 541996 **origin:** United States. **developer country:** China. **cultivar:** Man Yuan Hsiang. Perennial. Cultivar. Plant.
- PI 541997 **origin:** United States. **developer country:** China. **cultivar:** Nan Li. Perennial. Cultivar. Plant.
- PI 541998 **origin:** United States. **developer country:** China. **cultivar:** Pai Li. Perennial. Cultivar. Plant.
- PI 541999 **origin:** United States. **developer country:** China. **cultivar:** Ping Ding Li. **pedigree:** P. ussuriensis x P. phaeocarpa. Perennial. Cultivar. Plant.
- PI 542000 **origin:** United States. **developer country:** China. **cultivar:** Ta Mo Pan. Perennial. Cultivar. Plant.
- PI 542001 **origin:** United States. **developer country:** China. **cultivar:** Ta Suan Li. **collected:** December 08, 1916. Perennial. Cultivar. Plant.
- PI 542002 **origin:** United States. **developer country:** China. **cultivar:** Ta Tau Huang. Perennial. Cultivar. Plant.

PI 542003. *Pyrus ussuriensis* Maxim. ROSACEAE Sand 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.

origin: Korea, Republic of. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seed collected in Korea. Perennial. Breeding Material. Plant.

PI 542004 to 542007. *Pyrus ussuriensis* Maxim. ROSACEAE Asian 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 542004 **origin:** United States. **developer country:** United States. **cultivar:** Hansen Siberian Pear. **pedigree:** Probably a seedling selection. Perennial. Cultivar. Plant.

PI 542005 **origin:** United States. **developer country:** China. **cultivar:** Hsiang Sui Li. Perennial. Cultivar. Plant.

PI 542006 **origin:** United States. **developer country:** China. **cultivar:** Mien Suan Li. Perennial. Cultivar. Plant.

PI 542007 **origin:** United States. **developer country:** China. **cultivar:** Tzu Ma Li. Perennial. Cultivar. Plant.

PI 542008 to 542009. *Pyrus ussuriensis* Maxim. ROSACEAE Asian 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 542008 **origin:** United States. **developer country:** China. **cultivar:** Ping Li. Perennial. Cultivar. Plant.

PI 542009 **origin:** China. **developer country:** United States. **origin institute:** Oregon State University, Research Station, Medford, Oregon. **pedigree:** Seedling selection from seedlot collected in China. Perennial. Breeding Material. Plant.

PI 542010. *Pyrus ussuriensis* Maxim. ROSACEAE Asian Pear

Donated by: Beutel, James A., University of California, Department of Pomology, Davis, California, United States. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received February 10, 1983.

origin: United States. **developer country:** China.
cultivar: Pa Li. Perennial. Cultivar. Plant.

PI 542011 to 542020. *Pyrus ussuriensis* Maxim. ROSACEAE Sand 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 542011 **origin:** Korea, Republic of. **pedigree:** Collected from the wild in Korea. **collected:** September 07, 1981. **locality:** Mountains near Chengong. **latitude:** 36 deg. N. **longitude:** 128 deg. E. **elevation:** 350m. Perennial. Wild. Seed.

PI 542012 **origin:** Korea, Republic of. **pedigree:** Open pollinated from botanical collection. **collected:** September 06, 1981. **locality:** Seoul. **latitude:** 37 deg. 31 min. N. **longitude:** 127 deg. 06 min. E. **elevation:** 40m. Perennial. Cultivated. Seed.

PI 542013 **origin:** Korea, Republic of. **pedigree:** Collected from the wild in Korea. **collected:** September 06, 1981. **locality:** Near Hong-Nung Arboretum, coarse granite soil, pH 4 to 5. **latitude:** 37 deg. 31 min. N. **longitude:** 127 deg. 06 min. E. **elevation:** 40m. Perennial. Wild. Seed.

PI 542014 **origin:** Korea. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seedlot collected in Korea. Perennial. Breeding Material. Plant.

PI 542015 **origin:** China. **developer country:** United States. **origin institute:** Morton Arboretum, Lisle, Illinois. **pedigree:** Seedling selection from seedlot collected wild in China. Perennial. Breeding Material. Plant.

PI 542016 **origin:** Asia. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from Asian seedlot. Perennial. Breeding Material. Plant.

PI 542011 to 542020-continued

PI 542017 **origin:** China. **developer country:** United States. **origin institute:** Morton Arboretum, Lisle, Illinois. **pedigree:** Seedling selection from seedlot collected wild in China. Perennial. Breeding Material. Plant.

PI 542018 **origin:** UNCERTAIN. **developer country:** United States. **origin institute:** Oregon State University, Experiment Station, Medford, Oregon. **pedigree:** Probably a seedling selection. Perennial. Breeding Material. Plant.

PI 542019 **origin:** China. **pedigree:** Selection of seed-propagated variety from China. **collected:** January 01, 1924. **locality:** Harbin. Perennial. Cultivated. Plant.

PI 542020 **origin:** Asia. **developer country:** United States. **origin institute:** Oregon State University, Experiment Station, Medford, Oregon. **pedigree:** Seedling selection from Asian seedlot. Perennial. Breeding Material. Plant.

PI 542021. *Pyrus ussuriensis* Maxim. ROSACEAE Sand Pear

Donated by: Miller, C. Ferris, Chollipo Arboretum, 344-16 Yonhui-Dong, Seoul, Korea, Republic of. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received June 28, 1984.

origin: Korea. **pedigree:** Collected from the wild in Korea. **latitude:** 36 deg. N. **longitude:** 128 deg. E. Perennial. Wild. Seed.

PI 542022. *Pyrus ussuriensis* Maxim. ROSACEAE Asian 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 January 22, 1986.

origin: United States. **developer country:** China. **cultivar:** Hsiang Sui Li. Perennial. Cultivar. Cutting.

PI 542023. *Pyrus ussuriensis* Maxim. ROSACEAE Asian 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 12, 1986.

origin: United States. **developer country:** China. **cultivar:** Tsu Li. Perennial. Cultivar. Plant.

PI 542024. *Pyrus ussuriensis* Maxim. ROSACEAE Asian Pear

Donated by: Bell, Richard, USDA-ARS-NER, Appalachian Fruit Res. Station, Route 2, Box 45, Kearneysville, West Virginia, United States. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received February 24, 1986.

origin: United States. **developer country:** China.
cultivar: Tang Li. Perennial. Cultivar. Plant.

PI 542025. *Pyrus ussuriensis* Maxim. ROSACEAE Asian Pear

Donated by: Rombough, Lon, 4285 Claxter Ct. N.E., Salem, Oregon, United States. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received December 29, 1986.

origin: United States. **developer country:** United States.
cultivar: Hansen Pear. Perennial. Cultivar. Cutting.

PI 542026. *Pyrus ussuriensis* Maxim. ROSACEAE Chinese Pear

Donated by: Parlman, Dr. Bruce, USDA-ARS-PGGI, 11601 George Palmer Highway, Plant Introduction Station, Glenn Dale, Maryland, United States. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received January 20, 1987.

origin: China. **developer country:** United States.
pedigree: Selection of *P. ussuriensis* from Harbin.
Perennial. Breeding Material. Cutting.

PI 542027. *Pyrus ussuriensis* Maxim. ROSACEAE Sand Pear

Donated by: Vitkovskij, Prof. V.L, N.I. Vavilov Institute, 44 Herzen Str., Leningrad, Soviet Union. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received March 16, 1987.

origin: USSR. **pedigree:** Collected from the wild in the Soviet Union. Perennial. Wild. Seed.

PI 542028. *Pyrus ussuriensis* Maxim. ROSACEAE Chinese Pear

Donated by: Goheen, A., University of California, Davis, California, United States. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received April 08, 1987.

origin: China. **origin institute:** Shenyang University, Shenyang, Liaoning. Perennial. Breeding Material. Seed.

PI 542029. *Pyrus ussuriensis* Maxim. ROSACEAE Sand Pear

Donated by: Hortus Botanicus Acad. Sci., Tashkent, Uzbek Republic, Soviet Union. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received April 24, 1987.

origin: USSR. **pedigree:** Open-pollinated from botanical collection. Perennial. Cultivated. Seed.

PI 542030 to 542033. *Pyrus ussuriensis* Maxim. ROSACEAE Sand Pear

Donated by: Robbins, Patricia, USDA-ARS, NCGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon, United States. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received January 25, 1989.

PI 542030 **origin:** Korea, Republic of. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seed collected in Korea. Perennial. Breeding Material. Plant.

PI 542031 **origin:** Korea, Republic of. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seed collected in Korea. Perennial. Breeding Material. Plant.

PI 542032 **origin:** Korea, Republic of. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seed collected in Korea. Perennial. Breeding Material. Plant.

PI 542033 **origin:** Korea, Republic of. **developer country:** United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon. **pedigree:** Seedling selection from seed collected in Korea. Perennial. Breeding Material. Plant.

PI 542034. *Pyrus x bretschnideri* Rehder ROSACEAE

Donated by: Hortus Botanicus Acad. Sci., Tashkent, Uzbek Republic, Soviet Union. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received April 15, 1987.

origin: USSR. **pedigree:** Open-pollinated from botanical collection. Perennial. Cultivated. Seed.

PI 542035. *Pyrus x canescens* Spach ROSACEAE

Donated by: Hortus Botanicus Acad. Sci., Tashkent, Uzbek Republic, Soviet Union. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received April 15, 1987.

origin: USSR. **pedigree:** Open-pollinated from botanical collection. Perennial. Cultivated. Seed.

PI 542036. *Pyrus complexa* Rubtzov ROSACEAE

Donated by: Vitkovskij, Prof. V.L, N.I. Vavilov Institute, 44 Herzen Str., Leningrad, Soviet Union. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received March 16, 1987.

origin: USSR. **pedigree:** Collected from the wild in the Soviet Union. Perennial. Wild. Seed.

PI 542037. *Pyrus x phaeocarpa* Rehder 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.

origin: UNCERTAIN. **developer country:** United States. **origin institute:** Oregon State University, Experiment Station, Medford, Oregon. **pedigree:** Probably a seedling selection. Perennial. Breeding Material. Plant.

PI 542038. *Pyrus x serrulata* Rehder ROSACEAE

Donated by: Arnold Arboretum, The Arborway, Jamaica Plain, Massachusetts, United States. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received April 08, 1983.

origin: Europe. **pedigree:** Open pollinated from botanical collection. Perennial. Cultivated. Seed.

PI 542039. *Pyrus x serrulata* Rehder 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: UNCERTAIN. **pedigree:** Collected from the wild. **collected:** October 29, 1964. Perennial. Wild. Seed.

PI 542040. *Pyrus x serrulata* Rehder ROSACEAE

Donated by: Hortus Botanicus Acad. Sci., Tashkent, Uzbek Republic, Soviet Union. **remarks:** *Pyrus* accessions at NCGR-Corvallis being numbered. Received April 15, 1987.

origin: USSR. **pedigree:** Open-pollinated from botanical collection. Perennial. Cultivated. Seed.

PI 542041. *Pyrus xerophila* T. T. Yu 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: United States. **origin institute:** Oregon State University, Dept. Horticulture, Corvallis, Oregon.
pedigree: *P. pashia* x Kansu W-6. Perennial. Breeding Material. Plant.

PI 542042. *Glycine max* (L.) Merr. FABACEAE Soybean

Donated by: Orf, J.H., Minnesota Agr. Exp. Sta., Dept. of Agronomy & Plant Genetics, Univ. of Minnesota, St. Paul, Minnesota, United States. **remarks:** Kato Soybean. Received May 24, 1990.

origin: United States. **origin institute:** Minnesota Agr. Exp. Sta., St. Paul, Minnesota 55100. **cultivar:** Kato.
pedigree: M70-127 x Century M70-127 is from Evans x M63-217Y M63-217Y is a yellow hilum near-isogenic sib of 'Hodson'. **other id:** CV-269. **source:** Crop Sci. 31(1):233 1991. **group:** CSR-SOYBEAN. **other id:** PVP 9000028.
source: Pending. **group:** PVPO. **other id:** M81-382.
source: Prior designation. **remarks:** Maturity Group I. Indeterminate growth type. Flowers purple. Pubescence tawny. Pods brown. Seeds shiny yellow with black hila. Height 100cm. Seed weight 195mg. Protein content 42.1%. Oil content 19.7%. Resistant to phytophthora root rot (caused by *Phytophthora megasperma*). Annual. Cultivar. Seed.

PI 542043. *Glycine max* (L.) Merr. FABACEAE Soybean

Donated by: Bernard, R.L., Agricultural Research Service -- USDA, University of Illinois, 1102 South Goodwin, Urbana, Illinois, United States; and Illinois Agr. Exp. Sta.. **remarks:** Linford Soybean. Received May 24, 1990.

PI 542043-continued

origin: United States. **origin institute:** Agricultural Research Service -- USDA, Urbana, Illinois 61801.
cultivar: Linford. **pedigree:** Williams 82 x Fayette.
other id: CV-270. **source:** Crop Sci. 31(1):232 1991.
group: CSR-SOYBEAN. **other id:** L82C-1246. **source:** Prior designation. **remarks:** Similar to parent variety Fayette in appearance. Maturity Group III. Flowers white. Pubescence tawny. Pods tan. Seeds shiny yellow with black hilum. Moderately susceptible to Phytophthora root rot. Heterogeneous for resistance to downy mildew. Resistant to bacterial pustule. Moderately resistant to brown stem rot. Annual. Cultivar. Seed.

PI 542044. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: Hymowitz, T., Agricultural Research Service -- USDA, University of Illinois, 1102 South Goodwin, Urbana, Illinois, United States; and Illinois Agr. Exp. Sta.. **remarks:** Kunitz Soybean. Received May 24, 1990.

origin: United States. **origin institute:** Agricultural Research Service -- USDA, Urbana, Illinois 61801.
cultivar: Kunitz. **pedigree:** Williams 82(6) x PI 157440.
other id: CV-271. **source:** Crop Sci. 31(1):232 1991.
group: CSR-SOYBEAN. **other id:** PVP 9000169. **source:** Pending. **group:** PVPO. **other id:** GP-72. **source:** Crop Sci. 26(3):650 1986. **group:** CSR-SOYBEAN. **remarks:** Similar to Williams 82 in all visible traits. Maturity Group III. Flowers white. Pubescence tawny. Pods tan. Seeds shiny yellow with black hilum. Gene Rps1-k for resistance to many races of Phythphora rot and gene rxp for resistance to bacterial pustule leaf spot. Gene ti causing lack of trypsin inhibitor in seeds. Annual. Cultivar. Seed.

PI 542045. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: Bernard, R.L., Illinois Agr. Exp. Sta., University of Illinois, 1102 South Goodwin, Urbana, Illinois, United States.
remarks: IL1 Soybean. Received May 24, 1990.

PI 542045-continued

origin: United States. **origin institute:** Illinois Agr. Exp. Sta., Urbana, Illinois 61801. **cultivar:** IL1.
pedigree: Hobbit x T208. **other id:** CV-272. **source:** Crop Sci. 31(1):233 1991. **group:** CSR-SOYBEAN. **other id:** L84-3775. **remarks:** Relative maturity 2.6. Stems determinate. Flowers purple. Pubescence gray. Pods tan. Seeds shiny yellow with yellow to very light buff hilum. Compared to Hoyt in field tests at Urbana, averaged approx. 85% of Hoyt's yield, same maturity date, 8% greater plant height, similar protein content, lower oil by 2 percentage points, and seeds that averaged 71mg or 42% smaller than Hoyt and 50% smaller than. Annual. Cultivar. Seed.

PI 542046. *Glycine max* (L.) Merr. FABACEAE Soybean

Donated by: Bernard, R.L., Illinois Agr. Exp. Sta., University of Illinois, 1102 South Goodwin, Urbana, Illinois, United States.
remarks: IL2 Soybean. Received May 24, 1990.

origin: United States. **origin institute:** Illinois Agr. Exp. Sta., Urbana, Illinois 61801. **cultivar:** IL2.
pedigree: Hobbit x PI 408016B. **other id:** CV-273.
source: Crop Sci. 31(1):234 1991. **group:** CSR-SOYBEAN.
other id: L85-6899. **remarks:** Relative maturity 3.6. Stems determinate. Flowers purple. Pubescence gray. Pods tan. Seeds dull yellow with yellow to very light buff hilum. Compared to Hobbit in field tests at Urbana, averaged approx. 85% of Hobbit's seed yield, same maturity date, 25% greater plant height, 3.6 percentage points higher in protein, 4.0 lower in oil, and seeds that averaged 96mg or 30% smaller than Hobbit. Annual. Cultivar. Seed.

PI 542047. *Hordeum vulgare* L. POACEAE Barley

Donated by: Rasmusson, D.C., Minnesota Agr. Exp. Sta., University of Minnesota, Dept. of Agronomy, 1991 Buford Circle, St. Paul, Minnesota, United States. **remarks:** Excel Barley. Received May 24, 1990.

PI 542047-continued

origin: United States. **origin institute:** Minnesota Agr. Exp. Sta., University of Minnesota, Dept. of Agronomy, St. Paul, Minnesota 55108. **cultivar:** EXCEL. **pedigree:** Cree/Bonanza//Manker/3/2*Robust. **other id:** CV-223. **source:** Crop Sci. 31(1):227 1991. **group:** CSR-BARLEY. **other id:** PVP 9000208. **source:** Pending. **group:** PVPO. **remarks:** Six-rowed, smooth-awned spring type. Kernels covered, medium sized with long hairs on rachilla. Aleurone white. Spike medium-lax, medium-long, and semi-erect. Similar to Robust in maturity and lodging reaction, but lower in plump kernel percentage. Possesses desirable agronomic attributes of Robust and malting and brewing attributes of Morex, the six-rowed quality standard. Spring Annual. Cultivar. Seed.

PI 542048. *Sesamum indicum* L. PEDALIACEAE Sesame

Donated by: Brigham, R.D., Texas Agr. Exp. Sta., Texas A & M University, Route 3, Box 219, Lubbock, Texas, United States. Received May 31, 1990.

origin: United States. **cultivar:** dt45. **pedigree:** Developed from Israeli #45 by irradiating seeds with cobalt. **other id:** 1985 LB8 Field 301 increase. **remarks:** Determinate growth habit. Maturity medium. Plants 66-72cm in height, profusely branched with strong, green stalks. Branches terminate in clusters of 3-7 capsules. Capsules dehiscent, 4-loculed, medium length. Seeds dark brown to yellow, often viviparous if moisture is present at maturity. Seed weight 4.2-4.4 g/1000 seeds (large). Oil content 48.8% or greater on weight basis. Protein ranges from 21.5 to. Spring Annual. Breeding Material. Seed.

PI 542049. *Gossypium hirsutum* L. MALVACEAE Cotton

Donated by: Calif. Planting Cotton Seed Distributors, California, United States. Received June 08, 1990.

origin: United States. **cultivar:** CPCSD ACALA C-4226. **other id:** PVP 9000173. **source:** Pending. **group:** PVPO. Cultivated. Seed.

PI 542050. *Cucurbita pepo* L. CUCURBITACEAE Pumpkin

Donated by: Peto Seed Company, Inc., United States. Received June 08, 1990.

PI 542050-continued

origin: United States. **cultivar:** F11 PSR 476. **other id:** PVP 9000175. **source:** Pending. **group:** PVPO. Cultivated. Seed.

PI 542051. *Festuca arundinacea* Schreber POACEAE Tall fescue

Donated by: Pickseed West Inc., United States. Received June 08, 1990.

origin: United States. **cultivar:** EMPEROR. **other id:** PVP 9000176. **source:** Pending. **group:** PVPO. Cultivated. Seed.

PI 542052. *Vigna unguiculata* (L.) Walp. FABACEAE Cowpea

Donated by: South Carolina Agr. Exp. Sta., South Carolina, United States. Received June 08, 1990.

origin: United States. **cultivar:** CLEMSON PURPLE. **other id:** PVP 9000177. **source:** Pending. **group:** PVPO. Cultivated. Seed.

PI 542053. *Glycine max* (L.) Merr. FABACEAE Soybean

Donated by: Jacob Hartz Seed Company, Inc., United States. Received June 08, 1990.

origin: United States. **cultivar:** HARTZ 922. **other id:** PVP 9000178. **source:** Pending. **group:** PVPO. Cultivated. Seed.

PI 542054. *Cynara scolymus* L. ASTERACEAE Globe artichoke

Donated by: The Regents of the Univ. of California, California, United States. Received June 08, 1990.

origin: United States. **cultivar:** IMPERIAL STAR. **other id:** PVP 9000179. **source:** Pending. **group:** PVPO. Cultivated. Seed.

PI 542055. *Glycine max* (L.) Merr. FABACEAE Soybean

Donated by: Dairyland Seed Company, Inc., United States. Received June 08, 1990.

PI 542055-continued

origin: United States. **cultivar:** DSR-262. **other id:** PVP 9000180. **source:** Pending. **group:** PVPO. Cultivated. Seed.

PI 542056 to 542065. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: Pioneer Hi-Bred International, Inc., United States.
Received June 08, 1990.

PI 542056 **origin:** United States. **cultivar:** 9171. **other id:** PVP 9000181. **source:** Pending. **group:** PVPO. Cultivated. Seed.

PI 542057 **origin:** United States. **cultivar:** 9191. **other id:** PVP 9000182. **source:** Pending. **group:** PVPO. Cultivated. Seed.

PI 542058 **origin:** United States. **cultivar:** 9221. **other id:** PVP 9000183. **source:** Pending. **group:** PVPO. Cultivated. Seed.

PI 542059 **origin:** United States. **cultivar:** 9241. **other id:** PVP 9000184. **source:** Pending. **group:** PVPO. Cultivated. Seed.

PI 542060 **origin:** United States. **cultivar:** 9273. **other id:** PVP 9000185. **source:** Pending. **group:** PVPO. Cultivated. Seed.

PI 542061 **origin:** United States. **cultivar:** 9311. **other id:** PVP 9000186. **source:** Pending. **group:** PVPO. Cultivated. Seed.

PI 542062 **origin:** United States. **cultivar:** 9381. **other id:** PVP 9000187. **source:** Pending. **group:** PVPO. Cultivated. Seed.

PI 542063 **origin:** United States. **cultivar:** 9681. **other id:** PVP 9000188. **source:** Pending. **group:** PVPO. Cultivated. Seed.

PI 542064 **origin:** United States. **cultivar:** ARDIR. **other id:** PVP 9000189. **source:** Pending. **group:** PVPO. Cultivated. Seed.

PI 542065 **origin:** United States. **cultivar:** 9162. **other id:** PVP 9000190. **source:** Pending. **group:** PVPO. Cultivated. Seed.

PI 542066 to 542067. *Glycine max* (L.) Merr. FABACEAE Soybean

Donated by: FFR Cooperative, United States. Received June 08, 1990.

PI 542066 **origin:** United States. **cultivar:** FFR 606. **other id:** PVP 9000191. **source:** Pending. **group:** PVPO. Cultivated. Seed.

PI 542067 **origin:** United States. **cultivar:** FFR 646. **other id:** PVP 9000192. **source:** Pending. **group:** PVPO. Cultivated. Seed.

PI 542068 to 542069. *Oryza sativa* L. POACEAE Rice

Donated by: N.F. Davis Drier & Elevator, Inc., United States. Received June 08, 1990.

PI 542068 **origin:** United States. **cultivar:** NFD 108. **other id:** PVP 9000193. **source:** Pending. **group:** PVPO. Cultivated. Seed.

PI 542069 **origin:** United States. **cultivar:** NFD 109. **other id:** PVP 9000194. **source:** Pending. **group:** PVPO. Cultivated. Seed.

PI 542070 to 542071. *Glycine max* (L.) Merr. FABACEAE Soybean

Donated by: Dairyland Seed Company, Inc., United States. Received June 08, 1990.

PI 542070 **origin:** United States. **cultivar:** DSR-333. **other id:** PVP 9000195. **source:** Pending. **group:** PVPO. Cultivated. Seed.

PI 542071 **origin:** United States. **cultivar:** DSR-373. **other id:** PVP 9000196. **source:** Pending. **group:** PVPO. Cultivated. Seed.

PI 542072. *Triticum aestivum* L. POACEAE Common wheat

Donated by: Agripro Bioscience Inc., United States. Received June 08, 1990.

origin: United States. **cultivar:** CHEROKEE. **other id:** PVP 9000102. **source:** Pending. **group:** PVPO. Cultivated. Seed.

PI 542073 to 542075. *Ipomoea batatas* (L.) Lam. CONVOLVULACEAE Sweet potato

Donated by: De la Puente, F., CIP, Lima, Peru. Received May 18, 1990.

PI 542073 **donor id:** DLP 3189. **origin:** Jamaica. **developer country:** Peru. **origin institute:** CIP, P.O. Box 5969, Lima. **origin institute id:** CIP 400006. **collector id:** DLP 3189. **locality:** 0.2km S Mandeville, Manchester Department, Mandeville Province. **elevation:** 610m. Wild. Seed.

PI 542074 **donor id:** DLP 3203. **origin:** Jamaica. **developer country:** Peru. **origin institute:** CIP, P.O. Box 5969, Lima. **origin institute id:** CIP 400007. **collector id:** DLP 3203. **locality:** 5km W Kingston-Spanish town, Kingston Department, Kingston Province. **elevation:** 65m. Wild. Seed.

PI 542075 **donor id:** DLP 3250. **origin:** Jamaica. **developer country:** Peru. **origin institute:** CIP, P.O. Box 5969, Lima. **origin institute id:** CIP 400008. **collector id:** DLP 3250. **locality:** 0.5km S Foga, Clarendon Department, Foga Province. **elevation:** 510m. Wild. Seed.

PI 542076. *Ipomoea ochracea* (Lindley) G. Don CONVOLVULACEAE

Donated by: De la Puente, F., CIP, Lima, Peru. Received May 18, 1990.

donor id: DLP 3218. **origin:** Jamaica. **developer country:** Peru. **origin institute:** CIP, P.O. Box 5969, Lima. **origin institute id:** CIP 470152. **collector id:** DLP 3218. **locality:** 5km SE Chapleton, Clarendon Department, Chapleton Province. **elevation:** 280m. Wild. Seed.

PI 542077 to 542080. *Ipomoea* sp. CONVOLVULACEAE

Donated by: De la Puente, F., CIP, Lima, Peru. Received May 18, 1990.

PI 542077 **donor id:** DLP 3176. **origin:** Jamaica. **collector id:** DLP 3176. **locality:** 0.5km S Kingston, Kingston Department, Kingston Province. **elevation:** 60m. Wild. Seed.

PI 542078 **donor id:** DLP 3177. **origin:** Jamaica. **collector id:** DLP 3177. **locality:** 0.5km S Kingston, Kingston Department, Kingston Province. **elevation:** 60m. Wild. Seed.

PI 542079 **donor id:** DLP 3178. **origin:** Jamaica. **collector id:** DLP 3178. **locality:** 0.5km S Kingston, Kingston Department, Kingston Province. **elevation:** 60m. Wild. Seed.

PI 542077 to 542080-continued

PI 542080 **donor id:** DLP 3262. **origin:** Jamaica. **collector id:** DLP 3262. Wild. Seed.

PI 542081 to 542087. *Ipomoea tiliacea* (Willd.) Choisy CONVOLVULACEAE

Donated by: De la Puente, F., CIP, Lima, Peru. Received May 18, 1990.

PI 542081 **donor id:** DLP 3186. **origin:** Jamaica. **developer country:** Peru. **origin institute:** CIP, P.O. Box 5969, Lima. **origin institute id:** CIP 460145. **collector id:** DLP 3186. **locality:** 2km S Browns Town, St. Ann Department, Madras Province. **elevation:** 480m. Wild. Seed.

PI 542082 **donor id:** DLP 3187. **origin:** Jamaica. **developer country:** Peru. **origin institute:** CIP, P.O. Box 5969, Lima. **origin institute id:** CIP 460129. **collector id:** DLP 3187. **locality:** 4km S Browns Town, St. Ann Department, Madras Province. **elevation:** 488m. Wild. Seed.

PI 542083 **donor id:** DLP 3188. **origin:** Jamaica. **developer country:** Peru. **origin institute:** CIP, P.O. Box 5969, Lima. **origin institute id:** CIP 460146. **collector id:** DLP 3188. **locality:** 10km S Browns town, St. Ann Department, Madras Province. **elevation:** 580m. Wild. Seed.

PI 542084 **donor id:** DLP 3201. **origin:** Jamaica. **developer country:** Peru. **origin institute:** CIP, P.O. Box 5969, Lima. **origin institute id:** CIP 460147. **collector id:** DLP 3201. **locality:** 5km N Stanmored, St. Isabel Department, Sta Cruz Province. **elevation:** 520m. Wild. Seed.

PI 542085 **donor id:** DLP 3202. **origin:** Jamaica. **developer country:** Peru. **origin institute:** CIP, P.O. Box 5969, Lima. **origin institute id:** CIP 460121. **collector id:** DLP 3202. **locality:** 15km NE Mandeville-Spanish Town, Manchester Department, Mandeville Province. **elevation:** 680m. Wild. Seed.

PI 542086 **donor id:** DLP 3252. **origin:** Jamaica. **developer country:** Peru. **origin institute:** CIP, P.O. Box 5969, Lima. **origin institute id:** CIP 460148. **collector id:** DLP 3252. **locality:** 1km N Feather Bad Lane, St. Catherine Department, Spanish Town Province. **elevation:** 100m. Wild. Seed.

PI 542087 **donor id:** DLP 3253. **origin:** Jamaica. **developer country:** Peru. **origin institute:** CIP, P.O. Box 5969, Lima. **origin institute id:** CIP 460122. **collector id:** DLP 3253. **locality:** 0.5km N Linstead, St. Catherine Department, Linstead Province. **elevation:** 140m. Wild. Seed.

PI 542088. *Agrostis stolonifera* var. *palustris* (Huds.) Farw. POACEAE

Donated by: Brillman, L.A., Seed Research of Oregon, Inc., P.O. Box 1416, Corvallis, Oregon, United States; and Arizona Agr. Exp. Sta..
remarks: SR 1020 Creeping Bentgrass. Received May 31, 1990.

origin: United States. **origin institute:** Seed Research of Oregon, Inc., P.O. Box 1416, Corvallis, Oregon 97339.
cultivar: SR 1020. **pedigree:** Five clone advanced generation synthetic. Clones A19, A72, A74, A76, and A85 from University of of Arizona collection. **other id:** PVP 8800047. **source:** Pending. **group:** PVPO. **other id:** CV-145. **group:** CSR-OTHER GRASSES. **remarks:** Plants leafy, fine-textured, dark green with upright growth habit. Tillers strongly, dense, persistent even at low fertility. Excellent heat and drought tolerance. Very good cold tolerance. Excellent seedling vigor. Excellent wear tolerance. Used for putting greens, tees, fairways, closely mown turf. Improved resistance to Pythium blight (*Pythium* sp.) and powdery mildew (*Erysiphe graminis*). Moderate. **received as:** *A. palustris* Creeping bentgrass. Perennial. Cultivar. Seed.

PI 542089. *Agrostis stolonifera* var. *palustris* (Huds.) Farw. POACEAE

Donated by: Brillman, L.A., Seed Research of Oregon, Inc., P.O. Box 1416, Corvallis, Oregon, United States; and Rhode Island Agr. Exp. Sta..
remarks: Providence Creeping Bentgrass. Received May 31, 1990.

origin: United States. **origin institute:** Seed Research of Oregon, Inc., P.O. Box 1416, Corvallis, Oregon 97339.
cultivar: PROVIDENCE. **pedigree:** Five clone advanced generation synthetic. Parental clones from University of Rhode Island trace back through seed and stolons to P-19, P-7, P-27, P-43, and P-87. **other id:** PVP 8900287. **source:** Pending. **group:** PVPO. **other id:** CV-144. **group:** CSR-OTHER GRASSES. **remarks:** Plants dark green, fine-textured, uniform, upright growth habit. High density, strong tillering contributes to wear tolerance and recuperative ability. Excellent cold tolerance. Good heat and drought tolerance. Excellent seedling vigor. Used on putting greens, tees, fairways, and other areas with closely mown turf. Very good resistance to dollar spot (*Lanzia* and *Moellerodiscus* sp.) so can be used. **received as:** *A. palustris* Creeping bentgrass. Perennial. Cultivar. Seed.

PI 542090 to 542091. *Avena fatua* L. POACEAE

Donated by: Quaker Oats Company, Chicago, Illinois, United States.
remarks: Received through Ball Seed Company, West Chicago, Illinois, United States. Received May 31, 1990.

PI 542090 **donor id:** Selection No. 1. **origin:** Nepal. **collector id:** Selection No. 1. **locality:** Kambachen, Himalaya.
remarks: Plants glabrous, except some pubescence on callus and rachilla. Seed white (some with varying amounts of gray). Wild. Seed.

PI 542091 **donor id:** Selection No. 2. **origin:** Nepal. **collector id:** Selection No. 2. **locality:** Kambachen, Himalaya.
remarks: Plants heavy pubescence. Seed brown. Wild. Seed.

PI 542092 to 542098. *Trigonella* sp. FABACEAE

Donated by: Kaiser, W.J., USDA-ARS, Room 59, Johnson Hall, Washington State University, Pullman, Washington, United States. Received May 17, 1990.

PI 542092 **origin:** Pakistan. **collected:** April 07, 1986. **other id:** W6-2692. **locality:** Sandy soil, Nuclear Institute of Ag. & Biology (NIAB), Faisalabad. Wild. Seed.

PI 542093 **origin:** Pakistan. **collected:** April 11, 1986. **other id:** W6-2693. **locality:** Road to Tarabela Dam, Punjab Province. **elevation:** 610m. Wild. Seed.

PI 542094 **origin:** Pakistan. **collected:** April 11, 1986. **other id:** W6-2694. **locality:** Rocky sandy soil, edge of chickpea and wheat plantings, Nizampur Road, Punjab Province. **elevation:** 762m. Wild. Seed.

PI 542095 **origin:** Pakistan. **collected:** April 13, 1986. **other id:** W6-2695. **locality:** Sandy soil, on road from Fatehjang to Jand, Rawalpinda District, Punjab Province. **elevation:** 610m. Wild. Seed.

PI 542096 **origin:** Pakistan. **collected:** April 13, 1986. **other id:** W6-2696. **locality:** Sandy soil about 58km from Bannu on the Kohat-Bannu road, near Khorum village, NWFP. **elevation:** 762m. Wild. Seed.

PI 542097 **origin:** Pakistan. **collected:** April 13, 1986. **other id:** W6-2697. **locality:** Sandy soil in and around a chickpea field, Jand, Attock District, Panjab Province. **elevation:** 610m. Wild. Seed.

PI 542092 to 542098-continued

PI 542098 **origin:** Pakistan. **collected:** April 14, 1986. **other id:** W6-2698. **locality:** Sandy, rocky soil in wheat field, mountains along Bannu-Kohat Road, NWFP. **elevation:** 914m. Wild. Seed.

PI 542099 to 542101. Zea mays L. subsp. mays POACEAE Corn

Donated by: Cross, H.Z., Agricultural Research Service -- USDA, North Dakota State University, Fargo, North Dakota, United States; and North Dakota Agr. Exp. Sta.. **remarks:** NDSAB(MS)C8(LM)C3, NDS(D)C1(LM)C4, & NDSM Maize Germplasm. Received June 18, 1990.

PI 542099 **origin:** United States. **origin institute:** Agricultural Research Service -- USDA, North Dakota State University, Fargo, North Dakota 58105. **cultivar:** NDSAB(MS)C8(LM)C3. **pedigree:** Derived from NDSAB(MS)C8 by three cycles of mass selection for low ear moisture at physiological maturity. **other id:** GP-227. **source:** Crop Sci. 31(1):239 1991. **group:** CSR-MAIZE. **remarks:** Yellow, dent synthetic derived from NDSAB(MS)C8. Significantly lower ear moisture at harvest. Increased resistance to root lodging. Good agronomic characteristics including resistance to stalk lodging. Maturity AES200. Spring Annual. Breeding Material. Seed.

PI 542100 **origin:** United States. **origin institute:** Agricultural Research Service -- USDA, North Dakota State University, Fargo, North Dakota 58105. **cultivar:** NDS(D)C1(LM)C4. **pedigree:** Derived from four cycles of selection for low ear moisture at physiological maturity from NDS(D)C1. **other id:** GP-228. **source:** Crop Sci. 31(1):239 1991. **group:** CSR-MAIZE. **remarks:** Yellow, dent synthetic derived from NDS(D)C1. Significantly lower ear moisture at harvest. High resistance to stalk lodging. Good agronomic characteristics. Maturity AES200. Spring Annual. Breeding Material. Seed.

PI 542101 **origin:** United States. **origin institute:** Agricultural Research Service -- USDA, North Dakota State University, Fargo, North Dakota 58105. **cultivar:** NDSM. **pedigree:** Thirteen lines including ND250, ND101, CM153, A654, ND468, A664, PA363, ND363, W59E, ND8RF, CM105, ND245, and ND247. **other id:** GP-229. **source:** Crop Sci. 31(1):239 1991. **group:** CSR-MAIZE. **remarks:** Yellow, dent synthetic derived from 13 lines with demonstrated high combining ability for grain yield and resistance to stalk breakage. Maturity AES200. Yields high. Excellent lodging resistance. Spring Annual. Breeding Material. Seed.

PI 542102. *Saccharum officinarum* L. POACEAE Sugarcane

Donated by: Miller, J.D., Agricultural Research Service -- USDA, Sugarcane Field Station, Canal Point, Florida, United States; and Florida Agr. Exp. Sta.; and Florida Sugar Cane League, Inc..
remarks: CP 82-1172 Sugarcane. Received June 18, 1990.

origin: United States. **origin institute:** Agricultural Research Service -- USDA, Sugarcane Field Station, Canal Point, Florida 33438. **cultivar:** CP 82-1172. **pedigree:** CP 75-1091/CP 75-1283. **other id:** CV-79. **source:** Crop Sci. 31(1):234 1991. **group:** CSR-SUGARCANE. **remarks:** Stalk medium to large diameter, tall, and tendency to lodge. Leaf canopy closes quickly. Rarely flowers. Resistance to mosaic virus, leaf scald (*Xanthomonas albilineans*), eye spot (*Bipolaris sacchari*), and smut (*Ustilago scitaminea*). Millability rating of 0.979. Fiber content of 9.62%. Cultivar. Cutting.

PI 542103. *Saccharum officinarum* L. POACEAE Sugarcane

Donated by: Miller, J.D., Agricultural Research Service -- USDA, Sugarcane Field Station, Canal Point, Florida, United States; and Florida Agr. Exp. Sta.; and Florida Sugar Cane League, Inc..
remarks: CP 81-1302 Sugarcane. Received June 18, 1990.

origin: United States. **origin institute:** Agricultural Research Service -- USDA, Sugarcane Field Station, Canal Point, Florida 33438. **cultivar:** CP 81-1302. **pedigree:** CP 72-2079/CP 71-1086. **other id:** CV-80. **source:** Crop Sci. 31(1):235 1991. **group:** CSR-SUGARCANE. **remarks:** Stalk medium to large diameter. Maroon color where exposed to sun. Combination of good early vigor and broad leaves. Resistance to mosaic virus, leaf scald (*Xanthomonas albilineans*), eye spot (*Bipolaris sacchari*), and smut (*Ustilago scitaminea*). Cultivar. Cutting.

PI 542104. *Saccharum officinarum* L. POACEAE Sugarcane

Donated by: Miller, J.D., Agricultural Research Service -- USDA, Sugarcane Field Station, Canal Point, Florida, United States; and Florida Agr. Exp. Sta.; and Florida Sugar Cane League, Inc..
remarks: CP 80-1743 Sugarcane. Received June 18, 1990.

PI 542104-continued

origin: United States. **origin institute:** Agricultural Research Service -- USDA, Sugarcane Field Station, Canal Point, Florida 33438. **cultivar:** CP 80-1743. **pedigree:** CP 72-2083/CP 68-1067. **other id:** CV-81. **source:** Crop Sci. 31(1):235 1991. **group:** CSR-SUGARCANE. **remarks:** Shy to non-flowering clone. Foliage light green. Stalk green. Grows fast in spring. Stalk population high. Early row cover. Resistance to mosaic virus, leaf scald (*Xanthomonas albilineans*), eye spot (*Bipolaris sacchari*), smut (*Ustilago scitaminea*), and rust (*Puccinia melanocephala*). Hypersensitive reaction to rust and under extreme infection pressure flecking of leaves may become. Cultivar. Cutting.

PI 542105. *Saccharum officinarum* L. POACEAE Sugarcane

Donated by: Miller, J.D., Agricultural Research Service -- USDA, Sugarcane Field Station, Canal Point, Florida, United States; and Florida Agr. Exp. Sta.; and Florida Sugar Cane League, Inc..
remarks: CP 78-1628 Sugarcane. Received June 18, 1990.

origin: United States. **origin institute:** Agricultural Research Service -- USDA, Sugarcane Field Station, Canal Point, Florida 33438. **cultivar:** CP 78-1628. **pedigree:** CP 65-357/CP 68-1026. **other id:** CV-82. **source:** Crop Sci. 31(1):236 1991. **group:** CSR-SUGARCANE. **remarks:** Prolific-tillering, fast-growing clone. Stalk small to medium diameter, yellow-green with purple pigment on inside base of leaf sheath. Excellent ratooning ability. Resistance to mosaic virus, rust (*Puccinia melanocephala*), leaf scald (*Xanthomonas albilineans*), and eye spot (*Bipolaris sacchari*). Very susceptible to smut (*Ustilago scitaminea*) in inoculated smut trials, however, in natural. Cultivar. Cutting.

PI 542106 to 542111. *Zea mays* L. subsp. *mays* POACEAE Corn

Donated by: Johannessen, C., Dept. of Geography, University of Oregon, Eugene, Oregon, United States. Received September 20, 1985.

PI 542106 **origin:** Bhutan. **cultivar:** BHUTAN #25. **other id:** Ames 8345. Cultivar. Seed.

PI 542107 **origin:** Bhutan. **cultivar:** BHUTAN #30A. **other id:** Ames 8342. **remarks:** Flint-yellow T-D. Cultivar. Seed.

PI 542108 **origin:** Bhutan. **cultivar:** BHUTAN #42. **other id:** Ames 8341. Cultivar. Seed.

PI 542106 to 542111-continued

PI 542109 **origin:** Bhutan. **cultivar:** BHUTAN 56 Y 57. **other id:** Ames 8343. **Cultivar.** Seed.

PI 542110 **origin:** Bhutan. **cultivar:** BHUTAN #61. **other id:** Ames 8344. **Cultivar.** Seed.

PI 542111 **origin:** Bhutan. **cultivar:** BHUTAN #62. **other id:** Ames 8346. **remarks:** Manger District. **Cultivar.** Seed.

PI 542112 to 542123. *Citrullus lanatus* (Thunb.) Matsum. & Nakai
CUCURBITACEAE Watermelon

Donated by: Mithen, R., IBPGR, Harare, Zambabwe; and Terry, J., Royal Botanic Gardens Kew, Wakehurst Place, Haywards Heath, England RH17 6TN, United Kingdom; and Kalake, E., National Herbarium, Gaborone, Botswana. **remarks:** Received through IBPGR, Rome, Italy. Received November 29, 1989.

PI 542112 **donor id:** JT 22. **origin:** Botswana. **collected:** March 18, 1988. **collector id:** JT 22. **locality:** 4km from Notokwe to Kang, Kweneng District. **latitude:** 23 deg. 05 min. S. **longitude:** 24 deg. 05 min. E. **elevation:** 1090m. **remarks:** Fruit about 5cm long, soft, spiny with longitudinal stripes. Two plants sampled out of a population of 25. **Wild.** Seed.

PI 542113 **donor id:** JT 24. **origin:** Botswana. **collected:** March 19, 1988. **collector id:** JT 24. **locality:** 9km from Kang to Palamakoloi, Kgalagadi District. **latitude:** 22 deg. 30 min. S. **longitude:** 23 deg. 20 min. E. **elevation:** 1110m. **remarks:** Fruits 10cm in diameter, smooth, green-yellow. One plant sampled out of a population of 5. **Wild.** Seed.

PI 542114 **donor id:** JT 58. **origin:** Botswana. **collected:** April 7, 1988. **collector id:** JT 58. **locality:** Dried up lagoon, Moremi wildlife reserve, Xini District. **latitude:** 23 deg. 30 min. S. **longitude:** 19 deg. 20 min. E. **elevation:** 940m. **remarks:** One plant sampled out of a population of three. **Wild.** Seed.

PI 542115 **donor id:** 524. **origin:** Botswana. **collected:** March 17, 1988. **collector id:** 524. **locality:** Coarse sand, desert, plain near Khuze pan, 10.8km W from Dutlwe, SE Kweneng Province. **latitude:** 24 deg. 00 min. S. **longitude:** 23 deg. 46 min. W. **elevation:** 1190m. **remarks:** One plant sampled out of a population of 10. Soil pH 7.1. **Associated species:** *Acacia*, *Terminalia* and *Cyamopsis*. **Wild.** Seed.

PI 542112 to 542123-continued

- PI 542116 **donor id:** 531. **origin:** Botswana. **collected:** March 19, 1988. **collector id:** 531. **locality:** Coarse sand, bushland, plain, 26.2km SE of Kang, SW Kgalagadi Province. **latitude:** 23 deg. 51 min. S. **longitude:** 22 deg. 55 min. W. **elevation:** 1020m. **remarks:** Five plants sampled out of a population of >20. Soil pH 7.1. Associated species: Acacia, Terminalia and Indigofera. Wild. Seed.
- PI 542117 **donor id:** 539. **origin:** Botswana. **collected:** March 19, 1988. **collector id:** 539. **locality:** Coarse sand, bushland, plain, 39km N of Kang, SW Kgalagadi Province. **latitude:** 23 deg. 22 min. S. **longitude:** 22 deg. 31 min. W. **elevation:** 1050m. **remarks:** Two plants sampled out of a population of 20. Soil pH 7.1. Associated species: Acacia, Indigofera, Tephrosia. Wild. Seed.
- PI 542118 **donor id:** 548. **origin:** Botswana. **collected:** March 20, 1988. **collector id:** 548. **locality:** Coarse sand, bushland, plain, 24km E of Maitloadhuduhudu Pan, SW Kgalagadi Province. **latitude:** 23 deg. 06 min. S. **longitude:** 22 deg. 08 min. W. **elevation:** 1050m. **remarks:** One plant sampled out of a population of 20. Soil pH 6.9. Associated species: Acacia, Digitaria, Cambretum, Lonchocarpus and Indigofera. Wild. Seed.
- PI 542119 **donor id:** 554. **origin:** Botswana. **collected:** March 20, 1988. **collector id:** 554. **locality:** Coarse sand, grassland, plain, 13.5km W of Maitloadhuduhudu Pan, SW Kgalagadi Province. **latitude:** 23 deg. 04 min. S. **longitude:** 21 deg. 59 min. W. **elevation:** 1050m. **remarks:** One plant sampled out of a population of 20. Soil pH 7.0. Associated species: Digitaria, Dactyloctenium and Indigofera. Wild. Seed.
- PI 542120 **donor id:** 560. **origin:** Botswana. **collected:** March 22, 1988. **collector id:** 560. **locality:** Coarse sand, bushland, plain, 79km W of Ghanzi, SW Kgalagadi Province. **latitude:** 22 deg. 02 min. S. **longitude:** 21 deg. 06 min. W. **elevation:** 1110m. **remarks:** One plant sampled out of a population of 2. Soil pH 6.8. Associated species: Acacia, Bahinia and Tylosema. Wild. Seed.
- PI 542121 **donor id:** 565. **origin:** Botswana. **collected:** March 23, 1988. **collector id:** 565. **locality:** Coarse sand, bushland, plain, 50.5km S of Charles Hill, SW Ghanzi Province. **latitude:** 22 deg. 39 min. S. **longitude:** 20 deg. 10 min. W. **elevation:** 1120m. **remarks:** One plant sampled out of a population of 20. Associated species: Terminalia, Acacia, Dichrostachys, Vigna and Tylosema. Wild. Seed.

PI 542112 to 542123-continued

PI 542122 **donor id:** 585. **origin:** Botswana. **local name:** Tsama. **collected:** March 25, 1988. **collector id:** 585. **locality:** Coarse sand, bushland, plain, 39km S Tsane, SE Kgalagadi Province. **latitude:** 24 deg. 22 min. S. **longitude:** 21 deg. 52 min. W. **elevation:** 1100m. **remarks:** One plant sampled. Soil pH 7.0. Associated species: Rhus, Grewia and Schimtia. Wild. Seed.

PI 542123 **donor id:** 611. **origin:** Botswana. **collected:** April 6, 1988. **collector id:** 611. **locality:** Coarse sand, bushland, plain, 50km SW Maun, Ngamiland Province. **latitude:** 20 deg. 16 min. S. **longitude:** 23 deg. 05 min. W. **elevation:** 930m. **remarks:** One plant sampled out of a population of 10. Soil pH 6.8. Associated species: Acacia and Terminalia. Wild. Seed.

PI 542124. UNIDENT-Cucurbitaceae sp. CUCURBITACEAE

Donated by: Mithen, R., IBPGR, Harare, Zimbabwe; and Terry, J., Royal Botanic Gardens Kew, Wakehurst Place, Haywards Heath, England RH17 6TN, United Kingdom; and Kalake, E., National Herbarium, Gaborone, Botswana. **remarks:** Received through IBPGR, Rome, Italy. Received November 29, 1989.

donor id: JT20. **origin:** Botswana. **collected:** March 18, 1988. **collector id:** JT20. **locality:** 4km from Tsnaane to Motokwe, Kweneng District. **latitude:** 23 deg. 25 min. S. **longitude:** 24 deg. 00 min. W. **elevation:** 90m. **remarks:** One plant sampled out of a population of 5. **received as:** Corallocarpus triangularis. Wild. Seed.

PI 542125 to 542133. Cucumis africanus L. F. CUCURBITACEAE

Donated by: Mithen, R., IBPGR, Harare, Zimbabwe; and Terry, J., Royal Botanic Gardens Kew, Wakehurst Place, Haywards Heath, England RH17 6TN, United Kingdom; and Kalake, E., National Herbarium, Gaborone, Botswana. **remarks:** Received through IBPGR, Rome, Italy. Received November 29, 1989.

PI 542125 **donor id:** JT31. **origin:** Botswana. **collected:** March 22, 1988. **collector id:** JT31. **locality:** 3km from Kalkfontein to Mamuno, Ghanzi district. **latitude:** 20 deg. 50 min. S. **longitude:** 22 deg. 05 min. W. **elevation:** 1090m. **remarks:** Fruits about 5cm long, soft spiny with brown longitudinal stripes. One plant sampled out of a population of 10. Wild. Seed.

PI 542125 to 542133-continued

- PI 542126 **donor id:** JT48. **origin:** Botswana. **collected:** April 04, 1988. **collector id:** JT48. **locality:** By flint bolders, Ngamiland District. **elevation:** 910m. **remarks:** Two plants sampled. Wild. Seed.
- PI 542127 **donor id:** JT53. **origin:** Botswana. **collected:** April 05, 1988. **collector id:** JT53. **locality:** 9km from Maun to Lake Ngami, Ngamiland District. **latitude:** 20 deg. 05 min. S. **longitude:** 23 deg. 25 min. E. **elevation:** 915m. **remarks:** Ten plants sampled out a population of 25. Wild. Seed.
- PI 542128 **donor id:** 515. **origin:** Botswana. **collected:** March 17, 1988. **collector id:** 515. **locality:** Clay, bushland, plain, 120.2km W of Molepolole, SE Kweneng Province. **latitude:** 24 deg. 08 min. S. **longitude:** 24 deg. 33 min. E. **elevation:** 1150m. **remarks:** Ten plants sampled out of a population of 20. Soil pH 8. Associated species: Bidens and Acacia. Wild. Seed.
- PI 542129 **donor id:** 540. **origin:** Botswana. **collected:** March 19, 1988. **collector id:** 540. **locality:** Coarse sand, bushland, plain, 39km NNW of Kang, SW Kgalagadi Province. **latitude:** 23 deg. 22 min. S. **longitude:** 22 deg. 31 min. E. **elevation:** 1050m. **remarks:** Two plants sampled out of a population of 6. Soil pH 7.2. Associated species: Terminalia, Acacia, Indigofera and Tephrosia. Wild. Seed.
- PI 542130 **donor id:** 549. **origin:** Botswana. **collected:** March 20, 1988. **collector id:** 549. **locality:** Coarse sand, grassland, plain, edge of Maitloadhuduhudu Pan 129km NW Kang, SW Kgalagadi Province. **latitude:** 23 deg. 00 min. S. **longitude:** 22 deg. 08 min. E. **elevation:** 1050m. **remarks:** Two plants sampled out of a population of 4. Soil pH 7.3. Associated species: Hibiscus, Trigonella and Tephrosia. Wild. Seed.
- PI 542131 **donor id:** 581. **origin:** Botswana. **collected:** March 25, 1988. **collector id:** 581. **locality:** Clay, edge of clay pan, 127km ESE of Ncojane, SW Kgalagadi Province. **latitude:** 23 deg. 28 min. S. **longitude:** 21 deg. 22 min. E. **elevation:** 1050m. **remarks:** One plant sampled. Soil pH 7.9. Associated species: Helotropium, Odyssea, Ptychlobium, Enneapogon. Wild. Seed.

PI 542125 to 542133-continued

PI 542132 **donor id:** 587. **origin:** Botswana. **collected:** March 27, 1988. **collector id:** 587. **locality:** Coarse sand, bushland, plain, 115km N of Tshabong, SW Kgalagadi Province. **latitude:** 25 deg. 08 min. S. **longitude:** 22 deg. 02 min. E. **elevation:** 1100m. **remarks:** Two plants sampled out of a population of 5. Soil pH 6.8. Associated species: Acacia, Requinia and Indigofera. Wild. Seed.

PI 542133 **donor id:** 589. **origin:** Botswana. **collected:** March 27, 1988. **collector id:** 589. **locality:** Edge of clay pan, 106km N of Tshabong, SW Kgalagadi Province. **latitude:** 25 deg. 12 min. S. **longitude:** 22 deg. 03 min. E. **elevation:** 1100m. **remarks:** One plant sampled. Soil pH 7.8. Associated species: Acacia, Setaria and Enneapogen. Wild. Seed.

PI 542134 to 542135. *Cucumis anguria* L. CUCURBITACEAE West Indian gherkin

Donated by: Mithen, R., IBPGR, Harare, Zimbabwe; and Terry, J., Royal Botanic Gardens Kew, Wakehurst Place, Haywards Heath, England RH17 6TN, United Kingdom; and Kalake, E., National Herbarium, Gaborone, Botswana. **remarks:** Received through IBPGR, Rome, Italy. Received November 29, 1989.

PI 542134 **donor id:** 600. **origin:** Botswana. **collected:** April 04, 1988. **collector id:** 600. **locality:** Sandy, grassland, plain, valley bottom, 20m from Boteti river, 24km E of Maun, Ngamiland Province. **latitude:** 20 deg. 08 min. S. **longitude:** 23 deg. 29 min. E. **elevation:** 940m. **remarks:** Ten plants sampled. Soil Ph 7.6. Associated species: Digitaria, Paspalum and Eleusine. Wild. Seed.

PI 542135 **donor id:** 605. **origin:** Botswana. **collected:** April 06, 1988. **collector id:** 605. **locality:** Clay/sand, grassland, valley slope, heavily grazed near river, 30km SW of Maun, Ngamiland Province. **latitude:** 20 deg. 22 min. S. **longitude:** 23 deg. 13 min. E. **elevation:** 950m. **remarks:** Two pants sampled out of a population of 10. Soil pH 7.4. Associated species: Acacia. Wild. Seed.

PI 542136 to 542137. *Cucumis* sp. CUCURBITACEAE

Donated by: Mithen, R., IBPGR, Harare, Zimbabwe; and Terry, J., Royal Botanic Gardens Kew, Wakehurst Place, Haywards Heath, England RH17 6TN, United Kingdom; and Kalake, E., National Herbarium, Gaborone, Botswana. **remarks:** Received through IBPGR, Rome, Italy. Received November 29, 1989.

PI 542136 to 542137-continued

PI 542136 **donor id:** JT 63. **origin:** Botswana. **collected:** April 15, 1988. **collector id:** JT 63. **locality:** Open patches of grass, okorango delta, Shindi camp, Okorango, Ngamiland District. **latitude:** 23 deg. 10 min. S. **longitude:** 19 deg. 05 min. E. **remarks:** Three plants sampled. **received as:** Cucumis anguria. Wild. Seed.

PI 542137 **donor id:** 517. **origin:** Botswana. **collected:** March 17, 1988. **collector id:** 517. **locality:** Coarse sand, wasteland, plain, abandoned field, 40.9km E of Tokayoware, SE Kweneng Province. **latitude:** 23 deg. 59 min. S. **longitude:** 23 deg. 56 min. E. **elevation:** 1210m. **remarks:** Ten plants sampled out of a population >50. Soil pH 7.1. Associated species: Citrullus and Rhynchosia. Wild. Seed.

PI 542138. *Momordica balsamina* L. CUCURBITACEAE

Donated by: Mithen, R., IBPGR, Harare, Zambabwe; and Terry, J., Royal Botanic Gardens Kew, Wakehurst Place, Haywards Heath, England RH17 6TN, United Kingdom; and Kalake, E., National Herbarium, Gaborone, Botswana. **remarks:** Received through IBPGR, Rome, Italy. Received November 29, 1989.

donor id: JT 55. **origin:** Botswana. **collected:** April 5, 1988. **collector id:** JT 55. **locality:** 50km From Toteng to Lake Ngami, Ngamiland District. **latitude:** 22 deg. 50 min. S. **longitude:** 20 deg. 35 min. E. **elevation:** 980m. **remarks:** Climbing trees and shrubs. Twenty five plants sampled out of a population of 50. Wild. Seed.

PI 542139. *Pennisetum* sp. POACEAE

Donated by: Mithen, R., IBPGR, Harare, Zambabwe; and Terry, J., Royal Botanic Gardens Kew, Wakehurst Place, Haywards Heath, England RH17 6TN, United Kingdom; and Kalake, E., National Herbarium, Gaborone, Botswana. **remarks:** Received through IBPGR, Rome, Italy. Received November 29, 1989.

donor id: 506. **origin:** Botswana. **collected:** March 14, 1988. **collector id:** 506. **locality:** Sandy loam, arable, plain, abandoned field, Sebele Agricultural Research Station, 10km N of Gaborone, SE Gaborone Province. **latitude:** 24 deg. 30 min. S. **longitude:** 25 deg. 55 min. E. **elevation:** 1100m. **remarks:** More than 20 plants sampled. Soil pH 6.5-7. Associated species: Urochloa, Sesamum. Wild. Seed.

PI 542140 to 542143. *Rhynchosia totta* (Thunb.) DC. FABACEAE

Donated by: Mithen, R., IBPGR, Harare, Zimbabwe; and Terry, J., Royal Botanic Gardens Kew, Wakehurst Place, Haywards Heath, England RH17 6TN, United Kingdom; and Kalake, E., National Herbarium, Gaborone, Botswana. **remarks:** Received through IBPGR, Rome, Italy. Received November 29, 1989.

PI 542140 **donor id:** JT 40. **origin:** Botswana. **collected:** March 25, 1988. **collector id:** JT 40. **locality:** 7km from turn of E Ncojane to Lokolan E Road, Kgalagadi District. **latitude:** 21 deg. 35 min. S. **longitude:** 23 deg. 45 min. E. **elevation:** 1120m. **remarks:** One plant sampled. Wild. Seed.

PI 542141 **donor id:** 505. **origin:** Botswana. **collected:** March 13, 1988. **collector id:** 505. **locality:** Sandy loam, bush-grassland, valley slope, S slope Kgale Hill, 10km S Gaborone, SE Gaborone Province. **latitude:** 24 deg. 41 min. S. **longitude:** 25 deg. 52 min. E. **elevation:** 1100m. **remarks:** Three plants sampled out of 4. Soil pH 6.5-7. Associated species: *Digitaria* and *Panicum*. Wild. Seed.

PI 542142 **donor id:** 508. **origin:** Botswana. **collected:** March 16, 1988. **collector id:** 508. **locality:** Sandy loam, grassland, plain, 5.4km E of Molepololg, SE Kweneng Province. **latitude:** 24 deg. 25 min. S. **longitude:** 25 deg. 30 min. E. **elevation:** 1150m. **remarks:** One plant sampled out of a population of 5. Soil pH 6.5-7. Associated species: *Aristida* and *Zornia*. Wild. Seed.

PI 542143 **donor id:** 579. **origin:** Botswana. **collected:** March 25, 1988. **collector id:** 579. **locality:** Coarse sand, bushland, plain, 110km ESE of Niojane, SW Kgalagadi Province. **latitude:** 23 deg. 21 min. S. **longitude:** 21 deg. 07 min. E. **elevation:** 1050m. **remarks:** Ten plants sampled. Soil pH 7.0. Associated species: *Acacia* and *Digitaria*. Wild. Seed.

PI 542144 to 542170. *Aegilops biuncialis* Vis. POACEAE *Aegilops*

Donated by: Kimber, G., University of Missouri, Department of Agronomy, 210 Curtis Hall, Columbia, Missouri, United States; and Metzger, R.J., Department of Plant Sciences, Oregon State University, Oregon State University, Corvallis, Oregon, United States. Received October 01, 1989.

PI 542144 **donor id:** 84TK104-0051. **origin:** Turkey. **collected:** June 17, 1984. **collector id:** 84TK104-0051. **locality:** Diyarbakir Province. 4km north of Dicle. **elevation:** 925m. **received as:** *Triticum macrochaetum*. Annual. Wild. Seed.

PI 542144 to 542170-continued

- PI 542145 **donor id:** 84TK119-0112. **origin:** Turkey. **collected:** June 18, 1984. **collector id:** 84TK119-0112. **locality:** 29 km south of Urfa. **elevation:** 325m. **received as:** *Triticum macrochaetum*. Annual. Wild. Seed.
- PI 542146 **donor id:** 84TK119-0114. **origin:** Turkey. **collected:** June 18, 1984. **collector id:** 84TK119-0114. **locality:** Urfa Province. 29km south of Urfa. **elevation:** 325m. **received as:** *Triticum macrochaetum*. Annual. Wild. Seed.
- PI 542147 **donor id:** 84TK123-0012. **origin:** Turkey. **collected:** June 19, 1984. **collector id:** 84TK123-0012. **locality:** Urfa Province. 42km northeast of Urfa. **elevation:** 600m. **received as:** *Triticum macrochaetum*. Annual. Wild. Seed.
- PI 542148 **donor id:** 84TK 127-0026. **origin:** Turkey. **collected:** June 19, 1984. **collector id:** 84TK 127-0026. **locality:** Urfa Province. On state farm at Ceylanpinar. **elevation:** 350m. **received as:** *Triticum macrochaetum*. Annual. Wild. Seed.
- PI 542149 **donor id:** 84TK143-0042. **origin:** Turkey. **collected:** June 21, 1984. **collector id:** 84TK143-0042. **locality:** Kahramanmaras Province. 9km northeast of Pazacik on roadside slope. **elevation:** 800m. **received as:** *Triticum macrochaetum*. Annual. Wild. Seed.
- PI 542150 **donor id:** 84TK144-0048. **origin:** Turkey. **collected:** June 21, 1984. **collector id:** 84TK144-0048. **locality:** Kahramanmaras Province. 14km southeast of Kahramanmaras. **elevation:** 515m. **received as:** *Triticum macrochaetum*. Annual. Wild. Seed.
- PI 542151 **donor id:** 84TK145-0003. **origin:** Turkey. **cultivar:** 20. **collected:** June 22, 1984. **collector id:** 84TK145-0048. **locality:** Gaziantep Province. 17km northwest of Gaziantep, rugged mountain area. **elevation:** 850m. **received as:** *Triticum macrochaetum*. Annual. Wild. Seed.
- PI 542152 **donor id:** 84TK147-0004. **origin:** Turkey. **collected:** June 23, 1984. **collector id:** 84TK147-0004. **locality:** Konya Province. 10km west of Ilgin, going west from Konya. **elevation:** 1200m. **received as:** *Triticum macrochaetum*. Annual. Wild. Seed.

PI 542144 to 542170-continued

- PI 542153 donor id: 84TK150-0004. origin: Turkey. collected: June 23, 1984. collector id: 84TK150-0004. locality: Manisco Province. 1km east of road junction to Selemdi on Izmir highway. Roadside. elevation: 490m. received as: *Triticum macrochaetum*. Annual. Wild. Seed.
- PI 542154 donor id: 84TK154-0002. origin: Turkey. collected: June 27, 1984. collector id: 84TK154-0002. locality: Izmir Province. Aegean Agricultural Research Institute. elevation: 30m. received as: *Triticum macrochaetum*. Annual. Wild. Seed.
- PI 542155 donor id: 84TK154-0021. origin: Turkey. collected: June 27, 1984. collector id: 84TK154-0021. locality: Izmir Province. Aegean Agricultural Research Institute. elevation: 30m. received as: *Triticum macrochaetum*. Annual. Wild. Seed.
- PI 542156 donor id: 84TK156-0002. origin: Turkey. collected: June 28, 1984. collector id: 84TK156-0002. locality: Denizli Province. At Pamukkale Roman cemetery. elevation: 420m. received as: *Triticum macrochaetum*. Annual. Wild. Seed.
- PI 542157 donor id: 84TK157-0022. origin: Turkey. collected: June 28, 1984. collector id: 84TK157-0022. locality: Denizli Province. Asagisamli-Denzili, 500m from junction on Pamukkale road. elevation: 180m. received as: *Triticum macrochaetum*. Annual. Wild. Seed.
- PI 542158 donor id: 84TK159-0040. origin: Turkey. collected: June 28, 1984. collector id: 84TK159-0040. locality: Denizli Province. 25km south of Sarigol or 10km north of Buldan junction. elevation: 275m. received as: *Triticum macrochaetum*. Annual. Wild. Seed.
- PI 542159 donor id: 84TK162-0057. origin: Turkey. collected: June 28, 1984. collector id: 84TK162-0057. locality: Manisa Province. 2km south of Sarigol, on hill with grass and shrubs. elevation: 305m. received as: *Triticum macrochaetum*. Annual. Wild. Seed.
- PI 542160 donor id: 84TK201-0009. origin: Turkey. collected: July 05, 1984. collector id: 84TK201-0009. locality: Izmir Province. 500m east of Aliaga, east edge of village. elevation: 60m. received as: *Triticum macrochaetum*. Annual. Wild. Seed.

PI 542144 to 542170-continued

- PI 542161 **donor id:** 84TK202-0003. **origin:** Turkey. **collected:** July 05, 1984. **collector id:** 84TK202-0003. **locality:** Izmir Province. 22km southeast of Bergmana. **elevation:** 30m. **received as:** Triticum macrochaetum. Annual. Wild. Seed.
- PI 542162 **donor id:** 84TK205-0005B. **origin:** Turkey. **collected:** July 05, 1984. **collector id:** 84TK205-0005B. **locality:** Balikesir Province. Burhaniye-Ayvalik road junction at city limit going east. **elevation:** 20m. **received as:** Triticum macrochaetum. Annual. Wild. Seed.
- PI 542163 **donor id:** 84TK205-0006. **origin:** Turkey. **collected:** July 05, 1984. **collector id:** 84TK205-0006. **locality:** Balikesir Province. Burhaniye-Ayvalik road junction at city limit going east. **elevation:** 20m. **received as:** Triticum macrochaetum. Annual. Wild. Seed.
- PI 542164 **donor id:** 84TK208-0002. **origin:** Turkey. **collected:** July 05, 1984. **collector id:** 84TK208-0002. **locality:** Canakkale Province. 22km southeast of Ayvacik. **elevation:** 50m. **received as:** Triticum macrochaetum. Annual. Wild. Seed.
- PI 542165 **donor id:** 84TK209-0001. **origin:** Turkey. **collected:** July 05, 1984. **collector id:** 84TK209-0001. **locality:** Canakkale Province. 9km southeast of Ayvacik. **elevation:** 420m. **received as:** Triticum macrochaetum. Annual. Wild. Seed.
- PI 542166 **donor id:** 84TK072-0013. **origin:** Turkey. **collected:** June 15, 1984. **collector id:** 84TK072-0013. **locality:** Gaziantep Province. 19km north of Gaziantep towards Yavuzeli. **elevation:** 800m. **received as:** Triticum macrochaetum. Annual. Wild. Seed.
- PI 542167 **donor id:** 84TK073-0026. **origin:** Turkey. **collected:** June 15, 1984. **collector id:** 84TK073-0026. **locality:** Gaziantep Province. 4km north of Yaruzeli. **elevation:** 450m. **received as:** Triticum macrochaetum. Annual. Wild. Seed.
- PI 542168 **donor id:** 84TK076-0032. **origin:** Turkey. **collected:** June 15, 1984. **collector id:** 84TK076-0032. **locality:** Gaziantep Province. 9km north of the Araban Gaziantep-Adiyaman border. **elevation:** 820m. **received as:** Triticum macrochaetum. Annual. Wild. Seed.

PI 542144 to 542170-continued

PI 542169 **donor id:** 84TK077-0047. **origin:** Turkey. **collected:** June 15, 1984. **collector id:** 84TK077-0047. **locality:** Adiyaman Province. 10km south of Besni. **elevation:** 900m. **received as:** *Triticum macrochaetum*. Annual. Wild. Seed.

PI 542170 **donor id:** 84TK082-0062. **origin:** Turkey. **collected:** June 15, 1984. **collector id:** 84TK082-0062. **locality:** Adiyaman Province. 3km north of Damlacik village. **elevation:** 725m. **received as:** *Triticum macrochaetum*. Annual. Wild. Seed.

PI 542171. *Aegilops columnaris* Zhuk. POACEAE *Aegilops*

Donated by: Kimber, G., University of Missouri, Department of Agronomy, 210 Curtis Hall, Columbia, Missouri, United States; and Metzger, R.J., Department of Plant Sciences, Oregon State University, Oregon State University, Corvallis, Oregon, United States. Received October 01, 1989.

donor id: 84TK072-0019. **origin:** Turkey. **collected:** June 15, 1984. **collector id:** 84TK072-0019. **locality:** Gaziantep Province. 19km north of Gaziantep toward Yavuzeli. **elevation:** 800m. **received as:** *Triticum columnare*. Annual. Wild. Seed.

PI 542172 to 542177. *Aegilops comosa* Sibth. & Smith POACEAE *Aegilops*

Donated by: Kimber, G., University of Missouri, Department of Agronomy, 210 Curtis Hall, Columbia, Missouri, United States; and Metzger, R.J., Department of Plant Sciences, Oregon State University, Oregon State University, Corvallis, Oregon, United States. Received October 01, 1989.

PI 542172 **donor id:** 84TK154-0008. **origin:** Turkey. **collected:** June 27, 1984. **collector id:** 84TK154-0008. **locality:** Izmir Province. Aegean Agricultural Research Institute. **elevation:** 30m. **received as:** *Triticum comosum*. Annual. Wild. Seed.

PI 542173 **donor id:** 84TK154-0011. **origin:** Turkey. **collected:** June 27, 1984. **collector id:** 84TK154-0011. **locality:** Izmir Province. Aegean Agricultural Research Institute. **elevation:** 30m. **received as:** *Triticum comosum*. Annual. Wild. Seed.

PI 542172 to 542177-continued

PI 542174 **donor id:** 84TK154-0018. **origin:** Turkey. **collected:** June 27, 1984. **collector id:** 84TK154-0018. **locality:** Izmir Province. Aegean Agricultural Research Institute. **elevation:** 30m. **received as:** *Triticum comosum*. Annual. Wild. Seed.

PI 542175 **donor id:** 84TK157-0005. **origin:** Turkey. **collected:** June 28, 1984. **collector id:** 84TK157-0005. **locality:** Denizli Province. Asagisamli-Denizli, 500m from junction on the Pamukkale road. **elevation:** 180m. **received as:** *Triticum comosum*. Annual. Wild. Seed.

PI 542176 **donor id:** 84TK157-0008. **origin:** Turkey. **collected:** June 28, 1984. **collector id:** 84TK157-0008. **locality:** Denizli Province. Asagisamli-Denizli, 500m from junction on the Pamukkale road. **elevation:** 180m. **received as:** *Triticum comosum*. Annual. Wild. Seed.

PI 542177 **donor id:** 84TK081-0058. **origin:** Turkey. **collected:** June 15, 1984. **collector id:** 84TK081-0058. **locality:** Adiyaman Province 20km west of village of Danlacik, (a very small village) 9km north of Kahta junction. **elevation:** 1000m. **received as:** *Triticum comosum*. Annual. Wild. Seed.

PI 542178. *Aegilops crassa* Boiss. POACEAE *Aegilops*

Donated by: Kimber, G., University of Missouri, Department of Agronomy, 210 Curtis Hall, Columbia, Missouri, United States; and Metzger, R.J., Department of Plant Sciences, Oregon State University, Oregon State University, Corvallis, Oregon, United States. Received October 01, 1989.

donor id: 84TK154-0041. **origin:** Turkey. **collected:** June 27, 1984. **collector id:** 84TK154-0041. **locality:** Izmir Province. Aegean Agricultural Research Institute. **elevation:** 30m. **received as:** *Triticum crassum*. Annual. Wild. Seed.

PI 542179. *Aegilops cylindrica* Host POACEAE *Aegilops*

Donated by: Kimber, G., University of Missouri, Department of Agronomy, 210 Curtis Hall, Columbia, Missouri, United States; and Metzger, R.J., Department of Plant Sciences, Oregon State University, Oregon State University, Corvallis, Oregon, United States. Received October 01, 1989.

PI 542179-continued

donor id: 84TK206-0004. **origin:** Turkey. **collected:** July 05, 1984. **collector id:** 84TK206-0004. **locality:** Balikesir Province. 6km north of Ayvalik. **elevation:** 4m. **received as:** *Triticum cylindricum*. Annual. Wild. Seed.

PI 542180 to 542190. *Aegilops geniculata* Roth subsp. *geniculata*
POACEAE *Aegilops*

Donated by: Kimber, G., University of Missouri, Department of Agronomy, 210 Curtis Hall, Columbia, Missouri, United States; and Metzger, R.J., Department of Plant Sciences, Oregon State University, Oregon State University, Corvallis, Oregon, United States. Received October 01, 1989.

PI 542180 **donor id:** 84TK104-0049-1. **origin:** Turkey. **collected:** June 17, 1984. **collector id:** 84TK104-0049-1. **locality:** Diyarbakir Province. 4km northeast of Dicle. **elevation:** 925m. **received as:** *Triticum ovatum*. Annual. Wild. Seed.

PI 542181 **donor id:** 84TK104-0049-2. **origin:** Turkey. **collected:** June 17, 1984. **collector id:** 84TK104-0049-2. **locality:** Diyarbakir Province. 4km northeast of Dicle. **elevation:** 925m. **received as:** *Triticum ovatum*. Annual. Wild. Seed.

PI 542182 **donor id:** 84TK104-0050-3. **origin:** Turkey. **collected:** June 17, 1984. **collector id:** 84TK104-0050-3. **locality:** Diyarbakir Province. 4km northeast of Dicle. **elevation:** 925m. **received as:** *Triticum ovatum*. Annual. Wild. Seed.

PI 542183 **donor id:** 84TK154-0025. **origin:** Turkey. **collected:** June 27, 1984. **collector id:** 84TK154-0025. **locality:** Izmir Province. Aegean Agricultural Research Institute. **elevation:** 30m. **received as:** *Triticum ovatum*. Annual. Wild. Seed.

PI 542184 **donor id:** 84TK154-0050. **origin:** Turkey. **collected:** June 27, 1984. **collector id:** 84TK154-0050. **locality:** Izmir Province. Aegean Agricultural Research Institute. **elevation:** 30m. **received as:** *Triticum ovatum*. Annual. Wild. Seed.

PI 542185 **donor id:** 84TK201-0005. **origin:** Turkey. **collected:** July 05, 1984. **collector id:** 84TK201-0005. **locality:** Izmir Province. 500m east of Aliaga, east edge of village. **elevation:** 60m. **received as:** *Triticum ovatum*. Annual. Wild. Seed.

PI 542180 to 542190-continued

- PI 542186 **donor id:** 84TK202-0006. **origin:** Turkey. **collected:** July 05, 1984. **collector id:** 84TK206-0006. **locality:** Izmir Province. 22km southeast of Bergama. **elevation:** 30m. **received as:** Triticum ovatum. Annual. Wild. Seed.
- PI 542187 **donor id:** 84TK202-0009. **origin:** Turkey. **collected:** July 05, 1984. **collector id:** 84TK202-0009. **locality:** Izmir Province. 22km southeast of Bergmana. **elevation:** 30m. **received as:** Triticum ovatum. Annual. Wild. Seed.
- PI 542188 **donor id:** 84TK205-0005A. **origin:** Turkey. **collected:** July 05, 1984. **collector id:** 84TK205-0005A. **locality:** Balikesir Province. Burhaniye-Ayvalik road junction, at city limit, going east. **elevation:** 20m. **received as:** Triticum ovatum. Annual. Wild. Seed.
- PI 542189 **donor id:** 84TK206-0003. **origin:** Turkey. **collected:** July 05, 1984. **collector id:** 84TK206-0030. **locality:** Balikesir Province. 6km north of Ayvalik. **elevation:** 4m. **received as:** Triticum ovatum. Annual. Wild. Seed.
- PI 542190 **donor id:** 84TK208-0004. **origin:** Turkey. **collected:** July 05, 1984. **collector id:** 84TK208-0004. **locality:** Canakkale Province. 22km southeast of Ayvacik. **elevation:** 50m. **received as:** Triticum ovatum. Annual. Wild. Seed.

PI 542191. Aegilops hybrid POACEAE Aegilops

Donated by: Kimber, G., University of Missouri, Department of Agronomy, 210 Curtis Hall, Columbia, Missouri, United States; and Metzger, R.J., Department of Plant Sciences, Oregon State University, Oregon State University, Corvallis, Oregon, United States. Received October 01, 1989.

donor id: 84TK154-0040. **origin:** Turkey. **collected:** June 27, 1984. **collector id:** 84TK154-0040. **locality:** Izmir Province. Aegean Agricultural Research Institute. **elevation:** 30m. **received as:** Triticum hybrid. Annual. Wild. Seed.

PI 542192 to 542193. Aegilops juvenalis (Thell.) Eig POACEAE Aegilops

Donated by: Kimber, G., University of Missouri, Department of Agronomy, 210 Curtis Hall, Columbia, Missouri, United States; and Metzger, R.J., Department of Plant Sciences, Oregon State University, Oregon State University, Corvallis, Oregon, United States. Received October 01, 1989.

PI 542192 to 542193-continued

PI 542192 **donor id:** 84TK154-0024. **origin:** Turkey. **collected:** June 27, 1984. **collector id:** 84TK154-0024. **locality:** Izmir Province. Aegean Agricultural Research Institute. **elevation:** 30m. **received as:** *Triticum juvenale*. Annual. Wild. Seed.

PI 542193 **donor id:** 84TK154-0027. **origin:** Turkey. **collected:** June 27, 1984. **collector id:** 84TK154-0027. **locality:** Izmir Province. Aegean Agricultural Research Institute. **elevation:** 30m. **received as:** *Triticum juvenale*. Annual. Wild. Seed.

PI 542194 to 542195. *Aegilops kotschy* Boiss. POACEAE *Aegilops*

Donated by: Kimber, G., University of Missouri, Department of Agronomy, 210 Curtis Hall, Columbia, Missouri, United States; and Metzger, R.J., Department of Plant Sciences, Oregon State University, Oregon State University, Corvallis, Oregon, United States. Received October 01, 1989.

PI 542194 **donor id:** 84TK154-0023. **origin:** Turkey. **collected:** June 27, 1984. **collector id:** 84TK154-0023. **locality:** Izmir Province. Aegean Agricultural Research Institute. **elevation:** 30m. **received as:** *Triticum kotschy*. Annual. Wild. Seed.

PI 542195 **donor id:** 84TK073-0023. **origin:** Turkey. **collected:** June 15, 1984. **collector id:** 84TK073-0023. **locality:** Gaziantep Province. 4km north of Yavuzeli. **elevation:** 450m. **received as:** *Triticum kotschy*. Annual. Wild. Seed.

PI 542196. *Aegilops longissima* Schweinf. & Muschl. POACEAE *Aegilops*

Donated by: Kimber, G., University of Missouri, Department of Agronomy, 210 Curtis Hall, Columbia, Missouri, United States; and Metzger, R.J., Department of Plant Sciences, Oregon State University, Oregon State University, Corvallis, Oregon, United States. Received October 01, 1989.

donor id: 84TK154-0026. **origin:** Turkey. **collected:** June 27, 1984. **collector id:** 84TK154-0026. **locality:** Izmir Province. Aegean Agricultural Research Institute. **elevation:** 30m. **received as:** *Triticum longissimum*. Annual. Wild. Seed.

PI 542197 to 542210. *Aegilops markgrafii* (Greuter) Hammer var.
markgrafii POACEAE *Aegilops*

Donated by: Kimber, G., University of Missouri, Department of Agronomy, 210 Curtis Hall, Columbia, Missouri, United States; and Metzger, R.J., Department of Plant Sciences, Oregon State University, Oregon State University, Corvallis, Oregon, United States. Received October 01, 1989.

PI 542197 **donor id:** 84TK102-0042. **origin:** Turkey. **collected:** June 17, 1984. **collector id:** 84TK102-0042. **locality:** Diyarbakir Province. 8km east of Hani-Lice road. **elevation:** 1000m. **received as:** *Triticum dichasians*. Annual. Wild. Seed.

PI 542198 **donor id:** 84TK105-0055. **origin:** Turkey. **collected:** June 17, 1984. **collector id:** 84TK105-0055. **locality:** Diyarbakir Province. 3km southwest of Dicle. **elevation:** 950m. **received as:** *Triticum dichasians*. Annual. Wild. Seed.

PI 542199 **donor id:** 84TK116-0103. **origin:** Turkey. **collected:** June 18, 1984. **collector id:** 84TK116-0103. **locality:** Urfa Province. 8km southwest of Hivan, along roadside just west of a small village. **elevation:** 625m. **received as:** *Triticum dichasians*. Annual. Wild. Seed.

PI 542200 **donor id:** 84TK123-0015C. **origin:** Turkey. **collected:** June 19, 1984. **collector id:** 84TK123-0015C. **locality:** Urfa Province. 42km east of Urfa. **elevation:** 600m. **received as:** *Triticum dichasians*. Annual. Wild. Seed.

PI 542201 **donor id:** 84TK145-0007. **origin:** Turkey. **collected:** June 22, 1984. **collector id:** 84TK145-0007. **locality:** Gaziantep Province. 17km northwest of Gaziantep, rugged mountain area. **elevation:** 850m. **received as:** *Triticum dichasians*. Annual. Wild. Seed.

PI 542202 **donor id:** 84TK154-0001. **origin:** Turkey. **collected:** June 27, 1984. **collector id:** 84TK154-0001. **locality:** Izmir Province. Aegean Agricultural Research Institute. **elevation:** 30m. **received as:** *Triticum dichasians*. Annual. Wild. Seed.

PI 542203 **donor id:** 84TK157-0009. **origin:** Turkey. **collected:** June 28, 1984. **collector id:** 84TK157-0009. **locality:** Denizli Province. Asagisamli-Denizli, 500m from junction on Pamukkale road. **elevation:** 180m. **received as:** *Triticum dichasians*. Annual. Wild. Seed.

PI 542197 to 542210-continued

- PI 542204 donor id: 84TK157-0011. origin: Turkey. collected: June 28, 1984. collector id: 84TK157-0011. locality: Denizli Province. Asagisamli-Denizli, 500m from junction on Pamukkale road. elevation: 180m. received as: Triticum dichasians. Annual. Wild. Seed.
- PI 542205 donor id: 84TK159-0036. origin: Turkey. collected: June 28, 1984. collector id: 84TK159-0036. locality: Denizli Province. 25km south of Sarigol or 10km north of Buldan junction. elevation: 275m. received as: Triticum dichasians. Annual. Wild. Seed.
- PI 542206 donor id: 84TK160-0049. origin: Turkey. collected: June 28, 1984. collector id: 84TK160-0049. locality: Denizli Province. 13km north of Buldan junction. elevation: 385m. received as: Triticum dichasians. Annual. Wild. Seed.
- PI 542207 donor id: 84TK201-0008. origin: Turkey. collected: July 05, 1984. collector id: 84TK201-0008. locality: Izmir Province. 500m east of Aliaga, east edge of village. elevation: 60m. received as: Triticum dichasians. Annual. Wild. Seed.
- PI 542208 donor id: 84TK207-0004. origin: Turkey. collected: July 05, 1984. collector id: 84TK207-0004. locality: Balikesir Province. 6km southeast of Edremit. elevation: 20m. received as: Triticum dichasians. Annual. Wild. Seed.
- PI 542209 donor id: 84TK071-0010. origin: Turkey. collected: June 15, 1984. collector id: 84TK071-0010. locality: Gaziatep Province. 14km north of Gaziantep toward Yavuzeli. elevation: 850m. received as: Triticum dichasians. Annual. Wild. Seed.
- PI 542210 donor id: 84TK074-0029. origin: Turkey. collected: June 15, 1984. collector id: 84TK074-0029. locality: Gaziatep Province. 1km south of Araban village, 25km west of Yavuzeli. elevation: 550m. received as: Triticum dichasians. Annual. Wild. Seed.

PI 542211 to 542230. *Aegilops neglecta* Req. ex Bertol. POACEAE
Aegilops

Donated by: Kimber, G., University of Missouri, Department of Agronomy, 210 Curtis Hall, Columbia, Missouri, United States; and Metzger, R.J., Department of Plant Sciences, Oregon State University, Oregon State University, Corvallis, Oregon, United States. Received October 01, 1989.

PI 542211 to 542230-continued

- PI 542211 **donor id:** 84TK109-0076. **origin:** Turkey. **collected:** June 18, 1984. **collector id:** 84TK109-0076. **locality:** Diyarbakir Province. 25km southwest of Diyarbakir. **elevation:** 1000m. **received as:** *Triticum triaristatum*. Annual. Wild. Seed.
- PI 542212 **donor id:** 84TK132-0004. **origin:** Turkey. **collected:** June 21, 1984. **collector id:** 84TK132-0004. **locality:** Urfa Province. 3km southeast of junction of Mt. Karacadag road-Diyarbakir highway. **elevation:** 1350m. **received as:** *Triticum triaristatum*. Annual. Wild. Seed.
- PI 542213 **donor id:** 84TK138-0021. **origin:** Turkey. **collected:** June 21, 1984. **collector id:** 84TK138-0021. **locality:** Adiyaman Province. 9km north of Ninrute road (to Narince village) and Diyarbakir junction. Dry river bed. **elevation:** 500m. **received as:** *Triticum triaristatum*. Annual. Wild. Seed.
- PI 542214 **donor id:** 84TK149-0002. **origin:** Turkey. **collected:** June 23, 1984. **collector id:** 84TK149-0002. **locality:** Usak Province. 10km east of Usak. **elevation:** 900m. **received as:** *Triticum triaristatum*. Annual. Wild. Seed.
- PI 542215 **donor id:** 84TK149-0003. **origin:** Turkey. **collected:** June 23, 1984. **collector id:** 84TK149-0003. **locality:** Usak Province. 10km east of Usak. **elevation:** 900m. **received as:** *Triticum triaristatum*. Annual. Wild. Seed.
- PI 542216 **donor id:** 84TK154-0013. **origin:** Turkey. **collected:** June 27, 1984. **collector id:** 84TK154-0013. **locality:** Izmir Province. Aegean Agricultural Research Institute. **elevation:** 30m. **received as:** *Triticum triaristatum*. Annual. Wild. Seed.
- PI 542217 **donor id:** 84TK154-0016. **origin:** Turkey. **collected:** June 27, 1984. **collector id:** 84TK154-0016. **locality:** Izmir Province. Aegean Agricultural Research Institute. **elevation:** 30m. **received as:** *Triticum triaristatum*. Annual. Wild. Seed.
- PI 542218 **donor id:** 84TK154-0017. **origin:** Turkey. **collected:** June 27, 1984. **collector id:** 84TK154-0017. **locality:** Izmir Province. Aegean Agricultural Research Institute. **elevation:** 30m. **received as:** *Triticum triaristatum*. Annual. Wild. Seed.

PI 542211 to 542230-continued

- PI 542219 *Aegilops markgrafii* (Greuter) Hammer var. *markgrafii*
POACEAE *Aegilops*
donor id: 84TK154-0022. **origin:** Turkey. **collected:** June
27, 1984. **collector id:** 84TK154-0022. **locality:** Izmir
Province. Aegean Agricultural Research Institute.
elevation: 30m. **received as:** *Triticum triaristatum*.
Annual. Wild. Seed.
- PI 542220 **donor id:** 84TK154-0036. **origin:** Turkey. **collected:** June
27, 1984. **collector id:** 84TK154-0036. **locality:** Izmir
Province. Aegean Agricultural Research Institute.
elevation: 30m. **received as:** *Triticum triaristatum*.
Annual. Wild. Seed.
- PI 542221 **donor id:** 84TK154-0039. **origin:** Turkey. **collected:** June
27, 1984. **collector id:** 84TK154-0039. **locality:** Izmir
Province. Aegean Agricultural Research Institute.
elevation: 30m. **received as:** *Triticum triaristatum*.
Annual. Wild. Seed.
- PI 542222 **donor id:** 84TK154-0042. **origin:** Turkey. **collected:** June
27, 1984. **collector id:** 84TK154-0042. **locality:** Izmir
Province. Aegean Agricultural Research Institute.
elevation: 30m. **received as:** *Triticum triaristatum*.
Annual. Wild. Seed.
- PI 542223 **donor id:** 84TK158-0032. **origin:** Turkey. **collected:** June
28, 1984. **collector id:** 84TK158-0032. **locality:** Denizli
Province. 6km south of Buldan-Baraji junction.
elevation: 175m. **received as:** *Triticum triaristatum*.
Annual. Wild. Seed.
- PI 542224 **donor id:** 84TK158-0033. **origin:** Turkey. **collected:** June
28, 1984. **collector id:** 84TK158-0033. **locality:** Denizli
Province. 6km south of Buldan-Baraji junction.
elevation: 175m. **received as:** *Triticum triaristatum*.
Annual. Wild. Seed.
- PI 542225 **donor id:** 84TK159-0046. **origin:** Turkey. **collected:** June
28, 1984. **collector id:** 84TK159-0046. **locality:** Denizli
Province. 25km south of Sarigol, about 10km north of
Buldan junction. **elevation:** 275m. **received as:**
Triticum triaristatum. Annual. Wild. Seed.
- PI 542226 **donor id:** 84TK208-0005. **origin:** Turkey. **collected:** July
05, 1984. **collector id:** 84TK205-0005. **locality:**
Canakkale Province. 22km southeast of Ayvacik.
elevation: 50m. **received as:** *Triticum triaristatum*.
Annual. Wild. Seed.

PI 542211 to 542230-continued

- PI 542227 **donor id:** 84TK085-0001. **origin:** Turkey. **collected:** June 16, 1984. **collector id:** 84TK085-0001. **locality:** Diyarbakir Province. Regional Agricultural Research Station. **elevation:** 820m. **received as:** *Triticum triaristatum*. Annual. Wild. Seed.
- PI 542228 **donor id:** 84TK095-0003. **origin:** Turkey. **collected:** June 17, 1984. **collector id:** 84TK095-0003. **locality:** Diyarbakir Province. Junction of Diyarbakir-Bismil road. **elevation:** 900m. **received as:** *Triticum triaristatum*. Annual. Wild. Seed.
- PI 542229 **donor id:** 84TK098-0022A. **origin:** Turkey. **collected:** June 17, 1984. **collector id:** 84TK098-0022A. **locality:** Diyarbakir Province. 4km north of Diyarbakir-Bangol road junction. **elevation:** 875m. **received as:** *Triticum triaristatum*. Annual. Wild. Seed.
- PI 542230 **donor id:** 84TK099-0026. **origin:** Turkey. **collected:** June 17, 1984. **collector id:** 84TK099-0026. **locality:** Diyarbakir Province. 12km north of Diyarbakir-Bangol road junction. **elevation:** 925m. **received as:** *Triticum triaristatum*. Annual. Wild. Seed.

PI 542231 to 542234. *Aegilops neglecta* Req. ex Bertol. subsp. *neglecta*
POACEAE *Aegilops*

Donated by: Kimber, G., University of Missouri, Department of Agronomy, 210 Curtis Hall, Columbia, Missouri, United States; and Metzger, R.J., Department of Plant Sciences, Dept. of Crop Sciences, Oregon State University, Corvallis, Oregon, United States. Received October 01, 1989.

- PI 542231 **donor id:** 84TK104-0050-1. **origin:** Turkey. **collected:** June 17, 1984. **collector id:** 84TK104-0050-1. **locality:** Diyarbakir Province. 4km northeast of Dicle. **elevation:** 925m. **received as:** *Triticum neglectum*. Annual. Wild. Seed.
- PI 542232 **donor id:** 84TK104-0050-2. **origin:** Turkey. **collected:** June 17, 1984. **collector id:** 84TK104-0050-2. **locality:** Diyarbakir Province. 4km northeast of Dicle. **elevation:** 925m. **received as:** *Triticum neglectum*. Annual. Wild. Seed.
- PI 542233 **donor id:** 84TK104-0050-4. **origin:** Turkey. **collected:** June 17, 1984. **collector id:** 84TK104-0050-4. **locality:** Diyarbakir Province. 4km northeast of Dicle. **elevation:** 925m. **received as:** *Triticum neglectum*. Annual. Wild. Seed.

PI 542231 to 542234-continued

PI 542234 **donor id:** 84TK096-0014. **origin:** Turkey. **collected:** June 17, 1984. **collector id:** 84TK096-0014. **locality:** Diyarbakir Province. 19km southeast of Diyarbakir-Bismil junction on way to Bismil. **elevation:** 825m. **received as:** *Triticum triaristatum* ssp. *neglecta*. Annual. Wild. Seed.

PI 542235. *Aegilops neglecta* subsp. *recta* (Zhuk.) Hammer POACEAE
Aegilops

Donated by: Kimber, G., University of Missouri, Department of Agronomy, 210 Curtis Hall, Columbia, Missouri, United States; and Metzger, R.J., Department of Plant Sciences, Dept. of Crop Sciences, Oregon State University, Corvallis, Oregon, United States. Received October 01, 1989.

donor id: 84TK094-0002. **origin:** Turkey. **collected:** June 17, 1984. **collector id:** 84TK094-0002. **locality:** Diyarbakir Province. 18km northeast of Diyarbakir. **elevation:** 800m. **received as:** *Triticum triaristatum* ssp. *recta*. Annual. Wild. Seed.

PI 542236. *Aegilops peregrina* subsp. *cylindrostachys* (Eig & Feinbrun) Hammer POACEAE *Aegilops*

Donated by: Kimber, G., University of Missouri, Department of Agronomy, 210 Curtis Hall, Columbia, Missouri, United States; and Metzger, R.J., Department of Plant Sciences, Oregon State University, Oregon State University, Corvallis, Oregon, United States. Received October 01, 1989.

donor id: 84TK075-0030. **origin:** Turkey. **collected:** June 15, 1984. **collector id:** 84TK075-0030. **locality:** Gaziantep Province. 6km north of Araban. **elevation:** 620m. **received as:** *Triticum peregrinum* ssp. *cylindrostachys*. Annual. Wild. Seed.

PI 542237. *Aegilops sharonensis* Eig POACEAE *Aegilops*

Donated by: Kimber, G., University of Missouri, Department of Agronomy, 210 Curtis Hall, Columbia, Missouri, United States; and Metzger, R.J., Department of Plant Sciences, Oregon State University, Oregon State University, Corvallis, Oregon, United States. Received October 01, 1989.

PI 542237-continued

donor id: 84TK154-0045. **origin:** Turkey. **collected:** June 27, 1984. **collector id:** 84TK154-0045. **locality:** Izmir Province. Aegean Agricultural Research Institute. **elevation:** 30m. **received as:** *Triticum sharonense*. Annual. Wild. Seed.

PI 542238. *Aegilops speltoides* Tausch POACEAE *Aegilops*

Donated by: Kimber, G., University of Missouri, Department of Agronomy, 210 Curtis Hall, Columbia, Missouri, United States; and Metzger, R.J., Department of Plant Sciences, Oregon State University, Oregon State University, Corvallis, Oregon, United States. Received October 01, 1989.

donor id: 84TK085-0003. **origin:** Turkey. **collected:** June 16, 1984. **collector id:** 84TK085-0003. **locality:** Diyarbakir Province. Regional Agricultural Research Station. **elevation:** 820m. **received as:** *Triticum speltoides*. Annual. Wild. Seed.

PI 542239 to 542258. *Aegilops speltoides* var. *ligustica* (Savign.) Fiori
POACEAE *Aegilops*

Donated by: Kimber, G., University of Missouri, Department of Agronomy, 210 Curtis Hall, Columbia, Missouri, United States; and Metzger, R.J., Department of Plant Sciences, Oregon State University, Oregon State University, Corvallis, Oregon, United States. Received October 01, 1989.

PI 542239 **donor id:** 84TK106-0067. **origin:** Turkey. **collected:** June 17, 1984. **collector id:** 84TK106-0067. **locality:** Diyarbakir Province. 8km southwest of Dicle. **elevation:** 950m. **received as:** *Triticum speltoides* ssp. *ligusticum*. Annual. Wild. Seed.

PI 542240 **donor id:** 84TK108-0072. **origin:** Turkey. **collected:** June 17, 1984. **collector id:** 84TK108-0072. **locality:** Diyarbakir Province. 7km north of Diyarbakir on roadside. **elevation:** 650m. **received as:** *Triticum speltoides* ssp. *ligusticum*. Annual. Wild. Seed.

PI 542241 **donor id:** 84TK109-0074. **origin:** Turkey. **collected:** June 18, 1984. **collector id:** 84TK109-0074. **locality:** Diyarbakir Province. 25km southwest of Diyarbakir. **elevation:** 1000m. **received as:** *Triticum speltoides* ssp. *ligusticum*. Annual. Wild. Seed.

PI 542239 to 542258-continued

- PI 542242 **donor id:** 84TK114-0101E. **origin:** Turkey. **collected:** June 18, 1984. **collector id:** 84TK114-0101E. **locality:** Urfa Province. 3km north of Hilvan. **elevation:** 600m. **received as:** *Triticum speltoides* ssp. *ligusticum*. Annual. Wild. Seed.
- PI 542243 **donor id:** 84TK115-0118. **origin:** Turkey. **collected:** June 18, 1984. **collector id:** 84TK115-0118. **locality:** Urfa Province. 3km southwest of Hilvan. **elevation:** 600m. **received as:** *Triticum speltoides* ssp. *ligusticum*. Annual. Wild. Seed.
- PI 542244 **donor id:** 84TK118-0111A. **origin:** Turkey. **collected:** June 18, 1984. **collector id:** 84TK118-0111A. **locality:** Urfa Province. 7km northeast of Harrun-Urfa junction. **elevation:** 350m. **received as:** *Triticum speltoides* ssp. *ligusticum*. Annual. Wild. Seed.
- PI 542245 **donor id:** 84TK119-0113. **origin:** Turkey. **collected:** June 18, 1984. **collector id:** 84TK119-0113. **locality:** Urfa Province. 29km south of Urfa. **elevation:** 325m. **received as:** *Triticum speltoides* ssp. *ligusticum*. Annual. Wild. Seed.
- PI 542246 **donor id:** 84TK119-0119. **origin:** Turkey. **collected:** June 18, 1984. **collector id:** 84TK119-0119. **locality:** Urfa Province. 29km south of Urfa. **elevation:** 325m. **received as:** *Triticum speltoides* ssp. *ligusticum*. Annual. Wild. Seed.
- PI 542247 **donor id:** 84TK125-0019. **origin:** Turkey. **collected:** June 19, 1984. **collector id:** 84TK125-0019. **locality:** Urfa Province. 20km west of Viransehir. **elevation:** 550m. **received as:** *Triticum speltoides* ssp. *ligusticum*. Annual. Wild. Seed.
- PI 542248 **donor id:** 84TK125-0020. **origin:** Turkey. **collected:** June 19, 1984. **collector id:** 84TK125-0020. **locality:** Urfa Province. 20km west of Viransehir. **elevation:** 550m. **received as:** *Triticum speltoides* ssp. *ligusticum*. Annual. Wild. Seed.
- PI 542249 **donor id:** 84TK126-0025. **origin:** Turkey. **collected:** June 19, 1984. **collector id:** 84TK126-0025. **locality:** Urfa Province. 36km north of Ceylanpinar. **elevation:** 425m. **received as:** *Triticum speltoides* ssp. *ligusticum*. Annual. Wild. Seed.

PI 542239 to 542258-continued

- PI 542250 **donor id:** 84TK126-0039. **origin:** Turkey. **collected:** June 19, 1984. **collector id:** 84TK126-0039. **locality:** Urfa Province. 36km north of Ceylanpinar. **elevation:** 425m. **received as:** *Triticum speltoides* ssp. *ligusticum*. Annual. Wild. Seed.
- PI 542251 **donor id:** 84TK128-0031. **origin:** Turkey. **collected:** June 19, 1984. **collector id:** 84TK128-0031. **locality:** Urfa Province. 20.5km north of Ceylanpinar. **elevation:** 375m. **received as:** *Triticum speltoides* ssp. *ligusticum*. Annual. Wild. Seed.
- PI 542252 **donor id:** 84TK129-0033. **origin:** Turkey. **collected:** June 19, 1984. **collector id:** 84TK129-0033. **locality:** Urfa Province. On state farm at Ceylanpinar. **elevation:** 380m. **received as:** *Triticum speltoides* ssp. *ligusticum*. Annual. Wild. Seed.
- PI 542253 **donor id:** 84TK129-0034. **origin:** Turkey. **collected:** June 19, 1984. **collector id:** 84TK129-0034. **locality:** Urfa Province. On state farm at Ceylanpinar. **elevation:** 380m. **received as:** *Triticum speltoides* ssp. *ligusticum*. Annual. Wild. Seed.
- PI 542254 **donor id:** 84TK130-0035. **origin:** Turkey. **collected:** June 19, 1984. **collector id:** 84TK130-0035. **locality:** Diyarbakir Province. At water source (spring), 7km south of Cinar, south of Diyarbakir. **elevation:** 625m. **received as:** *Triticum speltoides* ssp. *ligusticum*. Annual. Wild. Seed.
- PI 542255 **donor id:** 84TK154-0010. **origin:** Turkey. **collected:** June 27, 1984. **collector id:** 84TK154-0010. **locality:** Izmir Province. Aegean Agricultural Research Institute. **elevation:** 30m. **received as:** *Triticum speltoides* ssp. *ligusticum*. Annual. Wild. Seed.
- PI 542256 **donor id:** 84TK082-0059. **origin:** Turkey. **collected:** June 15, 1984. **collector id:** 84TK082-0059. **locality:** Adiyaman Province. 3km north of Damlacik. **elevation:** 725m. **received as:** *Triticum speltoides* ssp. *ligusticum*. Annual. Wild. Seed.
- PI 542257 **donor id:** 84TK093-0026. **origin:** Turkey. **collected:** June 16, 1984. **collector id:** 84TK093-0026. **locality:** Diyarbakir Province. 18km southwest of Diyarbakir. **elevation:** 800m. **received as:** *Triticum speltoides* ssp. *ligusticum*. Annual. Wild. Seed.

PI 542239 to 542258-continued

PI 542258 **donor id:** 84TK098-0021B. **origin:** Turkey. **collected:** June 17, 1984. **collector id:** 84TK098-0021B. **locality:** Diyarbakir Province. 4km north of Diyarbakir-Bangol road junction. **elevation:** 875m. **received as:** *Triticum speltoides* ssp. *ligusticum*. Annual. Wild. Seed.

PI 542259 to 542276. *Aegilops speltoides* Tausch var. *speltoides*
POACEAE *Aegilops*

Donated by: Kimber, G., University of Missouri, Department of Agronomy, 210 Curtis Hall, Columbia, Missouri, United States; and Metzger, R.J., Department of Plant Sciences, Oregon State University, Oregon State University, Corvallis, Oregon, United States. Received October 01, 1989.

PI 542259 **donor id:** 84TK109-0078. **origin:** Turkey. **collected:** June 18, 1984. **collector id:** 84TK109-0078. **locality:** Diyarbakir Province. 25km southwest of Diyarbakir. **elevation:** 1000m. **received as:** *Triticum speltoides* var. *aucheri*. Annual. Wild. Seed.

PI 542260 **donor id:** 84TK117-0108. **origin:** Turkey. **collected:** June 18, 1984. **collector id:** 84TK117-0108. **locality:** Urfa Province. 8km north of Urfa. **elevation:** 600m. **received as:** *Triticum speltoides* var. *aucheri*. Annual. Wild. Seed.

PI 542261 **donor id:** 84TK118-0110. **origin:** Turkey. **collected:** June 18, 1984. **collector id:** 84TK118-0110. **locality:** Urfa Province. 7km northeast of Harrun-Urfa junction. **elevation:** 350m. **received as:** *Triticum speltoides* var. *aucheri*. Annual. Wild. Seed.

PI 542262 **donor id:** 84TK120-0002. **origin:** Turkey. **collected:** June 19, 1984. **collector id:** 84TK120-0002. **locality:** Urfa Province. North from Urfa, then northwest toward Bozova (3km northwest of junction toward Bozova). **elevation:** 700m. **received as:** *Triticum speltoides* var. *aucheri*. Annual. Wild. Seed.

PI 542263 **donor id:** 84TK123-0015D. **origin:** Turkey. **collected:** June 19, 1984. **collector id:** 84TK123-0015D. **locality:** Urfa Province. 42km east of Urfa. **elevation:** 600m. **received as:** *Triticum speltoides* var. *aucheri*. Annual. Wild. Seed.

PI 542264 **donor id:** 84TK124-0016. **origin:** Turkey. **collected:** June 19, 1984. **collector id:** 84TK124-0016. **locality:** Urfa Province. 48km east of Urfa. **elevation:** 625m. **received as:** *Triticum speltoides* var. *aucheri*. Annual. Wild. Seed.

PI 542259 to 542276-continued

- PI 542265 **donor id:** 84TK127-0027. **origin:** Turkey. **collected:** June 19, 1984. **collector id:** 84TK127-0027. **locality:** Urfa Province. On state farm at Ceylanpinar. **elevation:** 350m. **received as:** *Triticum speltoides* var. *aucheri*. Annual. Wild. Seed.
- PI 542266 **donor id:** 84TK138-0023. **origin:** Turkey. **collected:** June 21, 1984. **collector id:** 84TK138-0023. **locality:** Adiyaman Province. 9km north of junction of. Nimrud-Diyarbakir roads in route to Narince village. **elevation:** 500m. **received as:** *Triticum speltoides* var. *aucheri*. Annual. Wild. Seed.
- PI 542267 **donor id:** 84TK142-0037. **origin:** Turkey. **collected:** June 21, 1984. **collector id:** 84TK142-0037. **locality:** Kahramanmaras Province. 16km northeast of Pazarcik. **elevation:** 800m. **received as:** *Triticum speltoides* var. *aucheri*. Annual. Wild. Seed.
- PI 542268 **donor id:** 84TK144-0046. **origin:** Turkey. **collected:** June 21, 1984. **collector id:** 84TK144-0046. **locality:** Kahramanmaras Province. 14km southeast of Kahramanmaras. **elevation:** 515m. **received as:** *Triticum speltoides* var. *aucheri*. Annual. Wild. Seed.
- PI 542269 **donor id:** 84TK070-0005. **origin:** Turkey. **collected:** June 15, 1984. **collector id:** 84TK070-0005. **locality:** Gaziantep Province. 2km north of Gaziantep toward Yavuzeli. **elevation:** 940m. **received as:** *Triticum speltoides* var. *aucheri*. Annual. Wild. Seed.
- PI 542270 **donor id:** 84TK071-0009. **origin:** Turkey. **collected:** June 15, 1984. **collector id:** 84TK071-0009. **locality:** Gaziantep Province. 14km north of Gaziantep toward Yavuzeli. **elevation:** 850m. **received as:** *Triticum speltoides* var. *aucheri*. Annual. Wild. Seed.
- PI 542271 **donor id:** 84TK072-0015. **origin:** Turkey. **collected:** June 15, 1984. **collector id:** 84TK072-0015. **locality:** Gaziantep Province. 19km north of Gaziantep toward Yavuzeli. **elevation:** 800m. **received as:** *Triticum speltoides* var. *aucheri*. Annual. Wild. Seed.
- PI 542272 **donor id:** 84TK073-0025. **origin:** Turkey. **collected:** June 15, 1984. **collector id:** 84TK073-0025. **locality:** Gaziantep Province. 4km north of Yavuzeli. **elevation:** 450m. **received as:** *Triticum speltoides* var. *aucheri*. Annual. Wild. Seed.

PI 542259 to 542276-continued

- PI 542273 **donor id:** 84TK077-0046. **origin:** Turkey. **collected:** June 15, 1984. **collector id:** 84TK077-0046. **locality:** Adiyaman Province. 10km south of Besni. **elevation:** 900m. **received as:** *Triticum speltoides* var. *aucheri*. Annual. Wild. Seed.
- PI 542274 **donor id:** 84TK081-0057. **origin:** Turkey. **collected:** June 15, 1984. **collector id:** 84TK081-0057. **locality:** Adiyaman Province. 20km west of Damlacik village, 9km north of Kahta junction. **elevation:** 1000m. **received as:** *Triticum speltoides* var. *aucheri*. Annual. Wild. Seed.
- PI 542275 **donor id:** 84TK097-0018. **origin:** Turkey. **collected:** June 17, 1984. **collector id:** 84TK097-0018. **locality:** Diyarbakir Province. 4km northwest of Bismil. **elevation:** 750m. **received as:** *Triticum speltoides* var. *aucheri*. Annual. Wild. Seed.
- PI 542276 **donor id:** 84TK098-0021A. **origin:** Turkey. **collected:** June 17, 1984. **collector id:** 84TK098-0021A. **locality:** Diyarbakir Province. 4km north of Diyarbakir-Bingol road junction. **elevation:** 875m. **received as:** *Triticum speltoides* var. *aucheri*. Annual. Wild. Seed.

PI 542277 to 542278. *Aegilops tauschii* Cosson subsp. *tauschii* POACEAE
Aegilops

Donated by: Kimber, G., University of Missouri, Department of Agronomy, 210 Curtis Hall, Columbia, Missouri, United States; and Metzger, R.J., Department of Plant Sciences, Oregon State University, Oregon State University, Corvallis, Oregon, United States. Received October 01, 1989.

- PI 542277 **donor id:** 84TK154-0015. **origin:** Turkey. **collected:** June 27, 1984. **collector id:** 84TK154-0015. **locality:** Izmir Province. Aegean Agricultural Research Institute. **elevation:** 30m. **received as:** *Triticum tauschii*. Annual. Wild. Seed.
- PI 542278 **donor id:** 84TK154-0043. **origin:** Turkey. **collected:** June 27, 1984. **collector id:** 84TK154-0043. **locality:** Izmir Province. Aegean Agricultural Research Institute. **elevation:** 30m. **received as:** *Triticum tauschii*. Annual. Wild. Seed.

PI 542279 to 542361. *Aegilops triuncialis* L. POACEAE *Aegilops*

Donated by: Kimber, G., University of Missouri, Department of Agronomy, 210 Curtis Hall, Columbia, Missouri, United States; and Metzger, R.J., Department of Plant Sciences, Oregon State University, Oregon State University, Corvallis, Oregon, United States. Received October 01, 1989.

PI 542279 **donor id:** 84TK100-0032. **origin:** Turkey. **collected:** June 17, 1984. **collector id:** 84TK100-0032. **locality:** Diyarbakir Province. 28km north of Diyarbakir-Bingol road junction. **elevation:** 900m. **received as:** *Triticum triunciale*. Annual. Wild. Seed.

PI 542280 **donor id:** 84TK101-0035. **origin:** Turkey. **collected:** June 17, 1984. **collector id:** 84TK101-0035. **locality:** Diyarbakir Province. 48km north of Diyarbakir-Bingol junction. **elevation:** 1000m. **received as:** *Triticum triunciale*. Annual. Wild. Seed.

PI 542281 **donor id:** 84TK102-0041. **origin:** Turkey. **collected:** June 17, 1984. **collector id:** 84TK102-0041. **locality:** Diyarbakir Province. 8km east of Hani-Lice road junction. **elevation:** 1000m. **received as:** *Triticum triunciale*. Annual. Wild. Seed.

PI 542282 **donor id:** 84TK103-0044. **origin:** Turkey. **collected:** June 17, 1984. **collector id:** 84TK103-0044. **locality:** Diyarbakir Province. 24km southwest of Hani. **elevation:** 925m. **received as:** *Triticum triunciale*. Annual. Wild. Seed.

PI 542283 **donor id:** 84TK104-0048. **origin:** Turkey. **collected:** June 17, 1984. **collector id:** 84TK104-0048. **locality:** Diyarbakir Province. 4km northeast of Dicle. **elevation:** 925m. **received as:** *Triticum triunciale*. Annual. Wild. Seed.

PI 542284 **donor id:** 84TK106-0066. **origin:** Turkey. **collected:** June 17, 1984. **collector id:** 84TK106-0066. **locality:** Diyarbakir Province. 8km southwest of Dicle. **elevation:** 950m. **received as:** *Triticum triunciale*. Annual. Wild. Seed.

PI 542285 **donor id:** 84TK109-0073. **origin:** Turkey. **collected:** June 18, 1984. **collector id:** 84TK109-0073. **locality:** Diyarbakir Province. 25km southwest of Diyarbakir. **elevation:** 1000m. **received as:** *Triticum triunciale*. Annual. Wild. Seed.

PI 542279 to 542361-continued

- PI 542286 **donor id:** 84TK109-0075. **origin:** Turkey. **collected:** June 18, 1984. **collector id:** 84TK109-0075. **locality:** Diyarbakir Province. 25km southwest of Diyarbakir. **elevation:** 1000m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542287 **donor id:** 84TK110-0088. **origin:** Turkey. **collected:** June 18, 1984. **collector id:** 84TK110-0088. **locality:** Urfa Province. Junction of Mt. Karacadag road and highway. **elevation:** 775m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542288 **donor id:** 84TK111-0092. **origin:** Turkey. **collected:** June 18, 1984. **collector id:** 84TK111-0092. **locality:** Urfa Province. 28km east of Siverek. **elevation:** 1050m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542289 **donor id:** 84TK112-0094. **origin:** Turkey. **collected:** June 18, 1984. **collector id:** 84TK112-0094. **locality:** Urfa Province. 12km southwest of Siverek. **elevation:** 650m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542290 **donor id:** 84TK116-0102. **origin:** Turkey. **collected:** June 18, 1984. **collector id:** 84TK116-0102. **locality:** Urfa Province. 8km southwest of Hivan, along side road, just west of a small village. **elevation:** 625m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542291 **donor id:** 84TK117-0107. **origin:** Turkey. **collected:** June 18, 1984. **collector id:** 84TK117-0107. **locality:** Urfa Province. 8km north of Urfa. **elevation:** 600m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542292 **donor id:** 84TK120-0001. **origin:** Turkey. **collected:** June 19, 1984. **collector id:** 84TK120-0001. **locality:** Urfa Province. Northwest of Urfa, 33km southeast of Bozova. **elevation:** 700m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542293 **donor id:** 84TK120-0004B. **origin:** Turkey. **collected:** June 19, 1984. **collector id:** 84TK120-0004B. **locality:** Urfa Province. Northwest of Urfa, 33km southeast of Bozova. **elevation:** 700m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542294 **donor id:** 84TK121-0005. **origin:** Turkey. **collected:** June 19, 1984. **collector id:** 84TK121-0005. **locality:** Urfa Province. 18km southeast of Bozova. **elevation:** 725m. **received as:** Triticum triunciale. Annual. Wild. Seed.

PI 542279 to 542361-continued

- PI 542295 **donor id:** 84TK121-0009. **origin:** Turkey. **collected:** June 19, 1984. **collector id:** 84TK121-0009. **locality:** Urfa Province. 18km southeast of Bozova. **elevation:** 725m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542296 **donor id:** 84TK123-0011. **origin:** Turkey. **collected:** June 19, 1984. **collector id:** 84TK123-0011. **locality:** Urfa Province. 42km east of Urfa. **elevation:** 600m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542297 **donor id:** 84TK124-0017. **origin:** Turkey. **collected:** June 19, 1984. **collector id:** 84TK124-0017. **locality:** Urfa Province. 48km east of Urfa. **elevation:** 625m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542298 **donor id:** 84TK125-0022. **origin:** Turkey. **collected:** June 19, 1984. **collector id:** 84TK125-0022. **locality:** Urfa Province. 20km west of Viransehir. **elevation:** 550m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542299 **donor id:** 84TK127-0028. **origin:** Turkey. **collected:** June 19, 1984. **collector id:** 84TK127-0028. **locality:** Urfa Province. on state farm at Ceylanpinar. **elevation:** 350m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542300 **donor id:** 84TK132-0003. **origin:** Turkey. **collected:** June 21, 1984. **collector id:** 84TK132-0003. **locality:** Urfa Province. 3km southeast of junction of Mt. Karacadag road and Diyarbakir highway. **elevation:** 1350m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542301 **donor id:** 84TK134-0008. **origin:** Turkey. **collected:** June 21, 1984. **collector id:** 84TK134-0008. **locality:** Urfa Province. 20km southeast of Siverek. **elevation:** 450m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542302 **donor id:** 84TK136-0014. **origin:** Turkey. **collected:** June 21, 1984. **collector id:** 84TK136-0014. **locality:** Urfa Province. 5km northwest of Urfa-Diyarbakir road junction. **elevation:** 500m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542303 **donor id:** 84TK138-0022. **origin:** Turkey. **collected:** June 21, 1984. **collector id:** 84TK138-0022. **locality:** Adiyaman Province 9km north of junction of Nimrud-Diyarbakir roads in route to Narince village. Dry river bed. **elevation:** 500m. **received as:** Triticum triunciale. Annual. Wild. Seed.

PI 542279 to 542361-continued

- PI 542304 **donor id:** 84TK141-0031. **origin:** Turkey. **collected:** June 21, 1984. **collector id:** 84TK141-0031. **locality:** Adiyaman Province. 31km southwest of Golbasi, roadside slope. **elevation:** 750m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542305 **donor id:** 84TK143-0038. **origin:** Turkey. **collected:** June 21, 1984. **collector id:** 84TK143-0038. **locality:** Kahramanmaras Province. 9km northeast of Pazarcik. **elevation:** 800m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542306 **donor id:** 84TK144-0045. **origin:** Turkey. **collected:** June 21, 1984. **collector id:** 84TK144-0045. **locality:** Kahramanmaras Province. 14km southeast of Kahramanmaras. **elevation:** 515m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542307 **donor id:** 84TK145-0002. **origin:** Turkey. **collected:** June 22, 1984. **collector id:** 84TK145-0002. **locality:** Gaziantep Province. 17km northwest of Gaziantep. Rugged mountain area. **elevation:** 850m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542308 **donor id:** 84TK145-0004. **origin:** Turkey. **collected:** June 22, 1984. **collector id:** 84TK145-0004. **locality:** Gaziantep Province. 17km northwest of Gazinatep. Rugged mountain area. **elevation:** 850m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542309 **donor id:** 84TK147-0003. **origin:** Turkey. **collected:** June 23, 1984. **collector id:** 84TK147-0003. **locality:** Konya Province. 10km west of Ilgin, going west from Konya. **elevation:** 1200m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542310 **donor id:** 84TK148-0001. **origin:** Turkey. **collected:** June 23, 1984. **collector id:** 84TK148-0001. **locality:** Usak Province. 3km east of Guney, 55km east of Usak, 38km west of Afyon. **elevation:** 1250m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542311 **donor id:** 84TK149-0001. **origin:** Turkey. **collected:** June 23, 1984. **collector id:** 84TK149-0001. **locality:** Usak Province. 10km east of Usak. **elevation:** 900m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542312 **donor id:** 84TK150-0003. **origin:** Turkey. **collected:** June 23, 1984. **collector id:** 84TK150-0003. **locality:** Manisco Province. 1km east of road junction to Selemdi on Izmir highway roadside. **elevation:** 490m. **received as:** Triticum triunciale. Annual. Wild. Seed.

PI 542279 to 542361-continued

- PI 542313 **donor id:** 84TK151-0021. **origin:** Turkey. **collected:** June 23, 1984. **collector id:** 84TK151-0021. **locality:** Manis Province. Sardis (ancient Roman city ruins), 3km east of Mesendere village. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542314 **donor id:** 84TK152-0001. **origin:** Turkey. **collected:** June 1984. **collector id:** 84TK152-0001. **locality:** Izmir Province. Bergaman stop 1 (medical center) on tour. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542315 **donor id:** 84TK153-0004. **origin:** Turkey. **collected:** June 1984. **collector id:** 84TK153-0004. **locality:** Izmir Province. Bergaman stop 2 (hill over looking valley, remains of Roman theatre on hillside) on tour. **elevation:** 50m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542316 **donor id:** 84TK154-0004. **origin:** Turkey. **collected:** June 27, 1984. **collector id:** 84TK154-0004. **locality:** Izmir Province. Agean Agricultural Research Institute. **elevation:** 30m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542317 **donor id:** 84TK154-0009. **origin:** Turkey. **collected:** June 27, 1984. **collector id:** 84TK154-0009. **locality:** Izmir Province. Agean Agricultural Research Institute. **elevation:** 30m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542318 **donor id:** 84TK154-0012. **origin:** Turkey. **collected:** June 27, 1984. **collector id:** 84TK154-0012. **locality:** Izmir Province. Agean Agricultural Research Institute. **elevation:** 30m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542319 **donor id:** 84TK154-0020. **origin:** Turkey. **collected:** June 27, 1984. **collector id:** 84TK154-0020. **locality:** Izmir Province. Agean Agricultural Research Institute. **elevation:** 30m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542320 **donor id:** 84TK154-0037. **origin:** Turkey. **collected:** June 27, 1984. **collector id:** 84TK154-0037. **locality:** Izmir Province. Agean Agricultural Research Institute. **elevation:** 30m. **received as:** Triticum triunciale. Annual. Wild. Seed.

PI 542279 to 542361-continued

- PI 542321 **donor id:** 84TK154-0038. **origin:** Turkey. **collected:** June 27, 1984. **collector id:** 84TK154-0038. **locality:** Izmir Province. Aegean Agricultural Research Institute. **elevation:** 30m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542322 **donor id:** 84TK156-0001. **origin:** Turkey. **collected:** June 28, 1984. **collector id:** 84TK156-0001. **locality:** Denizli Province. Pamukkale Roman cemetery. **elevation:** 420m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542323 **donor id:** 84TK157-0007. **origin:** Turkey. **collected:** June 28, 1984. **collector id:** 84TK157-0007. **locality:** Denizli Province. Asagismali-Denizli, 500m from junction on Pamukkale road. **elevation:** 180m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542324 **donor id:** 84TK157-0021. **origin:** Turkey. **collected:** June 28, 1984. **collector id:** 84TK157-0021. **locality:** Denizli Province. Asagisamli-Denizli, 500m from junction on Pamukkale road. **elevation:** 180m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542325 **donor id:** 84TK158-0034. **origin:** Turkey. **collected:** June 28, 1984. **collector id:** 84TK158-0034. **locality:** Denizli Province. 6km south of Buldan-Baraji junction. **elevation:** 175m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542326 **donor id:** 84TK159-0038. **origin:** Turkey. **collected:** June 28, 1984. **collector id:** 84TK159-0038. **locality:** Denizli Province. 25km south of Sarigol, or 10km north of Buldan junction. **elevation:** 275m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542327 **donor id:** 84TK160-0048. **origin:** Turkey. **collected:** June 28, 1984. **collector id:** 84TK160-0048. **locality:** Denizli Province. 13km north of Buldan junction. **elevation:** 385m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542328 **donor id:** 84TK161-0053. **origin:** Turkey. **collected:** June 28, 1984. **collector id:** 84TK161-0053. **locality:** Manisa Province. 23km north of Buldan junction or 12km south of Sarigol. **elevation:** 320m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542329 **donor id:** 84TK162-0056. **origin:** Turkey. **collected:** June 28, 1984. **collector id:** 84TK162-0056. **locality:** Manisa Province. 2km south of Sarigol, on hill where grass and shrubs grow. **elevation:** 305m. **received as:** Triticum triunciale. Annual. Wild. Seed.

PI 542279 to 542361-continued

- PI 542330 **donor id:** 84TK162-0060. **origin:** Turkey. **collected:** June 28, 1984. **collector id:** 84TK162-0060. **locality:** Manisa Province. 2km south of Sarigol, on hill where grass and shrubs grow. **elevation:** 305m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542331 **donor id:** 84TK201-0006. **origin:** Turkey. **collected:** July 05, 1984. **collector id:** 84TK201-0006. **locality:** Izmir Province. 500m east of Aliaga, east edge of village. **elevation:** 60m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542332 **donor id:** 84TK202-0002. **origin:** Turkey. **collected:** July 05, 1984. **collector id:** 84TK202-0002. **locality:** Izmir Province. 22km southeast of Bergmana. **elevation:** 30m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542333 **donor id:** 84TK202-0004. **origin:** Turkey. **collected:** July 05, 1984. **collector id:** 84TK202-0004. **locality:** Izmir Province. 22km southeast of Bergmana. **elevation:** 30m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542334 **donor id:** 84TK203-0003. **origin:** Turkey. **collected:** July 05, 1984. **collector id:** 84TK203-0003. **locality:** Izmir Province. 10km west of Bergmana-Izmir-Dikili junction. **elevation:** 30m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542335 **donor id:** 84TK204-0001. **origin:** Turkey. **collected:** July 05, 1984. **collector id:** 84TK204-0001. **locality:** Izmir Province. 12km northwest of Dikili. **elevation:** 20m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542336 **donor id:** 84TK205-0004. **origin:** Turkey. **collected:** July 05, 1984. **collector id:** 84TK205-0004. **locality:** Balikesir Province. Burhaniye-Ayvalik road junction, at city limit going east. **elevation:** 20m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542337 **donor id:** 84TK206-0002. **origin:** Turkey. **collected:** July 05, 1984. **collector id:** 84TK206-0002. **locality:** Balikesir Province. 6km north of Ayvalik. **elevation:** 4m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542338 **donor id:** 84TK207-0003. **origin:** Turkey. **collected:** July 05, 1984. **collector id:** 84TK207-0003. **locality:** Balikesir Province. 6km southeast of Edremit. **elevation:** 20m. **received as:** Triticum triunciale. Annual. Wild. Seed.

PI 542279 to 542361-continued

- PI 542339 **donor id:** 84TK208-0001. **origin:** Turkey. **collected:** July 05, 1984. **collector id:** 84TK208-0001. **locality:** Canakkale Province. 22km southeast of Ayvacik. **elevation:** 50m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542340 **donor id:** 84TK070-0004. **origin:** Turkey. **collected:** June 15, 1984. **collector id:** 84TK070-0004. **locality:** Gaziantep Province. 2km north of Gaziantep toward Yavuzeli. **elevation:** 940m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542341 **donor id:** 84TK071-0008. **origin:** Turkey. **collected:** June 15, 1984. **collector id:** 84TK071-0008. **locality:** Gaziantep Province. 14km north of Gaziatep toward Yavuzeli. **elevation:** 850m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542342 **donor id:** 84TK072-0014. **origin:** Turkey. **collected:** June 15, 1984. **collector id:** 84TK072-0014. **locality:** Gaziatep Province. 19km north of Gaziantep toward Yavuzeli. **elevation:** 800m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542343 **donor id:** 84TK073-0024. **origin:** Turkey. **collected:** June 15, 1984. **collector id:** 84TK073-0024. **locality:** Gaziantep Province. 4km north of Yavuzeli. **elevation:** 450m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542344 **donor id:** 84TK076-0038. **origin:** Turkey. **collected:** June 15, 1984. **collector id:** 84TK076-0038. **locality:** Gaziantep Province. 9km north of Araban-Gaziantep-Adiyaman border. **elevation:** 820m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542345 **donor id:** 84TK077-0044. **origin:** Turkey. **collected:** June 15, 1984. **collector id:** 84TK077-0044. **locality:** Adiyaman Province. 10km south of Besni. **elevation:** 900m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542346 **donor id:** 84TK077-0045. **origin:** Turkey. **collected:** June 15, 1984. **collector id:** 84TK077-0045. **locality:** Adiyaman Province. 2km south of Besni. **elevation:** 900m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542347 **donor id:** 84TK082-0060. **origin:** Turkey. **collected:** June 15, 1984. **collector id:** 84TK082-0060. **locality:** Adiyaman Province. 3km north of Damlacik village. **elevation:** 725m. **received as:** Triticum triunciale. Annual. Wild. Seed.

PI 542279 to 542361-continued

- PI 542348 **donor id:** 84TK082-0061. **origin:** Turkey. **collected:** June 15, 1984. **collector id:** 84TK082-0061. **locality:** Adiyaman Province. 3km north of Damlacik village. **elevation:** 725m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542349 **donor id:** 84TK084-0068. **origin:** Turkey. **collected:** June 15, 1984. **collector id:** 84TK084-0068. **locality:** Adiyaman Province. 6km south of Narance village. **elevation:** 850m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542350 **donor id:** 84TK085-0002. **origin:** Turkey. **collected:** June 16, 1984. **collector id:** 84TK085-0002. **locality:** Diyarbakir Province. Regional Agricultural Research Station. **elevation:** 820m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542351 **donor id:** 84TK085-0004. **origin:** Turkey. **collected:** June 16, 1984. **collector id:** 84TK085-0004. **locality:** Diyarbakir Province. Regional Agricultural Research Station. **elevation:** 820m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542352 **donor id:** 84TK085-0015. **origin:** Turkey. **collected:** June 16, 1984. **collector id:** 84TK085-0015. **locality:** Diyarbakir Province. Regional Agricultural Research Station. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542353 **donor id:** 84TK090-0020. **origin:** Turkey. **collected:** June 16, 1984. **collector id:** 84TK090-0020. **locality:** Urfa Province. 7km east of Karacadag road-Diyarbakir junction in route to Diyarbakir. **elevation:** 1200m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542354 **donor id:** 84TK091-0021. **origin:** Turkey. **collected:** June 16, 1984. **collector id:** 84TK091-0021. **locality:** Urfa Province. 38km southwest of Diyarbakir. **elevation:** 1100m. **received as:** Triticum triunciale. Annual. Wild. Seed.
- PI 542355 **donor id:** 84TK093-0025. **origin:** Turkey. **collected:** June 16, 1984. **collector id:** 84TK093-0025. **locality:** Diyarbakir Province. 18km southwest of Diyarbakir. **elevation:** 800m. **received as:** Triticum triunciale. Annual. Wild. Seed.

PI 542279 to 542361-continued

- PI 542356 **donor id:** 84TK094-0001. **origin:** Turkey. **collected:** June 17, 1984. **collector id:** 84TK094-0001. **locality:** Diyarbakir Province. 18km northeast of Diyarbakir. **elevation:** 800m. **received as:** *Triticum triunciale*. Annual. Wild. Seed.
- PI 542357 **donor id:** 84TK095-0004. **origin:** Turkey. **collected:** June 17, 1984. **collector id:** 84TK095-0004. **locality:** Diyarbakir Province. Junction of Diyarbakir-Bismil road. **elevation:** 900m. **received as:** *Triticum triunciale*. Annual. Wild. Seed.
- PI 542358 **donor id:** 84TK096-0015. **origin:** Turkey. **collected:** June 17, 1984. **collector id:** 84TK096-0015. **locality:** Diyarbakir Province. 19km southeast of Diyarbakir-Bismil junction on way to Bismil. **elevation:** 825m. **received as:** *Triticum triunciale*. Annual. Wild. Seed.
- PI 542359 **donor id:** 84TK097-0019. **origin:** Turkey. **collected:** June 17, 1984. **collector id:** 84TK097-0019. **locality:** Diyarbakir Province. 4km northwest of Bismil. **elevation:** 750m. **received as:** *Triticum triunciale*. Annual. Wild. Seed.
- PI 542360 **donor id:** 84TK098-0022B. **origin:** Turkey. **collected:** June 17, 1984. **collector id:** 84TK098-0022B. **locality:** Diyarbakir Province. 4km north of Diyarbakir-Bingol road junction. **elevation:** 875m. **received as:** *Triticum triunciale*. Annual. Wild. Seed.
- PI 542361 **donor id:** 84TK099-0027. **origin:** Turkey. **collected:** June 17, 1984. **collector id:** 84TK099-0027. **locality:** Diyarbakir Province. 12km north of Diyarbakir-Bingol road junction. **elevation:** 925m. **received as:** *Triticum triunciale*. Annual. Wild. Seed.

PI 542362 to 542384. *Aegilops umbellulata* Zhuk. POACEAE *Aegilops*

Donated by: Kimber, G., University of Missouri, Department of Agronomy, 210 Curtis Hall, Columbia, Missouri, United States; and Metzger, R.J., Department of Plant Sciences, Oregon State University, Oregon State University, Corvallis, Oregon, United States. Received October 01, 1989.

- PI 542362 **donor id:** 84TK104-0049-3. **origin:** Turkey. **collected:** June 17, 1984. **collector id:** 84TK104-0049-3. **locality:** Diyarbakir Province. 4km northeast of Dicle. **elevation:** 925m. **received as:** *Triticum umbellulatum*. Annual. Wild. Seed.

PI 542362 to 542384-continued

- PI 542363 **donor id:** 84TK104-0049-4. **origin:** Turkey. **collected:** June 17, 1984. **collector id:** 84TK104-0049-4. **locality:** Diyarbakir Province. 4km northeast of Dicle. **elevation:** 925m. **received as:** Triticum umbellulatum. Annual. Wild. Seed.
- PI 542364 **donor id:** 84TK109-0077. **origin:** Turkey. **collected:** June 18, 1984. **collector id:** 84TK109-0077. **locality:** Diyarbakir Province. 25km southwest of Diyarbakir. **elevation:** 1000m. **received as:** Triticum umbellulatum. Annual. Wild. Seed.
- PI 542365 **donor id:** 84TK116-0104. **origin:** Turkey. **collected:** June 18, 1984. **collector id:** 84TK116-0104. **locality:** Urfa Province. 8km southwest of Hivan, along roadside, just west of a small village. **elevation:** 625m. **received as:** Triticum umbellulatum. Annual. Wild. Seed.
- PI 542366 **donor id:** 84TK140-0028. **origin:** Turkey. **collected:** June 21, 1984. **collector id:** 84TK140-0028. **locality:** Adiyaman Province. 20km east of Golbasi roadside. **elevation:** 670m. **received as:** Triticum umbellulatum. Annual. Wild. Seed.
- PI 542367 **donor id:** 84TK143-0039. **origin:** Turkey. **collected:** June 21, 1984. **collector id:** 84TK143-0039. **locality:** Kahramanmaras Province. 9km northeast of Pazarcik. **elevation:** 800m. **received as:** Triticum umbellulatum. Annual. Wild. Seed.
- PI 542368 **donor id:** 84TK144-0047. **origin:** Turkey. **collected:** June 21, 1984. **collector id:** 84TK144-0047. **locality:** Kahramanmaras Province. 14km southeast of Kahramanmaras. **elevation:** 515m. **received as:** Triticum umbellulatum. Annual. Wild. Seed.
- PI 542369 **donor id:** 84TK148-0002. **origin:** Turkey. **collected:** June 23, 1984. **collector id:** 84TK148-0002. **locality:** Usak Province. 3km east of Guney, 55km east of Usak or 38km west of Afyon. **elevation:** 1250m. **received as:** Triticum umbellulatum. Annual. Wild. Seed.
- PI 542370 **donor id:** 84TK152-0002. **origin:** Turkey. **collected:** June 1984. **collector id:** 84TK152-0002. **locality:** Izmir Province. Bergaman stop 1, medical center, on tour. **received as:** Triticum umbellulatum. Annual. Wild. Seed.

PI 542362 to 542384-continued

- PI 542371 **donor id:** 84TK153-0006. **origin:** Turkey. **collected:** June 1984. **collector id:** 84TK153-0006. **locality:** Izmir Province. Bergaman stop 2. Hill over looking valley, remains of Roman theatre on hillside. **elevation:** 50m. **received as:** Triticum umbellulatum. Annual. Wild. Seed.
- PI 542372 **donor id:** 84TK157-0012. **origin:** Turkey. **collected:** June 28, 1984. **collector id:** 84TK157-0012. **locality:** Denizli Province. Asagisamli-Denizli. 500m from junction on Pamukkale road. **elevation:** 180m. **received as:** Triticum umbellulatum. Annual. Wild. Seed.
- PI 542373 **donor id:** 84TK157-0023. **origin:** Turkey. **collected:** June 28, 1984. **collector id:** 84TK157-0023. **locality:** Denizli Province. Asagisamli-Denizli, 500m from junction on Pamukkale road. **elevation:** 180m. **received as:** Triticum umbellulatum. Annual. Wild. Seed.
- PI 542374 **donor id:** 84TK159-0039. **origin:** Turkey. **collected:** June 28, 1984. **collector id:** 84TK159-0039. **locality:** Denizli Province. 25km south of Sarigol, about 10km north of Buldan junction. **elevation:** 275m. **received as:** Triticum umbellulatum. Annual. Wild. Seed.
- PI 542375 **donor id:** 84TK160-0050. **origin:** Turkey. **collected:** June 28, 1984. **collector id:** 84TK160-0050. **locality:** Denizli Province. 13km north of Buldan junction. **elevation:** 385m. **received as:** Triticum umbellulatum. Annual. Wild. Seed.
- PI 542376 **donor id:** 84TK162-0058. **origin:** Turkey. **collected:** June 28, 1984. **collector id:** 84TK162-0058. **locality:** Manisa Province. 2km south of Sarigol, on hill where grass and shrubs grow. **elevation:** 305m. **received as:** Triticum umbellulatum. Annual. Wild. Seed.
- PI 542377 **donor id:** 84TK202-0007. **origin:** Turkey. **collected:** July 05, 1984. **collector id:** 84TK202-0007. **locality:** Izmir Province. 22km southeast of Bergama. **elevation:** 30m. **received as:** Triticum umbellulatum. Annual. Wild. Seed.
- PI 542378 **donor id:** 84TK202-0008. **origin:** Turkey. **collected:** July 05, 1984. **collector id:** 84TK202-0008. **locality:** Izmir Province. 22km southeast of Bergama. **elevation:** 30m. **received as:** Triticum umbellulatum. Annual. Wild. Seed.

PI 542362 to 542384-continued

- PI 542379 **donor id:** 84TK203-0004. **origin:** Turkey. **collected:** July 05, 1984. **collector id:** 84TK203-0004. **locality:** Izmir Province. 10km west of Bergmana-Izmir-Dikili junction. **elevation:** 30m. **received as:** *Triticum umbellulatum*. Annual. Wild. Seed.
- PI 542380 **donor id:** 84TK207-0005. **origin:** Turkey. **collected:** July 05, 1984. **collector id:** 84TK207-0005. **locality:** Balikesir Province. 6km southeast of Edremit. **elevation:** 20m. **received as:** *Triticum umbellulatum*. Annual. Wild. Seed.
- PI 542381 **donor id:** 84TK072-0012. **origin:** Turkey. **collected:** June 15, 1984. **collector id:** 84TK072-0012. **locality:** Gaziantep Province. 19km north of Gaziatep toward Yavuzeli. **elevation:** 800m. **received as:** *Triticum umbellulatum*. Annual. Wild. Seed.
- PI 542382 **donor id:** 84TK073-0027. **origin:** Turkey. **collected:** June 15, 1984. **collector id:** 84TK073-0027. **locality:** Gaziantep Province. 4km north of Yavuzeli. **elevation:** 450m. **received as:** *Triticum umbellulatum*. Annual. Wild. Seed.
- PI 542383 **donor id:** 84TK077-0042. **origin:** Turkey. **collected:** June 15, 1984. **collector id:** 84TK077-0042. **locality:** Adiyakman Province. 10km south of Besni. **elevation:** 900m. **received as:** *Triticum umbellulatum*. Annual. Wild. Seed.
- PI 542384 **donor id:** 84TK084-0067. **origin:** Turkey. **collected:** June 15, 1984. **collector id:** 84TK084-0067. **locality:** Adiyaman Province. 6km south of Narance village. **elevation:** 850m. **received as:** *Triticum umbellulatum*. Annual. Wild. Seed.

PI 542385. *Aegilops ventricosa* Tausch POACEAE *Aegilops*

Donated by: Kimber, G., University of Missouri, Department of Agronomy, 210 Curtis Hall, Columbia, Missouri, United States; and Metzger, R.J., Department of Plant Sciences, Oregon State University, Oregon State University, Corvallis, Oregon, United States. Received October 01, 1989.

donor id: 84TK154-0014. **origin:** Turkey. **collected:** June 27, 1984. **collector id:** 84TK154-0014. **locality:** Izmir Province. Aegean Agricultural Research Institute. **elevation:** 30m. **received as:** *Triticum ventricosum*. Annual. Wild. Seed.

PI 542386. *Lactuca sativa* L. ASTERACEAE Lettuce

Donated by: Genecorp, Inc., United States. Received July 03, 1990.

origin: United States. **cultivar:** JAZZ. **other id:** PVP
9000198. **source:** Pending. **group:** PVPO. Cultivar.
Seed.

PI 542387. *Pisum sativum* L. FABACEAE Pea

Donated by: Nestec S.A., United States. Received July 03, 1990.

origin: United States. **cultivar:** KARL-EVERT. **other id:**
PVP 9000199. **source:** Pending. **group:** PVPO. Cultivar.
Seed.

PI 542388. *Phaseolus vulgaris* L. FABACEAE Snap bean

Donated by: Rogers Brothers Seed Co., United States. Received July
03, 1990.

origin: United States. **cultivar:** DOLPHIN. **other id:** PVP
9000200. **source:** Pending. **group:** PVPO. Cultivar.
Seed.

PI 542389. *Phaseolus vulgaris* L. FABACEAE Snap bean

Donated by: Rogers Brothers Seed Co., United States. Received July
03, 1990.

origin: United States. **cultivar:** DUCHESS. **other id:** PVP
9000201. **source:** Pending. **group:** PVPO. Cultivar.
Seed.

PI 542390. *Lycopersicon esculentum* Miller SOLANACEAE Tomato

Donated by: Ferry-Morse Seed Co., United States. Received July 03,
1990.

origin: United States. **cultivar:** PROMO. **other id:** PVP
9000202. **source:** Pending. **group:** PVPO. Cultivar.
Seed.

PI 542391. *Hordeum vulgare* L. POACEAE Barley

Donated by: Forsberg, R.A., Wisconsin Agr. Exp. Sta., University of
Wisconsin-Madison, Madison, Wisconsin, United States. Received July
03, 1990.

PI 542391-continued

origin: United States. **developer country:** United States.
origin institute: Wisconsin Agr. Exp. Sta., University of Wisconsin-Madison, Madison, Wisconsin 53706. **cultivar:** CHILTON. **pedigree:** X2040-1/X1947-2//Morex. **other id:** PVP 9000204. **source:** Pending. **group:** PVPO. **remarks:** Six-rowed, smooth awned, early maturing, high yielding feed variety. Taller than average. Excellent lodging resistance to UW tests. Good overall disease resistance. Reaction to powdery mildew has varied from moderately resistant to moderately susceptible depending on severity. Not intended for malting. Spring Annual. Cultivar. Seed.

PI 542392. *Glycine max* (L.) Merr. FABACEAE Soybean

Donated by: Latham Seed Co., United States. Received July 03, 1990.

origin: United States. **cultivar:** 38735L. **other id:** PVP 9000205. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 542393. *Glycine max* (L.) Merr. FABACEAE Soybean

Donated by: Ziller Seed Farms, Inc., United States. Received July 03, 1990.

origin: United States. **cultivar:** BT 1790. **other id:** PVP 9000206. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 542394. *Oryza sativa* L. POACEAE Rice

Donated by: Rice Researchers, Inc., United States. Received July 03, 1990.

origin: United States. **cultivar:** 81-114-042. **other id:** PVP 9000207. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 542395. *Oenothera lipsiensis* Rostanski & Gutte ONAGRACEAE Evening primrose

Donated by: Scotia Pharmaceuticals Limited, United States. Received July 03, 1990.

origin: United States. **cultivar:** MERLIN. **other id:** PVP 9000209. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 542396. *Apium graveolens* L. APIACEAE Celery

Donated by: Pybas Vegetable Seed Co., United States. Received July 03, 1990.

origin: United States. **cultivar:** MATADOR. **other id:** PVP 9000210. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 542397. *Gossypium barbadense* L. MALVACEAE Cotton

Donated by: Chaney Ranch Research, United States. Received July 03, 1990.

origin: United States. **cultivar:** CH 252. **other id:** PVP 9000211. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 542398. *Gossypium hirsutum* L. MALVACEAE Cotton

Donated by: Stoneville Pedigree Seed Co., United States. Received July 03, 1990.

origin: United States. **cultivar:** ACALA BR-636. **other id:** PVP 9000212. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 542399. *Glycine max* (L.) Merr. FABACEAE Soybean

Donated by: Ziller Seed Farms, Inc., United States. Received July 03, 1990.

origin: United States. **cultivar:** BT 2585. **other id:** PVP 9000213. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 542400 to 542401. *Triticum aestivum* L. POACEAE Common wheat

Donated by: Allan, R.E., Agricultural Research Service -- USDA, Washington State University, Pullman, Washington, United States. Received June 25, 1990.

PI 542400 to 542401-continued

PI 542400 **origin:** United States. **cultivar:** WA7526. **pedigree:** A bulk of 70 F6 lines containing 2 complex pedigrees made up of Tres, Tyee, Omar, Webster, Spalding Prolific, Suwon 92, Ibis, Ministre, and Druchamp. **remarks:** Soft, white, winter club bulk mixture of lines of 7 crosses. Awnless. Glume white Rht2 semidwarf. Heterogeneous for resistance to diseases caused by Puccinia Striiformis, P. recondita, Erysiphe graminis. Kernels white, soft, short, ovate to oval; germ small, crease midwide, cheeks rounded. Similar to Tres for heading data, straw strength, cold tolerance, emergence, mill and baking quality. Winter Annual. Breeding Material. Seed.

PI 542401 **origin:** United States. **cultivar:** WA7527. **pedigree:** Tres/Tyee(2 lines);Tres/Suwon 92/6*/Omar(1 line);Tres/Suwon 92/6*Omar/2629/3*Omar(2);Tres/Suwon 92/6*ON/Iblis/2*Omar(1 line)Tres/14/5*Omar/Ministre/2*Omar(2 lines));Tres/Suwon 92/6*Omar/Druchamp/3*Omar(1 line);Tres Cp(1 line). **remarks:** Soft, white, winter club multiline of 10 components. Awnless. Glume white Rht2 semidwarfs. Heterogeneous for resistance to diseases caused by Puccinia striiformis, P. recondita and Erysiphe graminis. Kernels white, soft, short, ovate to oval; germ small; crease mid-wide, cheeks rounded, heading date, straw strength, cold tolerance, emergence, milling and baking quality like Tres. Winter Annual. Breeding Material. Seed.

PI 542402 to 542404. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: Orf, J.H., University of Minnesota, St. Paul, Minnesota, United States. Received June 25, 1990.

PI 542402 **origin:** United States. **origin institute:** Minnesota Agr. Exp. Sta., St. Paul, Minnesota 55100. **cultivar:** Chico. **pedigree:** [Evans x (Merit x Lee)] x (M65-69 x M65-227) M65-69 is from M54-12 (Capital x Renville) x Corsoy M65-227 is from O57-2921 (Blackhawk x Capital) x JA42 JA42 is 'Kogane-Jiro' from Japan (probably PI 317335). **other id:** CV-183. **source:** Crop Sci. 25(4):711 1985. **group:** CSR-SOYBEAN. **other id:** M74-355. **source:** Prior designation. **remarks:** Maturity Group 0. Indeterminate. Flowers white. Pubescence gray. Pods brown. Seed coats dull, yellow with buff hila. Approx. 30% smaller than most common soybeans. Rps1 gene present for resistance to phytophthora root rot (Phytophthora megasperma). Annual. Cultivar. Seed.

PI 542402 to 542404-continued

PI 542403 **origin:** United States. **origin institute:** Minnesota Agr. Exp. Sta., St. Paul, Minnesota 55100. **cultivar:** Dawson. **pedigree:** Evans x M63-217Y M63-217Y is a yellow hilum near-isogenic sib of 'Hodgson'. **other id:** PVP 8400053. **source:** Certificate in force. **group:** PVPO. **other id:** CV-182. **source:** Crop Sci. 25(3):572 1985. **group:** CSR-SOYBEAN. **other id:** M70-128E. **source:** Prior designation. **remarks:** Maturity Group 0. Indeterminate. Flowers purple. pubescence gray. Pods brown. Seed coat dull, yellow hila. Excellent resistance to iron deficiency chlorosis. Rps1 gene present for resistance to phytophthora root rot (Phytophthora megasperma). Annual. Cultivar. Seed.

PI 542404 **origin:** United States. **origin institute:** Minnesota Agr. Exp. Sta., St. Paul, Minnesota 55100. **cultivar:** Ozzie. **pedigree:** Wilkin x M63-217Y M63-217Y is a yellow hilum near-isogenic sib of 'Hodson'. **other id:** PVP 8400052. **source:** Certificate in force. **group:** PVPO. **other id:** CV-179. **source:** Crop Sci. 25(2):366 1985. **group:** CSR-SOYBEAN. **other id:** M71-43. **source:** Prior designation. **remarks:** Early maturity Group 0. Indeterminate. Flowers purple. Pubescence gray. Pods brown. Seed coat dull yellow, yellow hila. Excellent lodging resistance. Rps1 gene present for resistance to Phytophthora root rot (Phytophthora megasperma). Annual. Cultivar. Seed.

PI 542405 to 542406. Sorghum bicolor (L.) Moench POACEAE Sudangrass

Donated by: York, J.O., Arkansas Agr. Exp. Sta., University of Arkansas, Fayetteville, Arkansas, United States. **remarks:** Two Sudangrass Parental Lines. Received June 29, 1990.

PI 542405 **origin:** United States. **origin institute:** Arkansas Agr. Exp. Sta., University of Arkansas, Fayetteville, Arkansas 72701. **cultivar:** R LINE AR2001. **pedigree:** Stoneville Syn. sudangrass selection. **other id:** PL-3. **group:** CSR-SUDANGRASS. **remarks:** Height averages 154cm. Flowers approximately 74 days after emergence. Panicle does not clear sheath entirely with 2.5cm remaining in sheath, open type. Glumes black. Mesocarp starchy. Grain has brownish white pericarp. Seed small, round, and thresh free of glumes. Course type sudangrass. Spring Annual. Breeding Material. Seed.

PI 542405 to 542406-continued

PI 542406 **origin:** United States. **origin institute:** Arkansas Agr. Exp. Sta., University of Arkansas, Fayetteville, Arkansas 72701. **cultivar:** R LINE AR2002. **pedigree:** Stoneville Syn. sudangrass selection. **other id:** PL-4. **group:** CSR-SUDANGRASS. **remarks:** Height averages 160cm. Flowers approximately 77 days after emergence. Panicle does not clear sheath entirely with 3.8cm remaining in sheath, open type. Glumes black. Mesocarp starchy. Grain has brownish white pericarp. Seed small, round, and thresh free of glumes. Coarse type sudangrass. Spring Annual. Breeding Material. Seed.

PI 542407 to 542415. Sorghum bicolor (L.) Moench POACEAE Sorghum

Donated by: York, J.O., Arkansas Agr. Exp. Sta., University of Arkansas, Fayetteville, Arkansas, United States. **remarks:** Nine Sorghum Parental Lines. Received June 29, 1990.

PI 542407 **origin:** United States. **origin institute:** Arkansas Agr. Exp. Sta., University of Arkansas, Fayetteville, Arkansas 72701. **cultivar:** R LINE AR1000. **pedigree:** NB9040/IS11158. **other id:** PL-223. **group:** CSR-SORGHUM. **remarks:** Height averages 170cm. Flowers approximately 78 days after emergence. Panicle exertion well above flag leaf (20cm), semi-open type. Glumes straw colored. Mesocarp pearly. Grain has yellow endosperm. Spring Annual. Breeding Material. Seed.

PI 542408 **origin:** United States. **origin institute:** Arkansas Agr. Exp. Sta., University of Arkansas, Fayetteville, Arkansas 72701. **cultivar:** R LINE AR2200. **pedigree:** Atlas/E-26. **other id:** PL-224. **group:** CSR-SORGHUM. **remarks:** Height averages 170cm. Flowers approximately 92 days after emergence. Panicle exertion slightly above flag leaf (5cm), open type. Glumes black. Mesocarp starchy. Grain has white pericarp. Spring Annual. Breeding Material. Seed.

PI 542409 **origin:** United States. **origin institute:** Arkansas Agr. Exp. Sta., University of Arkansas, Fayetteville, Arkansas 72701. **cultivar:** R LINE AR2400. **pedigree:** Wiley/F-26. **other id:** PL-225. **group:** CSR-SORGHUM. **remarks:** Height averages 178cm. Flowers approximately 85 days after emergence. Panicle exertion above flag leaf (10cm), open type. Glumes black. Mesocarp starchy. Grain brownish white pericarp, brown testa. Spring Annual. Breeding Material. Seed.

PI 542407 to 542415-continued

- PI 542410 **origin:** United States. **origin institute:** Arkansas Agr. Exp. Sta., University of Arkansas, Fayetteville, Arkansas 72701. **cultivar:** R LINE AK2401. **pedigree:** Wiley/E-26. **other id:** PL-226. **group:** CSR-SORGHUM. **remarks:** Height averages 190cm. Flowers approximately 87 days after emergence. Panicle exertion above flag leaf (11.5cm), open type. Glumes black. Mesocarp starchy. Grain brownish white pericarp, brown testa. Spring Annual. Breeding Material. Seed.
- PI 542411 **origin:** United States. **origin institute:** Arkansas Agr. Exp. Sta., University of Arkansas, Fayetteville, Arkansas 72701. **cultivar:** R LINE AR2402. **pedigree:** Wiley/E-26. **other id:** PL-227. **group:** CSR-SORGHUM. **remarks:** Height averages 180cm. Flowers approximately 86 days after emergence. Panicle exertion above flag leaf (6cm), open type. Glumes black. Mesocarp starchy. Grain brownish white pericarp, brown testa. Spring Annual. Breeding Material. Seed.
- PI 542412 **origin:** United States. **origin institute:** Arkansas Agr. Exp. Sta., University of Arkansas, Fayetteville, Arkansas 72701. **cultivar:** R LINE AR2403. **pedigree:** Tracy/E-26. **other id:** PL-228. **group:** CSR-SORGHUM. **remarks:** Height averages 170cm. Flowers approximately 78 days after emergence. Panicle exertion slightly above flag leaf (3.5cm) open type. Glumes black. Mesocarp starchy. Grain brownish white pericarp, brown testa. Spring Annual. Breeding Material. Seed.
- PI 542413 **origin:** United States. **origin institute:** Arkansas Agr. Exp. Sta., University of Arkansas, Fayetteville, Arkansas 72701. **cultivar:** R LINE AR2404. **pedigree:** Tracy/E-26. **other id:** PL-229. **group:** CSR-SORGHUM. **remarks:** Height averages 135cm. Flowers approximately 86 days after emergence. Panicle exertion slightly above flag leaf (2.5cm) open type. Glumes black. Mesocarp pearly. Grain white pericarp. Slightly sweet stalk. Spring Annual. Breeding Material. Seed.
- PI 542414 **origin:** United States. **origin institute:** Arkansas Agr. Exp. Sta., University of Arkansas, Fayetteville, Arkansas 72701. **cultivar:** R LINE AR2405. **pedigree:** Tracy/E-26. **other id:** PL-230. **group:** CSR-SORGHUM. **remarks:** Height averages 170cm. Flowers approximately 90 days after emergence. Panicle exertion above flag leaf (7.5cm), open type. Glumes black. Mesocarp starchy. Grain brownish white pericarp, brown testa. Spring Annual. Breeding Material. Seed.

PI 542407 to 542415-continued

PI 542415 **origin:** United States. **origin institute:** Arkansas Agr. Exp. Sta., University of Arkansas, Fayetteville, Arkansas 72701. **cultivar:** R LINE AR2406. **pedigree:** Wiley/F-26. **other id:** PL-231. **group:** CSR-SORGHUM. **remarks:** Height averages 180cm. Flowers approximately 81 days after emergence. Panicle exertion well above flag leaf (13cm), open type. Glumes black. Mesocarp starchy. Grain has brownish-white pericarp, brown testa. Spring Annual. Breeding Material. Seed.

PI 542416 to 542431. *Antirrhinum majus* L. SCROPHULARIACEAE Snapdragon

Donated by: Harte, C., University of Koln, Institut fur Entwicklungsphysiologie, Gyrhofstr. 17, D 5000 Koln 41, Germany, Federal Rep of. Received June 12, 1990.

PI 542416 **donor id:** 88/12. **origin:** Germany, Federal Rep of. **cultivar:** STENOPHYLLA. **remarks:** Seeds originally obtained from the stocks of Erwin Baur -- see book of H. Stubbe. Plants narrow long leaves. Mutants used in experiments. Genetic Material. Seed.

PI 542417 **donor id:** 88/1. **origin:** Germany, Federal Rep of. **cultivar:** SIPPE 50. **remarks:** Standard type in experiments. Isolated by Erwin Baur. Plants 30-60cm tall, self-fertile, but do not self pollinate. Germination light dependent, best results on moist filter paper in petri-dishes, within one week at approx. 20 deg. C. Quantitative long-day plant, flowering at 16 hours daylight. Susceptible to *Antirrhinum*-rust fungus in the field. Isolation of inflorescence by paper bag necessary to prevent. Genetic Material. Seed.

PI 542418 **origin:** Germany, Federal Rep of. **cultivar:** IMMINUTA. **remarks:** Originally obtained from the stocks of Erwin Baur. Plants small leaves narrow. Flowers smaller than standard type. Used in experiments on leaf development. Genetic Material. Seed.

PI 542419 **origin:** Germany, Federal Rep of. **cultivar:** LOREFORMIS. **remarks:** Sees originally obtained from stocks of H. Stubbe. Propagated by artificial self pollination. Plants small. Leaves narrow, some small dwarfs with limited viability depending on environmental conditions. Genetic Material. Seed.

PI 542420 **origin:** Germany, Federal Rep of. **cultivar:** ARRECTA. **remarks:** Seeds originally obtained from stocks of H. Stubbe. (Erwin Baur). Morphology and size of the leaves different from standard type. Mutant used in experiments on leaf development. Genetic Material. Seed.

PI 542416 to 542431-continued

- PI 542421 **origin:** Germany, Federal Rep of. **cultivar:** SALICIFOLIA.
remarks: Seeds originally obtained from stocks of W. Rudorf. Propagated by artificial self pollination. Mutant used in experiments on leaf development. Slight difference from standard type. Genetic Material. Seed.
- PI 542422 **origin:** Germany, Federal Rep of. **cultivar:** STAMM 30.
remarks: Seeds originally obtained from stocks of W. Rudorf. Present type arose in culture. Most probable back mutation from tenuis. Propagated by artificial self pollination. Plants not distinguishable from standard type Sippe 50. Mutant used in experiments on leaf development. Genetic Material. Seed.
- PI 542423 **origin:** Germany, Federal Rep of. **cultivar:** DIMINUT.
remarks: Seeds originally obtained from stocks of W. Rudorf. Propagated by artificial self pollination. Small difference from standard type. Plants do not correspond to description in book of H. Stubbe. Mutant used in experiments on leaf development. Genetic Material. Seed.
- PI 542424 **origin:** Germany, Federal Rep of. **cultivar:** MACER.
remarks: Seeds originally obtained from stocks of H. Stubbe. Propagated by artificial self pollination. Plants with long, semi-narrow leaves. Mutant used in experiments on leaf development. Genetic Material. Seed.
- PI 542425 **origin:** Germany, Federal Rep of. **cultivar:** ANGUSTIFOLIA.
remarks: Seeds originally obtained from stocks of H. Stubbe. Propagated by artificial self pollination. Leaves long and narrow. Mutant used in experiments on leaf development. Genetic Material. Seed.
- PI 542426 **origin:** Germany, Federal Rep of. **cultivar:** GRAMINIFOLIA.
remarks: Seeds originally obtained from stocks of H. Stubbe. (Gatersleben) from stocks of Erwin Baur. Plants smaller than standard type, flowering later. Leaves very narrow. Malformations of flowers. Seed set after artificial self pollination less than in standard type. Pollination of several flowers on 5-10 plants necessary to obtain sufficient number of seeds. Mutant used in experiments on. Genetic Material. Seed.
- PI 542427 **origin:** Germany, Federal Rep of. **cultivar:** CINCINNATA.
remarks: Seeds originally obtained from stocks of Erwin Baur. Propagated by artificial self pollination. Leaves broad, margins rolled upward. Corresponds to Stubbe type. Used in experiments on development of leaves. Genetic Material. Seed.

PI 542416 to 542431-continued

- PI 542428 **origin:** Germany, Federal Rep of. **cultivar:** SERPENTINA.
remarks: Seeds originally obtained from stocks of H. Stubbe. Stems crooked. Leaves and flowers normal. Genetic Material. Seed.
- PI 542429 **origin:** Germany, Federal Rep of. **origin institute:** Zentralinstitut für Genetik und, Kulturpflanzenforschung der, Akademie der Wissenschaften der DDR, Gatersleben.
cultivar: TENUIS. **remarks:** Propagated by artificial self pollination. Plants small with narrow leaves. Mutant used in experiments on leaf development. Genetic Material. Seed.
- PI 542430 **origin:** Germany, Federal Rep of. **cultivar:** AMBIGUA.
remarks: Originally obtained from stocks of Erwin Baur. Plants somewhat smaller than standard type. Leaves abnormal. Inflorescence like needles, variable depending on photoperiod and temperature. Used in experiments on leaf development. Genetic Material. Seed.
- PI 542431 **origin:** Germany, Federal Rep of. **cultivar:** DELILA CAECA.
remarks: Originally obtained from stocks of Erwin Baur. Leaf growth and flower morphology normal. Delila is lack of anthocyanin in lower part of flower. Caeca is lack of yellow spot on lower lip of corolla. Used as "normal" reference type in some experiments on development of mutants in *Antirrhinum*. Genetic Material. Seed.

PI 542432 to 542465. *Triticum aestivum* L. POACEAE Common wheat

Donated by: Metzger, R.J., USDA-ARS, Dept. of Crop Sciences, Oregon State University, Corvallis, Oregon, United States. Received January 01, 1987.

- PI 542432 **donor id:** H86-706. **origin:** United States. **remarks:** Bunt Differential Bt 10 gene. Annual. Cultivar. Seed.
- PI 542433 **donor id:** H86-705. **origin:** United States. **remarks:** Line carries BT 10 and R3 (chromosome 3B) for red seed. Annual. Cultivar. Seed.
- PI 542434 **donor id:** H82-728. **origin:** United States. **cultivar:** PATO. **remarks:** Tolerance to excess water and wet soils. Annual. Cultivar. Seed.
- PI 542435 **donor id:** H83-1317-4. **origin:** United States. **pedigree:** T12/Ewion. **remarks:** Day length requirement very long. Hexaploid type. Annual. Breeding Material. Seed.

PI 542432 to 542465-continued

- PI 542436 **donor id:** H85-313. **origin:** United States. **cultivar:** IAC 5. **remarks:** Acid soil tolerant. Annual. Cultivar. Seed.
- PI 542437 **donor id:** H85-317. **origin:** United States. **cultivar:** C-17. **remarks:** Intermediate level of tolerance to acid soils. Annual. Cultivar. Seed.
- PI 542438 **donor id:** H83-514. **origin:** United States. **other id:** TSTS 3D. **remarks:** White seed, Timsteim chromosome 3D substituted into Chinese Spring Wheat, originally from E.R. Sears. Annual. Breeding Material. Seed.
- PI 542439 **donor id:** H85-307. **origin:** United States. **cultivar:** MARFED DWARF. **remarks:** Plants very dwarf type originally from C. Konzak. **received as:** TSTS 3D/Aegilops mutica. Annual. Cultivar. Seed.
- PI 542440 **donor id:** H85-310. **origin:** United States. **cultivar:** HYSLOP DWARF. **remarks:** Plants dwarf type (50cm). Annual. Cultivar. Seed.
- PI 542441 **donor id:** M86-37. **origin:** Yugoslavia. **other id:** L263.85. **remarks:** Introduction from Novi Sad. Annual. Breeding Material. Seed.
- PI 542442 **donor id:** M86-38. **origin:** Yugoslavia. **other id:** L264.85. **remarks:** Introduction from Novi Sad. Annual. Breeding Material. Seed.
- PI 542443 **donor id:** M86-36. **origin:** Yugoslavia. **other id:** L267.85. **remarks:** Introduction from Novi Sad. Annual. Breeding Material. Seed.
- PI 542444 **donor id:** M86-40. **origin:** Yugoslavia. **other id:** L301.85. **remarks:** Introduction from Novi Sad. Annual. Breeding Material. Seed.
- PI 542445 **donor id:** M86-39. **origin:** Yugoslavia. **other id:** L768.85. **remarks:** Introduction from Novi Sad. Annual. Cultivar. Seed.
- PI 542446 **donor id:** H81-639. **origin:** Switzerland. **other id:** MCB589(NYON). **remarks:** Excellent Septoria resistance. Annual. Breeding Material. Seed.
- PI 542447 **donor id:** H81-640. **origin:** Switzerland. **other id:** MCB601(NYON). **other id:** CH67335. **remarks:** Excellent Septoria resistance. Annual. Breeding Material. Seed.

PI 542432 to 542465-continued

- PI 542448 **donor id:** H81-641. **origin:** Switzerland. **other id:** MCB602(NYON). **other id:** CH67336. **remarks:** Excellent Septoria resistance. Annual. Breeding Material. Seed.
- PI 542449 **donor id:** H81-642. **origin:** Switzerland. **other id:** MCB623(NYON). **other id:** CH67337. **remarks:** Excellent Septoria resistance. Annual. Breeding Material. Seed.
- PI 542450 **donor id:** H82-710-1. **origin:** Poland. **other id:** C521 (1977 Selection). **remarks:** Line crosses easily with rye. Annual. Breeding Material. Seed.
- PI 542451 **donor id:** M82-3796. **origin:** Canada. **cultivar:** TETRAPLOID PRELUDE. **remarks:** Miniature plants. Seeds small. Annual. Breeding Material. Seed.
- PI 542452 **donor id:** M82-3741. **origin:** United States. **other id:** ND2. **locality:** North Dakota State University, Fargo, North Dakota. **remarks:** Seed purple. Annual. Breeding Material. Seed.
- PI 542453 **donor id:** H86-701. **origin:** New Zealand. **other id:** E450. **remarks:** Seed purple. Annual. Breeding Material. Seed.
- PI 542454 **donor id:** H84-961. **origin:** United States. **other id:** Sel 1403. **remarks:** Line carries gene D1. Grass clump tester. Annual. Breeding Material. Seed.
- PI 542455 **donor id:** H84-967. **origin:** United States. **cultivar:** RED BOB. **remarks:** Line carries Ch2 (chlorosis), d3, d3, d4, d4 (recessive alleles for dwarf clumping) nel, nel, ne2, ne2, (recessive alleles for necrosis). Grass clump dwarf tester. Annual. Cultivar. Seed.
- PI 542456 **donor id:** H85-975. **origin:** United States. **cultivar:** CNNS 2D. **remarks:** Cheyenne chromosome 2D (originally from R. Morris) substituted into Chinese Spring Wheat which has allele D4 (dwarf clumping). Grass clump dwarf tester. Spring Annual. Cultivar. Seed.
- PI 542457 **donor id:** H85-976. **origin:** United States. **cultivar:** CNNS 2B (XIII). **remarks:** Line carries allele D2 (dwarf clumping) on Cheyenne chromosome 2B. Grass clump dwarf tester. Annual. Cultivar. Seed.
- PI 542458 **donor id:** H84-972. **origin:** United States. **pedigree:** Kenya Farmer/Cedar, 3D-1. **remarks:** Plants true spring dwarf type (average height 67.5cm). Homozygous alleles D1D1, D2D2, D3D3, (dwarf clumping). Grass clump dwarf tester. Difficult to maintain. Spring Annual. Cultivar. Seed.

PI 542432 to 542465-continued

- PI 542459 **donor id:** H84-974. **origin:** United States. **pedigree:** Kenya Farmer/Cedar, D 3. **remarks:** Plants dwarf type (average height 52.5cm). Homozygous alleles D1D1, D2D2, D3D3, (dwarf clumping). Grass clump dwarf tester. Outcrosses easily. Open pollinated. Winter Annual. Cultivar. Seed.
- PI 542460 **donor id:** H84-970. **origin:** United States. **pedigree:** Sel. 1403/Cnns 2B. **remarks:** Plants dwarf type (average height 42.5cm). Homozygous alleles D1D1, D2D2, D3D3, (dwarf clumping). Grass clump tester. Very difficult to maintain. Outcrosses easily. Annual. Breeding Material. Seed.
- PI 542461 **donor id:** H84-969. **origin:** United States. **cultivar:** HERMSEN'S DWARF. **remarks:** Homozygous alleles D1D1, D2D2. Grass clump dwarf tester. Some vernalization required. Difficult to maintain. Outcrosses easily. Annual. Cultivar. Seed.
- PI 542462 **donor id:** H84-971. **origin:** United States. **pedigree:** Sel. 1403/Cnns 2D. **remarks:** Plants dwarf type (average height 31.2cm). Homozygous alleles D1D1, D4D4, (dwarf clumping). Annual. Breeding Material. Seed.
- PI 542463 **donor id:** H84-973-1. **origin:** United States. **pedigree:** Kenya Farmer/Cedar, 3D-2. **remarks:** Plants dwarf type (average height 55.0cm). Homozygous alleles D1D1, D2D2, D3D3, (dwarf clumping). Difficult to maintain. Outcrosses easily. Annual. Breeding Material. Seed.
- PI 542464 **donor id:** M86-130. **origin:** United States. **cultivar:** SHORT SARAGOLLA TETRAPLOID. **pedigree:** Saragolla/Olsen Dwarf/2/*3Saragolla. **remarks:** Plants dwarf type. Susceptible to bunt (*Tilletia* spp.) Crosses easily with A genome carriers. Annual. Breeding Material. Seed.
- PI 542465 **donor id:** H83-953. **origin:** United States. **cultivar:** BLUE NORCO. **remarks:** Seeds blue alurone (Xenia effect). Genetic makeup: 21 wheat chromosome pairs and one pair chromosomes (blue) from *Agropyron* spp. Winter Annual. Cultivar. Seed.

PI 542466. *Triticum macha* Dekapr. & Menabde POACEAE Wheat

Donated by: Metzger, R.J., USDA-ARS, Dept. of Crop Sciences, Oregon State University, Corvallis, Oregon, United States. Received January 01, 1987.

PI 542466-continued

donor id: H86-708. **origin:** United States. **remarks:**
Resistant to bunt (*Tilletia* spp.). Annual. Cultivated.
Seed.

PI 542467 to 542470. *Secale cereale* L. POACEAE Common rye

Donated by: Metzger, R.J., USDA-ARS, Dept. of Crop Sciences, Oregon State University, Corvallis, Oregon, United States. Received January 01, 1987.

PI 542467 **donor id:** H85-401. **origin:** Mexico. **cultivar:** EXTRA EARLY RYE 1. **locality:** Selected at Ciudad Obregon, Mexico. **remarks:** Maturity 40 days in field at Ciudad Obregon, Mexico, 33 days (10 hour daylength) in greenhouse at Corvallis, Oregon. Annual. Cultivar. Seed.

PI 542468 **donor id:** H85-403. **origin:** United States. **cultivar:** EXTRA EARLY RYE 2. **locality:** Selected at Ciudad Obregon, Mexico. **remarks:** Maturity 40 days in field at Ciudad Obregon, Mexico, 33 days (10 hour daylength) in greenhouse at Corvallis, Oregon. Annual. Cultivar. Seed.

PI 542469 **donor id:** M86-8666. **origin:** United States. **cultivar:** SEMI-DWARF RYEOUTCROSS. Annual. Cultivar. Seed.

PI 542470 **donor id:** H85-738. **origin:** United States. **cultivar:** BLANCO RYE. **remarks:** Seeds rice white. May contain a few outcrosses to Blue Rye. Does not have restorer to male sterile *Triticum timopheevi* cytoplasm. Originally from Brazil. Annual. Cultivar. Seed.

PI 542471. *Triticum durum* Desf. POACEAE Durum wheat

Donated by: Metzger, R.J., USDA-ARS, Dept. of Crop Sciences, Oregon State University, Corvallis, Oregon, United States. Received January 01, 1987.

donor id: H85-722. **origin:** India. **cultivar:** DWL 5023. **locality:** India. **remarks:** Excellent stripe rust (*Puccinia striiformis*) resistance. Annual. Cultivar. Seed.

PI 542472. *Triticum militinae* Zhuk. & Migush. POACEAE Wheat

Donated by: Metzger, R.J., USDA-ARS, Dept. of Crop Sciences, Oregon State University, Corvallis, Oregon, United States. Received January 01, 1987.

PI 542472-continued

donor id: M82-6267. **origin:** USSR. **remarks:** Spike compact, red when immature, black when mature. Annual. Wild. Seed.

PI 542473 to 542474. *Triticum monococcum* L. POACEAE Einkorn

Donated by: Metzger, R.J., USDA-ARS, Dept. of Crop Sciences, Oregon State University, Corvallis, Oregon, United States. Received January 01, 1987.

PI 542473 **donor id:** H81-501. **origin:** United States. **remarks:** Resistance to bunt (*Tilletia* spp.). Winter Annual. Wild. Seed.

PI 542474 **donor id:** R81-8029. **origin:** Turkey. **developer country:** United States. **cultivar:** EINKORN-11. **other id:** TR2660-68. **source:** Izmir. **remarks:** Resistant to bunt (*Tilletia* spp.). Winter Annual. Wild. Seed.

PI 542475. *Triticum boeoticum* Boiss. POACEAE Wild einkorn

Donated by: Metzger, R.J., USDA-ARS, Dept. of Crop Sciences, Oregon State University, Corvallis, Oregon, United States. Received January 01, 1987.

donor id: H84-496. **origin:** United States. **cultivar:** W49-4-2. **remarks:** Glums black. Seed red. Originally from L. Smith. Winter Annual. Wild. Seed.

PI 542476 to 542477. *Secale cereale* L. POACEAE Common rye

Donated by: Metzger, R.J., USDA-ARS, Dept. of Crop Sciences, Oregon State University, Corvallis, Oregon, United States. Received January 01, 1987.

PI 542476 **donor id:** H80-50-1. **origin:** United States. **other id:** 79TK069-382. **locality:** 19kms E Van, Van Province. **elevation:** 1830m. **remarks:** Plant spikes branched. Annual. Wild. Seed.

PI 542477 **donor id:** M80-10939-2. **origin:** Turkey. **other id:** 79TK069-328. **locality:** 19kms E Van, Van Province. **elevation:** 1830m. **remarks:** Plant spikes very large and faciated. Annual. Wild. Seed.

PI 542478 to 542506. Triticum hybrid POACEAE Wheat hybrid

Donated by: Metzger, R.J., USDA-ARS, Dept. of Crop Sciences, Oregon State University, Corvallis, Oregon, United States. Received January 01, 1987.

- PI 542478 **donor id:** M82-6300. **origin:** United States. **pedigree:** Elgin/Triticum spelta-10. **remarks:** Carries the Triticum spelta gene for yellow (stripe) rust (Puccinia striiformis) resistance. Winter Annual. Cultivated. Seed.
- PI 542479 **donor id:** H84-1076. **origin:** United States. **pedigree:** D6644/Einkorn-2. **other id:** TR15834-67). **remarks:** Resistant to bunt (Tilletia spp.). Winter Annual. Breeding Material. Seed.
- PI 542480 **donor id:** H84-1077. **origin:** United States. **pedigree:** D6644/Einkorn-5. **other id:** TR26477-68. **remarks:** Susceptible to bunt. Winter Annual. Breeding Material. Seed.
- PI 542481 **donor id:** H84-1078. **origin:** United States. **pedigree:** Male sterile D6644/Einkorn-5. **other id:** TR26477-68. **remarks:** Susceptible to bunt. Winter Annual. Breeding Material. Seed.
- PI 542482 **donor id:** H84-1060. **origin:** United States. **pedigree:** Triticum carthlicum-5/Einkorn-11. **other id:** TR26698-68. **remarks:** This line is AAAlAlBB. Winter Annual. Breeding Material. Seed.
- PI 542483 **donor id:** H84-1058. **origin:** United States. **pedigree:** Triticum carthlicum-1/Einkorn-8. **other id:** TR26644-68. **remarks:** Stem solid below spike. Resistant to bunt (Tilletia spp.). Winter Annual. Breeding Material. Seed.
- PI 542484 **donor id:** H84-1051. **origin:** United States. **pedigree:** D6644/Einkorn-9. **other id:** TK26644-68. **remarks:** Resistant to bunt (Tilletia spp.). Winter Annual. Breeding Material. Seed.
- PI 542485 **donor id:** H84-1080. **origin:** United States. **pedigree:** Male sterile D6644/Einkorn-9. **other id:** TK26644-68. **remarks:** Small seed. Resistant to bunt (Tilletia spp.). Winter Annual. Breeding Material. Seed.
- PI 542486 **donor id:** R86-1702. **origin:** United States. **pedigree:** NB 69889 Tetraploid/Triticum urartu. **remarks:** 0-5% bunt (Tilletia spp.) resistance, depending on race. Winter Annual. Breeding Material. Seed.

PI 542478 to 542506-continued

- PI 542487 **donor id:** H84-1063. **origin:** United States. **pedigree:** D6644/Einkorn-12. **remarks:** This line is AABBA1A1. Winter Annual. Breeding Material. Seed.
- PI 542488 **donor id:** H84-1064. **origin:** United States. **pedigree:** Short Saragolla/Einkorn-14. **other id:** TR26734-68. **remarks:** Resistant to bunt (*Tilletia* spp.). Winter Annual. Breeding Material. Seed.
- PI 542489 **donor id:** H84-1067. **origin:** United States. **pedigree:** Short Saragolla/Einkorn-16. **other id:** TK26812-68. **remarks:** Resistant to bunt (*Tilletia* spp.). Winter Annual. Breeding Material. Seed.
- PI 542490 **donor id:** H84-1069. **origin:** United States. **pedigree:** Triticum carthlicum-1/Einkorn-16. **other id:** TK26812-68. **remarks:** Resistant to bunt (*Tilletia* spp.). Winter Annual. Breeding Material. Seed.
- PI 542491 **donor id:** H84-1069-4. **origin:** United States. **pedigree:** Triticum carthlicum-1/Einkorn-16. **other id:** TK26812-68. **remarks:** Glumes completely black, maybe outcross or mixture. Winter Annual. Breeding Material. Seed.
- PI 542492 **donor id:** H84-1070. **origin:** United States. **pedigree:** Triticum carthlicum-5/Einkorn-17. **other id:** TR32113-70. **remarks:** Variable head type. Resistant to bunt (*Tilletia* spp.). Winter Annual. Breeding Material. Seed.
- PI 542493 **donor id:** H84-1052. **origin:** United States. **pedigree:** D6644/W49-1-3(L. Smith). **remarks:** W49-1-3 is resistant to bunt (*Tilletia* spp.). Winter Annual. Breeding Material. Seed.
- PI 542494 **donor id:** H83-1238. **origin:** United States. **pedigree:** D6644/W49-23(*Triticum monococcum*, L. Smith). **remarks:** Maturity very early. Daylength insensitive. Winter Annual. Breeding Material. Seed.
- PI 542495 **donor id:** H83-1237. **origin:** United States. **pedigree:** Saragolla(durum)/W49-23(*Triticum monococcum*). Winter Annual. Breeding Material. Seed.
- PI 542496 **donor id:** H83-1239. **origin:** United States. **pedigree:** Triticum carthlicum-1/W49-23(*Triticum monnococcum*). **remarks:** Daylength insensitive. Winter Annual. Breeding Material. Seed.
- PI 542497 **donor id:** H83-1241. **origin:** United States. **pedigree:** D6644/*Triticum urartu*-1. **remarks:** *Triticum urartu*-1 is resistant to bunt (*Tilletia* spp.). Winter Annual. Breeding Material. Seed.

PI 542478 to 542506-continued

- PI 542498 **donor id:** H84-1072. **origin:** United States. **pedigree:** Male sterile (*Triticum timopheevi* cytoplasm) D6644/*Triticum boeoticum*, TK. **remarks:** Seed blue-red. Resistant to bunt (*Tilletia* spp.). Winter Annual. Breeding Material. Seed.
- PI 542499 **donor id:** R84-2631. **origin:** United States. **pedigree:** D6644/*Triticum urartu*/2/Twin/3/Hill 81. **remarks:** 0% bunt (*Tilletia* spp.) resistant. Winter Annual. Breeding Material. Seed.
- PI 542500 **donor id:** R84-2794. **origin:** United States. **pedigree:** D6644/*Triticum urartu*/2/Steinwedel/3/Sava. **remarks:** Resistant to bunt (*Tilletia* spp.). Winter Annual. Breeding Material. Seed.
- PI 542501 **donor id:** R84-2776. **origin:** United States. **pedigree:** D6644/*Triticum urartu*/2/Steinwedel/3/Burt. **remarks:** Resistant to bunt (*Tilletia* spp.). Winter Annual. Breeding Material. Seed.
- PI 542502 **donor id:** R84-2743. **origin:** United States. **pedigree:** D6644/*Triticum urartu*/2/Steinwedel/3/Stephens. **remarks:** Resistant to bunt (*Tilletia* spp.). Winter Annual. Breeding Material. Seed.
- PI 542503 **donor id:** M82-3668. **origin:** United States. **pedigree:** *Triticum carthlicum*-1/*Aegilops squarrosa*. **other id:** KUSE 2144. **remarks:** Plants not cold tolerant. Carries a gene for bunt (*Tilletia* spp.) from KUSE 2144. Winter Annual. Breeding Material. Seed.
- PI 542504 **donor id:** H84-1074. **origin:** United States. **pedigree:** Durum-X/*Triticum timopheevi*-5(PI 221421). **remarks:** Resistant to bunt (*Tilletia* spp.). Winter Annual. Breeding Material. Seed.
- PI 542505 **donor id:** H84-589. **origin:** United States. **pedigree:** Durum-X/*Triticum timopheevi*-9(PI 288033). **remarks:** Excellent fertility and seed. Unusual. Resistant to bunt (*Tilletia* spp.). Winter Annual. Breeding Material. Seed.
- PI 542506 **donor id:** H85-739. **origin:** United States. **pedigree:** TSTS 3D (white seed, developed by E. R. Sears)/*Triticum mutica*. **received as:** TSTS 3D/*Aegilops mutica*. Winter Annual. Breeding Material. Seed.

PI 542507 to 542508. *Triticum* hybrid POACEAE Hybrid wheat

Donated by: Metzger, R.J., USDA-ARS, Dept. of Crop Sciences, Oregon State University, Corvallis, Oregon, United States. **remarks:** Received through KUSE. Received January 01, 1987.

PI 542507 **donor id:** M82-3676. **origin:** United States. **pedigree:** *Triticum carthlicum*-4/*Aegilops squarrosa*. **other id:** KUSE 2144. **remarks:** Resistant to bunt (*Tilletia* spp). KUSE 2144 is resistant to many bunt races. Winter Annual. Breeding Material. Seed.

PI 542508 **donor id:** M82-3665. **origin:** United States. **pedigree:** *Triticum dicoccoides*(JK)/*Aegilops squarrosa*. **other id:** KUSE 2016. Winter Annual. Breeding Material. Seed.

PI 542509 to 542566. X *Triticosecale* sp. POACEAE TRITICALE

Donated by: Metzger, R.J., USDA-ARS, Dep of Crop Sciences, Oregon State University, Corvallis, Oregon, United States. Received January 01, 1987.

PI 542509 **donor id:** M86-6018. **origin:** United States. **pedigree:** Daws/Antelope Rye/2/A876. **other id:** M81-8046. **remarks:** Excellent snow mold (*Fusarium nivale*). Annual. Breeding Material. Seed.

PI 542510 **donor id:** M86-6016. **origin:** United States. **pedigree:** M85-8064/A876/2/EMSA876. **remarks:** Plant height 95cm. Annual. Breeding Material. Seed.

PI 542511 **donor id:** M86-6021. **origin:** Canada. **other id:** 83D002. **remarks:** Plant height 160cm. Nearly awnless. Originally from J. Helm. Annual. Breeding Material. Seed.

PI 542512 **donor id:** M86-6027. **origin:** United States. **other id:** 85E007. **remarks:** Plant height 110cm to 130cm. Annual. Breeding Material. Seed.

PI 542513 **donor id:** M86-6030. **origin:** United States. **pedigree:** Mayo*2/Armadello/2/274-320. **other id:** 79B132001. **remarks:** Plant height 140cm. Annual. Breeding Material. Seed.

PI 542514 **donor id:** M86-6032. **origin:** United States. **pedigree:** Hyslop dwarf/Rufus wild rye/2/B219/A876. **remarks:** Plant height 90cm. Annual. Breeding Material. Seed.

PI 542515 **donor id:** M86-6033. **origin:** United States. **pedigree:** Hyslop dwarf/Rufus Rye/2/B219/A876. **remarks:** Plant height 95cm to 110cm. Maturity early. Annual. Breeding Material. Seed.

PI 542509 to 542566-continued

- PI 542516 **donor id:** M86-6034. **origin:** United States. **pedigree:** Male Sterile B219/A876/2/EMSA876/Poland Dwarf-1. B219 may have *Triticum timopheevi* cytoplasm, and is fertile because it carries fertility restorers. **remarks:** Plant height 100cm to 115cm. Annual. Breeding Material. Seed.
- PI 542517 **donor id:** M86-6037. **origin:** United States. **pedigree:** Male Sterile B219/A876/2/EMSA876/Druchamp/Kodiak Rye. **remarks:** Plant height 100cm to 115cm. Annual. Breeding Material. Seed.
- PI 542518 **donor id:** M86-6044. **origin:** United States. **pedigree:** M75-8064/A876/2/EMSA876. **remarks:** Plant height 100cm to 115cm. Annual. Breeding Material. Seed.
- PI 542519 **donor id:** M86-6045. **origin:** United States. **pedigree:** Burt/Frontier Rye/2/A876/Yoco. **remarks:** Segregating for plant height 100cm to 145cm. Annual. Breeding Material. Seed.
- PI 542520 **donor id:** M86-6046. **origin:** United States. **pedigree:** Druchamp/Kodiak Rye/2/B219/A876. **remarks:** Plant height 110cm to 125cm. Annual. Breeding Material. Seed.
- PI 542521 **donor id:** M86-6047. **origin:** United States. **pedigree:** A876/Dwarf rye. **remarks:** Plant height 95cm. Annual. Breeding Material. Seed.
- PI 542522 **donor id:** M86-6051. **origin:** United States. **pedigree:** Reselection from Jenkin's line. **other id:** B84-546. **remarks:** Plant height 160cm. Annual. Breeding Material. Seed.
- PI 542523 **donor id:** M86-6052. **origin:** United States. **pedigree:** Mayo*2/Armadillo/2/274-320. **other id:** 79B132002. **remarks:** Maturity early. Head cone shaped. Excellent thrashability. Annual. Breeding Material. Seed.
- PI 542524 **donor id:** M86-6054. **origin:** United States. **other id:** EMSA313A. **remarks:** Reduced plant height mutant (130cm). Annual. Breeding Material. Seed.
- PI 542525 **donor id:** M86-6055. **origin:** United States. **pedigree:** Daws/Antelope Rye/2/A876. **other id:** M81-8046. **remarks:** Plant height 115cm. Annual. Breeding Material. Seed.
- PI 542526 **donor id:** M86-6057. **origin:** United States. **pedigree:** A876/M76-6269. **other id:** M83-5062. Annual. Breeding Material. Seed.

PI 542509 to 542566-continued

- PI 542527 **donor id:** M86-6060. **origin:** United States. **pedigree:** Daws/Antelope Rye/2/A876. **other id:** M82-6003. **remarks:** Plant height 120cm. Annual. Breeding Material. Seed.
- PI 542528 **donor id:** M86-6064. **origin:** United States. **pedigree:** B219/A876. **remarks:** Plant height 115cm. Annual. Breeding Material. Seed.
- PI 542529 **donor id:** M86-6065. **origin:** Poland. **other id:** CT 463.77. **remarks:** Plant height 125cm. Annual. Breeding Material. Seed.
- PI 542530 **donor id:** M86-6066. **origin:** United States. **pedigree:** Elliot 16/Vt75229/2/Snoopy Rye/3/B164,F6. **remarks:** Plant height 90cm. Annual. Breeding Material. Seed.
- PI 542531 **donor id:** M86-6067. **origin:** United States. **pedigree:** B164A/VT75229/3/Daws/S Mont/2/274-320. **remarks:** Plant height 115cm-145cm. Annual. Breeding Material. Seed.
- PI 542532 **donor id:** M86-6068. **origin:** United States. **pedigree:** B219/A876. **remarks:** Plant height 115cm. Annual. Breeding Material. Seed.
- PI 542533 **donor id:** M86-6070. **origin:** United States. **pedigree:** A876/M76-6269. **other id:** M83-6199, F8. **remarks:** Plant height 95cm. Annual. Breeding Material. Seed.
- PI 542534 **donor id:** M86-6071. **origin:** United States. **pedigree:** Daws/Snoopy Rye/2/A876/3/EMSA876. **remarks:** Plant height 130cm. Annual. Breeding Material. Seed.
- PI 542535 **donor id:** M86-6078. **origin:** United States. **pedigree:** Daws/Snoopy Rye/2/A876. **remarks:** Plant height 75cm to 90cm. Maturity late. Seed excellent. Annual. Breeding Material. Seed.
- PI 542536 **donor id:** M86-6081. **origin:** United States. **pedigree:** AD206/2/Dankowskie Zlote Gold Rye Outcross, Sel. 4. **remarks:** Plant height 75cm to 90cm. Maturity late. Annual. Breeding Material. Seed.
- PI 542537 **donor id:** M86-6087. **origin:** United States. **pedigree:** Kiss/2/193/803/3/358. **other id:** M79-7686. Annual. Breeding Material. Seed.
- PI 542538 **donor id:** M86-6089. **origin:** United States. **pedigree:** Male Sterile cytoplasm Red Bob/2/Daws/Snoopy rye. Self-fertile. Carries restorers. Annual. Breeding Material. Seed.

PI 542509 to 542566-continued

- PI 542539 **donor id:** M86-6106. **origin:** United States. **pedigree:** M75-8064/A876/2/EMSA876. **remarks:** Plant height 95cm. Annual. Breeding Material. Seed.
- PI 542540 **donor id:** M86-6108. **origin:** United States. **pedigree:** Yoco/URSS 3310. Annual. Breeding Material. Seed.
- PI 542541 **donor id:** M86-6109. **origin:** United States. **other id:** KT933.82. Annual. Breeding Material. Seed.
- PI 542542 **donor id:** M86-6116. **origin:** United States. **pedigree:** Male sterile B219/A876/2/S. Silvestre. **remarks:** Plants height 120cm. Annual. Breeding Material. Seed.
- PI 542543 **donor id:** M86-6117. **origin:** United States. **pedigree:** 274-320/3/Early Blackhull/Dankowskie Zlote/2/3310/1A. Annual. Breeding Material. Seed.
- PI 542544 **donor id:** M86-6118. **origin:** United States. **pedigree:** 1008.3/Beagle. Annual. Breeding Material. Seed.
- PI 542545 **donor id:** M86-6121. **origin:** United States. **pedigree:** Male sterile B219/A876/2/Hyslop Dwarf/Rufus Rye/3/79B058. Annual. Breeding Material. Seed.
- PI 542546 **donor id:** M86-6139. **origin:** United States. **cultivar:** EMSA876. **other id:** M79-8409.10. **remarks:** Excellent small seed. Annual. Breeding Material. Seed.
- PI 542547 **donor id:** M86-6143. **origin:** United States. **other id:** B164. **remarks:** Plant height 115cm. Spring Annual. Breeding Material. Seed.
- PI 542548 **donor id:** M86-6153. **origin:** United States. **pedigree:** Bezostaja-1/Dankowskie Zlote Gold Rye Outcorss Sel. 4 (Octoploid). Annual. Breeding Material. Seed.
- PI 542549 **donor id:** M86-6159. **origin:** United States. **pedigree:** Bezostaia Dwarf/Dankowskie Zlote Gold Rye Outcross Sel. 4 (Octoploid). Annual. Breeding Material. Seed.
- PI 542550 **donor id:** M86-6171. **origin:** United States. **pedigree:** 78W008001/Dankowskie Zlote Gold Rye Outcross Sel. 4 (Octoploid). **remarks:** Plant height 105cm. Annual. Breeding Material. Seed.
- PI 542551 **donor id:** M86-6174. **origin:** United States. **pedigree:** Stephen/Turkey Rye (Hexaploid) (Octoploid). **remarks:** Plant height 105cm. Annual. Breeding Material. Seed.

PI 542509 to 542566-continued

- PI 542552 **donor id:** M83-6601. **origin:** United States. **other id:** VT75229 Resel.. **remarks:** Plant height 105cm. Annual. Breeding Material. Seed.
- PI 542553 **donor id:** H86-15. **origin:** Mexico. **cultivar:** Ardilla. Annual. Breeding Material. Seed.
- PI 542554 **donor id:** H86-221. **origin:** United States. **cultivar:** Jenkins. **remarks:** Line head rowed for many generations. Protein bands. Annual. Breeding Material. Seed.
- PI 542555 **donor id:** M86-139. **origin:** Mexico. **pedigree:** Hork Sib/Snoopy/2/WRC31/3/Navarino B-5353. Annual. Breeding Material. Seed.
- PI 542556 **donor id:** M86-150. **origin:** United States. **other id:** N9. **remarks:** Selected for low Trypsin inhibitor. Annual. Breeding Material. Seed.
- PI 542557 **donor id:** M86-6053. **origin:** United States. **pedigree:** Hyslop Dwarf/Rufus Rye/2/B219/A876, F5. Annual. Breeding Material. Seed.
- PI 542558 **donor id:** H83-607. **origin:** United States. **cultivar:** Frosty. **remarks:** Plants frost hardy at anthesis. Annual. Breeding Material. Seed.
- PI 542559 **donor id:** H83-605. **origin:** United States. **cultivar:** Beagle. **remarks:** Plants frost hardy at early boot to anthesis. Annual. Breeding Material. Seed.
- PI 542560 **donor id:** H85-743. **origin:** United States. **pedigree:** Chinese Spring Wheat/Unknown Rye (octoploid). **remarks:** Plants frost hardy at anthesis. Annual. Breeding Material. Seed.
- PI 542561 **donor id:** H85-633. **origin:** United States. **pedigree:** 79TK97-500(Triticum carthlicum)/Secale africanum(octoploid). **remarks:** Primary triticales. Annual. Breeding Material. Seed.
- PI 542562 **donor id:** H85-727. **origin:** United States. **pedigree:** Triticum carthlicum (79TK97-500)/Secale africanum (octiploid). **remarks:** Plant height 161cm. Rachis brittle.Solid stem 5cm below spike. Annual. Breeding Material. Seed.
- PI 542563 **donor id:** M82-3766. **origin:** United States. **pedigree:** Daws/Snoopy (octiploid). **remarks:** Plant height 161cm. Open pollinated, outcrossing expected. Annual. Breeding Material. Seed.

PI 542509 to 542566-continued

- PI 542564 **origin:** United States. **pedigree:** Early Blackhull/Dankowskie Zlote Rye (octiploid). **remarks:** Plant height 161cm. Advanced selection. Annual. Breeding Material. Seed.
- PI 542565 **origin:** United States. **pedigree:** Nacazari 76/Extra Early Rye, C3 Generation (octoploid). **remarks:** Plant height 161cm. Annual. Breeding Material. Seed.
- PI 542566 **donor id:** M84-6176. **origin:** Poland. **other id:** CT583.81. **remarks:** Plant height 161cm. Annual. Breeding Material. Seed.

PI 542567 to 542574. *Secale cereale* L. POACEAE Rye

Donated by: Metzger, R.J., USDA-ARS, Dep of Crop Sciences, Oregon State University, Corvallis, Oregon, United States. Received January 01, 1987.

- PI 542567 **donor id:** M86-9011. **origin:** Poland. **cultivar:** DANKOWSKIE ZLOTE GOLD RYE OUTCROSS NO. 4. **other id:** KR85-1. **remarks:** Height intermediate. Annual. Breeding Material. Seed.
- PI 542568 **donor id:** H82-305. **origin:** Poland. **cultivar:** KODIAK. Annual. Cultivated. Seed.
- PI 542569 **donor id:** 1343. **origin:** Poland. **cultivar:** JO 090. Annual. Cultivated. Seed.
- PI 542570 **donor id:** 18698. **origin:** Poland. **pedigree:** JEC7/1090. Annual. Breeding Material. Seed.
- PI 542571 **donor id:** 18709. **origin:** Poland. **cultivar:** LUNGAUER TAUREN. Annual. Cultivated. Seed.
- PI 542572 **origin:** Poland. **cultivar:** POLLUX. Annual. Cultivated. Seed.
- PI 542573 **donor id:** 2631. **origin:** Poland. **cultivar:** TOIVO. Annual. Cultivated. Seed.
- PI 542574 **donor id:** 18708. **origin:** Poland. **cultivar:** KALTENBERGER. Annual. Cultivated. Seed.

PI 542575 to 542577. *Triticum aestivum* L. POACEAE Common wheat

Donated by: Metzger, R.J., USDA-ARS, Dept. of Crop Sciences, Oregon State University, Corvallis, Oregon, United States. Received January 01, 1987.

PI 542575 to 542577-continued

- PI 542575 **donor id:** M85-22. **origin:** United States. **pedigree:** PI 178383 (Harlan JR 6256)/Elgin. **other id:** M72-345. **remarks:** Bunt (*Tilletia* spp.) resistance genes Bt8 and Bt9. Winter Annual. Cultivated. Seed.
- PI 542576 **donor id:** M85-25. **origin:** United States. **pedigree:** Elgin*2/PI 178383 (Harlan JR 6256). **other id:** R61-1719-2. **remarks:** Resistance to bunt (*Tilletia* spp.) genes unknown. Winter Annual. Cultivated. Seed.
- PI 542577 **donor id:** M86-67. **origin:** United States. **pedigree:** Faro*2/PI 192339. **remarks:** Spike club type. Good bunt (*Tilletia* spp.) resistance. Winter Annual. Cultivated. Seed.

PI 542578 to 542582. *Triticum* hybrid POACEAE Wheat

Donated by: Metzger, R.J., USDA-ARS, Dept. of Crop Sciences, Oregon State University, Corvallis, Oregon, United States. Received January 01, 1987.

- PI 542578 **donor id:** M86-104. **origin:** United States. **pedigree:** NB 69889/*Triticum urartu*-13. **remarks:** Bunt resistance (*Tilletia* spp.) comes from *Triticum urartu*-13. Winter Annual. Breeding Material. Seed.
- PI 542579 **donor id:** H86-202. **origin:** United States. **pedigree:** Saragolla/PI 167556(Einkorn)/2/Red Bob. **remarks:** Bunt resistance (*Tilletia* spp.) comes from Einkorn. Winter Annual. Breeding Material. Seed.
- PI 542580 **donor id:** M85-91. **origin:** United States. **pedigree:** D6644/*Triticum urartu*/2/Steinwedel/3/Sava. **remarks:** Excellent bunt (*Tilletia* spp.) comes from *Triticum urartu*. Winter Annual. Breeding Material. Seed.
- PI 542581 **donor id:** M86-72. **origin:** United States. **pedigree:** D6644/*Triticum urartu*/2/Steinwedel/3/Stephens. Winter Annual. Breeding Material. Seed.
- PI 542582 **donor id:** M80-42. **origin:** United States. **other id:** SM4(7436). Winter Annual. Breeding Material. Seed.

PI 542583 to 542589. *Triticum aestivum* L. POACEAE Wheat

Donated by: Metzger, R.J., USDA-ARS, Dept. of Crop Sciences, Oregon State University, Corvallis, Oregon, United States. Received January 01, 1987.

PI 542583 to 542589-continued

- PI 542583 **donor id:** M86-49. **origin:** Turkey. **other id:** 79TK054-309, HD4. **locality:** Hakkari Province. Semdinli-Ovac village. Annual. Breeding Material. Seed.
- PI 542584 **donor id:** M86-51. **origin:** Turkey. **other id:** 79TK058-330, HD4. **locality:** Semdinli, Hakkari Province. Annual. Breeding Material. Seed.
- PI 542585 **donor id:** M86-54. **origin:** Turkey. **other id:** 79TK090-451, HD1. **locality:** Tuzluca, Kars Province. Annual. Breeding Material. Seed.
- PI 542586 **donor id:** M86-55. **origin:** Turkey. **other id:** 79TK125-1107, HD7. **locality:** Province Centre, Erzincan Province. Annual. Breeding Material. Seed.
- PI 542587 **donor id:** M86-58. **origin:** Turkey. **other id:** 79TK130-686, HD2. **locality:** 13km E Imranli, Sivas Province. Annual. Breeding Material. Seed.
- PI 542588 **donor id:** M86-59. **origin:** Turkey. **other id:** 79TK110-607, HD1. **locality:** 33km N Erzurum, Erzurum Province. Annual. Breeding Material. Seed.
- PI 542589 **donor id:** M86-61. **origin:** Turkey. **other id:** 79TK131-709A, HD1. **locality:** Province Centre, Sivas Province. **remarks:** Bunt (*Tilletia* ssp.) resistance. Annual. Breeding Material. Seed.

PI 542590. *Triticum durum* Desf. POACEAE Wheat

Donated by: Metzger, R.J., USDA-ARS, Dept. of Crop Sciences, Oregon State University, Corvallis, Oregon, United States. Received January 01, 1987.

donor id: M86-62. **origin:** Turkey. **other id:** 79TK125-1107. **locality:** Province Centre, Erzincan Province. Annual. Breeding Material. Seed.

PI 542591 to 542593. *Avena sativa* L. POACEAE Common oat

Donated by: Agricultural Research Service --USDA-ARS, Cereal Research Unit, University Park, Pennsylvania, United States; and Pennsylvania Agr. Exp. Sta., Dept. of Agronomy, University Park, Pennsylvania, United States. Received June 90, 1990.

PI 542591 to 542593-continued

PI 542591 **origin:** United States. **origin institute:** Agricultural Research Service--USDA, Cereal Crops Res. Unit, University Park, Pennsylvania 16802. **cultivar:** PENNCOMP 29. **pedigree:** Composite of 31 crosses. **other id:** GP-34. **source:** Crop Sci. 26(6):1262 1986. **group:** CSR-OAT. **remarks:** Semi-dwarf to moderately tall. Lodging resistance high. Released in 1985. Spring Annual. Breeding Material. Seed.

PI 542592 **origin:** United States. **origin institute:** Agricultural Research Service--USDA, Cereal Crops Res. Unit, University Park, Pennsylvania 16802. **cultivar:** PENNCOMP 30. **pedigree:** Composite of 29 crosses. **other id:** GP-35. **source:** Crop Sci. 26(6):1262 1986. **group:** CSR-OAT. **remarks:** Semi-dwarf to moderately tall. Lodging resistance high. Released in 1985. Spring Annual. Breeding Material. Seed.

PI 542593 **origin:** United States. **origin institute:** Agricultural Research Service--USDA, Cereal Crops Res. Unit, University Park, Pennsylvania 16802. **cultivar:** PENNCOMP 31. **pedigree:** Composite of F3 to F8 remnant seed of bulk population from 40 crosses. **other id:** GP-33. **source:** Crop Sci. 26(6):1262 1986. **group:** CSR-OAT. **remarks:** Hull-less. Average groat weight approx. 26mg. Wide ranges of genetic variability for plant height, lodging resistance, maturity, groat size, grain protein content, and disease resistance. Spring Annual. Breeding Material. Seed.

PI 542594. *Abelmoschus esculentus* (L.) Moench MALVACEAE Okra

Donated by: Johannessen, C.L., Department of Geography, University of Oregon, Eugene, Oregon, United States. Received October 10, 1988.

origin: China. **cultivar:** PUSA SAVANI. **remarks:** Variety of Lady's finger. Cultivar. Seed.

PI 542595 to 542596. *Amaranthus* sp. AMARANTHACEAE

Donated by: Johannessen, C.L., Department of Geography, University of Oregon, Eugene, Oregon, United States. Received October 10, 1988.

PI 542595 **origin:** China. **collected:** September 1988. Cultivated. Seed.

PI 542596 **origin:** China. **collected:** September 1988. Cultivated. Seed.

PI 542597 to 542598. *Benincasa hispida* (Thunb.) Cogn. CUCURBITACEAE
Waxgourd

Donated by: Johannessen, C.L., Department of Geography, University of Oregon, Eugene, Oregon, United States. Received October 10, 1988.

PI 542597 **origin:** China. **local name:** Tung gua. **collected:** September 2, 1988. **locality:** Beibei market. **remarks:** Seeds small. Flesh better than larger seeded accession PI 542598. Cultivated. Seed.

PI 542598 **origin:** China. **local name:** Tung gua. **collected:** September 22, 1988. **locality:** Beibei market. Cultivated. Seed.

PI 542599 to 542604. *Capsicum annuum* L. SOLANACEAE Pepper

Donated by: Johannessen, C.L., Department of Geography, University of Oregon, Eugene, Oregon, United States. Received October 10, 1988.

PI 542599 **donor id:** 88-5. **origin:** China. **collected:** August 08, 1988. **collector id:** 88-5. **locality:** Kunming, Yunnan Province. **remarks:** Chili type. Fruits narrow, elongated. Cultivated. Seed.

PI 542600 **origin:** China. **collected:** September 03, 1988. **locality:** Beibei market. **remarks:** Fruits long. Cultivated. Seed.

PI 542601 **origin:** China. **collected:** September 03, 1988. **locality:** Beibei market. **remarks:** Chili type. Fruits short, slightly blocky. Cultivated. Seed.

PI 542602 **donor id:** 88-6. **origin:** China. **collected:** August 07, 1988. **collector id:** 88-6. **locality:** Kunming market, Yunnan Province. **remarks:** Bell type. Cultivated. Seed.

PI 542603 **donor id:** 88-7. **origin:** China. **collected:** August 07, 1988. **collector id:** 88-7. **locality:** Kunming market, Yunnan Province. **remarks:** Bell type. Cultivated. Seed.

PI 542604 **donor id:** 88-8. **origin:** China. **collected:** August 07, 1988. **collector id:** 88-8. **locality:** Kunming market, Yunnan Province. **remarks:** Sweet bell type. Cultivated. Seed.

PI 542605. *Cicer arietinum* L. FABACEAE Chickpea

Donated by: Johannessen, C.L., Department of Geography, University of Oregon, Eugene, Oregon, United States. Received October 10, 1988.

PI 542605-continued

origin: India. **developer country:** China. **local name:** Chena. **collected:** August 1988. **locality:** Katwoudu. Primitiv-cv. Seed.

PI 542606. *Citrullus lanatus* (Thunb.) Matsum. & Nakai CUCURBITACEAE
Watermelon

Donated by: Johannessen, C.L., Department of Geography, University of Oregon, Eugene, Oregon, United States. Received October 10, 1988.

origin: China. **local name:** Dodaka. **collected:** September 1988. **locality:** Kunming, Yunnan Province. Cultivated. Seed.

PI 542607. *Cucurbita moschata* (Duch.) Duch. ex Poir. CUCURBITACEAE

Donated by: Johannessen, C.L., Department of Geography, University of Oregon, Eugene, Oregon, United States. Received October 10, 1988.

donor id: 88-4. **origin:** China. **collected:** August 08, 1988. **collector id:** 88-4. **locality:** Kunming, Yunnan Province. **remarks:** Referred to as ash gourd. Cultivated. Seed.

PI 542608. *Cyamopsis tetragonoloba* (L.) Taubert FABACEAE Guar

Donated by: Johannessen, C.L., Department of Geography, University of Oregon, Eugene, Oregon, United States. Received October 10, 1988.

origin: India. **developer country:** China. **collected:** 1988. **locality:** Grown in Marathi. Cultivated. Seed.

PI 542609. *Lablab purpureus* (L.) Sweet FABACEAE Lablab bean

Donated by: Johannessen, C.L., Department of Geography, University of Oregon, Eugene, Oregon, United States. Received October 10, 1988.

origin: India. **developer country:** China. **collected:** August 1988. **locality:** Mysore. Cultivated. Seed.

PI 542610. *Lagenaria siceraria* (Mol.) Standl. CUCURBITACEAE White
flowered gourd

Donated by: Johannessen, C.L., Department of Geography, University
of Oregon, Eugene, Oregon, United States. Received October 10,
1988.

origin: India. **developer country:** China. **collected:**
August 1988. **locality:** Mysore. **remarks:** Referred to as
Dindhya Bhopala. Cultivated. Seed.

PI 542611. *Luffa aegyptiaca* Miller CUCURBITACEAE Luffa

Donated by: Johannessen, C.L., Department of Geography, University
of Oregon, Eugene, Oregon, United States. Received October 10,
1988.

origin: India. **developer country:** China. **collected:**
August 1988. **locality:** Mysore. **remarks:** Referred to as
Ghosale. Cultivated. Seed.

PI 542612. *Solanum melongena* L. SOLANACEAE Eggplant

Donated by: Johannessen, C.L., Department of Geography, University
of Oregon, Eugene, Oregon, United States. Received October 10,
1988.

origin: India. **developer country:** China. **collected:**
1988. **locality:** Mysore. **remarks:** Local type.
Cultivated. Seed.

PI 542613. *Phaseolus coccineus* L. FABACEAE

Donated by: Johannessen, C.L., Department of Geography, University
of Oregon, Eugene, Oregon, United States. Received October 10,
1988.

origin: China. **collected:** August 15, 1988. **locality:** Yi
village, near Kunming, Yunnan Province. **remarks:** Seeds
large, white. Cultivated. Seed.

PI 542614. *Raphanus sativus* L. BRASSICACEAE Radish

Donated by: Johannessen, C.L., Department of Geography, University
of Oregon, Eugene, Oregon, United States. Received October 10,
1988.

origin: China. **collected:** 1988. Cultivated. Seed.

PI 542615. *Asparagus hybrid* LILIACEAE

Donated by: McCollum, G.D., Vegetable Laboratory, USDA-ARS-BARC, Beltsville, Maryland, United States. Received .

origin: United States. **cultivar:** ASP 8271-ASP8284.
pedigree: F2 generation of Tetraploid of *A. officinalis* Viking/*A. officinalis* subsp. *prostratus*. **remarks:** Can be expected to segregate in gender and stem length, diameter, and habit (varying from erect to prostrate). Fully fertile. Hermaphroditism present. $2N=4X=40$. Can be useful in widening the range of genetic variation in the morphology and adaptation of vegetable asparagus. Breeders of ornamentals might find it useful for developing novel types. F2 populations of Sib crosses 8270 and 8284 bulked. Breeding Material. Seed.

PI 542616. *Citrullus colocynthis* (L.) Schrad. CUCURBITACEAE Colocynth

Donated by: Mokkadem, A.; Chadja, H., INRA, LaMiniere, Guyancourt, France; and Guarino, L., IBPGR, Rome, Italy. **remarks:** Received through IBPGR, Rome, Italy. Received November 29, 1989.

donor id: 1147. **origin:** Algeria. **collected:** June 22, 1988. **collector id:** 1147. **locality:** Wadi, edge of open Tamarix community, 60km SE of Arak, Mouydir Province. Site 21. **latitude:** 23 deg. 00 min. N. **longitude:** 42 deg. 00 min. E. **elevation:** 1050m. **remarks:** Soil pH>7.5. Wild. Seed.

PI 542617. *Citrullus lanatus* (Thunb.) Matsum. & Nakai CUCURBITACEAE Watermelon

Donated by: Mokkadem, A.; Chadja, H., INRA, LaMiniere, Guyancourt, France; and Guarino, L., IBPGR, Rome, Italy. **remarks:** Received through IBPGR, Rome, Italy. Received November 29, 1989.

donor id: 1088. **origin:** Algeria. **collected:** June 20, 1988. **collector id:** 1088. **locality:** Irrigated agriculture in wadi, Metoutek, Hoggar Province. Site 16. **latitude:** 24 deg. 20 min. N. **longitude:** 05 deg. 30 min. E. **elevation:** 1300m. **remarks:** Soil pH>7.5. Cultivated. Seed.

PI 542618 to 542619. *Cucumis melo* L. CUCURBITACEAE Melo

Donated by: Mokkadem, A.; Chadja, H., INRA, LaMiniere, Guyancourt, France; and Guarino, L., IBPGR, Rome, Italy. **remarks:** Received through IBPGR, Rome, Italy. Received November 29, 1989.

PI 542618 to 542619-continued

PI 542618 **donor id:** 1042. **origin:** Algeria. **collected:** June 19, 1988. **collector id:** 1042. **locality:** Irrigated agriculture in wadi through rocky desert, Tazrouk, Hoggar Province. Site 11. **latitude:** 23 deg. 30 min. N. **longitude:** 06 deg. 10 min. E. **elevation:** 1700m. **remarks:** Soil pH>7.5. Cultivated. Seed.

PI 542619 **donor id:** 1089. **origin:** Algeria. **collected:** June 20, 1988. **collector id:** 1089. **locality:** Irrigated agriculture in wadi, Mertoutek, Hoggar Province. Site 16. **latitude:** 24 deg. 20 min. N. **longitude:** 05 deg. 30 min. E. **elevation:** 1300m. **remarks:** Soil pH>7.5. Cultivated. Seed.

PI 542620 to 542625. *Medicago sativa* L. FABACEAE

Donated by: Mokkadem, A.; Chadja, H., INRA, LaMiniere, Guyancourt, France; and Guarino, L., IBPGR, Rome, Italy. **remarks:** Received through IBPGR, Rome, Italy. Received November 29, 1989.

PI 542620 **donor id:** 1019. **origin:** Algeria. **local name:** Fassah. **collected:** June 19, 1988. **collector id:** 1019. **locality:** Irrigated agriculture in wadi bed, Tahifet, Hoggar Province. Site 7. **latitude:** 23 deg. 00 min. N. **longitude:** 06 deg. 00 min. E. **elevation:** 1300m. **remarks:** Soil pH>7.5. Cultivated. Seed.

PI 542621 **donor id:** 1039. **origin:** Algeria. **local name:** Fassah. **collected:** June 19, 1988. **collector id:** 1039. **locality:** Irrigated agriculture in wadi through rocky desert, Tazrouk, Hoggar Province. Site 11. **latitude:** 23 deg. 30 min. N. **longitude:** 06 deg. 10 min. E. **elevation:** 1700m. **remarks:** Soil pH>7.5. Cultivated. Seed.

PI 542622 **donor id:** 1064. **origin:** Algeria. **local name:** Fassah. **collected:** June 20, 1988. **collector id:** 1064. **locality:** Irrigated agriculture in wadi, Ideles, Hoggar Province. Site 13. **latitude:** 23 deg. 50 min. N. **longitude:** 05 deg. 50 min. E. **elevation:** 1350m. **remarks:** Soil pH>7.0. Dates present. Cultivated. Seed.

PI 542623 **donor id:** 1067. **origin:** Algeria. **local name:** Fassah. **collected:** June 20, 1988. **collector id:** 1067. **locality:** Irrigated agriculture in wadi, Ideles, Hoggar Province. Site 13. **latitude:** 23 deg. 50 min. N. **longitude:** 05 deg. 50 min. E. **elevation:** 1350m. **remarks:** Soil pH>7.0. Dates present. Cultivated. Seed.

PI 542620 to 542625-continued

PI 542624 **donor id:** 1115. **origin:** Algeria. **local name:** Fassah.
collected: June 21, 1988. **collector id:** 1115. **locality:**
Irrigated agriculture, In Amguel, Hoggar Province. Site
18. **latitude:** 23 deg. 50 min. N. **longitude:** 05 deg. 10
min. E. **elevation:** 950m. **remarks:** Soil pH>7.5.
Cultivated. Seed.

PI 542625 **donor id:** 1137. **origin:** Algeria. **local name:** Fassah.
collected: June 22, 1988. **collector id:** 1137. **locality:**
Irrigated agriculture in large wadi, Abalessa, Hoggar
Province. Site 19. **latitude:** 23 deg. 00 min. N.
longitude: 04 deg. 50 min. E. **elevation:** 850m.
remarks: Soil pH>7.5. Dates present. Cultivated. Seed.

PI 542626. *Pennisetum divisum* (Forsk. ex Gmel.) Henr. POACEAE Millet

Donated by: Mokkadem, A; Chadja, H., INRA, LaMiniere, Guyancourt,
France; and Guarino, L., IBPGR, Rome, Italy. **remarks:** Received
through IBPGR, Rome, Italy. Received November 29, 1989.

donor id: 1146. **origin:** Algeria. **collected:** June 22,
1988. **collector id:** 1146. **locality:** Outwash fan, Tit,
Hoggar Province. Site 20. **latitude:** 23 deg. 00 min. N.
longitude: 05 deg. 10 min. E. **elevation:** 1100m.
remarks: Soil pH>7.5. Cultivated. Seed.

PI 542627 to 542637. *Pennisetum glaucum* (L.) R. Br. POACEAE Pearl
millet

Donated by: Mokkadem, A.; Chadja, H., INRA, LaMiniere, Guyancourt,
France; and Guarino, L., IBPGR, Rome, Italy. **remarks:** Received
through IBPGR, Rome, Italy. Received November 29, 1989.

PI 542627 **donor id:** 1006. **origin:** Algeria. **local name:** Bishna.
collected: June 12, 1988. **collector id:** 1006. **locality:**
Cultivated land, Ain Gassam, Tassili H. Province. Site 4.
latitude: 19 deg. 30 min. N. **longitude:** 05 deg. 50 min.
E. **elevation:** 400m. **remarks:** Soil pH>7.5.
Cultivated. Seed.

PI 542628 **donor id:** 1020. **origin:** Algeria. **local name:** Bishna.
collected: June 19, 1988. **collector id:** 1020. **locality:**
Irrigated agriculture in wadi bed, Tahifet, Hoggar
Province. Site 7. **latitude:** 23 deg. 00 min. N.
longitude: 06 deg. 00 min. E. **elevation:** 1300m.
remarks: Soil pH>7.5. Cultivated. Seed.

PI 542627 to 542637-continued

- PI 542629 **donor id:** 1048. **origin:** Algeria. **local name:** Bishna. **collected:** June 19, 1988. **collector id:** 1048. **locality:** Irrigated agriculture in wadi through rocky desert, Tazrouk, Hoggar Province. Site 11. **latitude:** 23 deg. 30 min. N. **longitude:** 06 deg. 10 min. E. **elevation:** 1700m. **remarks:** Soil pH>7.5. Cultivated. Seed.
- PI 542630 **donor id:** 1059. **origin:** Algeria. **local name:** Bishna. **collected:** June 20, 1988. **collector id:** 1059. **locality:** Irrigated agriculture in wadi, Ideles, Hoggar Province. Site 13. **latitude:** 23 deg. 50 min. N. **longitude:** 05 deg. 50 min. E. **elevation:** 1350m. **remarks:** Soil pH>7.0. Dates present. Cultivated. Seed.
- PI 542631 **donor id:** 1085. **origin:** Algeria. **local name:** Bishna. **collected:** June 20, 1988. **collector id:** 1085. **locality:** Irrigated agriculture in wadi, Mertoutek, Hoggar Province. Site 16. **latitude:** 24 deg. 20 min. N. **longitude:** 05 deg. 30 min. E. **elevation:** 1300m. **remarks:** Soil pH>7.5. Cultivated. Seed.
- PI 542632 **donor id:** 1107. **origin:** Algeria. **local name:** Bishna. **collected:** June 21, 1988. **collector id:** 1107. **locality:** Irrigated agriculture, In Amquel, Hoggar Province. Site 18. **latitude:** 23 deg. 50 min. N. **longitude:** 05 deg. 10 min. E. **elevation:** 950m. **remarks:** Soil pH>7.5. Cultivated. Seed.
- PI 542633 **donor id:** 1108. **origin:** Algeria. **local name:** Bishna. **collected:** June 21, 1988. **collector id:** 1108. **locality:** Irrigated agriculture, In Amquel, Hoggar Province. Site 18. **latitude:** 23 deg. 50 min. N. **longitude:** 05 deg. 10 min. E. **elevation:** 950m. **remarks:** Soil pH>7.5. Cultivated. Seed.
- PI 542634 **donor id:** 1109. **origin:** Algeria. **local name:** Bishna. **collected:** June 21, 1988. **collector id:** 1109. **locality:** Irrigated agriculture, In Amquel, Hoggar Province. Site 18. **latitude:** 23 deg. 50 min. N. **longitude:** 05 deg. 10 min. E. **elevation:** 950m. **remarks:** Soil pH>7.5. Cultivated. Seed.
- PI 542635 **donor id:** 1125. **origin:** Algeria. **local name:** Bishna. **collected:** June 22, 1988. **collector id:** 1125. **locality:** Irrigated agriculture in large wadi, Abalessa, Hoggar Province. Site 19. **latitude:** 23 deg. 00 min. N. **longitude:** 04 deg. 50 min. E. **elevation:** 850m. **remarks:** Soil pH>7.5. Long cycle. Dates present. Cultivated. Seed.

PI 542627 to 542637-continued

PI 542636 **donor id:** 1142. **origin:** Algeria. **local name:** Bishna.
collected: June 22, 1988. **collector id:** 1142. **locality:**
Irrigated agriculture in large wadi, Abalessa, Hoggar
Province. Site 19. **latitude:** 23 deg. 00 min. N.
longitude: 04 deg. 50 min. E. **elevation:** 850m.
remarks: Soil pH>7.5. Short cycle. Dates present.
Cultivated. Seed.

PI 542637 **donor id:** 1143. **origin:** Algeria. **local name:** Bishna.
collected: June 22, 1988. **collector id:** 1143. **locality:**
Irrigated agriculture in large wadi, Abalessa, Hoggar
Province. Site 19. **latitude:** 23 deg. 00 min. N.
longitude: 04 deg. 50 min. E. **elevation:** 850m.
remarks: Soil pH>7.5. Dates present. Cultivated. Seed.

PI 542638 to 542648. *Sorghum bicolor* (L.) Moench POACEAE Sorghum

Donated by: Mokkadem, A.; Chadja, H., INRA, LaMiniere, Guyancourt,
France; and Guarino, L., IBPGR, Rome, Italy. **remarks:** Received
through IBPGR, Rome, Italy. Received November 29, 1989.

PI 542638 **donor id:** 1007. **origin:** Algeria. **local name:** Tafsut.
collected: June 12, 1988. **collector id:** 1007. **locality:**
Recently cultivated land, Ain Gazzam, Tassili H.
Province. Site 4. **latitude:** 19 deg. 30 min. N.
longitude: 05 deg. 50 min. E. **elevation:** 400m.
remarks: Soil pH>7.5. Durra red type. Three heads
sampled. Cultivated. Seed.

PI 542639 **donor id:** 1045. **origin:** Algeria. **local name:** Tafsut.
collected: June 19, 1988. **collector id:** 1045. **locality:**
Irrigated agriculture in wadi through rocky desert,
Tazrouk, Hoggar Province. Site 112. **latitude:** 23 deg. 30
min. N. **longitude:** 06 deg. 10 min. E. **elevation:**
1700m. **remarks:** Soil pH>7.5. Durra red type. One head
sampled. Cultivated. Seed.

PI 542640 **donor id:** 1046. **origin:** Algeria. **local name:** Tafsut.
collected: June 19, 1988. **collector id:** 1046. **locality:**
Irrigated agriculture in wadi through rocky desert,
Tazrouk, Hoggar Province. Site 11. **latitude:** 23 deg. 30
min. N. **longitude:** 06 deg. 10 min. E. **elevation:**
1700m. **remarks:** Soil pH>7.5. Durra white type. One head
sampled. Cultivated. Seed.

PI 542638 to 542648-continued

- PI 542641 **donor id:** 1049. **origin:** Algeria. **local name:** Tafsut.
collected: June 19, 1988. **collector id:** 1049. **locality:**
Irrigated agriculture in wadi through rocky desert,
Tazrouk, Hoggar Province. Site 11. **latitude:** 23 deg. 30
min. N. **longitude:** 06 deg. 10 min. E. **elevation:**
1700m. **remarks:** Soil pH>7.5. Durra white, small type.
Cultivated. Seed.
- PI 542642 **donor id:** 1053. **origin:** Algeria. **local name:** Tafsut.
collected: June 20, 1988. **collector id:** 1053. **locality:**
Irrigated agriculture in wadi, Ideles, Hoggar Province.
Site 13. **latitude:** 23 deg. 50 min. N. **longitude:** 05
deg. 50 min. E. **elevation:** 1350m. **remarks:** Soil
pH>7.0. Dates present. Durra red type. Two heads sampled.
Cultivated. Seed.
- PI 542643 **donor id:** 1068. **origin:** Algeria. **local name:** Tafsut.
collected: June 20, 1988. **collector id:** 1068. **locality:**
Irrigated agriculture in wadi, Ideles, Hoggar Province.
Site 13. **latitude:** 23 deg. 50 min. N. **longitude:** 05
deg. 50 min. E. **elevation:** 1350m. **remarks:** Soil
pH>7.0. Dates present. Durra red type. One head sampled.
Cultivated. Seed.
- PI 542644 **donor id:** 1069. **origin:** Algeria. **local name:** Tafsut.
collected: June 20, 1988. **collector id:** 1069. **locality:**
Irrigated agriculture in wadi, Ideles, Hoggar Province.
Site 13. **latitude:** 23 deg. 50 min. N. **longitude:** 05
deg. 50 min. E. **elevation:** 1350m. **remarks:** Soil
pH>7.0. Dates present. Durra white type. One head
sampled. Cultivated. Seed.
- PI 542645 **donor id:** 1074. **origin:** Algeria. **local name:** Tafsut.
collected: June 20, 1988. **collector id:** 1074. **locality:**
Irrigated agriculture in wadi, Mertoutek, Hoggar
Province. Site 16. **latitude:** 24 deg. 20 min. N.
longitude: 05 deg. 30 min. E. **elevation:** 1300m.
remarks: Soil pH>7.5. Durra red type. One head sampled.
Cultivated. Seed.
- PI 542646 **donor id:** 1093. **origin:** Algeria. **local name:** Tafsut.
collected: June 21, 1988. **collector id:** 1093. **locality:**
Irrigated agriculture, In Amquel, Hoggar Province. Site
18. **latitude:** 23 deg. 50 min. N. **longitude:** 05 deg. 10
min. E. **elevation:** 950m. **remarks:** Soil pH>7.5. Durra
white early type. One head sampled. Cultivated. Seed.

PI 542638 to 542648-continued

PI 542647 **donor id:** 1094. **origin:** Algeria. **local name:** Tafsut.
collected: June 21, 1988. **collector id:** 1094. **locality:**
Irrigated agriculture, In Amguel, Hoggar Province. Site
18. **latitude:** 23 deg. 50 min. N. **longitude:** 05 deg. 10
min. E. **elevation:** 950m. **remarks:** Soil pH>7.5. Durra
white late type. One head sampled. Cultivated. Seed.

PI 542648 **donor id:** 1144. **origin:** Algeria. **local name:** Tafsut.
collected: June 22, 1988. **collector id:** 1144. **locality:**
Irrigated agriculture in large wadi, Abalessa, Hoggar
Province. Site 19. **latitude:** 23 deg. 00 min. N.
longitude: 04 deg. 50 min. E. **elevation:** 850m.
remarks: Soil pH>7.5. Durra white type. Cultivated.
Seed.

PI 542649. *Sorghum halepense* (L.) Pers. POACEAE Johnsongrass

Donated by: Mokkadem, A.; Chadja, H., INRA, LaMiniere, Guyancourt,
France; and Guarino, L., IBPGR, Rome, Italy. **remarks:** Received
through IBPGR, Rome, Italy. Received November 29, 1989.

donor id: 1111. **origin:** Algeria. **collected:** June 21,
1988. **collector id:** 1111. **locality:** Irrigated
agriculture, In Amguel, Hoggar Province. Site 18.
latitude: 23 deg. 50 min. N. **longitude:** 05 deg. 10 min.
E. **elevation:** 950m. **remarks:** Soil pH>7.5. Two plants
sampled. Cultivated. Seed.

PI 542650 to 542675. *Triticum aestivum* L. POACEAE Common wheat

Donated by: Mokkadem, A.; Chadja, H., INRA, LaMiniere, Guyancourt,
France; and Guarino, L., IBPGR, Rome, Italy. **remarks:** Received
through IBPGR, Rome, Italy. Received November 29, 1989.

PI 542650 **donor id:** 1013. **origin:** Algeria. **local name:** Hamra.
collected: June 19, 1988. **collector id:** 1013. **locality:**
Irrigated agriculture in wadi bed, Tahifet, Hoggar
Province. Site 7. **latitude:** 23 deg. 00 min. N.
longitude: 06 deg. 00 min. E. **elevation:** 1300m.
remarks: Soil pH>7.5. Cultivated. Seed.

PI 542651 **donor id:** 1015. **origin:** Algeria. **local name:** Manga.
collected: June 19, 1988. **collector id:** 1015. **locality:**
Irrigated agriculture in wadi bed, Tahifet, Hoggar
Province. Site 7. **latitude:** 23 deg. 00 min. N.
longitude: 06 deg. 00 min. E. **elevation:** 1300m.
remarks: Soil pH>7.5. Cultivated. Seed.

PI 542650 to 542675-continued

- PI 542652 **donor id:** 1016. **origin:** Algeria. **local name:** Ghati.
collected: June 19, 1988. **collector id:** 1016. **locality:**
Irrigated agriculture in wadi bed, Tahifet, Hoggar
Province. Site 7. **latitude:** 23 deg. 00 min. N.
longitude: 06 deg. 00 min. E. **elevation:** 1300m.
remarks: Soil pH>7.5. Cultivated. Seed.
- PI 542653 **donor id:** 1017. **origin:** Algeria. **local name:** Bourba
awned. **collected:** June 19, 1988. **collector id:** 1017.
locality: Irrigated agriculture in wadi bed, Tahifet,
Hoggar Province. Site 7. **latitude:** 23 deg. 00 min. N.
longitude: 06 deg. 00 min. E. **elevation:** 1300m.
remarks: Soil pH>7.5. Cultivated. Seed.
- PI 542654 **donor id:** 1018. **origin:** Algeria. **local name:** Bourba
awned. **collected:** June 19, 1988. **collector id:** 1018.
locality: Irrigated agriculture in wadi bed, Tahifet,
Hoggar Province. Site 7. **latitude:** 23 deg. 00 min. N.
longitude: 06 deg. 00 min. E. **elevation:** 1300m.
remarks: Soil pH>7.5. Two spikes sampled. Cultivated.
Seed.
- PI 542655 **donor id:** 1038. **origin:** Algeria. **local name:** Touati.
collected: June 19, 1988. **collector id:** 1038. **locality:**
Irrigated agriculture in wadi through rocky desert,
Tazrouk, Hoggar Province. Site 11. **latitude:** 23 deg. 30
min. N. **longitude:** 06 deg. 10 min. E. **elevation:**
1700m. **remarks:** Soil pH>7.5. Cultivated. Seed.
- PI 542656 **donor id:** 1051. **origin:** Algeria. **local name:** Touati or
Farh houia. **collected:** June 19, 1988. **collector id:**
1051. **locality:** Irrigated agriculture in wadi through
rocky desert, Tazrouk, Hoggar Province. Site 11.
latitude: 23 deg. 30 min. N. **longitude:** 06 deg. 10 min.
E. **elevation:** 1700m. **remarks:** Soil pH>7.5. Three
spikes sampled. Cultivated. Seed.
- PI 542657 **donor id:** 1055. **origin:** Algeria. **local name:** Labyad.
collected: June 20, 1988. **collector id:** 1055. **locality:**
Irrigated agriculture in wadi, Ideles, Hoggar Province.
Site 13. **latitude:** 23 deg. 50 min. N. **longitude:** 05
deg. 50 min. E. **elevation:** 1350m. **remarks:** Soil
pH>7.0. Cultivated. Seed.
- PI 542658 **donor id:** 1056. **origin:** Algeria. **local name:** Ghati.
collected: June 20, 1988. **collector id:** 1056. **locality:**
Irrigated agriculture in wadi, Ideles, Hoggar Province.
Site 13. **latitude:** 23 deg. 50 min. N. **longitude:** 05
deg. 50 min. E. **elevation:** 1350m. **remarks:** Soil
pH>7.0. Dates present. Cultivated. Seed.

PI 542650 to 542675-continued

- PI 542659 **donor id:** 1061. **origin:** Algeria. **local name:** Manga.
collected: June 20, 1988. **collector id:** 1061. **locality:**
Irrigated agriculture in wadi, Ideles, Hoggar Province.
Site 13. **latitude:** 23 deg. 50 min. N. **longitude:** 05
deg. 50 min. E. **elevation:** 1350m. **remarks:** Soil
pH>7.0. Dates present. Cultivated. Seed.
- PI 542660 **donor id:** 1062. **origin:** Algeria. **local name:** Farth
houia. **collected:** June 20, 1988. **collector id:** 1062.
locality: Irrigated agriculture in wadi, Ideles, Hoggar
Province. Site 13. **latitude:** 23 deg. 50 min. N.
longitude: 05 deg. 50 min. E. **elevation:** 1350m.
remarks: Soil pH>7.0. Dates present. Cultivated. Seed.
- PI 542661 **donor id:** 1065. **origin:** Algeria. **local name:** Bourba.
collected: June 20, 1988. **collector id:** 1065. **locality:**
Irrigated agriculture in wadi, Ideles, Hoggar Province.
Site 13. **latitude:** 23 deg. 50 min. N. **longitude:** 05
deg. 50 min. E. **elevation:** 1350m. **remarks:** Soil
pH>7.0. Dates present. Cultivated. Seed.
- PI 542662 **donor id:** 1066. **origin:** Algeria. **local name:** Labyad.
collected: June 20, 1988. **collector id:** 1066. **locality:**
Irrigated agriculture in wadi, Ideles, Hoggar Province.
Site 13. **latitude:** 23 deg. 50 min. N. **longitude:** 05
deg. 50 min. E. **elevation:** 1350m. **remarks:** Soil
pH>7.0. Dates present. Four spikes collected.
Cultivated. Seed.
- PI 542663 **donor id:** 1079. **origin:** Algeria. **local name:** Boumellal.
collected: June 20, 1988. **collector id:** 1079. **locality:**
Irrigated agriculture in wadi, Mertoutek, Hoggar
Province. Site 16. **latitude:** 24 deg. 20 min. N.
longitude: 05 deg. 30 min. E. **elevation:** 1300m.
remarks: Soil pH>7.5. Cultivated. Seed.
- PI 542664 **donor id:** 1082. **origin:** Algeria. **local name:** Mekkaoui.
collected: June 20, 1988. **collector id:** 1082. **locality:**
Irrigated agriculture in wadi, Mertoutek, Hoggar
Province. Site 16. **latitude:** 24 deg. 20 min. N.
longitude: 05 deg. 30 min. E. **elevation:** 1300m.
remarks: Soil pH>7.5. Cultivated. Seed.
- PI 542665 **donor id:** 1100. **origin:** Algeria. **local name:** Barudi.
collected: June 21, 1988. **collector id:** 1100. **locality:**
Irrigated agriculture in, In Amquel, Hoggar Province.
Site 18. **latitude:** 23 deg. 50 min. N. **longitude:** 05
deg. 10 min. E. **elevation:** 950m. **remarks:** Soil
pH>7.5. Cultivated. Seed.

PI 542650 to 542675-continued

- PI 542666 **donor id:** 1104. **origin:** Algeria. **local name:** Ghati.
collected: June 21, 1988. **collector id:** 1104. **locality:**
Irrigated agriculture, In Amguel, Hoggar Province. Site
18. **latitude:** 23 deg. 50 min. N. **longitude:** 05 deg. 10
min. E. **elevation:** 950m. **remarks:** Soil pH>7.5.
Cultivated. Seed.
- PI 542667 **donor id:** 1105. **origin:** Algeria. **local name:** Mshaara.
collected: June 21, 1988. **collector id:** 1105. **locality:**
Irrigated agriculture, In Amguel, Hoggar Province. Site
18. **latitude:** 23 deg. 50 min. N. **longitude:** 05 deg. 10
min. E. **elevation:** 950m. **remarks:** Soil pH>7.5.
Cultivated. Seed.
- PI 542668 **donor id:** 1106. **origin:** Algeria. **local name:** Hamra.
collected: June 21, 1988. **collector id:** 1106. **locality:**
Irrigated agriculture, In Amguel, Hoggar Province. Site
18. **latitude:** 23 deg. 50 min. N. **longitude:** 05 deg. 10
min. E. **elevation:** 950m. **remarks:** Soil pH>7.5.
Cultivated. Seed.
- PI 542669 **donor id:** 1110. **origin:** Algeria. **local name:** Manga.
collected: June 21, 1988. **collector id:** 1110. **locality:**
Irrigated agriculture, In Amguel, Hoggar Province. Site
18. **latitude:** 23 deg. 50 min. N. **longitude:** 05 deg. 10
min. E. **elevation:** 950m. **remarks:** Soil pH>7.5.
Cultivated. Seed.
- PI 542670 **donor id:** 1117. **origin:** Algeria. **local name:** Hamircha.
collected: June 21, 1988. **collector id:** 1117. **locality:**
Irrigated agriculture, In amguel, Hoggar Province. Site
18. **latitude:** 23 deg. 50 min. N. **longitude:** 05 deg. 10
min. E. **elevation:** 950m. **remarks:** Soil pH>7.5.
Cultivated. Seed.
- PI 542671 **donor id:** 1132. **origin:** Algeria. **local name:** Hamra.
collected: June 22, 1988. **collector id:** 1132. **locality:**
Irrigated agriculture in large wadi, Abalessa, Hoggar
Province. Site 19. **latitude:** 23 deg. 00 min. N.
longitude: 04 deg. 50 min. E. **elevation:** 850m.
remarks: Soil pH>7.5. Dates present. Cultivated. Seed.
- PI 542672 **donor id:** 1133. **origin:** Algeria. **local name:** Iskandara.
collected: June 22, 1988. **collector id:** 1133. **locality:**
Irrigated agriculture in large wadi, Abalessa, Hoggar
Province. Site 19. **latitude:** 23 deg. 00 min. N.
longitude: 04 deg. 50 min. E. **elevation:** 850m.
remarks: Soil pH>7.5. Dates present. Cultivated. Seed.

PI 542650 to 542675-continued

- PI 542673 **donor id:** 1134. **origin:** Algeria. **local name:** Manga.
collected: June 22, 1988. **collector id:** 1134. **locality:**
Irrigated agriculture in large wadi, Abalessa, Hoggar
Province. Site 19. **latitude:** 23 deg. 00 min. N.
longitude: 04 deg. 50 min. E. **elevation:** 850m.
remarks: Soil pH>7.5. Dates present. Cultivated. Seed.
- PI 542674 **donor id:** 1135. **origin:** Algeria. **local name:** Bourba.
collected: June 22, 1988. **collector id:** 1135. **locality:**
Irrigated agriculture in large wadi, Abalessa, Hoggar
Province. Site 19. **latitude:** 23 deg. 00 min. N.
longitude: 04 deg. 50 min. E. **elevation:** 850m.
remarks: Soil pH>7.5. Dates present. Cultivated. Seed.
- PI 542675 **donor id:** 1136. **origin:** Algeria. **local name:** Sudani.
collected: June 22, 1988. **collector id:** 1136. **locality:**
Irrigated agriculture in large wadi, Abalessa, Hoggar
Province. Site 19. **latitude:** 23 deg. 00 min. N.
longitude: 04 deg. 50 min. E. **elevation:** 850m.
remarks: Soil pH>7.5. Dates present. Two spikes sampled.
Cultivated. Seed.

PI 542676 to 542680. *Triticum turgidum* L. POACEAE

Donated by: Mokka-dem, A.; Chadja, H., INRA, LaMiniere, Guyancourt,
France; and Guarino, L., IBPGR, Rome, Italy. **remarks:** Received
through IBPGR, Rome, Italy. Received November 29, 1989.

- PI 542676 **donor id:** 1014. **origin:** Algeria. **local name:** Mekkaoui.
collected: June 19, 1988. **collector id:** 1014. **locality:**
Irrigated agriculture in wadi bed, Tahifet, Hoggar
Province. Site 7. **latitude:** 23 deg. 00 min. N.
longitude: 06 deg. 00 min. E. **elevation:** 1300m.
remarks: Soil pH>7.5. Cultivated. Seed.
- PI 542677 **donor id:** 1036. **origin:** Algeria. **local name:** Sundani.
collected: June 19, 1988. **collector id:** 1036. **locality:**
Irrigated agriculture in wadi through rocky desert,
Tazrouk, Hoggar Province. Site 11. **latitude:** 23 deg. 30
min. N. **longitude:** 06 deg. 10 min. E. **elevation:**
1700m. **remarks:** Soil pH>7.5. Cultivated. Seed.
- PI 542678 **donor id:** 1050. **origin:** Algeria. **local name:** Mekkaoui.
collected: June 19, 1988. **collector id:** 1050. **locality:**
Irrigated agriculture in wadi through rocky desert,
Tazrouk, Hoggar Province. Site 11. **latitude:** 23 deg. 30
min. N. **longitude:** 06 deg. 10 min. E. **elevation:**
1700m. **remarks:** Soil pH>7.5. Cultivated. Seed.

PI 542676 to 542680-continued

PI 542679 **donor id:** 1057. **origin:** Algeria. **local name:** Mekkaoui. **collected:** June 20, 1988. **collector id:** 1057. **locality:** Irrigated agriculture in wadi, Ideles, Hoggar Province. Site 13. **latitude:** 23 deg. 50 min. N. **longitude:** 05 deg. 50 min. E. **elevation:** 1350m. **remarks:** Soil pH>7.5. Dates present. Cultivated. Seed.

PI 542680 **donor id:** 1101. **origin:** Algeria. **local name:** Mekkaoui. **collected:** June 21, 1988. **collector id:** 1101. **locality:** Irrigated agriculture, In Amguel, Hoggar Province. Site 18. **latitude:** 23 deg. 50 min. N. **longitude:** 05 deg. 10 min. E. **elevation:** 950m. **remarks:** Soil pH>7.5. Cultivated. Seed.

PI 542681. *Vigna unguiculata* (L.) Walp. FABACEAE

Donated by: Mokkadem, A.; Chadja, H., INRA, LaMiniere, Guyancourt, France; and Guarino, L., IBPGR, Rome, Italy. **remarks:** Received through IBPGR, Rome, Italy. Received November 29, 1989.

donor id: 1113. **origin:** Algeria. **local name:** Tadelagh. **collected:** June 21, 1988. **collector id:** 1113. **locality:** Irrigated agriculture, In Amguel, Hoggar Province. Site 18. **latitude:** 23 deg. 50 min. N. **longitude:** 05 deg. 10 min. E. **elevation:** 950m. **remarks:** Soil pH>7.5. Cultivated. Seed.

PI 542682 to 542689. *Zea mays* L. subsp. *mays* POACEAE Corn

Donated by: Mokkadem, A.; Chadja, H., INRA, LaMiniere, Guyancourt, France; and Guarino, L., IBPGR, Rome, Italy. **remarks:** Received through IBPGR, Rome, Italy. Received November 29, 1989.

PI 542682 **donor id:** 1021. **origin:** Algeria. **local name:** Kabl. **collected:** June 19, 1988. **collector id:** 1021. **locality:** Irrigated agriculture in wadi bed, Tahifet, Hoggar Province. Site 7. **latitude:** 23 deg. 00 min. N. **longitude:** 06 deg. 00 min. E. **elevation:** 1300m. **remarks:** Soil pH>7.5. Seeds yellow. Two heads collected. Cultivated. Seed.

PI 542683 **donor id:** 1037. **origin:** Algeria. **local name:** Kabl. **collected:** June 19, 1988. **collector id:** 1037. **locality:** Irrigated agriculture in wadi through rocky desert, Tazrouk, Hoggar Province. Site 11. **latitude:** 23 deg. 30 min. N. **longitude:** 06 deg. 10 min. E. **elevation:** 1700m. **remarks:** Soil pH>7.5. Seeds yellow. Cultivated. Seed.

PI 542682 to 542689-continued

- PI 542684 **donor id:** 1054. **origin:** Algeria. **local name:** Kabl.
collected: June 20, 1988. **collector id:** 1054. **locality:**
Irrigated agriculture in wadi, Ideles, Hoggar Province.
Site 13. **latitude:** 23 deg. 50 min. N. **longitude:** 05
deg. 50 min. E. **elevation:** 1350m. **remarks:** Soil
pH>7.0. Dates present. Seeds yellow. Cultivated. Seed.
- PI 542685 **donor id:** 1078. **origin:** Algeria. **local name:** Kabl
(Aboras). **collected:** June 20, 1988. **collector id:** 1078.
locality: Irrigated agriculture in wadi, Mertoutek,
Hoggar Province. Site 16. **latitude:** 24 deg. 20 min. N.
longitude: 05 deg. 30 min. E. **elevation:** 1300m.
remarks: Soil pH>7.5. Seeds yellow. Two heads collected.
Cultivated. Seed.
- PI 542686 **donor id:** 1098. **origin:** Algeria. **local name:** Kabl.
collected: June 21, 1988. **collector id:** 1098. **locality:**
Irrigated agriculture, In Amguel, Hoggar Province. Site
18. **latitude:** 23 deg. 50 min. N. **longitude:** 05 deg. 10
min. E. **elevation:** 950m. **remarks:** Soil pH>7.5. Seeds
yellow. Cultivated. Seed.
- PI 542687 **donor id:** 1099. **origin:** Algeria. **local name:** Kabl.
collected: June 21, 1988. **collector id:** 1099. **locality:**
Irrigated agriculture, In Amguel, Hoggar Province. Site
18. **latitude:** 23 deg. 50 min. N. **longitude:** 05 deg. 10
min. E. **elevation:** 950m. **remarks:** Soil pH>7.5. Seeds
red. One head collected. Cultivated. Seed.
- PI 542688 **donor id:** 1123. **origin:** Algeria. **local name:** Kabl.
collected: June 22, 1988. **collector id:** 1123. **locality:**
Irrigated agriculture in large wadi, Abalessa, Hoggar
Province. Site 19. **latitude:** 23 deg. 00 min. N.
longitude: 04 deg. 50 min. E. **elevation:** 850m.
remarks: Soil pH>7.5. Dates present. Seeds red. One head
collected. Cultivated. Seed.
- PI 542689 **donor id:** 1124. **origin:** Algeria. **local name:** Kabl.
collected: June 22, 1988. **collector id:** 1124. **locality:**
Irrigated agriculture in large wadi, Abalessa, Hoggar
Province. Site 19. **latitude:** 23 deg. 00 min. N.
longitude: 04 deg. 50 min. E. **elevation:** 850m.
remarks: Soil pH>7.5. Dates present. Seeds yellow. Two
heads collected. Cultivated. Seed.

PI 542690. *Lathyrus* sp. FABACEAE

Donated by: Kaiser, W.J., Western Regional PI Station, USDA-ARS,
Room 59, Johnson Hall, Washington State Univ., Pullman, Washington,
United States. Received May 19, 1990.

PI 542690-continued

donor id: 210785-07. **origin:** Turkey. **collected:** July 21, 1985. **collector id:** 210785-07. **other id:** W6-2652. **locality:** Growing among chickpeas. Wild. Seed.

PI 542691. *Papaver somniferum* L. PAPAVERACEAE Opium poppy

Donated by: Kaiser, W.J., Western Regional PI Station, USDA-ARS, Room 59, Johnson Hall, Washington State Univ., Pullman, Washington, United States. Received May 19, 1990.

donor id: 230785-0301. **origin:** Turkey. **collected:** July 23, 1985. **collector id:** 230785-0301. **other id:** W6-2684. **locality:** Field near Kiziloren village, about 30km N of Dinar on road to Afyon, Afyon Province. **elevation:** 1050m. Cultivated. Seed.

PI 542692. *Papaver* sp. PAPAVERACEAE

Donated by: Kaiser, W.J., Western Regional PI Station, USDA-ARS, Room 59, Johnson Hall, Washington State Univ., Pullman, Washington, United States. Received May 19, 1990.

donor id: 240785-06. **origin:** Turkey. **collected:** July 24, 1985. **collector id:** 240785-06. **other id:** W6-2685. **locality:** River bed among rocks, 31km S of Isparta on road to Aglasum, Burdur Province. **elevation:** 1040m. **remarks:** Flowers red. Capsules small. Wild. Seed.

PI 542693 to 542699. *Trigonella* sp. FABACEAE

Donated by: Kaiser, W.J., Western Regional PI Station, USDA-ARS, Room 59, Johnson Hall, Washington State Univ., Pullman, Washington, United States. Received May 19, 1990.

PI 542693 **donor id:** 270685-02. **origin:** Turkey. **collected:** June 27, 1985. **collector id:** 270685-02. **other id:** W6-2699. **locality:** Edge of chickpea field, rocky soil, 7km S of Gulnar in Taurus mountains. **elevation:** 920m. **remarks:** Pods long curved. Flowers small, yellow. Plants small but produced abundant pods which were elevated above plant. Wild. Seed.

PI 542694 **donor id:** 060785-02. **origin:** Turkey. **collected:** July 06, 1985. **collector id:** 060785-02. **other id:** W6-2700. **locality:** Rocky brown soil. From piles of drying lentil pods in the field, Ataturk Dam, on road to Adiyaman, 20km from DSI Camp, Adiyaman Province. **elevation:** 580m. **remarks:** Pods slightly curved, 5cm long. Wild. Seed.

PI 542693 to 542699-continued

- PI 542695 **donor id:** 070785-02. **origin:** Turkey. **collected:** July 07, 1985. **collector id:** 070785-02. **other id:** W6-2701. **locality:** Mustafa Gayor village E of Kahta, Adiyaman Province. **elevation:** 570m. Wild. Seed.
- PI 542696 **donor id:** 090785-01. **origin:** Turkey. **collected:** July 9, 1985. **collector id:** 090785-01. **other id:** W6-2701. **locality:** 11km S of Diyarbakir. **elevation:** 650m. **remarks:** Thick curved pods. Wild. Seed.
- PI 542697 **donor id:** 090785-03. **origin:** Turkey. **collected:** July 09, 1985. **collector id:** 090785-03. **other id:** W6-2702. Wild. Seed.
- PI 542698 **donor id:** 160785-06. **origin:** Turkey. **collected:** July 16, 1985. **collector id:** 160785-06. **other id:** W6-2703. **locality:** Chickpea field, brown soil, 22km to Seydisehir from Beysehir, Konya Province. **elevation:** 1110m. **remarks:** Flowers small, yellow. Pods curved, 2-3cm long. Leaves unusual. Wild. Seed.
- PI 542699 **donor id:** 270785-01. **origin:** Turkey. **collected:** July 27, 1985. **collector id:** 270785-01. **other id:** W6-2704. **locality:** Steep, rocky area, calcareous soil, oak and juniper trees present, 10km from Kutahya, on road to Eskisehir, Kutahya Province. **elevation:** 1010m. **remarks:** Pods from one dry plant. Wild. Seed.

PI 542700 to 542703. *Vicia sativa* L. FABACEAE Common vetch

Donated by: Kaiser, W.J., Western Regional PI Station, USDA-ARS, Room 59, Johnson Hall, Washington State Univ., Pullman, Washington, United States. Received May 19, 1990.

- PI 542700 **donor id:** 300685-0401. **origin:** Turkey. **collected:** June 30, 1985. **collector id:** 300685-0401. **other id:** W6-2708. **locality:** Threshing field at Martavan, on road to Kilis. **elevation:** 710m. Cultivated. Seed.
- PI 542701 **donor id:** 050785-0106. **origin:** Turkey. **collected:** July 05, 1985. **collector id:** 050785-0106. **other id:** W6-2709. **locality:** Contaminant in lentil threshing pile, Hayiz village near dam site, Adiyaman Province. **elevation:** 380m. Cultivated. Seed.
- PI 542702 **donor id:** 170785-11. **origin:** Turkey. **collected:** July 17, 1985. **collector id:** 170785-11. **other id:** W6-2707. **locality:** From large pile of plants prior to threshing, 5km to Kisehir on the Kaman-Kisehir road, Kisehir Province. **elevation:** 1000m. Cultivated. Seed.

PI 542700 to 542703-continued

PI 542703 **donor id:** 180785-06. **origin:** Turkey. **collected:** July 18, 1985. **collector id:** 180785-06. **other id:** W6-2706. **locality:** From threshing pile, Sazlidere village, 19km to Akdagmaden, Yozgat Province. **elevation:** 1300m. Cultivated. Seed.

PI 542704 to 542706. *Triticum aestivum* L. POACEAE Common wheat

Donated by: Metzger, R.J., Department of Crop Sciences, Oregon State University, Oregon State University, Corvallis, Oregon, United States. Received January 01, 1987.

PI 542704 **origin:** United States. **cultivar:** EARLY BLACKHULL. **pedigree:** Many generations of purification of Citr 8856. Winter Annual. Cultivar. Seed.

PI 542705 **origin:** United States. **cultivar:** BLACKHULL. **pedigree:** Many generations of purification of Citr 6251. Winter Annual. Cultivar. Seed.

PI 542706 **origin:** United States. **cultivar:** EXTRA EARLY BLACKHULL. **pedigree:** Many generations of purification of Citr 13664. Winter Annual. Cultivar. Seed.

PI 542707 to 542708. *Hordeum vulgare* L. POACEAE Barley

Donated by: Scharen, A.L., USDA-ARS, Cereal Crops Research, Montana State University, Bozeman, Montana, United States. Received April 01, 1990.

PI 542707 **origin:** Egypt. **cultivar:** EGYPTIAN DRYLAND BARLEY #1. **collected:** April 23, 1980. **locality:** Bogay Larbida, 48km west of Alexandria. **remarks:** 6-rowed barley collected from area where precipitation is 200 to 250mm. Spring Annual. Cultivar. Seed.

PI 542708 **origin:** Egypt. **cultivar:** EGYPTIAN DRYLAND BARLEY #2. **collected:** April 23, 1980. **locality:** Bogay Larbida, 48km west of Alexandria. **remarks:** 6-rowed barley collected from area where precipitation is 200 to 250mm. Spring Annual. Cultivar. Seed.

PI 542709. *Glycine max* (L.) Merr. FABACEAE Soybean

Donated by: McBlain, B.A., Ohio Agr. Res. and Development Center, 1680 Madison Avenue, Wooster, Ohio, United States. **remarks:** Hayes Soybean. Received July 11, 1990.

PI 542709-continued

origin: United States. **origin institute:** Ohio Agr. Res. and Development Center, Wooster, Ohio 44691. **cultivar:** Hayes. **pedigree:** Amcor x Williams 82. **other id:** PVP 9000045. **source:** Pending. **group:** PVPO. **other id:** CV-277. **group:** CSR-SOYBEAN. **other id:** HM8482. **remarks:** Maturity early, Group III. Flowers purple. Pubescence gray. Pods brown. Seed shiny yellow with imperfect black hila. Rps1-k gene present for rot resistance. Tall plant type adapted to less favorable environments. Limited data suggest moderate resistance to white mold (*Sclerotinia sclerotiorum*) and brown stem rot (*Phialophora gregatum*). Annual. Cultivar. Seed.

PI 542710. *Glycine max* (L.) Merr. FABACEAE Soybean

Donated by: McBlain, B.A., Ohio Agr. Res. and Development Center, 1680 Madison Avenue, Wooster, Ohio, United States. **remarks:** Chapman Soybean. Received July 11, 1990.

origin: United States. **cultivar:** CHAPMAN. **pedigree:** B6, F4 line derived from backcross A79-236002(3)/HW79149. **other id:** CV-278. **group:** CSR-SOYBEAN. **remarks:** Maturity late, Group II. Flowers purple. Pubescence gray. Pods brown. Seed shiny yellow with imperfect black hila. Height moderate. Gene present for resistance to phytophthora rot (*Phytophthora megasperma*). Moderately resistant to purple seed stain (*Cercospora kikuchii*) and pod and stem blight (*Diaporthe phaseolorum*). Spring Annual. Cultivar. Seed.

PI 542711. *Glycine max* (L.) Merr. FABACEAE Soybean

Donated by: McBlain, B.A., Ohio Agr. Res. and Development Center, 1680 Madison Avenue, Wooster, Ohio, United States. **remarks:** Edison Soybean. Received July 11, 1990.

origin: United States. **origin institute:** Ohio Res. and Dev. Center, 1680 Madison Avenue, Wooster, Ohio 44691. **cultivar:** EDISON. **pedigree:** HW79116/HW79022. **other id:** CV-279. **group:** CSR-SOYBEAN. **remarks:** Maturity mid, Group III. Flowers purple. Pubescence tawny. Pods tan. Seed shiny yellow with black hila. Height short. Resistant to phytophthora rot (*Phytophthora megasperma*). Moderately resistant to pod and stem blight (*Diaporthe phaseolorum*). Spring Annual. Cultivar. Seed.

PI 542712. *Glycine max* (L.) Merr. FABACEAE Soybean

Donated by: Boerma, H.R., Georgia Agr. Exp. Stas., University of Georgia, 3111 Plant Sciences Bldg., Athens, Georgia, United States.
remarks: Bryan Soybean. Received July 11, 1990.

origin: United States. **origin institute:** Georgia Agr. Exp. Sta., University of Georgia, Dept. of Agronomy, Athens, Georgia 30602. **cultivar:** BRYAN. **pedigree:** F5 derived from Centennial/Bedford. **other id:** CV-274. **group:** CSR-SOYBEAN. **remarks:** Maturity Group VI. Determinate growth habit. Flowers purple. Pubescence tawny. Pod walls tan. Seed yellow with shiny seed coats and black hila. Resistant to soybean cyst nematode races 1 and 3 (*Heterodera glycines*) and the southern (*Meloidogyne incognita*), peanut (*M. arenaria*), and javanese (*M. javanica*) root-knot nematodes. Spring Annual. Cultivar. Seed.

PI 542713 to 542716. *Zea mays* L. subsp. *mays* POACEAE Corn

Donated by: Thomas-Compton, M., University of Nebraska, 308 Keim Hall, Lincoln, Nebraska, United States. Received July 12, 1990.

PI 542713 **origin:** United States. **cultivar:** YPI LFWS(1). **pedigree:** Yellow Pearl I Leaf Freckels and Wilt-YPFWS(1) is an improved version of the open pollinated popcorn variety Yellow Pearl. **remarks:** YPI LFWS(1) has undergone one cycle of combined So and S1 line per se selection for reaction to Goss' wilt (Leaf freckels and wilt) disease caused by *Corynebacterium clavibacter michiganense* ssp *nebraskense*. On a scale of 1 to 5 with 1 = resistant and 5 = susceptible, YPT LFWS(1) averaged 2.65. Popping expansion 27.3 cc g⁻¹. Not dent-sterile. Spring Annual. Breeding Material. Seed.

PI 542714 **origin:** United States. **cultivar:** SGII LFWS(2). **pedigree:** Supergold II Leaf Freckles and wilt (2) [SGII LFWS(2)] is an improved version of open pollinated popcorn variety Supergold. **remarks:** SGII LFWS(2) has undergone two cycles of combined So and S11 line per se selection for reaction to Goss' wilt (Leaf freckles and wilt) disease caused by *Corynebacterium clavibacter michiganense* ssp *nebraskense*. On a scale of 1 to 5 with 1 = resistant and 5 = susceptible, SGII LFW(2) averaged 2.61. Popping expansion 27.3 cc g⁻¹. Kernels yellow-pearl, medium-large. Not dent-sterile. Spring Annual. Breeding Material. Seed.

PI 542713 to 542716-continued

PI 542715 **origin:** United States. **cultivar:** NP86. **pedigree:** S5 inbred line derived from Nebraska version of Supergold (Syn7) variety. NP86 is a derivative of SG86. **remarks:** Among 112 S1 lines evaluated SG86 showed higher expansion volume and lower stalk breakage than Supergold (Syn7). Plants uniform, approx. 160cm tall. Maturity early, flowers approx. 2 days later than IaDS53. Kernels medium-small, yellow-pearl. Combines well with IADS91 as well as non-Supergold lines. Shows popping expansions of 36.0 and 37.3 cc g-1 by conventional and microwave popping methods,. Spring Annual. Breeding Material. Seed.

PI 542716 **origin:** United States. **cultivar:** NP87. **pedigree:** S5 inbred line derived from Nebraska version of Supergold (Syn7) variety. NP87 is a derivative of SG17. **remarks:** Among 112 S1 lines evaluated SG17 showed higher expansion volume and lower stalk breakage than Supergold (Syn7). Plants uniform, approx. 195cm tall. Maturity medium. Kernels medium-large, yellow-pearl. Combines well with IaDS69 as well as non-Supergold lines. Shows popping expansion of 37.3 cc g-1 for both conventional and microwave popping methods. Not dent-sterile but promising DS derivatives have been. Spring Annual. Breeding Material. Seed.

PI 542717 to 542767. Sorghum bicolor (L.) Moench POACEAE Sorghum

Donated by: Schertz, K.F., USDA-ARS, Department of Crop & Soil Sciences, Texas A&M University, College Station, Texas, United States. Received June 26, 1990.

PI 542717 **origin:** China. **cultivar:** 119. **other id:** Chin. Nat. Acc. No. 1. **locality:** Shenyang. **remarks:** Improved variety. Annual. Breeding Material. Seed.

PI 542718 **origin:** China. **cultivar:** SAN CHI SAN. **other id:** Chin. Nat. Acc. No. 422. **other id:** Three foot tree. **locality:** Fengang. **remarks:** Local variety. Annual. Breeding Material. Seed.

PI 542719 **origin:** China. **cultivar:** LI SHI HUANG. **other id:** Chin. Nat. Acc. No. 820. **other id:** Li Shi yellow. **locality:** Li Shi. **remarks:** Local variety. Annual. Breeding Material. Seed.

PI 542720 **origin:** China. **cultivar:** XIAN BAI NIAN. **other id:** Chin. Nat. Acc. No. 3113. **other id:** Small white sticky. **remarks:** Local variety. Plats small, white, and sticky. Annual. Breeding Material. Seed.

PI 542717 to 542767-continued

- PI 542721 **origin:** China. **cultivar:** GUAN DONG QING. **other id:** Chin. Nat. Acc. No. 3335. **other id:** Guan dong green. **locality:** Jinzhou. **remarks:** Local variety.
- PI 542722 **origin:** China. **cultivar:** JIN FU 1. **other id:** Chin. Nat. Acc. No. 793. **other id:** Jin radiation No. 1. **locality:** Fenyang. **remarks:** Improved variety, restorer. Annual. Breeding Material. Seed.
- PI 542723 **origin:** China. **cultivar:** XIN LIANG 7. **other id:** Chin. Nat. Acc. No. 730. **other id:** Xin sorghum No. 7. **locality:** Xinxian. **remarks:** Improved variety, restorer. Annual. Breeding Material. Seed.
- PI 542724 **origin:** China. **cultivar:** XIN LIANG 52. **other id:** Chin. Nat. Acc. No. 731. **other id:** Xin Sorghum No. 52. **locality:** Xinxian. **remarks:** Improved variety, restorer. Annual. Breeding Material. Seed.
- PI 542725 **origin:** China. **cultivar:** JI HUI 7348. **other id:** Chin. Nat. Acc. No. 140. **other id:** Jin restorer 7384. **locality:** Gungzhuling. **remarks:** Improved variety. Restorer. Annual. Breeding Material. Seed.
- PI 542726 **origin:** China. **cultivar:** MIN QUAN DA QING JIE. **other id:** Chin. Nat. Acc. No. 451. **other id:** Min Qiuan big green stalk. **locality:** Min Quan. **remarks:** Local variety, restorer. Annual. Breeding Material. Seed.
- PI 542727 **origin:** China. **cultivar:** BA YIE QI. **other id:** Chin. Nat. Acc. No. 3046. **other id:** Eight-leaf uniform. **locality:** An Shan. **remarks:** Local variety, maintainer. Annual. Breeding Material. Seed.
- PI 542728 **origin:** China. **cultivar:** HUANG KE. **other id:** Chin. Nat. Acc. No. 3467. **other id:** Yellow glume (shell). **remarks:** Local variety. Annual. Breeding Material. Seed.
- PI 542729 **origin:** China. **cultivar:** BAI E ZI. **other id:** Chin. Nat. Acc. No. 568. **other id:** White dwarf. **remarks:** Local variety. Annual. Breeding Material. Seed.
- PI 542730 **origin:** China. **cultivar:** XIANG GAOLIANG. **other id:** Chin. Nat. Acc. No. 779. **other id:** Sweet-smelling sorghum. **remarks:** Local variety. Annual. Breeding Material. Seed.
- PI 542731 **origin:** China. **cultivar:** ZHAO NONG 303. **other id:** Chin. Nat. Acc. No. 226. **other id:** Zhao agriculture 303. **locality:** Chifeng. **remarks:** Improved variety, restorer. Annual. Breeding Material. Seed.

PI 542717 to 542767-continued

- PI 542732 **origin:** China. **cultivar:** PING DING GUAN. **other id:** Chin. Nat. Acc. No. 536. **other id:** Hat on flat top. **remarks:** Local variety. Annual. Breeding Material. Seed.
- PI 542733 **origin:** China. **cultivar:** WEN CHENG GAOLIANG. **other id:** Chin. Nat. Acc. No. 527. **other id:** Wen cheng sorghum. **remarks:** Local variety. Annual. Breeding Material. Seed.
- PI 542734 **origin:** China. **cultivar:** JIU TOU NIAN. **other id:** Chin. Nat. Acc. No. 5981. **other id:** Bird of nine-heads. **remarks:** Local variety. Annual. Breeding Material. Seed.
- PI 542735 **origin:** China. **cultivar:** ER LU HUANG KE. **other id:** Chin. Nat. Acc. No. 5. **other id:** Yellow glume. **locality:** Beipiao. **remarks:** Local variety. Annual. Breeding Material. Seed.
- PI 542736 **origin:** China. **cultivar:** BA YE QI. **other id:** Chin. Nat. Acc. No. 14. **other id:** Eight-leaf uniform.. **locality:** An Shan. **remarks:** Local variety. Annual. Breeding Material. Seed.
- PI 542737 **origin:** China. **cultivar:** BA KE CHA. **other id:** Chin. Nat. Acc. No. 16. **other id:** Eight-tiller. **remarks:** Local variety. Annual. Breeding Material. Seed.
- PI 542738 **origin:** China. **cultivar:** SHUANG XIN HONG. **other id:** Chin. Nat. Acc. No. 106. **other id:** Double-red-heart. **locality:** Wuchang. **remarks:** Local variety. Annual. Breeding Material. Seed.
- PI 542739 **origin:** China. **cultivar:** PING DING XIANG. **other id:** Chin. Nat. Acc. No. 110. **other id:** Sweet-smell of flat top. **locality:** A Cheng. **remarks:** Local variety. Annual. Breeding Material. Seed.
- PI 542740 **origin:** China. **cultivar:** BAI DA SHE YAN. **other id:** Chin. Nat. Acc. No. 123. **other id:** Eye of white big snake. **locality:** Chaoyang. **remarks:** Local variety. Annual. Breeding Material. Seed.
- PI 542741 **origin:** China. **cultivar:** BAI LAO YA ZUO. **other id:** Chin. Nat. Acc. No. 124. **other id:** Seat of white old crow. **remarks:** Local variety. Annual. Breeding Material. Seed.

PI 542717 to 542767-continued

- PI 542742 **origin:** China. **cultivar:** BAI GAO LIANG. **other id:** Chin. Nat. Acc. No. 125. **other id:** White sorghum. **locality:** Xingcheng. **remarks:** Local variety. Annual. Breeding Material. Seed.
- PI 542743 **origin:** China. **cultivar:** CHU CHU HONG YI HAO. **other id:** Chin. Nat. Acc. No. 132. **other id:** Red everything No. 1. Annual. Breeding Material. Seed.
- PI 542744 **origin:** China. **cultivar:** LAO MU XHU QIAO JIAO. **other id:** Chin. Nat. Acc. No. 141. **other id:** Old female pig lifts her feet. **locality:** Jilin. **remarks:** Local variety. Annual. Breeding Material. Seed.
- PI 542745 **origin:** China. **cultivar:** LAO MU XHU QIAO JIAO. **other id:** Chin. Nat. Acc. No. 143. **other id:** Old female pig lifts her feet. **locality:** Zhaomeng. **remarks:** Local variety. Annual. Breeding Material. Seed.
- PI 542746 **origin:** China. **cultivar:** GUAN DONG QING. **other id:** Chin. Nat. Acc. No. 158. **other id:** Guan dong green. **locality:** Jin Zhou. **remarks:** Local variety. Annual. Breeding Material. Seed.
- PI 542747 **origin:** China. **cultivar:** HONG KE. **other id:** Chin. Nat. Acc. No. 167. **other id:** Red glume. **locality:** Fu song. **remarks:** Local variety. Annual. Breeding Material. Seed.
- PI 542748 **origin:** China. **cultivar:** HONG KE HONG QIAO JIAO ZI. **other id:** Chin. Nat. Acc. No. 176. **other id:** Red glume Red Lifting feet. **locality:** Ka Zuo. **remarks:** Local variety. Annual. Breeding Material. Seed.
- PI 542749 **origin:** China. **cultivar:** HU BO CUO. **other id:** Chin. Nat. Acc. No. 206. **other id:** Dwarf of short neck. **locality:** Huai De. **remarks:** Local variety. Annual. Breeding Material. Seed.
- PI 542750 **origin:** China. **cultivar:** WAI BO ZHANG. **other id:** Chin. Nat. Acc. No. 219. **other id:** Look with crooked neck. **locality:** Qing Yuan. **remarks:** Local variety. Annual. Breeding Material. Seed.
- PI 542751 **origin:** China. **cultivar:** HUANG KE XIAO BAI GAOLIANG. **other id:** Chin. Nat. Acc. No. 248. **other id:** Small white with yellow glume. **locality:** Chou Yang. **remarks:** Local variety. Annual. Breeding Material. Seed.

PI 542717 to 542767-continued

- PI 542752 **origin:** China. **cultivar:** HUANG KE BAI NIAN QIAOJIAO. **other id:** Chin. Nat. Acc. No. 253. **other id:** White glutinous yellow glume. **locality:** Ka Zuo. **remarks:** Local variety. Annual. Breeding Material. Seed.
- PI 542753 **origin:** China. **cultivar:** HUANG KE ZAO GAOLIANG. **other id:** Chin. Nat. Acc. No. 254. **other id:** Early-maturing yellow glume. **locality:** Xin bin. **remarks:** Local variety. Annual. Breeding Material. Seed.
- PI 542754 **origin:** China. **cultivar:** NIAN GAOLIANG. **other id:** Chin. Nat. Acc. No. 275. **other id:** Glutinous sorghum. **locality:** Yong Ji. **remarks:** Local variety. Annual. Breeding Material. Seed.
- PI 542755 **origin:** China. **cultivar:** BAI PING. **other id:** Chin. Nat. Acc. No. 557. **other id:** White flat. **locality:** Tang Shan. **remarks:** Local variety. Annual. Breeding Material. Seed.
- PI 542756 **origin:** China. **cultivar:** BAI GAOLIANG. **other id:** Chin. Nat. Acc. No. 577. **other id:** White sorghum. **locality:** Lai Yang. **remarks:** Local variety. Annual. Breeding Material. Seed.
- PI 542757 **origin:** China. **cultivar:** BAI AI. **other id:** Chin. Nat. Acc. No. 593. **other id:** White dwarf. **locality:** Longhua. **remarks:** Local variety. Annual. Breeding Material. Seed.
- PI 542758 **origin:** China. **cultivar:** MU ZHU GOU. **other id:** Chin. Nat. Acc. No. 600. **other id:** Enough to female pig. **locality:** He Ze. **remarks:** Local variety. Annual. Breeding Material. Seed.
- PI 542759 **origin:** China. **cultivar:** DA LUO CHUI. **other id:** Chin. Nat. Acc. No. 5212. **other id:** Gong hammer. **locality:** Huimin. **remarks:** Local variety. Annual. Breeding Material. Seed.
- PI 542760 **origin:** China. **cultivar:** JILIN HU NO. 2. **other id:** Protect No. 2. Annual. Breeding Material. Seed.
- PI 542761 **origin:** China. **cultivar:** JILIN HU NO. 4. **other id:** Protect No. 4. Annual. Breeding Material. Seed.
- PI 542762 **origin:** China. **cultivar:** JILIN HU NO. 22. **other id:** Protect No. 22. Annual. Breeding Material. Seed.
- PI 542763 **origin:** China. **cultivar:** JILIN DA HUANG KE. **other id:** Big red glume. Annual. Breeding Material. Seed.

PI 542717 to 542767-continued

- PI 542764 **origin:** China. **cultivar:** JILIN HEI LONG JIANG-22. **other id:** Hei Long 2. Annual. Breeding Material. Seed.
- PI 542765 **origin:** China. **cultivar:** JILIN ZHO BAN YUE. Annual. Breeding Material. Seed.
- PI 542766 **origin:** China. **cultivar:** JILIN HEI LONG JIANG-2. Annual. Breeding Material. Seed.
- PI 542767 **origin:** China. **cultivar:** JILIN XIAO HUANG KE. **other id:** Small red glume. Annual. Breeding Material. Seed.

PI 542768. *Glycine max* (L.) Merr. FABACEAE Soybean

Donated by: Orf, J.H., Minnesota Agr. Exp. Sta., University of Minnesota, St. Paul, Minnesota, United States. **remarks:** Sturdy Soybean. Received July 23, 1990.

origin: United States. **origin institute:** Minnesota Agr. Exp. Sta., Minnesota. **cultivar:** Sturdy. **pedigree:** M70-127 x Century. **other id:** PVP 9000027. **source:** Pending. **group:** PVPO. **other id:** CV-276. **group:** CSR-SOYBEAN. **other id:** M81-384. **source:** Prior designation. **remarks:** Indeterminate early maturity Group II. Flowers purple. Pubescence gray. Pods brown. Seeds intermediate luster yellow with imperfect black hila. Rps1 gene present for resistance to phytophthora root rot (*Phytophthora megasperma*). Annual. Cultivar. Seed.

PI 542769. *Glycine max* (L.) Merr. FABACEAE Soybean

Donated by: Orf, J.H., Minnesota Agr. Exp. Sta., University of Minnesota, St. Paul, Minnesota, United States. **remarks:** Proto Soybean. Received July 23, 1990.

origin: United States. **origin institute:** Minnesota Agr. Exp. Sta., St. Paul, Minnesota 55100. **cultivar:** Proto. **pedigree:** M70-504 x M69-42. **other id:** CV-275. **group:** CSR-SOYBEAN. **other id:** M77-251. **source:** Prior designation. **remarks:** Indeterminate maturity Group O. Flowers purple. Pubescence gray. Pods brown. Seeds dull yellow with buff hila. Protein content 5% higher and oil content 2% lower than most common soybean varieties. Annual. Cultivar. Seed.

PI 542770 to 542775. *Gossypium barbadense* L. MALVACEAE Cotton

Donated by: Turcotte, E.L., Agricultural Research Service -- USDA, 37860 W. Smith-Enke Road, Maricopa, Arizona, United States; and Arizona Agr. Exp. Sta.. **remarks:** Six American Pima Cotton Germplasms. Received July 23, 1990.

PI 542770 **origin:** United States. **origin institute:** Agricultural Research Service -- USDA, 37860 W. Smith-Enke Rd., Maricopa, Arizona 85239. **cultivar:** P45. **pedigree:** F5 selection from 6503-33-3-1/6614-91-11. **other id:** GP-479. **group:** CSR-COTTON. **remarks:** Grown in 25 replicated tests in Pima belt from 1980 through 1982. Plant height 103cm. Yield potential 1314 kg ha⁻¹. Lint percentage 37.4. Fiber length 35.8mm for 2.5% span length 17.3mm for 50% span length. T1 fiber strength 341 mN/tex. Micronaire 4.02 units. Spring Annual. Breeding Material. Seed.

PI 542771 **origin:** United States. **origin institute:** Agricultural Research Service -- USDA, 37860 W. Smith-Enke Rd., Maricopa, Arizona 85239. **cultivar:** P51. **pedigree:** F5 selection from 6503-33-3-1/6612-62-5. **other id:** GP-480. **group:** CSR-COTTON. **remarks:** Grown in 32 replicated tests in Pima belt from 1981 through 1985. Plant height 83cm. Yield potential 1193 kg ha⁻¹. Lint percentage 37.5. Fiber length 35.3mm for 2.5% span length and 17.3mm for 50% span length. T1 fiber strength 328 mN/tex. Micronaire 3.88 units. Spring Annual. Breeding Material. Seed.

PI 542772 **origin:** United States. **origin institute:** Agricultural Research Service -- USDA, 37860 W. Smith-Enke Rd., Maricopa, Arizona 85239. **cultivar:** P53. **pedigree:** F5 selection from 6112-4-1-5-1/6404-68-2-9. **other id:** GP-481. **group:** CSR-COTTON. **remarks:** Grown in 27 replicated tests in Pima belt from 1981 through 1984. Plant height 107cm. Yield potential 1294 kg ha⁻¹. Lint percentage 37.7. Fiber length 35.6mm for 2.5% span length and 17.8mm for 50% span length. T1 fiber strength 335 mN/tex. Micronaire 3.75 units. Spring Annual. Breeding Material. Seed.

PI 542773 **origin:** United States. **origin institute:** Agricultural Research Service -- USDA, 37860 W. Smith-Enke Rd., Maricopa, Arizona 85239. **cultivar:** P62. **pedigree:** F6 selection from 6503-33-3-1/6614-91-11. **other id:** GP-482. **group:** CSR-COTTON. **remarks:** Grown in 17 replicated tests in Pima belt in 1983, 1984 and 1985. Plant height 83cm. Yield potential 1101 kg ha⁻¹. Lint percentage 36.8. Fiber length 36.6mm for 2.5% span length and 17.8mm for 50% span length. T1 fiber strength 329 mN/tex. Micronaire 3.73 units. Spring Annual. Breeding Material. Seed.

PI 542770 to 542775-continued

PI 542774 **origin:** United States. **origin institute:** Agricultural Research Service -- USDA, 37860 W. Smith-Enke Rd., Maricopa, Arizona 85239. **cultivar:** P66. **pedigree:** F5 selection from 6614-91-9-3/6910-20-1-5. **other id:** GP-483. **group:** CSR-COTTON. **remarks:** Grown in 12 replicated tests in Pima belt in 1985 and 1986. 1986. Plant height 84cm. Yield potential 1232 kg ha⁻¹. Lint percentage 42.1. Fiber length 34.0mm for 2.5% span length and 15.7mm for 50% span length. T1 fiber strength 316 mN/tex. Micronaire 3.69 units. Spring Annual. Breeding Material. Seed.

PI 542775 **origin:** United States. **origin institute:** Agricultural Research Service -- USDA, 37860 W. Smith-Enke Rd., Maricopa, Arizona 85239. **cultivar:** E15. **pedigree:** F6 selection from family EL-5782 derived from hybrid B germplasm pool developed at El Paso, Texas. **other id:** GP-484. **group:** CSR-COTTON. **remarks:** Grown in 37 replicated tests in Pima belt from 1979 through 1982. Plant height 113cm. Yield potential 1160 kg ha⁻¹. Lint percentage 38.0. Fiber length 34.5mm for 2.5% span length and 16.5mm for 50% span length. T1 fiber strength 317 mN/tex. Micronaire 3.68 units. Spring Annual. Breeding Material. Seed.

PI 542776 to 542778. *Zea mays* L. subsp. *mays* POACEAE Corn

Donated by: Ashman, R.B., Indiana Agr. Exp. Sta., Purdue University, West Lafayette, Indiana, United States. **remarks:** No Certificate Requested. Received July 23, 1990.

PI 542776 **origin:** United States. **origin institute:** Indiana Agr. Exp. Sta., Purdue University, West Lafayette, Indiana 47907-1155. **cultivar:** HP62-02. **pedigree:** Derived from cross between Supergold and Early Yellow. Test crosses made on Supergold/Amber Pearl single cross and selection made primarily for high popping expansion volume. **other id:** PL-155. **group:** CSR-MAIZE. **remarks:** Plant height 115cm and 61cm to ear bearing node. Days to mid-pollen-shed average 70 and to midsilk 74. Ears average 17cm in length with 14 rows of kernels and have good husk coverage. Kernels have yellow endosperm and large enough to make satisfactory seed parent (87 k/10 g). Pollen production fair. Cross (dent) sterile (Gal-s). Breeding Material. Seed.

PI 542776 to 542778-continued

PI 542777 **origin:** United States. **origin institute:** Indiana Agr. Exp. Sta., Purdue University, West Lafayette, Indiana 47907-1155. **cultivar:** HP72-11. **pedigree:** Derived from cross between dent corn inbred C103 and popcorn double cross followed by two crosses to popcorn single cross. Selection made primarily from South American and Early Yellow. **other id:** PL-156. **group:** CSR-MAIZE. **remarks:** Plant height 127cm and 51cm to ear bearing node. Days to mid-pollen-shed average 73 and to midsilk 77. Ears average 16cm in length with 12 rows of kernels and have good husk coverage. Kernels have yellow endosperm and are too small to make satisfactory seed parent (108 k/10 g). Pollen production dependably large. Cross (dent) sterile (Gal-s). Breeding Material. Seed.

PI 542778 **origin:** United States. **origin institute:** Indiana Agr. Exp. Sta., Purdue University, West Lafayette, Indiana 47907-1155. **cultivar:** HP68-07. **pedigree:** Derived from cross between dent corn inbred H60 and popcorn double cross followed by cross to popcorn single cross. Germplasm involved primarily from Amber Pearl and South American. **other id:** PL-157. **group:** CSR-MAIZE. **remarks:** Plant height 136cm and 62cm to ear bearing node. Days to mid-pollen-shed average 71 and to midsilk 73. Ears average 16cm in length with 14 rows of kernels. Kernels have yellow endosperm and are large enough to make satisfactory seed parent (88 k/10 g). Husk long tight, often reduces seed set. Pollen production fair. Cross (dent) sterile (Gal-s). Ht-1 present for resistance to northern leaf blight. Breeding Material. Seed.

PI 542779 to 542781. *Anthyllis vulneraria* subsp. *carpatica* (Pant.)
Nyman FABACEAE

Donated by: Taylor, N.L., Univ. of Kentucky, Dept. of Agronomy, N-122 Ag. Sc. Bldg.-N, Lexington, Kentucky, United States; and Smith, R.R., ARS-USDA, Midwest Area U.S. Dairy Forage Res. Ctr., Univ. of Wisconsin, 1925 Linden Dr.-W, Madison, Wisconsin, United States. Received October 1989.

PI 542779 **donor id:** ST-8. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** ST-8. **locality:** Side road from Coast Rd., 12km from Jurjevo, Route 6, Village Razbojiste, Croatia Republic. **elevation:** 710m. **received as:** *Anthyllis vulgaris*. Wild. Seed.

PI 542780 **donor id:** ST-16. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** ST-16. **locality:** 17km, 600m from Jurjevo, Route 6, approx. 0.5km S of Krasno, Croatia Republic. **elevation:** 990m. **received as:** *Anthyllis vulgaris*. Wild. Seed.

PI 542779 to 542781-continued

PI 542781 **donor id:** ST-19. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** ST-19. **locality:** On road from Gracac to Karlobag, Route 6, Village Reduce, Croatia Republic. **elevation:** 610m. **received as:** Anthyllis vulgaris. Wild. Seed.

PI 542782. Astragalus sp. FABACEAE

Donated by: Taylor, N.L., Univ. of Kentucky, Dept. of Agronomy, N-122 Ag. Sc. Bldg.-N, Lexington, Kentucky, United States; and Smith, R.R., ARS-USDA, Midwest Area U.S. Dairy Forage Res. Ctr., Univ. of Wisconsin, 1925 Linden Dr.-W, Madison, Wisconsin, United States. Received October 1989.

donor id: T-12. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** T-12. **locality:** Side road from Coast Rd., 12km from Jurjevo, Route 6, Village Razbojiste, Croatia Republic. **elevation:** 710m. Wild. Seed.

PI 542783. Dactylis glomerata L. POACEAE Orchardgrass

Donated by: Taylor, N.L., Univ. of Kentucky, Dept. of Agronomy, N-122 Ag. Sc. Bldg.-N, Lexington, Kentucky, United States; and Smith, R.R., ARS-USDA, Midwest Area U.S. Dairy Forage Res. Ctr., Univ. of Wisconsin, 1925 Linden Dr.-W, Madison, Wisconsin, United States. Received October 1989.

donor id: T-6. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** T-6. **locality:** Plitvice 5km S of Motel "GAJ", Highway no. 13, Croatia Republic. **elevation:** 1000m. Wild. Seed.

PI 542784 to 542785. Lotus corniculatus L. FABACEAE Birdsfoot trefoil

Donated by: Taylor, N.L., Univ. of Kentucky, Dept. of Agronomy, N-122 Ag. Sc. Bldg.-N, Lexington, Kentucky, United States; and Smith, R.R., ARS-USDA, Midwest Area U.S. Dairy Forage Res. Ctr., Univ. of Wisconsin, 1925 Linden Dr.-W, Madison, Wisconsin, United States. Received October 1989.

PI 542784 **donor id:** S-94. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-94. **locality:** Priluka to Lusnic, Road 6, 30km from Glamoc, Bosnia Republic. **elevation:** 740m. **remarks:** Plants mixed, tall and short. Cultivated. Seed.

PI 542784 to 542785-continued

PI 542785 **donor id:** S-104. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-104. **locality:** Route 15 Donji Ranici, Slovenia Republic. **elevation:** 890m. Cultivated. Seed.

PI 542786 to 542792. Lotus sp. FABACEAE

Donated by: Taylor, N.L., Univ. of Kentucky, Dept. of Agronomy, N-122 Ag. Sc. Bldg.-N, Lexington, Kentucky, United States; and Smith, R.R., ARS-USDA, Midwest Area U.S. Dairy Forage Res. Ctr., Univ. of Wisconsin, 1925 Linden Dr.-W, Madison, Wisconsin, United States. Received October 1989.

PI 542786 **donor id:** T-10. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** T-10. **locality:** Side road from Coast Rd., 12km from Jurjevo, Route 6, Village Razbojiste, Croatia Republic. **elevation:** 710m. Wild. Seed.

PI 542787 **donor id:** T-38. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** T-38. **locality:** On route 17 from Mostar to Sarajevo 73km from Mostar to Jablanica, Hercegovia Republic. **elevation:** 500m. Wild. Seed.

PI 542788 **donor id:** S-16. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-16. **locality:** 17km, 600m from Jurjevo, Route 6, approx. 0.5km S of Krasno, Croatia Republic. **elevation:** 990m. **remarks:** Plants green, tall-growing. Flowers yellow. Wild. Seed.

PI 542789 **donor id:** S-105. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-105. **locality:** 2km S of Vrhnika on old road to Trieste, Slovenia Republic. **elevation:** 360m. **remarks:** Plants small. Flowers yellow. Wild. Seed.

PI 542790 **donor id:** S-120. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-120. **locality:** Breginski Stol (mountain) Pri Repetitorjv-Radar Station Navelikem Ovinri, Slovenia Republic. **elevation:** 1110m. **remarks:** Plants large, green. Leaf size varies. Wild. Seed.

PI 542791 **donor id:** S-125. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-125. **locality:** Breginski Stol (mountain), Slovenia Republic. **elevation:** 1400m. **remarks:** Plants large. Wild. Seed.

PI 542792 **donor id:** S-128. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-128. **locality:** Rbisce Ivad Sedlom on side of mountain, Slovenia Republic. **elevation:** 920m. **remarks:** Plants small. Wild. Seed.

PI 542793. *Lotus tenuis* Waldst. & Kit. ex Willd. FABACEAE Narrowleaf
trefoil

Donated by: Taylor, N.L., Univ. of Kentucky, Dept. of Agronomy,
N-122 Ag. Sc. Bldg.-N, Lexington, Kentucky, United States; and
Smith, R.R., ARS-USDA, Midwest Area U.S. Dairy Forage Res. Ctr.,
Univ. of Wisconsin, 1925 Linden Dr.-W, Madison, Wisconsin, United
States. Received October 1989.

donor id: S-40. **origin:** Yugoslavia. **collected:** August
1988. **collector id:** S-40. **locality:** Veljaci. The road
between Ljnbuski and Vrgorac along Trebizet River,
Hercegovia Republic. **elevation:** 600m. Wild. Seed.

PI 542794. *Medicago lupulina* L. FABACEAE Black medic

Donated by: Taylor, N.L., Univ. of Kentucky, Dept. of Agronomy,
N-122 Ag. Sc. Bldg.-N, Lexington, Kentucky, United States; and
Smith, R.R., ARS-USDA, Midwest Area U.S. Dairy Forage Res. Ctr.,
Univ. of Wisconsin, 1925 Linden Dr.-W, Madison, Wisconsin, United
States. Received October 1989.

donor id: T-52. **origin:** Yugoslavia. **collected:** August
1988. **collector id:** T-52. **locality:** 500m from hotel at
Vlasic Mt., Bosnia Republic. **elevation:** 1550m. Wild.
Seed.

PI 542795 to 542800. *Medicago* sp. FABACEAE

Donated by: Taylor, N.L., Univ. of Kentucky, Dept. of Agronomy,
N-122 Ag. Sc. Bldg.-N, Lexington, Kentucky, United States; and
Smith, R.R., ARS-USDA, Midwest Area U.S. Dairy Forage Res. Ctr.,
Univ. of Wisconsin, 1925 Linden Dr.-W, Madison, Wisconsin, United
States. Received October 1989.

PI 542795 **donor id:** T-39. **origin:** Yugoslavia. **collected:** August
1988. **collector id:** T-39. **locality:** On route 17 from
Mostar to Sarajevo 73km from Mostar at Jablanica,
Hercegovia Republic. **elevation:** 500m. Wild. Seed.

PI 542796 **donor id:** S-8. **origin:** Yugoslavia. **collected:** August
1988. **collector id:** S-8. **locality:** Road from Jurjeo to
Krasno, 6km from Jurjeo Route 6, Croatia Republic.
elevation: 300m. Wild. Seed.

PI 542797 **donor id:** S-35. **origin:** Yugoslavia. **collected:** August
1988. **collector id:** S-35. **locality:** Village of Gornje
Postinge near Split (30km from Split, Route #29), Croatia
Republic. **elevation:** 440m. **remarks:** Plants large.
Wild. Seed.

PI 542795 to 542800-continued

- PI 542798 **donor id:** S-46. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-46. **locality:** Approx. 2km from Vrgorac, Vrgorac to Metkovic on Old French Rd., Hercegovia Republic. **elevation:** 600m. **remarks:** Plants small, dry. Wild. Seed.
- PI 542799 **donor id:** S-50. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-50. **locality:** Road Medjugorje to Trebizet, Hercegovia Republic. **elevation:** 350m. **remarks:** Seed from several large plants. Wild. Seed.
- PI 542800 **donor id:** S-118. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-118. **locality:** 5km above Planina, near top of mountain, Slovenia Republic. **elevation:** 850m. **remarks:** Five leaf and stem. Flowers yellow. Wild. Seed.

PI 542801. *Melilotus* sp. FABACEAE

Donated by: Taylor, N.L., Univ. of Kentucky, Dept. of Agronomy, N-122 Ag. Sc. Bldg.-N, Lexington, Kentucky, United States; and Smith, R.R., ARS-USDA, Midwest Area U.S. Dairy Forage Res. Ctr., Univ. of Wisconsin, 1925 Linden Dr.-W, Madison, Wisconsin, United States. Received October 1989.

donor id: S-13. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-13. **locality:** Side road from Coast Rd., 12km from Jurjevo, Route 6, Village Razbojiste, Croatia Republic. **elevation:** 710m. **remarks:** Flowers yellow, low-growing. Single seed pod. Wild. Seed.

PI 542802 to 542812. *Trifolium alpestre* L. FABACEAE Mountain clover

Donated by: Taylor, N.L., Univ. of Kentucky, Dept. of Agronomy, N-122 Ag. Sc. Bldg.-N, Lexington, Kentucky, United States; and Smith, R.R., ARS-USDA, Midwest Area U.S. Dairy Forage Res. Ctr., Univ. of Wisconsin, 1925 Linden Dr.-W, Madison, Wisconsin, United States. Received October 1989.

PI 542802 **donor id:** T-45. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** T-45. **locality:** Sokolac to Pjerak Han Road near Village Luburic Polye, Bosnia Republic. **elevation:** 950m. Wild. Seed.

PI 542803 **donor id:** T-48. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** T-48. **locality:** Ravna Romanijr Sokolac to Mokro-Sar, Bosnia Republic. **elevation:** 1230m. Wild. Seed.

PI 542802 to 542812-continued

- PI 542804 **donor id:** T-86. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** T-86. **locality:** Nanos, Slovenia Republic. **elevation:** 330m. Wild. Seed.
- PI 542805 **donor id:** S-65. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-65. **locality:** Ravna Romanijr Sokolac to Mokro-Sar, Bosnia Republic. **elevation:** 1230m. Wild. Seed.
- PI 542806 **donor id:** S-95. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-95. **locality:** Podgora, Donje Penlye, Route 6, Bosnia Republic. **elevation:** 840m. Wild. Seed.
- PI 542807 **donor id:** S-97. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-97. **locality:** Bosansko. Grahovo to Drvar, Road 14a, 10km to Drvar, Bosnia Republic. **elevation:** 1000m. Wild. Seed.
- PI 542808 **donor id:** ST-43. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** ST-43. **locality:** Sokolac to Pjerak Han Road near Village Luburic Polye, Bosnia Republic. **elevation:** 950m. Wild. Seed.
- PI 542809 **donor id:** ST-60. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** ST-60. **locality:** Kupres plain, 4km from Kupres on road to Lwno, Brosnia, Bosnia Republic. **elevation:** 1140m. Wild. Seed.
- PI 542810 **donor id:** ST-63. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** ST-63. **locality:** Gornji Malovan Road, Kupres to Livnd, Road 16, Bosnia Republic. **elevation:** 1005m. Wild. Seed.
- PI 542811 **donor id:** ST-67. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** ST-67. **locality:** Glamoc to Priluka road near Dragnic, Route 15, Bosnia Republic. **elevation:** 900m. Wild. Seed.
- PI 542812 **donor id:** ST-82. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** ST-82. **locality:** Village Cerknica, community pasture, Slivnca hill, Slovenia Republic. **elevation:** 1100m. Wild. Seed.

PI 542813 to 542816. *Trifolium angustifolium* L. FABACEAE White clover

Donated by: Taylor, N.L., Univ. of Kentucky, Dept. of Agronomy, N-122 Ag. Sc. Bldg.-N, Lexington, Kentucky, United States; and Smith, R.R., ARS-USDA, Midwest Area U.S. Dairy Forage Res. Ctr., Univ. of Wisconsin, 1925 Linden Dr.-W, Madison, Wisconsin, United States. Received October 1989.

PI 542813 to 542816-continued

- PI 542813 **donor id:** T-33. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** T-33. **locality:** Road Vrgdovac to Ljnbusko, Hercegovia Republic. **elevation:** 500m. Wild. Seed.
- PI 542814 **donor id:** S-42. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-42. **locality:** Veljaci. The road between Ljnbuski and Vrgorac along Trebizet River, Hercegovia Republic. **elevation:** 600m. **remarks:** Plants dry, big stems. Good seed producer. Wild. Seed.
- PI 542815 **donor id:** S-44. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-44. **locality:** Approx. 2km from Vrgorac, Vrgorac to Metkovic on Old French Rd., Hercegovia Republic. **elevation:** 600m. Wild. Seed.
- PI 542816 **donor id:** ST-23. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** ST-23. **locality:** Village of Gornje Postinge near Split (30km from Split, Route #29), Croatia Republic. **elevation:** 440m. Wild. Seed.

PI 542817 to 542818. *Trifolium arvense* L. FABACEAE

Donated by: Taylor, N.L., Univ. of Kentucky, Dept. of Agronomy, N-122 Ag. Sc. Bldg.-N, Lexington, Kentucky, United States; and Smith, R.R., ARS-USDA, Midwest Area U.S. Dairy Forage Res. Ctr., Univ. of Wisconsin, 1925 Linden Dr.-W, Madison, Wisconsin, United States. Received October 1989.

- PI 542817 **donor id:** T-18. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** T-18. **locality:** Near Licki, between Gracac to Ricica, Route 6, Croatia Republic. **elevation:** 570m. Wild. Seed.
- PI 542818 **donor id:** S-27. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-27. **locality:** Near Licki, between Gracac to Ricica, Route 6, Croatia Republic. **elevation:** 440m. Wild. Seed.

PI 542819. *Trifolium bocconeii* Savi FABACEAE

Donated by: Taylor, N.L., Univ. of Kentucky, Dept. of Agronomy, N-122 Ag. Sc. Bldg.-N, Lexington, Kentucky, United States; and Smith, R.R., ARS-USDA, Midwest Area U.S. Dairy Forage Res. Ctr., Univ. of Wisconsin, 1925 Linden Dr.-W, Madison, Wisconsin, United States. Received October 1989.

PI 542819-continued

donor id: T-34. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** T-34. **locality:** Road Vrgdovac to Ljnbusko, Hercegovia Republic. **elevation:** 500m. Wild. Seed.

PI 542820 to 542826. *Trifolium campestre* Schreber FABACEAE Large hop clover

Donated by: Taylor, N.L., Univ. of Kentucky, Dept. of Agronomy, N-122 Ag. Sc. Bldg.-N, Lexington, Kentucky, United States; and Smith, R.R., ARS-USDA, Midwest Area U.S. Dairy Forage Res. Ctr., Univ. of Wisconsin, 1925 Linden Dr.-W, Madison, Wisconsin, United States. Received October 1989.

PI 542820 **donor id:** T-47. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** T-47. **locality:** Ravna Romanijr Sokolac to Mokro-Sar, Bosnia Republic. **elevation:** 1230m. Wild. Seed.

PI 542821 **donor id:** T-54. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** T-54. **locality:** Route 16 Koprivnica District. Porice Road between Bu Guyno and Kupres, Bosnia Republic. **elevation:** 940m. Wild. Seed.

PI 542822 **donor id:** S-7. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-7. **locality:** Side road from Coast Rd., 12km from Jurjevo, Route 6, Village Razbojiste, Croatia Republic. **elevation:** 710m. Wild. Seed.

PI 542823 **donor id:** S-45. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-45. **locality:** Approx. 2km from Vrgorac, Vrgorac to Metkovic on Old French Rd., Hercegovia Republic. **elevation:** 600m. Wild. Seed.

PI 542824 **donor id:** S-79. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-79. **locality:** Route 16 Koprivnica District. Porice Road between Bu Guyno and Kupres, Bosnia Republic. **elevation:** 1230m. Wild. Seed.

PI 542825 **donor id:** ST-3. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** ST-3. **locality:** Plitvice 5km S of Motel "GAJ", Highway no. 13, Croatia Republic. **elevation:** 1000m. Wild. Seed.

PI 542826 **donor id:** ST-22. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** ST-22. **locality:** Village of Gornje Postinge near Split (30km from Split, Route #29), Croatia Republic. **elevation:** 440m. Wild. Seed.

PI 542827 to 542829. *Trifolium fragiferum* L. FABACEAE Strawberry
clover

Donated by: Taylor, N.L., Univ. of Kentucky, Dept. of Agronomy, N-122 Ag. Sc. Bldg.-N, Lexington, Kentucky, United States; and Smith, R.R., ARS-USDA, Midwest Area U.S. Dairy Forage Res. Ctr., Univ. of Wisconsin, 1925 Linden Dr.-W, Madison, Wisconsin, United States. Received October 1989.

PI 542827 **donor id:** T-31. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** T-31. **locality:** Veljaci. The road between Ljn buski and Vrgorac along Trebizet River, Hercegovia Republic. **elevation:** 600m. Wild. Seed.

PI 542828 **donor id:** S-37. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-37. **locality:** Town of Turjaci, road to Imostki from Split, Route 61/15, Croatia Republic. **elevation:** 260m. Wild. Seed.

PI 542829 **donor id:** ST-1. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** ST-1. **locality:** West Zagreb, Spansko, Croatia Republic. **elevation:** 400m. Wild. Seed.

PI 542830. *Trifolium hybridum* L. FABACEAE Alsike clover

Donated by: Taylor, N.L., Univ. of Kentucky, Dept. of Agronomy, N-122 Ag. Sc. Bldg.-N, Lexington, Kentucky, United States; and Smith, R.R., ARS-USDA, Midwest Area U.S. Dairy Forage Res. Ctr., Univ. of Wisconsin, 1925 Linden Dr.-W, Madison, Wisconsin, United States. Received October 1989.

donor id: T-61. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** T-61. **locality:** Kupres plain, 4km from Kupres on road to Lwno, Brosnia, Bosnia Republic. **elevation:** 1140m. Wild. Seed.

PI 542831 to 542832. *Trifolium longidentatum* Nab. FABACEAE

Donated by: Taylor, N.L., Univ. of Kentucky, Dept. of Agronomy, N-122 Ag. Sc. Bldg.-N, Lexington, Kentucky, United States; and Smith, R.R., ARS-USDA, Midwest Area U.S. Dairy Forage Res. Ctr., Univ. of Wisconsin, 1925 Linden Dr.-W, Madison, Wisconsin, United States. Received October 1989.

PI 542831 **donor id:** T-56. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** T-56. **locality:** Route 16 Koprivnica District. Porice Road between Bu Guyno and Kupres, Bosnia Republic. **elevation:** 940m. Wild. Seed.

PI 542831 to 542832-continued

PI 542832 **donor id:** ST-55. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** ST-55. **locality:** Route 16 Koprivnica District. Porice Road between Bu Guyno and Kupres, Bosnia Republic. **elevation:** 940m. Wild. Seed.

PI 542833 to 542838. *Trifolium medium* L. FABACEAE Zigzag clover

Donated by: Taylor, N.L., Univ. of Kentucky, Dept. of Agronomy, N-122 Ag. Sc. Bldg.-N, Lexington, Kentucky, United States; and Smith, R.R., ARS-USDA, Midwest Area U.S. Dairy Forage Res. Ctr., Univ. of Wisconsin, 1925 Linden Dr.-W, Madison, Wisconsin, United States. Received October 1989.

PI 542833 **donor id:** T-42. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** T-42. **locality:** Sokolac to Pjerak Han Road near Village Luburic Polye, Bosnia Republic. **elevation:** 950m. Wild. Seed.

PI 542834 **donor id:** T-79. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** T-79. **locality:** Slavenija, 1km before Logatec on old road to Trieste, Slovenia Republic. **elevation:** 460m. Wild. Seed.

PI 542835 **donor id:** S-52. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-52. **locality:** Konjic Village 10km away on route from Konjic to Sarajevo, Hercegovia Republic. **elevation:** 800m. Wild. Seed.

PI 542836 **donor id:** S-101. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-101. **locality:** Road 14A Drvar to Bosanski, Petrovac. Kalonic 2km away, Bosnia Republic. **elevation:** 510m. Wild. Seed.

PI 542837 **donor id:** ST-59. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** ST-59. **locality:** Kupres plain, 4km from Kupres on road to Lwno, Brosnia, Bosnia Republic. **elevation:** 1140m. Wild. Seed.

PI 542838 **donor id:** ST-85. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** ST-85. **locality:** 5km above Planina, near top of mountain, Slovenia Republic. **elevation:** 850m. Wild. Seed.

PI 542839 to 542861. *Trifolium montanum* L. FABACEAE

Donated by: Taylor, N.L., Univ. of Kentucky, Dept. of Agronomy, N-122 Ag. Sc. Bldg.-N, Lexington, Kentucky, United States; and Smith, R.R., ARS-USDA, Midwest Area U.S. Dairy Forage Res. Ctr., Univ. of Wisconsin, 1925 Linden Dr.-W, Madison, Wisconsin, United States. Received October 1989.

PI 542839 to 542861-continued

- PI 542839 **donor id:** T-11. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** T-11. **locality:** Side road from Coast Rd., 12km from Jurjevo, Route 6, Village Razbojiste, Croatia Republic. **elevation:** 710m. Wild. Seed.
- PI 542840 **donor id:** T-17. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** T-17. **locality:** Near Licki, between Gracac to Ricica, Route 6, Croatia Republic. **elevation:** 570m. Wild. Seed.
- PI 542841 **donor id:** T-20. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** T-20. **locality:** On road from Gracac to Karlobag, Route 6, Village Reduce, Croatia Republic. **elevation:** 610m. Wild. Seed.
- PI 542842 **donor id:** T-27. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** T-27. **locality:** Village of Gornje Postinge near Split (30km from Split, Route #29), Croatia Republic. **elevation:** 440m. Wild. Seed.
- PI 542843 **donor id:** T-49. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** T-49. **locality:** Ravna Romanijr Sokolac to Mokro-Sar, Bosnia Republic. **elevation:** 1230m. Wild. Seed.
- PI 542844 **donor id:** T-66. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** T-66. **locality:** Glormoc Hotel HRAST, Route 15 2km from Glamoc, Bosnia Republic. **elevation:** 920m. Wild. Seed.
- PI 542845 **donor id:** T-71. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** T-71. **locality:** Podgora, Donje Penlye, Route 6, Bosnia Republic. **elevation:** 840m. Wild. Seed.
- PI 542846 **donor id:** T-72. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** T-72. **locality:** Bosansko. Grahovo to Drvar, Road 14A, 10km to Drvar, Bosnia Republic. **elevation:** 840m. Wild. Seed.
- PI 542847 **donor id:** T-75. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** T-75. **locality:** Road 14A Drvar to Bosanski, Petrovac. Kalonic 2km away, Bosnia Republic. **elevation:** 1000m. Wild. Seed.
- PI 542848 **donor id:** S-64. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-64. **locality:** Ravna Romanijr Sokolac to Mokro-Sar, Bosnia Republic. **elevation:** 1230m. Wild. Seed.

PI 542839 to 542861-continued

- PI 542849 **donor id:** S-84. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-84. **locality:** Gornji Malovan Road, Kupres to Livnd, Road 16, Bosnia Republic. **elevation:** 1005m. Wild. Seed.
- PI 542850 **donor id:** S-91. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-91. **locality:** Glamoc to Priluka road near Dragnic, Route 15, Bosnia Republic. **elevation:** 900m. Wild. Seed.
- PI 542851 **donor id:** S-108A. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-108A. **locality:** Slavenija, 1km before Logatec on old road to Trieste, Slovenia Republic. **elevation:** 460m. Wild. Seed.
- PI 542852 **donor id:** S-112. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-112. **locality:** Village of Blocice, community pasture, Slovenia Republic. **elevation:** 700m. Wild. Seed.
- PI 542853 **donor id:** S-123. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-123. **locality:** Breginski Stol (mountain), Slovenia Republic. **elevation:** 1400m. Wild. Seed.
- PI 542854 **donor id:** S-126. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-126. **locality:** Breginski Stol (mountain), Slovenia Republic. **elevation:** 1400m. Wild. Seed.
- PI 542855 **donor id:** S-130. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-130. **locality:** Lower on Breginski Stol (mountain), Slovenia Republic. **elevation:** 1200m. Wild. Seed.
- PI 542856 **donor id:** ST-14. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** ST-14. **locality:** 17km, 600m from Jurjevo, Route 6, approx. 0.5 S of Krasno, Croatia Republic. **elevation:** 990m. Wild. Seed.
- PI 542857 **donor id:** ST-44. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** ST-44. **locality:** Sokolac to Pjerak Han Road near Village Luburic Polye, Bosnia Republic. **elevation:** 950m. Wild. Seed.
- PI 542858 **donor id:** ST-81. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** ST-81. **locality:** Village Cerknica, community pasture, Slivnca hill, Slovenia Republic. **elevation:** 1100m. Wild. Seed.

PI 542839 to 542861-continued

- PI 542859 **donor id:** ST-83. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** ST-83. **locality:** 5km above Planina, near top of mountain, Slovenia Republic. **elevation:** 850m. Wild. Seed.
- PI 542860 **donor id:** ST-88. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** ST-88. **locality:** Breginski Stol (mountain) Pri Repetitorjv - Radar Station Navelikem Ovinri, Slovenia Republic. **elevation:** 1110m. Wild. Seed.
- PI 542861 **donor id:** ST-93. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** ST-93. **locality:** Breginski Stol (mountain), Slovenia Republic. **elevation:** 1400m. Wild. Seed.

PI 542862 to 542863. *Trifolium ochroleucum* Hudson FABACEAE

Donated by: Taylor, N.L., Univ. of Kentucky, Dept. of Agronomy, N-122 Ag. Sc. Bldg.-N, Lexington, Kentucky, United States; and Smith, R.R., ARS-USDA, Midwest Area U.S. Dairy Forage Res. Ctr., Univ. of Wisconsin, 1925 Linden Dr.-W, Madison, Wisconsin, United States. Received October 1989.

- PI 542862 **donor id:** T-46. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** T-46. **locality:** Sokolac to Pjerak Han Road near Village Luburic Polye, Bosnia Republic. **elevation:** 950m. Wild. Seed.
- PI 542863 **donor id:** ST-65. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** ST-65. **locality:** Gornji Malovan Road, Kupres to Livnd, Road 16, Bosnia Republic. **elevation:** 1005m. Wild. Seed.

PI 542864. *Trifolium pallidum* Waldst. & Kit. FABACEAE

Donated by: Taylor, N.L., Univ. of Kentucky, Dept. of Agronomy, N-122 Ag. Sc. Bldg.-N, Lexington, Kentucky, United States; and Smith, R.R., ARS-USDA, Midwest Area U.S. Dairy Forage Res. Ctr., Univ. of Wisconsin, 1925 Linden Dr.-W, Madison, Wisconsin, United States. Received October 1989.

donor id: T-35. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** T-35. **locality:** Road Vrgdovac to Ljnbusko, Hercegovia Republic. **elevation:** 500m. Wild. Seed.

PI 542865. *Trifolium pannonicum* Jacq. FABACEAE Hungarian clover

Donated by: Taylor, N.L., Univ. of Kentucky, Dept. of Agronomy, N-122 Ag. Sc. Bldg.-N, Lexington, Kentucky, United States; and Smith, R.R., ARS-USDA, Midwest Area U.S. Dairy Forage Res. Ctr., Univ. of Wisconsin, 1925 Linden Dr.-W, Madison, Wisconsin, United States. Received October 1989.

donor id: ST-45. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** ST-45. **locality:** Sokolac to Pjerak Han Road near Village Luburic Polye, Bosnia Republic. **elevation:** 950m. Wild. Seed.

PI 542866 to 542900. *Trifolium pratense* L. FABACEAE Red clover

Donated by: Taylor, N.L., Univ. of Kentucky, Dept. of Agronomy, N-122 Ag. Sc. Bldg.-N, Lexington, Kentucky, United States; and Smith, R.R., ARS-USDA, Midwest Area U.S. Dairy Forage Res. Ctr., Univ. of Wisconsin, 1925 Linden Dr.-W, Madison, Wisconsin, United States. Received October 1989.

PI 542866 **donor id:** T-30. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** T-30. **locality:** Veljaci. The road between Ljnbuski and Vrgorac along Trebizet River, Hercegovia Republic. **elevation:** 600m. Wild. Seed.

PI 542867 **donor id:** T-50. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** T-50. **locality:** On top of mountain near radar station Vlastic Mt., Bosnia Republic. **elevation:** 1230m. Wild. Seed.

PI 542868 **donor id:** T-57. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** T-57. **locality:** Overlooking Tito's hunting estate, Bosnia Republic. **elevation:** 1180m. Wild. Seed.

PI 542869 **donor id:** T-64. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** T-64. **locality:** Gornji Malovan Road, Kupres to Livnd, Road 16, Bosnia Republic. **elevation:** 1005m. Wild. Seed.

PI 542870 **donor id:** T-70. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** T-70. **locality:** Priluka to Lusnic, Road 6, 30 km from Glamoc, Bosnia Republic. **elevation:** 740m. Wild. Seed.

PI 542871 **donor id:** T-76. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** T-76. **locality:** Route 15 Donji Ranici, Slovenia Republic. **elevation:** 890m. Wild. Seed.

PI 542866 to 542900-continued

- PI 542872 **donor id:** T-78. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** T-78. **locality:** 2km S of Vrhnika on old road to Trieste, Slovenia Republic. **elevation:** 890m. Wild. Seed.
- PI 542873 **donor id:** T-87. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** T-87. **locality:** Nanos, Slovenia Republic. **elevation:** 330m. Wild. Seed.
- PI 542874 **donor id:** T-89. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** T-89. **locality:** Breginski Stol (mountain) Pri repetitorjv - Radar Station Navelikem Ovinri, Slovenia Republic. **elevation:** 1110m. Wild. Seed.
- PI 542875 **donor id:** T-95. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** T-95. **locality:** Lower on Breginski Stol, Slovenia Republic. **elevation:** 720m. Wild. Seed.
- PI 542876 **donor id:** ST-4. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** ST-4. **locality:** Plitvice 5km S of Motel "GAJ", Highway no. 13, Croatia Republic. **elevation:** 1000m. Wild. Seed.
- PI 542877 **donor id:** S-20. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-20. **locality:** St. Iiovac, lumber camp, Croatia Republic. **elevation:** 1090m. Wild. Seed.
- PI 542878 **donor id:** S-22. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-22. **locality:** Route 11, between Muskocvi and Gracac, Croatia Republic. **elevation:** 800m. Wild. Seed.
- PI 542879 **donor id:** S-26. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-26. **locality:** Near Licki, between Gracac to Ricica, Route 6, Croatia Republic. **elevation:** 570m. Wild. Seed.
- PI 542880 **donor id:** S-51. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-51. **locality:** On route 17 from Mostar to Sarajevo 73km from Mostar at Jablanica, Hercegovia Republic. **elevation:** 500m. Wild. Seed.
- PI 542881 **donor id:** S-73. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-73. **locality:** Vlastic Mountain ski lodge, Bosnia Republic. **elevation:** 1280m. Wild. Seed.
- PI 542882 **donor id:** S-74. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-74. **locality:** Vlastic Mountain ski lodge, Bosnia Republic. **elevation:** 1280m. Wild. Seed.

PI 542866 to 542900-continued

- PI 542883 **donor id:** S-75. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-75. **locality:** Vlastic Mountain ski lodge, Bosnia Republic. **elevation:** 1280m. Wild. Seed.
- PI 542884 **donor id:** S-78. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-78. **locality:** Route 16 Koprivnica District. Porice Road between Bu Guyno and Kupres, Bosnia Republic. **elevation:** 940m. Wild. Seed.
- PI 542885 **donor id:** S-80. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-80. **locality:** Route 16 Koprivnica District. Porice Road between Bu Guyno and Kupres, Bosnia Republic. **elevation:** 940m. Wild. Seed.
- PI 542886 **donor id:** S-92. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-92. **locality:** Priluka to Lusnic, Road 6, 30km from Glamoc, Bosnia Republic. **elevation:** 740m. Wild. Seed.
- PI 542887 **donor id:** S-98. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-98. **locality:** Bosansko. Grahovo to Drvar, Road 14A, 10km to Drvar, Bosnia Republic. **elevation:** 1000m. Wild. Seed.
- PI 542888 **donor id:** S-102. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-102. **locality:** Road 14A Drvar to Bosanski, Petrovac. Kalonic 2km away, Bosnia Republic. **elevation:** 510m. Wild. Seed.
- PI 542889 **donor id:** S-103. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-103. **locality:** Route 15 Donji Ranici, Slovenia Republic. **elevation:** 890m. Wild. Seed.
- PI 542890 **donor id:** ST-9. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** ST-9. **locality:** Side road from Coast Rd., 12km from Jurjevo, Route 6, Village Razbojiste, Croatia Republic. **elevation:** 710m. Wild. Seed.
- PI 542891 **donor id:** ST-13. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** ST-13. **locality:** 17km, 600m from Jurjevo, Route 6, approx. 0.5km S of Krasno, Croatia Republic. **elevation:** 990m. Wild. Seed.
- PI 542892 **donor id:** ST-15. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** ST-15. **locality:** 17km, 600m from Jurjevo, Route 6, approx. 0.5km S of Krasno, Croatia Republic. **elevation:** 990m. Wild. Seed.

PI 542866 to 542900-continued

- PI 542893 donor id: ST-24. origin: Yugoslavia. collected: August 1988. collector id: ST-24. locality: Village of Gornje Postinge near Split (30km from Split, Route #29), Croatia Republic. elevation: 440m. Wild. Seed.
- PI 542894 donor id: ST-40. origin: Yugoslavia. collected: August 1988. collector id: ST-40. locality: Konjic Village 10km away on route from Konjic to Sarajevo, Hercegovia Republic. elevation: 800m. Wild. Seed.
- PI 542895 donor id: ST-51. origin: Yugoslavia. collected: August 1988. collector id: ST-51. locality: 500m from hotel at Vlastic Mt., Bosnia Republic. elevation: 1550m. Wild. Seed.
- PI 542896 donor id: ST-58. origin: Yugoslavia. collected: August 1988. collector id: ST-58. locality: Overlooking Tito's hunting estate, Bosnia Republic. elevation: 1180m. Wild. Seed.
- PI 542897 donor id: ST-74. origin: Yugoslavia. collected: August 1988. collector id: ST-74. locality: Road 14A Ostrelj at Hotel Ostrelj, Bosnia Republic. elevation: 1060m. Wild. Seed.
- PI 542898 donor id: ST-77. origin: Yugoslavia. collected: August 1988. collector id: ST-77. locality: 2km S of Vrhnika on old road to Trieste, Slovenia Republic. elevation: 360m. Wild. Seed.
- PI 542899 donor id: ST-84. origin: Yugoslavia. collected: August 1988. collector id: ST-84. locality: 5km above Planina, near top of mountain, Slovenia Republic. elevation: 850m. Wild. Seed.
- PI 542900 donor id: ST-91. origin: Yugoslavia. collected: August 1988. collector id: ST-91. locality: Breginski Stol (mountain), Slovenia Republic. elevation: 1400m. Wild. Seed.

PI 542901 to 542916. *Trifolium repens* L. FABACEAE Dutch clover

Donated by: Taylor, N.L., Univ. of Kentucky, Dept. of Agronomy, N-122 Ag. Sc. Bldg.-N, Lexington, Kentucky, United States; and Smith, R.R., ARS-USDA, Midwest Area U.S. Dairy Forage Res. Ctr., Univ. of Wisconsin, 1925 Linden Dr.-W, Madison, Wisconsin, United States. Received October 1989.

PI 542901 to 542916-continued

- PI 542901 donor id: T-69. origin: Yugoslavia. collected: August 1988. collector id: T-69. locality: Glamoc to Priluka road near Dragnic, Route 15, Bosnia Republic. elevation: 900m. Wild. Seed.
- PI 542902 donor id: T-92. origin: Yugoslavia. collected: August 1988. collector id: T-92. locality: Breginski Stol (mountain), Slovenia Republic. elevation: 1400m. Wild. Seed.
- PI 542903 donor id: S-21. origin: Yugoslavia. collected: August 1988. collector id: S-21. locality: St. Iiovaca, lumber camp, Croatia Republic. elevation: 1090m. Wild. Seed.
- PI 542904 donor id: S-28. origin: Yugoslavia. collected: August 1988. collector id: S-28. locality: Near Licki, between Gracac to Ricica, Route 6, Croatia Republic. elevation: 570m. Wild. Seed.
- PI 542905 donor id: S-32. origin: Yugoslavia. collected: August 1988. collector id: S-32. locality: Village of Gornje Postinge near Split (30km from Split, Route #29), Croatia Republic. elevation: 440m. Wild. Seed.
- PI 542906 donor id: S-39. origin: Yugoslavia. collected: August 1988. collector id: S-39. locality: Town of Turjaci - road to Imostki from Split. route 61/15, Croatia Republic. elevation: 260m. Wild. Seed.
- PI 542907 donor id: S-43. origin: Yugoslavia. collected: August 1988. collector id: S-43. locality: Veljaci. The road between Ljnbuski and Vrgorac along Trebizet River, Hercegovia Republic. elevation: 600m. Wild. Seed.
- PI 542908 donor id: S-56. origin: Yugoslavia. collected: August 1988. collector id: S-56. locality: Sokolac to Pjerak Han Road near Village Luburic Polye, Bosnia Republic. elevation: 480m. Wild. Seed.
- PI 542909 donor id: S-58. origin: Yugoslavia. collected: August 1988. collector id: S-58. locality: Sokolac to Pjerak Han Road near Village Luburic Polye, Bosnia Republic. elevation: 950m. Wild. Seed.
- PI 542910 donor id: S-68. origin: Yugoslavia. collected: August 1988. collector id: S-68. locality: On top of mountain near radar station Vlasic Mt., Bosnia Republic. elevation: 1660m. Wild. Seed.

PI 542901 to 542916-continued

- PI 542911 **donor id:** S-86. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-86. **locality:** Gornji Malovan road, Kupres to Livnd, Road 16, Bosnia Republic. **elevation:** 1005m. Wild. Seed.
- PI 542912 **donor id:** S-93. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-93. **locality:** Priluka to Lusnic, Road 6, 30km from Glamoc, Bosnia Republic. **elevation:** 740m. Wild. Seed.
- PI 542913 **donor id:** S-114. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-114. **locality:** 5km above Planina, near top of mountain, Slovenia Republic. **elevation:** 850m. Wild. Seed.
- PI 542914 **donor id:** ST-5. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** ST-5. **locality:** Plitvice 5km S of Motel "GAJ", Highway no. 13, Croatia Republic. **elevation:** 1000m. Wild. Seed.
- PI 542915 **donor id:** ST-41. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** ST-41. **locality:** Konjic Village 10km away on route from Konjic to Sarajevo, Hercegovia Republic. **elevation:** 800m. Wild. Seed.
- PI 542916 **donor id:** ST-53. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** ST-53. **locality:** 500m from hotel at Vlastic Mt., Bosnia Republic. **elevation:** 1550m. Wild. Seed.

PI 542917 to 542925. *Trifolium rubens* L. FABACEAE

Donated by: Taylor, N.L., Univ. of Kentucky, Dept. of Agronomy, N-122 Ag. Sc. Bldg.-N, Lexington, Kentucky, United States; and Smith, R.R., ARS-USDA, Midwest Area U.S. Dairy Forage Res. Ctr., Univ. of Wisconsin, 1925 Linden Dr.-W, Madison, Wisconsin, United States. Received October 1989.

- PI 542917 **donor id:** T-80. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** T-80. **locality:** Slavenija, 1km before Logatec on old road to Trieste, Bosnia Republic. **elevation:** 940m. Wild. Seed.
- PI 542918 **donor id:** T-90. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** T-90. **locality:** Breginski Stol (mountain) Pri Repetitorjv - Radar Station Navelikem Ovinri, Slovenia Republic. **elevation:** 1110m. Wild. Seed.

PI 542917 to 542925-continued

- PI 542919 **donor id:** S-63. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-63. **locality:** Ravna Romanijr Sokolac to Mokro-Sar, Bosnia Republic. **elevation:** 1230m. Wild. Seed.
- PI 542920 **donor id:** S-100. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-100. **locality:** Road 14A Ostrelj at Hotel Ostrelj, Bosnia Republic. **elevation:** 1060m. Wild. Seed.
- PI 542921 **donor id:** S-121. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-121. **locality:** Breginski Stol (mountain) Pri Repetitorjv - Radar Station Navelikem Ovinri, Slovenia Republic. **elevation:** 1110m. Wild. Seed.
- PI 542922 **donor id:** S-127. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-127. **locality:** Breginski Stol (mountain), Slovenia Republic. **elevation:** 1400m. Wild. Seed.
- PI 542923 **donor id:** ST-68. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** ST-68. **locality:** Glamoc to Priluka road near Dragnic, Route 15, Bosnia Republic. **elevation:** 900m. Wild. Seed.
- PI 542924 **donor id:** ST-73. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** ST-73. **locality:** Bosansko. Grahovo to Drvar, Road 14A, 10km to Drvar, Bosnia Republic. **elevation:** 1000m. Wild. Seed.
- PI 542925 **donor id:** ST-94. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** ST-94. **locality:** Rbisce Ivad Sedlom on side of mountain, Slovenia Republic. **elevation:** 920m. Wild. Seed.

PI 542926 to 542929. *Trifolium scabrum* L. FABACEAE Rough clover

Donated by: Taylor, N.L., Univ. of Kentucky, Dept. of Agronomy, N-122 Ag. Sc. Bldg.-N, Lexington, Kentucky, United States; and Smith, R.R., ARS-USDA, Midwest Area U.S. Dairy Forage Res. Ctr., Univ. of Wisconsin, 1925 Linden Dr.-W, Madison, Wisconsin, United States. Received October 1989.

- PI 542926 **donor id:** T-7. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** T-7. **locality:** Road from Jurjeo to Krasno, 6km from Jurjeo Route 6, Croatia Republic. **elevation:** 300m. Wild. Seed.

PI 542926 to 542929-continued

- PI 542927 **donor id:** T-26. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** T-26. **locality:** Village of Gornje Postinge near Split (30km from Split, Route #29), Croatia Republic. **elevation:** 440m. Wild. Seed.
- PI 542928 **donor id:** T-32. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** T-32. **locality:** About 2km from Vrgorac, Vrgorac to Metkovic on Old French Rd., Hercegovia Republic. **elevation:** 600m. Wild. Seed.
- PI 542929 **donor id:** ST-36. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** ST-36. **locality:** Road Medjugorje to Trebiszet, Hercegovia Republic. **elevation:** 350m. Wild. Seed.

PI 542930 to 542932. *Trifolium* sp. FABACEAE

Donated by: Taylor, N.L., Univ. of Kentucky, Dept. of Agronomy, N-122 Ag. Sc. Bldg.-N, Lexington, Kentucky, United States; and Smith, R.R., ARS-USDA, Midwest Area U.S. Dairy Forage Res. Ctr., Univ. of Wisconsin, 1925 Linden Dr.-W, Madison, Wisconsin, United States. Received October 1989.

- PI 542930 **donor id:** S-59. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-59. **locality:** Sokolac to Pjerak Han Road near Village Luburic Polye, Bosnia Republic. **elevation:** 950m. Wild. Seed.
- PI 542931 **donor id:** S-60. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-60. **locality:** Sokolac to Pjerak Han Road near Village Luburic Polye, Bosnia Republic. **elevation:** 950m. Wild. Seed.
- PI 542932 **donor id:** S-66. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** S-66. **locality:** Ravna Romanijr Sokolac to Mokro-Sar, Bosnia Republic. **elevation:** 1230m. Wild. Seed.

PI 542933 to 542934. *Trifolium trichopterum* Pancic FABACEAE

Donated by: Taylor, N.L., Univ. of Kentucky, Dept. of Agronomy, N-122 Ag. Sc. Bldg.-N, Lexington, Kentucky, United States; and Smith, R.R., ARS-USDA, Midwest Area U.S. Dairy Forage Res. Ctr., Univ. of Wisconsin, 1925 Linden Dr.-W, Madison, Wisconsin, United States. Received October 1989.

- PI 542933 **donor id:** ST-25. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** ST-25. **locality:** Village of Gornje Postinge near Split (30km from Split, Route #29), Croatia Republic. **elevation:** 440m. Wild. Seed.

PI 542933 to 542934-continued

PI 542934 **donor id:** ST-28. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** ST-28. **locality:** Town of Turjaci - road to Imostki from Split. Route 61/15, Croatia Republic. **elevation:** 260m. Wild. Seed.

PI 542935 to 542936. UNDETERMINED sp. NONE

Donated by: Taylor, N.L., Univ. of Kentucky, Dept. of Agronomy, N-122 Ag. Sc. Bldg.-N, Lexington, Kentucky, United States; and Smith, R.R., ARS-USDA, Midwest Area U.S. Dairy Forage Res. Ctr., Univ. of Wisconsin, 1925 Linden Dr.-W, Madison, Wisconsin, United States. Received October 1989.

PI 542935 **donor id:** T-21. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** T-21. **locality:** On road from Gracac to Karlobag, route #6, Village Reduce Croatia Republic. **elevation:** 610m. Wild. Seed.

PI 542936 **donor id:** ST-2. **origin:** Yugoslavia. **collected:** August 1988. **collector id:** ST-2. **locality:** Zagreb Plitvice Lakes, Plitvice Motel "GAJ" Highway no. 13, Croatia Republic. **elevation:** 600m. Wild. Seed.

PI 542937 to 542959. *Zea mays* L. subsp. *mays* POACEAE Corn

Donated by: West, D.R., Plant & Soil Science Dept., P.O. Box 1071, Knoxville, Tennessee, United States. Received May 30, 1990.

PI 542937 **donor id:** TN89:211. **origin:** United States. **cultivar:** AB18. Annual. Breeding Material. Seed.

PI 542938 **donor id:** TN89:214. **origin:** United States. **cultivar:** AB610. Annual. Breeding Material. Seed.

PI 542939 **donor id:** TN89:215. **origin:** United States. **cultivar:** AB616. Annual. Breeding Material. Seed.

PI 542940 **donor id:** TN89:216. **origin:** United States. **cultivar:** OK22. Annual. Breeding Material. Seed.

PI 542941 **donor id:** TN89:217. **origin:** United States. **cultivar:** SC84. Annual. Breeding Material. Seed.

PI 542942 **donor id:** TN89:218. **origin:** United States. **cultivar:** SC155. Annual. Breeding Material. Seed.

PI 542943 **donor id:** TN89:219. **origin:** United States. **cultivar:** SC229. Annual. Breeding Material. Seed.

PI 542937 to 542959-continued

PI 542944 **donor id:** TN89:220. **origin:** United States. **cultivar:**
SC301. Annual. Breeding Material. Seed.

PI 542945 **donor id:** TN89:222. **origin:** United States. **cultivar:**
SC343. Annual. Breeding Material. Seed.

PI 542946 **donor id:** TN89:223. **origin:** United States. **cultivar:**
SC359. Annual. Breeding Material. Seed.

PI 542947 **donor id:** TN89:224. **origin:** United States. **cultivar:**
SC401. Annual. Breeding Material. Seed.

PI 542948 **donor id:** TN89:203. **origin:** United States. **cultivar:**
T204. **other id:** NSL 157309. Annual. Breeding Material.
Seed.

PI 542949 **donor id:** TN89:204. **origin:** United States. **cultivar:**
T222. Annual. Breeding Material. Seed.

PI 542950 **donor id:** TN89:205. **origin:** United States. **cultivar:**
T238. Annual. Breeding Material. Seed.

PI 542951 **donor id:** TN89:207. **origin:** United States. **cultivar:**
T250. Annual. Breeding Material. Seed.

PI 542952 **donor id:** TN89:208. **origin:** United States. **cultivar:**
T252. Annual. Breeding Material. Seed.

PI 542953 **donor id:** TN89:209. **origin:** United States. **cultivar:**
T264. Annual. Breeding Material. Seed.

PI 542954 **donor id:** TN89:210. **origin:** United States. **cultivar:**
T268. Annual. Breeding Material. Seed.

PI 542955 **donor id:** TN89:226. **origin:** United States. **cultivar:**
VA4. Annual. Breeding Material. Seed.

PI 542956 **donor id:** TN89:227. **origin:** United States. **cultivar:**
VA5. Annual. Breeding Material. Seed.

PI 542957 **donor id:** TN89:228. **origin:** United States. **cultivar:**
VA6. Annual. Breeding Material. Seed.

PI 542958 **donor id:** TN89:229. **origin:** United States. **cultivar:**
VA10. Annual. Breeding Material. Seed.

PI 542959 **donor id:** TN89:232. **origin:** United States. **cultivar:**
VA33. Annual. Breeding Material. Seed.

PI 542960. *Arachis hypogaea* L. subsp. *hypogaea* FABACEAE Peanut

Donated by: Branch, W.D., Georgia Agr. Exp. Stas., University of Georgia, Tifton, Georgia, United States. **remarks:** Georgia Runner Peanut. Received July 30, 1990.

origin: United States. **origin institute:** Georgia Agr. Exp. Stas., University of Georgia, Tifton, Georgia 31793-0748. **cultivar:** GEORGIA RUNNER. **pedigree:** Spanish mutant-type, Krinkle-leaf/PI 331334. **other id:** CV-41. **group:** CSR-PEANUT. **remarks:** Highly productive runner type with large percentage of jumbo runner seed. Four year (1986-89) mean field performance (20 tests) found significantly higher yield and dollar return by approximately 5%, respectively, over cultivar Florunner. Significantly higher percentage (ca. 7%) of extra large seed (>0.85 x 2.54 cm screen) than Florunner. Typical runner growth habit with large proportion. Cultivar. Seed.

PI 542961. *Arachis hypogaea* L. FABACEAE Peanut

Donated by: Branch, W.D., Georgia Agr. Exp. Sta., University of Georgia, Tifton, Georgia, United States; and Agricultural Research Service -- USDA. **remarks:** CPES Peanut Germplasm Population. Received July 30, 1990.

origin: United States. **origin institute:** Georgia Agr. Exp. Stas., University of Georgia, Tifton, Georgia 31793-0748. **cultivar:** CONVERGENT PEANUT EARLY-SEGREGATING. **pedigree:** Sixteen diverse parental lines. **other id:** GP-55. **group:** CSR-PEANUT. **remarks:** Unselected broad-base germplasm material developed by compositing F2-generation progenies which were systematically bulked for subsequent disease and insect screening. Variability includes an array of characteristics such as growth habit, maturity, pod shape, seed size, testa color, etc. Convergent hybridization scheme included four different crossing cycles and. Breeding Material. Seed.

PI 542962. *Sorghum bicolor* (L.) Moench POACEAE Sudangrass

Donated by: York, J.O., Arkansas Agricultural Experiment Sta., Plant Science 115, Fayetteville, Arkansas, United States. Received June 28, 1990.

PI 542962-continued

origin: United States. **developer country:** United States.
origin institute: Delta Branch Experiment Station,
Stoneville, Mississippi. **cultivar:** STONEVILLE SYNTHETIC.
remarks: Coarse sudangrass with small, round seed that
thresh free of glumes. Brownish white pericarp, starch
mesocarp, and black glumes. Panical type is open. Panicle
does not clear the sheath, approximately 5cm of the
panicle remaining in the sheath. Height averages 135cm.
Flowers approximately 82 days after emergence. Resistant
to Sorghum downy mildew (*Peronosclerospora sorghi*).
Developed for its resistance to. Spring Annual.
Breeding Material. Seed.

PI 542963. *Centrosema plumieri* (Turpin ex Pers.) Benth. FABACEAE

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

donor id: VI 60. **origin:** Dominican Republic. **collected:**
March 15, 1988. **locality:** Roadside, Route 4, km 30, 3km
after San Pederro de Macoris, towards Hato Mayor.
remarks: Propagated Spring, 1989, St. Croix, V.I. Wild.
Seed.

PI 542964. *Saccharum hybrid* POACEAE Sugarcane

Donated by: Legendre, B.L., Agricultural Research Service -- USDA,
Sugarcane Research Unit, Houma, Louisiana, United States; and
Estacion Experimental Agro-Industrial, "Obispo Colombres". **remarks:**
TUCCP 77-42 Sugarcane. Received June 27, 1990.

origin: United States. **origin institute:** Agricultural
Research Service -- USDA, Sugarcane Research Unit, Houma,
Louisiana 70361. **cultivar:** TUCCP 77-42. **pedigree:** CP
71-321/US 72-19. **other id:** CV-83. **group:** CSR-SUGARCANE.
remarks: High population of medium-sized, green stalks of
average stalk weight. Relatively high sucrose content
early in harvest season. Moderate fiber content (13.25%).
High tonnage. Rapid bud germination. Moderately erect,
non-brittle. Especially suited to mechanical harvesting.
Moderately resistant to mosaic virus, smut caused by
Ustilago scitaminea, and red stripe caused by
Xanthomonas. Cultivar. Cutting.

PI 542965. *Trifolium ambiguum* M. Bieb. FABACEAE Kura clover

Donated by: Rumbaugh, M.D., Agricultural Research Service -- USDA, Forage and Range Research Lab., Utah State University, Logan, Utah, United States; and Soil Conservation Service - USDA; and Utah Agr. Exp. Sta.. **remarks:** ARS-2678 Kura Clover. Received June 27, 1990.

origin: United States. **origin institute:** Agricultural Research Service -- USDA, Forage and Range Research Lab., Utah State University, Logan, Utah 84322-6300. **cultivar:** ARS-2678. **pedigree:** 81 parent clones. **other id:** GP-91. **group:** CSR-OTHER LEGUMES. **remarks:** Winterhardy. Tolerant of drought and high temperatures. Superior forage and seed yields in non-irrigated environments. Spreads extensively by means of rhizomes. Hexaploid with 48 chromosomes. Breeding Material. Seed.

PI 542966. *Stenotaphrum secundatum* (Walter) Kuntze POACEAE

Donated by: Riordan, T.P., O.M. Scott and Sons, Dept. of Horticulture, University of Nebraska, Lincoln, Nebraska, United States. **remarks:** Dal Mar St. Augustine Grass. Received June 27, 1990.

origin: United States. **origin institute:** O.M. Scott and Sons, Marysville, Ohio 43042. **cultivar:** DEL MAR. **pedigree:** Selected from controlled pollination of Seville. **other id:** CV-138. **group:** CSR-OTHER GRASSES. **remarks:** Good turf quality characteristics throughout year. Color green throughout growing season and not as purple in stem as most other St. Augustinegrasses. Produces few flowering spikes. Resistant to decline virus and gray leafspot (*Pyricularia grisea*) and dollar spot (*Curvalaria* sp.). Tolerance to chinchbugs (*Blissus* sp.) and sod webworm (*Cranbus* sp.). Cultivar. Plant.

PI 542967 to 542968. *Medicago sativa* L. FABACEAE Alfalfa

Donated by: Bingham, E.T., Wisconsin Agr. Exp. Sta., Univ. of Wisconsin, Agronomy Dept., Madison, Wisconsin, United States. **remarks:** W2Xiso-1 and W4Xiso-1 Alfalfa Germplasm. Received July 25, 1990.

PI 542967 to 542968-continued

PI 542967 **origin:** United States. **origin institute:** Wisconsin Agr. Exp. Sta., University of Wisconsin, Agronomy Dept., Madison, Wisconsin 53706. **cultivar:** W2Xiso-1. **other id:** GP-239. **group:** CSR-ALFALFA. **remarks:** Developed for comparative research on diploids and tetraploids. Two-cut alfalfa in Wisconsin. Lower in herbage yield and less tolerant of stress than W4Xiso-1. May be due to lower vigor and higher frequency of homozygous recessive genotypes segregating in the 2Xiso-1 population. Some CADL parents were heterozygous for certain qualitative traits. One tetraploid from union of 2n egg and 2n pollen. Not. Breeding Material. Seed.

PI 542968 **origin:** United States. **origin institute:** Wisconsin Agr. Exp. Sta., University of Wisconsin, Agronomy Dept., Madison, Wisconsin 53706. **cultivar:** W4Xiso-1. **other id:** GP-240. **group:** CSR-ALFALFA. **remarks:** Developed for comparative research on diploids and tetraploids. Three cut alfalfa in Wisconsin. Some CADL parents were heterozygous for certain qualitative traits and the generation of 2Xiso-1 used for seed increase segregated for the following traits in 100 plant sample: cream flowers (2%), white flowers (1%), male sterile (2%), 2n pollen (2%), and dark brown seed (1%). One tetraploid from union of 2n. Breeding Material. Seed.

PI 542969 to 542970. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: Caviness, C.E., Arkansas Agr. Exp. Sta., University of Arkansas, Agronomy Dept., Fayetteville, Arkansas, United States. **remarks:** Soybean Germplasm Lines, R 85-395 & R 88-1259. Received August 01, 1990.

PI 542969 **origin:** United States. **origin institute:** Arkansas Agr. Exp. Sta., University of Arkansas, Agronomy Dept., Fayetteville, Arkansas 72701. **cultivar:** R 85-395. **pedigree:** F5 selection from R74-334/Centennial/2/R74-1438/Braxton. **other id:** GP-122. **group:** CSR-SOYBEAN. **remarks:** Released to provide germplasm for study of leaflet traits and for use to modify canopy architecture. Maturity early, Group VI and yields similar to commercial cultivars of this maturity. Leaves predominately quinafoliolate, ovate. Growth habit determinant. Flowers purple. Pubescence tawny. Seed yellow with black hila. Spring Annual. Breeding Material. Seed.

PI 542969 to 542970-continued

PI 542970 **origin:** United States. **origin institute:** Arkansas Agr. Exp. Sta., University of Arkansas, Agronomy Dept., Fayetteville, Arkansas 72701. **cultivar:** R 88-1259. **pedigree:** F5 selection from R 82-4195/Leflore. **other id:** GP-123. **group:** CSR-SOYBEAN. **remarks:** Released to provide germplasm for study of leaflet traits and for use to modify canopy architecture. Maturity early, Group VI and yields similar to commercial cultivars of this maturity. Leaves predominately quintafoliolate, lanceolate. Growth habit determinant. Flowers purple. Pubescence tawny. Seed yellow with black hila. Spring Annual. Breeding Material. Seed.

PI 542971. *Beta vulgaris* L. CHENOPODIACEAE Sugarbeet

Donated by: Hecker, R.J., Agricultural Research Service -- USDA, Crops Research Laboratory, 1701 Center Avenue, Fort Collins, Colorado, United States; and Beet Sugar Development Foundation. **remarks:** FC710 Sugarbeet Germplasm. Received August 01, 1990.

origin: United States. **origin institute:** Agricultural Research Service -- USDA, Crops Research Laboratory, 1701 Center Avenue, Fort Collins, Colorado 80526. **cultivar:** FC710. **pedigree:** Eleven cycles of selection for *Rhizoctonia* resistance from an original population that was 42% U.S. cultivars, 28% leafspot and blackroot tolerant germplasms, and 30% reciprocal *B. maritima*/sugarbeet hybrids. **other id:** GP-133. **group:** CSR-SUGARBEET. **remarks:** Diploid multigerm germplasm resistant to root rot (*Rhizoctonia solani*) developed for use as a pollinator or as a source germplasm in breeding of *Rhizoctonia*-resistant hybrid cultivars. Developed by nine cycles of mass selection for resistance and two cycles of recurrent selection. Biennial. Breeding Material. Seed.

PI 542972. *Glycine max* (L.) Merr. FABACEAE Soybean

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

origin: United States. **cultivar:** HARTZ VARIETY H7190. **other id:** PVP 9000214. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 542973. *Gossypium hirsutum* L. MALVACEAE Cotton

Donated by: Cargill Hybrid Seeds, United States. Received June 29, 1990.

PI 542973-continued

origin: United States. **cultivar:** LANKART 142. **other id:** PVP 9000215. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 542974. *Gossypium hirsutum* L. MALVACEAE Cotton

Donated by: Cargill Hybrid Seeds, United States. Received June 29, 1990.

origin: United States. **cultivar:** PAYMASTER HS 200. **other id:** PVP 9000216. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 542975. *Triticum aestivum* L. POACEAE Common wheat

Donated by: Northrup King Co, United States. Received June 29, 1990.

origin: United States. **cultivar:** 814. **other id:** PVP 9000217. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 542976. *Triticum aestivum* L. POACEAE Common wheat

Donated by: Plant Breeders 1, Inc, United States. Received July 5, 1990.

origin: United States. **cultivar:** SALMON. **other id:** PVP 9000219. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 542977. *Capsicum annuum* L. SOLANACEAE Bell pepper

Donated by: Petoseed Company, INC, United States. Received July 5, 1990.

origin: United States. **cultivar:** CAPISTRANO. **other id:** PVP 9000220. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 542978. *Gossypium barbadense* L. MALVACEAE Sea Island cotton

Donated by: Chandy Ranch Research, United States. Received July 1990.

PI 542978-continued

origin: United States. **cultivar:** CH253. **other id:** PVP 9000221. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 542979. *Triticum aestivum* L. POACEAE Common wheat

Donated by: Northrup King Co, United States. Received July 12, 1990.

origin: United States. **cultivar:** COKER 9877. **other id:** PVP 9000222. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 542980. *Lolium perenne* L. POACEAE Perennial ryegrass

Donated by: Seaboard Seed/ Smith Seed, United States. Received July 16, 1990.

origin: United States. **cultivar:** D-10. **other id:** PVP 9000223. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 542981. *Lolium perenne* L. POACEAE Perennial ryegrass

Donated by: Seaboard Seed Co./ Smith Seed Services, United States. Received July 16, 1990.

origin: United States. **cultivar:** D-12. **other id:** PVP 9000224. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 542982. *Glycine max* (L.) Merr. FABACEAE Soybean

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

origin: United States. **cultivar:** HARTZ VARIETY H639. **other id:** PVP 9000225. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 542983 to 542984. *Brassica napus* L. BRASSICACEAE Winter rape

Donated by: Auld, D.L., Idaho Agr. Exp. Sta., University of Idaho, Moscow, Idaho, United States; and Agrigenetics Company; and Georgia Agr. Exp. Sta.. **remarks:** Tri-Bridger and Tri-Cascade Rapeseed Germplasms. Received August 02, 1990.

PI 542983 to 542984-continued

PI 542983 **origin:** United States. **origin institute:** Idaho Agr. Exp. Sta., University of Idaho, Moscow, Idaho 83210. **cultivar:** TRI-CASCADE. **pedigree:** Synthetic with four parental lines (WRE-6, WRE-12, WRE-20, WRE-28). Four parental lines were derived from four backcrosses to OAC Triton (A triazine tolerant spring rapeseed from Guelph, Ontario, Canada. **other id:** GP-3. **group:** CSR-RAPESEED. **remarks:** Triazine tolerant analogue of Cascade (PI 509072) (Crop Science Registration No. 5). BC4 derived synthetic which is near, isonuclear population of Cascade. Seed yield potential 80% of Cascade and similar oil content. Biennial. Breeding Material. Seed.

PI 542984 **origin:** United States. **origin institute:** Idaho Agr. Exp. Sta., University of Idaho, Moscow, Idaho 83843. **cultivar:** TRI-BRIDGER. **pedigree:** Synthetic with four parental lines (WRI-2, WRI-3, WRI-6, WRI-8). Four parental lines were derived from four backcrosses to OAC Triton (A triazine tolerant spring rapeseed from Guelph, Ontario, Canada. **other id:** GP-4. **group:** CSR-RAPESEED. **remarks:** Triazine tolerant analogue of Bridger (PI 509073) (Crop Science Registration No. 6). BC4 derived synthetic which is near, isonuclear population of Bridger. Seed yield potential 81% of Bridger and similar oil content. Biennial. Breeding Material. Seed.

PI 542985 to 542994. Sorghum bicolor (L.) Moench POACEAE Sorghum

Donated by: Kofoid, K.D., Kansas Agr. Exp. Sta., Fort Hays Branch, Hays, Kansas, United States. **remarks:** Ten Greenbug Resistant Sorghum Germplasm Lines. Received August 02, 1990.

PI 542985 **origin:** United States. **origin institute:** Kansas Agr. Exp. Sta., Fort Hays Branch, RR #2, Hays, Kansas 67601. **cultivar:** KS 84R. **pedigree:** KS 66 B/3/KS 65 A//alal KP 6BR/SARVASI. **other id:** 895501. **other id:** GP-348. **group:** CSR-SORGHUM. **remarks:** Restorer line in the A1 cytoplasm of sorghum. Resistant to biotype E greenbug (*Schizaphis graminum*). Mosaic reaction when infected with maize dwarf virus strain B. Maturity medium. 3-dwarf line. Seed red. Endosperm normal. No pigmented testa layer. Spring Annual. Breeding Material. Seed.

PI 542985 to 542994-continued

- PI 542986 **origin:** United States. **origin institute:** Kansas Agr. Exp. Sta., Fort Hays Branch, RR #2, Hays, Kansas 67601. **cultivar:** KS 85R. **pedigree:** WIRU/KS 56 B/3/KS 65 A//alal KP 6BR/SARVASI. **other id:** 895502. **other id:** GP-349. **group:** CSR-SORGHUM. **remarks:** Restorer line in the Al cytoplasm of sorghum. Resistant to biotype E greenbug (*Schizaphis graminum*). Mosaic reaction when infected with maize dwarf virus strain B. Maturity medium. 3-dwarf line. Seed red. Endosperm normal. No pigmented testa layer. Spring Annual. Breeding Material. Seed.
- PI 542987 **origin:** United States. **origin institute:** Kansas Agr. Exp. Sta., Fort Hays Branch, RR #2, Hays, Kansas 67601. **cultivar:** KS 86R. **pedigree:** KS 66 B/KS 65 B/3/KS 65 A//alal KP 6BR/SARVASI. **other id:** 895503. **other id:** GP-350. **group:** CSR-SORGHUM. **remarks:** Restorer line in the Al cytoplasm of sorghum. Resistant to biotype E greenbug (*Schizaphis graminum*). Mosaic reaction when infected with maize dwarf virus strain B. Maturity medium. Tall 3-dwarf line. Seed red. Endosperm normal. No pigmented testa layer. Spring Annual. Breeding Material. Seed.
- PI 542988 **origin:** United States. **origin institute:** Kansas Agr. Exp. Sta., Fort Hays Branch, RR #2, Hays, Kansas 67601. **cultivar:** KS 87R. **pedigree:** ms3ms3 KS 57 B/4/ms3ms3KS 56 B/3/KS 65 A//alal KP 6BR/SARVASI. **other id:** 895504. **other id:** GP-351. **group:** CSR-SORGHUM. **remarks:** Restorer line in the Al cytoplasm of sorghum. Resistant to biotype E greenbug (*Schizaphis graminum*). Mosaic reaction when infected with maize dwarf virus strain B. Maturity medium late. 3-dwarf line. Seed white. Endosperm normal. No pigmented testa layer. Spring Annual. Breeding Material. Seed.
- PI 542989 **origin:** United States. **origin institute:** Kansas Agr. Exp. Sta., Fort Hays Branch, RR #2, Hays, Kansas 67601. **cultivar:** KS 88R. **pedigree:** ms3ms3 KS 56 B/4/ms3ms3NP2B/3/KS 65 A//alal KP 6BR/SARVASI. **other id:** 895505. **other id:** GP-352. **group:** CSR-SORGHUM. **remarks:** Restorer line in the Al cytoplasm of sorghum. Resistant to biotype E greenbug (*Schizaphis graminum*). Mosaic reaction when infected with maize dwarf virus strain B. Maturity medium. 3-dwarf line. Seed red. Endosperm normal. No pigmented testa layer. Spring Annual. Breeding Material. Seed.

PI 542985 to 542994-continued

- PI 542990 **origin:** United States. **origin institute:** Kansas Agr. Exp. Sta., Fort Hays Branch, RR #2, Hays, Kansas 67601. **cultivar:** KS 89R. **pedigree:** ms3ms3 KS 56 B/4/ms3ms3NP2B/3/KS 65 A//alal KP 6BR/SARVASI. **other id:** 895506. **other id:** GP-353. **group:** CSR-SORGHUM. **remarks:** Restorer line in the Al cytoplasm of sorghum. Resistant to biotype E greenbug (*Schizaphis graminum*). Mosaic reaction when infected with maize dwarf virus strain B. Maturity medium late. 3-dwarf line. Seed white. Endosperm white. No pigmented testa layer. Spring Annual. Breeding Material. Seed.
- PI 542991 **origin:** United States. **origin institute:** Kansas Agr. Exp. Sta., Fort Hays Branch, RR #2, Hays, Kansas 67601. **cultivar:** KS 90R. **pedigree:** mscmsc unknown F2 plant/6/KS 65 A//alal KP 6BR/SARVASI. **other id:** 895507. **other id:** GP-354. **group:** CSR-SORGHUM. **remarks:** Restorer line in the Al cytoplasm of sorghum. Resistant to biotype E greenbug (*Schizaphis graminum*). Mosaic reaction when infected with maize dwarf virus strain B. Maturity medium. 3-dwarf line. Seed white. Endosperm normal. No pigmented testa layer. Spring Annual. Breeding Material. Seed.
- PI 542992 **origin:** United States. **origin institute:** Kansas Agr. Exp. Sta., Fort Hays Branch, RR #2, Hays, Kansas 67601. **cultivar:** KS 91R. **pedigree:** KS 66 A/MARTIN hh B/4/KS 65 A/3/KS 65 A//alal KP 6BR/SARVASI /5/ CK 60 A/S. virgatum (T.S. 1636)//TX 2536R. **other id:** 895508. **other id:** GP-355. **group:** CSR-SORGHUM. **remarks:** Restorer line in the Al cytoplasm of sorghum. Resistant to biotype E greenbug (*Schizaphis graminum*). Mosaic reaction when infected with maize dwarf virus strain B. Maturity medium early. 3-dwarf line. Seed white. Endosperm normal. No pigmented testa layer. Spring Annual. Breeding Material. Seed.
- PI 542993 **origin:** United States. **origin institute:** Kansas Agr. Exp. Sta., Fort Hays Branch, RR #2, Hays, Kansas 67601. **cultivar:** KS 92R. **pedigree:** KS 66 A//N 4692 B/SARVASI/3/KS 18 B/4/QL 17. **other id:** 895509. **other id:** GP-356. **group:** CSR-SORGHUM. **remarks:** Restorer line in the Al cytoplasm of sorghum. Resistant to biotype E greenbug (*Schizaphis graminum*). Mosaic reaction when infected with maize dwarf virus strain B. Maturity medium early. 3-dwarf line. Seed red. Endosperm normal. No pigmented testa layer. Spring Annual. Breeding Material. Seed.

PI 542985 to 542994-continued

PI 542994 **origin:** United States. **origin institute:** Kansas Agr. Exp. Sta., Fort Hays Branch, RR #2, Hays, Kansas 67601. **cultivar:** KS 93R. **pedigree:** KS 56 A//N 4692 B/SARVASI/3/KS 18 B/4/KS 56 A//3*WIRU/KS 56 B. **other id:** 895510. **other id:** GP-357. **group:** CSR-SORGHUM. **remarks:** Restorer line in the A1 cytoplasm of sorghum. Resistant to biotype E greenbug (*Schizaphis graminum*). Mosaic reaction when infected with maize dwarf virus strain B. Maturity medium. 3 dwarf line. Seed white. Endosperm yellow. No pigmented testa layer. Spring Annual. Breeding Material. Seed.

PI 542995. *Medicago sativa* L. FABACEAE Alfalfa

Donated by: Stratton, S.D., FFR Cooperative, 4112 E. State Rd. 225, West Lafayette, Indiana, United States. **remarks:** Haymark Alfalfa. Received August 03, 1990.

origin: United States. **cultivar:** HAYMARK. **pedigree:** 190 clones tracing to the cultivars Hi-phy and Classic, and several FFR breeding populations. **other id:** CV-165. **group:** CSR-ALFALFA. **remarks:** Flowers 90% purple, 10% variegated, trace of cream, yellow and white. Fall dormancy, 3. Growth habit - midsummer-erect, fall, semi-erect. Highly resistant to Anthracnose, race 1, caused by *Colletotrichum trifolii*, and Fusarium wilt caused by *Fusarium oxysporum* f. sp. *medicagenis*. Resistant to Bacterial wilt caused by *Clavibacter michiganense* subsp. *insidiosum* and *Phytophthora* root rot caused by *Phytophthora*. Perennial. Cultivar. Seed.

PI 542996. *Medicago sativa* L. FABACEAE Alfalfa

Donated by: Stratton, S.D., FFR Cooperative, 4112 E. State Rd. 225, West Lafayette, Indiana, United States. **remarks:** WAMPR Alfalfa. Received August 03, 1990.

origin: United States. **origin institute:** FFR Cooperative, 4112 E. State Rd. 225, West Lafayette, Indiana 47906. **cultivar:** WAMPR. **pedigree:** 330 clones tracing to the cultivars Endure, Eagle, Apollo II, Maxim, OK-135, WL-316, and WL320 in nearly equal proportions. **other id:** CV-166. **group:** CSR-ALFALFA. **remarks:** Flowers 92% purple, 8% variegated, trace of cream, yellow and white. Fall dormancy, 4. Growth habit - midsummer-erect, fall, semi-erect. Resistant to Anthracnose, Race 1, caused by *Colletotrichum trifolii*, Bacterial wilt (*Clavibacter michiganense* subsp. *insidiosum*, Fusarium wilt (*Fusarium oxysporum* f. sp. *medicagenis*, Verticillium wilt (*Verticillium albo-atrum* and *Phytophthora* root rot. Perennial. Cultivar. Seed.

PI 542997 to 543005. *Sorghum bicolor* (L.) Moench POACEAE Sorghum

Donated by: York, J.O., Arkansas Agricultural Experiment Station, Plant Science 115, Fayetteville, Arkansas, United States. Received August 03, 1990.

PI 542997 **origin:** United States. **cultivar:** B LINE AR 3027. **pedigree:** OK 24B/Brandes. **other id:** Ark 1018. **remarks:** 3-dwarf B line that is sterilized by A1 cytoplasm. Pericarp brownish white, mesocarp starchy, testa brown, and glumes mahogany. The grain threshes free of the glumes. Panicle exerted above flag leaf (5cm). Panicle compact. Plant height is approximately 112cm. Flowers approximately 75 days. Seeds small and flat. B line for silage sorghum. Spring Annual. Breeding Material. Seed.

PI 542998 **origin:** United States. **cultivar:** B LINE AR 3028. **pedigree:** AR 3005/OK 11. **other id:** Ark 1016. **remarks:** Pericarp brownish pink, mesocarp starchy, testa brown, and glumes mahogany. Panicle exerted above the flag leaf. Panicle open. Plant height approximately 127cm. Flowers approximately 75 days. Stalks are sturdy and juicy. Produce few tillers. Hybrids have excellent blackbird resistance. Spring Annual. Breeding Material. Seed.

PI 542999 **origin:** United States. **cultivar:** B LINE AR 3029. **pedigree:** TX 3118/AR 2403. **other id:** Ark 1017. **remarks:** 3-dwarf B line that is sterilized by A1 cytoplasm. Line developed as a B line for late silage sorghum hybrids. Pericarp white, mesocarp starchy, glumes black. Does not thresh freely of glumes and contains a brown spot. Panicle exerted above the flag leaf (5cm). Panicle compact. Plant height approximately 85 days after emergence. Spring Annual. Breeding Material. Seed.

PI 542997 to 543005-continued

- PI 543000 **origin:** United States. **cultivar:** B LINE AR 3035.
pedigree: CK60/*2AK 3003. **other id:** Ark 1026. **remarks:**
3-dwarf line that is sterilized with Al cytoplasm.
Pericarp white, mesocarp starchy, glumes black. Panicle
exerted above flag leaf (5cm). Panicle open. Plant height
approximately 122cm. Flowers approximately 74 days.
Exceptionally clean of all leaf diseases. Stalks are
juicy. Plants produce few tillers. Spring Annual.
Breeding Material. Seed.
- PI 543001 **origin:** United States. **cultivar:** B LINE AK 3002.
pedigree: Selection from Indonesian cultivar Malang (PI
192878). **remarks:** 3-dwarf B line that is sterilized with
Al cytoplasm. Pericarp red, mesocarp starchy, and glumes
mahogany. Panicle exerted above the flag leaf (16cm).
Panicle compact at physiological maturity. Plant height
approximately 122cm. Flowers approximately 72 days after
emergence. Spring Annual. Breeding Material. Seed.
- PI 543002 **origin:** United States. **cultivar:** B LINE AR 3003.
pedigree: S.A. 7770-3-3-4 (Combine Schrock). **remarks:**
3-dwarf B line that is sterilized with Al cytoplasm.
Pericarp brownish pink, mesocarp starchy, testa brown, and
glumes black. Panicle does not clear sheath (4cm).
Panicle open. Plant height approximately 92cm. Flowers
approximately 76 days after emergence. Hybrids extremely
bird resistance. Spring Annual. Breeding Material.
Seed.
- PI 543003 **origin:** United States. **cultivar:** B LINE AR 3004.
pedigree: TAM617/ XTX378 Redlan. **remarks:** 3-dwarf B line
sterilized with Al cytoplasm. Pericarp red, mesocarp
starchy, and glumes mahogany. Panicle exerted above the
flag leaf (9cm). Panicle semi-open. Plant height
approximately 122cm. Flowers approximately 76 days after
emergence. Spring Annual. Breeding Material. Seed.
- PI 543004 **origin:** United States. **cultivar:** B LINE AR 3005.
pedigree: Selection from (S57-10)-1. **remarks:** Pericarp
brownish red, mesocarp starchy, testa brown, and glumes
straw colored. Panicle exerted above the flag leaf
(18cm). Panicle open. Plant height approximately 142cm.
Flowers approximately 78 days after emergence. Moderate
resistance to maize dwarf mosaic virus disease A. Spring
Annual. Breeding Material. Seed.

PI 542997 to 543005-continued

PI 543005 **origin:** United States. **cultivar:** B LINE AR 3013.
pedigree: CK60/TS313(Early Hegari). **remarks:** Line developed as seed parent for leafy and late silage sorghum hybrids. Pericarp white and pearly, glumes black. Grain contains a brown spot. Panicle exerted above the flag leaf (3cm). Panicle semi-open. Plant height approximately 119cm. Flowers approximately 78 days. Spring Annual. Breeding Material. Seed.

PI 543006. *Helianthus annuus* L. ASTERACEAE Sunflower

Donated by: Auld, D. L., Idaho Agr. Exp. Sta., University of Idaho, Moscow, Idaho, United States; and Agricultural Research Service -- USDA. **remarks:** ID-ERLYC Sunflower Germplasm. Received August 03, 1990.

origin: United States. **origin institute:** Idaho Agr. Exp. Sta., University of Idaho, Dept. of Plant, Soil and Ent. Sci., Moscow, Idaho 83843. **cultivar:** ID-ERLYC.
pedigree: Composite made from S4 plant selected from 39 S3 selections. **other id:** GP-128. **group:** CSR-SUNFLOWER.
remarks: ID-ERLYC is an S4 composite selected for early bloom and short plant stature under the cold conditions of northern Idaho. Plant height ranges from 40-82cm and in this climate will bloom 63-91 days after planting. Spring Annual. Breeding Material. Seed.

PI 543007. *Triticum aestivum* L. POACEAE Common wheat

Donated by: Texas Agricultural Experiment Station, P.O. Box 1658, Vernon, Texas, United States. Received August 03, 1990.

origin: United States. **cultivar:** SIOUXLAND 89. **other id:** PVP 9100006. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 543008. *Zea mays* L. subsp. *mays* POACEAE Corn

Donated by: Moll, R.H., North Carolina Agr. Res. Service, North Carolina State University, Dept. of Genetics, Box 7614, Raleigh, North Carolina, United States. **remarks:** NC201 Maize Parental Line. Received August 03, 1990.

PI 543008-continued

origin: United States. **origin institute:** North Carolina Agr. Res. Service, North Carolina State University, Dept. of Genetics, Raleigh, North Carolina 27695-7614.
cultivar: NC201. **pedigree:** NC 201 = IR10 (I202-2)-S8.
other id: PL-153. **group:** CSR-MAIZE. **remarks:** A prolific yellow dent inbred of maize (AE 1100), selected for nitrogen use efficiency. In SE USA: 70 days to mid-silk, plant height 199cm, ear height 75cm, yellow anthers, green glumes, 19-20 tassel branches, yellow endosperm, white aleurone, colorless pericarp, seed weight 24g/100. Breeding Material. Seed.

PI 543009 to 543012. *Cicer arietinum* L. FABACEAE Chickpea

Donated by: Kaiser, W.J., Western Regional PI Station, USDA-ARS, Rm. 59, Johnson Hall, Washington State University, Pullman, Washington, United States. Received May 17, 1990.

PI 543009 **donor id:** 870525-21. **origin:** Spain. **developer country:** Spain. **origin institute:** Servicio de Extension Agraria, Cordoba, Cordoba. **cultivar:** DEL PAIS. **collected:** May 25, 1987. **collector id:** 870525-21. **other id:** W6-2648. **remarks:** Seeds obtained from Mr. Francisco Mansilla Sousa, Extension Agent. Cultivar. Seed.

PI 543010 **donor id:** 870525-22. **origin:** Spain. **developer country:** Spain. **origin institute:** Servicio de Extension Agraria, Cordoba, Cordoba. **cultivar:** MULATO DIAZ. **collected:** May 25, 1987. **collector id:** 870525-22. **other id:** W6-2649. **remarks:** Seeds obtained from Mr. Francisco Mansilla Sousa, Extension Agent. Cultivar. Seed.

PI 543011 **donor id:** 870527-07. **origin:** Spain. **developer country:** Spain. **origin institute:** Servicio de Investigaciones agrarias Sta, El Rancho de la Merced, Jerez de la Frontera, Cadiz. **cultivar:** VENOSO ANDALUZ. **collected:** May 27, 1987. **collector id:** 870527-07. **other id:** W6-2650. **remarks:** Seeds large. Kabuli type. Cultivar. Seed.

PI 543012 **donor id:** 870603-06. **origin:** Spain. **cultivar:** BLANCO LECHOSO. **collected:** June 03, 1987. **collector id:** 870603-06. **other id:** W6-2651. **locality:** Marchena, Sevilla Province. **remarks:** Farmer, Andres Suarez. Cultivar. Seed.

PI 543013 to 543028. *Lupinus albus* L. FABACEAE White lupine

Donated by: Kaiser, W.J., Western Regional PI Station, USDA-ARS, Rm. 59, Johnson Hall, Washington State University, Pullman, Washington, United States. Received May 17, 1990.

- PI 543013 **donor id:** 870601-05. **origin:** Spain. **origin institute:** Servicio de Investigaciones Agrarias, Cordoba. **origin institute id:** no. 22. **collected:** June 01, 1987. **collector id:** 870601-05. **other id:** W6-2654. Cultivated. Seed.
- PI 543014 **donor id:** 870601-07. **origin:** Spain. **origin institute:** Servicio de Investigaciones Agrarias, Cordoba. **origin institute id:** no. 24. **collected:** June 01, 1987. **collector id:** 870601-07. **other id:** W6-2655. Cultivated. Seed.
- PI 543015 **donor id:** 870601-10. **origin:** Spain. **origin institute:** Servicio de Investigaciones Agrarias, Cordoba. **origin institute id:** no. 47. **collected:** June 01, 1987. **collector id:** 870601-10. **other id:** W6-2656. Cultivated. Seed.
- PI 543016 **donor id:** 870601-14. **origin:** Spain. **origin institute:** Servicio de Investigaciones Agrarias, Cordoba. **origin institute id:** no. 53. **collected:** June 01, 1987. **collector id:** 870601-14. **other id:** W6-2657. Cultivated. Seed.
- PI 543017 **donor id:** 870601-20. **origin:** Spain. **origin institute:** Servicio de Investigaciones Agrarias, Cordoba. **origin institute id:** no. 188. **collected:** June 01, 1987. **collector id:** 870601-20. **other id:** W6-2658. Cultivated. Seed.
- PI 543018 **donor id:** 870601-21. **origin:** Spain. **origin institute:** Servicio de Investigaciones Agrarias, Cordoba. **origin institute id:** no. 189. **collected:** June 01, 1987. **collector id:** 870601-21. **other id:** W6-2659. Cultivated. Seed.
- PI 543019 **donor id:** 870601-33. **origin:** Spain. **origin institute:** Servicio de Investigaciones Agrarias, Cordoba. **origin institute id:** no. 272. **collected:** June 01, 1987. **collector id:** 870601-33. **other id:** W6-2660. **locality:** Palma de Mallorca. Cultivated. Seed.
- PI 543020 **donor id:** 870601-35. **origin:** Spain. **origin institute:** Servicio de Investigaciones Agrarias, Cordoba. **origin institute id:** no. 274. **collected:** June 01, 1987. **collector id:** 870601-35. **other id:** W6-2661. Cultivated. Seed.

PI 543013 to 543028-continued

- PI 543021 **donor id:** 870601-38. **origin:** Spain. **origin institute:** Servicio de Investigaciones Agrarias, Cordoba. **origin institute id:** no. 277. **collected:** June 01, 1987. **collector id:** 870601-38. **other id:** W6-2662. Cultivated. Seed.
- PI 543022 **donor id:** 870601-44. **origin:** Spain. **origin institute:** Servicio de Investigaciones Agrarias, Cordoba. **origin institute id:** no. 539. **collected:** June 01, 1987. **collector id:** 870601-44. **other id:** W6-2663. Cultivated. Seed.
- PI 543023 **donor id:** 870601-50. **origin:** Spain. **origin institute:** Servicio de Investigaciones Agrarias, Cordoba. **origin institute id:** no. 561. **collected:** June 01, 1987. **collector id:** 870601-50. **other id:** W6-2664. Cultivated. Seed.
- PI 543024 **donor id:** 870601-51. **origin:** Spain. **origin institute:** Servicio de Investigaciones Agrarias, Cordoba. **origin institute id:** no. 563. **collected:** June 01, 1987. **collector id:** 870601-51. **other id:** W6-2665. Cultivated. Seed.
- PI 543025 **donor id:** 870601-52. **origin:** Spain. **origin institute:** Servicio de Investigaciones Agrarias, Cordoba. **origin institute id:** no. 566. **collected:** June 01, 1987. **collector id:** 870601-52. **other id:** W6-2666. Cultivated. Seed.
- PI 543026 **donor id:** 870601-53. **origin:** Spain. **origin institute:** Servicio de Investigaciones Agrarias, Cordoba. **origin institute id:** no. 570. **collected:** June 01, 1987. **collector id:** 870601-53. **other id:** W6-2667. Cultivated. Seed.
- PI 543027 **donor id:** 870601-55. **origin:** Spain. **origin institute:** Servicio de Investigaciones Agrarias, Cordoba. **origin institute id:** no. 572. **collected:** June 01, 1987. **collector id:** 870601-55. **other id:** W6-2668. Cultivated. Seed.
- PI 543028 **donor id:** 870601-56. **origin:** Spain. **origin institute:** Servicio de Investigaciones Agrarias, Cordoba. **origin institute id:** no. 573. **collected:** June 01, 1987. **collector id:** 870601-56. **other id:** W6-2669. Cultivated. Seed.

PI 543029 to 543030. *Lupinus angustifolius* L. FABACEAE Blue lupine

Donated by: Kaiser, W.J., Western Regional PI Station, USDA-ARS, Rm. 59, Johnson Hall, Washington State University, Pullman, Washington, United States. Received May 17, 1990.

PI 543029 **donor id:** 870601-66. **origin:** Spain. **origin institute:** Servicio de Investigaciones Agrarias, Cordoba. **origin institute id:** no. 48. **collected:** June 01, 1987. **collector id:** 870601-66. **other id:** W6-2670. Cultivated. Seed.

PI 543030 **donor id:** 870601-70. **origin:** Spain. **origin institute:** Servicio de Investigaciones Agrarias, Cordoba. **origin institute id:** no. 77. **collected:** June 01, 1987. **collector id:** 870601-70. **other id:** W6-2671. Cultivated. Seed.

PI 543031. *Lupinus hispanicus* Boiss. & Reuter FABACEAE White lupine

Donated by: Kaiser, W.J., Western Regional PI Station, USDA-ARS, Rm. 59, Johnson Hall, Washington State University, Pullman, Washington, United States. Received May 17, 1990.

donor id: 870601-82. **origin:** Spain. **origin institute:** Servicio de Investigaciones Agrarias, Cordoba. **origin institute id:** no. 46. **collected:** June 01, 1987. **collector id:** 870601-82. **other id:** W6-2672. **locality:** Toledo. Cultivated. Seed.

PI 543032. *Lupinus* sp. FABACEAE

Donated by: Kaiser, W.J., Western Regional PI Station, USDA-ARS, Rm. 59, Johnson Hall, Washington State University, Pullman, Washington, United States. Received May 17, 1990.

donor id: 870601-89. **origin:** Spain. **origin institute:** Servicio de Investigaciones Agrarias, Cordoba. **origin institute id:** no. 30. **collected:** June 01, 1987. **collector id:** 870601-89. **other id:** W6-2673. Cultivated. Seed.

PI 543033. *Medicago lupulina* L. FABACEAE Black medic

Donated by: Kaiser, W.J., Western Regional PI Station, USDA-ARS, Rm. 59, Johnson Hall, Washington State University, Pullman, Washington, United States. Received May 17, 1990.

PI 543033-continued

donor id: 870530-02. **origin:** Spain. **collected:** May 30, 1987. **collector id:** 870530-02. **other id:** W6-2675.
locality: Edge of broadbean planting, next to Generalife, at the La Alhambra, Granada Province. **elevation:** 900m.
Wild. Seed.

PI 543034. *Medicago orbicularis* (L.) Bartal. FABACEAE Buttonclover

Donated by: Kaiser, W.J., Western Regional PI Station, USDA-ARS, Rm. 59, Johnson Hall, Washington State University, Pullman, Washington, United States. Received May 17, 1990.

donor id: 870530-10. **origin:** Spain. **collected:** May 30, 1987. **collector id:** 870530-10. **other id:** W6-2676.
locality: Olive grove 500m from Generalife, within 200m of the Washington Irving Hotel, at the La Alhambra, Granada Province. **elevation:** 900m. **remarks:** Plants semi-prostrate. Pods conical with no spines, dark brown at maturity. Wild. Seed.

PI 543035 to 543036. *Medicago polymorpha* L. FABACEAE California burclover

Donated by: Kaiser, W.J., Western Regional PI Station, USDA-ARS, Rm. 59, Johnson Hall, Washington State University, Pullman, Washington, United States. Received May 17, 1990.

PI 543035 **donor id:** 870523-11. **origin:** Spain. **local name:** Mielga. **collected:** May 23, 1987. **collector id:** 870523-11. **other id:** W6-2677. **locality:** Edge of wheat field, near Montilla, Cordoba Province. **elevation:** 300m. **remarks:** Pods spiny. Wild. Seed.

PI 543036 **donor id:** 870523-14. **origin:** Spain. **local name:** Mielga. **collected:** May 23, 1987. **collector id:** 870523-14. **other id:** W6-2678. **locality:** Edge of chickpea field, 3km N of Montilla, Cordoba Province. **elevation:** 300m. Wild. Seed.

PI 543037. *Medicago polymorpha* var. *vulgaris* (Benth.) Shinn., nom. illeg. FABACEAE

Donated by: Kaiser, W.J., Western Regional PI Station, USDA-ARS, Rm. 59, Johnson Hall, Washington State University, Pullman, Washington, United States. Received May 17, 1990.

PI 543037-continued

donor id: 870530-09. **origin:** Spain. **collected:** May 30, 1987. **collector id:** 870530-09. **other id:** W6-2674. **locality:** Olive grove about 500m from Generalife, within 200m of the Washington Irving Hotel, at the La Alhambra, Granada Province. **remarks:** Pods smaller than PI 543040, can be borne in clusters, spiny. **received as:** *M. hispida*. Wild. Seed.

PI 543038 to 543041. *Medicago* sp. FABACEAE

Donated by: Kaiser, W.J., Western Regional PI Station, USDA-ARS, Rm. 59, Johnson Hall, Washington State University, Pullman, Washington, United States. Received May 17, 1990.

PI 543038 **donor id:** 870527-18. **origin:** Spain. **local name:** Mielga. **collected:** May 27, 1987. **collector id:** 870527-18. **other id:** W6-2679. **locality:** Along roadside near chickpea field on road from Jerez de la Frontera to Trebugena, Cadiz Province. **elevation:** 35m. **remarks:** Plants prostrate. Pods small, spiny, spherical while still green. Wild. Seed.

PI 543039 **donor id:** 870530-03. **origin:** Spain. **collected:** May 30, 1987. **collector id:** 870530-03. **other id:** W6-2680. **locality:** Edge of farmers broadbean planting, next to the Generalife, at the La Alhambra, Granada Province. **elevation:** 900m. **remarks:** One plant collected, viny. Pods small and in clusters. Wild. Seed.

PI 543040 **donor id:** 870530-08. **origin:** Spain. **collected:** May 30, 1987. **collector id:** 870530-08. **other id:** W6-2681. **locality:** Olive grove about 500m from Generalife, within 200m of the Washington Irving Hotel, at the La Alhambra, Granada Province. **elevation:** 900m. **remarks:** Plants prostrate. Pods medium sized, spiny. Wild. Seed.

PI 543041 **donor id:** 870601-01. **origin:** Spain. **collected:** June 01, 1987. **collector id:** 870601-01. **other id:** W6-2682. **locality:** Edge of lawn, Escuela Tecnica Superior de Ingenieros Agronomos, Cordoba Province. **elevation:** 120m. **remarks:** Plants prostrate. Pods medium sized, spiny and not round. Wild. Seed.

PI 543042. *Medicago truncatula* Gaertner FABACEAE Barrel medic

Donated by: Kaiser, W.J., Western Regional PI Station, USDA-ARS, Rm. 59, Johnson Hall, Washington State University, Pullman, Washington, United States. Received May 17, 1990.

PI 543042-continued

donor id: 870527-19. **origin:** Spain. **collected:** May 27, 1987. **collector id:** 870527-19. **other id:** W6-2683. **locality:** Next to chickpea field, 4km from Marchena on National road 333, near km 32, to Ecijas. **remarks:** Pods large, spiny, spherical while still green. Wild. Seed.

PI 543043 to 543047. *Phaseolus vulgaris* L. var. *vulgaris* FABACEAE
Garden bean

Donated by: Kaiser, W.J., Western Regional PI Station, USDA-ARS, Rm. 59, Johnson Hall, Washington State University, Pullman, Washington, United States. Received May 17, 1990.

PI 543043 **donor id:** 870602-03. **origin:** Spain. **cultivar:** BLANCO REDONDA. **collected:** June 02, 1987. **collector id:** 870-602-03. **other id:** W6-2686. **locality:** Elosua, S.A. Cordoba Province. **remarks:** Seeds white, round. Cultivar. Seed.

PI 543044 **donor id:** 870602-04. **origin:** Spain. **cultivar:** LARGA BLANCA. **collected:** June 02, 1987. **collector id:** 870602-04. **other id:** W6-2687. **locality:** Elosua, S.A. Cordoba Province. **remarks:** Seeds white, large. Cultivar. Seed.

PI 543045 **donor id:** 870602-05. **origin:** Spain. **cultivar:** PALMENA. **collected:** June 02, 1987. **collector id:** 870602-05. **other id:** W6-2688. **locality:** Elosua, S.A. Cordoba Province. **remarks:** Seeds large, reddish with tan marks. Cultivar. Seed.

PI 543046 **donor id:** 870602-6. **origin:** Spain. **cultivar:** PINTA. **collected:** June 02, 1987. **collector id:** 870602-6. **other id:** W6-2689. **locality:** Elosua, S.A. Cordoba Province. **remarks:** Seeds large, tan with red marks. Cultivar. Seed.

PI 543047 **donor id:** 870606-02. **origin:** Spain. **collected:** June 06, 1987. **collector id:** 870606-02. **other id:** W6-2690. **locality:** Purchased in Supermercado Jumbro, Madrid Province. **remarks:** Probably grown in Northern Spain. Cultivar. Seed.

PI 543048 to 543049. *Allium sativum* L. LILIACEAE Garlic

Donated by: Kaiser, W.J., Western Regional PI Station, Room 59, Johnson Hall, Washington State University, Pullman, Washington, United States. Received May 17, 1990.

PI 543048 to 543049-continued

PI 543048 **donor id:** WKP-88-6. **origin:** Pakistan. **collected:** October 19, 1988. **collector id:** WKP-88-6. **locality:** Empress market, Karachi, Sind Province. **remarks:** Bulb white. Cultivated. Bulbs.

PI 543049 **donor id:** WKP-88-19. **origin:** Pakistan. **collected:** October 21, 1988. **collector id:** WKP-88-19. **locality:** Jomah market, Islamabad, Punjab Province. **remarks:** Bulb white. Cultivated. Bulbs.

PI 543050 to 543065. *Cicer arietinum* L. FABACEAE Chickpea

Donated by: Kaiser, W.J., Western Regional PI Station, Room 59, Johnson Hall, Washington State University, Pullman, Washington, United States. Received May 17, 1990.

PI 543050 **donor id:** WKP-88-1. **origin:** Pakistan. **collected:** October 19, 1988. **collector id:** WKP-88-1. **locality:** Empress market, Karachi, Sind Province. **remarks:** Kabuli type. Cultivated. Seed.

PI 543051 **donor id:** WKP-88-2. **origin:** Pakistan. **collected:** October 19, 1988. **collector id:** WKP-88-2. **locality:** Empress market, Karachi, Sind Province. **remarks:** Desi type. Cultivated. Seed.

PI 543052 **donor id:** WKP-88-13. **origin:** Pakistan. **cultivar:** CHOLLA LOCAL. **collected:** October 20, 1988. **collector id:** WKP-88-13. **locality:** Rice Research Institute, Dokri, Sind Province. **remarks:** Seeds small, kabuli type. Cultivated. Seed.

PI 543053 **donor id:** WKP-88-21. **origin:** Pakistan. **collected:** October 21, 1988. **collector id:** WKP-88-21. **locality:** Food display, Holiday Inn, Islamabad, Punjab Province. **remarks:** Seeds large, kabuli type. Cultivated. Seed.

PI 543054 **donor id:** WKP-88-22. **origin:** Pakistan. **collected:** October 21, 1988. **collector id:** WKP-88-22. **locality:** Food display, Holiday Inn, Islamabad, Punjab Province. **remarks:** Seeds medium, brown, desi type. Cultivated. Seed.

PI 543055 **donor id:** WKP-88-25. **origin:** Pakistan. **pedigree:** Pk51825/CM72. **collected:** October 22, 1988. **collector id:** WKP-88-25. **remarks:** Seeds desi type. Resistant to Ascochyta blight. Cultivated. Seed.

PI 543050 to 543065-continued

- PI 543056 **donor id:** WKP-88-26. **origin:** Pakistan. **pedigree:** PK51832/CM72. **collected:** October 22, 1988. **collector id:** WKP-88-26. **remarks:** Seeds desi type. Resistant to Ascochyta blight. Cultivated. Seed.
- PI 543057 **donor id:** WKP-88-27. **origin:** Pakistan. **pedigree:** PK51835/CM72. **collected:** October 22, 1988. **collector id:** WKP-88-27. **remarks:** Seeds desi type. Resistant to Ascochyta blight. Cultivated. Seed.
- PI 543058 **donor id:** WKP-88-28. **origin:** Pakistan. **pedigree:** PK51863/NEC-138-2. **collected:** October 22, 1988. **collector id:** WKP-88-28. **remarks:** Seeds desi type. Resistant to Ascochyta blight. Cultivated. Seed.
- PI 543059 **donor id:** WKP-88-36. **origin:** Pakistan. **collected:** October 26, 1988. **collector id:** WKP-88-36. **locality:** Market, Mankera, Punjab Province. **remarks:** Seeds desi type. Landrace. Seed.
- PI 543060 **donor id:** WKP-88-37. **origin:** Pakistan. **cultivar:** C-44. **collected:** October 26, 1988. **collector id:** WKP-88-37. **locality:** Market, Mankera, Punjab Province. Landrace. Seed.
- PI 543061 **donor id:** WKP-88-38. **origin:** Pakistan. **collected:** October 26, 1988. **collector id:** WKP-88-38. **locality:** Sargy Walla village, 20km from Gohar Walla on Mankera road, Punjab Province. **remarks:** Seeds desi type. Landrace. Seed.
- PI 543062 **donor id:** WKP-88-39. **origin:** Pakistan. **collected:** October 26, 1988. **collector id:** WKP-88-39. **locality:** Dabb village, near Kallurkot, Punjab Province. **remarks:** Seeds desi type. Landrace. Seed.
- PI 543063 **donor id:** WKP-88-57. **origin:** Pakistan. **collected:** October 28, 1988. **collector id:** WKP-88-57. **locality:** Obtained from NARC, Islamabad, Punjab Province. **remarks:** Adapted to Thal region. Possible resistance to Ascochyta blight. Landrace. Seed.
- PI 543064 **donor id:** WKP-88-58. **origin:** Pakistan. **collected:** October 26, 1988. **collector id:** WKP-88-58. **locality:** Thal region, NARC, Islamabad, Punjab Province. Landrace. Seed.
- PI 543065 **donor id:** WKP-88-59. **origin:** Pakistan. **collected:** October 28, 1988. **collector id:** WKP-88-59. **locality:** Thal region, obtained from Mohammad Bashir, NARC, Islamabad, Punjab Province. **remarks:** Seeds small, kabuli type. Landrace. Seed.

PI 543066 to 543070. *Lens culinaris* Medikus FABACEAE Chickpea

Donated by: Kaiser, W.J., Western Regional PI Station, Room 59, Johnson Hall, Washington State University, Pullman, Washington, United States. Received May 17, 1990.

PI 543066 **donor id:** WKP-88-3. **origin:** Pakistan. **collected:** October 19, 1988. **collector id:** WKP-88-3. **locality:** Empress market, Karachi, Sind Province. **remarks:** Seeds small. Cultivated. Seed.

PI 543067 **donor id:** WKP-88-7. **origin:** Pakistan. **cultivar:** MASOOR DL-6. **collected:** October 20, 1988. **collector id:** WKP-88-7. **locality:** Rice Research Institute, Dokri, Sind Province. **remarks:** Seeds small. Cultivar. Seed.

PI 543068 **donor id:** WKP-88-8. **origin:** Pakistan. **cultivar:** MASOOR VM-3. **collected:** October 20, 1988. **collector id:** WKP-88-8. **locality:** Rice Research Institute, Dokri, Sind Province. **remarks:** Seeds small. Cultivar. Seed.

PI 543069 **donor id:** WKP-88-9. **origin:** Pakistan. **cultivar:** MASOOR 9-6. **collected:** October 20, 1988. **collector id:** WKP-88-9. **locality:** Rice Research Institute, Dokri, Sind Province. **remarks:** Seeds small. Cultivar. Seed.

PI 543070 **donor id:** WKP-88-10. **origin:** Pakistan. **cultivar:** MASOOR 18-10. **collected:** October 20, 1988. **collector id:** WKP-88-10. **locality:** Rice Research Institute, Dokri, Sind Province. **remarks:** Seeds small. Cultivar. Seed.

PI 543071. *Lathyrus sativus* L. FABACEAE Grass pea

Donated by: Kaiser, W.J., Western Regional PI Station, Room 59, Johnson Hall, Washington State University, Pullman, Washington, United States. Received May 17, 1990.

donor id: WKP-88-12. **origin:** Pakistan. **cultivar:** MATTAR DM-2. **collected:** October 20, 1988. **collector id:** WKP-88-12. **locality:** Rice Research Institute, Dokri, Sind Province. Cultivar. Seed.

PI 543072 to 543073. *Trigonella foenum-graecum* L. FABACEAE Fenugreek

Donated by: Kaiser, W.J., Western Regional PI Station, Room 59, Johnson Hall, Washington State University, Pullman, Washington, United States. Received May 17, 1990.

PI 543072 **donor id:** WKP-88-4. **origin:** Pakistan. **collected:** October 19, 1988. **collector id:** WKP-88-4. **locality:** Empress market, Karachi, Sind Province. Cultivated. Seed.

PI 543072 to 543073-continued

PI 543073 **donor id:** WKP-88-17. **origin:** Pakistan. **collected:** October 19, 1988. **collector id:** WKP-88-17. **locality:** Jomah market, Islamabad, Punjab Province. **Cultivated.** Seed.

PI 543074 to 543175. *Sorghum bicolor* (L.) Moench POACEAE

Donated by: Voigt, R. L., University of Arizona, USAID Sorghum/Millet Program, Tucson, Arizona, United States. **Received** July 30, 1990.

PI 543074 **donor id:** 794. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alzaher. **elevation:** 2090m. **remarks:** Race - Caudatum durra. Head type 5 - semi-compact, ovate. Seed yellow. **Cultivated.** Seed.

PI 543075 **donor id:** 1118. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alzaher. **elevation:** 2090m. **remarks:** Race - Caudatum durra. Head type 6 - semi-compact, elliptical. Seed light red. **Cultivated.** Seed.

PI 543076 **donor id:** 1872. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alzaher. **elevation:** 2090m. **remarks:** Race - Caudatum durra. Head type 4 - semi-open, elongated, elliptical. Seed light red. **Cultivated.** Seed.

PI 543077 **donor id:** 2633. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alzaher. **elevation:** 2100m. **remarks:** Race - Caudatum. Head type 5 - semi-compact, ovate. Seed white. **Cultivated.** Seed.

PI 543078 **donor id:** 3056. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alzaher. **elevation:** 2100m. **remarks:** Race - Caudatum durra. Head type 5 - semi-compact, ovate. Seed light brown. **Cultivated.** Seed.

PI 543079 **donor id:** 3118. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alzaher. **elevation:** 2100m. **remarks:** Race - Kafir. Head type 4 - semi-open, elongated, elliptical. Seed light yellow. **Cultivated.** Seed.

PI 543080 **donor id:** 3166. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alzaher. **elevation:** 2100m. **remarks:** Race - Durra kafir. Head type 4 - semi-open, elongated, elliptical. Seed brown. **Cultivated.** Seed.

PI 543081 **donor id:** 3179. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alzaher. **elevation:** 2100m. **remarks:** Race - Caudatum durra. Head type 4 - semi-open, elongated, elliptical. Seed white. **Cultivated.** Seed.

PI 543074 to 543175-continued

- PI 543082 **donor id:** 3195. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alzاهر. **elevation:** 2100m. **remarks:** Race - Durra caudatum. Head type 5 - semi-compact, ovate. Seed brown. Cultivated. Seed.
- PI 543083 **donor id:** 3205. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alzاهر. **elevation:** 2100m. **remarks:** Race - Durra kafir. Head type 7 - very compact, ovate, flattened base, with usually a recurved peduncle. Seed orange. Cultivated. Seed.
- PI 543084 **donor id:** 3236. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alzاهر. **elevation:** 2100m. **remarks:** Race - Durra caudatum. Head type 7 - very compact, ovate, flattened base, with usually a recurved peduncle. Seed light orange. Cultivated. Seed.
- PI 543085 **donor id:** 3261. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alzاهر. **elevation:** 2100m. **remarks:** Race - Caudatum durra. Head type 6 - semi-compact, elliptical. Seed light brown. Cultivated. Seed.
- PI 543086 **donor id:** 3310. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alzاهر. **elevation:** 2100m. **remarks:** Race - Durra bicolor. Head type 4 - semi-open, elongated, elliptical. Seed light yellow. Cultivated. Seed.
- PI 543087 **donor id:** 3311. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alzاهر. **elevation:** 2100m. **remarks:** Race - Caudatum durra. Head type 3 - open, elongated, elliptical. Seed light yellow. Cultivated. Seed.
- PI 543088 **donor id:** 3447. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alzاهر. **elevation:** 2100m. **remarks:** Race - Caudatum durra. Head type 4 - semi-open, elongated, elliptical. Seed white. Cultivated. Seed.
- PI 543089 **donor id:** 3547. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alzاهر. **elevation:** 2100m. **remarks:** Race - Durra caudatum. Head type 6 - semi-compact, elliptical. Seed brown. Cultivated. Seed.
- PI 543090 **donor id:** 3651. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alzاهر. **elevation:** 2100m. **remarks:** Race - Kafir durra. Head type 4 - semi-open, elongated, elliptical. Seed yellow. Cultivated. Seed.
- PI 543091 **donor id:** 3729. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alzاهر. **elevation:** 2100m. **remarks:** Race - Durra kafir. Head type 4 - semi-open, elongated, elliptical. Seed yellow. Cultivated. Seed.

PI 543074 to 543175-continued

- PI 543092 **donor id:** 3732. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alzaher. **elevation:** 2100m. **remarks:** Race - Durra kafir. Head type 5 - semi-compact, ovate. Seed yellow. Cultivated. Seed.
- PI 543093 **donor id:** 3744. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alzaher. **elevation:** 2100m. **remarks:** Race - Caudatum durra. Head type 4 - semi-open, elongated, elliptical. Seed white. Cultivated. Seed.
- PI 543094 **donor id:** 3773. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alzaher. **elevation:** 2100m. **remarks:** Race - Kafir durra. Head type 5 - semi-compact, ovate. Seed dark yellow. Cultivated. Seed.
- PI 543095 **donor id:** 3844. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alzaher. **elevation:** 2100m. **remarks:** Race - Durra caudatum. Head type 5 - semi-compact, ovate. Seed yellow. Cultivated. Seed.
- PI 543096 **donor id:** 3865. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alzaher. **elevation:** 2100m. **remarks:** Race - Durra. Head type 5 - semi-compact, ovate. Seed yellow. Cultivated. Seed.
- PI 543097 **donor id:** 3874. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alzaher. **elevation:** 2100m. **remarks:** Race - Durra kafir. Head type 6 - semi-compact, elliptical. Seed yellow. Cultivated. Seed.
- PI 543098 **donor id:** 3881. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alzaher. **elevation:** 2100m. **remarks:** Race - Durra kafir. Head type 5 - semi-compact, ovate. Seed yellow. Cultivated. Seed.
- PI 543099 **donor id:** 3888. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alzaher. **elevation:** 2100m. **remarks:** Race - Caudatum durra. Head type 4 - semi-open, elongated, elliptical. Seed light red. Cultivated. Seed.
- PI 543100 **donor id:** 3895. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alzaher. **elevation:** 2100m. **remarks:** Race - Durra. Head type 5 - semi-compact, ovate. Seed yellow. Cultivated. Seed.
- PI 543101 **donor id:** 3896. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alzaher. **elevation:** 2100m. **remarks:** Race - Durra kafir. Head type 4 - semi-open, elongated, elliptical. Seed yellow. Cultivated. Seed.

PI 543074 to 543175-continued

- PI 543102 **donor id:** 3914. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alzaher. **elevation:** 2100m. **remarks:** Race - Durra kafir. Head type 6 - semi-compact, elliptical. Seed yellow. Cultivated. Seed.
- PI 543103 **donor id:** 3917. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alzaher. **elevation:** 2100m. **remarks:** Race - Caudatum durra. Head type 6 - semi-compact, elliptical. Seed yellow. Cultivated. Seed.
- PI 543104 **donor id:** 3923. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alzaher. **elevation:** 2100m. **remarks:** Race - Durra. Head type 7 - very compact, ovate, flattened base, with usually a recurved peduncle. Seed yellow. Cultivated. Seed.
- PI 543105 **donor id:** 3938. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alzaher. **elevation:** 2100m. **remarks:** Race - Durra kafir. Head type 4 - semi-open, elongated, elliptical. Seed light yellow. Cultivated. Seed.
- PI 543106 **donor id:** 3950. **origin:** Yemen Arab Republic. **locality:** Al Bayda. **elevation:** 2080m. **remarks:** Race - Durra. Head type 6 - semi-compact, elliptical. Seed yellow. Cultivated. Seed.
- PI 543107 **donor id:** 3953. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alzaher. **elevation:** 2080m. **remarks:** Race - Durra caudatum. Head type 5 - semi-compact, ovate. Seed yellow. Cultivated. Seed.
- PI 543108 **donor id:** 3955. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alfwhah. **elevation:** 2080m. **remarks:** Race - Durra caudatum. Head type 5 - semi-compact, ovate. Seed light yellow. Cultivated. Seed.
- PI 543109 **donor id:** 3956. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alfwhah. **elevation:** 2080m. **remarks:** Race - Durra. Head type 5 - semi-compact, ovate. Seed light yellow. Cultivated. Seed.
- PI 543110 **donor id:** 3963. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alfwhah. **elevation:** 2080m. **remarks:** Race - Durra caudatum. Head type 5 - semi-compact, ovate. Seed yellow. Cultivated. Seed.
- PI 543111 **donor id:** 3976. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alfwhah. **elevation:** 2080m. **remarks:** Race - Durra caudatum. Head type 6 - semi-compact, elliptical. Seed yellow. Cultivated. Seed.

PI 543074 to 543175-continued

- PI 543112 **donor id:** 3980. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alfwah. **elevation:** 2080m. **remarks:** Race - Durra. Head type 5 - semi-compact, ovate. Seed yellow. Cultivated. Seed.
- PI 543113 **donor id:** 3990. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alfwah. **elevation:** 2080m. **remarks:** Race - Caudatum durra. Head type 4 - semi-open, elongated, elliptical. Seed yellow. Cultivated. Seed.
- PI 543114 **donor id:** 3994. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alfwah. **elevation:** 2080m. **remarks:** Race - Caudatum durra. Head type 4 - semi-open, elongated, elliptical. Seed yellow. Cultivated. Seed.
- PI 543115 **donor id:** 4016. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alfwah. **elevation:** 2080m. **remarks:** Race - Caudatum durra. Head type 5 - semi-compact, ovate. Seed light orange. Cultivated. Seed.
- PI 543116 **donor id:** 4017. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alfwah. **elevation:** 2080m. **remarks:** Race - Caudatum durra. Head type 5 - semi-compact, ovate. Seed yellow. Cultivated. Seed.
- PI 543117 **donor id:** 4021. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alzaher. **elevation:** 2090m. **remarks:** Race - Durra kafir. Head type 5 - semi-compact, ovate. Seed light yellow. Cultivated. Seed.
- PI 543118 **donor id:** 4033. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alfoah. **elevation:** 2080m. **remarks:** Race - Caudatum durra. Head type 4 - semi-open, elongated, elliptical. Seed orange. Cultivated. Seed.
- PI 543119 **donor id:** 4049. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alfoah. **elevation:** 2080m. **remarks:** Race - Caudatum durra. Head type 4 - semi-open, elongated, elliptical. Seed orange. Cultivated. Seed.
- PI 543120 **donor id:** 4093. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alzaher. **elevation:** 2090m. **remarks:** Race - Caudatum durra. Head type 4 - semi-open, elongated, elliptical. Seed light yellow. Cultivated. Seed.
- PI 543121 **donor id:** 4094. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alzaher. **elevation:** 2090m. **remarks:** Race - Caudatum durra. Head type 4 - semi-open, elongated, elliptical. Seed yellow. Cultivated. Seed.

PI 543074 to 543175-continued

- PI 543122 **donor id:** 4098. **origin:** Yemen Arab Republic. **locality:** Al Bayda Beer Algarm. **elevation:** 2050m. **remarks:** Race - Durra kafir. Head type 5 - semi-compact, ovate. Seed light yellow. Cultivated. Seed.
- PI 543123 **donor id:** 4100. **origin:** Yemen Arab Republic. **locality:** Al Bayda Beer Algarm. **elevation:** 2050m. **remarks:** Race - Durra caudatum. Head type 5 - semi-compact, ovate. Seed yellow. Cultivated. Seed.
- PI 543124 **donor id:** 4103. **origin:** Yemen Arab Republic. **locality:** Al Bayda Awen. **elevation:** 2140m. **remarks:** Race - Caudatum durra. Head type 4 - semi-open, elongated, elliptical. Seed yellow. Cultivated. Seed.
- PI 543125 **donor id:** 4108. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alfoah. **elevation:** 2080m. **remarks:** Race - Durra kafir. Head type 5 - semi-compact, ovate. Seed light yellow. Cultivated. Seed.
- PI 543126 **donor id:** 4112. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alfoah. **elevation:** 2080m. **remarks:** Race - Caudatum durra. Head type 5 - semi-compact, ovate. Seed light yellow. Cultivated. Seed.
- PI 543127 **donor id:** 4123. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alfoah. **elevation:** 2080m. **remarks:** Race - Durra caudatum. Head type 4 - semi-open, elongated, elliptical. Seed red. Cultivated. Seed.
- PI 543128 **donor id:** 4126. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alzaher. **elevation:** 2090m. **remarks:** Race - Caudatum. Head type 3 - open, elongated, elliptical. Seed brown. Cultivated. Seed.
- PI 543129 **donor id:** 4128. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alzaher. **elevation:** 2090m. **remarks:** Race - Durra kafir. Head type 5 - semi-compact, ovate. Seed light yellow. Cultivated. Seed.
- PI 543130 **donor id:** 4129. **origin:** Yemen Arab Republic. **locality:** Al Bayda Beer Algarwy. **elevation:** 2050m. **remarks:** Race - Durra caudatum. Head type 5 - semi-compact, ovate. Seed brown. Cultivated. Seed.
- PI 543131 **donor id:** 4130. **origin:** Yemen Arab Republic. **locality:** Al Bayda Beer Algarwy. **elevation:** 2050m. **remarks:** Race - Caudatum durra. Head type 5 - semi-compact, ovate. Seed brown. Cultivated. Seed.

PI 543074 to 543175-continued

- PI 543132 **donor id:** 4166. **origin:** Yemen Arab Republic. **locality:** Al Bayda Beer Algarwy. **elevation:** 2050m. **remarks:** Race - Durra caudatum. Head type 5 - semi-compact, ovate. Seed light yellow. Cultivated. Seed.
- PI 543133 **donor id:** 4174. **origin:** Yemen Arab Republic. **locality:** Al Bayda Al Matar. **elevation:** 2100m. **remarks:** Race - Caudatum durra. Head type 6 - semi-compact, elliptical. Seed yellow. Cultivated. Seed.
- PI 543134 **donor id:** 4175. **origin:** Yemen Arab Republic. **locality:** Al Bayda Al Matar. **elevation:** 2100m. **remarks:** Race - Caudatum durra. Head type 6 - semi-compact, elliptical. Seed light yellow. Cultivated. Seed.
- PI 543135 **donor id:** 4179. **origin:** Yemen Arab Republic. **locality:** Al Bayda Al Matar. **elevation:** 2100m. **remarks:** Race - Caudatum durra. Head type 5 - semi-compact, ovate. Seed yellow. Cultivated. Seed.
- PI 543136 **donor id:** 4181. **origin:** Yemen Arab Republic. **locality:** Al Bayda Al Matar. **elevation:** 2100m. **remarks:** Race - Caudatum durra. Head type 5 - semi-compact, ovate. Seed light yellow. Cultivated. Seed.
- PI 543137 **donor id:** 4190. **origin:** Yemen Arab Republic. **locality:** Al Bayda Beer Algarwy. **elevation:** 2050m. **remarks:** Race - Durra caudatum. Head type 5 - semi-compact, ovate. Seed light yellow. Cultivated. Seed.
- PI 543138 **donor id:** 4202. **origin:** Yemen Arab Republic. **locality:** Al Bayda Beer Algarwy. **elevation:** 2050m. **remarks:** Race - Caudatum durra. Head type 4 - semi-open, elongated, elliptical. Seed yellow. Cultivated. Seed.
- PI 543139 **donor id:** 4206. **origin:** Yemen Arab Republic. **locality:** Al Bayda Beer Algarwy. **elevation:** 2050m. **remarks:** Race - Caudatum durra. Head type 4 - semi-open, elongated, elliptical. Seed yellow. Cultivated. Seed.
- PI 543140 **donor id:** 4208. **origin:** Yemen Arab Republic. **locality:** Al Bayda Beer Algarwy. **elevation:** 2050m. **remarks:** Race - Durra caudatum. Head type 5 - semi-compact, ovate. Seed yellow. Cultivated. Seed.
- PI 543141 **donor id:** 4211. **origin:** Yemen Arab Republic. **locality:** Al Bayda Beer Algarwy. **elevation:** 2050m. **remarks:** Race - Durra caudatum. Head type 5 - semi-compact, ovate. Seed yellow. Cultivated. Seed.

PI 543074 to 543175-continued

- PI 543142 **donor id:** 4213. **origin:** Yemen Arab Republic. **locality:** Al Bayda Beer Algarwy. **elevation:** 2050m. **remarks:** Race - Durra caudatum. Head type 5 - semi-compact, ovate. Seed yellow. Cultivated. Seed.
- PI 543143 **donor id:** 4234. **origin:** Yemen Arab Republic. **locality:** Al Bayda Al Matar. **elevation:** 2100m. **remarks:** Race - Caudatum durra. Head type 4 - semi-open, elongated, elliptical. Seed yellow. Cultivated. Seed.
- PI 543144 **donor id:** 4243. **origin:** Yemen Arab Republic. **locality:** Al Bayda Al Matar. **elevation:** 2100m. **remarks:** Race - Caudatum durra. Head type 4 - semi-open, elongated, elliptical. Seed yellow. Cultivated. Seed.
- PI 543145 **donor id:** 4263. **origin:** Yemen Arab Republic. **locality:** Al Bayda Al Matar. **elevation:** 2100m. **remarks:** Race - Caudatum durra. Head type 4 - semi-open, elongated, elliptical. Seed yellow. Cultivated. Seed.
- PI 543146 **donor id:** 4285. **origin:** Yemen Arab Republic. **locality:** Al Bayda Al Matar. **elevation:** 2100m. **remarks:** Race - Caudatum durra. Head type 4 - semi-open, elongated, elliptical. Seed white. Cultivated. Seed.
- PI 543147 **donor id:** 4286. **origin:** Yemen Arab Republic. **locality:** Al Bayda Al Matar. **elevation:** 2100m. **remarks:** Race - Caudatum durra. Head type 4 - semi-open, elongated, elliptical. Seed yellow. Cultivated. Seed.
- PI 543148 **donor id:** 4297. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alsharyah. **elevation:** 2070m. **remarks:** Race - Durra. Head type 6 - semi-compact, elliptical. Seed yellow. Cultivated. Seed.
- PI 543149 **donor id:** 4299. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alsharyah. **elevation:** 2070m. **remarks:** Race - Caudatum durra. Head type 4 - semi-open, elongated, elliptical. Seed white and light brown. Cultivated. Seed.
- PI 543150 **donor id:** 4304. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alsharyah. **elevation:** 2070m. **remarks:** Race - Durra. Head type 6 - semi-compact, elliptical. Seed yellow. Cultivated. Seed.
- PI 543151 **donor id:** 4307. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alsharyah. **elevation:** 2070m. **remarks:** Race - Durra kafir. Head type 5 - semi-compact, ovate. Seed light yellow. Cultivated. Seed.

PI 543074 to 543175-continued

- PI 543152 **donor id:** 4308. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alsharyah. **elevation:** 2070m. **remarks:** Race - Durra kafir. Head type 6 - semi-compact, elliptical. Seed light yellow. Cultivated. Seed.
- PI 543153 **donor id:** 4309. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alsharyah. **elevation:** 2070m. **remarks:** Race - Durra kafir. Head type 6 - semi-compact, elliptical. Seed yellow. Cultivated. Seed.
- PI 543154 **donor id:** 4323. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alsharyah. **elevation:** 2070m. **remarks:** Race - Durra. Head type 7 - very compact, ovate, flattened base, with usually a recurved peduncle. Seed yellow. Cultivated. Seed.
- PI 543155 **donor id:** 4328. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alsharyah. **elevation:** 2070m. **remarks:** Race - Durra kafir. Head type 5 - semi-compact, ovate. Seed yellow. Cultivated. Seed.
- PI 543156 **donor id:** 4330. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alsharyah. **elevation:** 2070m. **remarks:** Race - Kafir durra. Head type 4 - semi-open, elongated, elliptical. Seed yellow. Cultivated. Seed.
- PI 543157 **donor id:** 4336. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alsharyah. **elevation:** 2070m. **remarks:** Race - Kafir durra. Head type 4 - semi-open, elongated, elliptical. Seed yellow. Cultivated. Seed.
- PI 543158 **donor id:** 4342. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alsharyah. **elevation:** 2070m. **remarks:** Race - Durra caudatum. Head type 5 - semi-compact, ovate. Seed yellow. Cultivated. Seed.
- PI 543159 **donor id:** 4346. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alsharyah. **elevation:** 2070m. **remarks:** Race - Durra caudatum. Head type 5 - semi-compact, ovate. Seed yellow. Cultivated. Seed.
- PI 543160 **donor id:** 4348. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alsharyah. **elevation:** 2070m. **remarks:** Race - Durra caudatum. Head type 5 - semi-compact, ovate. Seed yellow. Cultivated. Seed.
- PI 543161 **donor id:** 4355. **origin:** Yemen Arab Republic. **locality:** Al Bayda Awen. **elevation:** 2140m. **remarks:** Race - Durra. Head type 5 - semi-compact, ovate. Seed yellow. Cultivated. Seed.

PI 543074 to 543175-continued

- PI 543162 **donor id:** 4380. **origin:** Yemen Arab Republic. **locality:** Al Bayda Awen. **elevation:** 2140m. **remarks:** Race - Durra. Head type 5 - semi-compact, ovate. Seed yellow. Cultivated. Seed.
- PI 543163 **donor id:** 4389. **origin:** Yemen Arab Republic. **locality:** Al Bayda Awen. **elevation:** 2140m. **remarks:** Race - Durra caudatum. Head type 5 - semi-compact, ovate. Seed yellow. Cultivated. Seed.
- PI 543164 **donor id:** 4394. **origin:** Yemen Arab Republic. **locality:** Al Bayda Awen. **elevation:** 2140m. **remarks:** Race - Bicolor. Head type 3 - open, elongated, elliptical. Seed yellow. Cultivated. Seed.
- PI 543165 **donor id:** 4396. **origin:** Yemen Arab Republic. **locality:** Al Bayda Awen. **elevation:** 2140m. **remarks:** Race - Bicolor. Head type 3 - open, elongated, elliptical. Seed yellow. Cultivated. Seed.
- PI 543166 **donor id:** 4448. **origin:** Yemen Arab Republic. **locality:** Al Bayda Awen. **elevation:** 2140m. **remarks:** Race - Durra caudatum. Head type 4 - semi-open, elongated, elliptical. Seed yellow. Cultivated. Seed.
- PI 543167 **donor id:** 4450. **origin:** Yemen Arab Republic. **locality:** Al Bayda Awen. **elevation:** 2140m. **remarks:** Race - Durra kafir. Head type 5 - semi-compact, ovate. Seed yellow. Cultivated. Seed.
- PI 543168 **donor id:** 4466. **origin:** Yemen Arab Republic. **locality:** Al Bayda Awen. **elevation:** 2010m. **remarks:** Race - Caudatum durra. Head type 5 - semi-compact, ovate. Seed light red. Cultivated. Seed.
- PI 543169 **donor id:** 4473. **origin:** Yemen Arab Republic. **locality:** Al Bayda Awen. **elevation:** 2010m. **remarks:** Race - Caudatum. Head type 4 - semi-open, elongated, elliptical. Seed light red. Cultivated. Seed.
- PI 543170 **donor id:** 4474. **origin:** Yemen Arab Republic. **locality:** Al Bayda Al Matar. **elevation:** 2010m. **remarks:** Race - Caudatum. Head type 4 - semi-open, elongated, elliptical. Seed white. Cultivated. Seed.
- PI 543171 **donor id:** 4504. **origin:** Yemen Arab Republic. **locality:** Al Bayda Al Matar. **elevation:** 2010m. **remarks:** Race - Durra kafir. Head type 5 - semi-compact, ovate. Seed yellow. Cultivated. Seed.

PI 543074 to 543175-continued

- PI 543172 **donor id:** 4528. **origin:** Yemen Arab Republic. **locality:** Al Bayda Al Matar. **elevation:** 2010m. **remarks:** Race - Bicolor. Head type 3 - open, elongated, elliptical. Seed yellow. Cultivated. Seed.
- PI 543173 **donor id:** 4566. **origin:** Yemen Arab Republic. **locality:** Al Bayda Alsharyah. **elevation:** 2010m. **remarks:** Race - Durra caudatum. Head type 5 - semi-compact, ovate. Seed yellow. Cultivated. Seed.
- PI 543174 **donor id:** 4575. **origin:** Yemen Arab Republic. **locality:** Al Bayda Awen. **elevation:** 2010m. **remarks:** Race - Durra caudatum. Head type 5 - semi-compact, ovate. Seed yellow. Cultivated. Seed.
- PI 543175 **donor id:** 4576. **origin:** Yemen Arab Republic. **locality:** Al Bayda Awen. **elevation:** 2140m. **remarks:** Race - Durra kafir. Head type 5 - semi-compact, ovate. Seed light yellow. Cultivated. Seed.

PI 543176. *Ulmus parvifolia* Jacq. ULMACEAE Lacebark elm

Donated by: Townsend, A.M., U.S. National Arboretum, USDA-ARS, 3501 New York Ave, NE, Washington, D.C., United States. Received August 09, 1990.

donor id: NA 55345. **origin:** United States. **cultivar:** PATHFINDER. **pedigree:** Clonal selection at the USDA Nursery Crops Res. Lab., Delaware, Ohio from a seedling population of unknown origin. **remarks:** Tree vase-shaped, pendulous crown. Height 11.3m and crown spread 9.7m at 27 years of age. Bark has lacebark quality, mixed colors and textures. Outer bark varies from black (202C) to grey (201C), and greyed green (195A) but flakes off with age, revealing a grey orange (165B) color. Leaves typical for species, greyed red (178A) color in autumn. Fruits red purple (59A), ripens in mid-October in Ohio. Cold. Tree. Cultivar. Plant.

PI 543177. *Cajanus cajan* (L.) Millsp. FABACEAE

Donated by: Williams, D.E., New York Botanical Garden, Bronx, New York, United States. **remarks:** Collected in Northern Bolivia, September 8, 1988 through December 12, 1988. Received November 1989.

donor id: 779. **origin:** Bolivia. **local name:** Chicharilla (Spanish) Juchui chicharilla (Quechua). **collected:** October 25, 1988. **collector id:** 779. **locality:** Tacana and Quechua Indian town, 35km W of Tumupasa on footpath, on high bench above the Rio Tuichi, San Jose de Uchupiamonas, La Paz Department, Iturralde Province. **latitude:** 14 deg. 15 min. S. **longitude:** 68 deg. 10 min. W. **elevation:** 630m. **remarks:** Shrub to 3m high. Flowers papilionate, yellow with purple venations on back of standard. Pods 4cm long. Seeds pinkish-tan, round, flattened, edible. Cultivated in chacos and dooryard gardens by the Indians for food and medicine. A tea made of the leaves and orange leaves is used as a remedy for fevers and colds. Cultivated. Seed.

PI 543178 to 543208. *Capsicum* sp. SOLANACEAE

Donated by: Williams, D.E., New York Botanical Garden, Bronx, New York, United States. **remarks:** Collected in Northern Bolivia, September 8, 1988 through December 12, 1988. Received November 1989.

PI 543178 **donor id:** 696. **origin:** Bolivia. **local name:** Aji. **collected:** September 18, 1988. **collector id:** 696. **locality:** Dooryard garden in the city of Santa Cruz de la Sierra, Santa Cruz Department, Andres Ibanez Province. **latitude:** 17 deg. 46 min. S. **longitude:** 63 deg. 04 min. W. **elevation:** 375m. **remarks:** Perennial, woody shrub 1.5m tall. Corollas cream colored with two yellow-green spots on the inside base of petals. Anthers purple. Flowers nodding, young fruits erect then nodding as fruits become heavier, turning from green to orange, then red. Common. Used as a spice. Cultivated. Seed.

PI 543179 **donor id:** 708. **origin:** Bolivia. **local name:** Aji. **collected:** September 28, 1988. **collector id:** 708. **locality:** Sanlgnacio de Moxos, Chaco 1.5km E of town square, Beni Department, Moxos Province. **latitude:** 14 deg. 50 min. S. **longitude:** 65 deg. 35 min. W. **elevation:** 165m. **remarks:** Perennial, woody shrub 1 m tall. Fruits to 10cm long, shiny, wrinkled, and twisted, green, changing to yellow and orange-red. Very piquant. Cultivated. Seed.

PI 543178 to 543208-continued

- PI 543180 **donor id:** 728. **origin:** Bolivia. **local name:** Aji (Spanish) Ta (Chimane). **collected:** October 03, 1988. **collector id:** 728. **locality:** Cero Ocho, Chimane Indian Village on the Rio Curiraba, 17km NNE of the Estacion Biologica Beni, Beni Department, Yacuma Province. **latitude:** 14 deg. 30 min. S. **longitude:** 66 deg. 30 min. W. **elevation:** 218m. **remarks:** Shrub to 1.5m tall. Flowers yellow, stamens dark. Fruits pendulous, wrinkled, cuniform, nearly 4-sided, deep red when ripe, very piquant. Seeds yellow. Cultivated by Indians in dooryard gardens. Cultivated. Seed.
- PI 543181 **donor id:** 748. **origin:** Bolivia. **local name:** Aji (Spanish) bido (Tacana). **collected:** October 15, 1988. **collector id:** 748. **locality:** Carmen Florida, small village on right bank of Rio Beni, 5km upriver from Rurrenabaque, Beni Department, Ballvian Province. **latitude:** 14 deg. 30 min. S. **longitude:** 67 deg. 30 min. W. **elevation:** 320m. **remarks:** Shrub to 1.5m tall. Fruits green, then red, 5cm long, somewhat ribbed, irregularly shaped, acuminate near stigma scar. Seeds white. Cultivated in chacos for market by acculturated Tacanas. Seeds may be mixed with those of no. 749. Cultivated. Seed.
- PI 543182 **donor id:** 749. **origin:** Bolivia. **local name:** Aji (Spanish), bido (Tacana). **collected:** October 15, 1988. **collector id:** 749. **locality:** Carmen Florida, small village on right bank of Rio Beni, 5km upriver from Rurrenabaque, Beni Department, Ballvian Province. **latitude:** 14 deg. 30 min. S. **longitude:** 67 deg. 30 min. W. **elevation:** 320m. **remarks:** Shrub to 1.5m tall. Fruits dark red, strongly ribbed, longitudinally flattened spheres to 3cm in diameter. Flowers light yellow with green anthers. Cultivated in chacos for market by acculturated Tacanas. Cultivated. Seed.
- PI 543183 **donor id:** 764. **origin:** Bolivia. **local name:** Aribibi chico bido (Tacana). **collected:** October 22, 1988. **collector id:** 764. **locality:** Tumupasa, Tacana Indian town, 50km NW of San Buenaventura, on road to Ixiamas, La Paz Department, Iturralde Province. **latitude:** 14 deg. 10 min. S. **longitude:** 67 deg. 55 min. W. **elevation:** 560m. **remarks:** Shrub to 2m tall. Flowers nodding, petals yellowish, anthers green. Fruits narrow, conical, erect, indihiscent, turning from green to dark red, 3cm long, very piquant. Seeds numerous, light yellow. Commonly cultivated in dooryard gardens. Cultivated. Seed.

PI 543178 to 543208-continued

- PI 543184 **donor id:** 772. **origin:** Bolivia. **local name:** Aji (Spanish), Bido (Tacana), Uchu (Quechua). **collected:** October 24, 1988. **collector id:** 772. **locality:** San Jose de Uchupiamonas, Tacana and Quechua Indian town, 35km W of Tumupasa on foot trail, on high bench over the Rio Tuichi, La Paz Department, Iturralde Province. **latitude:** 14 deg. 15 min. S. **longitude:** 68 deg. 10 min. W. **elevation:** 630m. **remarks:** Shrub to 2m tall. Flowers nodding, petals yellow, anthers purple. Fruit to 6cm long, pendulous, shiny green turning red, conical, wrinkled, ribbed. Seeds white. Cultivated by Indians in dooryard gardens. Cultivated. Seed.
- PI 543185 **donor id:** 773. **origin:** Bolivia. **local name:** Aji (Spanish), Bido (Tacana), Uchu (Quechua). **collected:** October 24, 1988. **collector id:** 773. **locality:** San Jose de Uchupiamonas, Tacana and Quechua Indian town located on a high bench over the Rio Tuichi, 35km W of Tumupasa on foot trail, La Paz Department, Iturralde Province. **latitude:** 14 deg. 15 min. S. **longitude:** 68 deg. 10 min. W. **elevation:** 630m. **remarks:** Shrub to 2m tall. Flowers nodding, petals light yellow, anthers purple. Fruits pendulous, shiny green, turning yellow when ripe, pyramidal, 4-ribbed. Seeds light brown. Cultivated in dooryard gardens. Cultivated. Seed.
- PI 543186 **donor id:** 774. **origin:** Bolivia. **local name:** Aji (Spanish), Bido (Tacana), Uchu (Quechua). **collected:** October 24, 1988. **collector id:** 774. **locality:** San Jose de Uchupiamonas, Tacana and Quechua Indian town, 35km W of Tumupasa on foot trail, on bench above Rio Tuichi, La Paz Department, Iturralde Province. **latitude:** 14 deg. 15 min. S. **longitude:** 68 deg. 10 min. W. **elevation:** 630m. **remarks:** Shrub to 2m tall. Flowers nodding, petals light yellow, anthers purple. Fruits pendulous, semi-globose, strongly ribbed with 4-5 rounded ribs, turning bright orange when ripe. Seeds light yellow, placenta orange. Cultivated in dooryard garden. Cultivated. Seed.
- PI 543187 **donor id:** 781. **origin:** Bolivia. **local name:** Aji dulce. **collected:** November 13, 1988. **collector id:** 781. **locality:** Cobija, market, Pando Department, Nicolas Suarez Province. **latitude:** 11 deg. 00 min. S. **longitude:** 68 deg. 45 min. W. **elevation:** 200m. **remarks:** Fruits vaguely pear-shaped, irregular, 5cm long, somewhat ribbed, contorted at apex, shiny, turning bright red, not piquant. Seeds light yellow. Purchased from a Brazilian vendor in the Cobija market. Said to be grown locally. Cultivated. Seed.

PI 543178 to 543208-continued

- PI 543188 **donor id:** 782. **origin:** Bolivia. **local name:** Aji dulce.
collected: November 13, 1988. **collector id:** 782.
locality: Cobija, market, Pando Department, Nicolas Suarez Province. **latitude:** 11 deg. 00 min. S. **longitude:** 68 deg. 45 min. W. **elevation:** 200m. **remarks:** Fruits oblong, irregular, to 7cm long, somewhat ribbed, shiny yellow when ripe, not piquant. Seeds light yellow. Purchased from a Brazilian vendor in the Cobija market. Said to be grown locally. Cultivated. Seed.
- PI 543189 **donor id:** 783. **origin:** Bolivia. **local name:** Aji dulce.
collected: November 13, 1988. **collector id:** 783.
locality: Cobija, market, Pando Department, Nicolas Suarez Province. **latitude:** 11 deg. 00 min. S. **longitude:** 68 deg. 45 min. W. **elevation:** 200m. **remarks:** Fruits oblong, pointed, 10cm long, smooth, shiny, dark red when mature, not piquant. Seeds light yellow. Thick, firm flesh. Purchased from a Brazilian vendor in the Cobija market. Said to be grown locally. Cultivated. Seed.
- PI 543190 **donor id:** 784. **origin:** Bolivia. **local name:** Aji dulce.
collected: November 13, 1988. **collector id:** 784.
locality: Cobija, market, Pando Department, Nicolas Suarez Province. **latitude:** 11 deg. 00 min. S. **longitude:** 68 deg. 45 min. W. **elevation:** 200m. **remarks:** Fruits oblong, to 7cm long, pointed, roughly triangular in cross-section, waxy, old ivory color, not piquant. Seeds light yellow. Purchased from a Brazilian vendor in the Cobija market. Said to be grown locally. Cultivated. Seed.
- PI 543191 **donor id:** 785. **origin:** Bolivia. **local name:** Aji dulce.
collected: November 13, 1988. **collector id:** 785.
locality: Cobija, market, Pando Department, Nicolas Suarez Province. **latitude:** 11 deg. 00 min. S. **longitude:** 68 deg. 45 min. W. **elevation:** 200m. **remarks:** Fruits oblong, to 6cm long, apex inverted, ribbed, yellow when mature, somewhat translucent, not piquant. Seeds light yellow. Purchased from a Brazilian vendor in the Cobija market. Said to be grown locally. Cultivated. Seed.
- PI 543192 **donor id:** 786. **origin:** Bolivia. **local name:** Aji dulce.
collected: November 13, 1988. **collector id:** 786.
locality: Cobija, market, Pando Department, Nicolas Suarez Province. **latitude:** 11 deg. 00 min. S. **longitude:** 68 deg. 45 min. W. **elevation:** 200m. **remarks:** Fruits somewhat pear-shaped, 3cm long, irregular, ribbed, 3-4 sided in cross section, apex inverted, dark purple when mature, flesh thin, not piquant. Seeds light yellow. Purchased from a Brazilian vendor in the Cobija market. Said to be grown locally. Cultivated. Seed.

PI 543178 to 543208-continued

- PI 543193 **donor id:** 787. **origin:** Bolivia. **local name:** Aji dulce. **collected:** November 13, 1988. **collector id:** 787. **locality:** Cobija, market, Pando Department, Nicolas Suarez Province. **latitude:** 11 deg. 00 min. S. **longitude:** 68 deg. 45 min. W. **elevation:** 200m. **remarks:** Fruits box-like, 4cm long, 3-4 strong ribs, inverted apex, orange when mature, not piquant. Seeds light yellow. Purchased from a Brazilian vendor in the Cobija market. Said to be grown locally. Cultivated. Seed.
- PI 543194 **donor id:** 788. **origin:** Bolivia. **local name:** Aji dulce. **collected:** November 13, 1988. **collector id:** 788. **locality:** Cobija, market, Pando Department, Nicolas Suarez Province. **latitude:** 11 deg. 00 min. S. **longitude:** 68 deg. 45 min. W. **elevation:** 200m. **remarks:** Fruits semi-globose with about 4 ribs, 4cm long, apex inverted, dull dark red when mature, thick, firm flesh, not piquant. Seeds light yellow. Purchased from a Brazilian vendor in the Cobija market. Said to be grown locally. Cultivated. Seed.
- PI 543195 **donor id:** 789. **origin:** Bolivia. **local name:** Aji dulce. **collected:** November 13, 1988. **collector id:** 789. **locality:** Cobija, market, Pando Department, Nicolas Suarez Province. **latitude:** 11 deg. 00 min. S. **longitude:** 68 deg. 45 min. W. **elevation:** 200m. **remarks:** Fruits irregular, oblong, to 7cm long, ribbed, contorted, apex inverted, shiny red when mature, not piquant. Seeds light yellow. Purchased from a Brazilian vendor in the Cobija market. Said to be grown locally. Cultivated. Seed.
- PI 543196 **donor id:** 812. **origin:** Bolivia. **local name:** Aji dulce. **collected:** November 11, 1988. **collector id:** 812. **locality:** Dooryard garden by Rio Acre, Cobija, Pando Department, Nicolas Suarez Province. **latitude:** 11 deg. 00 min. S. **longitude:** 68 deg. 45 min. W. **elevation:** 200m. **remarks:** Fruits oblong, wrinkled, sometimes contorted, 5cm long, red, not pungent. Seeds light yellow. Perennial woody shrub to 1.5m. Cultivated. Seed.
- PI 543197 **donor id:** 813. **origin:** Bolivia. **local name:** Aji dulce. **collected:** November 11, 1988. **collector id:** 813. **locality:** Dooryard garden by Rio Acre, Cobija, Pando Department, Nicolas Suarez Province. **latitude:** 11 deg. 00 min. S. **longitude:** 68 deg. 45 min. W. **elevation:** 200m. **remarks:** Perennial woody shrub to 1.5m tall. Fruit more or less globose, ribbed, red, not pungent, sweet. Cultivated. Seed.

PI 543178 to 543208-continued

- PI 543198 **donor id:** 814. **origin:** Bolivia. **local name:** Aji dulce blanco redondo. **collected:** November 11, 1988. **collector id:** 814. **locality:** Dooryard garden by Rio Acre, Cobija, Pando Department, Nicolas Suarez Province. **latitude:** 11 deg. 00 min. S. **longitude:** 68 deg. 45 min. W. **elevation:** 200m. **remarks:** Perennial woody shrub to 1.5m tall. Fruit more or less globose, ribbed, pale yellow-green when mature, not piquant, sweet. Cultivated. Seed.
- PI 543199 **donor id:** 816. **origin:** Bolivia. **local name:** Aji dulce. **collected:** November 11, 1988. **collector id:** 816. **locality:** Dooryard garden by Rio Acre, Cobija, Pando Department, Nicolas Suarez Province. **latitude:** 11 deg. 00 min. S. **longitude:** 68 deg. 45 min. W. **elevation:** 200m. **remarks:** Perennial, woody shrub to 1.5m tall. Fruits oblong, acuminate, to 7cm long, smooth, shiny red, not piquant, sweet. Cultivated. Seed.
- PI 543200 **donor id:** 830. **origin:** Bolivia. **local name:** Pimenton. **collected:** November 13, 1988. **collector id:** 830. **locality:** Cobija, market, Pando Department, Nicolas Suarez Province. **latitude:** 11 deg. 00 min. S. **longitude:** 68 deg. 45 min. W. **elevation:** 200m. **remarks:** Fruits pyramidal, somewhat ribbed, red at maturity, 8cm long, thick firm flesh, not piquant. Seeds yellow. Purchased from a Brazilian vendor. Said to be grown locally. Cultivated. Seed.
- PI 543201 **donor id:** 832. **origin:** Bolivia. **local name:** Aji. **collected:** November 15, 1988. **collector id:** 832. **locality:** Cobija, market, Pando Department, Nicolas Suarez Province. **latitude:** 11 deg. 00 min. S. **longitude:** 68 deg. 45 min. W. **elevation:** 200m. **remarks:** Fruits 2cm long, diamond-shaped, orange-red when mature, very piquant. Said to be grown locally. Cultivated. Seed.
- PI 543202 **donor id:** 842. **origin:** Bolivia. **local name:** Aji dulce. **collected:** November 16, 1988. **collector id:** 842. **locality:** Cobija, market, Pando Department, Nicolas Suarez Province. **latitude:** 11 deg. 00 min. S. **longitude:** 68 deg. 45 min. W. **elevation:** 200m. **remarks:** Fruits oblong, to 6cm long, irregular, light orange color, not piquant. Said to be cultivated locally. Cultivated. Seed.

PI 543178 to 543208-continued

- PI 543203 **donor id:** 865. **origin:** Bolivia. **local name:** Aji gusanito. **collected:** November 23, 1988. **collector id:** 865. **locality:** Riberalta, market, Beni Department, Vaca Diez Province. **latitude:** 11 deg. 01 min. S. **longitude:** 66 deg. 08 min. W. **elevation:** 134m. **remarks:** Fruits elongate, 2.5-4cm long, wrinkled, giving a worm-like appearance, style scar inserted, yellow when ripe, piquant, Seeds white. Cultivated locally. Cultivated. Seed.
- PI 543204 **donor id:** 875. **origin:** Bolivia. **local name:** Aji. **collected:** November 27, 1988. **collector id:** 875. **locality:** Mercado Central, Trinidad, Beni Department, Cercado Province. **latitude:** 14 deg. 48 min. S. **longitude:** 64 deg. 52 min. W. **elevation:** 155m. **remarks:** Fruits pyramidal, 3cm long, dark red, waxy, piquant. Seeds yellow. Purchased in market. Cultivated. Seed.
- PI 543205 **donor id:** 876. **origin:** Bolivia. **local name:** Aji. **collected:** November 27, 1988. **collector id:** 876. **locality:** Trinidad, Mercado Central, Beni Department, Cercado Province. **latitude:** 14 deg. 48 min. S. **longitude:** 64 deg. 52 min. W. **elevation:** 155m. **remarks:** Fruit sub-globose, 1.5cm in diameter, with acuminate apex, dark red, waxy, piquant. Seeds yellow. Purchased in market. Cultivated. Seed.
- PI 543206 **donor id:** 877. **origin:** Bolivia. **local name:** Aji. **collected:** November 27, 1988. **collector id:** 877. **locality:** Trinidad, Mercado Central, Beni Department, Cercado Province. **latitude:** 14 deg. 48 min. S. **longitude:** 64 deg. 52 min. W. **elevation:** 155m. **remarks:** Fruits irregular, vaguely globose, 3.5cm diameter, pale green, piquant. Seeds light yellow. Purchased in market. Cultivated. Seed.
- PI 543207 **donor id:** 878. **origin:** Bolivia. **local name:** Aji. **collected:** November 27, 1988. **collector id:** 878. **locality:** Trinidad, Mercado Central, Beni Department, Cercado Province. **latitude:** 14 deg. 48 min. S. **longitude:** 64 deg. 52 min. W. **elevation:** 155m. **remarks:** Fruit top-shaped, flanged, 5cm in diameter, 3-4cm long, style scar inserted, dull red color, piquant. Seeds yellow. Purchased in market. Cultivated. Seed.

PI 543178 to 543208-continued

PI 543208 **donor id:** 879. **origin:** Bolivia. **local name:** Aji.
collected: November 27, 1988. **collector id:** 879.
locality: Trinidad, Mercado Central, Beni Department,
Cercado Province. **latitude:** 14 deg. 48 min. S.
longitude: 64 deg. 52 min. W. **elevation:** 155m.
remarks: Fruit subglobose, 1.5cm in diameter, acuminate
apex, yellow-green turning orange, piquant. Seeds white.
Purchased in market. Cultivated. Seed.

PI 543209 to 543211. *Citrullus* sp. CUCURBITACEAE

Donated by: Williams, D.E., New York Botanical Garden, Bronx, New
York, United States. **remarks:** Collected in Northern Bolivia,
September 8, 1988 through December 12, 1988. Received November
1989.

PI 543209 **donor id:** 722. **origin:** Bolivia. **local name:** Sandia
(Spanish), Tibus shandia (Chimane) black seeds, Muchas
shandia (Chimane) reddish seeds. **collected:** October 03,
1988. **collector id:** 722. **locality:** Cero Ocho, Chimane
Indian village on Rio Curiraba, 17km NNE of the Estacion
Biologica Beni, Beni Department, Yacuma Province.
latitude: 14 deg. 30 min. S. **longitude:** 66 deg. 30 min.
W. **elevation:** 218m. **remarks:** Mixed seed of two
varieties, one with black seeds, another with reddish
seeds, said to produce spherical and elongate fruits,
respectively. Watermelons cultivated by Indians on
riverine beaches and in chacos. Cultivated. Seed.

PI 543210 **donor id:** 733. **origin:** Bolivia. **local name:** Sandia
(Spanish) Muchas shandia (Chamane) reddish seeds.
collected: October 04, 1988. **collector id:** 733.
locality: Cero Ocho, Chimane Indian village on Rio
Curiraba, 17km NNE of the Estacion Biologica Beni, Beni
Department, Yacuma Province. **latitude:** 14 deg. 30 min.
S. **longitude:** 66 deg. 30 min. W. **elevation:** 218m.
remarks: Light orange seeds, said to produce elongate
fruits. Watermelon cultivated by Indians on riverine
sandbars. Cultivated. Seed.

PI 543211 **donor id:** 734. **origin:** Bolivia. **local name:** Sandia
(Spanish), Tibus shandia (Chimane). **collected:** October
04, 1988. **collector id:** 734. **locality:** Cero Ocho,
Chimane Indian village on Rio Curiraba, 17km NNE of the
Estacion Biologica Beni, Beni Department, Yacuma
Province. **latitude:** 14 deg. 30 min. S. **longitude:** 66
deg. 30 min. W. **elevation:** 218m. **remarks:** Seeds black,
said to produce spherical fruits. Watermelon cultivated
by Indians on sandbars. Cultivated. Seed.

PI 543212. *Citrullus lanatus* (Thunb.) Matsum. & Nakai CUCURBITACEAE
Watermelon

Donated by: Williams, D.E., New York Botanical Garden, Bronx, New York, United States. **remarks:** Collected in Northern Bolivia, September 8, 1988 through December 12, 1988. Received November 1989.

donor id: 807. **origin:** Bolivia. **local name:** Sandia.
collected: November 08, 1988. **collector id:** 807.
locality: 21 de Septiembre, small village on L bank of Rio Beni, Pando Department, Madre de Dios Province.
latitude: 11 deg. 25 min. S. **longitude:** 66 deg. 30 min. W. **elevation:** 135m. **remarks:** Teardrop-shaped fruit 40cm long, 20cm diameter, green with lighter green spots in longitudinal lines. Locally cultivated watermelon. Cultivated. Seed.

PI 543213 to 543214. *Cyclanthera pedata* (L.) Schrad. CUCURBITACEAE
Achocha

Donated by: Williams, D.E., New York Botanical Garden, Bronx, New York, United States. **remarks:** Collected in Northern Bolivia, September 8, 1988 through December 12, 1988. Received November 1989.

PI 543213 **donor id:** 826. **origin:** Bolivia. **local name:** Caiba, Maxixi peruano, Achoscha (all Spanish). **collected:** November 13, 1988. **collector id:** 826. **locality:** Cobija, market, Pando Department, Nicolas Suarez Province.
latitude: 11 deg. 00 min. S. **longitude:** 68 deg. 45 min. W. **elevation:** 200m. **remarks:** Fruit oblong, pointed at both ends, somewhat flattened, smooth, waxy, partially ribbed, to 14cm long, 6cm wide, hollow, light green turning yellowish. Seeds black, roughly textured, somewhat triangular, dentate, about 10 borne on an axially free placenta. Cultivated locally as a vegetable for soups, stews, and stuffing. Cultivated. Seed.

PI 543214 **donor id:** 872. **origin:** Bolivia. **local name:** Achoscha. **collected:** November 27, 1988. **collector id:** 872. **locality:** Pompeya market, Trinidad, Beni Department, Cercado Province. **latitude:** 14 deg. 48 min. S. **longitude:** 64 deg. 52 min. W. **elevation:** 155m. **remarks:** Fruit oblong, to 18cm long, 6cm wide, acuminate, flattened, shallowly ribbed, soft, hollow, light green. Seeds black, vaguely triangular, dentate, rough-textured, 8-14 borne on an axially free placenta. Cucumber-like odor. Cultivated as a vegetable for soups and for stuffing. Cultivated. Seed.

PI 543215 to 543230. Cucurbita sp. CUCURBITACEAE

Donated by: Williams, D.E., New York Botanical Garden, Bronx, New York, United States. **remarks:** Collected in Northern Bolivia, September 8, 1988 through December 12, 1988. Received November 1989.

- PI 543215 **donor id:** 732. **origin:** Bolivia. **local name:** Joco (Spanish), Shobo (Chimane). **collected:** October 04, 1988. **collector id:** 732. **locality:** Chimane Indian village on Rio Curiraba, 17km NNE of the Estacion Biologica Beni, Cero Ocho, Beni Department, Yacuma Province. **latitude:** 14 deg. 30 min. S. **longitude:** 66 deg. 30 min. W. **elevation:** 218m. **remarks:** Ribbed, spherical to ovoid fruits, light green-blue with light yellow irregular spots, to 15cm diam. Seeds light brown. Squash cultivated by Indians in chacos. Cultivated. Seed.
- PI 543216 **donor id:** 758. **origin:** Bolivia. **local name:** Joco, Zapallo. **collected:** October 19, 1988. **collector id:** 758. **locality:** Ixiamas, 100km NW of San Buenaventura, La Paz Department, Iturralde Province. **latitude:** 13 deg. 45 min. S. **longitude:** 68 deg. 10 min. W. **elevation:** 332m. **remarks:** Fruit green with yellow stripes, 30cm long, crook neck, orange flesh. Grown locally. Cultivated. Seed.
- PI 543217 **donor id:** 759. **origin:** Bolivia. **local name:** Joco, Zapallo. **collected:** October 19, 1988. **collector id:** 759. **locality:** 100km NW of San Buenaventura, Ixiamas, La Paz Department, Iturralde Province. **latitude:** 13 deg. 45 min. S. **longitude:** 68 deg. 10 min. W. **elevation:** 332m. **remarks:** Fruit pear shaped, ribbed, green with yellow spots, 20cm in diam., light orange flesh. Squash grown locally. Cultivated. Seed.
- PI 543218 **donor id:** 760. **origin:** Bolivia. **local name:** Joco, Zapallo. **collected:** October 19, 1988. **collector id:** 760. **locality:** 100km NW of San Buenaventura, Ixiamas, La Paz Department, Iturralde Province. **latitude:** 13 deg. 45 min. S. **longitude:** 68 deg. 10 min. W. **elevation:** 332m. **remarks:** Fruit acorn-shaped, ribbed, dark green. Squash grown locally. Cultivated. Seed.
- PI 543219 **donor id:** 804. **origin:** Bolivia. **local name:** Joco. **collected:** November 06, 1988. **collector id:** 804. **locality:** San Jose, small village on R bank of Rio Beni, Beni Department, Ballivian Province. **latitude:** 13 deg. 05 min. S. **longitude:** 67 deg. 08 min. W. **elevation:** 220m. **remarks:** Fruit spherical or with a short neck, many-ribbed, yellow-orange when ripe. Flesh very thick and deep orange in color. Fruits 20cm in diameter. Seeds light brown. Squash cultivated locally in chacos on river levee. Cultivated. Seed.

PI 543215 to 543230-continued

- PI 543220 **donor id:** 811. **origin:** Bolivia. **local name:** Joco.
collected: November 11, 1988. **collector id:** 811.
locality: Cobija, Pando Department, Nicolas Suarez
Province. **latitude:** 11 deg. 00 min. S. **longitude:** 68
deg. 45 min. W. **elevation:** 200m. **remarks:** Purchased
from a farmer living in town. Squash cultivated locally.
Cultivated. Seed.
- PI 543221 **donor id:** 818. **origin:** Bolivia. **local name:** Joco
(Spanish), Jirimu de caboclo (Portuguese) = Indian
squash. **collected:** November 12, 1988. **collector id:**
818. **locality:** Cobija, market, Pando Department, Nicolas
Suarez Province. **latitude:** 11 deg. 00 min. S.
longitude: 68 deg. 45 min. W. **elevation:** 200m.
remarks: Fruit pumkin-like, a flattened, strongly-ribbed
spheroid, 27cm diam., orange color, light orange flesh,
seeds chalk-white. Said to have been purchased across the
Rio Acre at the Brasileia (Acre) market. Cultivated
locally. Cultivated. Seed.
- PI 543222 **donor id:** 819. **origin:** Bolivia. **local name:** Joco.
collected: November 12, 1988. **collector id:** 819.
locality: Cobija, market, Pando Department, Nicolas
Suarez Province. **latitude:** 11 deg. 00 min. S.
longitude: 68 deg. 45 min. W. **elevation:** 200m.
remarks: Fruit pear-shaped, 38cm long, 25cm max. diam.
slightly ribbed, dark green with lighter green spots in
longitudinal stripes. Flesh orange. Seeds light brown.
Locally cultivated squash. Cultivated. Seed.
- PI 543223 **donor id:** 820. **origin:** Bolivia. **local name:** Joco.
collected: November 12, 1988. **collector id:** 820.
locality: Cobija, market, Pando Department, Nicolas
Suarez Province. **latitude:** 11 deg. 00 min. S.
longitude: 68 deg. 45 min. W. **elevation:** 200m.
remarks: Fruit sub-globose, 18cm diam., slightly ribbed,
light green with light orange-yellow spots. Flesh orange.
Seeds light yellow. Locally cultivated squash.
Cultivated. Seed.
- PI 543224 **donor id:** 821. **origin:** Bolivia. **local name:** Joco.
collected: November 12, 1988. **collector id:** 821.
locality: Cobija, market, Pando Department, Nicolas
Suarez Province. **latitude:** 11 deg. 00 min. S.
longitude: 68 deg. 45 min. W. **elevation:** 200m.
remarks: Fruit pear-shaped, 20cm long, 10cm max. diam.,
slightly ribbed, light orange color. Flesh orange. Seeds
tan. Locally cultivated squash. Cultivated. Seed.

PI 543215 to 543230-continued

- PI 543225 **donor id:** 822. **origin:** Bolivia. **local name:** Joco.
collected: November 12, 1988. **collector id:** 822.
locality: Cobija, market, Pando Department, Nicolas Suarez Province. **latitude:** 11 deg. 00 min. S.
longitude: 68 deg. 45 min. W. **elevation:** 200m.
remarks: Fruit pear-shaped, 20cm long, 14cm max. diam., slightly ribbed, creamy yellow color, flesh orange. Seeds light yellow. Locally cultivated squash. Cultivated. Seed.
- PI 543226 **donor id:** 823. **origin:** Bolivia. **local name:** Joco.
collected: November 12, 1988. **collector id:** 823.
locality: Cobija, market, Pando Department, Nicolas Suarez Province. **latitude:** 11 deg. 00 min. S.
longitude: 68 deg. 45 min. W. **elevation:** 200m.
remarks: Fruit oblong, pear-shaped, 30cm long, 13cm max. diameter, slightly ribbed, dark green with irregular orange stripes, flesh orange. Cultivated locally. Cultivated. Seed.
- PI 543227 **donor id:** 854. **origin:** Bolivia. **local name:** Joco (Spanish) Jemi (Esse Ejja). **collected:** November 19, 1988. **collector id:** 854. **locality:** Esse Ejja Indian village on Rio Beni, approx. 50 air km SW of Riberalta. **latitude:** 11 deg. 15 min. S. **longitude:** 66 deg. 18 min. W. **elevation:** 203m. **remarks:** Fruit spherical or egg-shaped, to 30cm long, strongly ribbed, orange, with corky peduncle. Flesh is firm, thick and orange, seeds white and numerous. Squash cultivated locally by Indians on sandbars and in chacos. Cultivated. Seed.
- PI 543228 **donor id:** 871. **origin:** Bolivia. **local name:** Joco.
collected: November 26, 1988. **collector id:** 871.
locality: Pompeya market, Trinidad, Beni Department, Cercado Province. **latitude:** 14 deg. 48 min. S.
longitude: 64 deg. 52 min. W. **elevation:** 155m.
remarks: Fruit oblong, ovoid, 25cm long, 15cm diam., slightly ribbed, predominantly yellow-orange with green striations. Flesh orange. Seeds light brown. Said to have been brought from San Pablo, Beni, near the border with Santa Cruz Department. Cultivated. Seed.

PI 543215 to 543230-continued

PI 543229 **donor id:** 873. **origin:** Bolivia. **local name:** Zapallito. **collected:** November 27, 1988. **collector id:** 873. **locality:** Pompeya market, Trinidad, Beni Department, Cercado Province. **latitude:** 14 deg. 48 min. S. **longitude:** 64 deg. 52 min. W. **elevation:** 155m. **remarks:** Small pumpkin-like squashes, flattened longitudinally, 15cm in diam., 7cm long, strongly ribbed, depressed peduncle insertion, woody peduncle flared at point of insertion, yellow-orange color, very firm, thick, light orange flesh, green layer just beneath pericarp. Seeds light yellow. Said to have come from Cochabamba. Cultivated. Seed.

PI 543230 **donor id:** 874. **origin:** Bolivia. **local name:** Joco. **collected:** November 27, 1988. **collector id:** 874. **locality:** Mercado Central, Trinidad, Beni Department, Cercado Province. **latitude:** 14 deg. 48 min. S. **longitude:** 64 deg. 52 min. W. **elevation:** 155m. **remarks:** Fruit spheroid, pumpkin-like, 18cm diam., ribbed, light orange color. Woody peduncle. Bright orange flesh. Seeds light brown with dark brown line around seed margin. Locally cultivated squash. Cultivated. Seed.

PI 543231. *Lablab purpureus* (L.) Sweet FABACEAE Hyacinth bean

Donated by: Williams, D.E., New York Botanical Garden, Bronx, New York, United States. **remarks:** Collected in Northern Bolivia, September 8, 1988 through December 12, 1988. Received November 1989.

donor id: 777. **origin:** Bolivia. **local name:** Poroto chiquito (Spanish), Chilpi (Tancana), Juchui poroto (Quechua). **collected:** October 25, 1988. **collector id:** 777. **locality:** San Jose de Uchupaimonas, Tacana and Quechua Indian town, 35km W of Tumupasa on footpath, on high bench above the Rio Tuichi, La Paz Department, Iturralde Province. **latitude:** 14 deg. 15 min. S. **longitude:** 68 deg. 10 min. W. **elevation:** 630m. **remarks:** Herbaceous vine. Flowers papilionate, white. Fruits are curved pods, 4cm long, containing 2-4 seeds. Seed tan with long, exserted white hilum extending 1/3 way around the seed. Heavy producer, yielding after one year. Cultivated. Seed.

PI 543232 to 543236. *Lagenaria* sp. CUCURBITACEAE

Donated by: Williams, D.E., New York Botanical Garden, Bronx, New York, United States. **remarks:** Collected in Northern Bolivia, September 8, 1988 through December 12, 1988. Received November 1989.

PI 543232 to 543236-continued

- PI 543232 **donor id:** 718. **origin:** Bolivia. **local name:** Mate (Spanish), Ewa (Chimane). **collected:** October 02, 1988. **collector id:** 718. **locality:** In chacos, Chimane Indian village on Rio Curiraba, 17km NNE of the Estacion Biologica Beni, Cero Ocho, Beni Department, Yacuma Province. **latitude:** 14 deg. 30 min. S. **longitude:** 66 deg. 30 min. W. **elevation:** 218m. **remarks:** Large spherical fruits to 40cm in diameter. Used as containers. Cultivated. Seed.
- PI 543233 **donor id:** 720. **origin:** Bolivia. **local name:** Mate (Spanish), Shara (Chimane). **collected:** October 02, 1988. **collector id:** 720. **locality:** In chacos, Chimane Indian village on Rio Curiraba, 17km NNE of the Estacion Biologica Beni, Cero Ocho, Beni Department, Yacuma Province. **latitude:** 14 deg. 30 min. S. **longitude:** 66 deg. 30 min. W. **elevation:** 218m. **remarks:** Elongate fruit to 50cm long, 30cm diameter. Bottle gourd cultivated by Indians. Cultivated. Seed.
- PI 543234 **donor id:** 770. **origin:** Bolivia. **local name:** Mumo (The gourd), Jushi (the plant) both Tacana Puro (Quechua), Tari (Spanish). **collected:** October 24, 1988. **collector id:** 770. **locality:** In chacos, San Jose de Uchupiamonas, Tacana and Quechua Indian town, 35km W of Tumupasa on footpath, on high bench above Rio Tuichi, La Paz Department, Iturralde Province. **latitude:** 14 deg. 15 min. S. **longitude:** 68 deg. 10 min. W. **elevation:** 630m. **remarks:** Round and pear-shaped fruits to 40cm in diameter. Vine trailing along ground. Flowers white. Bottle gourd cultivated by Indians. Cultivated. Seed.
- PI 543235 **donor id:** 805. **origin:** Bolivia. **local name:** Mate. **collected:** November 06, 1988. **collector id:** 805. **locality:** In dooryard gardens and chacos on river levee, small village on the R bank of the Rio Beni, San Jose, Beni Department, Ballivian Province. **latitude:** 13 deg. 05 min. S. **longitude:** 67 deg. 08 min. W. **elevation:** 220m. **remarks:** Small spherical fruits with slight neck, 10cm in diameter maximum. Seeds smaller than those of the large-fruited types, 1.3cm long, roughly triangular, flattened, tan to dark brown with two exserted lighter stripes on either side. Bottle gourd cultivated locally. Cultivated. Seed.

PI 543232 to 543236-continued

PI 543236 **donor id:** 806. **origin:** Bolivia. **local name:** Mate.
collected: November 06, 1988. **collector id:** 806.
locality: San Jose, small village on R bank of Rio Beni,
Beni Department, Ballivian Province. **latitude:** 13 deg.
05 min. S. **longitude:** 67 deg. 08 min. W. **elevation:**
220m. **remarks:** Long, pear-shaped fruits, 50cm long, 20cm
in diameter. Bottle gourd cultivated for eating and
storage vessels, and bailing canoes. Cultivated. Seed.

PI 543237. *Momordica charantia* L. CUCURBITACEAE Balsam pear

Donated by: Williams, D.E., New York Botanical Garden, Bronx, New
York, United States. **remarks:** Collected in Northern Bolivia,
September 8, 1988 through December 12, 1988. Received November
1989.

donor id: 771. **origin:** Bolivia. **local name:** Balsamina
(Spanish) Etibeni ina (Tacana). **collected:** October 24,
1988. **collector id:** 771. **locality:** San Jose de
Uchupiamonas, Tacana and Quechua Indian town, 35km on
footpath W of Tumupasa, on high bench above the Rio
Tuichi, La Paz Department, Iturralde Province. **latitude:**
14 deg. 15 min. S. **longitude:** 68 deg. 10 min. W.
elevation: 630m. **remarks:** Herbaceous vine trailing
densely over fences in dooryard garden. Flowers yellow.
Fruits avoid, to 5cm long, acuminate with spiney
longitudinal ribs, orange, dehiscent, exposing yellow
seeds covered with bright red arils. Common. Leaves used
as spot remover and for bathing children with a rash
called rasquina, and pitai. Casually cultivated.
Cultivated. Seed.

PI 543238 to 543239. *Pachyrhizus tuberosus* (Lam.) Sprengel FABACEAE
Yambean

Donated by: Williams, D.E., New York Botanical Garden, Bronx, New
York, United States. **remarks:** Collected in Northern Bolivia,
September 8, 1988 through December 12, 1988. Received November
1989.

PI 543238 **donor id:** 724. **origin:** Bolivia. **local name:** Ajipa
(Spanish) Cooco (Chimane). **collected:** October 03, 1988.
collector id: 724. **locality:** Cero Ocho, Chimane Indian
village, 17km NNE of the Estacion Biologica Beni, on the
Curiraba River, Beni Department, Yacuma Province.
latitude: 14 deg. 30 min. S. **longitude:** 66 deg. 30 min.
W. **elevation:** 218m. **remarks:** Seeds tan, spotted with
terra cotta or black, said to be poisonous. Cultivated.
Seed.

PI 543238 to 543239-continued

PI 543239 **donor id:** 780. **origin:** Bolivia. **local name:** Ajipa (Spanish) Ajipa (Tacana). **collected:** October 25, 1988. **collector id:** 780. **locality:** San Jose de Uchupiamonas, Tacana and Quechua Indian town, 35km on footpath W of Tumupasa, on high bench above the Rio Tuichi, La Paz Department, Iturralde Province. **latitude:** 14 deg. 15 min. S. **longitude:** 68 deg. 10 min. W. **elevation:** 630m. **remarks:** Pods 20cm long, containing 10 brown, oval, flattened seeds. Tuberous, edible root. Cultivated. Seed.

PI 543240 to 543241. *Sesamum indicum* L. PEDALIACEAE Sesame

Donated by: Williams, D.E., New York Botanical Garden, Bronx, New York, United States. **remarks:** Collected in Northern Bolivia, September 8, 1988 through December 12, 1988. Received November 1989.

PI 543240 **donor id:** 836. **origin:** Bolivia. **local name:** Chinchilin negro. **collected:** November 15, 1988. **collector id:** 836. **locality:** Cobija, dooryard garden of private house, 1km W of main square, on bank of the Rio Acre, Pando Department, Nicolas Suarez Province. **latitude:** 11 deg. 00 min. S. **longitude:** 68 deg. 45 min. W. **elevation:** 190m. **remarks:** Plants 1.5m tall, herbaceous. Seeds black, very small. Cultivated for extraction of the edible and medicinal oil from its seeds. Cultivated. Seed.

PI 543241 **donor id:** 843. **origin:** Bolivia. **local name:** Chinchilin negro. **collected:** November 16, 1988. **collector id:** 843. **locality:** Cobija, dooryard garden of private house, Pando Department, Nicolas Suarez Province. **latitude:** 11 deg. 00 min. S. **longitude:** 68 deg. 45 min. W. **elevation:** 190m. **remarks:** Plants 2m tall, herbaceous. Flowers white with lilac lip. Seeds black. Cultivated for extraction of medicinal oil from the seeds. Oil used as a remedy for "aire". It is drunk as a purgative and/or applied externally. Cultivated. Seed.

PI 543242. *Vigna unguiculata* (L.) Walp. FABACEAE Cowpea

Donated by: Williams, D.E., New York Botanical Garden, Bronx, New York, United States. **remarks:** Collected in Northern Bolivia, September 8, 1988 through December 12, 1988. Received November 1989.

PI 543242-continued

donor id: 711. **origin:** Bolivia. **local name:** Frejol.
collected: September 29, 1988. **collector id:** 711.
locality: San Ignacio de Moxos, Chaco 1.5km E of town
square, Beni Department, Moxos Province. **latitude:** 14
deg. 50 min. S. **longitude:** 65 deg. 35 min. W.
elevation: 165m. **remarks:** Plants a prostrate runner to
50cm tall. Flowers white, standard has yellow spot at
base. Pods green changing to yellow then reddish when
mature, up to 20cm long. Seeds white with brown hilum.
Cultivated. Seed.

PI 543243 to 543247. *Sorghum bicolor* (L.) Moench POACEAE Sorghum

Donated by: Pioneer Hi-Bred Internatinal, United States. Received
August 13, 1990.

PI 543243 **origin:** United States. **cultivar:** PH256. **other id:** PVP
9000226. **source:** Pending. **group:** PVPO. Cultivar.
Seed.

PI 543244 **origin:** United States. **cultivar:** PHA279. **other id:** PVP
9000227. **source:** Pending. **group:** PVPO. Cultivar.
Seed.

PI 543245 **origin:** United States. **cultivar:** PHA349. **other id:** PVP
9000228. **source:** Pending. **group:** PVPO. Cultivar.
Seed.

PI 543246 **origin:** United States. **cultivar:** PHB279. **other id:** PVP
9000229. **source:** Pending. **group:** PVPO. Cultivar.
Seed.

PI 543247 **origin:** United States. **cultivar:** PHB349. **other id:** PVP
9000230. **source:** Pending. **group:** PVPO. Cultivar.
Seed.

PI 543248. *Agrostis stolonifera* var. *palustris* (Huds.) Farw. POACEAE

Donated by: Jacklin Seed Company, United States. Received August
13, 1990.

origin: United States. **cultivar:** PUTTER. **other id:** PVP
9000231. **source:** Pending. **group:** PVPO. Cultivar.
Seed.

PI 543249 to 543251. *Phaseolus vulgaris* L. FABACEAE Bean

Donated by: Rogers Brothers Seed Company, United States. Received
August 13, 1990.

PI 543249 to 543251-continued

PI 543249 **origin:** United States. **cultivar:** PT84343. **other id:** PVP 9000232. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 543250 **origin:** United States. **cultivar:** CAMELOT. **other id:** PVP 9000233. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 543251 **origin:** United States. **cultivar:** EMBER. **other id:** PVP 9000234. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 543252. *Gossypium hirsutum* L. MALVACEAE Cotton

Donated by: Germain's, Inc., United States. Received August 13, 1990.

origin: United States. **cultivar:** GERMAIN'S ACALA GC-714. **other id:** PVP 9000235. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 543253 to 543260. *Sorghum bicolor* (L.) Moench POACEAE Sorghum

Donated by: York, J.O., Arkansas Agricultural Experiment Station, Plant Science 115, Fayetteville, Arkansas, United States. Received July 23, 1990.

PI 543253 **origin:** United States. **cultivar:** R LINE AR 3006. **pedigree:** Selection from S-57-15. **remarks:** 3-dwarf R line that restores pollen production to A1 cytoplasm. Pericarp brownish pink, mesocarp starchy, testa brown, glumes straw colored. (B1 B1 B2 B2 SSRRYYiizzTp Tp). Panicle exerted, above flag leaf (5cm) Panicle semi-open. Plant height approximately 123cm. Flowers approximately 67 days after emergence. Plant tan with cloudy midrib. Stalk juicy and sweetness. Tillers absent. Spring Annual. Breeding Material. Seed.

PI 543254 **origin:** United States. **cultivar:** R LINE AR 3007. **pedigree:** Selection from CK60/AK3003. **remarks:** 3-Dwarf R line sterilized by A1 cytoplasm. Pericarp brownish pink, mesocarp starchy, testa brown, and glumes black, (B1 B1 B2 B2 SSRRYYiizzTp Tp). Panicle exerted above flag leaf (5cm). Panicle semi-open. Plant height approximately 72cm. Flowers approximately 75 days after emergence. Plant color tan and stalk juicy. Tillers absent. Approximately 10 leaves per plant. Seed awnless and cannot be distinguished. Spring Annual. Breeding Material. Seed.

PI 543253 to 543260-continued

- PI 543255 **origin:** United States. **cultivar:** R LINE AR 3009.
pedigree: Selection from IS 12609 for 4-dwarf and purple testa. **remarks:** 4-dwarf restorer line for Al cytoplasm. Pericarp white, mesocarp pearly, testa purple, and glumes mahogany (B1 Bi B2 B2 ssRRyyiiZZtp tp). Theses completely free of glumes. Panicle exerted slightly above the flag leaf (25cm). Panicle compact. Plant height approximately 82cm. Flowers approximately 76 days after emergence. When crossed with KS57 (tp tp) produces F1 hybrid whose grain produces .03%. Spring Annual. Breeding Material. Seed.
- PI 543256 **origin:** United States. **cultivar:** R LINE AR 3010.
pedigree: Selection from IS 1266c for 3-dwarf. Probably contains a mutated dw3 allele. **remarks:** 3-dwarf restorer line for Al cytoplasm. Pericarp brownish white, mesocarp pearly, testa purple, and glumes mahogany (B1 B1 B2 B2 SSRRyyiiZZtp tp). Panicle exerted above the flag leaf (6cm). Panicle open. Plant height is approximately 120cm. Flowers approximately 74 days after emergence. The grain threshes extremely free of glumes. Resistant to Contarinia sorghicola. Hybrids KS57/ AR3010 and TX2755/. Spring Annual. Breeding Material. Seed.
- PI 543257 **origin:** United States. **cultivar:** R LINE AR 3011.
pedigree: Selection from TS 313 (Early Hegari) / TX 7078 for 3-dwarf and purple testa. **remarks:** 3-dwarf, wide leaved, and semi-open panicle. Pericarp brownish pink, mesocarp starchy, testa purple, and glumes mahogany (B1 B1 B2 B2 SSRRYYiizztp tp). The grain threshes extremely free of the glumes. Panicle exerted above the flag leaf. Plant height approximately 90cm. Flowers approximately 74 days after emergence. Line restores pollen to Al cytoplasm. the hybrid KS 57/AR 3011 had 0.8% tannin. Spring Annual. Breeding Material. Seed.
- PI 543258 **origin:** United States. **cultivar:** R LINE AR 3012.
pedigree: Selection from IS12608c for bird resistance. **remarks:** 3-dwarf, restores for Al cytoplasm. Pericarp white, mesocarp pearly, glumes black (bl bl B2 B2 SSRRyyiiZZTp Tp). Panical exerted approximately 2cm above flag leaf. Panical slightly open. Plant height approximately 97cm. Flowers approximately 75 days after emergence. Grain threshes extremely free of glumes. Bird damage varies year to year. Average general combining ability. Spring Annual. Breeding Material. Seed.

PI 543253 to 543260-continued

PI 543259 **origin:** United States. **cultivar:** R LINE AR 3014.
pedigree: Selected from TAM Bulk 48. **remarks:** 3-dwarf, restorer line for A1 cytoplasm. Pericarp white, mesocarp pearly, endosperm yellow, and glumes maghogany. (b1 b1 B2 B2 SSRyyiiZZTp Tp). Panicle exerted above flag leaf (10cm). Panicle open. Plant height approximately 112cm. Flowers approximately 75 days after emergence. Grain threshes extremely free of glumes. Exceptionally clean of all diseases. Spring Annual. Breeding Material. Seed.

PI 543260 **origin:** United States. **cultivar:** R LINE AR 3015.
pedigree: Selection from TX 2526/TAM Bulk 45, using pollen mixture. **remarks:** 3-dwarf, restorer line for A1 cytoplasm. Pericarp white, mesocarp pearly, endosperm yellow, glumes maghogany (b1 b1 B2 B2 SSRyyiiZZTp Tp). Panical exerted above flag leaf (8cm). Panicle open. Plant height approximately 112cm. Flowers approximately 84 days after emergence. Exceptionally clean of all leaf diseases. Spring Annual. Breeding Material. Seed.

PI 543261 to 543397. *Macroptilium atropurpureum* (Mocino & Sesse ex DC.)
Urban FABACEAE Purple bean

Donated by: Kretschmer, Jr., A.E., IFAS, AREC, P.O. Box 248, Ft. Pierce, Florida, United States. Received May 22, 1989.

PI 543261 **donor id:** 483. **origin:** Australia. **collected:** June 20, 1962. **remarks:** Siratro. Wild. Seed.

PI 543262 **donor id:** 1055. **origin:** Venezuela. **collected:** December 1967. **collector id:** 26. Wild. Seed.

PI 543263 **donor id:** 2207. **origin:** Mexico. **collected:** June 22, 1977. **collector id:** 2207. **other id:** CF-360. **locality:** Valladolid road, 18.3km top of cut, past Angle Iron road mark, Kantunil, Yucatan State. **latitude:** 20 deg. 44 min. N. **longitude:** 11 deg. 50 min. W. **elevation:** 50m. **remarks:** Annual rainfall 50mm. Wild. Seed.

PI 543264 **donor id:** 2212. **origin:** Mexico. **collected:** June 22, 1977. **collector id:** 2212. **other id:** CF-411. **locality:** Road edge and margin, small dense patches, Puerto Juarez road, 193km from Valladolid, Yucatan State. Wild. Seed.

PI 543265 **donor id:** 3146. **origin:** Brazil. **collected:** September 26, 1978. **collector id:** 3146. **other id:** IRI3316. **locality:** Mato, Sao Paulo State. Wild. Seed.

PI 543261 to 543397-continued

- PI 543266 **donor id:** 3350. **origin:** Mexico. **collected:** March 12, 1980. **collector id:** 7C. **other id:** MEX 343. **locality:** 2km S of intersection on Hwy 131, Oaxaca to Escondido, about 15km S of Oaxaca - Sola de Vega, Oaxaca State. **latitude:** 16 deg. 56 min. N. **longitude:** 96 deg. 44 min. W. **elevation:** 1200m. **remarks:** Annual rainfall 600mm. Wild. Seed.
- PI 543267 **donor id:** 3356. **origin:** Mexico. **collected:** March 12, 1980. **collector id:** 3356. **other id:** MEX 345. **other id:** CPI 87488. **locality:** 43km SW of Oaxaca - Sola de Vega, El Trapiche, Oaxaca State. **latitude:** 16 deg. 45 min. N. **longitude:** 96 deg. 50 min. W. **elevation:** 800m. **remarks:** Annual rainfall 700mm. Wild. Seed.
- PI 543268 **donor id:** 3363. **origin:** Mexico. **collected:** March 12, 1980. **collector id:** 12. **locality:** 39km SW of Sola de Vega Hwy. marker, 113km from Oaxaca State. **latitude:** 16 deg. 25 min. N. **longitude:** 97 deg. 04 min. W. **elevation:** 1500m. **remarks:** Annual rainfall 700mm. Wild. Seed.
- PI 543269 **donor id:** 3388. **origin:** Mexico. **collected:** March 13, 1980. **collector id:** 28B. **other id:** MEX 363. **other id:** CPI 87506. **locality:** 19km from Escondido to Acapulco, Oaxaca State. **latitude:** 15 deg. 57 min. N. **longitude:** 97 deg. 05 min. W. **elevation:** 15m. **remarks:** Annual rainfall 1300mm. Wild. Seed.
- PI 543270 **donor id:** 3436. **origin:** Mexico. **collected:** March 25, 1980. **collector id:** 47C. **locality:** 12km S of Santiago Tuxtla, Veracruz State. **latitude:** 18 deg. 28 min. N. **longitude:** 95 deg. 26 min. W. **elevation:** 200m. **remarks:** Annual rainfall 2200mm. Soil pH 6.5. Wild. Seed.
- PI 543271 **donor id:** 3440. **origin:** Mexico. **collected:** March 25, 1980. **collector id:** 48A. **locality:** 29km S of Santiago Tuxtla, Veracruz State. **latitude:** 18 deg. 13 min. N. **longitude:** 95 deg. 26 min. W. **elevation:** 200m. **remarks:** Annual rainfall 2200mm. Wild. Seed.
- PI 543272 **donor id:** 3462. **origin:** Mexico. **collected:** March 25, 1980. **collector id:** 55B. **locality:** Heavily grazed low area, 3km E of Coruarrubias - Coatzacoalcos, Veracruz State. **latitude:** 18 deg. 15 min. N. **longitude:** 95 deg. 10 min. W. **elevation:** 90m. **remarks:** Annual rainfall 1770mm. Wild. Seed.

PI 543261 to 543397-continued

- PI 543273 donor id: 3521. origin: Mexico. collected: March 29, 1980. collector id: 77C. locality: Ceiba, Mirador, Tuxtla Gutierrez, Chiapas State. latitude: 16 deg. 50 min. N. longitude: 93 deg. 02 min. W. Wild. Seed.
- PI 543274 donor id: 3524. origin: Mexico. collected: March 29, 1980. collector id: 78A. locality: 3km E of Tuxtla Gutierrez, Chiapas State. latitude: 16 deg. 46 min. N. longitude: 92 deg. 56 min. W. Wild. Seed.
- PI 543275 donor id: 3527. origin: Mexico. collected: March 29, 1980. collector id: 79B. other id: MEX 459. other id: CPI 87846. locality: 1km N of Ocozocautla on road to Malpaso, Chiapas State. latitude: 16 deg. 47 min. N. longitude: 93 deg. 23 min. W. elevation: 830m. Wild. Seed.
- PI 543276 donor id: 3531. origin: Mexico. collected: March 29, 1980. collector id: 80B. other id: MEX 462. other id: CPI 87849. locality: 3km Hwy marker N of Ocozocautla, Chiapas State. latitude: 16 deg. 48 min. N. longitude: 93 deg. 22 min. W. Wild. Seed.
- PI 543277 donor id: 3564. origin: Mexico. collected: April 01, 1980. collector id: 91A. other id: MEX 482. locality: 8km road marker, SE of Jalpa, on road to Veracruz at intersection of Colegio de Lencero, Veracruz State. latitude: 19 deg. 31 min. N. longitude: 96 deg. 48 min. W. Wild. Seed.
- PI 543278 donor id: 3568. origin: Mexico. collected: April 01, 1980. collector id: 92A. locality: 1/4km W of W. Corral Falso sign, off Hwy 140 to Pinoltepec, Veracruz State. latitude: 19 deg. 24 min. N. longitude: 96 deg. 36 min. W. Wild. Seed.
- PI 543279 donor id: 3580. origin: Mexico. collected: April 01, 1980. collector id: 95D. locality: 70km road marker, Veracruz State. latitude: 19 deg. 06 min. N. longitude: 97 deg. 01 min. W. elevation: 700m. Wild. Seed.
- PI 543280 donor id: 3625. origin: Mexico. collected: January 24, 1980. collector id: 257. other id: MEX 257. other id: CPI 85924. locality: 26km N of Matias Romero, on the road to Acayucan, Oaxaca State. latitude: 17 deg. 08 min. N. longitude: 95 deg. 00 min. W. elevation: 80m. remarks: Annual rainfall 2350mm. Wild. Seed.

PI 543261 to 543397-continued

- PI 543281 **donor id:** 3636. **origin:** Mexico. **collected:** January 09, 1980. **collector id:** 985-187. **other id:** MEX 187. **locality:** 103km E Pin NCL road to Puerto Escondida, Oaxaca State. **latitude:** 15 deg. 58 min. N. **longitude:** 92 deg. 30 min. W. **elevation:** 50m. **remarks:** Annual rainfall 1300mm. Wild. Seed.
- PI 543282 **donor id:** 4174. **origin:** Brazil. **collected:** August 22, 1984. **other id:** CPI 4110. **locality:** Road from Rondonopolis to Brasilia, 11km SE of Rondonopolis, road BR 363, Mato Grosso State. **latitude:** 16 deg. 34 min. N. **longitude:** 54 deg. 34 min. W. **elevation:** 200m. **remarks:** Soil pH 6.3. Annual rainfall 1590mm. Wild. Seed.
- PI 543283 **donor id:** 4191. **origin:** Colombia. **collected:** August 22, 1984. **other id:** CIAT 9006. **locality:** Cali, Valle Del Cauca State. Wild. Seed.
- PI 543284 **donor id:** 4195. **origin:** Guatemala. **collected:** August 22, 1984. **other id:** CIAT 559. Wild. Seed.
- PI 543285 **donor id:** 4206. **origin:** Mexico. **collected:** August 22, 1984. **other id:** CPI 4006. **other id:** Y-103. Wild. Seed.
- PI 543286 **donor id:** 4209. **origin:** Belize. **collected:** August 22, 1984. **other id:** CIAT 4052. **other id:** CF 3-2. Cultivated. Seed.
- PI 543287 **donor id:** 4214. **origin:** Mexico. **collected:** August 22, 1984. **other id:** CIAT 4068. **other id:** CF 442. **locality:** Yucatan State. Wild. Seed.
- PI 543288 **donor id:** 4216. **origin:** Mexico. **collected:** August 22, 1984. **other id:** CIAT 4074. **other id:** CF 570. **locality:** Campeche State. Wild. Seed.
- PI 543289 **donor id:** 4265. **origin:** Mexico. **collected:** February 24, 1984. **collector id:** 008A. **locality:** Rocky pasture with drought stricken grasses, small moist areas, 1.4km W of sign La Palmilla, hwy to P. Nacional, Huatusco, Veracruz State. **latitude:** 19 deg. 14 min. N. **longitude:** 96 deg. 49 min. W. **remarks:** Small to moderate leaf type. No rust. Some chewing insects attacking leaves. Associated plants: *C. papayas*, *Tephrosia* sp., *D. incanum*, *D. scorpiurus*, *M. pudica*. Wild. Seed.

PI 543261 to 543397-continued

- PI 543290 **donor id:** 4278. **origin:** Mexico. **collected:** February 24, 1985. **collector id:** 012A. **locality:** Entrance road to Pinaltepec, Corral Falso, Veracruz State. **latitude:** 19 deg. 28 min. N. **longitude:** 96 deg. 45 min. W. **elevation:** 950m. **remarks:** Annual rainfall 1454mm. Moderate rust on leaves. Evidence of spider mite damage. Associated plant: *D. virgatus*. Wild. Seed.
- PI 543291 **donor id:** 4311. **origin:** Mexico. **collected:** February 26, 1985. **collector id:** 028C. **locality:** 15km S of Coxcatlan, 1 km N of San Jose de Tilapa, Hwy 131 road to Oaxaca. **latitude:** 18 deg. 10 min. N. **longitude:** 97 deg. 08 min. W. **elevation:** 900m. **remarks:** Small leaf type. No rust. Annual rainfall 525mm. Wild. Seed.
- PI 543292 **donor id:** 4358. **origin:** Mexico. **collected:** March 02, 1985. **collector id:** 046A. **locality:** 2.3km W of 137 Hwy marker, W of P. Escondido Hwy 200, road to Pinotepa, Puerto Escondido, Oaxaca State. **latitude:** 15 deg. 51 min. N. **longitude:** 97 deg. 07 min. W. **elevation:** 25m. **remarks:** Annual rainfall 1274mm. Moderate rust. Associated species: *Desmanthus virgatus*, *Desmodium* sp. Wild. Seed.
- PI 543293 **donor id:** 4391. **origin:** Mexico. **collected:** March 03, 1985. **collector id:** 056D. **locality:** 3km W of Int. Hwys 185 and 200 at Salina Cruz, Oaxaca State. **latitude:** 16 deg. 10 min. N. **longitude:** 95 deg. 12 min. W. **elevation:** 150m. **remarks:** Annual rainfall 1063mm. Associated species: *A. pinetorum*, *A. acapulcensis*, *C. pascuorum*, *Stylosanthes* sp. Wild. Seed.
- PI 543294 **donor id:** 4397. **origin:** Mexico. **collected:** March 04, 1985. **collector id:** 059. **locality:** 5.5km from La Ventosa road to Salina Cruz, La Ventosa, Oaxaca State. **latitude:** 16 deg. 10 min. N. **longitude:** 95 deg. 09 min.. **elevation:** 7m. **remarks:** Annual rainfall 1063mm. Small leaf type. No rust. Some mite damage. Wild. Seed.
- PI 543295 **donor id:** 4399. **origin:** Mexico. **collected:** March 04, 1985. **collector id:** 060B. **locality:** Int. Hwy 185 and road to La Ventose or 6.2km from La Ventosa (S of Salina Cruz by water), Tehuantepec, Oaxaca State. **latitude:** 16 deg. 10 min. N. **longitude:** 95 deg. 10 min. W. **elevation:** 5m. **remarks:** Annual rainfall 1063mm. Moderate size leaves. Wild. Seed.

PI 543261 to 543397-continued

- PI 543296 **donor id:** 4410. **origin:** Mexico. **collected:** March 04, 1985. **collector id:** 66B. **locality:** Near Juchitan, 4.3km S Hwy 190 Int. road to Stn. Maria Xalani, Oaxaca State. **latitude:** 16 deg. 23 min. N. **longitude:** 95 deg. 01 min. W. **elevation:** 10m. **remarks:** Annual rainfall 908mm. Medium size leaves. Associated species: *V. adenantha* and *G. striata*. No rust. Wild. Seed.
- PI 543297 **donor id:** 4418. **origin:** Mexico. **collected:** March 05, 1985. **collector id:** 069A. **locality:** 2.2km E of Miltepec Hwy 190, E of Tehuantepec, Miltepec, Oaxaca State. **latitude:** 16 deg. 33 min. N. **longitude:** 94 deg. 35 min. W. **elevation:** 50m. **remarks:** Annual rainfall 1074mm. Average leaflets. No rust. Associated species: *G. striata*. Wild. Seed.
- PI 543298 **donor id:** 4449. **origin:** Mexico. **collected:** March 06, 1985. **collector id:** 078. **locality:** Growing out of rock at side of road, 3.8km from Int. Chicoasen Dam Road and Hwy 90, Tuxtla Gutierrez, Chiapas State. **latitude:** 16 deg. 47 min. N. **longitude:** 93 deg. 10 min. W. **elevation:** 725m. **remarks:** Annual rainfall, 849mm. Plants very vigorous. Leaves large, moderately lobed, dark green. No rust. Moderate mite damage. Wild. Seed.
- PI 543299 **donor id:** 4451. **origin:** Mexico. **collected:** March 06, 1985. **collector id:** 079B. **locality:** 11.3km N on Chicoasen Dam road from Int. Hwy 190, Tuxtla Gutierrez, Chiapas State. **latitude:** 16 deg. 51 min. N. **longitude:** 93 deg. 12 min. W. **elevation:** 850m. **remarks:** Annual rainfall 849mm. Moderate sized leaflets. Severe rust. Associated plants: *D. virgatus*, *C. schottii*, *A. americana*, Unknown species. Cultivated. Seed.
- PI 543300 **donor id:** 4452. **origin:** Mexico. **collected:** March 06, 1985. **collector id:** 079C. **locality:** 11.3km N on Chicoasen Dam road from Int. Hwy 190, Tuxtla Gutierrez, Chiapas State. **latitude:** 16 deg. 51 min. N. **longitude:** 93 deg. 12 min. W. **elevation:** 850m. **remarks:** Annual rainfall 849mm. Moderate leaflet size. Severe rust. Associated plants: *D. virgatus*, *C. schottii*, *A. americana*, Unknown species. Wild. Seed.
- PI 543301 **donor id:** 4453. **origin:** Mexico. **collected:** March 06, 1985. **collector id:** 079D. **locality:** 11.3km N on Chicoasen Dam road from Int. Hwy 190, Tuxtla Gutierrez, Chiapas State. **latitude:** 16 deg. 51 min. N. **longitude:** 93 deg. 12 min. W. **elevation:** 850m. **remarks:** Annual rainfall 849mm. Severe rust. Associated species: *D. virgatus*, *C. schottii*, *A. americana*, unknown species. Wild. Seed.

PI 543261 to 543397-continued

- PI 543302 **donor id:** 4501. **origin:** Mexico. **collected:** March 09, 1985. **collector id:** 093A. **locality:** Irrigated area with water along roadside, 210km road marker, Hwy 190 S La Trinitaria, La Trinitaria, Chiapas. **latitude:** 15 deg. 57 min. N. **longitude:** 92 deg. 00 min. W. **elevation:** 760m. **remarks:** Annual rainfall 1038mm. No rust or mites. Associated species: *Vigna adenantha*. Wild. Seed.
- PI 543303 **donor id:** 4509. **origin:** Mexico. **collected:** March 09, 1985. **collector id:** 095B. **locality:** S of 222km road marker, Hwy 190 S of La Trinitaria, Chiapas State. **latitude:** 15 deg. 40 min. N. **longitude:** 91 deg. 59 min. W. **elevation:** 725m. **remarks:** Annual rainfall 1038mm. Medium sized leaves. Moderate rust present. Wild. Seed.
- PI 543304 **donor id:** 4536. **origin:** Mexico. **collected:** March 11, 1985. **locality:** 8.7km N of Ocosingo road, San Cristobal, Palenque Hwy 199, Ocosingo, Chiapas State. **latitude:** 16 deg. 58 min. N. **longitude:** 92 deg. 08 min. W. **elevation:** 925m. **remarks:** Annual rainfall 1810mm. Associated plants: *V. lutelola*, *D. barbatum*, *Vigna elegans*, *Desmodium* sp., *G. straita*, *Teramnus uncinatus*, *A. villosa*, *A. brasiliana*, *Centrosema* sp., *S. guianensis*. Soil pH 5.5. Wild. Seed.
- PI 543305 **donor id:** 4548. **origin:** Mexico. **collected:** March 11, 1985. **collector id:** 107. **locality:** 26km N of Ocosingo road San Cristobal, Palenque Hwy 199, Ocosingo, Chiapas State. **latitude:** 17 deg. 04 min. N. **longitude:** 92 deg. 09 min. W. **elevation:** 925m. **remarks:** Annual rainfall 1810mm. Plants normal. Leaves slightly elongated. No rust or mites. Wild. Seed.
- PI 543306 **donor id:** 4605. **origin:** Mexico. **collected:** March 14, 1985. **collector id:** 126A. **locality:** 2km N road Mecoacan to Chiltepec, 18km marker, Chiltepec, Tabasco State. **latitude:** 18 deg. 22 min. N. **longitude:** 93 deg. 03 min. W. **elevation:** 2m. **remarks:** Annual rainfall 2097mm. Wild. Seed.
- PI 543307 **donor id:** 4606. **origin:** Mexico. **collected:** March 14, 1985. **collector id:** 126B. **locality:** 2km N road Mecoacan to Chiltepec, 18km marker, Chiltepec, Tabasco State. **latitude:** 18 deg. 22 min. N. **longitude:** 93 deg. 03 min. W. **elevation:** 2m. **remarks:** Annual rainfall 2097mm. Leaves medium size. Slight rust. No mites. Wild. Seed.

PI 543261 to 543397-continued

- PI 543308 **donor id:** 4612. **origin:** Mexico. **collected:** March 14, 1985. **collector id:** 130C. **locality:** 0.2km from Playa Bruja, Chiltepec, Tabasco State. **latitude:** 18 deg. 28 min. N. **longitude:** 93 deg. 07 min. W. **elevation:** 2m. **remarks:** Annual rainfall 2097mm. Leaves medium-small size. Associated species: *Phaseolus lunatus*. Severe rust. No mites. Wild. Seed.
- PI 543309 **donor id:** 4626. **origin:** Mexico. **collected:** March 15, 1985. **collector id:** 133F. **locality:** Basalt red soil, 18km N of Hueyapan sign road marker, 168km on Hwy 180, Acayucan to Catemaco, Hueyapan de Ocampo, Veracruz State. **latitude:** 18 deg. 17 min. N. **longitude:** 95 deg. 07 min. W. **elevation:** 425m. **remarks:** Annual rainfall 2273mm. Leaves medium size. Moderate mite damage. No rust. Associated species: *A. americana*, *Phaseolus lunatus*, *Teramnus uncinatus*, *G. Striata*, *C. plumieri*, *C. pubescens*. Wild. Seed.
- PI 543310 **donor id:** 4642. **origin:** Mexico. **collected:** March 16, 1985. **collector id:** 139B. **locality:** Almost in water, 10.1km S of Camacho, 35km road marker S of Santiago Tuxtla-Isla, Santiago Tuxtla, Veracruz State. **latitude:** 18 deg. 10 min. N. **longitude:** 95 deg. 30 min. W. **elevation:** 10m. **remarks:** Annual rainfall 1419mm. Rust present. Associated species: *A. americana*, *C. pubescens*, *Desmodium* sp. Wild. Seed.
- PI 543311 **donor id:** 4655. **origin:** Mexico. **collected:** March 16, 1985. **collector id:** 143A. **locality:** 33.5km W of Int. at Isla road to Ciudad Aleman and road from Santiago Tuxtla, Ciudad Aleman, Veracruz State. **latitude:** 18 deg. 05 min. N. **longitude:** 95 deg. 51 min. W. **elevation:** 75m. **remarks:** Annual rainfall 1419mm. Leaves large. Moderate mite damage. No rust. Associated species: *V. adenantha*. Wild. Seed.
- PI 543312 **donor id:** 4659. **origin:** Mexico. **collected:** March 16, 1985. **collector id:** 145A. **locality:** 11km N of Int. Cosamalaopan, Veracruz State. **latitude:** 18 deg. 11 min. N. **longitude:** 96 deg. 05 min. W. **elevation:** 60m. **remarks:** Annual rainfall 1419mm. Leaves medium size. No rust or mites. Associated species: *A. americana*, *D. virgatus*. Wild. Seed.

PI 543261 to 543397-continued

- PI 543313 **donor id:** 4665. **origin:** Mexico. **collected:** March 17, 1985. **collector id:** 148A. **locality:** Sand hills W of Lerdo de Tejada, road marker 74, 8km E of bridge Int. road to Ciudad Aleman and Hwy 180, Lerdo De Tejada, Veracruz State. **latitude:** 18 deg. 43 min. N. **longitude:** 95 deg. 37 min. W. **elevation:** 5m. **remarks:** Annual rainfall 1710mm. Leaves normal size. Soil pH 6.5. Rust and mite damage. Associated species: *Zornia* sp., *Phaseolus lunatus*. Wild. Seed.
- PI 543314 **donor id:** 4668. **origin:** Mexico. **collected:** March 17, 1985. **collector id:** 149A. **locality:** Sand hills at road marker 62 W of Lerdo de Tejada, Hwy 180, 11km E of toll bridge at Alvarado, Lerdo de Tejada, Veracruz State. **latitude:** 18 deg. 45 min. N. **longitude:** 95 deg. 41 min. W. **elevation:** 25m. **remarks:** Annual rainfall 1710mm. Leaves normal size. Soil pH 6.5. Rust and mite damage. Associated species: *Zornia* sp., *Phaseolus lunatus*. Wild. Seed.
- PI 543315 **donor id:** 4676. **origin:** Mexico. **collected:** March 17, 1985. **collector id:** 009D. **locality:** Near bridge, across river by swimming pool, Puente Nacional, Veracruz State. **latitude:** 19 deg. 20 min. N. **longitude:** 96 deg. 29 min. W. **elevation:** 150m. **remarks:** Annual rainfall 1116mm. Long, narrow, moderate sized leaves. Associated species: *Leucaena lanceolata*. Wild. Seed.
- PI 543316 **donor id:** 4680. **origin:** Mexico. **collected:** March 05, 1985. **collector id:** 071G. **locality:** 5.6km E Rizo de Oro, off 1.6km E of Las Perlas Hwy 190, Cintalapa, Chiapas State. **latitude:** 16 deg. 29 min. N. **longitude:** 94 deg. 02 min. W. **elevation:** 825m. **remarks:** Annual rainfall 1773mm. Associated species: *Desmodium* sp., *A. americana*, *S. guianensis*, *Leucaena macrophylla*. Wild. Seed.
- PI 543317 **donor id:** 4732. **origin:** Costa Rica. **collector id:** CR-21-3. **locality:** Enrique Jimenez Experiment Station at siratro seed increase area, near Tempisque Ferry, Canas, Guanacaste State. **latitude:** 10 deg. 23 min. N. **longitude:** 84 deg. 21 min. W. **elevation:** 75m. **remarks:** Annual rainfall 1500mm. Probably Siratro escape. Collected by V. Prodo. Cultivated. Seed.
- PI 543318 **donor id:** 4767. **origin:** United States. **pedigree:** 483/3440 parent unknown (male & female). **collected:** May 15, 1986. **locality:** Ft. Pierce, Florida. Cultivated. Seed.

PI 543261 to 543397-continued

- PI 543319 **donor id:** 4768. **origin:** United States. **pedigree:** 3440/483 parent unknown (male & female). **collected:** May 15, 1986. **locality:** Ft. Pierce, Florida. Cultivated. Seed.
- PI 543320 **donor id:** 4770. **origin:** Colombia. **collected:** May 29, 1986. **other id:** CIAT 0559. **locality:** CIAT, Cali Department. **remarks:** Received from Dr. Rainer, Schultze-Kraft. Cultivated. Seed.
- PI 543321 **donor id:** 4869. **origin:** Costa Rica. **collected:** March 05, 1987. **collector id:** 5/3. **locality:** Nicoya Peninsula near Tempisque, Guanacaste Province. **latitude:** 10 deg. 12 min. N. **longitude:** 85 deg. 17 min. W. **elevation:** 30m. **remarks:** Annual rainfall 1884mm. Collected by V. Prado in 1984. Possibly Siratro escape. Cultivated. Seed.
- PI 543322 **donor id:** 4876. **origin:** Costa Rica. **collected:** March 06, 1987. **collector id:** 6/5. **locality:** Very dry area, 18km S of Santa Cruz, Ruta 21, Santa Cruz, Guanacaste Province. **latitude:** 10 deg. 10 min. N. **longitude:** 85 deg. 27 min. W. **elevation:** 150m. **remarks:** Annual rainfall 1392mm. Leaves thick and leathery. Probably escaped Siratro. Abundant. Wild. Seed.
- PI 543323 **donor id:** 4880. **origin:** Costa Rica. **collected:** March 06, 1987. **collector id:** 6/9. **locality:** 15km Ruta 18 from Ferry E to Ruta 1, between Ruta markers 7km and 16km, also on Ruta 1, road to San Jose at 21km and 91km, Tempisque Ferry, Guanacaste Province. **latitude:** 10 deg. 14 min. N. **longitude:** 85 deg. 10 min. W. **elevation:** 75m. **remarks:** Annual rainfall 1729mm. Probably escaped Siratro. Abundant. Wild. Seed.
- PI 543324 **donor id:** 5129. **origin:** Mexico. **collected:** November 12, 1980. **collector id:** 5129. **other id:** MEX 701. **other id:** CPI 90486. **locality:** San Miguel Allende, Guanajuato State. **latitude:** 20 deg. 55 min. N. **longitude:** 100 deg. 45 min. W. **elevation:** 1850m. **remarks:** Annual rainfall 500mm. Loam soil, pH 6.5. Wild. Seed.
- PI 543325 **donor id:** 5142. **origin:** Mexico. **collected:** November 12, 1980. **collector id:** 5142. **other id:** MEX 891. **other id:** CPI 90905. **locality:** Beach sands W of Cuilialan, Altata, Sinaloa State. **latitude:** 24 deg. 35 min. N. **longitude:** 107 deg. 52 min. W. **elevation:** 2m. **remarks:** Annual rainfall 650mm. Wild. Seed.

PI 543261 to 543397-continued

- PI 543326 **donor id:** 5190. **origin:** Mexico. **developer country:** United States. **origin institute:** University of Arizona, Arizona. **collected:** September 08, 1980. **collector id:** 5190. **other id:** MEX 939. **other id:** CPI 91101. **locality:** 3km N of Rosairo, Sinaloa State. **latitude:** 23 deg. 00 min. N. **longitude:** 105 deg. 53 min. W. **elevation:** 50m. **remarks:** Annual rainfall 1000mm. Cultivated. Seed.
- PI 543327 **donor id:** 5553. **origin:** Mexico. **collected:** January 09, 1980. **other id:** CF 570. **locality:** Campeche road, Champoton, Campeche State. Wild. Seed.
- PI 543328 **donor id:** 5730. **origin:** Mexico. **collected:** April 08, 1982. **collector id:** 5730. **other id:** MEX 085. **other id:** CPI 84989. **locality:** Cabo, San Lucas, Baja California State. **latitude:** 22 deg. 50 min. N. **longitude:** 109 deg. 55 min. W. **elevation:** 5m. **remarks:** Annual rainfall 230mm. Cultivated. Seed.
- PI 543329 **donor id:** 5731. **origin:** Mexico. **collected:** April 08, 1982. **collector id:** 5731. **other id:** MEX 089. **other id:** CPI 84993. **locality:** 10km E Cabo, San Lucas, Baja California State. **latitude:** 22 deg. 50 min. N. **longitude:** 109 deg. 53 min. W. **elevation:** 15m. **remarks:** Annual rainfall 230mm. Cultivated. Seed.
- PI 543330 **donor id:** 5733. **origin:** Australia. **collected:** April 08, 1982. **collector id:** 5733. **other id:** MEX 093. **other id:** CPI 84997. Cultivated. Seed.
- PI 543331 **donor id:** 5736. **origin:** Australia. **collected:** April 08, 1982. **collector id:** 5736. **other id:** MEX 389. **other id:** CPI 87532. Cultivated. Seed.
- PI 543332 **donor id:** 5737. **origin:** Australia. **collected:** April 08, 1982. **collector id:** 5737. **other id:** MEX 403. **other id:** CPI 87546. Cultivated. Seed.
- PI 543333 **donor id:** 5738. **origin:** Australia. **collected:** April 08, 1982. **collector id:** 5738. **other id:** MEX 420. **other id:** CPI 87807. Cultivated. Seed.
- PI 543334 **donor id:** 5739. **origin:** Australia. **collected:** April 08, 1982. **collector id:** 5739. **other id:** MEX 459. **other id:** CPI 87846. Cultivated. Seed.
- PI 543335 **donor id:** 5740. **origin:** Australia. **collected:** April 08, 1982. **collector id:** 5740. **other id:** MEX 462. **other id:** CPI 87849. Cultivated. Seed.

PI 543261 to 543397-continued

- PI 543336 **donor id:** 5741. **origin:** Australia. **collected:** April 08, 1982. **collector id:** 5741. **other id:** MEX 482. **other id:** CPI 87869. Cultivated. Seed.
- PI 543337 **donor id:** 5745. **origin:** Australia. **collected:** April 08, 1982. **collector id:** 5745. **other id:** MEX 559. **other id:** CPI 90336. Cultivated. Seed.
- PI 543338 **donor id:** 5746. **origin:** Australia. **collected:** April 08, 1982. **collector id:** 5746. **other id:** MEX 560. **other id:** CPI 90337. Cultivated. Seed.
- PI 543339 **donor id:** 5747. **origin:** Australia. **collected:** April 08, 1982. **collector id:** 5747. **other id:** MEX 561. **other id:** CPI 90338. Cultivated. Seed.
- PI 543340 **donor id:** 5748. **origin:** Australia. **collected:** April 08, 1982. **collector id:** 5748. **other id:** MEX 670. **other id:** CPI 90455. Cultivated. Seed.
- PI 543341 **donor id:** 5750. **origin:** Australia. **collected:** April 08, 1982. **collector id:** 5750. **other id:** MEX 685. **other id:** CPI 90470. Cultivated. Seed.
- PI 543342 **donor id:** 5751. **origin:** Australia. **collected:** April 08, 1982. **collector id:** 5751. **other id:** MEX 734. **other id:** CPI 90748. Cultivated. Seed.
- PI 543343 **donor id:** 5753. **origin:** Australia. **collected:** April 08, 1982. **collector id:** 5753. **other id:** MEX 807. **other id:** CPI 90821. Cultivated. Seed.
- PI 543344 **donor id:** 5754. **origin:** Australia. **collected:** April 08, 1982. **collector id:** 5754. **other id:** MEX 808. **other id:** CPI 90822. Cultivated. Seed.
- PI 543345 **donor id:** 5759. **origin:** Australia. **collected:** April 08, 1982. **collector id:** 5759. **other id:** MEX 995. **other id:** CPI 91157. Cultivated. Seed.
- PI 543346 **donor id:** 5761. **origin:** Australia. **collected:** April 08, 1982. **collector id:** 5761. **other id:** MEX 1128. **other id:** CPI 91348. Cultivated. Seed.
- PI 543347 **donor id:** 5763. **origin:** Australia. **collected:** April 08, 1982. **collector id:** 5763. **other id:** MEX 1142. **other id:** CPI 91445. Cultivated. Seed.
- PI 543348 **donor id:** 5777. **origin:** Colombia. **developer country:** Australia. **collected:** July 29, 1982. **collector id:** 5777. **locality:** On Bueno Ventura road, 10km from Buga, Valle del Cauca State. Wild. Seed.

PI 543261 to 543397-continued

- PI 543349 **donor id:** 5792. **origin:** Colombia. **developer country:** Australia. **collected:** July 29, 1982. **collector id:** 5792. **locality:** 7km from Buga, Valle del Cauca State. **Wild. Seed.**
- PI 543350 **donor id:** 5816. **origin:** Colombia. **collected:** April 19, 1982. **locality:** Davies Lab. **remarks:** Sirato. **Cultivated. Seed.**
- PI 543351 **donor id:** 5817. **origin:** Colombia. **collected:** April 08, 1982. **other id:** (1981-CQ 1282). **locality:** Davies Lab. **remarks:** Rust resistant. **Cultivated. Seed.**
- PI 543352 **donor id:** 6358. **origin:** Costa Rica. **collected:** February 15, 1988. **collector id:** 15/13. **other id:** (1981-CQ 1282). **locality:** 11.1km S Penas Blancas, Guanacaste State. **latitude:** 11 deg. 04 min. N. **longitude:** 85 deg. 38 min. W. **elevation:** 200m. **remarks:** Annual rainfall 1737mm. Severe rust. Many green leaves. Probably Sirato. **Wild. Seed.**
- PI 543353 **donor id:** 6365. **origin:** Costa Rica. **collected:** February 15, 1988. **other id:** 15/7A. **locality:** Cuanjiniquil, Guanacaste State. **latitude:** 10 deg. 56 min. N. **longitude:** 85 deg. 41 min. W. **elevation:** 50m. **remarks:** Annual rainfall 1737mm. Associated species: *Canavallia*. Possibly Sirato. **Wild. Seed.**
- PI 543354 **donor id:** 6402. **origin:** Costa Rica. **collected:** February 17, 1988. **other id:** 17/2A. **locality:** Very dry area, 1 km N of 10km road marker, Canas to Tileran road, Canas, Guanacaste State. **latitude:** 10 deg. 28 min. N. **longitude:** 85 deg. 04 min. W. **elevation:** 375m. **remarks:** Annual rainfall 1210mm. Probably escaped Siratro. From 1969 Brennes planting. Associated species. *Desmanthus virgatus*. **Wild. Seed.**
- PI 543355 **donor id:** 6505. **origin:** Costa Rica. **collected:** January 31, 1988. **other id:** 31-0. **locality:** 8.0km S from Intersection Ruta 1 on Ruta 18, Tempisque Ferry, Guanacaste State. **latitude:** 10 deg. 16 min. N. **longitude:** 85 deg. 05 min. W. **elevation:** 75m. **remarks:** Annual rainfall 1775mm. Rust on leaves. **Cultivated. Seed.**
- PI 543356 **donor id:** 6545. **origin:** Costa Rica. **collected:** February 02, 1989. **other id:** 02-1. **locality:** Hotel de Paso, Cabo Blanco, Leptano, Puntarenas State. **latitude:** 09 deg. 56 min. N. **longitude:** 85 deg. 00 min. W. **elevation:** 50m. **remarks:** Annual rainfall 2072mm. No rust. **Wild. Seed.**

PI 543261 to 543397-continued

- PI 543357 **donor id:** 6570. **origin:** Costa Rica. **collected:** February 03, 1989. **other id:** 03-4A. **other id:** 74017-Talolinga. **locality:** 3.2km from Caballito on road to Millal, plot 3m in diameter, Caballito, Guanacaste. **latitude:** 10 deg. 13 min. N. **longitude:** 85 deg. 20 min. W. **elevation:** 50m. **remarks:** Annual rainfall 1824mm. Wild. Seed.
- PI 543358 **donor id:** 6595. **origin:** Mexico. **collected:** March 29, 1989. **collector id:** 29-1A. **locality:** Very dry area, 1.1km NW on Ruta 180 from intersection of 180, NW edge of City, Vera Cruz, Vera Cruz State. **latitude:** 19 deg. 13 min. N. **longitude:** 96 deg. 11 min. W. **elevation:** 50m. **remarks:** No rust. Smaller leaves than Siratro. Wild. Seed.
- PI 543359 **donor id:** 6596. **origin:** Mexico. **collected:** March 29, 1989. **collector id:** 29-1B. **locality:** Very dry area, 1.1km NW on Ruta 180 at NW edge of City, Vera Cruz, Vera Cruz State. **latitude:** 19 deg. 13 min. N. **longitude:** 96 deg. 11 min. W. **elevation:** 50m. **remarks:** No rust. Smaller leaves than Siratro. Wild. Seed.
- PI 543360 **donor id:** 6597. **origin:** Mexico. **collected:** March 29, 1989. **collector id:** 29-2A. **locality:** Very dry area, 6.1km NW on Ruta 180 from intersection of 180 at NW edge of city, road marker 239, Vera Cruz, Vera Cruz State. **latitude:** 19 deg. 13 min. N. **longitude:** 96 deg. 15 min. W. **elevation:** 50m. **remarks:** No rust. Larger leaves than Siratro. Wild. Seed.
- PI 543361 **donor id:** 6598. **origin:** Mexico. **collected:** March 29, 1989. **locality:** Very dry area, 6.1km NW of Ruta 180 from intersection of 180 at NW edge of city, road marker 239, Vera Cruz, Vera Cruz State. **latitude:** 19 deg. 13 min. N. **longitude:** 96 deg. 15 min. W. **elevation:** 50m. **remarks:** No rust. Smaller leaves than Sirato. Wild. Seed.
- PI 543362 **donor id:** 6599. **origin:** Mexico. **collected:** March 30, 1989. **collector id:** 30-1. **locality:** 72km from Hotel Emporio on road 150 to Cordoba, 6km S from Rio Blanco bridge, La Tinaja, Vera Cruz State. **latitude:** 18 deg. 47 min. N. **longitude:** 96 deg. 26 min. W. **elevation:** 100m. **remarks:** Rust present. Wild. Seed.
- PI 543363 **donor id:** 6600. **origin:** Mexico. **collected:** March 30, 1989. **collector id:** 30-2. **locality:** 23km from intersection at La Tinaja, Hwy 150 and 145 road to Tuxtepec, Matapalpa, Vera Cruz State. **latitude:** 18 deg. 35 min. N. **longitude:** 96 deg. 24 min. W. **elevation:** 25m. **remarks:** Annual rainfall 1463mm. No rust. Wild. Seed.

PI 543261 to 543397-continued

- PI 543364 **donor id:** 6601. **origin:** Mexico. **collected:** March 30, 1989. **collector id:** 30-3. **locality:** 10km N of Valle Nacional, Hwy 175, road marker 57km, road to Vera Cruz to Oaxaca, Valle Nacional, Oaxaca State. **latitude:** 17 deg. 50 min. N. **longitude:** 96 deg. 15 min. W. **elevation:** 200m. **remarks:** Annual rainfall 1463mm. Scattered rust. Wild. Seed.
- PI 543365 **donor id:** 6603. **origin:** Mexico. **collected:** March 31, 1989. **collector id:** 31-1A. **locality:** Road 200, 12km W of Puerto Escondido, 75km E of Hwy marker 127, Puerto Escondido, Oaxaca State. **latitude:** 15 deg. 53 min. N. **longitude:** 97 deg. 10 min. W. **elevation:** 25m. **remarks:** Annual rainfall 1274mm. No rust. Associated species: *Phaseolus lunatus*. Wild. Seed.
- PI 543366 **donor id:** 6604. **origin:** Mexico. **collected:** March 31, 1989. **collector id:** 31-1B. **locality:** Road 200, 12km W of Puerto Escondido, 50km E of Hwy marker 127, Puerto Escondido, Oaxaca State. **latitude:** 15 deg. 53 min. N. **longitude:** 97 deg. 10 min. W. **elevation:** 25m. **remarks:** Annual rainfall 1274mm. Rust present. Associated species: *Phaseolus lunatus*. Wild. Seed.
- PI 543367 **donor id:** 6605. **origin:** Mexico. **collected:** March 31, 1989. **collector id:** 31-2. **locality:** 2.7km S of Hwy 200 and road to Puerto Angel, Oaxaca State. **latitude:** 15 deg. 43 min. N. **longitude:** 96 deg. 29 min. W. **elevation:** 175m. **remarks:** Annual rainfall 700mm. Moderate rust. Smaller leaves than Siratro. Wild. Seed.
- PI 543368 **donor id:** 6606. **origin:** Mexico. **collected:** March 31, 1989. **collector id:** 31-3. **locality:** 2km E of Port across from Naval Training Station, Salina Cruz, Oaxaca State. **latitude:** 15 deg. 42 min. N. **longitude:** 96 deg. 29 min. W. **elevation:** 3m. **remarks:** Annual rainfall 700mm. No rust. Wild. Seed.
- PI 543369 **donor id:** 6607. **origin:** Mexico. **collected:** March 31, 1989. **collector id:** 31-4A. **locality:** Hotel Cali grounds, Tehuantepec, Oaxaca State. **latitude:** 16 deg. 20 min. N. **longitude:** 95 deg. 13 min. W. **elevation:** 60m. **remarks:** Annual rainfall 1063mm. Rust present. Siratro type leaves. Associated species: *Desmanthus virgatus*. Wild. Seed.

PI 543261 to 543397-continued

- PI 543370 **donor id:** 6609. **origin:** Mexico. **collected:** March 31, 1989. **collector id:** 31-5. **locality:** Hotel Cali grounds, Tehuantepec, Oaxaca State. **latitude:** 16 deg. 20 min. N. **longitude:** 95 deg. 13 min. W. **elevation:** 60m. **remarks:** Annual rainfall 1063mm. No. rust. Siratro type leaves. Associated species: *Desmanthus virgatus*. Wild. Seed.
- PI 543371 **donor id:** 6610. **origin:** Mexico. **collected:** March 31, 1989. **collector id:** 31-5. **locality:** Santa Maria Xadani, Oaxaca State. **latitude:** 16 deg. 25 min. N. **longitude:** 95 deg. 01 min. W. **elevation:** 30m. **remarks:** Annual rainfall 908mm. Rust present. Smaller leaves than Siratro. Wild. Seed.
- PI 543372 **donor id:** 6611. **origin:** Mexico. **collected:** April 01, 1989. **collector id:** 01-1. **locality:** Just beginning to climb mountains, 30km E of Easter Pemex Station of Tuxtla Gutierrez, Chiapas State. **latitude:** 16 deg. 45 min. N. **longitude:** 92 deg. 57 min. W. **elevation:** 800m. **remarks:** Annual rainfall 849mm, No rust. Wild. Seed.
- PI 543373 **donor id:** 6612. **origin:** Mexico. **collected:** April 01, 1989. **collector id:** 01-2. **locality:** Hwy 190 road marker 196, 5.5km S of La Trinitaria, Chiapas State. **latitude:** 16 deg. 05 min. N. **longitude:** 92 deg. 02 min. W. **elevation:** 1350m. **remarks:** Annual rainfall 1038. Moderate rust. Small, very lobed leaves. Wild. Seed.
- PI 543374 **donor id:** 6613. **origin:** Mexico. **collected:** April 01, 1989. **collector id:** 01-3. **locality:** 7.8km N from Hwy 190 toward Chioasen Dam, Tuxtla Gutierrez, Chiapas State. **latitude:** 16 deg. 49 min. N. **longitude:** 93 deg. 11 min. W. **elevation:** 800m. **remarks:** Annual rainfall 849mm. No. rust. Siratro sized leaves. Wild. Seed.
- PI 543375 **donor id:** 6614. **origin:** Mexico. **collected:** April 01, 1989. **collector id:** 01-4. **locality:** 10.5km N from Hwy 190 toward Chiapas Dam, Tuxtla Gutierrez, Chiapas State. **latitude:** 16 deg. 50 min. N. **longitude:** 93 deg. 11 min. W. **elevation:** 800m. **remarks:** Annual rainfall 849mm. Rust present. Smaller leaves than Siratro. Wild. Seed.
- PI 543376 **donor id:** 6615. **origin:** Mexico. **collected:** April 02, 1989. **collector id:** 02-1. **locality:** 31km from Tuxtla Gutierrez, east side of Pemex Station, road to San Cristobal, road marker 32km, Tuxtla Gutierrez, Chiapas State. **latitude:** 16 deg. 45 min. N. **longitude:** 92 deg. 57 min. W. **elevation:** 1050m. **remarks:** Annual rainfall 1000mm. No rust. Very small, lobed leaves. Wild. Seed.

PI 543261 to 543397-continued

- PI 543377 **donor id:** 6621. **origin:** Mexico. **collected:** April 02, 1989. **collector id:** 02-3A. **locality:** 5.9km N of Tapilula, Ixtapa road to Villa Hermosa, road marker 127km, Tapilula, Oaxaca State. **latitude:** 17 deg. 16 min. N. **longitude:** 93 deg. 01 min. W. **elevation:** 475m. **remarks:** Annual rainfall 2000mm. Sirtaro type leaves. **Associated species:** *Aeschynomene americana*. Wild. Seed.
- PI 543378 **donor id:** 6624. **origin:** Mexico. **collected:** April 02, 1989. **collector id:** 02-4B. **locality:** 10km N of Solusuchiapa, Itapa road to Villa Hermosa, Solusuchiapa, Oaxaca State. **latitude:** 17 deg. 26 min. N. **longitude:** 93 deg. 05 min. W. **elevation:** 250m. **remarks:** Annual rainfall 2238mm. No rust. **Associated species:** *Vigna* sp. and *Desmanthus virgatus*. Wild. Seed.
- PI 543379 **donor id:** 6626. **origin:** Mexico. **collected:** April 02, 1989. **collector id:** 02-5. **locality:** 16.2km N of Teapa, road to Villa Hermos, Hwy 195, road marker 40km, Teapa, Tabasco State. **latitude:** 17 deg. 42 min. N. **longitude:** 92 deg. 57 min. W. **elevation:** 25m. **remarks:** Annual rainfall, 2238mm. Severe rust. Large seed production. Wild. Seed.
- PI 543380 **donor id:** 6627. **origin:** Mexico. **collected:** April 03, 1989. **collector id:** 03-1. **locality:** 25.9km N of Intersection of Hwy 190 and road to Comalcalco, road marker 69.6km, Colmalcalco, Tabasco State. **latitude:** 18 deg. 10 min. N. **longitude:** 93 deg. 15 min. W. **elevation:** 20m. **remarks:** Annual rainfall 2238mm. Severe rust in 20m patch of Sirtaro. Wild. Seed.
- PI 543381 **donor id:** 6628. **origin:** Mexico. **collected:** April 06, 1989. **collector id:** 03-2A. **locality:** Pemex station about 5km N of Tabasco Vera Cruz Border on Hwy 180, Vera Cruz State. **latitude:** 18 deg. 04 min. N. **longitude:** 94 deg. 07 min. W. **elevation:** 50m. **remarks:** Annual rainfall 2097mm. No rust. Leaves smaller than Sirtaro. **Associated species:** *Izeriopsis* and *Rhizoctonia*. Wild. Seed.
- PI 543382 **donor id:** 6629. **origin:** Mexico. **collected:** April 03, 1989. **collector id:** 03-2B. **locality:** 3.9km N on road to Agua Dulce from Hwy 180, Agua Dulce, Vera Cruz State. **latitude:** 18 deg. 05 min. N. **longitude:** 34 deg. 07 min. W. **elevation:** 20m. **remarks:** Annual rainfall 2818mm. No rust. Wild. Seed.

PI 543261 to 543397-continued

- PI 543383 **donor id:** 6631. **origin:** Mexico. **collected:** April 03, 1989. **collector id:** 03-4. **locality:** 63km N of Acayucan on Acayucan road to Catemaco, Hwy 180 or 17.2km S of Catemaco Pemex Station road marker 163km, Catemaco, Vera Cruz State. **latitude:** 18 deg. 17 min. N. **longitude:** 95 deg. 06 min. W. **elevation:** 500m. **remarks:** Annual rainfall 1419mm. No rust. Wild. Seed.
- PI 543384 **donor id:** 6635. **origin:** Mexico. **collected:** April 04, 1989. **collector id:** 04-1A. **locality:** 0.2km W of entrance of Hotel Playa, Azul road to Catemaco, Vera Cruz State. **latitude:** 18 deg. 26 min. N. **longitude:** 95 deg. 05 min. W. **elevation:** 400m. **remarks:** Annual rainfall 1419mm. Slight rust. Smaller leaves than Siratro. Associated plants. Sychitrichum, Vigna vexillata, and Phaseolus lunatus. Wild. Seed.
- PI 543385 **donor id:** 6636. **origin:** Mexico. **collected:** April 04, 1989. **collector id:** 04-1B. **locality:** 0.2km W of entrance of Hotel Playa, Azul road to Catemaco, Vera Cruz State. **latitude:** 18 deg. 26 min. N. **longitude:** 95 deg. 05 min. W. **elevation:** 400m. **remarks:** Annual rainfall 1419mm. Rust present. Associated plants: Siratro and Phaseolus lunatus. Wild. Seed.
- PI 543386 **donor id:** 6638. **origin:** Mexico. **collected:** April 04, 1989. **collector id:** 04-2. **locality:** 22.7km W of Western Catemaco Pemex Station at Catemaco Hwy 180, or just before road marker 124, E of Santiago Tuxtla, Vera Cruz State. **latitude:** 18 deg. 28 min. N. **longitude:** 95 deg. 16 min. W. **elevation:** 200m. **remarks:** Annual rainfall 2273mm. No rust. Siratro type. Wild. Seed.
- PI 543387 **donor id:** 6639. **origin:** Mexico. **collected:** April 04, 1989. **collector id:** 04-3. **locality:** 100km N of road marker, 5km S of Santiago Tuxtla, Vera Cruz State. **latitude:** 18 deg. 26 min. N. **longitude:** 95 deg. 17 min. W. **elevation:** 150m. **remarks:** Annual rainfall 2273mm. Moderate rust. Leaves larger than Siratro. Wild. Seed.
- PI 543388 **donor id:** 6640. **origin:** Mexico. **collected:** April 04, 1989. **collector id:** 04-4A. **locality:** Growing next to an asphalt road, 29.5km S of Hwy 180, on the road to Isla, Santiago Tuxtla, Vera Cruz State. **latitude:** 18 deg. 13 min. N. **longitude:** 95 deg. 26 min. W. **elevation:** 200m. **remarks:** Annual rainfall 2200mm No rust. Leaves smaller than Siratro. Wild. Seed.

PI 543261 to 543397-continued

- PI 543389 **donor id:** 6641. **origin:** Mexico. **collected:** April 04, 1989. **collector id:** 04-4B. **locality:** 29.5km S of Hwy 180, on road to Isla, Santiago Tuxtla, Vera Cruz State. **latitude:** 18 deg. 13 min. N. **longitude:** 95 deg. 26 min. W. **elevation:** 200m. **remarks:** Annual rainfall 2200mm. Rust present. Siratro type leaves. Wild. Seed.
- PI 543390 **donor id:** 6642. **origin:** Mexico. **collected:** April 04, 1989. **collector id:** 04-4C. **locality:** 29.5km S of Hwy 180, on road to Isla, Santiago Tuxtla, Vera Cruz State. **latitude:** 18 deg. 13 min. N. **longitude:** 95 deg. 26 min. W. **elevation:** 200m. **remarks:** Annual rainfall 2200mm. No rust. Leaves larger than Siratro. Wild. Seed.
- PI 543391 **donor id:** 6644. **origin:** Mexico. **collected:** April 04, 1989. **collector id:** 04-5A. **locality:** 1.1km W of high power line crossing Hwy, Isla to Ciudad Aleman; 3.9km W of La Zueta, 100m E of Road marker 38, Isla, Vera Cruz State. **latitude:** 18 deg. 05 min. N. **longitude:** 95 deg. 51 min. W. **elevation:** 100m. **remarks:** Annual rainfall 1419mm. No rust. Smaller leaves than Siratro. Wild. Seed.
- PI 543392 **donor id:** 6646. **origin:** Mexico. **collected:** April 04, 1989. **collector id:** 04-6. **locality:** 2.2km W of high power line crossing Hwy, Isla to Ciudad Aleman, 5.0km W of La Azueta, Isla, Vera Cruz State. **elevation:** 50m. **remarks:** Annual rainfall 1419mm. Rust present. Siratro type leaves. Abundant in 20 by 5m area. Wild. Seed.
- PI 543393 **donor id:** 6647. **origin:** Mexico. **collected:** April 04, 1989. **collector id:** 04-7A. **locality:** 26km N of Cosmalaopan-Tuxtepec Intersection of Hwy 175, road to Alvarado, 1.6km N of the sign Novillero Pueblo, Cosmalaopan, Vera Cruz State. **latitude:** 18 deg. 26 min. N. **longitude:** 95 deg. 45 min. W. **elevation:** 5m. **remarks:** Annual rainfall 1419mm. Rust present. Associated species; *Vigna adenantha* and *Desmanthus virgatus*. Wild. Seed.
- PI 543394 **donor id:** 6650. **origin:** Mexico. **collected:** April 04, 1989. **collector id:** 04-8. **locality:** Very dry, beach sand, 2.4km W of Alvarado, Hwy 180, Vera Cruz State. **latitude:** 18 deg. 48 min. N. **longitude:** 95 deg. 47 min. W. **elevation:** 50m. **remarks:** Annual rainfall 1710mm. Rust present. Leaves smaller than Siratro. Wild. Seed.

PI 543261 to 543397-continued

- PI 543395 **donor id:** 6651. **origin:** Mexico. **collected:** April 05, 1989. **collector id:** 05-1A. **locality:** 2.2km E of Pueblo Tolome or 37.9km from Pemex Station at Intersection of Hwy 180 and 140, on the road to Xalapa, Vera Cruz State. **latitude:** 19 deg. 17 min. N. **longitude:** 96 deg. 26 min. W. **elevation:** 50m. **remarks:** Annual rainfall 1116mm. Rust present. Siratro type leaves. Wild. Seed.
- PI 543396 **donor id:** 6652. **origin:** Mexico. **collected:** April 05, 1989. **collector id:** 05-1B. **locality:** 2.2km E of Pueblo Tolome or 37.9km from Pemex Station at Intersection of Hwy 180 and 140, on the road to Xalapa, Vera Cruz State. **latitude:** 19 deg. 17 min. N. **longitude:** 96 deg. 26 min. W. **elevation:** 50m. **remarks:** Annual rainfall 1116mm. No rust. Siratro type leaves. Wild. Seed.
- PI 543397 **donor id:** 6653. **origin:** Mexico. **collected:** April 05, 1989. **collector id:** 05-2. **locality:** Puente Nacional, Vera Cruz State. **latitude:** 19 deg. 20 min. N. **longitude:** 96 deg. 29 min. W. **elevation:** 150m. **remarks:** Annual rainfall 1116mm. Rust present. Wild. Seed.

PI 543398. *Secale cereale* L. POACEAE Rye

Donated by: Kehr, W.R., Lincoln, Nebraska, United States. Received December 11, 1974.

origin: Argentina. **cultivar:** HARRIET'S CENTENO SELECTION. **other id:** CIse 187. **locality:** Rivadavia. Annual. Cultivar. Seed.

PI 543399 to 543727. *Secale cereale* L. POACEAE Rye

Donated by: Zillinsky, F.J., CIMMYT, Apartado Postal 6-641, Mexico 06600, Federal District, Mexico; and Prescott, J.M., CIMMYT, Apartado Postal 6-641, Mexico 06600, Federal District, Mexico. Received October 01, 1973.

- PI 543399 **donor id:** M1-72-73-161. **origin:** Turkey. **collected:** 1972. **other id:** CIse 190. **locality:** 25 km east of Sardev, Western Turkey. Annual. Cultivated. Seed.
- PI 543400 **donor id:** M1-72-73-162. **origin:** Turkey. **collected:** 1972. **other id:** CIse 191. **locality:** 25 km east of Sardev, Western Turkey. Annual. Cultivated. Seed.
- PI 543401 **donor id:** M1-72-73-163. **origin:** Turkey. **collected:** 1972. **other id:** CIse 192. **locality:** 25 km east of Sardev, Western Turkey. Annual. Cultivated. Seed.

PI 543399 to 543727-continued

- PI 543402 **donor id:** M1-72-73-164. **origin:** Turkey. **collected:** 1972. **other id:** CIse 193. **locality:** 25 km east of Sardev, Western Turkey. Annual. Cultivated. Seed.
- PI 543403 **donor id:** M1-72-73-165. **origin:** Turkey. **collected:** 1972. **other id:** CIse 194. **locality:** 25 km east of Sardev, Western Turkey. Annual. Cultivated. Seed.
- PI 543404 **donor id:** M1-72-73-166. **origin:** Turkey. **collected:** 1972. **other id:** CIse 195. **locality:** 25 km east of Sardev, Western Turkey. Annual. Cultivated. Seed.
- PI 543405 **donor id:** M1-72-73-167. **origin:** Turkey. **collected:** 1972. **other id:** CIse 196. **locality:** 25 km east of Sardev, Western Turkey. Annual. Cultivated. Seed.
- PI 543406 **donor id:** M1-72-73-168. **origin:** Turkey. **collected:** 1972. **other id:** CIse 197. **locality:** 25 km east of Sardev, Western Turkey. Annual. Cultivated. Seed.
- PI 543407 **donor id:** M1-72-73-169. **origin:** Turkey. **collected:** 1972. **other id:** CIse 198. **locality:** 25 km east of Sardev, Western Turkey. Annual. Cultivated. Seed.
- PI 543408 **donor id:** M1-72-73-170. **origin:** Turkey. **collected:** 1972. **other id:** CIse 199. **locality:** 25 km east of Sardev, Western Turkey. Annual. Cultivated. Seed.
- PI 543409 **donor id:** M1-72-73-171. **origin:** Turkey. **collected:** 1972. **other id:** CIse 200. **locality:** 25 km east of Sardev, Western Turkey. Annual. Cultivated. Seed.
- PI 543410 **donor id:** M1-72-73-172. **origin:** Turkey. **collected:** 1972. **other id:** CIse 201. **locality:** 25 km east of Sardev, Western Turkey. Annual. Cultivated. Seed.
- PI 543411 **donor id:** M1-72-73-173. **origin:** Turkey. **collected:** 1972. **other id:** CIse 202. **locality:** 35 km east of Sardev, Western Turkey. Annual. Cultivated. Seed.
- PI 543412 **donor id:** M1-72-73-174. **origin:** Turkey. **collected:** 1972. **other id:** CIse 203. **locality:** 35 km east of Sardev, Western Turkey. Annual. Cultivated. Seed.
- PI 543413 **donor id:** M1-72-73-175. **origin:** Turkey. **collected:** 1972. **other id:** CIse 204. **locality:** 35 km east of Sardev, Western Turkey. Annual. Cultivated. Seed.
- PI 543414 **donor id:** M1-72-73-176. **origin:** Turkey. **collected:** 1972. **other id:** CIse 205. **locality:** 35 km east of Sardev, Western Turkey. Annual. Cultivated. Seed.

PI 543399 to 543727-continued

- PI 543415 **donor id:** M1-72-73-177. **origin:** Turkey. **collected:** 1972. **other id:** CISe 206. **locality:** 35 km east of Sardev, Western Turkey. Annual. Cultivated. Seed.
- PI 543416 **donor id:** M1-72-73-178. **origin:** Turkey. **collected:** 1972. **other id:** CISe 207. **locality:** 35 km east of Sardev, Western Turkey. Annual. Cultivated. Seed.
- PI 543417 **donor id:** M1-72-73-179. **origin:** Turkey. **collected:** 1972. **other id:** CISe 208. **locality:** 35 km east of Sardev, Western Turkey. Annual. Cultivated. Seed.
- PI 543418 **donor id:** M1-72-73-180. **origin:** Turkey. **collected:** 1972. **other id:** CISe 209. **locality:** 35 km east of Sardev, Western Turkey. Annual. Cultivated. Seed.
- PI 543419 **donor id:** M1-72-73-181. **origin:** Turkey. **collected:** 1972. **other id:** CISe 210. **locality:** 35 km east of Sardev, Western Turkey. Annual. Cultivated. Seed.
- PI 543420 **donor id:** M1-72-73-182. **origin:** Turkey. **collected:** 1972. **other id:** CISe 211. **locality:** 35 km east of Sardev, Western Turkey. Annual. Cultivated. Seed.
- PI 543421 **donor id:** M1-72-73-183. **origin:** Turkey. **collected:** 1972. **other id:** CISe 212. **locality:** 35 km east of Sardev, Western Turkey. Annual. Cultivated. Seed.
- PI 543422 **donor id:** M1-72-73-184. **origin:** Turkey. **collected:** 1972. **other id:** CISe 213. **locality:** 35 km east of Sardev, Western Turkey. Annual. Cultivated. Seed.
- PI 543423 **donor id:** M1-72-73-185. **origin:** Turkey. **collected:** 1972. **other id:** CISe 214. **locality:** 35 km east of Sardev, Western Turkey. Annual. Cultivated. Seed.
- PI 543424 **donor id:** M1-72-73-186. **origin:** Turkey. **collected:** 1972. **other id:** CISe 215. **locality:** 35 km east of Sardev, Western Turkey. Annual. Cultivated. Seed.
- PI 543425 **donor id:** M1-72-73-187. **origin:** Turkey. **collected:** 1972. **other id:** CISe 216. **locality:** 35 km east of Sardev, Western Turkey. Annual. Cultivated. Seed.
- PI 543426 **donor id:** M1-72-73-188. **origin:** Turkey. **collected:** 1972. **other id:** CISe 217. **locality:** 35 km east of Sardev, Western Turkey. Annual. Cultivated. Seed.
- PI 543427 **donor id:** M1-72-73-189. **origin:** Turkey. **collected:** 1972. **other id:** CISe 218. **locality:** 35 km east of Sardev, Western Turkey. Annual. Cultivated. Seed.

PI 543399 to 543727-continued

- PI 543428 **donor id:** M1-72-73-190. **origin:** Turkey. **collected:** 1972. **other id:** C1se 219. **locality:** 35 km east of Sardev, Western Turkey. Annual. Cultivated. Seed.
- PI 543429 **donor id:** M1-72-73-191. **origin:** Turkey. **collected:** 1972. **other id:** C1se 220. **locality:** 35 km east of Sardev, Western Turkey. Annual. Cultivated. Seed.
- PI 543430 **donor id:** M1-72-73-192. **origin:** Turkey. **collected:** 1972. **other id:** C1se 221. **locality:** 35 km east of Sardev, Western Turkey. Annual. Cultivated. Seed.
- PI 543431 **donor id:** M1-72-73-193. **origin:** Turkey. **collected:** 1972. **other id:** C1se 222. **locality:** 35 km east of Sardev, Western Turkey. Annual. Cultivated. Seed.
- PI 543432 **donor id:** M1-72-73-194. **origin:** Turkey. **collected:** 1972. **other id:** C1se 223. **locality:** 35 km east of Sardev, Western Turkey. Annual. Cultivated. Seed.
- PI 543433 **donor id:** M1-72-73-195. **origin:** Turkey. **collected:** 1972. **other id:** C1se 224. **locality:** 35 km east of Sardev, Western Turkey. Annual. Cultivated. Seed.
- PI 543434 **donor id:** M1-72-73-196. **origin:** Turkey. **collected:** 1972. **other id:** C1se 225. **locality:** 35 km east of Sardev, Western Turkey. Annual. Cultivated. Seed.
- PI 543435 **donor id:** M1-72-73-197. **origin:** Turkey. **collected:** 1972. **other id:** C1se 226. **locality:** 35 km east of Sardev, Western Turkey. Annual. Cultivated. Seed.
- PI 543436 **donor id:** M1-72-73-198. **origin:** Turkey. **collected:** 1972. **other id:** C1se 227. **locality:** 35 km east of Sardev, Western Turkey. Annual. Cultivated. Seed.
- PI 543437 **donor id:** M1-72-73-199. **origin:** Turkey. **collected:** 1972. **other id:** C1se 228. **locality:** 35 km east of Sardev, Western Turkey. Annual. Cultivated. Seed.
- PI 543438 **donor id:** M1-72-73-200. **origin:** Turkey. **collected:** 1972. **other id:** C1se 229. **locality:** 35 km east of Sardev, Western Turkey. Annual. Cultivated. Seed.
- PI 543439 **donor id:** M1-72-73-201. **origin:** Turkey. **collected:** 1972. **other id:** C1se 230. **locality:** 35 km east of Sardev, Western Turkey. Annual. Cultivated. Seed.
- PI 543440 **donor id:** M1-72-73-202. **origin:** Turkey. **collected:** 1972. **other id:** C1se 231. **locality:** 1 km west of Accentec, Western Turkey. Annual. Cultivated. Seed.

PI 543399 to 543727-continued

- PI 543441 **donor id:** M1-72-73-203. **origin:** Turkey. **collected:** 1972. **other id:** C1se 232. **locality:** 1 km west of Accentec, Western Turkey. Annual. Cultivated. Seed.
- PI 543442 **donor id:** M1-72-73-204. **origin:** Turkey. **collected:** 1972. **other id:** C1se 233. **locality:** 1 km west of Accentec, Western Turkey. Annual. Cultivated. Seed.
- PI 543443 **donor id:** M1-72-73-205. **origin:** Turkey. **collected:** 1972. **other id:** C1se 234. **locality:** 1 km west of Accentec, Western Turkey. Annual. Cultivated. Seed.
- PI 543444 **donor id:** M1-72-73-206. **origin:** Turkey. **collected:** 1972. **other id:** C1se 235. **locality:** 1 km west of Accentec, Western Turkey. Annual. Cultivated. Seed.
- PI 543445 **donor id:** M1-72-73-207. **origin:** Turkey. **collected:** 1972. **other id:** C1se 236. **locality:** 1 km west of Accentec, Western Turkey. Annual. Cultivated. Seed.
- PI 543446 **donor id:** M1-72-73-208. **origin:** Turkey. **collected:** 1972. **other id:** C1se 237. **locality:** 1 km west of Accentec, Western Turkey. Annual. Cultivated. Seed.
- PI 543447 **donor id:** M1-72-73-209. **origin:** Turkey. **collected:** 1972. **other id:** C1se 238. **locality:** 1 km west of Accentec, Western Turkey. Annual. Cultivated. Seed.
- PI 543448 **donor id:** M1-72-73-210. **origin:** Turkey. **collected:** 1972. **other id:** C1se 239. **locality:** 1 km west of Accentec, Western Turkey; wheat field. Annual. Cultivated. Seed.
- PI 543449 **donor id:** M1-72-73-211. **origin:** Turkey. **collected:** 1972. **other id:** C1se 240. **locality:** 1 km west of Accentec, Western Turkey; wheat field. Annual. Cultivated. Seed.
- PI 543450 **donor id:** M1-72-73-212. **origin:** Turkey. **collected:** 1972. **other id:** C1se 241. **locality:** 1 km west of Accentec, Western Turkey; wheat field. Annual. Cultivated. Seed.
- PI 543451 **donor id:** M1-72-73-213. **origin:** Turkey. **collected:** 1972. **other id:** C1se 242. **locality:** 1 km west of Accentec, Western Turkey; wheat field. Annual. Cultivated. Seed.
- PI 543452 **donor id:** M1-72-73-214. **origin:** Turkey. **collected:** 1972. **other id:** C1se 243. **locality:** 1 km west of Accentec, Western Turkey; wheat field. Annual. Cultivated. Seed.

PI 543399 to 543727-continued

- PI 543453 **donor id:** M1-72-73-215. **origin:** Turkey. **collected:** 1972. **other id:** CISe 244. **locality:** 1 km west of Accentec, Western Turkey; wheat field. Annual. Cultivated. Seed.
- PI 543454 **donor id:** M1-72-73-216. **origin:** Turkey. **collected:** 1972. **other id:** CISe 245. **locality:** 1 km west of Accentec, Western Turkey; wheat field. Annual. Cultivated. Seed.
- PI 543455 **donor id:** M1-72-73-217. **origin:** Turkey. **collected:** 1972. **other id:** CISe 246. **locality:** 1 km west of Accentec, Western Turkey. Annual. Cultivated. Seed.
- PI 543456 **donor id:** M1-72-73-218. **origin:** Turkey. **collected:** 1972. **other id:** CISe 247. **locality:** 1 km west of Accentec, Western Turkey; wheat field. Annual. Cultivated. Seed.
- PI 543457 **donor id:** M1-72-73-219. **origin:** Turkey. **collected:** 1972. **other id:** CISe 248. **locality:** 1 km west of Accentec, Western Turkey; wheat field. Annual. Cultivated. Seed.
- PI 543458 **donor id:** M1-72-73-220. **origin:** Turkey. **collected:** 1972. **other id:** CISe 249. **locality:** 1 km west of Accentec, Western Turkey; wheat field. Annual. Cultivated. Seed.
- PI 543459 **donor id:** M1-72-73-221. **origin:** Turkey. **collected:** 1972. **other id:** CISe 250. **locality:** 1 km west of Accentec, Western Turkey; wheat field. Annual. Cultivated. Seed.
- PI 543460 **donor id:** M1-72-73-222. **origin:** Turkey. **collected:** 1972. **other id:** CISe 251. **locality:** 1 km west of Accentec, Western Turkey; wheat field. Annual. Cultivated. Seed.
- PI 543461 **donor id:** M1-72-73-223. **origin:** Turkey. **collected:** 1972. **other id:** CISe 252. **locality:** 1 km west of Accentec, Western Turkey; wheat field. Annual. Cultivated. Seed.
- PI 543462 **donor id:** M1-72-73-224. **origin:** Turkey. **collected:** 1972. **other id:** CISe 253. **locality:** 1 km west of Accentec, Western Turkey; wheat field. Annual. Cultivated. Seed.

PI 543399 to 543727-continued

- PI 543463 **donor id:** M1-72-73-225. **origin:** Turkey. **collected:** 1972. **other id:** CISe 254. **locality:** 1 km west of Accentec, Western Turkey; wheat field. Annual. Cultivated. Seed.
- PI 543464 **donor id:** M1-72-73-226. **origin:** Turkey. **collected:** 1972. **other id:** CISe 255. **locality:** 1 km west of Accentec, Western Turkey; wheat field. Annual. Cultivated. Seed.
- PI 543465 **donor id:** M1-72-73-227. **origin:** Turkey. **collected:** 1972. **other id:** CISe 256. **locality:** 1 km west of Accentec, Western Turkey; wheat field. Annual. Cultivated. Seed.
- PI 543466 **donor id:** M1-72-73-228. **origin:** Turkey. **collected:** 1972. **other id:** CISe 257. **locality:** 1 km west of Accentec, Western Turkey; wheat field. Annual. Cultivated. Seed.
- PI 543467 **donor id:** M1-72-73-229. **origin:** Turkey. **collected:** 1972. **other id:** CISe 258. **locality:** 1 km west of Belikerhir, Western Turkey; wheat field. Annual. Cultivated. Seed.
- PI 543468 **donor id:** M1-72-73-230. **origin:** Turkey. **collected:** 1972. **other id:** CISe 259. **locality:** 1 km west of Belikerhir, Western Turkey; wheat field. Annual. Cultivated. Seed.
- PI 543469 **donor id:** M1-72-73-231. **origin:** Turkey. **collected:** 1972. **other id:** CISe 260. **locality:** 1 km west of Belikerhir, Western Turkey; wheat field. Annual. Cultivated. Seed.
- PI 543470 **donor id:** M1-72-73-232. **origin:** Turkey. **collected:** 1972. **other id:** CISe 261. **locality:** 1 km west of Belikerhir, Western Turkey; wheat field. Annual. Cultivated. Seed.
- PI 543471 **donor id:** M1-72-73-233. **origin:** Turkey. **collected:** 1972. **other id:** CISe 262. **locality:** 1 km west of Belikerhir, Western Turkey; wheat field. Annual. Cultivated. Seed.
- PI 543472 **donor id:** M1-72-73-234. **origin:** Turkey. **collected:** 1972. **other id:** CISe 263. **locality:** 1 km west of Belikerhir, Western Turkey; wheat field. Annual. Cultivated. Seed.

PI 543399 to 543727-continued

- PI 543473 **donor id:** M1-72-73-235. **origin:** Turkey. **collected:** 1972. **other id:** CIse 264. **locality:** 1 km west of Belikerhir, Western Turkey; wheat field. Annual. Cultivated. Seed.
- PI 543474 **donor id:** M1-72-73-236. **origin:** Turkey. **collected:** 1972. **other id:** CIse 265. **locality:** 1 km west of Belikerhir, Western Turkey; wheat field. Annual. Cultivated. Seed.
- PI 543475 **donor id:** M1-72-73-237. **origin:** Turkey. **collected:** 1972. **other id:** CIse 266. **locality:** 1 km west of Belikerhir, Western Turkey; wheat field. Annual. Cultivated. Seed.
- PI 543476 **donor id:** M1-72-73-238. **origin:** Turkey. **collected:** 1972. **other id:** CIse 267. **locality:** 1 km west of Belikerhir, Western Turkey; wheat field. Annual. Cultivated. Seed.
- PI 543477 **donor id:** M1-72-73-239. **origin:** Turkey. **collected:** 1972. **other id:** CIse 268. **locality:** 1 km west of Belikerhir, Western Turkey; wheat field. Annual. Cultivated. Seed.
- PI 543478 **donor id:** M1-72-73-240. **origin:** Turkey. **collected:** 1972. **other id:** CIse 269. **locality:** 1 km west of Belikerhir, Western Turkey; wheat field. **remarks:** Semi-dwarf. Annual. Cultivated. Seed.
- PI 543479 **donor id:** M1-72-73-241. **origin:** Turkey. **collected:** 1972. **other id:** CIse 270. **locality:** 1 km west of Belikerhir, Western Turkey; wheat field. **remarks:** Semi-dwarf. Annual. Cultivated. Seed.
- PI 543480 **donor id:** M1-72-73-242. **origin:** Turkey. **collected:** 1972. **other id:** CIse 271. **locality:** 1 km west of Belikerhir, Western Turkey; wheat field. **remarks:** Semi-dwarf. Annual. Cultivated. Seed.
- PI 543481 **donor id:** M1-72-73-243. **origin:** Turkey. **collected:** 1972. **other id:** CIse 272. **locality:** 1 km west of Belikerhir, Western Turkey; wheat field. **remarks:** Semi-dwarf. Annual. Cultivated. Seed.
- PI 543482 **donor id:** M1-72-73-244. **origin:** Turkey. **collected:** 1972. **other id:** CIse 273. **locality:** 1 km west of Belikerhir, Western Turkey; wheat field. **remarks:** Semi-dwarf. Annual. Cultivated. Seed.

PI 543399 to 543727-continued

- PI 543483 **donor id:** M1-72-73-245. **origin:** Turkey. **collected:** 1972. **other id:** C1se 274. **locality:** 1 km west of Belikerhir, Western Turkey; wheat field. **remarks:** Semi-dwarf. Annual. Cultivated. Seed.
- PI 543484 **donor id:** M1-72-73-246. **origin:** Turkey. **collected:** 1972. **other id:** C1se 275. **locality:** 1 km west of Belikerhir, Western Turkey; wheat field. **remarks:** Semi-dwarf. Annual. Cultivated. Seed.
- PI 543485 **donor id:** M1-72-73-247. **origin:** Turkey. **collected:** 1972. **other id:** C1se 276. **locality:** 1 km west of Belikerhir, Western Turkey; wheat field. **remarks:** Semi-dwarf. Annual. Cultivated. Seed.
- PI 543486 **donor id:** M1-72-73-248. **origin:** Turkey. **collected:** 1972. **other id:** C1se 277. **locality:** 1 km west of Belikerhir, Western Turkey; wheat field. **remarks:** Semi-dwarf. Annual. Cultivated. Seed.
- PI 543487 **donor id:** M1-72-73-249. **origin:** Turkey. **collected:** 1972. **other id:** C1se 278. **locality:** 1 km west of Belikerhir, Western Turkey; wheat field. **remarks:** Semi-dwarf. Annual. Cultivated. Seed.
- PI 543488 **donor id:** M1-72-73-250. **origin:** Turkey. **collected:** 1972. **other id:** C1se 279. **locality:** 1 km west of Belikerhir, Western Turkey; wheat field. **remarks:** Semi-dwarf. Annual. Cultivated. Seed.
- PI 543489 **donor id:** M1-72-73-251. **origin:** Turkey. **collected:** 1972. **other id:** C1se 280. **locality:** 1 km west of Belikerhir, Western Turkey; wheat field. **remarks:** Semi-dwarf. Annual. Cultivated. Seed.
- PI 543490 **donor id:** M1-72-73-252. **origin:** Turkey. **collected:** 1972. **other id:** C1se 281. **locality:** 1 km west of Belikerhir, Western Turkey; wheat field. **remarks:** Semi-dwarf. Annual. Cultivated. Seed.
- PI 543491 **donor id:** M1-72-73-253. **origin:** Turkey. **collected:** 1972. **other id:** C1se 282. **locality:** 1 km west of Belikerhir, Western Turkey; wheat field. **remarks:** Semi-dwarf. Annual. Cultivated. Seed.
- PI 543492 **donor id:** M1-72-73-254. **origin:** Turkey. **collected:** 1972. **other id:** C1se 283. **locality:** 1 km west of Belikerhir, Western Turkey; wheat field. **remarks:** Semi-dwarf. Annual. Cultivated. Seed.

PI 543399 to 543727-continued

- PI 543493 **donor id:** M1-72-73-255. **origin:** Turkey. **collected:** 1972. **other id:** CIse 284. **locality:** 1 km west of Belikerhir, Western Turkey; wheat field. **remarks:** Semi-dwarf. Annual. Cultivated. Seed.
- PI 543494 **donor id:** M1-72-73-256. **origin:** Turkey. **collected:** 1972. **other id:** CIse 285. **locality:** 15 km west of Begadic, Western Turkey; wheat field. Annual. Cultivated. Seed.
- PI 543495 **donor id:** M1-72-73-257. **origin:** Turkey. **collected:** 1972. **other id:** CIse 286. **locality:** 15 km west of Begadic, Western Turkey; wheat field. Annual. Cultivated. Seed.
- PI 543496 **donor id:** M1-72-73-258. **origin:** Turkey. **collected:** 1972. **other id:** CIse 287. **locality:** 15 km west of Begadic, Western Turkey; wheat field. Annual. Cultivated. Seed.
- PI 543497 **donor id:** M1-72-73-259. **origin:** Turkey. **collected:** 1972. **other id:** CIse 288. **locality:** 15 km west of Begadic, Western Turkey; wheat field. Annual. Cultivated. Seed.
- PI 543498 **donor id:** M1-72-73-260. **origin:** Turkey. **collected:** 1972. **other id:** CIse 289. **locality:** 15 km west of Begadic, Western Turkey; wheat field. Annual. Cultivated. Seed.
- PI 543499 **donor id:** M1-72-73-261. **origin:** Turkey. **collected:** 1972. **other id:** CIse 290. **locality:** 15 km west of Begadic, Western Turkey; wheat field. Annual. Cultivated. Seed.
- PI 543500 **donor id:** M1-72-73-262. **origin:** Turkey. **collected:** 1972. **other id:** CIse 291. **locality:** 15 km west of Begadic, Western Turkey; wheat field. Annual. Cultivated. Seed.
- PI 543501 **donor id:** M1-72-73-263. **origin:** Turkey. **collected:** 1972. **other id:** CIse 292. **locality:** 15 km west of Begadic, Western Turkey; wheat field. **remarks:** Normal fertility. Annual. Cultivated. Seed.
- PI 543502 **donor id:** M1-72-73-264. **origin:** Turkey. **collected:** 1972. **other id:** CIse 293. **locality:** 15 km west of Begadic, Western Turkey; wheat field. **remarks:** Normal fertility. Annual. Cultivated. Seed.

PI 543399 to 543727-continued

- PI 543503 **donor id:** M1-72-73-265. **origin:** Turkey. **collected:** 1972. **other id:** Cise 294. **locality:** 15 km west of Begadic, Western Turkey; wheat field. **remarks:** Normal fertility. Annual. Cultivated. Seed.
- PI 543504 **donor id:** M1-72-73-266. **origin:** Turkey. **collected:** 1972. **other id:** Cise 295. **locality:** 15 km west of Begadic, Western Turkey; wheat field. **remarks:** Normal fertility. Annual. Cultivated. Seed.
- PI 543505 **donor id:** M1-72-73-267. **origin:** Turkey. **collected:** 1972. **other id:** Cise 296. **locality:** 15 km west of Begadic, Western Turkey. Annual. Cultivated. Seed.
- PI 543506 **donor id:** M1-72-73-268. **origin:** Turkey. **collected:** 1972. **other id:** Cise 297. **locality:** 15 km west of Begadic, Western Turkey. Annual. Cultivated. Seed.
- PI 543507 **donor id:** M1-72-73-269. **origin:** Turkey. **collected:** 1972. **other id:** Cise 298. **locality:** 15 km west of Begadic, Western Turkey. Annual. Cultivated. Seed.
- PI 543508 **donor id:** M1-72-73-270. **origin:** Turkey. **collected:** 1972. **other id:** Cise 299. **locality:** 15 km west of Begadic, Western Turkey. Annual. Cultivated. Seed.
- PI 543509 **donor id:** M1-72-73-271. **origin:** Turkey. **collected:** 1972. **other id:** Cise 300. **locality:** 15 km west of Begadic, Western Turkey. Annual. Cultivated. Seed.
- PI 543510 **donor id:** M1-72-73-272. **origin:** Turkey. **collected:** 1972. **other id:** Cise 301. **locality:** 15 km west of Begadic, Western Turkey. Annual. Cultivated. Seed.
- PI 543511 **donor id:** M1-72-73-273. **origin:** Turkey. **collected:** 1972. **other id:** Cise 302. **locality:** 15 km west of Begadic, Western Turkey; durum wheat field. Annual. Cultivated. Seed.
- PI 543512 **donor id:** M1-72-73-274. **origin:** Turkey. **collected:** 1972. **other id:** Cise 303. **locality:** 15 km west of Begadic, Western Turkey; durum wheat field. Annual. Cultivated. Seed.
- PI 543513 **donor id:** M1-72-73-275. **origin:** Turkey. **collected:** 1972. **other id:** Cise 304. **locality:** 15 km west of Begadic, Western Turkey; durum wheat field. Annual. Cultivated. Seed.

PI 543399 to 543727-continued

- PI 543514 **donor id:** M1-72-73-276. **origin:** Turkey. **collected:** 1972. **other id:** CIse 305. **locality:** 15 km west of Begadic, Western Turkey; durum wheat field. Annual. Cultivated. Seed.
- PI 543515 **donor id:** M1-72-73-277. **origin:** Turkey. **collected:** 1972. **other id:** CIse 306. **locality:** 15 km west of Begadic, Western Turkey; durum wheat field. Annual. Cultivated. Seed.
- PI 543516 **donor id:** M1-72-73-278. **origin:** Turkey. **collected:** 1972. **other id:** CIse 307. **locality:** 15 km west of Begadic, Western Turkey; durum wheat field. Annual. Cultivated. Seed.
- PI 543517 **donor id:** M1-72-73-279. **origin:** Turkey. **collected:** 1972. **other id:** CIse 308. **locality:** 15 km west of Begadic, Western Turkey; durum wheat field. Annual. Cultivated. Seed.
- PI 543518 **donor id:** M1-72-73-280. **origin:** Turkey. **collected:** 1972. **other id:** CIse 309. **locality:** 15 km west of Begadic, Western Turkey; durum wheat field. Annual. Cultivated. Seed.
- PI 543519 **donor id:** M1-72-73-281. **origin:** Turkey. **collected:** 1972. **other id:** CIse 310. **locality:** 15 km west of Begadic, Western Turkey; durum wheat field. Annual. Cultivated. Seed.
- PI 543520 **donor id:** M1-72-73-282. **origin:** Turkey. **collected:** 1972. **other id:** CIse 311. **locality:** 15 km west of Begadic, Western Turkey; durum wheat field. Annual. Cultivated. Seed.
- PI 543521 **donor id:** M1-72-73-283. **origin:** Turkey. **collected:** 1972. **other id:** CIse 312. **locality:** 15 km west of Begadic, Western Turkey; durum wheat field. Annual. Cultivated. Seed.
- PI 543522 **donor id:** M1-72-73-284. **origin:** Turkey. **collected:** 1972. **other id:** CIse 313. **locality:** 15 km west of Begadic, Western Turkey; durum wheat field. Annual. Cultivated. Seed.
- PI 543523 **donor id:** M1-72-73-285. **origin:** Turkey. **collected:** 1972. **other id:** CIse 314. **locality:** 15 km west of Begadic, Western Turkey; durum wheat field. Annual. Cultivated. Seed.

PI 543399 to 543727-continued

- PI 543524 **donor id:** M1-72-73-286. **origin:** Turkey. **collected:** 1972. **other id:** Cise 315. **locality:** 15 km west of Begadic, Western Turkey; durum wheat field. Annual. Cultivated. Seed.
- PI 543525 **donor id:** M1-72-73-287. **origin:** Turkey. **collected:** 1972. **other id:** Cise 316. **locality:** 15 km west of Kacabas, Western Turkey; durum wheat field. Annual. Cultivated. Seed.
- PI 543526 **donor id:** M1-72-73-288. **origin:** Turkey. **collected:** 1972. **other id:** Cise 317. **locality:** 15 km west of Kacabas, Western Turkey; durum wheat field. Annual. Cultivated. Seed.
- PI 543527 **donor id:** M1-72-73-289. **origin:** Turkey. **collected:** 1972. **other id:** Cise 318. **locality:** 15 km west of Kacabas, Western Turkey; durum wheat field. Annual. Cultivated. Seed.
- PI 543528 **donor id:** M1-72-73-290. **origin:** Turkey. **collected:** 1972. **other id:** Cise 319. **locality:** 15 km west of Kacabas, Western Turkey; durum wheat field. Annual. Cultivated. Seed.
- PI 543529 **donor id:** M1-72-73-291. **origin:** Turkey. **collected:** 1972. **other id:** Cise 320. **locality:** 15 km west of Kacabas, Western Turkey; durum wheat field. Annual. Cultivated. Seed.
- PI 543530 **donor id:** M1-72-73-292. **origin:** Turkey. **collected:** 1972. **other id:** Cise 321. **locality:** 15 km west of Kacabas, Western Turkey; durum wheat field. Annual. Cultivated. Seed.
- PI 543531 **donor id:** M1-72-73-293. **origin:** Turkey. **collected:** 1972. **other id:** Cise 322. **locality:** 15 km west of Kacabas, Western Turkey; durum wheat field. Annual. Cultivated. Seed.
- PI 543532 **donor id:** M1-72-73-294. **origin:** Turkey. **collected:** 1972. **other id:** Cise 323. **locality:** 15 km west of Kacabas, Western Turkey; durum wheat field. Annual. Cultivated. Seed.
- PI 543533 **donor id:** M1-72-73-295. **origin:** Turkey. **collected:** 1972. **other id:** Cise 324. **locality:** 15 km west of Kacabas, Western Turkey; durum wheat field. Annual. Cultivated. Seed.

PI 543399 to 543727-continued

- PI 543534 **donor id:** M1-72-73-296. **origin:** Turkey. **collected:** 1972. **other id:** Cise 325. **locality:** 15 km west of Kacabas, Western Turkey; durum wheat field. Annual. Cultivated. Seed.
- PI 543535 **donor id:** M1-72-73-297. **origin:** Turkey. **collected:** 1972. **other id:** Cise 326. **locality:** 15 km west of Kacabas, Western Turkey; durum wheat field. Annual. Cultivated. Seed.
- PI 543536 **donor id:** M1-72-73-298. **origin:** Turkey. **collected:** 1972. **other id:** Cise 327. **locality:** 15 km west of Kacabas, Western Turkey; durum wheat field. **remarks:** "Beautiful heads.". Annual. Cultivated. Seed.
- PI 543537 **donor id:** M1-72-73-299. **origin:** Turkey. **collected:** 1972. **other id:** Cise 328. **locality:** 15 km west of Kacabas, Western Turkey; durum wheat field. **remarks:** "Beautiful heads.". Annual. Cultivated. Seed.
- PI 543538 **donor id:** M1-72-73-300. **origin:** Turkey. **collected:** 1972. **other id:** Cise 329. **locality:** 15 km west of Kacabas, Western Turkey; durum wheat field. **remarks:** "Beautiful heads.". Annual. Cultivated. Seed.
- PI 543539 **donor id:** M1-72-73-301. **origin:** Turkey. **collected:** 1972. **other id:** Cise 330. **locality:** 15 km west of Kacabas, Western Turkey; durum wheat field. **remarks:** "Beautiful heads.". Annual. Cultivated. Seed.
- PI 543540 **donor id:** M1-72-73-302. **origin:** Turkey. **collected:** 1972. **other id:** Cise 331. **locality:** 15 km west of Kacabas, Western Turkey; barley field. Annual. Cultivated. Seed.
- PI 543541 **donor id:** M1-72-73-303. **origin:** Turkey. **collected:** 1972. **other id:** Cise 332. **locality:** 15 km west of Kacabas, Western Turkey; mixed grain field. Annual. Cultivated. Seed.
- PI 543542 **donor id:** M1-72-73-304. **origin:** Turkey. **collected:** 1972. **other id:** Cise 333. **locality:** 15 km west of Kacabas, Western Turkey; mixed grain field. Annual. Cultivated. Seed.
- PI 543543 **donor id:** M1-72-73-305. **origin:** Turkey. **collected:** 1972. **other id:** Cise 334. **locality:** 15 km west of Kacabas, Western Turkey; mixed grain field. Annual. Cultivated. Seed.

PI 543399 to 543727-continued

- PI 543544 **donor id:** M1-72-73-306. **origin:** Turkey. **collected:** 1972. **other id:** CISe 335. **locality:** 15 km west of Kacabas, Western Turkey; mixed grain field. Annual. Cultivated. Seed.
- PI 543545 **donor id:** M1-72-73-307. **origin:** Turkey. **collected:** 1972. **other id:** CISe 336. **locality:** 15 km west of Kacabas, Western Turkey; mixed grain field. Annual. Cultivated. Seed.
- PI 543546 **donor id:** M1-72-73-308. **origin:** Turkey. **collected:** 1972. **other id:** CISe 337. **locality:** 15 km west of Kacabas, Western Turkey; mixed grain field. Annual. Cultivated. Seed.
- PI 543547 **donor id:** M1-72-73-309. **origin:** Turkey. **collected:** 1972. **other id:** CISe 338. **locality:** 15 km west of Kacabas, Western Turkey; mixed grain field. Annual. Cultivated. Seed.
- PI 543548 **donor id:** M1-72-73-310. **origin:** Turkey. **collected:** 1972. **other id:** CISe 339. **locality:** 15 km west of Kacabas, Western Turkey; mixed grain field. Annual. Cultivated. Seed.
- PI 543549 **donor id:** M1-72-73-311. **origin:** Turkey. **collected:** 1972. **other id:** CISe 340. **locality:** 15 km west of Kacabas, Western Turkey; mixed grain field. Annual. Cultivated. Seed.
- PI 543550 **donor id:** M1-72-73-312. **origin:** Turkey. **collected:** 1972. **other id:** CISe 341. **locality:** 15 km west of Kacabas, Western Turkey; mixed grain field. Annual. Cultivated. Seed.
- PI 543551 **donor id:** M1-72-73-313. **origin:** Turkey. **collected:** 1972. **other id:** CISe 342. **locality:** 15 km west of Kacabas, Western Turkey; mixed grain field. Annual. Cultivated. Seed.
- PI 543552 **donor id:** M1-72-73-314. **origin:** Turkey. **collected:** 1972. **other id:** CISe 343. **locality:** 15 km west of Kacabas, Western Turkey. **remarks:** Vigorous semi-dwarf. Annual. Cultivated. Seed.
- PI 543553 **donor id:** M1-72-73-315. **origin:** Turkey. **collected:** 1972. **other id:** CISe 344. **locality:** 15 km west of Kacabas, Western Turkey. **remarks:** Vigorous semi-dwarf. Annual. Cultivated. Seed.

PI 543399 to 543727-continued

- PI 543554 **donor id:** M1-72-73-316. **origin:** Turkey. **collected:** 1972. **other id:** CISe 345. **locality:** 15 km west of Kacabas, Western Turkey. **remarks:** Vigorous semi-dwarf. Annual. Cultivated. Seed.
- PI 543555 **donor id:** M1-72-73-317. **origin:** Turkey. **collected:** 1972. **other id:** CISe 346. **locality:** 15 km west of Kacabas, Western Turkey. **remarks:** Vigorous semi-dwarf. Annual. Cultivated. Seed.
- PI 543556 **donor id:** M1-72-73-318. **origin:** Turkey. **collected:** 1972. **other id:** CISe 347. **locality:** 15 km west of Kacabas, Western Turkey. **remarks:** Vigorous semi-dwarf. Annual. Cultivated. Seed.
- PI 543557 **donor id:** M1-72-73-319. **origin:** Turkey. **collected:** 1972. **other id:** CISe 348. **locality:** 15 km west of Kacabas, Western Turkey. **remarks:** Vigorous semi-dwarf. Annual. Cultivated. Seed.
- PI 543558 **donor id:** M1-72-73-320. **origin:** Turkey. **collected:** 1972. **other id:** CISe 349. **locality:** 15 km west of Kacabas, Western Turkey. **remarks:** Vigorous semi-dwarf. Annual. Cultivated. Seed.
- PI 543559 **donor id:** M1-72-73-321. **origin:** Turkey. **collected:** 1972. **other id:** CISe 350. **locality:** 15 km west of Kacabas, Western Turkey. **remarks:** Vigorous semi-dwarf. Annual. Cultivated. Seed.
- PI 543560 **donor id:** M1-72-73-322. **origin:** Turkey. **collected:** 1972. **other id:** CISe 351. **locality:** 15 km west of Kacabas, Western Turkey. **remarks:** Vigorous semi-dwarf. Annual. Cultivated. Seed.
- PI 543561 **donor id:** M1-72-73-323. **origin:** Turkey. **collected:** 1972. **other id:** CISe 352. **locality:** 15 km west of Kacabas, Western Turkey. Annual. Cultivated. Seed.
- PI 543562 **donor id:** M1-72-73-324. **origin:** Turkey. **collected:** 1972. **other id:** CISe 353. **locality:** 15 km west of Kacabas, Western Turkey. Annual. Cultivated. Seed.
- PI 543563 **donor id:** M1-72-73-325. **origin:** Turkey. **collected:** 1972. **other id:** CISe 354. **locality:** 15 km west of Kacabas, Western Turkey. Annual. Cultivated. Seed.
- PI 543564 **donor id:** M1-72-73-326. **origin:** Turkey. **collected:** 1972. **other id:** CISe 355. **locality:** 15 km west of Kacabas, Western Turkey. Annual. Cultivated. Seed.

PI 543399 to 543727-continued

- PI 543565 **donor id:** M1-72-73-327. **origin:** Turkey. **collected:** 1972. **other id:** C1se 356. **locality:** 15 km north of Bilecik, Western Turkey. Annual. Cultivated. Seed.
- PI 543566 **donor id:** M1-72-73-328. **origin:** Turkey. **collected:** 1972. **other id:** C1se 357. **locality:** 15 km north of Bilecik, Western Turkey. Annual. Cultivated. Seed.
- PI 543567 **donor id:** M1-72-73-329. **origin:** Turkey. **collected:** 1972. **other id:** C1se 358. **locality:** 15 km north of Bilecik, Western Turkey. Annual. Cultivated. Seed.
- PI 543568 **donor id:** M1-72-73-330. **origin:** Turkey. **collected:** 1972. **other id:** C1se 359. **locality:** 15 km north of Bilecik, Western Turkey. Annual. Cultivated. Seed.
- PI 543569 **donor id:** M1-72-73-331. **origin:** Turkey. **collected:** 1972. **other id:** C1se 360. **locality:** 15 km from Alikurt, Western Turkey. Annual. Cultivated. Seed.
- PI 543570 **donor id:** M1-72-73-332. **origin:** Turkey. **collected:** 1972. **other id:** C1se 361. **locality:** 15 km from Alikurt, Western Turkey. Annual. Cultivated. Seed.
- PI 543571 **donor id:** M1-72-73-333. **origin:** Turkey. **collected:** 1972. **other id:** C1se 362. **locality:** 15 km from Alikurt, Western Turkey. Annual. Cultivated. Seed.
- PI 543572 **donor id:** M1-72-73-334. **origin:** Turkey. **collected:** 1972. **other id:** C1se 363. **locality:** 15 km from Alikurt, Western Turkey. Annual. Cultivated. Seed.
- PI 543573 **donor id:** M1-72-73-335. **origin:** Turkey. **collected:** 1972. **other id:** C1se 364. **locality:** 15 km from Alikurt, Western Turkey. Annual. Cultivated. Seed.
- PI 543574 **donor id:** M1-72-73-336. **origin:** Turkey. **collected:** 1972. **other id:** C1se 365. **locality:** 15 km from Alikurt, Western Turkey. Annual. Cultivated. Seed.
- PI 543575 **donor id:** M1-72-73-337. **origin:** Turkey. **collected:** 1972. **other id:** C1se 366. **locality:** 15 km from Alikurt, Western Turkey. Annual. Cultivated. Seed.
- PI 543576 **donor id:** M1-72-73-338. **origin:** Turkey. **collected:** 1972. **other id:** C1se 367. **locality:** 15 km from Alikurt, Western Turkey. Annual. Cultivated. Seed.
- PI 543577 **donor id:** M1-72-73-339. **origin:** Turkey. **collected:** 1972. **other id:** C1se 368. **locality:** 15 km from Alikurt, Western Turkey. Annual. Cultivated. Seed.

PI 543399 to 543727-continued

- PI 543578 **donor id:** M1-72-73-340. **origin:** Turkey. **collected:** 1972. **other id:** CIsE 369. **locality:** 15 km from Alikurt, Western Turkey. Annual. Cultivated. Seed.
- PI 543579 **donor id:** M1-72-73-341. **origin:** Turkey. **collected:** 1972. **other id:** CIsE 370. **locality:** 15 km from Alikurt, Western Turkey. Annual. Cultivated. Seed.
- PI 543580 **donor id:** M1-72-73-342. **origin:** Turkey. **collected:** 1972. **other id:** CIsE 371. **locality:** 15 km from Alikurt, Western Turkey. Annual. Cultivated. Seed.
- PI 543581 **donor id:** M1-72-73-343. **origin:** Turkey. **collected:** 1972. **other id:** CIsE 372. **locality:** 15 km from Alikurt, Western Turkey. Annual. Cultivated. Seed.
- PI 543582 **donor id:** M1-72-73-344. **origin:** Turkey. **collected:** 1972. **other id:** CIsE 373. **locality:** 15 km from Alikurt, Western Turkey. Annual. Cultivated. Seed.
- PI 543583 **donor id:** M1-72-73-345. **origin:** Turkey. **collected:** 1972. **other id:** CIsE 374. **locality:** 15 km from Pamokkgle, Western Turkey. Annual. Cultivated. Seed.
- PI 543584 **donor id:** M1-72-73-346. **origin:** Turkey. **collected:** 1972. **other id:** CIsE 375. **locality:** 15 km from Pamokkgle, Western Turkey. Annual. Cultivated. Seed.
- PI 543585 **donor id:** M1-72-73-347. **origin:** Turkey. **collected:** 1972. **other id:** CIsE 376. **locality:** 15 km from Pamokkgle, Western Turkey. Annual. Cultivated. Seed.
- PI 543586 **donor id:** M1-72-73-348. **origin:** Turkey. **collected:** 1972. **other id:** CIsE 377. **locality:** 15 km from Pamokkgle, Western Turkey. Annual. Cultivated. Seed.
- PI 543587 **donor id:** M1-72-73-349. **origin:** Turkey. **collected:** 1972. **other id:** CIsE 378. **locality:** 15 km from Pamokkgle, Western Turkey. Annual. Cultivated. Seed.
- PI 543588 **donor id:** M1-72-73-350. **origin:** Turkey. **collected:** 1972. **other id:** CIsE 379. **locality:** 15 km from Pamokkgle, Western Turkey. Annual. Cultivated. Seed.
- PI 543589 **donor id:** M1-72-73-351. **origin:** Turkey. **collected:** 1972. **other id:** CIsE 380. **locality:** 15 km from Pamokkgle, Western Turkey. Annual. Cultivated. Seed.
- PI 543590 **donor id:** M1-72-73-352. **origin:** Turkey. **collected:** 1972. **other id:** CIsE 381. **locality:** 15 km from Pamokkgle, Western Turkey. Annual. Cultivated. Seed.

PI 543399 to 543727-continued

- PI 543591 **donor id:** M1-72-73-353. **origin:** Turkey. **collected:** 1972. **other id:** C1se 382. **locality:** 15 km from Pamokkgle, Western Turkey. Annual. Cultivated. Seed.
- PI 543592 **donor id:** M1-72-73-354. **origin:** Turkey. **collected:** 1972. **other id:** C1se 383. **locality:** 15 km from Pamokkgle, Western Turkey. Annual. Cultivated. Seed.
- PI 543593 **donor id:** M1-72-73-355. **origin:** Turkey. **collected:** 1972. **other id:** C1se 384. **locality:** 15 km from Adapazari, Western Turkey. Annual. Cultivated. Seed.
- PI 543594 **donor id:** M1-72-73-356. **origin:** Turkey. **collected:** 1972. **other id:** C1se 385. **locality:** 15 km from Adapazari, Western Turkey. Annual. Cultivated. Seed.
- PI 543595 **donor id:** M1-72-73-357. **origin:** Turkey. **collected:** 1972. **other id:** C1se 386. **locality:** 15 km from Adapazari, Western Turkey. Annual. Cultivated. Seed.
- PI 543596 **donor id:** M1-72-73-358. **origin:** Turkey. **collected:** 1972. **other id:** C1se 387. **locality:** 7 km north of Sindivgi, Western Turkey. **remarks:** Good fertility. Annual. Cultivated. Seed.
- PI 543597 **donor id:** M1-72-73-359. **origin:** Turkey. **collected:** 1972. **other id:** C1se 388. **locality:** 7 km north of Sindivgi, Western Turkey. **remarks:** Good fertility. Annual. Cultivated. Seed.
- PI 543598 **donor id:** M1-72-73-360. **origin:** Turkey. **collected:** 1972. **other id:** C1se 389. **locality:** 7 km north of Sindivgi, Western Turkey. **remarks:** Good fertility. Annual. Cultivated. Seed.
- PI 543599 **donor id:** M1-72-73-361. **origin:** Turkey. **collected:** 1972. **other id:** C1se 390. **locality:** 7 km north of Sindivgi, Western Turkey. **remarks:** Good fertility. Annual. Cultivated. Seed.
- PI 543600 **donor id:** M1-72-73-362. **origin:** Turkey. **collected:** 1972. **other id:** C1se 391. **locality:** 7 km north of Sindivgi, Western Turkey. **remarks:** Good fertility. Annual. Cultivated. Seed.
- PI 543601 **donor id:** M1-72-73-363. **origin:** Turkey. **collected:** 1972. **other id:** C1se 392. **locality:** 7 km north of Sindivgi, Western Turkey. **remarks:** Good fertility. Annual. Cultivated. Seed.

PI 543399 to 543727-continued

- PI 543602 **donor id:** M1-72-73-364. **origin:** Turkey. **collected:** 1972. **other id:** CIse 393. **locality:** 7 km north of Sindivgi, Western Turkey. **remarks:** Good fertility. Annual. Cultivated. Seed.
- PI 543603 **donor id:** M1-72-73-365. **origin:** Turkey. **collected:** 1972. **other id:** CIse 394. **locality:** 7 km north of Sindivgi, Western Turkey. **remarks:** Good fertility. Annual. Cultivated. Seed.
- PI 543604 **donor id:** M1-72-73-366. **origin:** Turkey. **collected:** 1972. **other id:** CIse 395. **locality:** 7 km north of Sindivgi, Western Turkey. **remarks:** Good fertility. Annual. Cultivated. Seed.
- PI 543605 **donor id:** M1-72-73-367. **origin:** Turkey. **collected:** 1972. **other id:** CIse 396. **locality:** 7 km north of Sindivgi, Western Turkey. **remarks:** Good fertility. Annual. Cultivated. Seed.
- PI 543606 **donor id:** M1-72-73-368. **origin:** Turkey. **collected:** 1972. **other id:** CIse 397. **locality:** 7 km north of Sindivgi, Western Turkey. **remarks:** Good fertility. Annual. Cultivated. Seed.
- PI 543607 **donor id:** M1-72-73-369. **origin:** Turkey. **collected:** 1972. **other id:** CIse 398. **locality:** 7 km north of Sindivgi, Western Turkey. **remarks:** Good fertility. Annual. Cultivated. Seed.
- PI 543608 **donor id:** M1-72-73-370. **origin:** Turkey. **collected:** 1972. **other id:** CIse 399. **locality:** 7 km north of Sindivgi, Western Turkey. **remarks:** Good fertility. Annual. Cultivated. Seed.
- PI 543609 **donor id:** M1-72-73-371. **origin:** Turkey. **collected:** 1972. **other id:** CIse 400. **locality:** 7 km north of Sindivgi, Western Turkey. **remarks:** Good fertility. Annual. Cultivated. Seed.
- PI 543610 **donor id:** M1-72-73-372. **origin:** Turkey. **collected:** 1972. **other id:** CIse 401. **locality:** 7 km north of Sindivgi, Western Turkey. **remarks:** Good fertility. Annual. Cultivated. Seed.
- PI 543611 **donor id:** M1-72-73-373. **origin:** Turkey. **collected:** 1972. **other id:** CIse 402. **locality:** 7 km north of Sindivgi, Western Turkey. **remarks:** Good fertility. Annual. Cultivated. Seed.

PI 543399 to 543727-continued

- PI 543612 **donor id:** M1-72-73-374. **origin:** Turkey. **collected:** 1972. **other id:** CISe 403. **locality:** 7 km north of Sindivgi, Western Turkey. Annual. Cultivated. Seed.
- PI 543613 **donor id:** M1-72-73-375. **origin:** Turkey. **collected:** 1972. **other id:** CISe 404. **locality:** 7 km north of Sindivgi, Western Turkey. Annual. Cultivated. Seed.
- PI 543614 **donor id:** M1-72-73-376. **origin:** Turkey. **collected:** 1972. **other id:** CISe 405. **locality:** 7 km north of Sindivgi, Western Turkey. Annual. Cultivated. Seed.
- PI 543615 **donor id:** M1-72-73-377. **origin:** Turkey. **collected:** 1972. **other id:** CISe 406. **locality:** 7 km north of Sindivgi, Western Turkey. Annual. Cultivated. Seed.
- PI 543616 **donor id:** M1-72-73-378. **origin:** Turkey. **collected:** 1972. **other id:** CISe 407. **locality:** 7 km north of Sindivgi, Western Turkey. Annual. Cultivated. Seed.
- PI 543617 **donor id:** M1-72-73-379. **origin:** Turkey. **collected:** 1972. **other id:** CISe 408. **locality:** 7 km north of Sindivgi, Western Turkey. Annual. Cultivated. Seed.
- PI 543618 **donor id:** M1-72-73-380. **origin:** Turkey. **collected:** 1972. **other id:** CISe 409. **locality:** 7 km north of Sindivgi, Western Turkey. Annual. Cultivated. Seed.
- PI 543619 **donor id:** M1-72-73-381. **origin:** Turkey. **collected:** 1972. **other id:** CISe 410. **locality:** 7 km north of Sindivgi, Western Turkey. Annual. Cultivated. Seed.
- PI 543620 **donor id:** M1-72-73-382. **origin:** Turkey. **collected:** 1972. **other id:** CISe 411. **locality:** 7 km north of Sindivgi, Western Turkey. Annual. Cultivated. Seed.
- PI 543621 **donor id:** M1-72-73-383. **origin:** Turkey. **collected:** 1972. **other id:** CISe 412. **locality:** 7 km north of Sindivgi, Western Turkey. Annual. Cultivated. Seed.
- PI 543622 **donor id:** M1-72-73-384. **origin:** Turkey. **collected:** 1972. **other id:** CISe 413. **locality:** 7 km north of Sindivgi, Western Turkey. Annual. Cultivated. Seed.
- PI 543623 **donor id:** M1-72-73-385. **origin:** Turkey. **collected:** 1972. **other id:** CISe 414. **locality:** 7 km north of Sindivgi, Western Turkey. Annual. Cultivated. Seed.
- PI 543624 **donor id:** M1-72-73-386. **origin:** Turkey. **collected:** 1972. **other id:** CISe 415. **locality:** 7 km north of Sindivgi, Western Turkey. Annual. Cultivated. Seed.

PI 543399 to 543727-continued

- PI 543625 **donor id:** M1-72-73-387. **origin:** Turkey. **collected:** 1972. **other id:** CISe 416. **locality:** 7 km north of Sindivgi, Western Turkey. Annual. Cultivated. Seed.
- PI 543626 **donor id:** M1-72-73-388. **origin:** Turkey. **collected:** 1972. **other id:** CISe 417. **locality:** 7 km north of Sindivgi, Western Turkey. Annual. Cultivated. Seed.
- PI 543627 **donor id:** M1-72-73-389. **origin:** Turkey. **collected:** 1972. **other id:** CISe 418. **locality:** 7 km north of Sindivgi, Western Turkey. Annual. Cultivated. Seed.
- PI 543628 **donor id:** M1-72-73-390. **origin:** Turkey. **collected:** 1972. **other id:** CISe 419. **locality:** 7 km north of Sindivgi, Western Turkey. Annual. Cultivated. Seed.
- PI 543629 **donor id:** M1-72-73-391. **origin:** Turkey. **collected:** 1972. **other id:** CISe 420. **locality:** 7 km north of Sindivgi, Western Turkey. Annual. Cultivated. Seed.
- PI 543630 **donor id:** M1-72-73-392. **origin:** Turkey. **collected:** 1972. **other id:** CISe 421. **locality:** 7 km north of Sindivgi, Western Turkey. Annual. Cultivated. Seed.
- PI 543631 **donor id:** M1-72-73-393. **origin:** Turkey. **collected:** 1972. **other id:** CISe 422. **locality:** 7 km north of Sindivgi, Western Turkey. Annual. Cultivated. Seed.
- PI 543632 **donor id:** M1-72-73-394. **origin:** Turkey. **collected:** 1972. **other id:** CISe 423. **locality:** 7 km north of Sindivgi, Western Turkey. Annual. Cultivated. Seed.
- PI 543633 **donor id:** M1-72-73-395. **origin:** Turkey. **collected:** 1972. **other id:** CISe 424. **locality:** 7 km north of Sindivgi, Western Turkey. Annual. Cultivated. Seed.
- PI 543634 **donor id:** M1-72-73-396. **origin:** Turkey. **collected:** 1972. **other id:** CISe 425. **locality:** 7 km north of Sindivgi, Western Turkey. Annual. Cultivated. Seed.
- PI 543635 **donor id:** M1-72-73-397. **origin:** Turkey. **collected:** 1972. **other id:** CISe 426. **locality:** 7 km north of Sindivgi, Western Turkey. Annual. Cultivated. Seed.
- PI 543636 **donor id:** M1-72-73-398. **origin:** Turkey. **collected:** 1972. **other id:** CISe 427. **locality:** 7 km north of Sindivgi, Western Turkey. Annual. Cultivated. Seed.
- PI 543637 **donor id:** M1-72-73-399. **origin:** Turkey. **collected:** 1972. **other id:** CISe 428. **locality:** 7 km north of Sindivgi, Western Turkey. Annual. Cultivated. Seed.

PI 543399 to 543727-continued

- PI 543638 **donor id:** M1-72-73-400. **origin:** Turkey. **collected:** 1972. **other id:** CIse 429. **locality:** 7 km north of Sindivgi, Western Turkey. Annual. Cultivated. Seed.
- PI 543639 **donor id:** M1-72-73-401. **origin:** Turkey. **collected:** 1972. **other id:** CIse 430. **locality:** 7 km north of Sindivgi, Western Turkey. Annual. Cultivated. Seed.
- PI 543640 **donor id:** M1-72-73-402. **origin:** Turkey. **collected:** 1972. **other id:** CIse 431. **locality:** 7 km north of Sindivgi, Western Turkey. Annual. Cultivated. Seed.
- PI 543641 **donor id:** M1-72-73-403. **origin:** Turkey. **collected:** 1972. **other id:** CIse 432. **locality:** 7 km north of Belecik, Western Turkey. Annual. Cultivated. Seed.
- PI 543642 **donor id:** M1-72-73-404. **origin:** Turkey. **collected:** 1972. **other id:** CIse 433. **locality:** 7 km north of Bilecik, Western Turkey. Annual. Cultivated. Seed.
- PI 543643 **donor id:** M1-72-73-405. **origin:** Turkey. **collected:** 1972. **other id:** CIse 434. **locality:** 7 km north of Bilecik, Western Turkey. Annual. Cultivated. Seed.
- PI 543644 **donor id:** M1-72-73-406. **origin:** Turkey. **collected:** 1972. **other id:** CIse 435. **locality:** 7 km north of Bilecik, Western Turkey. Annual. Cultivated. Seed.
- PI 543645 **donor id:** M1-72-73-407. **origin:** Turkey. **collected:** 1972. **other id:** CIse 436. **locality:** 7 km north of Bilecik, Western Turkey. Annual. Cultivated. Seed.
- PI 543646 **donor id:** M1-72-73-408. **origin:** Turkey. **collected:** 1972. **other id:** CIse 437. **locality:** 7 km north of Bilecik, Western Turkey. Annual. Cultivated. Seed.
- PI 543647 **donor id:** M1-72-73-409. **origin:** Turkey. **collected:** 1972. **other id:** CIse 438. **locality:** 7 km north of Bilecik, Western Turkey. Annual. Cultivated. Seed.
- PI 543648 **donor id:** M1-72-73-410. **origin:** Turkey. **collected:** 1972. **other id:** CIse 439. **locality:** 7 km north of Bilecik, Western Turkey. Annual. Cultivated. Seed.
- PI 543649 **donor id:** M1-72-73-411. **origin:** Turkey. **collected:** 1972. **other id:** CIse 440. **locality:** 7 km north of Bilecik, Western Turkey. Annual. Cultivated. Seed.
- PI 543650 **donor id:** M1-72-73-412. **origin:** Turkey. **collected:** 1972. **other id:** CIse 441. **locality:** 7 km north of Bilecik, Western Turkey. Annual. Cultivated. Seed.

PI 543399 to 543727-continued

- PI 543651 **donor id:** M1-72-73-413. **origin:** Turkey. **collected:** 1972. **other id:** C1se 442. **locality:** 7 km north of Bilecik, Western Turkey. Annual. Cultivated. Seed.
- PI 543652 **donor id:** M1-72-73-414. **origin:** Turkey. **collected:** 1972. **other id:** C1se 443. **locality:** Selcur, Western Turkey. Annual. Cultivated. Seed.
- PI 543653 **donor id:** M1-72-73-415. **origin:** Turkey. **collected:** 1972. **other id:** C1se 444. **locality:** Selcur, Western Turkey. Annual. Cultivated. Seed.
- PI 543654 **donor id:** M1-72-73-416. **origin:** Turkey. **collected:** 1972. **other id:** C1se 445. **locality:** Selcur, Western Turkey. Annual. Cultivated. Seed.
- PI 543655 **donor id:** M1-72-73-417. **origin:** Turkey. **collected:** 1972. **other id:** C1se 446. **locality:** Selcur, Western Turkey. Annual. Cultivated. Seed.
- PI 543656 **donor id:** M1-72-73-418. **origin:** Turkey. **collected:** 1972. **other id:** C1se 447. **locality:** Selcur, Western Turkey. Annual. Cultivated. Seed.
- PI 543657 **donor id:** M1-72-73-419. **origin:** Turkey. **collected:** 1972. **other id:** C1se 448. **locality:** Selcur, Western Turkey. Annual. Cultivated. Seed.
- PI 543658 **donor id:** M1-72-73-420. **origin:** Turkey. **collected:** 1972. **other id:** C1se 449. **locality:** Selcur, Western Turkey. Annual. Cultivated. Seed.
- PI 543659 **donor id:** M1-72-73-421. **origin:** Turkey. **collected:** 1972. **other id:** C1se 450. **locality:** Selcur, Western Turkey. Annual. Cultivated. Seed.
- PI 543660 **donor id:** M1-72-73-422. **origin:** Turkey. **collected:** 1972. **other id:** C1se 451. **locality:** Selcur, Western Turkey. Annual. Cultivated. Seed.
- PI 543661 **donor id:** M1-72-73-423. **origin:** Turkey. **collected:** 1972. **other id:** C1se 452. **locality:** Selcur, Western Turkey. Annual. Cultivated. Seed.
- PI 543662 **donor id:** M1-72-73-424. **origin:** Turkey. **collected:** 1972. **other id:** C1se 453. **locality:** Selcur, Western Turkey. Annual. Cultivated. Seed.
- PI 543663 **donor id:** M1-72-73-425. **origin:** Turkey. **collected:** 1972. **other id:** C1se 454. **locality:** Selcur, Western Turkey. Annual. Cultivated. Seed.

PI 543399 to 543727-continued

- PI 543664 **donor id:** M1-72-73-426. **origin:** Turkey. **collected:** 1972. **other id:** C1se 455. **locality:** Selcur, Western Turkey. Annual. Cultivated. Seed.
- PI 543665 **donor id:** M1-72-73-427. **origin:** Turkey. **collected:** 1972. **other id:** C1se 456. **locality:** Selcur, Western Turkey. Annual. Cultivated. Seed.
- PI 543666 **donor id:** M1-72-73-428. **origin:** Turkey. **collected:** 1972. **other id:** C1se 457. **locality:** Selcur, Western Turkey. Annual. Cultivated. Seed.
- PI 543667 **donor id:** M1-72-73-429. **origin:** Turkey. **collected:** 1972. **other id:** C1se 458. **locality:** Selcur, Western Turkey. Annual. Cultivated. Seed.
- PI 543668 **donor id:** M1-72-73-430. **origin:** Turkey. **collected:** 1972. **other id:** C1se 459. **locality:** Selcur, Western Turkey. Annual. Cultivated. Seed.
- PI 543669 **donor id:** M1-72-73-431. **origin:** Turkey. **collected:** 1972. **other id:** C1se 460. **locality:** Selcur, Western Turkey. Annual. Cultivated. Seed.
- PI 543670 **donor id:** M1-72-73-432. **origin:** Turkey. **collected:** 1972. **other id:** C1se 461. **locality:** Selcur, Western Turkey. Annual. Cultivated. Seed.
- PI 543671 **donor id:** M1-72-73-433. **origin:** Turkey. **collected:** 1972. **other id:** C1se 462. **locality:** Selcur, Western Turkey. Annual. Cultivated. Seed.
- PI 543672 **donor id:** M1-72-73-434. **origin:** Turkey. **collected:** 1972. **other id:** C1se 463. **locality:** Selcur, Western Turkey. Annual. Cultivated. Seed.
- PI 543673 **donor id:** M1-72-73-435. **origin:** Turkey. **collected:** 1972. **other id:** C1se 464. **locality:** Hayrettin, Western Turkey. Annual. Cultivated. Seed.
- PI 543674 **donor id:** M1-72-73-436. **origin:** Turkey. **collected:** 1972. **other id:** C1se 465. **locality:** Hayrettin, Western Turkey. Annual. Cultivated. Seed.
- PI 543675 **donor id:** M1-72-73-437. **origin:** Turkey. **collected:** 1972. **other id:** C1se 466. **locality:** Hayrettin, Western Turkey. Annual. Cultivated. Seed.
- PI 543676 **donor id:** M1-72-73-438. **origin:** Turkey. **collected:** 1972. **other id:** C1se 467. **locality:** Hayrettin, Western Turkey. Annual. Cultivated. Seed.

PI 543399 to 543727-continued

- PI 543677 **donor id:** M1-72-73-439. **origin:** Turkey. **collected:** 1972. **other id:** CIsE 468. **locality:** Hayrettin, Western Turkey. Annual. Cultivated. Seed.
- PI 543678 **donor id:** M1-72-73-440. **origin:** Turkey. **collected:** 1972. **other id:** CIsE 469. **locality:** Hayrettin, Western Turkey. Annual. Cultivated. Seed.
- PI 543679 **donor id:** M1-72-73-441. **origin:** Turkey. **collected:** 1972. **other id:** CIsE 470. **locality:** Hayrettin, Western Turkey. Annual. Cultivated. Seed.
- PI 543680 **donor id:** M1-72-73-442. **origin:** Turkey. **collected:** 1972. **other id:** CIsE 471. **locality:** Hayrettin, Western Turkey. Annual. Cultivated. Seed.
- PI 543681 **donor id:** M1-72-73-443. **origin:** Turkey. **collected:** 1972. **other id:** CIsE 472. **locality:** Hayrettin, Western Turkey. Annual. Cultivated. Seed.
- PI 543682 **donor id:** M1-72-73-444. **origin:** Turkey. **collected:** 1972. **other id:** CIsE 473. **locality:** Hayrettin, Western Turkey. Annual. Cultivated. Seed.
- PI 543683 **donor id:** M1-72-73-445. **origin:** Turkey. **collected:** 1972. **other id:** CIsE 474. **locality:** Hayrettin, Western Turkey. Annual. Cultivated. Seed.
- PI 543684 **donor id:** M1-72-73-446. **origin:** Turkey. **collected:** 1972. **other id:** CIsE 475. **locality:** Hayrettin, Western Turkey. Annual. Cultivated. Seed.
- PI 543685 **donor id:** M1-72-73-447. **origin:** Turkey. **collected:** 1972. **other id:** CIsE 476. **locality:** Hayrettin, Western Turkey. Annual. Cultivated. Seed.
- PI 543686 **donor id:** M1-72-73-448. **origin:** Turkey. **collected:** 1972. **other id:** CIsE 477. **locality:** Hayrettin, Western Turkey. Annual. Cultivated. Seed.
- PI 543687 **donor id:** M1-72-73-449. **origin:** Turkey. **collected:** 1972. **other id:** CIsE 478. **locality:** Hayrettin, Western Turkey. Annual. Cultivated. Seed.
- PI 543688 **donor id:** M1-72-73-450. **origin:** Turkey. **collected:** 1972. **other id:** CIsE 479. **locality:** Hayrettin, Western Turkey. Annual. Cultivated. Seed.
- PI 543689 **donor id:** M1-72-73-451. **origin:** Turkey. **collected:** 1972. **other id:** CIsE 480. **locality:** Hayrettin, Western Turkey. Annual. Cultivated. Seed.

PI 543399 to 543727-continued

- PI 543690 **donor id:** M1-72-73-452. **origin:** Turkey. **collected:** 1972. **other id:** Cise 481. **locality:** Hayrettin, Western Turkey. Annual. Cultivated. Seed.
- PI 543691 **donor id:** M1-72-73-453. **origin:** Turkey. **collected:** 1972. **other id:** Cise 482. **locality:** Hayrettin, Western Turkey. Annual. Cultivated. Seed.
- PI 543692 **donor id:** M1-72-73-454. **origin:** Turkey. **collected:** 1972. **other id:** Cise 483. **locality:** Hayrettin, Western Turkey. Annual. Cultivated. Seed.
- PI 543693 **donor id:** M1-72-73-455. **origin:** Turkey. **collected:** 1972. **other id:** Cise 484. **locality:** Hayrettin, Western Turkey. Annual. Cultivated. Seed.
- PI 543694 **donor id:** M1-72-73-456. **origin:** Turkey. **collected:** 1972. **other id:** Cise 485. **locality:** Hayrettin, Western Turkey. Annual. Cultivated. Seed.
- PI 543695 **donor id:** M1-72-73-457. **origin:** Turkey. **collected:** 1972. **other id:** Cise 486. **locality:** Hayrettin, Western Turkey. Annual. Cultivated. Seed.
- PI 543696 **donor id:** M1-72-73-458. **origin:** Turkey. **collected:** 1972. **other id:** Cise 487. **locality:** Tagutlo, Western Turkey. Annual. Cultivated. Seed.
- PI 543697 **donor id:** M1-72-73-459. **origin:** Turkey. **collected:** 1972. **other id:** Cise 488. **locality:** Tagutlo, Western Turkey. Annual. Cultivated. Seed.
- PI 543698 **donor id:** M1-72-73-460. **origin:** Turkey. **collected:** 1972. **other id:** Cise 489. **locality:** Hayrettin, Western Turkey. Annual. Cultivated. Seed.
- PI 543699 **donor id:** M1-72-73-461. **origin:** Turkey. **collected:** 1972. **other id:** Cise 490. **locality:** Tagutlo, Western Turkey. Annual. Cultivated. Seed.
- PI 543700 **donor id:** M1-72-73-462. **origin:** Turkey. **collected:** 1972. **other id:** Cise 491. **locality:** Tagutlo, Western Turkey. Annual. Cultivated. Seed.
- PI 543701 **donor id:** M1-72-73-463. **origin:** Turkey. **collected:** 1972. **other id:** Cise 492. **locality:** Tagutlo, Western Turkey. Annual. Cultivated. Seed.
- PI 543702 **donor id:** M1-72-73-464. **origin:** Turkey. **collected:** 1972. **other id:** Cise 493. **locality:** Tagutlo, Western Turkey. Annual. Cultivated. Seed.

PI 543399 to 543727-continued

- PI 543703 **donor id:** M1-72-73-465. **origin:** Turkey. **collected:** 1972. **other id:** C1se 494. **locality:** Tagutlo, Western Turkey. Annual. Cultivated. Seed.
- PI 543704 **donor id:** M1-72-73-466. **origin:** Turkey. **collected:** 1972. **other id:** C1se 495. **locality:** Tagutlo, Western Turkey. Annual. Cultivated. Seed.
- PI 543705 **donor id:** M1-72-73-467. **origin:** Turkey. **collected:** 1972. **other id:** C1se 496. **locality:** Tagutlo, Western Turkey. Annual. Cultivated. Seed.
- PI 543706 **donor id:** M1-72-73-468. **origin:** Turkey. **collected:** 1972. **other id:** C1se 497. **locality:** Tagutlo, Western Turkey. Annual. Cultivated. Seed.
- PI 543707 **donor id:** M1-72-73-469. **origin:** Turkey. **collected:** 1972. **other id:** C1se 498. **locality:** Tagutlo, Western Turkey. Annual. Cultivated. Seed.
- PI 543708 **donor id:** M1-72-73-470. **origin:** Turkey. **collected:** 1972. **other id:** C1se 499. **locality:** Tagutlo, Western Turkey. Annual. Cultivated. Seed.
- PI 543709 **donor id:** M1-72-73-471. **origin:** Turkey. **collected:** 1972. **other id:** C1se 500. **locality:** Tagutlo, Western Turkey. Annual. Cultivated. Seed.
- PI 543710 **donor id:** M1-72-73-472. **origin:** Turkey. **collected:** 1972. **other id:** C1se 501. **locality:** Tagutlo, Western Turkey. Annual. Cultivated. Seed.
- PI 543711 **donor id:** M1-72-73-473. **origin:** Turkey. **collected:** 1972. **other id:** C1se 502. **locality:** Tagutlo, Western Turkey. Annual. Cultivated. Seed.
- PI 543712 **donor id:** M1-72-73-474. **origin:** Turkey. **collected:** 1972. **other id:** C1se 503. **locality:** Tagutlo, Western Turkey. Annual. Cultivated. Seed.
- PI 543713 **donor id:** M1-72-73-475. **origin:** Turkey. **collected:** 1972. **other id:** C1se 504. **locality:** Tagutlo, Western Turkey. Annual. Cultivated. Seed.
- PI 543714 **donor id:** M1-72-73-476. **origin:** Turkey. **collected:** 1972. **other id:** C1se 505. **locality:** Tagutlo, Western Turkey. Annual. Cultivated. Seed.
- PI 543715 **donor id:** M1-72-73-477. **origin:** Turkey. **collected:** 1972. **other id:** C1se 506. **locality:** Tagutlo, Western Turkey. Annual. Cultivated. Seed.

PI 543399 to 543727-continued

- PI 543716 **donor id:** M1-72-73-478. **origin:** Turkey. **collected:** 1972. **other id:** Cise 507. **locality:** Tagutlo, Western Turkey. Annual. Cultivated. Seed.
- PI 543717 **donor id:** M1-72-73-479. **origin:** Turkey. **collected:** 1972. **other id:** Cise 508. **locality:** Efes, Western Turkey. Annual. Cultivated. Seed.
- PI 543718 **donor id:** M1-72-73-480. **origin:** Turkey. **collected:** 1972. **other id:** Cise 509. **locality:** Selouk, Western Turkey. Annual. Cultivated. Seed.
- PI 543719 **donor id:** M1-72-73-481. **origin:** Turkey. **collected:** 1972. **other id:** Cise 510. **locality:** Selouk, Western Turkey. Annual. Cultivated. Seed.
- PI 543720 **donor id:** M1-72-73-482. **origin:** Turkey. **collected:** 1972. **other id:** Cise 511. **locality:** Selouk, Western Turkey. Annual. Cultivated. Seed.
- PI 543721 **donor id:** M1-72-73-483. **origin:** Turkey. **collected:** 1972. **other id:** Cise 512. **locality:** Selouk, Western Turkey. Annual. Cultivated. Seed.
- PI 543722 **donor id:** M1-72-73-484. **origin:** Turkey. **collected:** 1972. **other id:** Cise 513. **locality:** Selouk, Western Turkey. Annual. Cultivated. Seed.
- PI 543723 **donor id:** M1-72-73-485. **origin:** Turkey. **collected:** 1972. **other id:** Cise 514. **locality:** Selouk, Western Turkey. Annual. Cultivated. Seed.
- PI 543724 **donor id:** M1-72-73-486. **origin:** Turkey. **collected:** 1972. **other id:** Cise 515. **locality:** Selouk, Western Turkey. Annual. Cultivated. Seed.
- PI 543725 **donor id:** M1-72-73-487. **origin:** Turkey. **collected:** 1972. **other id:** Cise 516. **locality:** 20 km north of Akhisar, Western Turkey. Annual. Cultivated. Seed.
- PI 543726 **donor id:** M1-72-73-488. **origin:** Turkey. **collected:** 1972. **other id:** Cise 517. **locality:** 20 km north of Akhisar, Western Turkey. Annual. Cultivated. Seed.
- PI 543727 **donor id:** M1-72-73-489. **origin:** Turkey. **collected:** 1972. **other id:** Cise 518. **locality:** 20 km north of Akhisar, Western Turkey. Annual. Cultivated. Seed.

PI 543728 to 543729. *Secale cereale* L. POACEAE Rye

Donated by: Nolan, C.N., Clemson University, Clemson, South Carolina, United States. Received November 04, 1975.

PI 543728 **origin:** United States. **cultivar:** ACCO WR-811. **other id:** Cise 519. Annual. Cultivar. Seed.

PI 543729 **origin:** United States. **developer country:** United States. **origin institute:** Conley Seed Co., Waco, Texas. **cultivar:** WINTERMORE. **other id:** Cise 520. Annual. Cultivar. Seed.

PI 543730 to 543740. *Sorghum bicolor* (L.) Moench POACEAE Sorghum

Donated by: York, J.O., Arkansas Agr. Exp. Sta., Plant Science 115, Fayetteville, Arkansas, United States. Received August 27, 1990.

PI 543730 **origin:** United States. **origin institute:** Arkansas Agr. Exp. Sta., Plant Science 115, Fayetteville, Arkansas 72701. **cultivar:** R line AK 3001 R. **pedigree:** Selected from backcross population of Double Dwarf Early Shallu in development of 3-dwarf Shallu (SA 6657-25-4). **remarks:** 3-dwarf restorer line that restores pollen to A1 cytoplasm. Grain has white and pearly pericarp and straw colored glumes. Corneous endosperm. Seed carries a dormancy factor. Panicle exertion well above flag leaf (10cm), panicle type open. Plant averages 105cm in height. Flowers approx. 67 days after emergence. Annual. Breeding Material. Seed.

PI 543731 **origin:** United States. **origin institute:** Arkansas Agr. Exp. Sta., Plant Science 115, Fayetteville, Arkansas 72701. **cultivar:** R line AR 3016. **pedigree:** TX2527/TAM bulk 45 (using pollen mixture). **other id:** Ark. 1040. **remarks:** Grain has white and pearly pericarp, yellow endosperm, and mahogany glumes. Panicle exertion well above flag leaf (11cm), panicle type open. Plant averages 114cm in height. Flowers approx. 84 days after emergence. Plants sturdy, juicy, and produce few tillers. Restores pollen production to A1 cytoplasm. Selected for disease free leaves. Annual. Breeding Material. Seed.

- PI 543732 **origin:** United States. **origin institute:** Arkansas Agr. Exp. Sta., Plant Science 115, Fayetteville, Arkansas 72701. **cultivar:** R line AR 3017. **pedigree:** NB9040/TAM bulk 47 (using pollen mixture). **other id:** Ark 1041. **remarks:** Grain has white and pearly pericarp, yellow endosperm, and mahogany glumes. Seed small and thresh easily from glumes. Panicle exertion above flag leaf (8cm), panicle type open. Plant averages 107cm in height. Flowers approx. 80 days after emergence. Plants sturdy, juicy, and produce no tillers. Restores pollen production to A1 cytoplasm. Selected for disease free leaves. Annual. Breeding Material. Seed.
- PI 543733 **origin:** United States. **origin institute:** Arkansas Agr. Exp. Sta., Plant Science 115, Fayetteville, Arkansas 72701. **cultivar:** R line AR 3018. **pedigree:** Selected from A line TX399(Wheatland)/Rline Tx7000 (Caprock). **other id:** Ark. 1008. **remarks:** Resembles Caprock but contains A1 cytoplasm. 3-dwarf line that restores pollen production to A1 cytoplasm. Grain has pink pericarp, starchy mesocarp, and mahogany glumes. Seed average in size and thresh easily from glumes. Panicle exertion well above flag leaf (11cm), panicle type compact. Plant averages 107cm in height. Flowers approx. 79 days after emergence. Plants sturdy, juicy, and produce few. Annual. Breeding Material. Seed.
- PI 543734 **origin:** United States. **origin institute:** Arkansas Agr. Exp. Sta., Plant Science 115, Fayetteville, Arkansas 72701. **cultivar:** R line AR 3020. **pedigree:** Selected from TAM Bulk 47 sorghum anthracnose (*Colletotrichum graminicola*) resistant population. **other id:** Ark. 1011. **remarks:** 3-dwarf inbred line that restores pollen production to A1 cytoplasm. Grain has white and pearly pericarp, yellow endosperm, and mahogany glumes. Seed average size and thresh easily from glumes. Panicle exertion above flag leaf (5cm), panicle type open. Plant averages 117cm in height. Flowers approx. 81 days after emergence. Selected for disease free leaves. Annual. Breeding Material. Seed.

PI 543730 to 543740-continued

- PI 543735 **origin:** United States. **origin institute:** Arkansas Agr. Exp. Sta., Plant Science 115, Fayetteville, Arkansas 72701. **cultivar:** R line AR 3031. **pedigree:** Selected from IS2266c. **other id:** Russet. **other id:** IS2266c. **remarks:** Selected for purple testa and recess spreader factor (ss). 3-dwarf line that restores pollen production to A1 cytoplasm. Grain has pink pericarp, chalky mesocarp, purple testa, and straw colored glumes. Seed large and thresh free of glumes. Panicle exertion above flag leaf (14cm), panicle type compact. Plant averages 104cm in height. Flowers approx 76 days after emergence. Plant is rather weak and tillers. Annual. Breeding Material. Seed.
- PI 543736 **origin:** United States. **origin institute:** Arkansas Agr. Exp. Sta., Plant Science 115, Fayetteville, Arkansas 72701. **cultivar:** R2line AR 3032. **pedigree:** AR 3003(Schrock)/TAM bulk 40 (using a pollen mixture). **other id:** Ark. 1066. **remarks:** Selected for purple testa. 3-dwarf line that restores pollen production to A2 cytoplasm. Grain has brownish pink and pearly pericarp, purple testa, and black glumes. Grain medium size and does not thresh easily from glumes. Panicle exertion above flag leaf (10cm), panicle type is semi-open. Plant averages 138cm in height. Flowers approx. 78 days after emergence. Plant is sturdy with no tillers. Annual. Breeding Material. Seed.
- PI 543737 **origin:** United States. **origin institute:** Arkansas Agr. Exp. Sta., Plant Science 115, Fayetteville, Arkansas 72701. **cultivar:** R line AR 3037. **pedigree:** SA6649-7-2(Feterita)/TAM bulk 47 (using a pollen mixture). **other id:** Ark. 1073. **remarks:** Selected for purple testa. 3-dwarf line that restores pollen production to A1 cytoplasm. Grain has white and pearly pericarp, purple testa, and black glumes. Seed medium size and thres free of glumes. Panicle exertion above flag leaf (5cm), panicle semi-open. Plant averages 102cm in height. flowers approx. 74 days after emergence. Plant sturdy with no tillers. Annual. Breeding Material. Seed.

PI 543730 to 543740-continued

PI 543738 **origin:** United States. **origin institute:** Arkansas Agr. Exp. Sta., Plant Science 115, Fayetteville, Arkansas 72701. **cultivar:** R line AR 3038. **pedigree:** TAM 2568/TAM bulk 46 (using a pollen mixture). **other id:** Ark. 1074. **remarks:** 3-dwarf line that restores pollen production to A1 cytoplasm. Grain has white and pearly pericarp, yellow endosperm, and straw colored glumes. Seed medium and thresh free of glumes. Panicle exertion above flag leaf (8cm), panicle type open. Plant averages 109cm in height. Flowers approx. 72 days after emergence. Plant sturdy and tillers lightly. Spring Annual. Breeding Material. Seed.

PI 543739 **origin:** United States. **origin institute:** Arkansas Agr. Exp. Sta., Plant Science 115, Fayetteville, Arkansas 72701. **cultivar:** R line AR 3039. **pedigree:** TAM 2567/TAM bulk 47 (using a pollen mixture). **other id:** Ark. 1094. **remarks:** 3-dwarf line that restores pollen production to A1 cytoplasm. Grain has white and pearly pericarp, yellow endosperm, and mahogany glumes. Seed medium to large and thresh free of glumes. Panicle exertion above flag leaf (5cm), panicle type open. Plant averages 99cm in height. Flowers approx. 85 days after emergence. Plant sturdy and does not tiller. Annual. Breeding Material. Seed.

PI 543740 **origin:** United States. **origin institute:** Arkansas Agr. Exp. Sta., Plant Science 115, Fayetteville, Arkansas 72701. **cultivar:** R line AR 3041. **pedigree:** S5 selection from SA 6649-7-2/TAM bulk 47 (using a pollen mixture). **other id:** Ark. 1073(white). **remarks:** 3-dwarf line that restores pollen production to A1 cytoplasm. Grain has white and pearly pericarp with black glumes. Seed small and do not thresh easily from glumes. Panicle above flag leaf (6cm), and panicle type open. Plant averages 162cm in height. Flowers approx. 75 days after emergence. Plant sturdy and tillers lightly. Annual. Breeding Material. Seed.

PI 543741. *Zea mays* L. subsp. *mays* POACEAE Corn

Donated by: Darrah, L., Agricultural Research Service -- USDA, University of Missouri, Curtis Hall, Rm. 210, Columbia, Missouri, United States. Received August 27, 1990.

origin: United States. **origin institute:** Agricultural Research Service -- USDA, University of Missouri, Curtis Hall, Rm. 210, Columbia, Missouri 65211. **cultivar:** Kitale II (R11)C6. **pedigree:** Source materials include Hickory King, (Natal) White Horsetooth, Ladysmith White, Champion White Pearl, and Iowa Silver Mine imported from South Africa. **remarks:** Six cycles of reciprocal recurrent selection with EC 573 (R12) Cn as tester with high yield and disease resistance (*Helminthosporium turcicum* and *Puccinia sorghi*) as selection criteria. High level of resistance appears multigenic for both diseases. Maturity is extremely long season with very high ear and plant height. Breeding Material. Seed.

PI 543742 to 543747. *Helianthus* hybrid ASTERACEAE

Donated by: Miller, J.F., Agricultural Research Service -- USDA, Northern Crops Science Lab., P.O. Box 5677, Fargo, North Dakota, United States; and North Dakota Agr. Res. Sta.. **remarks:** Three Cytoplasmic Male Sterile and Three Restorer Sunflower Germplasm Lines. Received August 27, 1990.

PI 543742 **origin:** United States. **origin institute:** Agricultural Research Service -- USDA, Northern Crops Science Lab., P.O. Box 5677, Fargo, North Dakota 58105. **cultivar:** cmsHA 89(PET2). **pedigree:** BC8 lines of HA 89 with cytoplasm from CMG-1. **other id:** GP-129. **group:** CSR-SUNFLOWER. **remarks:** Cytoplasmic male sterile line to provide cytoplasmic diversity. Morphologic and agronomic characteristics indistinguishable from HA 89 except rudimentary anthers which shed no pollen. Spring Annual. Breeding Material. Seed.

PI 543743 *Helianthus annuus* L. ASTERACEAE
origin: United States. **origin institute:** Agricultural Research Service -- USDA, Northern Crops Science Lab., P.O. Box 5677, Fargo, North Dakota 58105. **cultivar:** cmsHA 89(GIG1). **pedigree:** BC8 lines of HA 89 with cytoplasm from CMG-2. **other id:** GP-130. **group:** CSR-SUNFLOWER. **remarks:** Cytoplasmic male sterile line to provide cytoplasmic diversity. Morphologic and agronomic characteristics indistinguishable from HA 89 except rudimentary anthers which shed no pollen. Spring Annual. Breeding Material. Seed.

PI 543742 to 543747-continued

- PI 543744 *Helianthus annuus* L. ASTERACEAE
origin: United States. **origin institute:** Agricultural Research Service -- USDA, Northern Crops Science Lab., P.O. Box 5677, Fargo, North Dakota 58105. **cultivar:** cmsHA 89(MAX1). **pedigree:** BC8 lines of HA 89 with cytoplasm from CMG-3. **other id:** GP-131. **group:** CSR-SUNFLOWER. **remarks:** Cytoplasmic male sterile line to provide cytoplasmic diversity. Morphologic and agronomic characteristics indistinguishable from HA 89 except split anther and small pollen at frequency of 1%. Seedset on plants approx. 5%. Spring Annual. Breeding Material. Seed.
- PI 543745 *Helianthus annuus* L. ASTERACEAE
origin: United States. **origin institute:** Agricultural Research Service -- USDA, Northern Crops Science Lab., P.O. Box 5677, Fargo, North Dakota 58105. **cultivar:** RPET2. **pedigree:** F3-derived F5 line from cmsHA 89(PET2)//RCMG1/*3 RHA 274. **other id:** GP-132. **group:** CSR-SUNFLOWER. **remarks:** Homozygous male fertility restoration line for PET2 cytoplasm. Morphology similar to RHA 274. Spring Annual. Breeding Material. Seed.
- PI 543746 *Helianthus annuus* L. ASTERACEAE
origin: United States. **origin institute:** Agricultural Research Service -- USDA, Northern Crops Science Lab., P.O. Box 5677, Fargo, North Dakota 58105. **cultivar:** RGIG1. **pedigree:** F3-derived F4 line from cmsHA 89(GIG1)/3/RCMG2// RCM2/*2 RHA 274. **other id:** GP-133. **group:** CSR-SUNFLOWER. **remarks:** Homozygous male fertility restoration line for GIG1 cytoplasm. Morphology similar to RHA 274. Spring Annual. Breeding Material. Seed.
- PI 543747 **origin:** United States. **origin institute:** Agricultural Research Service -- USDA, Northern Crops Science Lab., P.O. Box 5677, Fargo, North Dakota 58105. **cultivar:** RMAX1. **pedigree:** F3-derived F5 line from cmsHA 89(MAX1)//RCMG3/*3 RHA 274/3/cmsHA 89(MAX1)/RCMG3. **other id:** GP-134. **group:** CSR-SUNFLOWER. **remarks:** Homozygous male fertility restoration line for MAX1 cytoplasm. Morphology similar to RHA 274. Spring Annual. Breeding Material. Seed.

PI 543748. *Dactylis glomerata* L. POACEAE Orchardgrass

Donated by: Conger, B.V., Tennessee Agr. Exp. Sta., University of Tennessee, Knoxville, Tennessee, United States. **remarks:** Embryogen-P Orchardgrass Germplasm. Received August 27, 1990.

PI 543748-continued

origin: United States. **origin institute:** Tennessee Agr. Exp. Sta., University of Tennessee, Knoxville, Tennessee 37901-1071. **cultivar:** EMBRYOGEN-P. **pedigree:** Derived from one plant of Potomac which produced somatic embryos from basal leaf segments cultured in vitro in medium containing 30 uM dicamba (3,6-dichloro-2-methoxybenzoic acid). **other id:** GP-2. **group:** CSR-ORCHARDGRASS. **remarks:** High capacity for producing somatic embryos directly from basal leaf segments cultured in vitro and from suspension cultures. Plant phenotypically normal in color and morphology. Fertile and can be used in crosses with other genotypes. Breeding Material. Plant.

PI 543749. Pennisetum glaucum (L.) R. Br. POACEAE Pearl millet

Donated by: Gupta, S.C., Institut Senegalais de Recherches Agric., (ISRA), Bulawayo, Zimbabwe; and ICRISAT. **remarks:** ICMV 2 (IBV 8001). Received August 21, 1990.

origin: Zimbabwe. **origin institute:** SADCC/ICRISAT, Sorghum and Millets Program, Bulawayo. **cultivar:** ICMV 2. **pedigree:** Developed by recombining three entries: a line resistant to downy mildew (700516) from Nigeria, a composite (Serere 2A) from Uganda, and a Cassady dwarf population from Kansas, USA. **other id:** IBV 8001. **other id:** CV-4. **group:** CSR-MILLET, PEARL. **remarks:** Height medium (1.8-2.8m). Stems robust. Resistant to lodging. Flowers in 47-68 days. Matures in 85-100 days. Anther color is mixed. Heads medium long (30-41cm), cylindrical, non-bristled, and very compact. Good resistance to downy mildew (*Sclerospora graminicola*) and smut disease (*Tolyposporium penicillariae*). Grain medium size, obovate, slate grey in color, with a vitreous endosperm. Spring Annual. Cultivar. Seed.

PI 543750. Sorghum bicolor (L.) Moench POACEAE Sorghum

Donated by: Denton, I.R., IBPGR, Rome, Italy; and Toll, J.A., IBPGR, Rome, Italy. **remarks:** Received through IBPGR, Rome, Italy. Received 1978.

donor id: 328. **origin:** Kenya. **collected:** 1978. **collector id:** 328. **other id:** NSL 184143.01. **other id:** FAO49236. **locality:** Kandae village, Kitui, Eastern Province. **remarks:** Sown late September, harvested late February. Cultivated. Seed.

PI 543751. *Cucumis anguria* L. CUCURBITACEAE West Indian gerkin

Donated by: Williams, D.E., New York Botanical Garden, Bronx, New York, United States. **remarks:** Collected in Northern Bolivia, September 8, 1988 through December 12, 1988. Received November 1989.

donor id: 827. **origin:** Bolivia. **local name:** Maxixi.
collected: November 13, 1988. **collector id:** 827.
locality: Cobija, market, Pando Department, Nicolas Suarez Province. **latitude:** 11 deg. 00 min. S.
longitude: 68 deg. 45 min. W. **elevation:** 200m.
remarks: Fruit egg-shaped, to 7cm long, covered with short, thick, soft spines, light green turning yellowish. Seeds small, white, numerous. Inside of fruit has odor of cucumber, and similar texture and appearance. Cultivated locally as a vegetable. Cultivated. Seed.

PI 543752. *Cucumis melo* L. CUCURBITACEAE Melon

Donated by: Williams, D.E., New York Botanical Garden, Bronx, New York, United States. **remarks:** Collected in Northern Bolivia, September 8, 1988 through December 12, 1988. Received November 1989.

donor id: 850. **origin:** Bolivia. **local name:** Melon.
collected: November 18, 1988. **collector id:** 850.
locality: Puerto de la Capitania market, Riberalta, Beni Department, Vaca Diez Province. **latitude:** 11 deg. 01 min. S. **longitude:** 66 deg. 08 min. W. **elevation:** 135m. **remarks:** Fruit oblong, to 35cm long, strongly ribbed, yellow-green and fragrant. Fresh light green, seeds light brown. Melon cultivated locally on sandbars and in chacos. Cultivated. Seed.

PI 543753 to 543760. *Gossypium barbadense* L. MALVACEAE Sea Island cotton

Donated by: Williams, D.E., New York Botanical Garden, Bronx, New York, United States. **remarks:** Collected in Northern Bolivia, September 8, 1988 through December 12, 1988. Received November 1989.

PI 543753 **donor id:** 712. **origin:** Bolivia. **local name:** Algodon blanco. **collected:** September 29, 1988. **collector id:** 712. **locality:** San Ignacio de Moxos, Beni Department, Moxos Province. **latitude:** 14 deg. 50 min. S. **longitude:** 65 deg. 35 min. W. **elevation:** 165m. **remarks:** White lint on seeds. Gift of seeds from a native weaver. Said to be the variety that has always been traditionally grown here. Cultivated. Seed.

PI 543753 to 543760-continued

- PI 543754 **donor id:** 717. **origin:** Bolivia. **local name:** Algodon mollado. **collected:** October 1, 1988. **collector id:** 717. **locality:** Dooryard garden, Comunidad Totaizal, small village 50km NE of San Borja on road to San Ignacio, Beni Department, Yacuma Province. **latitude:** 14 deg. 45 min. S. **longitude:** 66 deg. 40 min. W. **elevation:** 202m. **remarks:** Fibers light brown. Seed, a gift from an Ignaciano Indian spinner. Cultivated. Seed.
- PI 543755 **donor id:** 725. **origin:** Bolivia. **local name:** Algodon mollado (Spanish) Cuneundye (Chimane). **collected:** October 3, 1988. **collector id:** 725. **locality:** Dooryard gardens and chacos, Chimane Indian village on the Rio Curiraba, 17km NNE of the Estacion Biologica Beni, Cero Ocho, Beni Department, Yacuma Province. **latitude:** 14 deg. 30 min. S. **longitude:** 66 deg. 30 min. W. **elevation:** 218m. **remarks:** Fibers brown. Cultivated. Seed.
- PI 543756 **donor id:** 726. **origin:** Bolivia. **local name:** Algodon blanco (Spanish) Shitin (Chimane). **collected:** October 3, 1988. **collector id:** 726. **locality:** Dooryard gardens and chacos, Chimane Indian village on the Rio Curiraba, 17km NNE of the Estacion Biologica Beni, Cero Ocho, Beni Department, Yacuma Province. **latitude:** 14 deg. 30 min. S. **longitude:** 66 deg. 30 min. W. **elevation:** 218m. **remarks:** Plant 3m tall. Flowers yellow. Fibers white on seeds. Cultivated. Seed.
- PI 543757 **donor id:** 727. **origin:** Bolivia. **local name:** Algodon blanco (Spanish) Bahana uetche (Chimane). **collected:** October 3, 1988. **collector id:** 727. **locality:** Dooryard gardens and chacos, Chimane Indian village on the Rio Curiraba, 17km NNE of the Estacion Biologica Beni, Cero Ocho, Beni Department, Yacuma Province. **latitude:** 14 deg. 30 min. S. **longitude:** 66 deg. 30 min. W. **elevation:** 218m. **remarks:** Plant over 3m tall, with large bolls. White fiber on seeds. Cultivated. Seed.
- PI 543758 **donor id:** 796. **origin:** Bolivia. **local name:** Algodon. **collected:** October 27, 1988. **collector id:** 796. **locality:** Dooryard garden, Tacana Indian town 50km NW of San Buenaventura, Tumupasa, La Paz Department, Iturralde Province. **latitude:** 14 deg. 10 min. S. **longitude:** 67 deg. 55 min. W. **elevation:** 470m. **remarks:** Treelet to 3m tall. Flowers yellow. Fibers white. Cultivated. Seed.

PI 543753 to 543760-continued

PI 543759 **donor id:** 802. **origin:** Bolivia. **local name:** Algodon.
collected: November 5, 1988. **collector id:** 802.
locality: San Marcos, small village on R bank of Rio Beni, approx. 80 air km N of Rurrenabaque, Beni Department, Ballivian Province. **latitude:** 13 deg. 30 min. S. **longitude:** 67 deg. 25 min. W. **elevation:** 220m. **remarks:** Fiber white, Cultivated locally. Cultivated. Seed.

PI 543760 **donor id:** 837. **origin:** Bolivia. **local name:** Algodon rinon. **collected:** November 15, 1988. **collector id:** 837.
locality: Dooryard garden, Cobija, house and chaco 1 km W of main square on bank of Rio Acre, Pando Department, Nicolas Suarez Province. **latitude:** 11 deg. 00 min. S. **longitude:** 68 deg. 45 min. W. **elevation:** 190m. **remarks:** Treelet to 3m tall. Leaves purple tinge and veins purple. Flowers yellow, turning reddish when wilted. Fiber white. Cultivated. Seed.

PI 543761. Inga sp. FABACEAE

Donated by: Williams, D.E., New York Botanical Garden, Bronx, New York, United States. **remarks:** Collected in Northern Bolivia, September 8, 1988 through December 12, 1988. Received November 1989.

donor id: 848. **origin:** Bolivia. **local name:** Pacay.
collected: November 18, 1988. **collector id:** 848.
locality: In market at the Puerto de la Capitania, Riberalta, Beni Department, Vaca Diez Province.
latitude: 11 deg. 01 min. S. **longitude:** 66 deg. 08 min. W. **elevation:** 135m. **remarks:** Trees 1.5m tall. Flowers white. Pods 8-13cm long, smooth flattened, with rounded ends, green, turning yellow when mature. Edible white, sweet-tasting, cottony aril surrounds black seeds. Wild. Seed.

PI 543762. Jacaranda sp. BIGNONIACEAE

Donated by: Williams, D.E., New York Botanical Garden, Bronx, New York, United States. **remarks:** Collected in Northern Bolivia, September 8, 1988 through December 12, 1988. Received November 1989.

PI 543762-continued

donor id: 862. **origin:** Bolivia. **local name:** Yacaranda.
collected: November 22, 1988. **collector id:** 862.
locality: Riberalta, Beni Department, Vaca Diez Province.
latitude: 11 deg. 01 min. S. **longitude:** 66 deg. 08 min.
W. **elevation:** 134m. **remarks:** Tree 6m tall. Flowers
purple. Fruit round, flattened, brown. Capsules woody,
7cm in diameter. Common street tree in Riberalta.
Cultivated. Seed.

PI 543763 to 543764. Lonchocarpus sp. FABACEAE

Donated by: Williams, D.E., New York Botanical Garden, Bronx, New
York, United States. **remarks:** Collected in Northern Bolivia,
September 8, 1988 through December 12, 1988. Received November
1989.

PI 543763 **donor id:** 729. **origin:** Bolivia. **local name:** Barbasco
(Spanish) Chitu (Chimane). **collected:** October 3, 1988.
collector id: 729. **locality:** Cero Ocho, Chimane Indian
village on the Rio Curiraba, 17km NNE of the Estacion
Biologica Beni, Beni Department, Yacuma Province.
latitude: 14 deg. 30 min. S. **longitude:** 66 deg. 30 min.
W. **elevation:** 218m. **remarks:** Branched shrub to 2.5m
tall. Furry fruits, 11cm long. Flowers white. Cultivated
by Indians in dooryard gardens. Macerated leaves used as
fish poison. Cultivated. Seed.

PI 543764 **donor id:** 778. **origin:** Bolivia. **local name:** Barbasco
(Spanish), Daata (Tacana) Sata (Quechua). **collected:**
October 25, 1988. **collector id:** 778. **locality:** San Jose
de Uchupiamonas, Tacana and Quechua Indian town, 35km W
of Tumupasa on footpath, on high bench above the Rio
Tuichi, La Paz Department, Iturralde Province. **latitude:**
14 deg. 15 min. S. **longitude:** 68 deg. 10 min. W.
elevation: 630m. **remarks:** Shrub to 3m tall. Fruits
hairy pods, 14cm long. Cultivated by Indians in dooryard
gardens for fish poison, the leaves being mashed and
introduced into the water, quickly killing the fish.
Cultivated. Seed.

PI 543765 to 543768. Nicotiana tabacum L. SOLANACEAE Tobacco

Donated by: Williams, D.E., New York Botanical Garden, Bronx, New
York, United States. **remarks:** Collected in Northern Bolivia,
September 8, 1988 through December 12, 1988. Received November
1989.

PI 543765 to 543768-continued

- PI 543765 **donor id:** 706. **origin:** Bolivia. **local name:** Tabaco negro, Acara. **collected:** September 28, 1988. **collector id:** 706. **locality:** San Ignacio de Moxos, chaco 1.5km E of Town square, Beni Department, Moxos Province. **latitude:** 14 deg. 50 min. S. **longitude:** 65 deg. 35 min. W. **elevation:** 165m. **remarks:** Herbaceous plants 1.5m tall. Sticky leaves up to 70cm long and 50cm wide, dark green. Flowers pink. Cultivated for preparation of plug tobacco for smoking. Cultivated. Seed.
- PI 543766 **donor id:** 707. **origin:** Bolivia. **local name:** Tabaco rubio. **collected:** September 28, 1988. **collector id:** 707. **locality:** San Ignacio de Moxos, Beni Department, Moxos Province. **latitude:** 14 deg. 50 min. S. **longitude:** 65 deg. 35 min. W. **elevation:** 165m. **remarks:** Plants herbaceous, 1.5m tall. Stick leaves up to 60cm long, and 40cm wide, light green in color. Flowers pink. Cultivated for elaboration of plug tobacco for smoking. Cultivated. Seed.
- PI 543767 **donor id:** 730. **origin:** Bolivia. **local name:** Tabaco (Spanish) Curio fine (Chimane). **collected:** October 3, 1988. **collector id:** 730. **locality:** In chacos and dooryard gardens, Cerro Ocho, Chimane Indian Village on Rio Curiraba, 17km NNE of the Estacion Biologica Beni, Beni Department, Yacuma Province. **latitude:** 14 deg. 30 min. S. **longitude:** 66 deg. 30 min. W. **elevation:** 218m. **remarks:** Short variety of tobacco, 1m tall. Flowers white with pink corolla lobes. Cultivated. Seed.
- PI 543768 **donor id:** 776. **origin:** Bolivia. **local name:** Tabaco (Spanish) Umasha (Tacana), Rapi (Quechua). **collected:** October 25, 1988. **collector id:** 776. **locality:** In dooryard gardens, San Jose de Uchupiamonas, Tacana and Quechua Indian town, 35km W of Tumupasa on foot trail, on high bench above the Rio Tuichi, La Paz Department, Iturralde Province. **latitude:** 14 deg. 15 min. S. **longitude:** 68 deg. 10 min. W. **elevation:** 630m. **remarks:** Plants 1.5m tall, herbaceous. Flowers cream, pink at end of tube. Used for smoking. Cultivated. Seed.

PI 543769 to 543770. *Rheedia* sp. CLUSIACEAE

Donated by: Williams, D.E., New York Botanical Garden, Bronx, New York, United States. **remarks:** Collected in Northern Bolivia, September 8, 1988 through December 12, 1988. Received November 1989.

PI 543769 to 543770-continued

PI 543769 **donor id:** 797. **origin:** Bolivia. **local name:** Camururo. **collected:** October 27, 1988. **collector id:** 797. **locality:** Tumupasa, Tacana Indian town, 50km NW of San Buenaventura, La Paz Department, Iturralde Province. **latitude:** 14 deg. 10 min. S. **longitude:** 67 deg. 55 min. W. **elevation:** 470m. **remarks:** Trees to 20m tall, 1-1.5m dbh. Fruit lemon-shaped, 5cm long, yellow when mature, covered with soft spines. Three large brown seeds are surrounded by a juicy, white, edible pulp. Grows wild in nearby forest, commonly spared and cultivated when clearing land for agriculture and house lots. Wild. Seed.

PI 543770 **donor id:** 845. **origin:** Bolivia. **local name:** Achachairu. **collected:** November 16, 1988. **collector id:** 845. **locality:** Dooryard gardens, Cobija, Pando Department, Nicolas Suarez Province. **latitude:** 11 deg. 00 min. S. **longitude:** 68 deg. 45 min. W. **elevation:** 200m. **remarks:** Fruits globose or teardrop shaped, smooth, 4cm diameter, yellow when ripe, containing 1-3 large oval seeds. Seeds surrounded with white, sweet, edible pulp. Wild. Seed.

PI 543771. *Spilanthes* sp. ASTERACEAE

Donated by: Williams, D.E., New York Botanical Garden, Bronx, New York, United States. **remarks:** Collected in Northern Bolivia, September 8, 1988 through December 12, 1988. Received November 1989.

donor id: 735. **origin:** Bolivia. **local name:** Yambu (Spanish) Matune (Chimane). **collected:** October 4, 1988. **collector id:** 735. **locality:** Dooryard gardens, Cero Ocho, Chimane Indian community on the Rio Curiraba, 17km NNE of the Estacion Biologica Beni, Beni Department, Yacuma Province. **latitude:** 14 deg. 30 min. S. **longitude:** 66 deg. 30 min. W. **elevation:** 218m. **remarks:** Plants 25cm tall, herbaceous. Flowers yellow in ovoid capitula. Cultivated by Indians for use as a remedy for toothache and rheumatism. A chewed or macerated capitulum produces a numbing, anasthetic sensation. Cultivated. Seed.

PI 543772. *Tamarindus indica* L. FABACEAE Tamarind

Donated by: Williams, D.E., New York Botanical Garden, Bronx, New York, United States. **remarks:** Collected in Northern Bolivia, September 8, 1988 through December 12, 1988. Received November 1989.

PI 543772-continued

donor id: 847. **origin:** Bolivia. **local name:** Tamarindo.
collected: November 18, 1988. **collector id:** 847.
locality: From a owner of a tamarindo plantation,
Riberalta, Beni Department, Vaca Diez Province.
latitude: 11 deg. 01 min. S. **longitude:** 66 deg. 08 min.
W. **elevation:** 135m. Wild. Seed.

PI 543773. UNDETERMINED sp. NONE

Donated by: Williams, D.E., New York Botanical Garden, Bronx, New York, United States. **remarks:** Collected in Northern Bolivia, September 8, 1988 through December 12, 1988. Received November 1989.

donor id: 853. **origin:** Bolivia. **local name:** Masaranduba (Spanish) Pisoji (Esse Ejja). **collected:** November 19, 1988. **collector id:** 853. **locality:** Portachuelo Bajo, Esse Ejja Indian village on Rio Beni, about 50km SSW of Riberalta, Pando Department, Madre de Dios Province. **latitude:** 11 deg. 15 min. S. **longitude:** 66 deg. 18 min. W. **elevation:** 203m. **remarks:** Large forest tree, producing small, round orange fruits 1.5cm in diameter with edible sweet white pulp surrounding a single black, shiny seed. The hard wood of this tree is valued for construction. Wild. Seed.

PI 543774. Vitex sp. VERBENACEAE

Donated by: Williams, D.E., New York Botanical Garden, Bronx, New York, United States. **remarks:** Collected in Northern Bolivia, September 8, 1988 through December 12, 1988. Received November 1989.

donor id: 855. **origin:** Bolivia. **local name:** Taruma (Spanish) Quijesi (Esse Ejja). **collected:** November 19, 1988. **collector id:** 855. **locality:** Portachuelo Bajo, Esse Ejja Indian village on Rio Beni, about 50km SSW of Riberalta, Pando Department, Madre de Dios Province. **latitude:** 11 deg. 15 min. S. **longitude:** 66 deg. 18 min. W. **elevation:** 203m. **remarks:** Large forest canopy tree. Fruits ovoid, black, closely resembling ripe olives, 2cm long, containing a single woolly seed surrounded by edible sweet pulp. Wild. Seed.

PI 543775 to 543790. *Zea mays* L. subsp. *mays* POACEAE Corn

Donated by: Williams, D.E., New York Botanical Garden, Bronx, New York, United States. **remarks:** Collected in Northern Bolivia, September 8, 1988 through December 12, 1988. Received November 1989.

PI 543775 **donor id:** 701. **origin:** Bolivia. **local name:** Cubano Blanco. **collected:** September 23, 1988. **collector id:** 701. **locality:** Urubicha, 40km NE of Ascencion de Guarayos, Santa Cruz Department, Nuflo de Chavez Province. **latitude:** 15 deg. 20 min. S. **longitude:** 62 deg. 55 min. W. **elevation:** 270m. **remarks:** Seed collection only. Grown locally by Guarayo Indian farmers. Cultivated. Seed.

PI 543776 **donor id:** 702. **origin:** Bolivia. **local name:** Blando colorado. **collected:** September 23, 1988. **collector id:** 702. **locality:** Urubicha, 40km NE of Ascencion de Guarayos, Santa Cruz Department, Nuflo de Chavez Province. **latitude:** 15 deg. 20 min. S. **longitude:** 62 deg. 55 min. W. **elevation:** 270m. **remarks:** Seed collection only. Grown locally by Guarayo Indian farmers. Cultivated. Seed.

PI 543777 **donor id:** 719. **origin:** Bolivia. **local name:** Maiz blanco (Spanish) Tara yunqui (Chimane). **collected:** October 2, 1988. **collector id:** 719. **locality:** Cero Ocho, 17km NNE of the Estacion Biologica Beni, on the Curiraba River, Beni Department, Yacuma Province. **latitude:** 14 deg. 30 min. S. **longitude:** 66 deg. 30 min. W. **elevation:** 218m. **remarks:** Ears long and narrow, with kernels in uneven rows, especially toward the base. Kernels starchy, orange. Cultivated by Chimane Indians for the preparation of the maize beverage, "Chicha". Cultivated. Seed.

PI 543778 **donor id:** 731. **origin:** Bolivia. **local name:** Maiz duro (Spanish) Yitket tara (Chimane). **collected:** October 4, 1988. **collector id:** 731. **locality:** In chacos, Chimane Indian village on the Rio Curiraba, 17km NNE of the Estacion Biologica Beni, Beni Department, Yacuma Province. **latitude:** 14 deg. 30 min. S. **longitude:** 66 deg. 30 min. W. **elevation:** 218m. **remarks:** Kernels light yellow, crystalline, arranged in 14 rows. Said to produce in three months. Cultivated by Indians. Cultivated. Seed.

PI 543775 to 543790-continued

- PI 543779 **donor id:** 754. **origin:** Bolivia. **local name:** Maiz cubana. **collected:** October 19, 1988. **collector id:** 754. **locality:** Macahua, Indian village 3.5km S of Ixiamas, La Paz Department, Iturralde Province. **latitude:** 13 deg. 45 min. S. **longitude:** 68 deg. 10 min. W. **elevation:** 326m. **remarks:** Ears 20cm long with 14-20 rows, cylindrical to conical. Kernels hard, mostly white, with orange below, much variability among ears. Grown by Tacana Indians for animal feed and for making "Zomo", a refreshing maize beverage. Cultivated. Seed.
- PI 543780 **donor id:** 7556. **origin:** Bolivia. **local name:** Maiz perla. **collected:** October 19, 1988. **collector id:** 7556. **locality:** In chacos, Ixiamas, 100km NW of San Buenaventura, La Paz Department, Iturralde Province. **latitude:** 13 deg. 45 min. S. **longitude:** 68 deg. 10 min. W. **elevation:** 332m. **remarks:** Conical ears, to 18cm long. Kernels white, hard, in 18 rows. Cultivated for animal feed and to make "Zomo" a refreshing maize beverage. Cultivated. Seed.
- PI 543781 **donor id:** 756. **origin:** Bolivia. **local name:** Maiz blando. **collected:** October 19, 1988. **collector id:** 756. **locality:** In chacos, Ixiamas, 100km NW of San Buenaventura, La Paz Department, Iturralde Province. **latitude:** 13 deg. 45 min. S. **longitude:** 68 deg. 10 min. W. **elevation:** 332m. **remarks:** Narrow, conical ears up to 25cm long with 12 imbricated rows of starchy, orange kernels. Cultivated for chicha and other forms of human consumption. Cultivated. Seed.
- PI 543782 **donor id:** 791. **origin:** Bolivia. **local name:** Maiz blando morado (Spanish), Cuarudije (Tacana) Puca sara (Quechua). **collected:** October 25, 1988. **collector id:** 791. **locality:** San Jose de Uchupiamonas, 35km W of Tumupasa on foot trail. Tacana and Quechua Indian town, on the Rio Tuichi, La Paz Department, Iturralde Province. **latitude:** 14 deg. 15 min. S. **longitude:** 68 deg. 10 min. W. **elevation:** 630m. **remarks:** Kernels purple. Used to make chicha. Cultivated. Seed.
- PI 543783 **donor id:** 792. **origin:** Bolivia. **local name:** Maiz cubana (Spanish), Jatun sara (Quechua). **collected:** October 25, 1988. **collector id:** 792. **locality:** San Jose de Uchupiamonas, 35km W of Tumupasa, Tacana and Quechua Indian town, on the Rio Tuichi, La Paz Department, Iturralde Province. **latitude:** 14 deg. 15 min. S. **longitude:** 68 deg. 10 min. W. **elevation:** 630m. Cultivated. Seed.

PI 543775 to 543790-continued

- PI 543784 **donor id:** 793. **origin:** Bolivia. **local name:** Maiz blando colorado (Spanish), Rije erii (Tacana) Quillu sara (Quechua). **collected:** October 25, 1988. **collector id:** 793. **locality:** San Jose de Uchupiamonas, Tacana abd Quechua Indian community, 35km W of Tumupasa on the Rio Tuichi, La Paz Department, Iturralde Province. **remarks:** Ears 28cm long. Kernels and cob white, husks white or purple, 12-14 rows. Used to make chicha. Cultivated. Seed.
- PI 543785 **donor id:** 794. **origin:** Bolivia. **local name:** Maiz duro (Spanish), Rije pasha (Tacana) Juchui sara (Quechua). **collected:** October 25, 1988. **collector id:** 794. **locality:** San Jose de Uchupiamonas, 35km W of Tumupasa on foot trail, Tacana and Quechua Indian town, on the Rio Tuichi, La Paz Department, Iturralde Province. **latitude:** 14 deg. 15 min. S. **longitude:** 68 deg. 10 min. W. **elevation:** 630m. Cultivated. Seed.
- PI 543786 **donor id:** 799. **origin:** Bolivia. **local name:** Maiz duro blanco. **collected:** November 5, 1988. **collector id:** 799. **locality:** San Marcos, small village on R bank of Rio Beni, approx. 80 air km N of Rurrenabaque, Beni Department, Ballivian Province. **latitude:** 13 deg. 30 min. S. **longitude:** 67 deg. 25 min. W. **elevation:** 220m. **remarks:** Kernels, small, hard, white, crystalline, in 16 rows. Husk white, Cob white. Cultivated. Seed.
- PI 543787 **donor id:** 800. **origin:** Bolivia. **local name:** Maiz blando. **collected:** November 5, 1988. **collector id:** 800. **locality:** San Marcos, small village on R bank of Rio Beni, approx. 80 air km N of Rurrenabaque, Beni Department, Ballivian Province. **latitude:** 13 deg. 30 min. S. **longitude:** 67 deg. 25 min. W. **elevation:** 220m. **remarks:** Kernels, large, starchy, orange, in 19 irregular, imbricated rows. Husk purple, cob white with purple cupules. Cultivated. Seed.
- PI 543788 **donor id:** 801. **origin:** Bolivia. **local name:** Maiz cubano. **collected:** November 5, 1988. **collector id:** 801. **locality:** San Marcos, small village on R bank of Rio Beni, approx. 80 air km N of Rurrenabaque, Beni Department, Ballivian Province. **latitude:** 13 deg. 30 min. S. **longitude:** 67 deg. 25 min. W. **elevation:** 220m. **remarks:** Kernels, hard, dark yellow with light yellow tops, in 14 rows. Husk and cob white. Cultivated. Seed.

PI 543775 to 543790-continued

PI 543789 **donor id:** 803. **origin:** Bolivia. **local name:** Maiz negro, maiz cuara. **collected:** November 06, 1988. **collector id:** 803. **locality:** San Jose, small village on right bank of Rio Beni, Rio Beni Department, Ballivian Province. **latitude:** 13 deg. 05 min. S. **longitude:** 67 deg. 08 min. W. **elevation:** 220m. **remarks:** Kernels, gray, fat, starchy, in 11-15 irregular, imbricated rows. Husk and cob white. Used for making chicha morada. Cultivated. Seed.

PI 543790 **donor id:** 810. **origin:** Bolivia. **local name:** Maiz cubana. **collected:** November 11, 1988. **collector id:** 810. **locality:** Cobija, Departmental capital located on Rio Acre and the Brazilian frontier, Pando Department, Nicolas Suarez Province. **latitude:** 10 deg. 00 min. S. **longitude:** 68 deg. 45 min. W. **elevation:** 200m. **remarks:** Kernels yellow, hard. Planted on sandbars of the Rio Acre. Said to mature in 90 days. Cultivated. Seed.

PI 543791. *Triticum aestivum* L. POACEAE

Donated by: Howard, G., Agricultural Research Service -- USDA, High Plains Grasslands Research Station, Cheyenne, Wyoming, United States. Received 1978.

origin: United States. **cultivar:** BEARDLESS BRONZE. **other id:** NSL 98627. **remarks:** Beardless bronze wheat segregated from the Cheyenne variety No further background info. available at NSSL. Seed.

PI 543792. *Nicotiana tabacum* L. SOLANACEAE Tobacco

Donated by: Miller, R.D., Tennessee Agr. Exp. Sta., University of Tennessee, Route 5, Box 113, Greeneville, Tennessee, United States. **remarks:** TN 90 Burley Tobacco. Received September 10, 1990.

origin: United States. **cultivar:** TN 90. **pedigree:** Burley 21*2//Burley 49/PVY 202, F11. **other id:** GR 141. **other id:** CV-100. **group:** CSR-TOBACCO. **remarks:** Medium-tall, stand-up variety. Growth habit similar to Burley 21. Maturity medium-late. Approx. 20-22 leaves when topped at early bloom stage. Leaf length and width medium. Stalk size small. Yields higher than most black shank resistant cultivars, but somewhat lower than cultivars that do not have black shank resistance. Cured leaf quality good. High resistance to Tobacco Mosaic Virus, Tobacco Vein. Spring Annual. Cultivar. Seed.

PI 543793. *Glycine max* (L.) Merr. FABACEAE Soybean

Donated by: Anand, S.C., Missouri Agr. Exp. Sta., University of Missouri, Portageville, Missouri, United States. **remarks:** Delsoy 4500 Soybean. Received September 10, 1990.

origin: United States. **origin institute:** Missouri Agr. Exp. Sta., Portageville, Missouri 63873. **cultivar:** Delsoy 4500. **pedigree:** Cumberland x Forrest. **other id:** CV-283. **group:** CSR-SOYBEAN. **other id:** PVP 9100061. **source:** Pending. **group:** PVPO. **other id:** S83-1004. **remarks:** Indeterminate variety. Mid-maturity group IV. Resistant to soybean cyst nematode (*Heterodera glycines* Ichinohe Race 3). Good resistance to purple seed stain (*Cercospora kikuchii*) and pod and stem blight (*Diaporthe phaseolorum*). Seeds yellow. Average 100 seed weight 11.2g. Seed protein 39.8%. Oil 21.0%. Annual. Cultivar. Seed.

PI 543794. *Glycine max* (L.) Merr. FABACEAE Soybean

Donated by: Anand, S.C., Missouri Agr. Exp. Sta., University of Missouri, Portageville, Missouri, United States. **remarks:** Delsoy 4900 Soybean. Received September 10, 1990.

origin: United States. **origin institute:** Missouri Agr. Exp. Sta., Portageville, Missouri 63873. **cultivar:** Delsoy 4900. **pedigree:** A5424 x Mack. **other id:** CV-284. **group:** CSR-SOYBEAN. **other id:** PVP 9100062. **source:** Pending. **group:** PVPO. **other id:** S82-1443. **remarks:** Determinate variety. Late maturity group IV. Resistant to soybean cyst nematode (*Heterodera glycines* Ichinohe Race 3). Seeds yellow. Average 100 seed weight 16.3g. Seed protein 40.0%. Oil 21.0%. Annual. Cultivar. Seed.

PI 543795. *Glycine max* (L.) Merr. FABACEAE Soybean

Donated by: Anand, S.C., Missouri Agr. Exp. Sta., University of Missouri, Portageville, Missouri, United States. **remarks:** S88-2036 Soybean Germplasm. Received September 10, 1990.

origin: United States. **origin institute:** Missouri Agr. Exp. Sta., University of Missouri, Portageville, Missouri 63873. **cultivar:** S88-2036. **pedigree:** Forrest*3/PI 437654. **other id:** GP-124. **group:** CSR-SOYBEAN. **other id:** PVP 9100063. **source:** Pending. **group:** PVPO. **remarks:** Determinate variety. Maturity group V. Highly resistant to all known races of soybean cyst nematode (*Heterodera glycines*). Similar to Forrest in most traits. Spring Annual. Breeding Material. Seed.

PI 543796 to 543799. *Pennisetum sphacelatum* (Nees) Dur. & Schinz
POACEAE

Donated by: Moss, H., IBPGR, c/o Department of Biological Science,
University of Zimbabwe, Mount Pleasant, Harare, Zimbabwe. **remarks:**
Received from IBPGR, Rome, Italy. Received March 08, 1990.

PI 543796 **donor id:** 425. **origin:** Lesotho. **collected:** January 24,
1989. **collector id:** 425. **locality:** Valley slope,
grassland, small valley-stream banks and moist
surrounding slopes, loam soil. low stoniness, 30km N from
Oxbow Lodge, Birta Buthe Province then 1 km S to
Hamalap. **latitude:** 28 deg. 07 min. S. **longitude:** 28
deg. 47 min. E. **elevation:** 1800m. **remarks:** Soil pH
5-6.5. Associated Species: *Artemisia*, *Zantedeschia*,
Eragrostis, *Rhus* numerous compositae. Some beetles
present. Fifty plants sampled from 200. Wild. Seed.

PI 543797 **donor id:** 449. **origin:** Lesotho. **collected:** January 26,
1989. **collector id:** 449. **locality:** Valley slope,
grassland, medium altitude, montane grassland, relatively
undisturbed, loam soil, low stoniness. At entrance to
Molimo Nohuse Pony Trekking Center, Maseru Province.
latitude: 29 deg. 27 min. S. **longitude:** 27 deg. 58 min.
E. **elevation:** 2500m. **remarks:** Soil pH 5-6.5. Associated
species: *Senecio*, *Eragrostis*, *Mishda*, *Andropogon*. Fifty
plants sampled from 1000. Wild. Seed.

PI 543798 **donor id:** 481. **origin:** Lesotho. **collected:** January 28,
1989. **collector id:** 481. **locality:** Valley slope,
grassland, medium altitude, montane grassland, relatively
undisturbed, gentle slope. loam soil, low stoniness, 1/2
horse ride N of Rapokland Valley, Maseru Province.
latitude: 29 deg. 21 min. S. **longitude:** 28 deg. 01 min.
E. **elevation:** 2500m. **remarks:** Beetles present.
Associated species *Eragrostis capensis*, *Dianthus*,
Andropogon, *appendicularis*. Ten plants sampled out of 50.
Wild. Seed.

PI 543799 **donor id:** 490. **origin:** Lesotho. **collected:** January 29,
1989. **collector id:** 490. **locality:** Valley bottom,
grassland, rocky streambed and surrounding marsh area,
loam soil, medium stoniness, 1 km N of Molimo Nohuse Pony
Trekking Center, Maseru Province. **latitude:** 29 deg. 27
min. S. **longitude:** 27 deg. 58 min. E. **elevation:**
2400m. **remarks:** Associated species: *Cyperaceae*,
Andropogon. Ten plants sampled out of 30. Wild. Seed.

PI 543800 to 543806. *Pennisetum thunbergii* Kunth POACEAE

Donated by: Moss, H., IBPGR, c/o Department of Biological Science,
University of Zimbabwe, Mount Pleasant, Harare, Zimbabwe. **remarks:**
Received from IBPGR, Rome, Italy. Received March 08, 1990.

PI 543800 to 543806-continued

- PI 543800 **donor id:** 333. **origin:** Lesotho. **collected:** January 15, 1989. **collector id:** 333. **locality:** Valley slope, shrubland, edge of small stream in sub-alpine mountain grassland, loam soil, low stoniness, Quachas Nek Province. **latitude:** 29 deg. 52 min. S. **longitude:** 29 deg. 06 min. E. **elevation:** 2500m. **remarks:** Soil pH 5-6.5. Associated species: Cyperaceae, Merxmuellera sp., Lubelia, Geranium african. Fifty plants sampled out of 100. Wild. Seed.
- PI 543801 **donor id:** 371. **origin:** Lesotho. **collected:** January 21, 1989. **collector id:** 371. **locality:** Valley slope, montane grassland near edge of small, rocky stream, loam soil, medium stoniness, 15km W of Mononisa border, Birta-Buthe Province. **latitude:** 28 deg. 34 min. S. **longitude:** 28 deg. 41 min. E. **elevation:** 2300m. **remarks:** Soil pH 2-5. Associated species: Themeda mandsa, Eragrostis sp. Arisaema affra. One hundred plants sampled out of 300. Wild. Seed.
- PI 543802 **donor id:** 448. **origin:** Lesotho. **collected:** January 26, 1989. **collector id:** 448. **locality:** Valley slope, grassland, montane grassland relatively undisturbed. loam soil, low stoniness, at entrance to Molimo Nohuse Pony Trekking Center, Maseru Province. **latitude:** 29 deg. 27 min. S. **longitude:** 27 deg. 58 min. E. **elevation:** 2500m. **remarks:** Soil pH 5-6.5. Associated species: Senecio sp., Eragrostis ssp., Andropogon. Five plants sampled out of 5. Wild. Seed.
- PI 543803 **donor id:** 464. **origin:** Lesotho. **collected:** January 26, 1989. **collector id:** 464. **locality:** Valley slope, grassland, seasonally waterlogged area near to road and agric. areas, loam soil, and low stoniness, 7km W of Molimo Nohuse Pony Trekking Center, Maseru Province. **latitude:** 29 deg. 07 min. S. **longitude:** 27 deg. 52 min. E. **elevation:** 2300m. **remarks:** Associated species: P. cladestinum, Mentha sp., Cyperaceae Two plants sampled out of two. Soil pH 2-5. Wild. Seed.
- PI 543804 **donor id:** 465. **origin:** Lesotho. **collected:** January 26, 1989. **collector id:** 465. **locality:** Valley slope, grassland, seasonally waterlogged area near road and agric. areas, loam soil, and low stoniness, 7km W of Molimo Nuhase Pony Trekking Center, Maseru Province. **latitude:** 29 deg. 27 min. S. **longitude:** 27 deg. 32 min. E. **elevation:** 2300m. **remarks:** Soil pH 2-5. Associated species: P. cladestinum, Eragrostis. Twenty plants sampled out of 20. Wild. Seed.

PI 543800 to 543806-continued

PI 543805 **donor id:** 488. **origin:** Lesotho. **collected:** January 29, 1989. **collector id:** 488. **locality:** Valley bottom, grassland, streambed and surrounding marsh area, Loam soil, medium stoniness, 21km N of Molimo Nuhase Pony Trekking Center, Maseru Province. **latitude:** 29 deg. 27 min. S. **longitude:** 27 deg. 58 min. E. **elevation:** 2400m. **remarks:** Associated species: Cyperaceae, Andropogon appendicularis, Crunna, Sporobolus. Fifty plants sampled out of 300. Wild. Seed.

PI 543806 **donor id:** 500. **origin:** Lesotho. **collected:** January 29, 1989. **collector id:** 500. **locality:** Valley bottom, grassland, in banks of and surrounding shallow river valley, 1.5km N of Molimo Nohuse Pony Trekking Center, Maseru Province. **latitude:** 29 deg. 27 min. S. **longitude:** 27 deg. 58 min. E. **elevation:** 2400m. **remarks:** Associated species: Cyperaceae, Eragrostis, Andropogon appendicularis, Senecio. Fifty plants sampled out of 200. Wild. Seed.

PI 543807. *Pennisetum villosum* R. Br. ex Fres. POACEAE Feathertop

Donated by: Moss, H., IBPGR, c/o Department of Biological Science, University of Zimbabwe, Mount Pleasant, Harare, Zimbabwe. **remarks:** Received from IBPGR, Rome, Italy. Received March 08, 1990.

donor id: 366. **origin:** Lesotho. **collected:** January 20, 1989. **collector id:** 366. **locality:** Roadside, lowland-shrubland, clay-loam soil, at Teyateyaneng, 42km NE of Maseru, Berka Province. **latitude:** 29 deg. 10 min. S. **longitude:** 27 deg. 45 min. E. **elevation:** 1600m. **remarks:** Associated species: *Bromus willdenowii*, *Eragrostis* spp., *Tagetes minuta*. Twenty plants sampled out of 200. Wild. Seed.

PI 543808. *Chamaecytisus prolifer* (L. f.) Link FABACEAE Tagasate

Donated by: Renrun, Wu, Lanzhou Institute of Animal Science, Xiaoxihu, Lanzhou, Gansu, China. **remarks:** Received through T.A. Campbell, Soybean and Alfalfa Research Lab, USDA-ARS, Beltsville, Maryland. Received July 19, 1990.

origin: Australia. **remarks:** Received from Australia. Cultivated. Seed.

PI 543809 to 543811. *Capsicum annum* L. SOLANACEAE

Donated by: Ledo, H.D., Seed Production and Trading Company, Research Institute, P.O. Box 41, H--6601 Szentes, Hungary. Received July 03, 1990.

PI 543809 **origin:** Hungary. **cultivar:** ALMAPAPRIKA. **remarks:** Apple type. Cultivar. Seed.

PI 543810 **origin:** Hungary. **cultivar:** SZENTESI KOSSZARVU. **remarks:** Long, sweet type. Cultivar. Seed.

PI 543811 **origin:** Hungary. **cultivar:** CSERESZNYEPAPRIKA. **remarks:** Cherry type. Cultivar. Seed.

PI 543812. *Gossypium hirsutum* L. MALVACEAE Cotton

Donated by: Dawson County Seed Company, Route B, Lamesa, Texas, United States. Received November 20, 1980.

origin: United States. **cultivar:** DAWSON V-14. **other id:** PVP 7900015. **source:** Certificate in force. **group:** PVPO. **remarks:** Closely resembles Blightmaster A-5. However, resistant to *Verticillium* wilt, whereas Blightmaster A-5 is susceptible. Cultivar. Seed.

PI 543813. *Aniseia martinicensis* (Jacq.) Choisy CONVOLVULACEAE

Donated by: Jarret, R.L., Southern Regional Plant Intr. Station, USDA-ARS, 1109 Experiment Street, Griffin, Georgia, United States. Received September 09, 1990.

donor id: JA 0102. **origin:** Costa Rica. **collected:** January 09, 1990. **locality:** 4km W of entrance to Santa Rosa National Park en route to Playa Naranjo. **elevation:** 100m. Wild. Seed.

PI 543814. *Ipomoea pes-caprae* (L.) R. Br. CONVOLVULACEAE

Donated by: Jarret, R.L., Southern Regional Plant Intr. Station, USDA-ARS, 1109 Experiment Street, Griffin, Georgia, United States. Received September 09, 1990.

donor id: JA 0104. **origin:** Costa Rica. **collected:** January 09, 1990. **locality:** Right of entrance to beach, on Playa Naranjo, Santa Ross National Park. **elevation:** 1m. Wild. Seed.

PI 543815 to 543831. *Ipomoea trifida* (Kunth) G.Don CONVOLVULACEAE

Donated by: Jarret, R.L., Southern Regional Plant Intr. Station, USDA-ARS, 1109 Experiment Street, Griffin, Georgia, United States. Received September 09, 1990.

- PI 543815 **donor id:** JA 0100. **origin:** Costa Rica. **collected:** January 09, 1990. **locality:** Plants sprawling on ground, fencing and along drive, 0.3km E of entrance to Playa Ocotol. **remarks:** Large population. Wild. Seed.
- PI 543816 **donor id:** JA 0101. **origin:** Costa Rica. **collected:** January 09, 1990. **locality:** Sprawling on ground, along roadside, 8km E from Playa Ocotol to Comunidad. **remarks:** Small population. Wild. Seed.
- PI 543817 **donor id:** JA 0103. **origin:** Costa Rica. **collected:** January 09, 1990. **locality:** 8.6km W of entrance to Santa Rosa National Park en route to Playa Naranjo. **elevation:** 100m. Wild. Seed.
- PI 543818 **donor id:** JA 0105. **origin:** Costa Rica. **collected:** January 09, 1990. **locality:** 8.7km from Playa Naranjo, along roadside, en route to entrance gate of Santa Rosa National Park. **elevation:** 50m. **remarks:** Small flowers. Wild. Seed.
- PI 543819 **donor id:** JA 0106. **origin:** Costa Rica. **collected:** January 09, 1990. **locality:** 0.5km from Laguna Escondida, along roadside, en route to entrance gate of Santa Rosa National Park. **elevation:** 50m. Wild. Seed.
- PI 543820 **donor id:** JA 0107. **origin:** Costa Rica. **collected:** January 09, 1990. **locality:** Plants climbing on grass, 0.3km inside Santa Rosa National Park entrance, en route to Playa Naranjo. **remarks:** A few isolated plants. Wild. Seed.
- PI 543821 **donor id:** JA 0108. **origin:** Costa Rica. **collected:** January 10, 1990. **locality:** Along roadside, 47.9km S on Route 21 from turnoff to Playa Ocotol. **elevation:** 50m. **remarks:** Small population. Wild. Seed.
- PI 543822 **donor id:** JA 0109. **origin:** Costa Rica. **collected:** January 10, 1990. **locality:** Plants climbing on grass, 64.2km S on Route 21 from turnoff to Playa Ocotol. **elevation:** 50m. **remarks:** Small population. Wild. Seed.
- PI 543823 **donor id:** JA 0110. **origin:** Costa Rica. **collected:** January 10, 1990. **locality:** On roadside, 7.9km to 8.3km N of bridge leaving Carmona. **elevation:** 50m. **remarks:** Fairly large population. Wild. Seed.

PI 543815 to 543831-continued

- PI 543824 **donor id:** JA 0111. **origin:** Costa Rica. **collected:** January 10, 1990. **locality:** Plants climbing on fence, 0.3km off of Route 21 on hardtop road W to Playa Ocotal. **elevation:** 50m. **remarks:** Fair-sized population. Wild. Seed.
- PI 543825 **donor id:** JA 0112. **origin:** Costa Rica. **collected:** January 11, 1990. **locality:** Sprawling in grass, north side of Rio Carana, 6.7km S of Liberia on Pan American Highway, Route 1, in front of Mangoes Tico. **elevation:** 50m. **remarks:** Large dispersed population. Wild. Seed.
- PI 543826 **donor id:** JA 0113. **origin:** Costa Rica. **collected:** January 11, 1990. **locality:** Growing over rocks, 13km NE on route 42 from Canas, 0.1km S of entrance to Angeles. **elevation:** 100m. Wild. Seed.
- PI 543827 **donor id:** JA 0114. **origin:** Costa Rica. **collected:** January 11, 1990. **locality:** Sprawling in grass on roadside, 15.8km N from Bagaces on route 164 to Fortuna, 1.9km after left turnoff to Fortuna. **elevation:** 150m. Wild. Seed.
- PI 543828 **donor id:** JA 0115. **origin:** Costa Rica. **collected:** January 11, 1990. **locality:** On ground in vacant waste area, 0.1km NE on Route 142, near 142 1km marker stone, Canas. **elevation:** 100m. Wild. Seed.
- PI 543829 **donor id:** JA 0116. **origin:** Costa Rica. **collected:** January 11, 1990. **locality:** On dirt road, 50m from beach, 0.5-0.6km E of Playa Tamarindo entrance gates, Playa Tamarindo. **elevation:** 1-2m. **remarks:** Large population. Wild. Seed.
- PI 543830 **donor id:** JA 0117. **origin:** Costa Rica. **collected:** January 12, 1990. **locality:** In field on dirt road, 3.8km E of entrance gate to Playa Ocotal, El Coco. **elevation:** 25m. **remarks:** Large population. Wild. Seed.
- PI 543831 **donor id:** JA 0118. **origin:** Costa Rica. **collected:** January 12, 1990. **locality:** Near highway drainage conduit, climbing in grass, 19.3km S of Rio Lajas on Route 1, Pan American Highway. **elevation:** 100m. **remarks:** Small population. Wild. Seed.

PI 543832. *Glycine max* (L.) Merr. FABACEAE Soybean

Donated by: Louisiana Agr. Exp. Sta., Louisiana, United States.
Received September 04, 1990.

PI 543832-continued

origin: United States. **cultivar:** BUCKSHOT 723. **other id:** PVP 9000236. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 543833. *Lolium perenne* L. POACEAE Perennial ryegrass

Donated by: Seed Research of Oregon, Inc., Oregon, United States. Received September 04, 1990.

origin: United States. **cultivar:** SR 4200. **other id:** PVP 9000237. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 543834. *Festuca rubra* L. POACEAE Chewings fescue

Donated by: Seed Research of Oregon, Inc., Oregon, United States. Received September 04, 1990.

Festuca rubra subsp. *commutata* Gaud. POACEAE Chewings fescue

origin: United States. **cultivar:** SR 5000. **other id:** PVP 9000238. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 543835. *Lolium perenne* L. POACEAE Perennial ryegrass

Donated by: Pure-Seed Testing, Inc., United States. Received September 04, 1990.

origin: United States. **cultivar:** ASSURE. **other id:** PVP 9000239. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 543836. *Festuca arundinacea* Schreber POACEAE Tall fescue

Donated by: Hurley, R.H., Lofts Seed, Inc., Chimney Rock Road, Bound Brook, New Jersey, United States. Received September 04, 1990.

origin: United States. **cultivar:** REBEL JR.. **other id:** PVP 9000240. **source:** Pending. **group:** PVPO. **other id:** NJED-87. **remarks:** Attractive, persistent, lower-growing turf type capable of producing dark green turf with medium texture, medium-high density and reduced vertical growth rate. Winterhardiness, cold temperature color retention, and heat and drought tolerance good. Resistance moderately good to large brown patch disease. Resistance good to net blotch disease. Seedling vigor good. Wear tolerance good. Perennial. Cultivar. Seed.

PI 543837. *Festuca arundinacea* Schreber POACEAE Tall fescue

Donated by: Weaver Seed Co., United States. Received September 04, 1990.

origin: United States. **cultivar:** SAMSON. **other id:** PVP 9000241. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 543838. *Festuca arundinacea* Schreber POACEAE Tall fescue

Donated by: Normarc, Inc., United States. Received September 04, 1990.

origin: United States. **cultivar:** NORMARC-25. **other id:** PVP 9000243. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 543839. *Festuca arundinacea* Schreber POACEAE Tall fescue

Donated by: Seaboard Seed Co./Smith Seed Services, United States. Received September 04, 1990.

origin: United States. **cultivar:** B-21. **other id:** PVP 9000244. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 543840 to 543850. *Zea mays* L. subsp. *mays* POACEAE Corn

Donated by: Pioneer Hi-Bred International, United States. Received September 04, 1990.

PI 543840 **origin:** United States. **cultivar:** PHJ65. **other id:** PVP 9000245. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 543841 **origin:** United States. **cultivar:** PHK46. **other id:** PVP 9000246. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 543842 **origin:** United States. **cultivar:** PHK56. **other id:** PVP 9000247. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 543843 **origin:** United States. **cultivar:** PHN34. **other id:** PVP 9000248. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 543844 **origin:** United States. **cultivar:** PHN46. **other id:** PVP 9000249. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 543840 to 543850-continued

- PI 543845 **origin:** United States. **cultivar:** PHP38. **other id:** PVP
9000250. **source:** Pending. **group:** PVPO. **Cultivar.**
Seed.
- PI 543846 **origin:** United States. **cultivar:** PHP76. **other id:** PVP
9000251. **source:** Pending. **group:** PVPO. **Cultivar.**
Seed.
- PI 543847 **origin:** United States. **cultivar:** PHV07. **other id:** PVP
9000252. **source:** Pending. **group:** PVPO. **Cultivar.**
Seed.
- PI 543848 **origin:** United States. **cultivar:** PHW06. **other id:** PVP
9000253. **source:** Pending. **group:** PVPO. **Cultivar.**
Seed.
- PI 543849 **origin:** United States. **cultivar:** PHW51. **other id:** PVP
9000254. **source:** Pending. **group:** PVPO. **Cultivar.**
Seed.
- PI 543850 **origin:** United States. **cultivar:** PHW86. **other id:** PVP
9000255. **source:** Pending. **group:** PVPO. **Cultivar.**
Seed.

PI 543851 to 543853. *Oryza sativa* L. POACEAE Rice

Donated by: Rutger, J.N., USDA-ARS, California Agric. Exp. Sta.,
Davis, California, United States. Received August 21, 1990.

- PI 543851 **origin:** United States. **origin institute:** USDA-ARS,
California Agric. Exp. Sta., Davis, California.
cultivar: CALROSE 76 PHOTOSENSITIVE GENETIC MS.
pedigree: Anther culture-derived from cultivar, Calrose
76. **remarks:** Recessive genetic male sterility that is
turned on and off by day length. In long days, 15 hours,
e.g. Davis, sterility occurs. In short days, 12 hours,
e.g. Hawaii, sterile plants become fertile. Seed source
1988 Davis rows; bulked fertile panicles (1/plant) in
rows segregating 3 fertile, 1 sterile. In long day
environments, such as Davis, seeds should produce plants
segregating 5 fertile, 1 sterile. Cultivated. **Seed.**

PI 543851 to 543853-continued

PI 543852 **origin:** United States. **origin institute:** USDA-ARS, California Agric. Exp. Sta., Davis, California. **cultivar:** M-101 GENETIC MS I-2. **pedigree:** Induced by gamma rays from cultivar, M-101. **remarks:** Recessive genetic male sterile, complete pollen abortion, normal female fertility, high outcrossing, 15-20%. Seed source, 1983 Davis rows, bulked fertile plants in rows segregating 3 fertile, 1 sterile. Seeds should produce plants segregating 5 fertile, 1 sterile. Reference: Crop Sci. 24:523, 1984. Cultivated. Seed.

PI 543853 **origin:** United States. **origin institute:** USDA-ARS, California Agric. Exp. Sta., Davis, California. **cultivar:** M-201 NP GENETIC MS. **pedigree:** Induced by streptomycin from cultivar, M-201. **remarks:** Recessive genetic male sterile, no pollen produced, normal female fertility, high outcrossing 20-25%. Seed source, 1988 Davis row, bulked fertile plants in row segregating 3 fertile, 1 sterile. Seeds should produce plants segregating 5 fertile, 1 sterile. Reference: UC Davis PhD Dissertation: Hu, Jinguo, 1989. Cultivated. Seed.

PI 543854. *Paspalum vaginatum* Swartz POACEAE

Donated by: Sakamoto, G.S., USDA-SCS, Hoolehua, Hawaii, United States. **remarks:** Joint release of USDA-SCS and Hawaii Institute of Tropiculture Agriculture and Human Resources. Received July 02, 1990.

donor id: 9037868. **origin:** United States. **cultivar:** TROPIC SHORE. **other id:** T-37868. **other id:** HA-190. **remarks:** Perennial creeping, stoloniferous & rhizomatous 38-50.8cm tall. Developed for stabilizing shoreline, banks of aquaculture ponds, canals and streams with brackish and salty water. Less aggressive with regard to growing out in the water. May be planted for pasture, lawns and other uses where only salt water is available. May also be used for erosion control where the water is nonsaline. Adapted to. Perennial. Cultivar. Plant.

PI 543855. *Glycine max* (L.) Merr. FABACEAE Soybean

Donated by: Mansur, L.M., Iowa Agr. and Home Econ. Exp. Station, Iowa State University, 1210 Agronomy, Ames, Iowa, United States; and Agricultural Research Service -- USDA; and Puerto Rico Agr. Exp. Sta.. **remarks:** Newton Soybean. Received September 19, 1990.

PI 543855-continued

origin: United States. **origin institute:** Iowa Agr. and Home Econ. Exp. Station, Iowa State University, Ames, Iowa 50011. **cultivar:** NEWTON. **pedigree:** BSR 101/CN210, F3. **other id:** CV-282. **group:** CSR-SOYBEAN. **remarks:** Maturity Group II. Flowers purple. Pubescence gray. Pods brown at maturity. Seed coat shiny yellow with imperfect black hila. Resistant to soybean cyst nematode (SCN) (*Heterodera glycines* race 3). Moderately resistant to iron-deficiency chlorosis. Yields 2837 kg ha⁻¹ under SCN-free conditions and 2082 kg ha⁻¹ in presence of SCN. Seed weight 159 mg seed⁻¹. Seed protein 369g kg⁻¹. Seed. Annual. Cultivar. Seed.

PI 543856. *Glycine max* (L.) Merr. FABACEAE Soybean

Donated by: Cooper, R.L., Agricultural Research Service -- USDA, Ohio State University, Dept. of Agronomy, Wooster, Ohio, United States; and Ohio Agr. Res. and Dev. Center. **remarks:** Pixie Soybean. Received September 18, 1990.

origin: United States. **developer country:** United States. **origin institute:** Agricultural Research Service -- USDA, Wooster, Ohio 44691. **cultivar:** Pixie. **pedigree:** Williams x Ransom. **other id:** CV-280. **group:** CSR-SOYBEAN. **other id:** PVP 8100162. **source:** Certificate in Force. **group:** PVPO. **other id:** L74D-609. **source:** Prior designation. **remarks:** Maturity Group IV. Determinate, semidwarf type. Short stature. Highly resistant to lodging. Yield potential high. Specific adaptation to high yield environments (>3500 kg ha⁻¹) where lodging frequently limits yields of tall cultivars. Should be solid-seeded in 17cm row width at 750,000 seeds ha⁻¹ for maximum yield. Annual. Cultivar. Seed.

PI 543857. *Glycine max* (L.) Merr. FABACEAE Soybean

Donated by: Cooper, R.L., Agricultural Research Service -- USDA, Ohio State University, Dept. of Agronomy, Wooster, Ohio, United States; and Ohio Agr. Res. and Dev. Center. **remarks:** Gnome 85 Soybean. Received September 18, 1990.

PI 543857-continued

origin: United States. **developer country:** United States.
origin institute: Agricultural Research Service -- USDA,
Wooster, Ohio 44691. **cultivar:** Gnome 85. **pedigree:**
Gnome(6) x Williams 82. **other id:** CV-281. **group:**
CSR-SOYBEAN. **other id:** PVP 8700097. **source:** Certificate
in Force. **group:** PVPO. **other id:** Gnome Rps1-k. **source:**
Prior designation. **remarks:** Maturity Group II.
Determinate, semidwarf type. Short stature. Highly
resistant to lodging. Yield potential high. Resistant
(Rps1k) to all prevalent races of Phytophthora rot
(Phytophthora megasperma). Specific adaptation to high
yield environments (>3500 kg ha⁻¹) where lodging
frequently limits yields of taller cultivars. Should be
solid-seeded in 17cm row width at 750,000 seeds ha⁻¹ for
maximum yield. Annual. Cultivar. Seed.

PI 543858 to 543859. *Gossypium hirsutum* L. MALVACEAE Upland cotton

Donated by: Green, C.C., Agricultural Research Service -- USDA, P.O.
Box 2131, Florence, South Carolina, United States; and South
Carolina Agr. Exp. Sta.. **remarks:** Two Germplasm Lines of Upland
Cotton with High Yield Potential and Fiber Quality. Received
September 18, 1990.

PI 543858 **origin:** United States. **origin institute:** Agricultural
Research Service -- USDA, P.O. Box 2131, Florence, South
Carolina 29503. **cultivar:** PD 5363. **pedigree:** Delcot
311/PD 6131. **other id:** GP-485. **group:** CSR-COTTON.
remarks: Yield potential high. Fiber quality superior.
Selected for superior performance in full- and
short-season production systems. Annual. Breeding
Material. Seed.

PI 543859 **origin:** United States. **origin institute:** Agricultural
Research Service -- USDA, P.O. Box 2131, Florence, South
Carolina 29503. **cultivar:** PD 5472. **pedigree:** McNair
235/PD 6184. **other id:** GP-486. **group:** CSR-COTTON.
remarks: Yield potential high. Fiber quality superior.
Selected for superior performance in full- and
short-season production systems. Annual. Breeding
Material. Seed.

PI 543860 to 543863. *Gossypium hirsutum* L. MALVACEAE Upland cotton

Donated by: Green, C.C., Agricultural Research Service -- USDA, P.O.
Box 2131, Florence, South Carolina, United States; and South
Carolina Agr. Exp. Sta.. **remarks:** Four Germplasm Lines of Upland
Cotton with Early Maturity and Fiber Quality. Received September
18, 1990.

PI 543860 to 543863-continued

- PI 543860 **origin:** United States. **origin institute:** Agricultural Research Service -- USDA, P.O. Box 2131, Florence, South Carolina 29503. **cultivar:** PD 5286. **pedigree:** DES 422/PD 6044. **other id:** GP-487. **group:** CSR-COTTON. **remarks:** Yield potential high. Fiber quality superior. Selected specifically on performance in short-season production system. Annual. Breeding Material. Seed.
- PI 543861 **origin:** United States. **origin institute:** Agricultural Research Service -- USDA, P.O. Box 2131, Florence, South Carolina 29503. **cultivar:** PD 5529. **pedigree:** Deltapine 41/PD 6133. **other id:** GP-488. **group:** CSR-COTTON. **remarks:** Yield potential high. Fiber quality superior. Selected specifically on performance in short-season production system. Annual. Breeding Material. Seed.
- PI 543862 **origin:** United States. **origin institute:** Agricultural Research Service -- USDA, P.O. Box 2131, Florence, South Carolina 29503. **cultivar:** PD 5576. **pedigree:** Deltapine 41/PD 3246. **other id:** GP-489. **group:** CSR-COTTON. **remarks:** Yield potential high. Fiber quality superior. Selected specifically on performance in short-season production system. Annual. Breeding Material. Seed.
- PI 543863 **origin:** United States. **origin institute:** Agricultural Research Service -- USDA, P.O. Box 2131, Florence, South Carolina 29503. **cultivar:** PD 5582. **pedigree:** Deltapine 41/PD 4461. **other id:** GP-490. **group:** CSR-COTTON. **remarks:** Yield potential high. Fiber quality superior. Selected specifically on performance in short-season production system. Annual. Breeding Material. Seed.

PI 543864 to 543868. *Gossypium hirsutum* L. MALVACEAE Upland cotton

Donated by: Green, C.C., Agricultural Research Service -- USDA, P.O. Box 2131, Florence, South Carolina, United States; and South Carolina Agr. Exp. Sta.. **remarks:** Five Germplasm Lines of Upland Cotton with High Yield Potential and Fiber Quality. Received September 18, 1990.

- PI 543864 **origin:** United States. **origin institute:** Agricultural Research Service -- USDA, P.O. Box 2131, Florence, South Carolina 29503. **cultivar:** PD 5246. **pedigree:** McNair 220/PD 6171. **other id:** GP-491. **group:** CSR-COTTON. **remarks:** Yield potential high. Fiber quality superior. Selected specifically for performance in full-season production system. Annual. Breeding Material. Seed.

PI 543864 to 543868-continued

PI 543865 **origin:** United States. **origin institute:** Agricultural Research Service -- USDA, P.O. Box 2131, Florence, South Carolina 29503. **cultivar:** PD 5256. **pedigree:** McNair 220/AC 241. **other id:** GP-492. **group:** CSR-COTTON. **remarks:** Yield potential high. Fiber quality superior. Selected specifically for its performance in full-season production system. Annual. Breeding Material. Seed.

PI 543866 **origin:** United States. **origin institute:** Agricultural Research Service -- USDA, P.O. Box 2131, Florence, South Carolina 29503. **cultivar:** PD 5358. **pedigree:** Delcot 311/PD 5657. **other id:** GP-493. **group:** CSR-COTTON. **remarks:** Yield potential high. Fiber quality superior. Selected specifically for its performance in full-season production system. Annual. Breeding Material. Seed.

PI 543867 **origin:** United States. **origin institute:** Agricultural Research Service -- USDA, P.O. Box 2131, Florence, South Carolina 29503. **cultivar:** PD 5377. **pedigree:** Delcot 311/PD 6171. **other id:** GP-494. **group:** CSR-COTTON. **remarks:** Yield potential high. Fiber quality superior. Selected specifically for superior performance in full-season production system. Annual. Breeding Material. Seed.

PI 543868 **origin:** United States. **origin institute:** Agricultural Research Service -- USDA, P.O. Box 2131, Florence, South Carolina 29503. **cultivar:** PD 5380. **pedigree:** Delcot 311/PD 6171. **other id:** GP-495. **group:** CSR-COTTON. **remarks:** Yield potential high. Fiber quality superior. Selected specifically for superior performance in full-season production system. Annual. Breeding Material. Seed.

PI 543869. *Crotalaria ochroleuca* G. Don FABACEAE

Donated by: Sunnhemp Seed Bank, P.O. Box 1, Peramiho, Tanzania. Received June 13, 1990.

origin: Tanzania. Seed.

PI 543870 to 543872. *Zea mays* L. subsp. *mays* POACEAE Corn

Donated by: Fed. Dept. Agr. Res., Nigeria. Received 1970.

PI 543870 to 543872-continued

- PI 543870 **origin:** Tanzania. **cultivar:** UKIRIGURU COMPOSITE A.
remarks: Mostly of flint type but some dent present. Open-pollinated. Plant ht. is 300 cm. Lodging -- moderate 4. Ear ht. is 150 cm, 1 ear per stalk, good ear coverage, ear length is 25-30 cm, cob color is white, rows are variable (12 or 14), white kernel, good resistance to rust, good resist. to blight, susceptible to corn borer, and other disease resistance factors not tested. It is one of the basic maize breeding. Seed.
- PI 543871 **origin:** Tanzania. **cultivar:** UKIRIGURU COMPOSITE B.
remarks: Composite formed from varieties with great genetic diversity. Will be used as breeding population for long term improvement and maintenance of genetic diversity. Seed.
- PI 543872 **origin:** Tanzania. **cultivar:** UKIRIGURU COMPOSITE B-W.
remarks: Composite is one of the basic maize breeding populations in Tanzania for areas with 3000-6500 ft. elevation. It is in use as open pollinated variety and will be used in the future in the variety cross Ukiriguru A x Ukiriguru B-W. Seed.

PI 543873 to 543875. *Oryza sativa* L. POACEAE Rice

Donated by: Chang, T.T., International Rice Research Institute, International Rice Germplasm Center, P.O. Box 933, Manila, Luzon, Philippines. Received May 16, 1989.

- PI 543873 **donor id:** 05008. **origin:** UNCERTAIN. **cultivar:** SLG1.
collector id: 05008. **other id:** F 6. **other id:** 2346.
other id: 72483. **remarks:** Seeds large. Awned. Germination poor. Perennial. Seed.
- PI 543874 **donor id:** 05008. **origin:** UNCERTAIN. **cultivar:** SLG12.
collector id: 05008. **other id:** F 7. **other id:** 2346.
other id: 72484. **remarks:** Seeds large. Awned. Germination poor. Perennial. Seed.
- PI 543875 **donor id:** 05008. **origin:** UNCERTAIN. **cultivar:** SLG13.
collector id: 05008. **other id:** F 8. **other id:** 72485.
remarks: Seeds large. Awned. Germination poor. Perennial. Seed.

PI 543876 to 543883. *Oryza* sp. POACEAE

Donated by: Chang, T.T., International Rice Research Institute, International Rice Germplasm Center, P.O. Box 933, Manila, Luzon, Philippines. Received May 10, 1989.

PI 543876 to 543883-continued

- PI 543876 **donor id:** UCB511. **origin:** UNCERTAIN. **cultivar:** NAM ROO.
collector id: UCB511. **other id:** F 9. **other id:** 2336.
Perennial. Seed.
- PI 543877 **origin:** UNCERTAIN. **cultivar:** KHAO KHAO 1. **other id:** F
10. **other id:** 2336. **other id:** 23430. Perennial. Seed.
- PI 543878 **origin:** UNCERTAIN. **cultivar:** MOTOZA. **other id:** F 11.
other id: 2336. **other id:** 66906. Perennial. Seed.
- PI 543879 **origin:** UNCERTAIN. **cultivar:** KHAO' DAENG HAWN. **other**
id: F 12. **other id:** 2336. Perennial. Seed.
- PI 543880 **donor id:** ACC 71. **origin:** UNCERTAIN. **cultivar:** KHAO
DAENG. **collector id:** ACC 71. **other id:** F 13. **other id:**
2336. **other id:** 05007. Perennial. Seed.
- PI 543881 **donor id:** 7693. **origin:** UNCERTAIN. **cultivar:** TOSAHATA
MOCHI. **collector id:** 7693. **other id:** F 16. **other id:**
2336. Perennial. Seed.
- PI 543882 **donor id:** 14778. **origin:** UNCERTAIN. **cultivar:**
HATAHONAMI. **collector id:** 14778. **other id:** F 19. **other**
id: 2336. Perennial. Seed.
- PI 543883 **donor id:** 14780. **origin:** UNCERTAIN. **cultivar:**
CHIYOMINORI. **collector id:** 14780. **other id:** F 20.
other id: 2336. Perennial. Seed.

PI 543884 to 543885. *Oryza sativa* L. POACEAE Rice

Donated by: Watanabe, Shinji, Nat. Instit. of Agrobiological
Resources, Kannondai, Tsukuba, Ibarski, Japan. Received July 07,
1989.

- PI 543884 **donor id:** 143. **origin:** UNCERTAIN. **cultivar:** NORIN PL 2.
collector id: 143. **other id:** F 21. **other id:** 1800.
Perennial. Seed.
- PI 543885 **donor id:** 143. **origin:** UNCERTAIN. **cultivar:** NORIN PL3.
collector id: 143. **other id:** F 22. **other id:** 1800.
Perennial. Seed.

PI 543886. *Oryza sativa* L. POACEAE Rice

Donated by: Khush, G.S., International Rice Research Institute, Los
Banos, Laguna, Philippines. Received July 07, 1989.

origin: UNCERTAIN. **cultivar:** IR 033 88. **other id:** F 23.
other id: 1655. **other id:** IR 03388. Perennial. Seed.

PI 543887. *Oryza sativa* L. POACEAE Rice

Donated by: Bockelman, H.E., USDA-ARS-NSGGRF, P.O. Box 307, Aberdeen, Idaho, United States. Received July 07, 1989.

origin: UNCERTAIN. **cultivar:** THUNG MON HWA SHO. **other id:** F 24. **other id:** 1800. **other id:** ACC 3543.
Perennial. Seed.

PI 543888. *Oryza sativa* L. POACEAE Rice

Donated by: Chang, T.T., International Rice Research Institute, International Rice Germplasm Center, P.O. Box 933, Manila, Luzon, Philippines. Received July 08, 1989.

origin: UNCERTAIN. **cultivar:** HABIGANJ AMON 2. **other id:** F 93. **other id:** ACC 11933. Perennial. Seed.

PI 543889 to 543892. *Tripsacum dactyloides* (L.) L. POACEAE Eastern gamagrass

Donated by: Dewald, C.L., Southern Plains Range Res. Sta., 2000 18th Street, Woodward, OK, United States. Received October 01, 1990.

PI 543889 **origin:** United States. **cultivar:** WW-1903. **other id:** FT-I. **remarks:** Fertile warm season triploid bunchgrass with up-right habit. Foliage deep green with basal and cauline leaves, 15 to 20mm wide and 30 to 60cm long at maturity. Foliage height average approx. .75 to 1.5m with seed stalks reaching 2-2.5m. Seed maturity slightly later than native diploids and occurs during late July at Woodward, OK. Disease resistance good to anthracnose (*Colletotrichum* sp.). Perennial. Cultivar. Seed.

PI 543890 **origin:** United States. **cultivar:** WW-1906. **other id:** FT-II. **remarks:** Fertile warm season triploid bunchgrass with up-right habit. Foliage deep green with basal and cauline leaves, 15 to 20mm wide and 30 to 60cm long at maturity. Foliage height average approx. .75 to 1.5m with seed stalks reaching 2-2.5m. Seed maturity slightly later than native diploids and occurs during late July at Woodward, OK. Disease resistance good to anthracnose (*Colletotrichum* sp.). Perennial. Cultivar. Seed.

PI 543889 to 543892-continued

PI 543891 **origin:** United States. **cultivar:** WW-1908. **other id:** FT-III. **remarks:** Fertile warm season triploid bunchgrass with up-right habit. Foliage deep green with basal and cauline leaves, 15 to 20mm wide and 30 to 60cm long at maturity. Foliage height average approx. .75 to 1.5m with seed stalks reaching 2-2.5m. Seed maturity slightly later than native diploids and occurs during late July at Woodward, OK. Disease resistance good to anthracnose (*Colletotrichum* sp.). Perennial. Cultivar. Seed.

PI 543892 **origin:** United States. **cultivar:** WW-1912. **other id:** FT-IV. **remarks:** Fertile warm season triploid bunchgrass with up-right habit. Foliage deep green with basal and cauline leaves, 15 to 20mm wide and 30 to 60cm long at maturity. Foliage height average approx. .75 to 1.5m with seed stalks reaching 2-2.5m. Seed maturity slightly later than native diploids and occurs during late July at Woodward, OK. Disease resistance good to anthracnose (*Colletotrichum* sp.). Perennial. Cultivar. Seed.

PI 543893. *Triticum aestivum* L. POACEAE Winter wheat

Donated by: Baenziger, P.S., Nebraska Agr. Exp. Sta., University of Nebraska, 330 Keim Hall, Lincoln, NE, United States. Received October 01, 1990.

origin: United States. **cultivar:** RAWHIDE. **pedigree:** Wrr*5/Agent//Kavkaz/4/Pkr*4/Agent//Beloterkovskaia 198/Lcr/3 /Vona, F3. **other id:** NE83498. **remarks:** Hard red, semi-dwarf, awned, white glume type. Winterhardiness good. Straw moderately strong. Resistance moderate to currently prevalent races of stem rust (contains Sr17, Sr24, and/or Sr31) and Hessian fly. Susceptible to leaf rust, wheat soilborne mosaic virus, and wheat streak mosaic virus. Test weight characteristics good. Winter Annual. Breeding Material. Seed.

PI 543894. *Limnanthes alba* Hartweg ex Benth. var. *alba* LIMNANTHACEAE

Donated by: Oregon Agr. Exp. Sta., Oregon State University, Corvallis, Oregon, United States. Received 1975.

origin: United States. **cultivar:** FOAMORE. **pedigree:** Single plant selection in 1970 from PI 283704. Self-pollinating for seed increase. Mass selections made in early 1970's for upright growth habit and good seed retention. **remarks:** Flowers in May (Willamette Valley, Oregon). Seed oil content average 25%. Crude protein content 30%. Oil is unique since over 95% of fatty acids have 20-22 carbon atoms and essentially none as typical polyunsaturated structures. Potential for industrial utilization (after oil is chemically transformed). Tolerant to both wet acid and slightly alkaline soils. Adapted to southern Oregon, parts. Winter Annual. Cultivar. Seed.

PI 543895 to 543914. *Desmanthus illinoensis* (Michaux) MacMillan ex Robinson & Fern. FABACEAE Illinois bundleflower

Donated by: Wolfe, J.A., USDA-SCS, Suite 1321, Federal Building, 100 W Capitol St., Jackson, Mississippi, United States. Received August 16, 1990.

PI 543895 **donor id:** 9006779. **origin:** United States. **other id:** MS-5672. **locality:** Missouri. Perennial. Seed.

PI 543896 **donor id:** 9017600. **origin:** United States. **collected:** July 01, 1980. **other id:** PMT 4688. **other id:** MS-5495. **locality:** Ft. Bend County, Texas. **remarks:** Miller soil series at collection site. Perennial. Seed.

PI 543897 **donor id:** 9028305. **origin:** United States. **collected:** July 01, 1981. **other id:** MS-5158. **locality:** Cameron Parish, Louisiana. **remarks:** Harris soil series at collection site. Perennial. Seed.

PI 543898 **donor id:** 9028326. **origin:** United States. **collected:** October 01, 1981. **other id:** MS-5179. **locality:** West Feliciana Parish, Louisiana. **remarks:** Sharkey soil series at collection site. Perennial. Seed.

PI 543899 **donor id:** 9028341. **origin:** United States. **collected:** October 01, 1981. **other id:** MS-5203. **locality:** Lafayette County, Arkansas. **remarks:** Billyhaw soil series at collection site. Perennial. Seed.

PI 543900 **donor id:** 9021695. **origin:** United States. **collected:** September 01, 1980. **other id:** MS-4810. **locality:** Howard County, Arkansas. **remarks:** Sumter soil series at collection site. Perennial. Seed.

PI 543895 to 543914-continued

- PI 543901 **donor id:** 9028950. **origin:** United States. **other id:** MS-4974. **locality:** Texas. **remarks:** Composite sample from Knox City PMC. Perennial. Seed.
- PI 543902 **donor id:** 9028953. **origin:** United States. **collected:** September 01, 1981. **other id:** MS-5003. **locality:** Lee County, Mississippi. Perennial. Seed.
- PI 543903 **donor id:** 9028955. **origin:** United States. **other id:** MS-5009. **locality:** Chickasaw County, Mississippi. Perennial. Seed.
- PI 543904 **donor id:** 9028956. **origin:** United States. **collected:** August 01, 1981. **other id:** MS-5015. **locality:** Miller County, Arkansas. **remarks:** Billyhaw soil series at collection site. Perennial. Seed.
- PI 543905 **donor id:** 9028957. **origin:** United States. **collected:** August 01, 1981. **other id:** MS-5010. **locality:** Hempstead County, Arkansas. **remarks:** Houston soil series at collection site. Perennial. Seed.
- PI 543906 **donor id:** 9028958. **origin:** United States. **collected:** September 01, 1981. **other id:** MS-5064. **locality:** Howard County, Arkansas. **remarks:** Oktibbeha soil series at collection site. Perennial. Seed.
- PI 543907 **donor id:** 9028374. **origin:** United States. **collected:** October 01, 1982. **other id:** T-28374. **other id:** MS-5417. **locality:** Lee County, Arkansas. **remarks:** Dundee soil series at collection site. Perennial. Seed.
- PI 543908 **donor id:** 9028381. **origin:** United States. **collected:** October 01, 1982. **other id:** T-28381. **other id:** MS-5423. **locality:** Sharkey County, Mississippi. **remarks:** Forestdale soil series at collection site. Perennial. Seed.
- PI 543909 **donor id:** 9028429. **origin:** United States. **collected:** November 01, 1982. **other id:** T-28429. **other id:** MS-5498. **locality:** Little River County, Arkansas. **remarks:** Houston soil series at collection site. Perennial. Seed.
- PI 543910 **donor id:** 9028430. **origin:** United States. **collected:** November 01, 1982. **other id:** T-28430. **other id:** MS-5499. **locality:** Hampstead County, Arkansas. **remarks:** Houston soil series at collection site. Perennial. Seed.

PI 543895 to 543914-continued

- PI 543911 **donor id:** 9028448. **origin:** United States. **collected:** September 01, 1982. **other id:** T-28448. **other id:** MS-5517. **locality:** Mississippi County, Arkansas. **remarks:** Convent soil series at collection site. Perennial. Seed.
- PI 543912 **donor id:** 9028461. **origin:** United States. **collected:** October 01, 1982. **other id:** T-28461. **other id:** MS-5530. **locality:** Conway County, Arkansas. **remarks:** Endevs soil series at collection site. Perennial. Seed.
- PI 543913 **donor id:** 9028469. **origin:** United States. **collected:** November 01, 1982. **other id:** T-28469. **other id:** MS-5539. **locality:** Howard County, Arkansas. **remarks:** Terouge soil series at collection site. Perennial. Seed.
- PI 543914 **donor id:** 9028485. **origin:** United States. **collected:** September 01, 1982. **other id:** T-28485. **other id:** MS-5559. **locality:** La Salle County, Louisiana. **remarks:** Sharkey soil series at collection site. Perennial. Seed.

PI 543915. *Desmanthus virgatus* (L.) Willd. FABACEAE

Donated by: Wolfe, J.A., USDA-SCS, Suite 1321, Federal Building, 100 W Capitol St., Jackson, Mississippi, United States. Received August 16, 1990.

donor id: 9028960. **origin:** United States. **other id:** MS-4968. **locality:** Texas. **remarks:** Composite sample from Knox City, PMC. Perennial. Seed.

PI 543916 to 543917. *Zea mays* L. subsp. *mays* POACEAE Corn

Donated by: Scott, G.E., Agricultural Research Service -- USDA, Crop Science Research Lab., P.O. Box 5248, Mississippi State, Mississippi, United States. Received October 09, 1990.

PI 543916 **origin:** United States. **cultivar:** Mp339. **pedigree:** T61/Hill Yellow Dent. **remarks:** Inbred. Midseason white line. Cobs white. Yield high. Resistance good to maize chlorotic dwarf virus and maize dwarf mosaic virus. Spring Annual. Breeding Material. Seed.

PI 543916 to 543917-continued

PI 543917 **origin:** United States. **cultivar:** Mp412. **pedigree:** Hill Yellow Dent. **remarks:** Inbred. Late yellow line. Cobs white. Root and stalk strength good. Yield moderate. Single-earness. Highly resistant to both maize dwarf mosaic virus and maize chlorotic dwarf virus. Spring Annual. Breeding Material. Seed.

PI 543918 to 543919. *Zea mays* L. subsp. *mays* POACEAE Corn

Donated by: North Carolina Agr. Exp. Sta., North Carolina, United States. Received 1961.

PI 543918 **origin:** United States. **cultivar:** INDIAN CHIEF. **remarks:** Robinson, H.F., Comstock, R.E., & Harvey, P.H. Genetic variances in open-pollinated varieties of corn. Genetics 40: 45-60. 1955. Moll, R.H., Robinson, H.F., & Cockerham, C. Clark. Genetic variability in an advanced generation of a cross of two open-pollinated varieties of corn. Agron. J. 52: 171-173. 1960. Seed.

PI 543919 **origin:** United States. **cultivar:** JARVIS GOLDEN PROLIFIC. **remarks:** Robinson, H.F., Comstock, R.E., & Harvey, P.H. Genetic variances in open-pollinated varieties of corn. Genetics 40: 45-60. 1955. Moll, R.H., Robinson, H.F., & Cockerham C. Clark. Genetic variability in an advanced generation of a cross of two open-pollinated varieties of corn. Agron. J. 52: 171-173. 1960. Seed.

PI 543920. *Lens culinaris* Medikus FABACEAE Lentil

Donated by: Muehlbauer, F. J., Washington Agr. Res. Ctr., Washington State University, Pullman, Washington, United States; and Agricultural Research Service -- USDA; and Idaho Agr. Exp. Sta..
remarks: Crimson Lentil. Received October 09, 1990.

origin: United States. **origin institute:** Washington Agr. Res. Ctr., Washington State University, Pullman, Washington 99164-6421. **cultivar:** CRIMSON. **pedigree:** Pureline selection from Giza-9. **other id:** Selection #LC800024. **other id:** CV-5. **group:** CSR-LENTIL. **remarks:** Growth habit erect, 34-40cm tall. Leaves medium sized leaflets. Plants moderately branched. Flowers white with pale purple veins in throat of standard. Single, double or triple flowers borne on peduncles originating from leaf axils. Pods contain one or two seeds. Seed light brown testa with some dark mottled spot. Cotyledons bright red-orange. Seed quality traits are distinguishing features and should. Spring Annual. Cultivar. Seed.

PI 543921. *Cicer arietinum* L. FABACEAE Chickpea

Donated by: Muehlbauer, F. J., Agricultural Research Service -- USDA, Washington State University, Pullman, Washington, United States; and Washington Agr. Res. Ctr.; and Idaho Agr. Exp. Sta..
remarks: Sarah Chickpea. Received October 09, 1990.

origin: United States. **origin institute:** Agricultural Research Service -- USDA, Washington State University, Pullman, Washington 99164-6421. **cultivar:** SARAH.
pedigree: Pureline selection from C-235. **other id:** Selection #CP830006. **other id:** CV-88. **group:** CSR-OTHER LEGUMES. **remarks:** Growth habit branched, upright. Leaves fern type. Flowers in 56 days. Maturity early, 110 days from planting. Seeds uniform, reddish-tan. Seed weight 15.8g per 100. Cotyledons bright yellow. Drought tolerance good. Performs well in shallow soils common in eroded areas of the Palouse region. Spring Annual. Cultivar. Seed.

PI 543922. *Nicotiana tabacum* L. SOLANACEAE Tobacco

Donated by: Wilkinson, C.A., Virginia Polytechnic Institute, P.O. Box 448, Blackstone, Virginia, United States. **remarks:** VA 116 Tobacco. Received October 09, 1990.

origin: United States. **origin institute:** Virginia Polytechnic Institute, P.O. Box 448, Blackstone, Virginia 23824. **cultivar:** VA 116. **pedigree:** NC 82/C 319. **other id:** CV-101. **group:** CSR-TOBACCO. **remarks:** Plants approx. 100cm tall, produces 19 harvestable leaves when topped, and flowers 64 days after transplanting. Average yield 3231kg/ha and 2847kg/ha in 1986 and 1989, respectively. Resistance moderate to black smut (*Phytophthora parasitica*), Granville wilt (*Pseudomonas solanacearum*) and brown spot (*Alternaria alternata*). Spring Annual. Cultivar. Seed.

PI 543923 to 543925. *Phaseolus vulgaris* L. FABACEAE Pinto bean

Donated by: Brick, M.A., Colorado Agr. Exp. Sta., Colorado State University, Fort Collins, Colorado, United States. **remarks:** Three Pinto Bean Breeding Lines. Received October 09, 1990.

PI 543923 to 543925-continued

- PI 543923 **origin:** United States. **origin institute:** Colorado Agr. Exp. Sta., Colorado State University, Fort Collins, Colorado 80523. **cultivar:** CO 81-12001. **pedigree:** Ouray/Aurora(7342-1). **other id:** GP-94. **group:** CSR-OTHER LEGUMES. **remarks:** Upright growth habit line. Unique and commercially unacceptable in dry pack sales because of pink hilar ring rather than normal yellow. Mean plant maturity, seed weight, and yield: 95 days, 32.17g per 100 seeds, and 2530kg/ha, respectively, during 1984-1985 at 10 location-years in Colorado. Spring Annual. Breeding Material. Seed.
- PI 543924 **origin:** United States. **origin institute:** Colorado Agr. Exp. Sta., Colorado State University, Fort Collins, Colorado 80523. **cultivar:** CO-22625. **pedigree:** Olathe/Nebl. **other id:** GP-92. **group:** CSR-OTHER LEGUMES. **remarks:** High-yielding, semi-vine growth habit (Type III) line. Mean plant maturity during 3 years at Fort Collins, CO, 92 days. Seed weight and yield 30.3g per 100 seeds and 2890kg/ha, respectively, based on 10 location-years of testing in eastern Colorado. Spring Annual. Breeding Material. Seed.
- PI 543925 **origin:** United States. **origin institute:** Colorado Agr. Exp. Sta., Colorado State University, Fort Collins, Colorado 80523. **cultivar:** CO 33142. **pedigree:** 16/2207(5517-2)//A56240(6B)/3/13B/MO67(7016). **other id:** GP-93. **group:** CSR-OTHER LEGUMES. **remarks:** Large-seeded, semi-vine line. Mean plant maturity during 1984-87 at Fort Collins, CO, 96 days. Seed weight and yield 36g per 100 seeds and 2367kg/ha, respectively, based on 10 location-years in eastern Colorado. White mold (*Schlerotinia schlerotiorum*) variety trial results from University of Nebraska indicated 50% infection compared to mean of 59%. Spring Annual. Breeding Material. Seed.

PI 543926. *Gossypium hirsutum* L. MALVACEAE Cotton

Donated by: B & M Cotton Company, United States. Received September 27, 1990.

origin: United States. **cultivar:** SAN SIMON DEL CERRO.
other id: PVP 9000256. **source:** Pending. **group:** PVPO.
Cultivar. Seed.

PI 543927. *Lactuca sativa* L. ASTERACEAE Lettuce

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

PI 543927-continued

origin: United States. **cultivar:** RAMBO. **other id:** PVP 9000257. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 543928. *Festuca rubra* subsp. *commutata* Gaud. POACEAE Chewings fescue

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

origin: United States. **cultivar:** LONGFELLOW. **other id:** PVP 9000258. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 543929 to 543930. *Festuca arundinacea* Schreber POACEAE Tall fescue

Donated by: Seaboard Seed Co./Smith Seed Services, United States. Received September 27, 1990.

PI 543929 **origin:** United States. **cultivar:** STAGECOACH. **other id:** PVP 9000259. **source:** Pending. **group:** PVPO. **other id:** C10. Cultivar. Seed.

PI 543930 **origin:** United States. **cultivar:** HOMESTEAD. **other id:** PVP 9000260. **source:** Pending. **group:** PVPO. **other id:** F16. Cultivar. Seed.

PI 543931. *Festuca arundinacea* Schreber POACEAE Tall fescue

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

origin: United States. **cultivar:** CREWCUT. **other id:** PVP 9000261. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 543932 to 543936. *Glycine max* (L.) Merr. FABACEAE Soybean

Donated by: Northrup King Company, United States. Received September 27, 1990.

PI 543932 **origin:** United States. **cultivar:** S00-88. **other id:** PVP 9000262. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 543933 **origin:** United States. **cultivar:** S83-30. **other id:** PVP 9000263. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 543932 to 543936-continued

PI 543934 **origin:** United States. **cultivar:** S48-84. **other id:** PVP 9000264. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 543935 **origin:** United States. **cultivar:** S64-23. **other id:** PVP 9000265. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 543936 **origin:** United States. **cultivar:** S61-89. **other id:** PVP 9000266. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 543937. *Brassica napus* L. BRASSICACEAE Rape

Donated by: W. Weibull AB, United States. Received September 27, 1990.

origin: United States. **cultivar:** DELTA. **other id:** PVP 9000268. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 543938. *Poa pratensis* L. POACEAE Kentucky bluegrass

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

origin: United States. **cultivar:** INDIGO. **other id:** PVP 9000269. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 543939. *Prunus salicina* var. *mandshurica* (Skvortzov) Skvortzov & Baranov ROSACEAE

Donated by: VIR, 44 Herzen Street, Leningrad, USSR. **remarks:** Received through the American Embassy, Moscow. Received September 16, 1971.

origin: USSR. **developer country:** UNCERTAIN. **other id:** Q 19731. Tree. Clone. Budwd.

PI 543940. *Prunus armeniaca* L. ROSACEAE Apricot

Donated by: Fruit Research Institute, 32000 Cacak, Yugoslavia. Received March 11, 1976.

origin: Yugoslavia. **developer country:** UNCERTAIN. **cultivar:** V/17. **other id:** Q 20370. Tree. Clone. Budwd.

PI 543941. *Prunus armeniaca* L. ROSACEAE Apricot

Donated by: Fideghelli, Carlo, Inst. Sperimentale per la Frutticoltura, Via de Fioranello n. 52,, 00040 Ciampino Aeroporto, Rome, Italy. Received August 10, 1976.

origin: Italy. **cultivar:** ABATE. **other id:** Q 20776.
Tree. Clone. Budwd.

PI 543942 to 543944. *Prunus armeniaca* L. ROSACEAE Apricot

Donated by: Research Institute for Fruit Growing, Pitesti-Maracineni, Romania. Received August 20, 1976.

PI 543942 **origin:** Romania. **developer country:** UNCERTAIN.
cultivar: MARCULESTI 19. **other id:** Q 20814. Tree.
Clone. Budwd.

PI 543943 **origin:** Romania. **developer country:** UNCERTAIN.
cultivar: MARCULESTI 17/1. **other id:** Q 20816. Tree.
Clone. Budwd.

PI 543944 **origin:** Romania. **developer country:** UNCERTAIN.
cultivar: MARCULESTI 10/5. **other id:** Q 20821. Tree.
Clone. Budwd.

PI 543945 to 543946. *Prunus armeniaca* L. ROSACEAE Apricot

Donated by: Cociu, V., Research Institute for Fruit Growing, Pitesti-Maracineni, Romania. Received March 14, 1979.

PI 543945 **origin:** Romania. **developer country:** UNCERTAIN.
cultivar: VOINESTI B' R17P18-27 MARC 8/1. **other id:** Q
21629. Tree. Clone. Budwd.

PI 543946 **origin:** Romania. **developer country:** UNCERTAIN.
cultivar: VOINESTI B' R10P13-14 MARC 22/4. **other id:** Q
21630. Tree. Clone. Budwd.

PI 543947. *Prunus hybrid* ROSACEAE

Donated by: Watanabe, Kenji, Gotenba Noen, 59 Nagatsuka Golenbashi, Shizuoka-ken, Honshu, Japan. Received April 17, 1979.

origin: UNCERTAIN. **cultivar:** P. X. KANZAKURA
OH-KANZAKURA. **pedigree:** PRUNUS DULCIS X PRUNUS PERSICA.
other id: Q 21682. Tree. Clone. Plant.

PI 543948. *Prunus armeniaca* L. ROSACEAE Apricot

Donated by: Res. Sta. for Fruit Tree Production, INRA, La Grande Ferrade, 33140 Pont-de-la-Maye, Bordeaux, France. Received August 01, 1979.

origin: France. **cultivar:** LUIZET. **other id:** Q 21731.
Tree. Clone. Budwd.

PI 543949. *Prunus domestica* subsp. *insititia* (L.) C. Schneider
ROSACEAE Plum

Donated by: Dept. de Hortofruticultura, INIA, Murcia, Spain.
Received February 06, 1980.

origin: Spain. **developer country:** UNCERTAIN. **cultivar:**
CIRUELO POLLIZO AM-4. **other id:** Q 21826. **remarks:** Plum
rootstock. Perennial. Clone. Budwd.

PI 543950. *Prunus dulcis* (Miller) D. Webb ROSACEAE Almond

Donated by: Helms, Glenn, Route 1 Box 242, Hellertown, Pennsylvania,
United States. Received March 04, 1980.

origin: UNCERTAIN. **cultivar:** BUSCHMANDEL. **other id:** Q
21890. **remarks:** Cultivar translated means "bush or
shrub almond" Tree. Clone. Budwd.

PI 543951 to 543952. *Prunus cerasus* L. ROSACEAE Sour cherry

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

PI 543951 **origin:** Hungary. **origin institute:** Enter. for Dev. in
Fruit Growing, Budapest. **cultivar:** ERDI JUBILEUM. **other
id:** Q 22544. Tree. Clone. Budwd.

PI 543952 **origin:** UNCERTAIN. **cultivar:** FORTUNA. **other id:** Q
22545. Tree. Clone. Budwd.

PI 543953 to 543954. *Prunus cerasus* L. ROSACEAE Sour cherry

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

PI 543953 **origin:** Hungary. **origin institute:** Enter. for Dev. in
Fruit Growing, Budapest. **cultivar:** OBLACINKA R3T3.
other id: Q 22558. Tree. Clone. Budwd.

PI 543953 to 543954-continued

PI 543954 **origin:** Hungary. **origin institute:** Enter. for Dev. in Fruit Growing, Budapest. **cultivar:** OBLACINKA B. **other id:** Q 22560. Tree. Clone. Budwd.

PI 543955. *Prunus mume* Siebold & Zucc. ROSACEAE Japanese apricot

Donated by: Sun, Yat-Sen, Hortus Botanicus Nanjingensis, Nanjing, Jiangsu, China. Received December 21, 1981.

origin: UNCERTAIN. **cultivar:** VIRGIN. **other id:** Q 22761. Tree. Clone. Budwd.

PI 543956 to 543957. *Prunus domestica* L. ROSACEAE Plum

Donated by: Kapetanovic, Nada, Poljoprivredni Fakultet, 71000 Sarajevo, Zagrevaika, Yugoslavia. Received March 05, 1982.

PI 543956 **origin:** Yugoslavia. **developer country:** UNCERTAIN. **cultivar:** POZEGACA D-6. **other id:** Q 22869. Tree. Clone. Budwd.

PI 543957 **origin:** Yugoslavia. **developer country:** UNCERTAIN. **cultivar:** POZEGACA M-1. **other id:** Q 22871. Tree. Clone. Budwd.

PI 543958. *Prunus armeniaca* L. ROSACEAE Apricot

Donated by: Sta. de Recherches Fruitieres Mediterran, INRA, de St. Paul, 84140 Montfavet, France. Received March 01, 1983.

origin: France. **developer country:** UNCERTAIN. **cultivar:** HOUCALL. **other id:** Q 23392. Tree. Clone. Budwd.

PI 543959. *Lactuca sativa* L. ASTERACEAE

Donated by: Texas Agr. Exp. Sta., Texas, United States. Received 1963.

origin: United States. **cultivar:** VALMAINE. **other id:** NSL 28226. **remarks:** More uniform plant type and salad quality than Parris Island. Plants taller, darker green and have better caps and straighter leaves. Matures slightly earlier or at same time as Parris Island. Plants upright, rigid, 14-16 inches high. Head 10-11 inches long, 3-4 inches diameter. Leaves slightly curly. Outer leaves dark green. Center leaves golden yellow. High resistance to downy mildew. Annual. Cultivar. Seed.

PI 543960. *Lactuca sativa* L. ASTERACEAE

Donated by: Seed Res. Spec., California, United States. Received 1961.

origin: United States. **cultivar:** PARRIS DARK GREEN COS.
other id: NSL 5411. **remarks:** Maturity 70 days. Seed white. Leaves erect, oval, dark green, crumpled. Interior greenish white. Slow to bolt. Heat tolerance. Winterhardy. Annual. Cultivar. Seed.

PI 543961. *Lactuca sativa* L. ASTERACEAE

Donated by: Agricultural Research Service -- USDA, California, United States. Received 1961.

origin: United States. **cultivar:** MIDAS. **other id:** NSL 5440. Annual. Cultivar. Seed.

PI 543962. *Lactuca sativa* L. ASTERACEAE

Donated by: E. State Farmers, United States. Received 1962.

origin: United States. **cultivar:** EASTERN LAKES. **other id:** NSL 9352. **remarks:** Maturity 72 days. Head very uniform, larger, more open and more nearly round than Cornell 456. Plants vigorous. Annual. Cultivar. Seed.

PI 543963 to 543964. *Lactuca sativa* L. ASTERACEAE

Donated by: Agricultural Research Service -- USDA, California, United States. Received 1962.

PI 543963 **origin:** France. **cultivar:** BATAVIA BLONDE DE PARIS. **other id:** Brittle Ice. **other id:** NSL 8637. **remarks:** Crisp head type, medium size, soft, loose heads, but with each leaf overlapping the other. Leaves broad oval and cupped, with serrated margins, and prominent mid-veins or "ribs". Color medium green. Moderately resistant to tip-burn. Forms head under wide fluctuations in the environment. Annual. Cultivar. Seed.

PI 543964 **origin:** United States. **cultivar:** FRANCISCO. **other id:** NSL 16927. **remarks:** Matures 3-4 days earlier than Great Lakes. Head firm but not hard. Butt flat. Leaves broad at base, slightly frilled, not spidery. Outer leaves medium green. Inner leaves creamy white. Moderately resistant to tip-burn. Susceptible to mosaic, downy mildew, and big vein. Good eating quality. Highly productive. Relatively slow bolting. Most useful as a cool season variety. Annual. Cultivar. Seed.

PI 543965. *Lactuca sativa* L. ASTERACEAE

Donated by: Corneli, Missouri, United States. Received 1962.

origin: Canada. **developer country:** Canada. **origin institute:** Horticultural Experiment Station, Vineland, Ontario. **cultivar:** VELVET. **other id:** NSL 20117. **remarks:** Closely resembles Bibb but stands without bolting as much as a month longer. Takes longer than Bibb to mature to full size, but will produce heads same size as Bibb in same number of days. Heads similar to Bibb except grows larger and leaves not fringed with red. Very fine eating quality. Annual. Cultivar. Seed.

PI 543966. *Lactuca sativa* L. ASTERACEAE

Donated by: Ferry-Morse Seed Company, California, United States. Received 1963.

origin: United States. **cultivar:** DARK GREEN COS. **other id:** NSL 22155. **remarks:** Maturity 70 days. Trimmed size large. Leaves large, thick, slightly savoyed. Color dark green. Local market and home garden use. Home garden usually planted in late summer for fall crop. Annual. Cultivar. Seed.

PI 543967 to 543969. *Lactuca sativa* L. ASTERACEAE

Donated by: Asgrow Seed Company, Michigan, United States. Received 1963.

PI 543967 **origin:** United States. **cultivar:** FORTY-NINER. **other id:** NSL 26464. **remarks:** Cool season variety. Resistance to big vein and rib-breakdown. Color and good shipping characteristics of Great Lakes. Particularly well suited for early spring plantings at Salinas and for late fall crops in the Salinas and Patterson-Brentwood districts of California. Annual. Cultivar. Seed.

PI 543968 **origin:** United States. **cultivar:** GREAT LAKES 13. **other id:** NSL 26534. **remarks:** Maturity medium. Head size medium. Head color dark. Butt core large. Butt appearance dark, smooth. Solidity good. Good resistance to tipburn. Plant vigor good. Heads well protected by wrapper leaves. Good tolerance to tipburn and rib-blight. For spring use in the California coastal region and for winter and early use in desert areas of the Southwest. Annual. Cultivar. Seed.

PI 543967 to 543969-continued

PI 543969 **origin:** United States. **cultivar:** MESA 659. **other id:** NSL 26535. **remarks:** Maturity medium-early. Head size large. Head color dark. Butt core medium. Butt appearance medium-dark. Solidity very good. Excellent resistance to tipburn. Intended for summer and fall use in Southwest and for other areas where bolting and tipburn are problems. Annual. Cultivar. Seed.

PI 543970. *Lactuca sativa* L. ASTERACEAE

Donated by: Honma, S., Michigan State University, Department of Horticulture, East Lansing, Michigan, United States. Received 1980.

origin: United States. **cultivar:** SUPERBB. **other id:** NSL 113038. **remarks:** Maturity 8-10 days earlier than Bibb when grown in greenhouse in soil beds for hydroponics. Vigorous growth. Tolerant to low light intensity. Adapted to wide range of day lengths. Leaf character and quality of Bibb though not as dark green. Plants slightly larger than Bibb. Flavor similar to Bibb. Annual. Cultivar. Seed.

PI 543971 to 543972. *Lactuca sativa* L. ASTERACEAE

Donated by: Plant Variety Protection Office, Agricultural Marketing Service -- USDA, NAL Building, Rm. 500, Beltsville, Maryland, United States. Received 1988.

PI 543971 **origin:** United States. **origin institute:** Brinker Orsetti Seed Inc.. **cultivar:** RED LAKES. **other id:** PVP 8800205. **source:** Application withdrawn. **group:** PVPO. **other id:** NSL 236195. Annual. Cultivar. Seed.

PI 543972 **origin:** United States. **origin institute:** Royal Sluis Inc.. **cultivar:** PARRIS ISLAND COS 318. **other id:** PVP 8900032. **source:** Application abandoned. **group:** PVPO. **other id:** NSL 239086. Annual. Cultivar. Seed.

PI 543973. *Zea mays* L. subsp. *mays* POACEAE Corn

Donated by: Cuany, R.L., Colorado State University, Fort Collins, Colorado, United States. Received October 1990.

origin: UNKNOWN. **remarks:** May be 900 years old. Annual. Cultivated. Seed.

PI 543974 to 544063. *Carthamus tinctorius* L. ASTERACEAE Safflower

Donated by: Li, D., Beijing Botanical Garden, Institute of Botany, Chinese Academy of Sciences, Xiangshan, Beijing, China. **remarks:** Received through P.F. Knowles, 5703 Nakat Way, Blaine, WA 98230. Received January 30, 1989.

- PI 543974 **origin:** China. **local name:** Honghua. **collected:** October 1980. **collector id:** BJ-142. **other id:** W6 119. **group:** W6. **locality:** Hetian County, Xinjiang Province. **remarks:** Growing period 117 days. Plants 98.1cm tall, very spiny. Branching angle 35 degrees. Head diameter-2.11cm. Flowers orange. 100 seed weight-6.53g. Oil content-30.07%. Annual. Cultivated. Seed.
- PI 543975 **origin:** China. **local name:** Honghua. **collected:** February 1981. **collector id:** BJ-180. **other id:** W6 120. **group:** W6. **locality:** Nanxi County, Sichuan Province. **remarks:** Growing period 92 days. Plants 68cm tall, spiny. Branching angle 34 degrees. Head diameter-2.54cm. Flowers red. 100 seed weight-4.25g. Oil content-22.51%. Linoleic acid-74.6%. Oleic acid-18%. Stearic acid-1.0%. Palmitic acid-6.3%. Annual. Cultivated. Seed.
- PI 543976 **origin:** China. **local name:** Honghua. **collected:** February 1981. **collector id:** BJ-182. **other id:** W6 121. **group:** W6. **locality:** Heze County, Shandong Province. **remarks:** Growing period 104 days. Plants 65.4cm tall. Head diameter-2.08cm. Flowers orange. 100 seed weight-5.4g. Oil content-24.53%. Annual. Cultivated. Seed.
- PI 543977 **origin:** China. **local name:** Honghua. **collected:** February 1981. **collector id:** BJ-183. **other id:** W6 122. **group:** W6. **locality:** Zhecheng County, Henan Province. **remarks:** Growing period 102 days. Plants 78.9cm tall, spineless. Branching angle 51 degrees. Head diameter-2.06cm. Flowers orange. 100 seed weight-5.1g. Oil content-24.85%. Linoleic acid-75.5%. Oleic acid 15.8%. Stearic acid-2.5%. Palmitic acid-6.1%. Annual. Cultivated. Seed.
- PI 543978 **origin:** China. **local name:** Honghua. **collected:** February 1981. **collector id:** BJ-194. **other id:** W6 124. **group:** W6. **locality:** Yingshan County, Sichuan Province. **remarks:** 100 seed weight 2.78g. Annual. Cultivated. Seed.
- PI 543979 **origin:** China. **local name:** Honghua. **collected:** February 1981. **collector id:** BJ-200. **other id:** W6 125. **group:** W6. **locality:** Tongliao City, Inner Mongolia. **remarks:** Growing period 103 days. Plants 87.5cm tall, spineless. Branching angle 40 degrees. Head diameter-2.32cm. Flowers orange. 100 seed weight-4.56g. Annual. Cultivated. Seed.

PI 543974 to 544063-continued

- PI 543980 **origin:** China. **local name:** Honghua. **collected:** February 1981. **collector id:** BJ-201. **other id:** W6 126. **group:** W6. **locality:** Qiubei County, Yunnan Province. **remarks:** Growing period 98 days. Plants 75.6cm tall, spiny. Branching angle 56.6 degrees. Head diameter-2.22cm. Flowers red. 100 seed weight-4.1g. Oil content-22.61%. Linoleic acid-74.7%. Oleic acid-16.5%. Stearic acid-2.7%. Palmitic acid-5.6%. Annual. Cultivated. Seed.
- PI 543981 **origin:** China. **collected:** February 1981. **collector id:** BJ-203. **other id:** W6 203. **group:** W6. Annual. Cultivated. Seed.
- PI 543982 **origin:** China. **local name:** Honghua. **collected:** February 1981. **collector id:** BJ-220. **other id:** W6 204. **group:** W6. **locality:** Kalaqinzuoyi County, Liaoning Province. **remarks:** Growing period 99 days. Plants 83cm tall, spineless. Branching angle 48 degrees. Head diameter-2.29cm. Flowers orange. 100 seed weight-3.76g. Annual. Cultivated. Seed.
- PI 543983 **origin:** China. **local name:** Honghua. **collected:** February 1981. **collector id:** BJ-224. **other id:** W6 205. **group:** W6. **locality:** Zhangye County, Gansu Province. **remarks:** Growing period 120 days. Plants 123.8cm tall, spineless. Branching angle 35.5 degrees. Head diameter-1.97cm. Flowers red. 100 seed weight-5.52g. Oil content-27.68%. Annual. Cultivated. Seed.
- PI 543984 **origin:** China. **local name:** Honghua. **collected:** September 1981. **collector id:** BJ-225. **other id:** W6 206. **group:** W6. **locality:** Qixian County, Henan Province. **remarks:** Growing period 103 days. Plants 68.1cm tall, spineless. Branching angle 49.4 degrees. Head diameter-2.20cm. Flowers orange. 100 seed weight-5.4g. Oil content-22.50%. Annual. Cultivated. Seed.
- PI 543985 **origin:** China. **local name:** Honghua. **collected:** September 1981. **collector id:** BJ-226. **other id:** W6 207. **group:** W6. **locality:** Huolu County, Hebei Province. **remarks:** Growing period 100 days. Plants 74.2cm tall, spineless. Branching angle 52 degrees. Head diameter-2.26cm. Flowers red. 100 seed weight-4.83g. Oil content-21.17%. Linoleic acid-73.0%. Oleic acid-17.8%. Stearic acid-2.5%. Palmitic acid-6.5%. Annual. Cultivated. Seed.

PI 543974 to 544063-continued

- PI 543986 **origin:** China. **local name:** Honghua. **collector id:** BJ-227. **other id:** W6 208. **group:** W6. **locality:** Danxian County, Shandong Province. **remarks:** Growing period 104 days. Plants 78cm tall. Branching angle 50 degrees. Head diameter-2.06cm. Flowers red. 100 seed weight-4.8g. Oil content-23.82%. Linoleic acid-64.4%. Oleic acid-22.0%. Stearic acid-3.0%. Palmitic acid-7.3%. Annual. Cultivated. Seed.
- PI 543987 **origin:** China. **local name:** Honghua. **collected:** September 1981. **collector id:** BJ-228. **other id:** W6 209. **group:** W6. **locality:** Dangshan County, Shandong Province. **remarks:** Growing period 105 days. Plants 89.2cm tall, spineless. Branching angle 53 degrees. Head diameter-2.25cm. Flowers red. 100 seed weight-3.7g. Oil content-21.74%. Annual. Cultivated. Seed.
- PI 543988 **origin:** China. **local name:** Honghua. **collected:** September 1981. **collector id:** BJ-229. **other id:** W6 210. **group:** W6. **locality:** Qixian County, Henan Province. **remarks:** Growing period 100 days. Plants 68cm tall, spineless. Branching angle 55 degrees. Head diameter-2.09cm. Flowers orange. 100 seed weight-5.6g. Oil content-24.70%. Annual. Cultivated. Seed.
- PI 543989 **origin:** China. **local name:** Honghua. **collected:** September 1981. **collector id:** BJ-232. **other id:** W6 211. **group:** W6. **locality:** Gaotang County, Shandong Province. **remarks:** Growing period 103 days. Plants 74.1cm tall. Branching angle 52 degrees. Head diameter-2.32cm. Flowers red. 100 seed weight-5.3g. Oil content-20.62%. Annual. Cultivated. Seed.
- PI 543990 **origin:** China. **local name:** Honghua. **collected:** February 1981. **collector id:** BJ-235. **other id:** W6 212. **group:** W6. **locality:** Fenggui County, Henan Province. **remarks:** Growing period 103 days. Plants 64.0cm tall, spineless. Branching angle 48 degrees. Head diameter-2.26cm. Flowers red. 100 seed weight-5.45g. Oil content-24.98%. Annual. Cultivated. Seed.
- PI 543991 **origin:** China. **local name:** Honghua. **collected:** February 1981. **collector id:** BJ-237. **other id:** W6 213. **group:** W6. **locality:** Boxian County, Anhui Province. **remarks:** Plants 86.7cm tall. Branching angle 65 degrees. Head diameter-1.72cm. Flowers red. 100 seed weight-4.9g. Oil content-20.92%. Linoleic acid-73.1%. Oleic acid-19.3%. Stearic acid-0.8%. Palmitic acid-6.7%. Annual. Cultivated. Seed.

PI 543974 to 544063-continued

- PI 543992 **origin:** China. **local name:** Honghua. **collected:** September 1981. **collector id:** BJ-238. **other id:** W6 214. **group:** W6. **locality:** Juye County, Shandong Province. **remarks:** Growing period 105 days. Plants 68.7cm tall. Branching angle 50 degrees. Head diameter 2cm. 100 seed weight-4.7g. Oil content-24.39%. Annual. Cultivated. Seed.
- PI 543993 **origin:** China. **local name:** Honghua. **collected:** September 1981. **collector id:** BJ-239. **other id:** W6 215. **group:** W6. **locality:** Lingquan County, Anhui Province. **remarks:** Growing period 101 days. Plants 81cm tall. Branching angle 48 degrees. Head diameter 2.08cm. 100 seed weight-4.2g. Oil content-21.07%. Linoleic acid-79.2%. Oleic acid-11.7%. Stearic acid-1.5%. Palmitic acid-6.8%. Annual. Cultivated. Seed.
- PI 543994 **origin:** China. **local name:** Honghua. **collected:** September 1981. **collector id:** BJ-240. **other id:** W6 216. **group:** W6. **locality:** Caoxian County, Shandong Province. **remarks:** Growing period 100 days. Plants 74.3cm tall. Branching angle 47 degrees. Head diameter-2.04cm. 100 seed weight- 5.5g. Oil content-24.66%. Annual. Cultivated. Seed.
- PI 543995 **origin:** China. **local name:** Honghua. **collected:** February 1981. **collector id:** BJ-242. **other id:** W6 217. **group:** W6. **locality:** Jingxian County, Hebei Province. **remarks:** Growing period 105 days. Plants spineless. Flowers red. 100 seed weight-4.83g. Oil content-22.66%. Annual. Cultivated. Seed.
- PI 543996 **origin:** China. **local name:** Honghua. **collected:** February 1981. **collector id:** BJ-243. **other id:** W6 218. **group:** W6. **locality:** Weishan County, Shandong Province. **remarks:** Growing period 103 days. Plants 70.8cm tall. Branching angle 52 degrees. Head diameter-2.17cm. Flowers red. 100 seed weight 5.5g. Oil content-22.50%. Annual. Cultivated. Seed.
- PI 543997 **origin:** China. **local name:** Honghua. **collected:** February 1981. **collector id:** BJ-244. **other id:** W6 219. **group:** W6. **locality:** Daming County, Hebei Province. **remarks:** Plants 83.1cm tall, spineless. Branching angle 51 degrees. Head diameter-2.15cm. Flowers red. 100 seed weight-5.3g. Oil content-24.24%. Annual. Cultivated. Seed.

PI 543974 to 544063-continued

- PI 543998 **origin:** China. **local name:** Honghua. **collected:** February 1981. **collector id:** BJ-245. **other id:** W6 220. **group:** W6. **locality:** Liangshan County, Shandong Province. **remarks:** Growing period 105 days. Plants 81.8cm tall, spiny. Branching angle 51.6 degrees. Head diameter 2.11cm. Flowers orange. 100 seed weight-5.4g. Oil content-24.22%. Annual. Cultivated. Seed.
- PI 543999 **origin:** China. **local name:** Honghua. **collected:** October 1981. **collector id:** BJ-249. **other id:** W6 221. **group:** W6. **locality:** Sixian County, Anhui Province. **remarks:** Plants 87.6cm tall. Branching angle 50 degrees. Head diameter-2.28cm. 100 seed weight-5.35g. Oil content-21.81%. Annual. Cultivated. Seed.
- PI 544000 **origin:** China. **local name:** Honghua. **collector id:** BJ-296. **other id:** W6 223. **group:** W6. **locality:** Ningling County, Henan Province. **remarks:** Growing period 103 days. Plants 73.1cm tall. Branching angle 52 degrees. Head diameter-2.30cm. 100 seed weight- 5.8g. Oil content-22.37%. Annual. Cultivated. Seed.
- PI 544001 **origin:** China. **local name:** Honghua. **collected:** October 1981. **collector id:** BJ-297. **other id:** W6 224. **group:** W6. **locality:** Taikang County, Henan Province. **remarks:** Growing period 103 days. Plants 65.6cm tall. Branching angle 46 degrees. Head diameter-2.11cm. 100 seed weight- 5.5g. Oil content-24.17%. Linoleic acid-77.4%. Oleic acid -13.1%. Stearic acid-1.7%. Palmitic acid-6.9%. Annual. Cultivated. Seed.
- PI 544002 **origin:** China. **local name:** Honghua. **collected:** October 1981. **collector id:** BJ-299. **other id:** W6 225. **group:** W6. **locality:** Yucheng County, Henan Province. **remarks:** Growing period 103 days. Plants 75.7cm tall, spineless. Branching angle 46 degrees. Head diameter-2.14cm. Flowers red. 100 seed weight-6g. Oil content-21.89%. Linoleic acid-77.5%. Oleic acid-14.5%. Stearic acid 1.6%. Palmitic acid-6.3%. Annual. Cultivated. Seed.
- PI 544003 **origin:** China. **local name:** Honghua. **collected:** October 1981. **collector id:** BJ-301. **other id:** W6 226. **group:** W6. **locality:** Linzhang County, Hebei Province. **remarks:** Growing period 99 days. Plants 71.2cm tall, spineless. Branching angle 46 degrees. Head diameter-2.15cm. Flowers red. 100 seed weight-5.53g. Oil content-21.35%. Linoleic acid-74.3%. Oleic acid-16.9%. Stearic acid 1.1%. Palmitic acid-7.1%. Annual. Cultivated. Seed.
- PI 544004 **origin:** China. **collected:** July 1981. **collector id:** BJ-306. **other id:** W6 227. **group:** W6. Annual. Cultivated. Seed.

PI 543974 to 544063-continued

- PI 544005 **origin:** China. **local name:** Honghua. **collected:** October 1981. **collector id:** BJ-317. **other id:** W6 228. **group:** W6. **locality:** Xiuxian County, Anhui Province. **remarks:** Growing period 103 days. Plants 93.7cm tall, spiny. Branching angle 47 degrees. Head diameter-2.05cm. Flowers orange. 100 seed weight-4.8g. Oil content-21.77%. Annual. Cultivated. Seed.
- PI 544006 **origin:** China. **local name:** Honghua. **collected:** January 1982. **collector id:** BJ-318. **other id:** W6 229. **group:** W6. **locality:** Runan County. **remarks:** Growing period 101 days. Plants 72.4cm tall, spineless. Branching angle 48 degrees. Head diameter-2.03cm. Flowers orange. 100 seed weight-4.0g. Oil content-26.69%. Linoleic acid-75.7%. Oleic acid-14.8%. Stearic acid-1.7%. Palmitic acid-7.5%. Annual. Cultivated. Seed.
- PI 544007 **origin:** China. **local name:** Honghua. **collected:** January 1982. **collector id:** BJ-320. **other id:** W6 230. **group:** W6. **locality:** Taichan County. **remarks:** Growing period 100 days. Plants 69.7cm tall, spiny. Branching angle 55 degrees. Head diameter-2.24cm. Flowers orange. 100 seed weight-4.8g. Oil content-19.87%. Linoleic acid-79.2%. Oleic acid-12.1%. Stearic acid-1.9%. Palmitic acid-6.5%. Annual. Cultivated. Seed.
- PI 544008 **origin:** China. **local name:** Honghua. **collected:** January 1982. **collector id:** BJ-321. **other id:** W6 231. **group:** W6. **locality:** Lingxian County, Shandong Province. **remarks:** Growing period 109 days. Plants 65.7cm tall. Branching angle 46 degrees. Head diameter-2.24cm. Flowers orange. 100 seed weight-5.8g. Oil content-23.46%. Linoleic acid- 77.8%. Oleic acid-13.4%. Stearic acid-2.4%. Palmitic acid -6.2%. Annual. Cultivated. Seed.
- PI 544009 **origin:** China. **local name:** Honghua. **collected:** January 1982. **collector id:** BJ-323. **other id:** W6 232. **group:** W6. **locality:** Donghai County, Jiangsu Province. **remarks:** Growing period 103 days. Plants 92.3cm tall, spineless. Branching angle 50 degrees. Head diameter-2.22cm. Flowers red. 100 seed weight-5.0g. Oil content-19.9%. Linoleic acid-75.6%. Oleic acid-14.4%. Stearic acid-2.1%. Palmitic acid-7.0%. Annual. Cultivated. Seed.

PI 543974 to 544063-continued

- PI 544010 **origin:** China. **local name:** Honghua. **collected:** January 1982. **collector id:** BJ-324. **other id:** W6 234. **group:** W6. **locality:** Changyi County, Shandong Province. **remarks:** Growing period 102 days. Plants 71cm tall. Branching angle 50 degrees. Head diameter-2.15cm. Flowers red. 100 seed weight-5.2g. Oil content-20.80%. Linoleic acid-75.40%. Oleic acid-16%. Stearic acid-1.4%. Palmitic acid 7.1%. Annual. Cultivated. Seed.
- PI 544011 **origin:** China. **local name:** Honghua. **collected:** January 1982. **collector id:** BJ-326. **other id:** W6 235. **group:** W6. **locality:** Ningjin County, Shandong Province. **remarks:** Growing period 96 days. Plants 47cm tall, spiny. Branching angle 57 degrees. Head diameter-2.13cm. Flowers orange. 100 seed weight-4.7g. Oil content-16.7%. Linoleic acid- 82%. Oleic acid-11.5%. Stearic acid-2.4%. Palmitic acid- 6.3%. Annual. Cultivated. Seed.
- PI 544012 **origin:** China. **local name:** Honghua. **collected:** January 1982. **collector id:** BJ-327. **other id:** W6 236. **group:** W6. **locality:** Guangde County, Anhui Province. **remarks:** Growing period 95 days. Plants 72.3cm tall, spiny. Branching angle 53 degrees. Head diameter-2.5cm. Flowers orange. 100 seed weight-5.1g. Oil content-23.32%. Linoleic acid-80.8%. Oleic acid-17.1%. Stearic acid-1.8%. Palmitic acid-0.3%. Annual. Cultivated. Seed.
- PI 544013 **origin:** China. **local name:** Honghua. **collected:** January 1982. **collector id:** BJ-331. **other id:** W6 237. **group:** W6. **locality:** Xingchang County, Zhejiang Province. **remarks:** Growing period 95 days. Plants 64cm tall, spiny. Branching angle 57 degrees. Head diameter-2.2cm. Flowers red. 100 seed weight-4.7g. Oil content-19.9%. Annual. Cultivated. Seed.
- PI 544014 **origin:** China. **local name:** Honghua. **collected:** January 1982. **collector id:** BJ-332. **other id:** W6 238. **group:** W6. **locality:** Shanghe County, Shandong Province. **remarks:** Growing period 98 days. Plants 54.1cm tall, spiny. Branching angle 57 degrees. Head diameter 2.08cm. Flowers orange. 100 seed weight-4.3g. Oil content-23.25%. Linoleic acid-76.4%. Oleic acid-14.4%. Stearic acid-2.3%. Palmitic acid-6.7%. Annual. Cultivated. Seed.
- PI 544015 **origin:** China. **local name:** Honghua. **collected:** October 1977. **collector id:** BJ-11. **other id:** W6 239. **group:** W6. **locality:** Kunming City, Yunnan Province. **remarks:** Plants 80.4cm tall. Head diameter-1.99cm. Oil content-25.08%. Annual. Cultivated. Seed.

PI 543974 to 544063-continued

- PI 544016 **origin:** China. **local name:** Honghua. **collected:** August 1978. **collector id:** BJ-19. **other id:** W6 241. **group:** W6. **locality:** Zhangye County, Gansu Province. **remarks:** Growing period 108 days. Plants 72.2cm tall, spiny. Branching angle 40 degrees. Head diameter-1.78cm. Flowers orange. 100 seed weight-6.8g. Oil content-23.2%. Annual. Cultivated. Seed.
- PI 544017 **origin:** China. **local name:** Honghua. **collected:** November 1978. **collector id:** BJ-27. **other id:** W6 243. **group:** W6. **locality:** Ruicheng County, Shanxi Province. **remarks:** Growing period duration 99 days. Plants 67.3cm tall. Branching angle 50 degrees. Head diameter-2.03cm. Flowers red. 100 seed weight-5.3g. Oil content-27.97%. Linoleic acid-76.7%. Oleic acid-14.4%. Stearic acid-2.2%. Palmitic acid 6.6%. Annual. Cultivated. Seed.
- PI 544018 **origin:** China. **local name:** Honghua. **collected:** March 1979. **collector id:** BJ-45. **other id:** W6 244. **group:** W6. **locality:** Xiapu County, Fujian Province. Annual. Cultivated. Seed.
- PI 544019 **origin:** China. **local name:** Honghua. **collected:** May 1979. **collector id:** BJ-54. **other id:** W6 245. **group:** W6. **locality:** Yanjin County, Henan Province. **remarks:** Growing period 102 days. Plants 77cm tall, spineless. Branching angle 49 degrees. Head diameter-2.1cm. Flowers red. 100 seed weight-5.4g. Oil content-25.65%. Linoleic acid-72.8%. Stearic acid-1.1%. Oleic acid-19.4%. Palmitic acid-6.7%. Annual. Cultivated. Seed.
- PI 544020 **origin:** China. **collected:** April 1980. **collector id:** BJ-89. **other id:** W6 247. **group:** W6. Annual. Cultivated. Seed.
- PI 544021 **origin:** China. **collected:** May 1980. **collector id:** BJ-90. **other id:** W6 248. **group:** W6. **remarks:** 100 seed weight-2.7g. Oil content-19.16%. Annual. Cultivated. Seed.
- PI 544022 **origin:** China. **collected:** July 1980. **collector id:** BJ-96. **other id:** W6 249. **group:** W6. **remarks:** 100 seed weight-3.7g. Annual. Cultivated. Seed.
- PI 544023 **origin:** China. **local name:** Honghua. **collected:** October 1980. **collector id:** BJ-141. **other id:** W6 250. **group:** W6. **locality:** Fukang County, Xinjiang Province. **remarks:** Growing period 116 days. Flowers orange. 100 seed weight- 5.2g. Oil content-27.86%. Annual. Cultivated. Seed.

PI 543974 to 544063-continued

- PI 544024 **origin:** China. **local name:** Honghua. **collected:** January 1982. **collector id:** BJ-337. **other id:** W6 251. **group:** W6. **locality:** Shucheng County, Anhui Province. **remarks:** Growing period 96 days. Plants 70.3cm tall, spiny. Branching angle 52 degrees. Head diameter 2.29cm. Flowers orange. 100 seed weight-4.3g. Oil content-22.17%. Linoleic acid-80.4%. Oleic acid-11.3%. Stearic acid-1.9%. Palmitic acid-6.3%. Annual. Cultivated. Seed.
- PI 544025 **origin:** China. **local name:** Honghua. **collected:** January 1982. **collector id:** BJ-338. **other id:** W6 252. **group:** W6. **locality:** Huaiyuan County, Anhui Province. **remarks:** Plants 88.7cm tall, spiny. Branching angle 50 degrees. Head diameter-2.27cm. Flowers orange. 100 seed weight-5.0g. Oil content-21.21%. Linoleic acid-75.4%. Oleic acid-15.4%. Stearic acid-2.0%. Palmitic acid-6.5%. Annual. Cultivated. Seed.
- PI 544026 **origin:** China. **local name:** Honghua. **collected:** January 1982. **collector id:** BJ-341. **other id:** W6 253. **group:** W6. **locality:** Xianxian County, Hebei Province. **remarks:** Growing period 104 days. Plants 87.5cm tall, spineless. Branching angle 45 degrees. Head diameter-1.92cm. Flowers red. 100 seed weight-4.87g. Oil content-24.74%. Linoleic acid-74.8%. Oleic acid-14.5%. Stearic acid-3.0%. Palmitic acid-7.6%. Annual. Cultivated. Seed.
- PI 544027 **origin:** China. **local name:** Honghua. **collected:** January 1982. **collector id:** BJ-342. **other id:** W6 254. **group:** W6. **locality:** Xingtang County, Hebei Province. **remarks:** Growing period 89 days. Plants 91.7cm tall, spineless. Branching angle 57 degrees. Head diameter-2.28cm. Flowers red. 100 seed weight-4.37g. Oil content-23.58%. Linoleic acid-75.5%. Oleic acid-15.0%. Stearic acid-1.7%. Palmitic acid-7.5%. Annual. Cultivated. Seed.
- PI 544028 **origin:** China. **local name:** Honghua. **collected:** January 1982. **collector id:** BJ-344. **other id:** W6 255. **group:** W6. **locality:** Yuhuan County, Zhejiang Province. **remarks:** Growing period 97 days. Plants 63.8cm tall, spiny. Branching angle 52 degrees. Head diameter-2.52cm. Flowers orange. 100 seed weight-5.0g. Oil content-21.82%. Annual. Cultivated. Seed.

PI 543974 to 544063-continued

- PI 544029 **origin:** China. **local name:** Honghua. **collected:** January 1982. **collector id:** BJ-346. **other id:** W6 256. **group:** W6. **locality:** Liuan County, Anhui Province. **remarks:** Growing period 99 days. Plants 66.5cm tall, spiny. Branching angle 53 degrees. Head diameter-2.38cm. Flowers red. 100 seed weight-3.65g. Oil content-24.43%. Linoleic acid-79.0%. Oleic acid-12.3%. Stearic acid-2.3%. Palmitic acid-6.1%. Annual. Cultivated. Seed.
- PI 544030 **origin:** China. **local name:** Honghua. **collected:** January 1982. **collector id:** BJ-348. **other id:** W6 257. **group:** W6. **locality:** Chengxian County, Zhejiang Province. **remarks:** Growing period 97 days. Plants 48.2cm tall, spiny. Branching angle 57 degrees. Head diameter-2.16cm. Flowers red. 100 seed weight-4.5g. Oil content-20.51%. Annual. Cultivated. Seed.
- PI 544031 **origin:** China. **local name:** Honghua. **collected:** January 1982. **collector id:** BJ-350. **other id:** W6 258. **group:** W6. **locality:** Anji County, Zhejiang Province. **remarks:** Growing period 95 days. Plants 63.5cm tall, spiny. Branching angle 42 degrees. Head diameter-2.27cm. Flowers red. 100 seed weight-4.2g. Oil content-22.60%. Linoleic acid-80.5%. Oleic acid-11.4%. Stearic acid-2.2%. Palmitic acid-6.0%. Annual. Cultivated. Seed.
- PI 544032 **origin:** China. **local name:** Honghua. **collected:** January 1982. **collector id:** BJ-351. **other id:** W6 259. **group:** W6. **locality:** Zouping County, Shandong Province. **remarks:** Growing period 103 days. Plants spineless. Flowers red. 100 seed weight-5.2g. Oil content-22.17%. Linoleic acid- 22.17%. Oleic acid-15.5%. Stearic acid-1.7%. Palmitic acid-6.6%. Annual. Cultivated. Seed.
- PI 544033 **origin:** China. **local name:** Honghua. **collected:** February 1982. **collector id:** BJ-356. **other id:** W6 260. **group:** W6. **locality:** Kuerle City, Xinjiang Province. **remarks:** Growing period 124 days. Plants 111.2cm tall, spiny. Branching angle 33 degrees. Head diameter-1.9cm. Flowers orange. 100 seed weight-5.1g. Linoleic acid-81.0%. Oleic acid-10.1%. Stearic acid-2.7%. Palmitic acid-6.1%. Annual. Cultivated. Seed.
- PI 544034 **origin:** China. **local name:** Honghua. **collected:** February 1982. **collector id:** BJ-369. **other id:** H1-001. **other id:** W6 261. **group:** W6. **locality:** Fukang County, Xinjiang Province. Annual. Cultivated. Seed.

PI 543974 to 544063-continued

- PI 544035 **origin:** China. **local name:** Honghua. **collected:** February 1982. **collector id:** BJ-375. **other id:** H2-002. **other id:** W6 262. **group:** W6. **locality:** Fukang County, Xinjiang Province. Annual. Cultivated. Seed.
- PI 544036 **origin:** China. **local name:** Honghua. **collected:** March 1982. **collector id:** BJ-383. **other id:** W6 263. **group:** W6. **locality:** Yutian County, Xinjiang Province. **remarks:** Growing period 119 days. Plants 94cm tall, spiny. Branching angle 37 degrees. Head diameter-2.14cm. Flowers orange. 100 seed weight-6.5g. Oil content-20.84%. Annual. Cultivated. Seed.
- PI 544037 **origin:** China. **local name:** Honghua. **collected:** May 1982. **collector id:** BJ-400. **other id:** W6 264. **group:** W6. **locality:** Jimushaer County, Xinjiang Province. **remarks:** Plants spineless. Flowers red. Linoleic acid-79.1%. Oleic acid-11.9%. Stearic acid-2.9%. Palmitic acid-6.0%. Annual. Cultivated. Seed.
- PI 544038 **origin:** China. **local name:** Honghua. **collected:** May 1982. **collector id:** BJ-407. **other id:** W6 265. **group:** W6. **locality:** Tongjiang County, Sichuan Province. **remarks:** Plants spineless. Linoleic acid-73.0%. Oleic acid-17.3%. Stearic acid-1.4%. Palmitic acid-8.0%. Annual. Cultivated. Seed.
- PI 544039 **origin:** China. **local name:** Honghua. **collected:** September 1982. **collector id:** BJ-416. **other id:** W6 266. **group:** W6. **locality:** Changning County, Yunnan Province. **remarks:** Growing period 86 days. Plants 58cm tall. Branching angle 44 degrees. Head diameter-2.07cm. 100 seed weight-3.2g. Oil content-23.32%. Annual. Cultivated. Seed.
- PI 544040 **origin:** China. **local name:** Honghua. **collected:** October 1982. **collector id:** BJ-417. **other id:** W6 267. **group:** W6. **locality:** Dahongpao, Yanjin County, Henan Province. **remarks:** Growing period 102 days. Plants 77cm tall, spineless. Branching angle 49 degrees. Head diameter-2.11cm. Flowers orange. 100 seed weight-5.4g. Oil content-25.65%. Linoleic acid-72.8%. Oleic acid-19.4%. Stearic acid-1.1%. Palmitic acid-6.7%. Annual. Cultivated. Seed.
- PI 544041 **origin:** China. **local name:** Honghua. **collected:** October 1982. **collector id:** BJ-418. **other id:** W6 268. **group:** W6. **locality:** Xizang, Laza City, Tibet. Annual. Cultivated. Seed.

PI 543974 to 544063-continued

- PI 544042 **origin:** China. **local name:** Honghua. **collected:** November 1982. **collector id:** BJ-424. **other id:** W6 269. **group:** W6. **locality:** Ledu County, Qinghai Province. **remarks:** Linoleic acid-81.2%. Oleic acid-11.0%. Stearic acid-0.9%. Palmitic acid-6.1%. Annual. Cultivated. Seed.
- PI 544043 **origin:** China. **local name:** Honghua. **collected:** June 1983. **collector id:** BJ-444. **other id:** W6 270. **group:** W6. **locality:** Taixing County, Jiangsu Province. **remarks:** Growing period 83 days. Plants 60.6cm tall, spiny. Branching angle 44 degrees. Head diameter-1.96cm. Flowers orange. 100 seed weight-3.75g. Oil content-21.57%. Linoleic acid-83.5%. Oleic acid-9.2%. Stearic acid-1.9%. Palmitic acid-5.2%. Annual. Cultivated. Seed.
- PI 544044 **origin:** China. **local name:** Honghua. **collected:** June 1983. **collector id:** BJ-445. **other id:** W6 271. **group:** W6. **locality:** Nanjing City, Jiangsu Province. **remarks:** Growing period 89 days. Plants 74.6cm tall, spiny. Branching angle 56 degrees. Head diameter-1.99cm. Flowers orange. 100 seed weight-5.4g. Oil content-22.46%. Annual. Cultivated. Seed.
- PI 544045 **origin:** China. **local name:** Honghua. **collected:** August 1983. **collector id:** BJ-479. **other id:** W6 272. **group:** W6. **locality:** Funing County, Jiangsu Province. **remarks:** Growing period 84 days. Plants 69.2cm tall, very spiny. Branching angle 43 degrees. Head diameter-2.06cm. Flowers orange. 100 seed weight-3.4g. Linoleic acid-81.8%. Oleic acid-9.6%. Stearic acid-1.8%. Palmitic acid-6.4%. Annual. Cultivated. Seed.
- PI 544046 **origin:** China. **local name:** Honghua. **collected:** August 1983. **collector id:** BJ-480. **other id:** W6 273. **group:** W6. **locality:** Lingquan County, Anhui Province. **remarks:** Growing period 84 days. Plants 78.6cm tall. Branching angle 41 degrees. Head diameter-1.84cm. 100 seed weight- 2.97g. Annual. Cultivated. Seed.
- PI 544047 **origin:** China. **local name:** Honghua. **collected:** May 1983. **collector id:** BJ-495. **other id:** W6 274. **group:** W6. **locality:** Jiangyin County, Jiangsu Province. **remarks:** Growing period 82 days. Plants 77.4cm tall, very spiny. Branching angle 43 degrees. Head diameter-2.11cm. Flowers orange. 100 seed weight-3.33g. Oil content-18.71%. Linoleic acid-80.3%. Oleic acid-12.0%. Stearic acid-1.8%. Palmitic acid-5.2%. Annual. Cultivated. Seed.

PI 543974 to 544063-continued

- PI 544048 **origin:** China. **local name:** Honghua. **collected:** March 1983. **collector id:** BJ-496. **other id:** W6 275. **group:** W6. **locality:** Wuwei county, Anhui Province. **remarks:** Plants 52.6cm tall. Branching angle 42 degrees. Head diameter-1.76cm. Flowers orange. Oil content-22.36%. Linoleic acid-77.0%. Oleic acid-13.8%. Stearic acid-2.2%. Palmitic acid-6.2%. Annual. Cultivated. Seed.
- PI 544049 **origin:** China. **local name:** Honghua. **collector id:** BJ-509. **other id:** W6 276. **group:** W6. **locality:** Taiping County, Anhui Province. **remarks:** Growing period 83 days. Plants 75.5cm tall, very spiny. Branching angle 52 degrees. Head diameter-2.2cm. Flowers orange. 100 seed weight-3.47g. Oil content-18.08%. Annual. Cultivated. Seed.
- PI 544050 **origin:** China. **local name:** Honghua. **collected:** October 1983. **collector id:** BJ-511. **other id:** W6 277. **group:** W6. **locality:** Wuxi City, Jiangsu Province. **remarks:** Growing period 86 days. Plants 64.2cm tall, spiny. Branching angle 44 degrees. Head diameter-2.04cm. Flowers orange. 100 seed weight-3.47g. Oil content-19.43%. Annual. Cultivated. Seed.
- PI 544051 **origin:** China. **local name:** Honghua. **collected:** October 1983. **collector id:** BJ-593. **other id:** W6 278. **group:** W6. **locality:** Chuanhong, Chongqing City, Sichuan Province. Annual. Cultivated. Seed.
- PI 544052 **origin:** China. **local name:** Honghua. **collected:** June 1987. **collector id:** BJ-2155. **other id:** ZW-971. **other id:** W6 279. **group:** W6. **locality:** Zhangye County, Gansu Province. **remarks:** Plants spineless. Flowers orange. Hull striped. Annual. Cultivated. Seed.
- PI 544053 **origin:** China. **local name:** Honghua. **collected:** June 1986. **collector id:** BJ-2156. **other id:** ZW-972. **other id:** W6 280. **group:** W6. **locality:** Zhangye County, Gansu Province. **remarks:** Plants spineless. Flowers orange. Hull striped. Annual. Cultivated. Seed.
- PI 544054 **origin:** China. **origin institute:** Hangzhou Pharmaceutical Institute. **collected:** July 08, 1988. **collector id:** C-1. **other id:** W6 281. **group:** W6. **remarks:** Plants 80cm tall, spiny type. Flowers orange. Matures April or May. Seed harvested 1988. Flowers used for medicinal purposes. Annual. Cultivated. Seed.

PI 543974 to 544063-continued

- PI 544055 **origin:** China. **origin institute:** Inst. of Industrial Crops, Urumqi, Xinjiang, Autonomous Region, PRC. **collected:** July 28, 1988. **collector id:** C-4. **other id:** XJ-12. **other id:** W6 282. **group:** W6. **remarks:** Donated by Dr. Wang Zhao-Mu. Flowers used for flower colors and medicinal purposes. Annual. Cultivated. Seed.
- PI 544056 **origin:** China. **origin institute:** Inst. of Industrial Crops, Urumqi, Xinjiang, Autonomous Region, PRC. **collected:** July 28, 1988. **collector id:** C-5. **other id:** XJ-26. **other id:** W6 283. **group:** W6. **remarks:** Donated by Dr. Wang Zhao-Mu. Flowers used for flower colors and medicinal purposes. Annual. Cultivated. Seed.
- PI 544057 **origin:** China. **origin institute:** Inst. of Industrial Crops, Urumqi, Xinjiang, Autonomous Region, PRC. **collected:** July 28, 1988. **collector id:** C-6. **other id:** XJ-59. **other id:** W6 284. **group:** W6. **remarks:** Donated by Dr. Wang Zhao-Mu. Flowers used for flower colors and medicinal purposes. Annual. Cultivated. Seed.
- PI 544058 **origin:** China. **origin institute:** Inst. of Industrial Crops, Urumqi, Xinjiang, Autonomous Region, PRC. **collected:** July 28, 1988. **collector id:** C-7. **other id:** XJ-68. **other id:** W6 285. **group:** W6. **remarks:** Donated by Dr. Wang Zhao-Mu. Flowers used for flower colors and medicinal purposes. Annual. Cultivated. Seed.
- PI 544059 **origin:** China. **origin institute:** Inst. of Industrial Crops, Urumqi, Xinjiang, Autonomous Region, PRC. **collected:** July 28, 1988. **collector id:** C-8. **other id:** XJ-80. **other id:** W6 286. **group:** W6. **remarks:** Donated by Dr. Wang Zhao-Mu. Flowers used for flower colors and medicinal purposes. Annual. Cultivated. Seed.
- PI 544060 **origin:** China. **origin institute:** Inst. of Industrial Crops, Urumqi, Xinjiang, Autonomous Region, PRC. **collected:** July 28, 1988. **collector id:** C-9. **other id:** XJ-81. **other id:** W6 287. **group:** W6. **remarks:** Donated by Dr. Wang Zhao-Mu. Flowers used for flower colors and medicinal purposes. Annual. Cultivated. Seed.
- PI 544061 **origin:** China. **collected:** July 23, 1988. **collector id:** C-10. **other id:** W6 288. **group:** W6. **locality:** Red Flag farm, 30km N of Jimusaer, NE of Urumqi, Xinjiang Autonomous Region. **remarks:** Plants spineless. Flowers red or orange. Used for extraction of yellow and red pigments. Annual. Cultivated. Seed.

PI 543974 to 544063-continued

PI 544062 **origin:** China. **origin institute:** Qinghai Academy of Agr. and Forestry, Xining, Qinghai Prov, Qinghai. **collected:** July 17, 1988. **collector id:** C-3. **other id:** W6 289. **group:** W6. **remarks:** Plants 90cm tall, spiny (probably). Flowers used for medicinal purposes. Annual. Cultivated. Seed.

PI 544063 **origin:** China. **origin institute:** Qinghai Academy of Agr. and Forestry, Xining, Qinghai Prov, Qinghai. **collected:** July 17, 1988. **collector id:** C-2. **other id:** W6 290. **group:** W6. **remarks:** Plants 90cm tall, spiny (probably). Flowers used for medicinal purposes. Annual. Cultivated. Seed.

PI 544064. *Festuca arundinacea* Schreber POACEAE Tall fescue

Donated by: Hubbard Seed and Supply, United States. Received October 15, 1990.

origin: United States. **cultivar:** HUBBARD 87. **other id:** PVP 9100001. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 544065. *Zea mays* L. subsp. *mays* POACEAE Corn

Donated by: Northrup King Co., United States. Received October 15, 1990.

origin: United States. **cultivar:** BCC03. **other id:** PVP 9100002. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 544066. *Lactuca sativa* L. ASTERACEAE Lettuce

Donated by: Rijk Zwaan Zaadteelt en Zaadhandel B.V., United States. Received October 15, 1990.

origin: United States. **cultivar:** RAISA. **other id:** PVP 9100003. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 544067. *Cichorium endivia* L. ASTERACEAE Endive

Donated by: Rijk Zwaan Zaadteelt en Zaadhandel B.V., United States. Received October 15, 1990.

PI 544067-continued

origin: United States. **cultivar:** PRISCILLA. **other id:** PVP 9100004. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 544068. *Medicago sativa* L. FABACEAE Alfalfa

Donated by: Thaddeus H. Busbice, United States. Received October 15, 1990.

origin: United States. **cultivar:** CIMARRON VR. **other id:** PVP 9100005. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 544069. *Sorghum bicolor* (L.) Moench POACEAE Sorghum

Donated by: Pioneer Hi-Bred International, United States. Received October 15, 1990.

origin: United States. **cultivar:** PH352. **other id:** PVP 9100007. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 544070. *Vigna unguiculata* (L.) Walp. FABACEAE Cowpea

Donated by: Texas Agr. Exp. Sta., United States. Received October 15, 1990.

origin: United States. **cultivar:** TEXAS PINKEYE. **other id:** PVP 9100008. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 544071 to 544072. *Phaseolus vulgaris* L. FABACEAE Garden bean

Donated by: Ferry-Morse Seed Co., United States. Received October 15, 1990.

PI 544071 **origin:** United States. **cultivar:** BELMONT. **other id:** PVP 9100009. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 544072 **origin:** United States. **cultivar:** RAPIDS. **other id:** PVP 9100010. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 544073 to 544074. *Gossypium hirsutum* L. MALVACEAE Cotton

Donated by: Lubrizol dba Agrigenetics, United States. Received October 15, 1990.

PI 544073 **origin:** United States. **cultivar:** GSC1054. **other id:** PVP 9000270. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 544074 **origin:** United States. **cultivar:** GSC1059. **other id:** PVP 9000271. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 544075 to 544076. *Hordeum vulgare* L. POACEAE Barley

Donated by: Hayes, P.M., Oregon Agric. Exp. Station, Corvallis, Oregon, United States. Received September 26, 1990.

PI 544075 **origin:** United States. **pedigree:** OSB74133-2S-1K-91K/Minn M33. **other id:** ORS-2. **remarks:** Spike six-row type. Developed as a feed barley. Spring Annual. Cultivated. Seed.

PI 544076 **origin:** United States. **pedigree:** OSB74133-2S-1K-91K/Minn M33. **other id:** ORS-3. **remarks:** Spike six-row type. Developed as a feed barley. Spring Annual. Cultivated. Seed.

PI 544077 to 544078. *Hordeum vulgare* L. POACEAE Barley

Donated by: Kolding, M.F., Oregon Agric. Exp. Station, Pendleton, Oregon, United States. Received September 26, 1990.

PI 544077 **origin:** United States. **pedigree:** Steptoe/MN 66102/WA 6124-62. **other id:** ORFB-006. **other id:** FB78444-006. **remarks:** Plants medium tall. Six-row type. Straw stiff. Kernels covered. Aleurone white. Beards nearly smooth, rachilla hairs long, lemma base transverse, hulls semi-wrinkled, lemma hairs nearly absent, basal rachis short curved. Spike lax. Maturity mid-late. Spring Annual. Cultivated. Seed.

PI 544078 **donor id:** ORFB-1209. **origin:** United States. **pedigree:** Selection #FBOB 74-23 from MN 12-6. **other id:** ORFB-1209. **other id:** FB741209. **remarks:** Plants medium tall. Six-row type. Straw stiff. Kernel covered. Aleurone white. Spike nearly lax, rachilla hairs short, beards rough, crease closed bottom half, flared top half. Hulls semi-wrinkled. Maturity medium. Original selection by D.C. Rasmussen, University of Minnesota. Spring Annual. Cultivated. Seed.

PI 544079 to 544345. *Aeschynomene americana* L. FABACEAE Joint-vetch

Donated by: Kretschmer, Jr., A.E., IFAS, AREC, P.O. Box 248, Ft. Pierce, Florida, United States. Received August 1990.

PI 544079 **donor id:** 3197. **origin:** Brazil. **collected:** November 20, 1978. **other id:** CIAT 9694. **locality:** Para State. Wild. Seed.

PI 544080 **donor id:** 5202. **origin:** Mexico. **collected:** September 12, 1980. **other id:** CPI 91155. **other id:** MEX 993. **locality:** 36.8km W of Teloloapan on road to Ciudad Altamirano, Guerrero State. **latitude:** 18 deg. 00 min. N. **elevation:** 1100m. **remarks:** Flowers pink. Annual rainfall 1000mm. Wild. Seed.

PI 544081 **donor id:** 5203. **origin:** Mexico. **collected:** September 12, 1980. **other id:** CPI 91158. **other id:** MEX 993. **locality:** 43km W of Teloloapan on road to Ciudad Altamirano, Guerrero State. **latitude:** 18 deg. 00 min. N. **elevation:** 800m. **remarks:** Annual rainfall 900mm. Wild. Seed.

PI 544082 **donor id:** 470. **origin:** UNKNOWN. **collected:** May 13, 1961. **other id:** CPI 93552. Wild. Seed.

PI 544083 **donor id:** 519. **origin:** United States. **collected:** September 19, 1962. **locality:** Florida State. Wild. Seed.

PI 544084 **donor id:** 1010. **origin:** United States. **locality:** E. Hodges Range Cattle Station, 1966, Ona, Florida. Wild. Seed.

PI 544085 **donor id:** 1197. **origin:** Costa Rica. **collected:** March 06, 1970. **collector id:** 43S. **locality:** Finca El Muelle, San Carlos, Ciudad Quesada, Alajuela State. **latitude:** 11 deg. 29 min. N. **longitude:** 84 deg. 28 min. W. **elevation:** 200m. **remarks:** Annual rainfall 1804. Wild. Seed.

PI 544086 **donor id:** 1710. **origin:** Brazil. **collected:** January 23, 1974. **locality:** Sao Paulo State. **remarks:** Plants tall. Perennial. Wild. Seed.

PI 544087 **donor id:** 1725. **origin:** Belize. **collected:** March 16, 1974. **other id:** CPI 93554. **locality:** Southern border of Beaver Creek. Wild. Seed.

PI 544088 **donor id:** 1726. **origin:** Honduras. **collected:** March 14, 1974. **other id:** CPI 93555. **locality:** Midence Finca, Trujillo. Wild. Seed.

PI 544079 to 544345-continued

- PI 544089 **donor id:** 1982. **origin:** Brazil. **collected:** May 11, 1976. **other id:** CPI 93556. **locality:** North of Airstrip, Brazilandia, Mato Grosso State. **latitude:** 21 deg. 25 min. S. **longitude:** 52 deg. 05 min. W. **remarks:** Stem-common type, smooth. Sample No. 25. Wild. Seed.
- PI 544090 **donor id:** 2032. **origin:** Brazil. **collected:** May 19, 1976. **other id:** CPI 93623. **locality:** South entrance, opposite main gate, 36km from Miranda on road to Corumba, Mato Grosso State. **latitude:** 20 deg. 07 min. S. **longitude:** 56 deg. 43 min. W. **remarks:** Pods not hairy. Sample No. 76. MI3019932. Wild. Seed.
- PI 544091 **donor id:** 2036. **origin:** Brazil. **collected:** May 19, 1976. **other id:** CPI 93624. **locality:** Fazenda Tapoco, 50km N of Aquidauana, Mato Grosso State. **latitude:** 20 deg. 02 min. S. **longitude:** 55 deg. 58 min. W. **remarks:** Pods hairy. Sample No. 80. MI301993. Wild. Seed.
- PI 544092 **donor id:** 2054. **origin:** Colombia. **collected:** May 23, 1976. **other id:** CPI 93557. **locality:** Leticia State. **latitude:** 4 deg. 10 min. S. **longitude:** 69 deg. 56 min. W. **remarks:** Sample No. 98. MI 3019931. Wild. Seed.
- PI 544093 **donor id:** 2190. **origin:** Mexico. **collected:** June 22, 1977. **other id:** CF-450. **locality:** Dry area, along 3m raised road bed, Campeche road by 98km Stone, Muna, Yucatan State. **latitude:** 20 deg. 05 min. S. **elevation:** 100m. **remarks:** Annual rainfall 1050mm. Wild. Seed.
- PI 544094 **donor id:** 2258. **origin:** Belize. **collected:** June 22, 1977. **other id:** CF-288. **locality:** Mt. Pine Ridge, Bull Run, NE corner of House area, E of Gate. **latitude:** 17 deg. 25 min. S. **elevation:** 560m. **remarks:** Flowers yellow. Annual rainfall 2000mm. Grazed heavily a year previously. Wild. Seed.
- PI 544095 **donor id:** 2365. **origin:** UNKNOWN. **collected:** March 15, 1978. **other id:** CPI 37350. Wild. Seed.
- PI 544096 **donor id:** 2366. **origin:** UNKNOWN. **collected:** March 15, 1978. **other id:** CPI 37375. Wild. Seed.
- PI 544097 **donor id:** 2367. **origin:** UNKNOWN. **collected:** March 15, 1978. **other id:** CPI 37413. Wild. Seed.
- PI 544098 **donor id:** 2376. **origin:** Indonesia. **collected:** March 15, 1978. **other id:** CPI 70244. **locality:** Bogor, Java State. Wild. Seed.

PI 544079 to 544345-continued

- PI 544099 donor id: 2800. origin: Panama. collected: May 1978.
other id: CPI 93568. other id: CIAT 7001. locality:
Cocle State. Wild. Seed.
- PI 544100 donor id: 2803. origin: Panama. collected: May 1978.
other id: CIAT 7004. locality: Cocle State. Wild.
Seed.
- PI 544101 donor id: 2805. origin: Panama. collected: May 1978.
other id: CPI 93569. other id: CIAT 7006. locality:
Herrera State. Wild. Seed.
- PI 544102 donor id: 2808. origin: Panama. collected: May 1978.
other id: CIAT 7009. locality: Los Santos State. Wild.
Seed.
- PI 544103 donor id: 2811. origin: Panama. collected: May 1978.
other id: CPI 93570. other id: CIAT 7012. locality:
Herrera State. Wild. Seed.
- PI 544104 donor id: 2812. origin: Panama. collected: May 1978.
other id: CPI 93571. other id: CIAT 7013. locality: Los
Santos State. Wild. Seed.
- PI 544105 donor id: 2813. origin: Panama. collected: May 1978.
other id: CPI 93572. other id: CIAT 7014. locality:
Herrera State. Wild. Seed.
- PI 544106 donor id: 2814. origin: Panama. collected: May 1978.
other id: CIAT 7015. locality: Veraguas State. Wild.
Seed.
- PI 544107 donor id: 2816. origin: Panama. collected: May 1978.
other id: CIAT 7018. locality: Veraguas State. Wild.
Seed.
- PI 544108 donor id: 2817. origin: Panama. collected: May 1978.
other id: CIAT 7019. locality: Chiriqui State. Wild.
Seed.
- PI 544109 donor id: 2819. origin: Panama. collected: May 1978.
other id: CPI 93573. other id: CIAT 7022. locality:
Chiriqui State. Wild. Seed.
- PI 544110 donor id: 2821. origin: Panama. collected: May 1978.
other id: CIAT 7024. locality: Chiriqui State. Wild.
Seed.
- PI 544111 donor id: 2822. origin: Panama. collected: May 1978.
other id: CIAT 7025. locality: Chiriqui State. Wild.
Seed.

PI 544079 to 544345-continued

- PI 544112 donor id: 2823. origin: Panama. collected: May 1978.
other id: CPI 93574. other id: CIAT 7026. locality:
Chiriqui State. Wild. Seed.
- PI 544113 donor id: 2825. origin: Panama. collected: May 1978.
other id: CIAT 7028. locality: Chiriqui State. Wild.
Seed.
- PI 544114 donor id: 2826. origin: Venezuela. collected: May 1978.
other id: CPI 93575. other id: CIAT 7247. locality:
Miranda State. Wild. Seed.
- PI 544115 donor id: 2827. origin: Venezuela. collected: May 1978.
other id: CPI 93576. other id: CIAT 7248. locality:
Aragua State. Wild. Seed.
- PI 544116 donor id: 2829. origin: Venezuela. collected: May 1978.
other id: CIAT 7251. locality: Guarico State. Wild.
Seed.
- PI 544117 donor id: 2830. origin: Venezuela. collected: May 1978.
other id: CPI 93977. other id: CIAT 7252. locality:
Guarico State. Wild. Seed.
- PI 544118 donor id: 2831. origin: Venezuela. collected: May 1978.
other id: CIAT 7257. locality: Guarico State. Wild.
Seed.
- PI 544119 donor id: 2832. origin: Venezuela. collected: May 1978.
other id: CPI 93578. other id: CIAT 7258. locality:
Guarico State. Wild. Seed.
- PI 544120 donor id: 2842. origin: Venezuela. collected: May 1978.
other id: CIAT 7270. locality: Monagas State. Wild.
Seed.
- PI 544121 donor id: 2847. origin: Venezuela. collected: May 1978.
other id: CIAT 7277. locality: Anzoategui State. Wild.
Seed.
- PI 544122 donor id: 2848. origin: Venezuela. collected: May 1978.
other id: CIAT 7278. locality: Miranda State. Wild.
Seed.
- PI 544123 donor id: 2849. origin: Venezuela. collected: May 1978.
other id: CIAT 7280. other id: CPI 85843. other id:
93669. locality: Guarico State. Wild. Seed.
- PI 544124 donor id: 2850. origin: Venezuela. collected: May 1978.
other id: CIAT 7281. locality: Guarico State. Wild.
Seed.

PI 544079 to 544345-continued

- PI 544125 donor id: 2851. origin: Venezuela. collected: May 1978.
other id: CIAT 7282. locality: Guarico State. Wild.
Seed.
- PI 544126 donor id: 2855. origin: Colombia. collected: May 1978.
other id: CIAT 9250. locality: Meta State. Wild. Seed.
- PI 544127 donor id: 2857. origin: Colombia. collected: May 1978.
other id: CPI 93632. other id: CIAT 9256. locality:
Meta State. Wild. Seed.
- PI 544128 donor id: 2858. origin: Colombia. collected: May 1978.
other id: CIAT 9291. locality: Meta State. Wild. Seed.
- PI 544129 donor id: 2861. origin: Colombia. collected: May 1978.
other id: CIAT 9557. locality: Cauca State. Wild.
Seed.
- PI 544130 donor id: 2864. origin: Colombia. collected: May 1978.
other id: CIAT 9565. locality: Valle Del Cauca, Cauca
State. Wild. Seed.
- PI 544131 donor id: 2868. origin: Colombia. collected: May 1978.
other id: CIAT 9569. locality: Valle Del Cauca, Cauca
State. Wild. Seed.
- PI 544132 donor id: 2875. origin: Colombia. collected: May 1978.
other id: CIAT 9670. locality: Sucre, Bolivar State.
Wild. Seed.
- PI 544133 donor id: 2897. origin: Colombia. collected: May 1978.
other id: CIAT 9873. locality: Antioquia State. Wild.
Seed.
- PI 544134 donor id: 2900. origin: Colombia. collected: May 1978.
other id: CIAT 9876. locality: Antioquia State. Wild.
Seed.
- PI 544135 donor id: 2901. origin: Colombia. collected: May 1978.
other id: CIAT 9877. locality: Antioquia State. Wild.
Seed.
- PI 544136 donor id: 2904. origin: Colombia. collected: May 1978.
other id: CPI 93580. other id: CIAT 7880. locality:
Choco State. Wild. Seed.
- PI 544137 donor id: 2905. origin: Colombia. collected: May 1978.
other id: CPI 93581. other id: CIAT 9881. locality:
Choco State. Wild. Seed.

PI 544079 to 544345-continued

- PI 544138 donor id: 2906. origin: Colombia. collected: May 1978.
other id: CPI 93582. other id: CIAT 9882. locality:
Choco State. Wild. Seed.
- PI 544139 donor id: 2908. origin: Colombia. collected: May 1978.
other id: CIAT 9927. locality: Magdalena State. Wild.
Seed.
- PI 544140 donor id: 2910. origin: Colombia. collected: May 1978.
other id: CIAT 9929. locality: Magdalena State. Wild.
Seed.
- PI 544141 donor id: 2911. origin: Colombia. collected: May 1978.
other id: CIAT 9930. locality: Magdalena State. Wild.
Seed.
- PI 544142 donor id: 2913. origin: Colombia. collected: May 1978.
other id: CIAT 9932. locality: Antioquia State. Wild.
Seed.
- PI 544143 donor id: 2914. origin: Colombia. collected: May 1978.
other id: CIAT 9933. locality: Antioquia State. Wild.
Seed.
- PI 544144 donor id: 2915. origin: Colombia. collected: May 1978.
other id: CPI 93672. other id: CIAT 9934. locality:
Antioquia State. Wild. Seed.
- PI 544145 donor id: 2916. origin: Colombia. collected: May 1978.
other id: CPI 93583. other id: CIAT 9935. locality:
Antioquia State. Wild. Seed.
- PI 544146 donor id: 2917. origin: Colombia. collected: May 1978.
other id: CIAT 9936. locality: Antioquia State. Wild.
Seed.
- PI 544147 donor id: 2918. origin: Colombia. collected: May 1978.
other id: CIAT 9937. locality: Antioquia State. Wild.
Seed.
- PI 544148 donor id: 2919. origin: Colombia. collected: May 1978.
other id: CIAT 9938. locality: Risaralda State. Wild.
Seed.
- PI 544149 donor id: 2921. origin: Colombia. collected: May 1978.
other id: CIAT 9995. locality: Valle Del Cauca, Cauca
State. Wild. Seed.
- PI 544150 donor id: 2922. origin: Colombia. collected: May 1978.
other id: CIAT 9996. locality: Valle Del Cauca, Cauca
State. Wild. Seed.

PI 544079 to 544345-continued

- PI 544151 **donor id:** 2923. **origin:** Panama. **collected:** May 1978.
other id: CPI 93584. **other id:** CIAT 9997. **locality:**
Panama State. Wild. Seed.
- PI 544152 **donor id:** 2924. **origin:** Panama. **collected:** May 1978.
other id: CIAT 9998. **locality:** Panama State. Wild.
Seed.
- PI 544153 **donor id:** 2930. **origin:** Colombia. **collected:** April 16,
1978. **collector id:** 6. **locality:** Dry area, 3km from
Lake Calimo on road to Buena Ventura. **latitude:** 3 deg.
52 min. N. **longitude:** 76 deg. 35 min. W. Wild. Seed.
- PI 544154 **donor id:** 2931. **origin:** Colombia. **collected:** April 16,
1978. **collector id:** 6. **locality:** Dry area, 3km from
Lake Calimo on road to Buena Ventura. **latitude:** 3 deg.
52 min. N. **longitude:** 76 deg. 35 min. W. Wild. Seed.
- PI 544155 **donor id:** 2966. **origin:** UNKNOWN. **collected:** May 17,
1978. **other id:** CPI 93585. **other id:** CF 660. Wild.
Seed.
- PI 544156 **donor id:** 2967. **origin:** Guatemala. **collected:** May 17,
1978. **other id:** CIAT 3229. **other id:** CF 76. Wild.
Seed.
- PI 544157 **donor id:** 2968. **origin:** Mexico. **collected:** May 17,
1978. **other id:** CF 323. **locality:** Yucatan State. Wild.
Seed.
- PI 544158 **donor id:** 2974. **origin:** Honduras. **collected:** May 28,
1978. **locality:** Paragrass Pasture, front of house,
Carver Tropical Ltd., Belize. **latitude:** 17 deg. 80 min.
N. **longitude:** 88 deg. 45 min. W. Wild. Seed.
- PI 544159 **donor id:** 2975. **origin:** Honduras. **collected:** May 28,
1978. **locality:** Carver Tropical Ltd., barn, Belize.
latitude: 17 deg. 80 min. N. **longitude:** 88 deg. 45 min.
W. Wild. Seed.
- PI 544160 **donor id:** 2993. **origin:** Zambia. **collected:** August 07,
1978. **other id:** CPI 70253. **remarks:** Seed in GPBank 6.
Wild. Seed.
- PI 544161 **donor id:** 3155. **origin:** Dominican Republic. **collected:**
November 13, 1978. **locality:** Pasture Ginebro No. 1Y, NO.
51, 7km from La Rowcena on La Carretara. Wild. Seed.
- PI 544162 **donor id:** 3157. **origin:** Dominican Republic. **collected:**
November 13, 1978. **locality:** 14km Pedro Sanchez. Wild.
Seed.

PI 544079 to 544345-continued

- PI 544163 donor id: 3162. origin: Venezuela. collected: November 20, 1978. other id: CPI 93639. other id: CIAT 315. locality: Barinas State. Wild. Seed.
- PI 544164 donor id: 3163. origin: Colombia. collected: November 20, 1978. other id: CIAT 356. locality: Atlantico State. Wild. Seed.
- PI 544165 donor id: 3164. origin: Colombia. collected: November 20, 1978. other id: CPI 93640. other id: CIAT 396. locality: Antioquia State. Wild. Seed.
- PI 544166 donor id: 3165. origin: Colombia. collected: November 20, 1978. other id: CIAT 724. other id: IRF3667. locality: Narino State. Wild. Seed.
- PI 544167 donor id: 3166. origin: Peru. collected: November 20, 1978. other id: CIAT 942. Wild. Seed.
- PI 544168 donor id: 3168. origin: Venezuela. collected: November 20, 1978. other id: CPI 93641. other id: CIAT 3153. locality: Anzoategui State. Wild. Seed.
- PI 544169 donor id: 3172. origin: Panama. collected: November 20, 1978. other id: CPI 93586. other id: CIAT 7000. locality: Cocle State. Wild. Seed.
- PI 544170 donor id: 3173. origin: Venezuela. collected: November 20, 1979. other id: CPI 93642. other id: CIAT 7391. locality: Monagas State. Wild. Seed.
- PI 544171 donor id: 3176. origin: Venezuela. collected: November 20, 1978. other id: CPI 93587. other id: CIAT 7253. locality: Guarico State. Wild. Seed.
- PI 544172 donor id: 3177. origin: Venezuela. collected: November 20, 1978. other id: CIAT 7254. locality: Guarico State. Wild. Seed.
- PI 544173 donor id: 3190. origin: Colombia. collected: November 20, 1978. other id: CPI 93588. other id: CIAT 9149. locality: Valle Del Cauca, Cacuca State. Wild. Seed.
- PI 544174 donor id: 3343. origin: Mexico. collected: March 11, 1978. collector id: 4A. other id: CPI 93645. locality: 142km from Huajuapán De León to Oaxaca, Oaxaca State. latitude: 17 deg. 15 min. N. longitude: 97 deg. 04 min. W. elevation: 1550m. Perennial. Wild. Seed.

PI 544079 to 544345-continued

- PI 544175 **donor id:** 3345. **origin:** Mexico. **collected:** March 11, 1980. **collector id:** 5. **other id:** CPI 93646. **locality:** 27km NW of Oaxaca, Oaxaca State. **latitude:** 17 deg. 15 min. N. **longitude:** 96 deg. 52 min. W. **elevation:** 1000m. Wild. Seed.
- PI 544176 **donor id:** 3353. **origin:** Mexico. **collected:** March 12, 1980. **collector id:** 7F. **locality:** 2km S of intersection on Hwy 131 Oaxaca to Escondido about 15km S of Oaxaca, Oaxaca State. **latitude:** 16 deg. 56 min. N. **longitude:** 96 deg. 44 min. W. **elevation:** 1200m. **remarks:** Annual rainfall 600mm. Wild. Seed.
- PI 544177 **donor id:** 3358. **origin:** Mexico. **collected:** March 12, 1980. **collector id:** 9B. **locality:** 17km SW of Sola de Vega, Oaxaca State. **latitude:** 16 deg. 30 min. N. **longitude:** 97 deg. 00 min. W. **elevation:** 1500m. **remarks:** Transplanted plant. No seeds. Annual rainfall 700mm. Wild. Plant.
- PI 544178 **donor id:** 3367. **origin:** Mexico. **collected:** March 12, 1980. **collector id:** 15A. **other id:** CPI 93648. **other id:** MEX 349. **locality:** 17km S of Juchantengo, Sanpedro, Oaxaca State. **latitude:** 16 deg. 15 min. N. **longitude:** 97 deg. 10 min. W. **elevation:** 1500m. **remarks:** Plants large. Annual rainfall 800mm. Wild. Seed.
- PI 544179 **donor id:** 3421. **origin:** Mexico. **collected:** March 25, 1980. **collector id:** 43B. **other id:** CPI 93651. **locality:** 1 km W from Catemaco at intersection 350m, Veracruz State. **latitude:** 18 deg. 30 min. N. **longitude:** 95 deg. 10 min. W. **elevation:** 300m. **remarks:** Annual rainfall 2300mm. Wild. Seed.
- PI 544180 **donor id:** 3434. **origin:** Mexico. **collected:** March 25, 1980. **collector id:** 47A. **locality:** 12km S of Santiago Tuxtla, Veracruz State. **latitude:** 18 deg. 28 min. N. **longitude:** 95 deg. 26 min. W. **elevation:** 200m. **remarks:** Annual rainfall 2200mm. Soil pH 6.5. Wild. Seed.
- PI 544181 **donor id:** 3435. **origin:** Mexico. **collected:** March 25, 1980. **collector id:** 47B. **locality:** 12km S of Santiago Tuxtla, Veracruz State. **latitude:** 18 deg. 28 min. N. **longitude:** 95 deg. 26 min. W. **elevation:** 200m. **remarks:** Annual rainfall 2200mm. Soil pH 6.5. Wild. Seed.

PI 544079 to 544345-continued

- PI 544182 **donor id:** 3442. **origin:** Mexico. **collected:** March 25, 1980. **collector id:** 48C. **other id:** CPI 93654. **locality:** 29km S of Santiago Tuxtla, Veracruz State. **latitude:** 18 deg. 13 min. N. **longitude:** 95 deg. 26 min. W. **elevation:** 200m. **remarks:** Annual rainfall 2200mm. Wild. Seed.
- PI 544183 **donor id:** 3443. **origin:** Mexico. **collected:** March 25, 1980. **collector id:** 49A. **locality:** 39km S of Santiago Tuxtla, Veracruz State. **latitude:** 18 deg. 12 min. N. **longitude:** 95 deg. 31 min. W. Wild. Seed.
- PI 544184 **donor id:** 3448. **origin:** Mexico. **collected:** March 25, 1980. **collector id:** 51B. **other id:** CPI 93590. **locality:** 20km N of intersection, Veracruz State. **latitude:** 18 deg. 17 min. N. **longitude:** 95 deg. 53 min. W. Wild. Seed.
- PI 544185 **donor id:** 3450. **origin:** Mexico. **collected:** March 25, 1980. **collector id:** 52A. **locality:** 69km from intersection, 1 km Amatclan, Veracruz State. **latitude:** 18 deg. 26 min. N. **longitude:** 95 deg. 44 min. W. Wild. Seed.
- PI 544186 **donor id:** 3451. **origin:** Mexico. **collected:** March 25, 1980. **collector id:** 52B. **other id:** CPI 93657. **locality:** 69km from intersection, 1 km from Veracruz State. Amatclan, Veracruz State. **latitude:** 18 deg. 26 min. N. **longitude:** 95 deg. 44 min. W. Wild. Seed.
- PI 544187 **donor id:** 3452. **origin:** Mexico. **collected:** March 25, 1980. **collector id:** 52C. **locality:** 69km from intersection, 1 km from Amatclan, Veracruz State. **latitude:** 18 deg. 26 min. N. **longitude:** 95 deg. 44 min. W. Wild. Seed.
- PI 544188 **donor id:** 3467. **origin:** Mexico. **collected:** March 25, 1980. **collector id:** 57C. **locality:** 1 km W of 25km sign to Cardenas, Tabasco State. **latitude:** 18 deg. 02 min. N. **longitude:** 94 deg. 16 min. W. Wild. Seed.
- PI 544189 **donor id:** 3471. **origin:** Mexico. **collected:** March 25, 1980. **collector id:** 59B. **other id:** CPI 93661. **locality:** 4km W of Hwy marker 90, Tabasco State. **latitude:** 17 deg. 59 min. N. **longitude:** 93 deg. 41 min. W. Wild. Seed.
- PI 544190 **donor id:** 3473. **origin:** Mexico. **collected:** March 25, 1980. **collector id:** 60A. **other id:** CPI 93589. **locality:** Lawn of Dr. A. Romero, Tabasco State. **latitude:** 18 deg. 02 min. N. **longitude:** 93 deg. 22 min. W. Wild. Seed.

PI 544079 to 544345-continued

- PI 544191 **donor id:** 3484. **origin:** Mexico. **collected:** March 25, 1980. **collector id:** 62G. **other id:** CPI 93663. **locality:** 11km W from Tierra Nueva, Tabasco State. **latitude:** 17 deg. 38 min. N. **longitude:** 93 deg. 33 min. W. **remarks:** Identified by V.E. Rudd, Bank 8. Wild. Seed.
- PI 544192 **donor id:** 3487. **origin:** Mexico. **collected:** March 25, 1980. **collector id:** 63B. **other id:** CPI 93664. **locality:** 13km W from Tierra Nueva, Tabasco State. **latitude:** 17 deg. 38 min. N. **longitude:** 93 deg. 34 min. W. **remarks:** Identified by V.E. Rudd. Wild. Seed.
- PI 544193 **donor id:** 3490. **origin:** Mexico. **collected:** March 25, 1980. **collector id:** 64C. **other id:** CPI 93665. **locality:** 12km S of Huimangilla, Tabasco State. **latitude:** 17 deg. 44 min. N. **longitude:** 93 deg. 27 min. W. **remarks:** Wild. Seed.
- PI 544194 **donor id:** 3493. **origin:** Mexico. **collected:** March 25, 1980. **collector id:** 65B. **locality:** 1 km W of intersection S of Estacion, Chonpalpa, Tabasco State. **latitude:** 17 deg. 37 min. N. **longitude:** 93 deg. 28 min. W. **remarks:** Identified by V.E. Rudd. Wild. Seed.
- PI 544195 **donor id:** 3532. **origin:** Mexico. **collected:** March 29, 1980. **collector id:** 81A. **locality:** 21km N of Ocozocautla, Chiapas State. **latitude:** 16 deg. 56 min. N. **longitude:** 93 deg. 27 min. W. **elevation:** 850m. **remarks:** Identified by V.E. Rudd. Annual rainfall 1100mm. Wild. Seed.
- PI 544196 **donor id:** 3538. **origin:** Mexico. **collected:** March 29, 1980. **collector id:** 82D. **locality:** 100km S of 24km marker N of Ocozocautla, Chiapas State. **latitude:** 16 deg. 56 min. N. **longitude:** 93 deg. 27 min. W. **elevation:** 600m. **remarks:** Identified by V.E. Rudd. Annual rainfall 600mm. Wild. Seed.
- PI 544197 **donor id:** 3545. **origin:** Mexico. **collected:** March 29, 1980. **collector id:** 83G. **locality:** 27km road marker N of Ocozocautla, Chiapas State. **latitude:** 16 deg. 59 min. N. **longitude:** 93 deg. 26 min. W. **elevation:** 500m. **remarks:** Identified by V.E. Rudd. Wild. Seed.
- PI 544198 **donor id:** 3632. **origin:** Mexico. **collected:** February 16, 1980. **collector id:** 306. **other id:** CPI 93710. **other id:** MEX 306. **locality:** 5km S of Chamela, Jalisco State. **latitude:** 20 deg. 00 min. N. **elevation:** 20m. **remarks:** Soil pH 7.0. Annual rainfall 900mm. Wild. Seed.

PI 544079 to 544345-continued

- PI 544199 **donor id:** 3637. **origin:** Mexico. **collected:** March 1980. **other id:** CPI 93591. **locality:** Chiapas State. Wild. Seed.
- PI 544200 **donor id:** 3644. **origin:** Australia. **collected:** March 14, 1980. **other id:** CPI 58491. Wild. Seed.
- PI 544201 **donor id:** 3645. **origin:** Australia. **collected:** March 14, 1980. **other id:** CPI 58522. Wild. Seed.
- PI 544202 **donor id:** 3646. **origin:** Australia. **collected:** March 14, 1980. **other id:** CPI 70253. Wild. Seed.
- PI 544203 **donor id:** 3667. **origin:** Colombia. **collected:** May 13, 1980. **other id:** CIAT 0724. **locality:** Narino State. Wild. Seed.
- PI 544204 **donor id:** 3673. **origin:** Brazil. **collected:** May 13, 1980. **other id:** CIAT 7582. **locality:** Bahia State. Wild. Seed.
- PI 544205 **donor id:** 3677. **origin:** Colombia. **collected:** May 13, 1980. **other id:** CIAT 7400. **locality:** Valle Del Cauca, Cauca State. Wild. Seed.
- PI 544206 **donor id:** 3682. **origin:** Brazil. **collected:** May 13, 1980. **other id:** CIAT 7571. **locality:** Bahia State. Wild. Seed.
- PI 544207 **donor id:** 4102. **origin:** Costa Rica. **collected:** October 21, 1983. **collector id:** 21-1A. **other id:** CIAT 7571. **locality:** 2.8km W Tollgate, Hwy Median San Jose, Cartago State. **latitude:** 9 deg. 50 min. N. **longitude:** 84 deg. 00 min. W. **elevation:** 1172m. **remarks:** Associated species: Calopo, Teramnus uncinatus. Annual rainfall 1626mm. Wild. Seed.
- PI 544208 **donor id:** 4118. **origin:** Costa Rica. **collected:** October 23, 1983. **collector id:** 23-2A. **locality:** 3km N of Desamparados, 0.5km N of Cristiana Church in subdivision E side Hwy, San Jose State. **latitude:** 9 deg. 55 min. N. **longitude:** 84 deg. 08 min. W. **elevation:** 1160m. **remarks:** Annual rainfall 1340mm. Associated species: Centrosema pubescens. Wild. Seed.
- PI 544209 **donor id:** 4160. **origin:** United States. **collected:** May 09, 1984. **other id:** IRS 69. **locality:** Iberia and St. Mary Parish, all along LA Hwy 87, Clinton Shock, Louisiana. Wild. Seed.

PI 544079 to 544345-continued

- PI 544210 **donor id:** 4240. **origin:** Costa Rica. **collected:** December 10, 1984. **other id:** M2471209. **locality:** Finca Tapir Feeding Voucher, D. H. Janzen, La Pacifica, Guanacaste State. **elevation:** 5m. Wild. Seed.
- PI 544211 **donor id:** 4300. **origin:** Mexico. **collected:** March 01, 1985. **collector id:** 043G. **locality:** 1 km S of Pluma Hidalgo sign road Oaxaca to Puerto Angel Hwy 175, Pluma Hidalgo, Oaxaca State. **latitude:** 15 deg. 52 min.. **longitude:** 96 deg. 29 min.. **elevation:** 1000m. **remarks:** Associated species: *A. americana*, *Phaseolus lunatus*, *Indigofera* sp., *G. striata*, *D. barbatum*, *Teramnus* sp. Annual rainfall 635mm. Wild. Seed.
- PI 544212 **donor id:** 4335. **origin:** Mexico. **collected:** February 28, 1985. **collector id:** 039B. **locality:** 6.6km S La Maria Hwy 175 road Oaxaca-Puerto Angel, La Maria, Oaxaca State. **latitude:** 16 deg. 40 min. N. **longitude:** 96 deg. 44 min. W. **elevation:** 1450m. **remarks:** Plants dead. Associated species: *A. villosa*, *M. atropurpureum*, *Desmodium* sp., *Zornia* sp. Annual rainfall 635mm. Wild. Seed.
- PI 544213 **donor id:** 4348. **origin:** Mexico. **collected:** March 01, 1985. **collector id:** 043A. **locality:** 1 km S of Pluma Hidalgo sign road Oaxaca to Puerto Angel Hwy 175, Pluma Hidalgo, Oaxaca State. **latitude:** 15 deg. 52 min. N. **longitude:** 96 deg. 29 min. W. **elevation:** 1000m. **remarks:** Soil brought in. Associated species: *Phaseolus lanatus*, *Indigofera* sp., *G. striata*, *D. barbatum*, *Teramnus* sp. Annual rainfall 635mm. Wild. Seed.
- PI 544214 **donor id:** 4456. **origin:** Mexico. **collected:** March 06, 1985. **collector id:** 079G. **locality:** 11.3km N on Chicoasen Dam Road from intersection of Hwy 109, Tuxtla Gutierrez, Chiapas State. **latitude:** 16 deg. 51 min. N. **longitude:** 93 deg. 12 min. W. **elevation:** 850m. **remarks:** Annual rainfall 849mm. Associated species: *D. virgatus*, *M. atropurpureum*, *C. schottii*, unknown species. Wild. Seed.
- PI 544215 **donor id:** 4460. **origin:** Mexico. **collected:** March 06, 1985. **collector id:** 081. **locality:** 23.1 km N of intersection road to Chicoasen and Hwy 190, before tunnel on side, Tuxtla Gutierrez, Chiapas State. **latitude:** 16 deg. 57 min. N. **longitude:** 93 deg. 09 min. W. **elevation:** 825m. **remarks:** Annual rainfall 849mm. Identified by V.E. Rudd. Wild. Seed.

PI 544079 to 544345-continued

- PI 544216 **donor id:** 4471. **origin:** Mexico. **collected:** March 07, 1985. **collector id:** 085C. **locality:** 4.3km Ixtapa road to Soyala Hwy 195, Ixtapa, Chiapas State. **latitude:** 16 deg. 50 min. N. **longitude:** 92 deg. 55 min. W. **elevation:** 1140m. **remarks:** Annual rainfall 1703mm. Soil pH 6.0. Associated species: *S. humilis*, *D. barbatum*, *Teramnus uncinatus*, *A. villosa*, *Stylosanthes* sp., *D. scorpiuris*, *Zornia* sp., *Indigofera* sp., *S. guianensis*. Plants dead. Wild. Seed.
- PI 544217 **donor id:** 4561. **origin:** Mexico. **collected:** March 12, 1985. **collector id:** 113B. **locality:** 3.3km NE of intersection to La Libertad and Hwy 199, Palenque, Chiapas State. **latitude:** 17 deg. 35 min. N. **longitude:** 91 deg. 58 min. W. **elevation:** 50m. **remarks:** Annual rainfall 2032mm. Associated species: *Alysicarpus vaginalis*, *D. barbatum*, *M. gracile*, *G. striata*, *S. guianensis*, *A. villosa*. Wild. Seed.
- PI 544218 **donor id:** 4572. **origin:** Mexico. **collected:** March 12, 1985. **collector id:** 116B. **locality:** 3.3km S on Hwy 199 road to Palenque from Hwy 186, Catazaja, Chiapas State. **latitude:** 17 deg. 42 min. N. **longitude:** 91 deg. 45 min. W. **elevation:** 20m. **remarks:** Annual rainfall 2032mm. Associated species: *V. adenantha*. Plants dead. Wild. Seed.
- PI 544219 **donor id:** 4583. **origin:** Mexico. **collected:** March 12, 1985. **collector id:** 119E. **locality:** Hwy 186 marker 104, 9.9km W on Hwy 186 from intersection of Palenque Hwy 199, Catazaja, Chiapas State. **latitude:** 17 deg. 40 min. N. **longitude:** 92 deg. 03 min. W. **remarks:** Annual rainfall 2032mm. Associated species: *D. barbatum*, *S. guianensis*, *Zornia* sp., *Tephrosia* sp., *A. villosa*, *M. lathyroides*. Wild. Seed.
- PI 544220 **donor id:** 4598. **origin:** Mexico. **collected:** March 14, 1985. **collector id:** 124A. **locality:** 2.7km N of Saloya, 1 km N of Villahermosa, Saloya, Tabasco State. **latitude:** 18 deg. 06 min. N. **longitude:** 92 deg. 57 min.. **elevation:** 2m. **remarks:** Annual rainfall 2238mm. Associated species: *C. pubescens*, *V. adenantha*, *D. virgatus*. Seeds possibly not mature. Wild. Seed.
- PI 544221 **donor id:** 4643. **origin:** Mexico. **collected:** March 16, 1985. **collector id:** 139C. **locality:** 10.1km S of Camacho, 36km road marker S of Santiago Tuxtla-Isle, Veracruz State. **latitude:** 18 deg. 10 min. N. **longitude:** 95 deg. 30 min. W. **elevation:** 10m. **remarks:** Annual rainfall 1419mm. Plant dead. Associated species: *A. atropurpureum*, *C. pubescens*, *Desmodium* sp. Wild. Seed.

PI 544079 to 544345-continued

- PI 544222 **donor id:** 4650. **origin:** Mexico. **collected:** March 16, 1985. **collector id:** 140E. **locality:** 2.3km W of intersection from Santiago Tuxtla and road to Ciudad Aleman & Tuxtepec, Isla, Veracruz State. **latitude:** 18 deg. 03 min. N. **longitude:** 95 deg. 34 min. W. **elevation:** 50m. **remarks:** Annual rainfall 1419mm. Soil pH 4.5 to 4.8. Identified by V. Rudd. Associated species: *M. atropurpureum*, *D. barbatum*, *Zornia* sp., *S. guianensis*. Wild. Seed.
- PI 544223 **donor id:** 4652. **origin:** Mexico. **collected:** March 16, 1985. **collector id:** 142A. **locality:** 21.4km W from intersection at Isla road to Ciudad Aleman and Santiago Tuxtla, Ciudad Aleman, Veracruz State. **latitude:** 18 deg. 05 min. N. **longitude:** 95 deg. 45 min. W. **elevation:** 50m. **remarks:** Annual rainfall 1419mm. Plants dead. Associated species: *M. atropurpureum* but no seeds, *D. barbatum*. Wild. Seed.
- PI 544224 **donor id:** 4660. **origin:** Mexico. **collected:** March 16, 1985. **collector id:** 145B. **locality:** 11 km N of interection Cosamalaopan, Veracruz State. **latitude:** 18 deg. 11 min. N. **longitude:** 96 deg. 05 min. W. **elevation:** 60m. **remarks:** Annual rainfall 1419mm. Severe mildew. Associated species: *M. atropurpureum*. *D. virgatus*. Wild. Seed.
- PI 544225 **donor id:** 4695. **origin:** Argentina. **collected:** June 10, 1985. **other id:** E.B8215. **remarks:** From Ing. Agr. J. R. R. Tarrago, J. De La Delegacion Agricola ctes. Identified by V.E. Rudd. Wild. Seed.
- PI 544226 **donor id:** 4736. **origin:** Costa Rica. **collected:** April 23, 1986. **collector id:** 23-5. **locality:** Finca La Fortuna, San Carlos, Tabacon River, Agua Termales Restaurant, La Fortuna, Alajuela State. **latitude:** 10 deg. 17 min. N. **longitude:** 84 deg. 26 min. W. **elevation:** 250m. **remarks:** Annual rainfall 4653mm. Identified by V. E. Rudd. Wild. Seed.
- PI 544227 **donor id:** 4739. **origin:** Costa Rica. **collected:** April 24, 1986. **collector id:** 24-1. **locality:** Instituto Tecnologico de Costa Rica, Santa Clara, San Carlos, Alajuela State. **latitude:** 10 deg. 22 min. N. **longitude:** 84 deg. 31 min. W. **elevation:** 200m. **remarks:** Annual rainfall 4653mm. Wild. Seed.

PI 544079 to 544345-continued

- PI 544228 **donor id:** 4741. **origin:** Costa Rica. **collected:** April 28, 1986. **collector id:** 28-2. **locality:** On roadside at corner of road to N, 10km W of Siquirres Int. on road to Guapiles, 1 km W of Germania, Squirres, Limon State. **latitude:** 10 deg. 09 min. N. **longitude:** 83 deg. 35 min. W. **elevation:** 125m. **remarks:** Annual rainfall 3719mm. Associated species: *A americana*, *Desmodium* sp., *Desmodium barbatum*, *Erythrina*, *Pueraria phasioloides*. Wild. Seed.
- PI 544229 **donor id:** 4748. **origin:** Costa Rica. **collected:** April 28, 1986. **collector id:** 28-9. **locality:** Road siquirres-Guapiles, 2km W Willow Springs Ranch, or 5.5km E entrance of Guacimo, Limon State. **latitude:** 10 deg. 12 min. N. **longitude:** 83 deg. 39 min. W. **remarks:** Annual rainfall 3719mm. Wild. Seed.
- PI 544230 **donor id:** 4752. **origin:** Costa Rica. **collected:** April 29, 1986. **collector id:** 29-4. **locality:** 10km N of Montes del Aguacate, Alajuela State. **elevation:** 300m. **remarks:** Identified by V. E. Rudd. Associated species: *Desmodium barbatum*, *Zornia* sp. Wild. Seed.
- PI 544231 **donor id:** 4753. **origin:** Costa Rica. **collected:** April 29, 1986. **collector id:** 29-5. **locality:** 1 km S of Tarcoles Rio Bridge, Tarcoles, Puntarenas State. **latitude:** 09 deg. 48 min. N. **longitude:** 84 deg. 37 min. W. **elevation:** 50m. **remarks:** Identified by V. E. Rudd. Associated species: *Indigofera* (upright type), *Centrosema* species. Plants green. No flowers, but seeds mature. Plant dead. Annual rainfall 2000mm. Annual. Wild. Seed.
- PI 544232 **donor id:** 4759. **origin:** Costa Rica. **collected:** April 29, 1986. **collector id:** 29-11. **locality:** Quepos road to Dominical, 1 km N of Rio Tulin, Quepos, Puntarenas State. **latitude:** 09 deg. 24 min. N. **longitude:** 84 deg. 04 min. W. **elevation:** 10m. **remarks:** Annual rainfall 2887mm. Associated species: *Centrosema pubescens* present but no flowers or seeds. Wild. Seed.
- PI 544233 **donor id:** 4857. **origin:** Costa Rica. **collected:** March 04, 1987. **collector id:** 4/1C. **locality:** 15km S of Siquirres road to Turrialba, Siquirres, Turrialba State. **latitude:** 10 deg. 03 min. N. **longitude:** 83 deg. 36 min. W. **elevation:** 625m. **remarks:** Annual rainfall 3518mm. Associated species: *D. barbatum*, *A. americana*, *Centrosema* sp., *Calopogonium mucunopides*, *Mimosa* sp., *T. uncinatus*, *S. guianensis*, *D. intortum*. Perennial. Wild. Seed.

PI 544079 to 544345-continued

- PI 544234 **donor id:** 4863. **origin:** Costa Rica. **collected:** March 04, 1987. **collector id:** 4/II. **locality:** 15km S of Siquirres road to Turrialba, Siquirres, Turrialba State. **latitude:** 10 deg. 03 min. N. **longitude:** 83 deg. 36 min. W. **elevation:** 625m. **remarks:** Annual rainfall 3518mm. Associated species: *D. barbatum*, *A. americana*, *Centrosema* sp., *Calopogonium mucunopides*, *Mimosa* sp., *T. uncinatus*, *S. guianensis*, *D. intortum*. Plants dead. Annual. Wild. Seed.
- PI 544235 **donor id:** 4867. **origin:** Costa Rica. **collected:** March 05, 1987. **collector id:** 5/1B. **locality:** 22km E Esparza, Ruta 1, 88km, Esparza, Alajuela State. **latitude:** 10 deg. 20 min. N. **longitude:** 85 deg. 12 min. W. **elevation:** 900m. **remarks:** Annual rainfall 2262mm. Associated species: *Galactia striata*, *Teranmus uncinatus*, *Stylosanthes guianensis*. Wild. Seed.
- PI 544236 **donor id:** 4870. **origin:** Costa Rica. **collected:** March 06, 1987. **collector id:** 6/1. **locality:** 1 km N of Intersection (1 km E El Coco) to El Coco and Panama Beaches, El Coco Beach, Guanacaste State. **latitude:** 10 deg. 33 min. N. **longitude:** 85 deg. 41 min. W. **elevation:** 25m. **remarks:** Annual rainfall 960mm. Dead plants. Wild. Seed.
- PI 544237 **donor id:** 4871. **origin:** Costa Rica. **collected:** March 06, 1987. **collector id:** 6/2. **locality:** 1 km before Panama Beach road from El Coco Beach, Panama Beach, Guanacaste State. **latitude:** 10 deg. 34 min. N. **longitude:** 85 deg. 40 min. W. **elevation:** 25m. **remarks:** Annual rainfall 960mm. Dead plants. Wild. Seed.
- PI 544238 **donor id:** 4878. **origin:** Costa Rica. **collected:** March 06, 1987. **collector id:** 6/7. **locality:** 8km NE of intersection Mansion, Ruta 18 and Ruta 21 road to Tempisque Ferry, Nicoya, Guanacaste State. **latitude:** 10 deg. 10 min. N. **longitude:** 85 deg. 29 min. W. **elevation:** 50m. **remarks:** Annual rainfall 1729mm. Plants dead. Wild. Seed.
- PI 544239 **donor id:** 4884. **origin:** Costa Rica. **collected:** March 08, 1987. **collector id:** 8/1D. **locality:** Area around Hotel Bougainvillea, San Jose, San Jose State. **latitude:** 9 deg. 57 min. N. **longitude:** 84 deg. 05 min. W. **elevation:** 1175m. **remarks:** Annual rainfall 1987mm. Associated species: *D. intortum*, *Vigna vexillata*, *Termnus uncinatus*, *Vigna* sp. Wild. Seed.

PI 544079 to 544345-continued

- PI 544240 **donor id:** 4890. **origin:** Costa Rica. **collected:** March 09, 1987. **collector id:** 9/2C. **locality:** 2km S of Tarbarca, Aserri, San Jose State. **latitude:** 9 deg. 51 min. N. **longitude:** 84 deg. 06 min. W. **elevation:** 1475m. **remarks:** Annual rainfall 2356mm. Associated species: *Macroptilium* sp., *S. guianensis*, *Zornia* sp., *Desmodium* sp., *Rhynchosia* sp. Plants dead. Wild. Seed.
- PI 544241 **donor id:** 4899. **origin:** Costa Rica. **collected:** March 09, 1987. **collector id:** 9/4. **locality:** 3km S of Palmichal road to Acosta, San Ignacio, Palmichal, San Jose State. **latitude:** 9 deg. 50 min. N. **longitude:** 84 deg. 12 min. W. **elevation:** 1125m. **remarks:** Annual rainfall 1125mm. Plants dead. Wild. Seed.
- PI 544242 **donor id:** 4901. **origin:** Costa Rica. **collected:** March 09, 1987. **collector id:** 9/5B. **locality:** Just before intersection Ruta 7 and road to Tabarcia, Guayabo, San Jose State. **latitude:** 9 deg. 52 min. N. **longitude:** 84 deg. 16 min. W. **elevation:** 1050m. **remarks:** Annual rainfall 2356mm. Plants dead. Associated species: *Centro* sp. Wild. Seed.
- PI 544243 **donor id:** 4907. **origin:** Costa Rica. **collected:** March 10, 1987. **collector id:** 10/3. **locality:** 8km S of Puriscal road to Parrito, Puriscal (Santiago), San Jose State. **latitude:** 9 deg. 50 min. N. **longitude:** 84 deg. 21 min. W. **elevation:** 975m. **remarks:** Annual rainfall 2145mm. Plants almost dead. Wild. Seed.
- PI 544244 **donor id:** 4913. **origin:** Costa Rica. **collected:** March 10, 1987. **collector id:** 10/7. **locality:** 19km S of Puriscal road to Parrito, Puriscal (Santiago), San Jose State. **latitude:** 9 deg. 46 min. N. **longitude:** 84 deg. 24 min. W. **elevation:** 900m. **remarks:** Annual rainfall 2145mm. Plants almost dead. Wild. Seed.
- PI 544245 **donor id:** 4914. **origin:** Costa Rica. **collected:** March 10, 1987. **collector id:** 10/8A. **locality:** 22km S of Puriscal road to Parrito, Puriscal (Santiago), San Jose State. **latitude:** 9 deg. 45 min. N. **longitude:** 84 deg. 24 min. W. **elevation:** 850m. **remarks:** Annual rainfall 2145mm. Plants almost dead. Associated species: *C. virginianum*. Wild. Seed.
- PI 544246 **donor id:** 4918. **origin:** Costa Rica. **collected:** March 10, 1987. **collector id:** 10/10B. **locality:** 28km S of Puriscal road to Parrito, Puriscal (Santiago), San Jose State. **latitude:** 9 deg. 43 min. N. **longitude:** 84 deg. 26 min. W. **elevation:** 650m. **remarks:** Annual rainfall 2145mm. Plants green. Associated species: *S. guianensis*. Wild. Seed.

PI 544079 to 544345-continued

- PI 544247 **donor id:** 4821. **origin:** Costa Rica. **collected:** March 10, 1987. **collector id:** 10/11C. **locality:** 32km S of Puriscal road to Parrito, Puriscal (Santiago), San Jose State. **latitude:** 9 deg. 41 min. N. **longitude:** 84 deg. 26 min. W. **elevation:** 500m. **remarks:** Annual rainfall 2145mm. Associated species: *S. guianensis*, *Zornia* sp. Wild. Seed.
- PI 544248 **donor id:** 4925. **origin:** Costa Rica. **collected:** March 10, 1987. **collector id:** 10/13B. **locality:** 53km S of Puriscal road to Parrito, Puntarenas, State. **latitude:** 9 deg. 35 min. N. **longitude:** 84 deg. 24 min. W. **elevation:** 250m. **remarks:** Annual rainfall 2843mm. Associated species: *C. virginianum*. Wild. Seed.
- PI 544249 **donor id:** 4933. **origin:** Costa Rica. **collected:** March 11, 1987. **collector id:** 11/3B. **locality:** 13km N of Vera Blanca road to La Virgen, Vera Blanca, Alajuela State. **latitude:** 10 deg. 15 min. N. **longitude:** 84 deg. 11 min. W. **elevation:** 1125m. **remarks:** Annual rainfall 2374mm. Plants dead. Associated species: *C. pubescens*, *Desmodium adscendens*. Wild. Seed.
- PI 544250 **donor id:** 4935. **origin:** Costa Rica. **collected:** March 11, 1987. **collector id:** 11/4B. **locality:** 17km N of Vera Blanca road to La Virgen, Vera Blanca, Alajuela State. **latitude:** 10 deg. 15 min. N. **longitude:** 84 deg. 11 min. W. **elevation:** 1125m. **remarks:** Annual rainfall 2374mm. Plants green. Associated species: *C. pubescens*, *Desmodium adscendens* A. *sensitiva*. Wild. Seed.
- PI 544251 **donor id:** 4936. **origin:** Costa Rica. **collected:** March 11, 1987. **collector id:** 11/4C. **locality:** 17km N of Vera Blanca road to La Virgen, Vera Blanca, Alajuela State. **latitude:** 10 deg. 15 min. N. **longitude:** 84 deg. 11 min. W. **elevation:** 1125m. **remarks:** Annual rainfall 2374mm. Plants green, smaller than 11/4B. Associated species: *C. pubescens*, *Desmodium adscendens* A. *sensitiva*. Wild. Seed.
- PI 544252 **donor id:** 4940. **origin:** Costa Rica. **collected:** March 11, 1987. **collector id:** 11/6C. **locality:** 22km N of Vera Blanca road to La Virgen, Vera Blanca, Alajuela State. **latitude:** 10 deg. 17 min. N. **longitude:** 84 deg. 12 min. W. **elevation:** 800m. **remarks:** Annual rainfall 2374mm. Plants dead. Associated species: *D. barbatum*, *Desmodium* sp., *S. Guianensis*, *D. intortum*. Wild. Seed.

PI 544079 to 544345-continued

- PI 544253 **donor id:** 4945. **origin:** Costa Rica. **collected:** March 12, 1987. **collector id:** 12/1. **locality:** 15km E of Siquirres, Limon State. **latitude:** 10 deg. 05 min. N. **longitude:** 83 deg. 23 min. W. **elevation:** 75m. **remarks:** Annual rainfall 3518mm. Fruits very small. 3-6 articulations. Wild. Seed.
- PI 544254 **donor id:** 4947. **origin:** Costa Rica. **collected:** March 12, 1987. **collector id:** 12/2B. **locality:** 2km N of Puerto Moin at side of Football field, Limon, Limon State. **latitude:** 10 deg. 04 min. N. **longitude:** 83 deg. 09 min. W. **elevation:** 2m. **remarks:** Annual rainfall 3678mm. Associated species: *D. barbatum*, *Rhynchosia minima*, *V. luteola*, *V. vexillata*, *C. mucunoides*, *C. plumieri*. Wild. Seed.
- PI 544255 **donor id:** 4949. **origin:** Costa Rica. **collected:** March 12, 1987. **collector id:** 12/3A. **locality:** 9km N of Puerto Moin, Limon, Limon State. **latitude:** 10 deg. 01 min. N. **longitude:** 83 deg. 07 min. W. **elevation:** 2m. **remarks:** Annual rainfall 3678mm. Plants 2m tall. Associated species: *D. barbatum*. Wild. Seed.
- PI 544256 **donor id:** 4957. **origin:** Costa Rica. **collected:** March 16, 1987. **collector id:** 16/1B. **locality:** 13km (Autopista) Ruta 27, San Jose to Colon, San Jose, San Jose State. **latitude:** 9 deg. 57 min. N. **longitude:** 84 deg. 13 min. W. **elevation:** 900m. **remarks:** Annual rainfall 1868mm. Plants dead. Associated species: *Zornia* sp., *C. pubescens*, *T. uncinatus*. Wild. Seed.
- PI 544257 **donor id:** 4962. **origin:** Costa Rica. **collected:** March 16, 1987. **collector id:** 16/4A. **locality:** 10km from San Ramon road to C. Quesada, San Ramon, Alajuela State. **latitude:** 10 deg. 08 min. N. **longitude:** 84 deg. 26 min. W. **elevation:** 1300m. **remarks:** Annual rainfall 1796mm. Plants dead. Associated species: *D. adscendens*, *T. uncinatus*, *D. intortum*, *C. virginianum*, *S. guianensis*. Wild. Seed.
- PI 544258 **donor id:** 4967. **origin:** Costa Rica. **collected:** March 16, 1987. **collector id:** 16/6B. **locality:** 17km from San Ramon road to C. Quesada, San Ramon, Alajuela State. **latitude:** 10 deg. 09 min. N. **longitude:** 84 deg. 24 min. W. **elevation:** 1550m. **remarks:** Annual rainfall 1796mm. Plants dead. Wild. Seed.

PI 544079 to 544345-continued

- PI 544259 **donor id:** 4973. **origin:** Costa Rica. **collected:** March 17, 1987. **collector id:** 17/1D. **locality:** 0.8km N of Autopista road exit at Lomas Ayarcos in Urbanizacion La Laguna, Lomas Ayarcos, Cartago State. **latitude:** 9 deg. 53 min. N. **longitude:** 84 deg. 01 min. W. **elevation:** 1240m. **remarks:** Annual rainfall 2214mm. Plants almost dead. Associated species: Unkown vigna, D. intortum, T. uncinatus, C. pubescens. Wild. Seed.
- PI 544260 **donor id:** 5137. **origin:** Mexico. **collected:** November 12, 1980. **other id:** MEX 796. **locality:** 11km NW of Tequila, on road to Tepic, Tequila, Jalisco State. **latitude:** 21 deg. 00 min. N. **elevation:** 1300m. **remarks:** Annual rainfall 1040mm. Wild. Seed.
- PI 544261 **donor id:** 5186. **origin:** Mexico. **collected:** September 08, 1980. **other id:** MEX 930. **locality:** 3km W of Escuenapa, Sinaloa State. **latitude:** 23 deg. 00 min. N. **elevation:** 10m. **remarks:** Annual rainfall 1000mm. Wild. Seed.
- PI 544262 **donor id:** 5191. **origin:** Mexico. **collected:** September 08, 1980. **other id:** MEX 940. **locality:** 3km N of Rosario Rec. University of Arizona, Rosario, Sinaloa State. **latitude:** 23 deg. 00 min. N. **longitude:** 105 deg. 53 min. W. **elevation:** 50m. **remarks:** Annual rainfall 1000mm. Identified by V. E. Rudd. Wild. Seed.
- PI 544263 **donor id:** 5490. **origin:** Belize. **collected:** April 01, 1981. **locality:** Just outside Monkey Bay Research Pastures. Wild. Seed.
- PI 544264 **donor id:** 5505. **origin:** Belize. **collected:** April 05, 1981. **locality:** Both sides of road, 0.31km past marker 70. **remarks:** Identified by V.E. Rudd. Common. Wild. Seed.
- PI 544265 **donor id:** 5514. **origin:** Belize. **collected:** April 05, 1981. **locality:** On hill 3.10km from intersection. **remarks:** Identified by V.E. Rudd. Wild. Seed.
- PI 544266 **donor id:** 5518. **origin:** Belize. **collected:** April 07, 1981. **locality:** 1.18km E of Big Falls Community Center, W of Southern Hwy, 1st hill after road ends. In cut area of the road. **remarks:** Identified by V.E. Rudd. Stem smooth. No flowers. Associated species: D. adcondens. Perennial. Wild. Seed.
- PI 544267 **donor id:** 5519. **origin:** Belize. **collected:** April 07, 1981. **locality:** 23km E of Big Falls Community Center. **remarks:** Identified by V.E. Rudd. Stem hairy. Perennial. Wild. Seed.

PI 544079 to 544345-continued

- PI 544268 **donor id:** 6297. **origin:** United States. **collected:** June 29, 1981. **other id:** IRS 69. **other id:** 70544. Wild. Seed.
- PI 544269 **donor id:** 6299. **origin:** Costa Rica. **collected:** February 11, 1988. **collector id:** 11/1A. **locality:** Dry soil, 5.6km S of Desamparados, San Jose State. **latitude:** 9 deg. 51 min. N. **longitude:** 84 deg. 04 min. W. **elevation:** 1425m. **remarks:** Associated species: Galactia sp., Canavalia sp., Clitoria sp., Phaseolus sp., Demanthus sp., Teramnus uncinatus. Plants dead. Wild. Seed.
- PI 544270 **donor id:** 6309. **origin:** Costa Rica. **collected:** February 11, 1988. **collector id:** 11/3A. **locality:** 0.9km S of Jerico, site is S over the first peak from Desamparados, San Jose State. **latitude:** 9 deg. 49 min. N. **longitude:** 84 deg. 04 min. W. **elevation:** 1550m. **remarks:** Associated species: D. virgatus, D uncinatum, S. guianensis, T. uncinatus, Zornia species, Clitoria species. Some leaves green. Wild. Seed.
- PI 544271 **donor id:** 6318. **origin:** Costa Rica. **collected:** February 11, 1988. **collector id:** 11/4C. **locality:** 4.2km S of San Juan Sur, Cartago State. **latitude:** 9 deg. 46 min. N. **longitude:** 84 deg. 04 min. W. **elevation:** 1350m. **remarks:** Associated species: Canavalia species, T. uncinatus, uncinatus. Plants dead. Wild. Seed.
- PI 544272 **donor id:** 6326. **origin:** Costa Rica. **collected:** February 11, 1988. **collector id:** 11/8C. **locality:** 1.2km before Santa Maria, San Jose State. **latitude:** 9 deg. 39 min. N. **longitude:** 83 deg. 59 min. W. **elevation:** 1550m. **remarks:** Flowers tan-yellow. Associated species: T. uncinatus, Zornia species, D. intortum, Galactia species, S. guianensis. Wild. Seed.
- PI 544273 **donor id:** 6331. **origin:** Costa Rica. **collected:** February 11, 1988. **collector id:** 11/9B. **locality:** 5km N of Santa Maria, road to Empalme, Santa Maria, San Jose State. **latitude:** 9 deg. 43 min. N. **longitude:** 83 deg. 57 min. W. **elevation:** 1825m. **remarks:** Leaves green. Only legumes found. Associated species: Stylosanthes guianensis. Wild. Seed.
- PI 544274 **donor id:** 6332. **origin:** Costa Rica. **collected:** February 11, 1988. **collector id:** 11/10A. **locality:** 1 km past Tejar road to Cartago, Tejar, Cartago State. **latitude:** 9 deg. 52 min. N. **longitude:** 83 deg. 57 min. W. **elevation:** 1400m. **remarks:** Associated species: Desmodium intortum. Plants dead. Wild. Seed.

PI 544079 to 544345-continued

- PI 544275 **donor id:** 6335. **origin:** Costa Rica. **collected:** February 12, 1988. **collector id:** 12/1B. **locality:** 0.4km S of Bridge over Rio Tarcoles; 2km S from Admin. Bldg. of ECAG College, road Balse de Atenas to Balsilla, Atenas, Alajuela State. **latitude:** 9 deg. 56 min. N. **longitude:** 84 deg. 22 min. W. **elevation:** 350m. **remarks:** Associated species: *C. mucunoides*, *Galactia* species. Plants dead. Wild. Seed.
- PI 544276 **donor id:** 6340. **origin:** Costa Rica. **collected:** February 12, 1988. **collector id:** 12/4A. **locality:** 1.4km E of Int. Guadalupe road on San Luis-San Jeronimo road or 2km from San Jeronimo to San Luis, San Jose State. **latitude:** 10 deg. 01 min. N. **longitude:** 84 deg. 02 min. W. **elevation:** 1400m. **remarks:** Leaves and fruit green. Associated species: *Desmodium intortum*. Wild. Seed.
- PI 544277 **donor id:** 6360. **origin:** Costa Rica. **collected:** February 15, 1988. **collector id:** 15/4B. **locality:** 12.7km S Penas Blancas, Guanacaste State. **latitude:** 11 deg. 04 min. N. **longitude:** 85 deg. 37 min. W. **elevation:** 150m. **remarks:** Associated species: *S. Humilis*, *D. Barbatum*. Plants almost dead. Wild. Seed.
- PI 544278 **donor id:** 6363. **origin:** Costa Rica. **collected:** February 15, 1988. **collector id:** 15/5. **locality:** 0.9km W of La Cruz road to Manzanilla, La Cruz, Guanacaste State. **latitude:** 11 deg. 40 min. N. **longitude:** 85 deg. 73 min. W. **elevation:** 250m. **remarks:** Plants dead. Plants 1.5m tall. Wild. Seed.
- PI 544279 **donor id:** 6367. **origin:** Costa Rica. **collected:** February 15, 1988. **collector id:** 15/8A. **locality:** Road to Murcielago, Cuanjiniquil, Guanacaste State. **latitude:** 10 deg. 55 min. N. **longitude:** 85 deg. 43 min. W. **elevation:** 75m. **remarks:** Plants 2m tall, tops grazed. Almost dead. Associated species: *Galactic striata*, *Desmanthus virgatus*. Wild. Seed.
- PI 544280 **donor id:** 6370. **origin:** Costa Rica. **collected:** February 15, 1988. **collector id:** 15/9. **locality:** Cuanjiniquil, Guanacaste State. **latitude:** 10 deg. 55 min. N. **longitude:** 85 deg. 43 min. W. **elevation:** 100m. **remarks:** Common. Wild. Seed.
- PI 544281 **donor id:** 6371. **origin:** Costa Rica. **collected:** February 15, 1988. **collector id:** 15/10. **locality:** Samta Elena, Guanacaste State. **latitude:** 10 deg. 55 min. N. **longitude:** 85 deg. 43 min. W. **elevation:** 100m. **remarks:** Three articulations. Wild. Seed.

PI 544079 to 544345-continued

- PI 544282 **donor id:** 6383. **origin:** Costa Rica. **collected:** February 16, 1988. **collector id:** 16/5A. **locality:** 0.7km N of intersection Rincon de la Vieja-Colonia Blanca, Colonia Blanca, Guanacaste State. **latitude:** 10 deg. 46 min. N. **longitude:** 85 deg. 18 min. W. **elevation:** 800m. **remarks:** Leaves green. Associated species: *Desmodium barbatum*. Wild. Seed.
- PI 544283 **donor id:** 6384. **origin:** Costa Rica. **collected:** February 16, 1988. **collector id:** 16/5B. **locality:** 0.7km N of intersection Rincon de la Vieja-Colonia Blanca, Colonia Blanca, Guanacaste State. **latitude:** 10 deg. 46 min. N. **longitude:** 85 deg. 18 min. W. **elevation:** 800m. **remarks:** Leaves partially green. Associated species: *Zornia* species, *Desmodium barbatum*. Wild. Seed.
- PI 544284 **donor id:** 6391. **origin:** Costa Rica. **collected:** February 16, 1988. **collector id:** 16/7. **locality:** 1.7km N Colonia road to Aguas Claras, Colonia Blanca, Guanacaste State. **latitude:** 10 deg. 50 min. N. **longitude:** 85 deg. 13 min. W. **elevation:** 375m. **remarks:** Plants green, 6 articulations. Wild. Seed.
- PI 544285 **donor id:** 6398. **origin:** Costa Rica. **collected:** February 16, 1988. **collector id:** 16/12. **locality:** 3.5km S of Canalete road Upala-Canas, Canalete, Alajuela State. **latitude:** 10 deg. 49 min. N. **longitude:** 85 deg. 03 min. W. **elevation:** 150m. Wild. Seed.
- PI 544286 **donor id:** 6400. **origin:** Costa Rica. **collected:** February 16, 1988. **collector id:** 16/14. **locality:** 1.7km N of road marker Km27 road from La Garta (Canas) to Upala, Bijagua, Guanacaste State. **latitude:** 10 deg. 42 min. N. **longitude:** 85 deg. 05 min. W. **elevation:** 600m. **remarks:** Plants green. Wild. Seed.
- PI 544287 **donor id:** 6411. **origin:** Costa Rica. **collected:** February 17, 1988. **collector id:** 17/4C. **locality:** 1.8km from Tileran road to Monte Verde, Tileran, Guanacaste State. **latitude:** 10 deg. 27 min. N. **longitude:** 84 deg. 58 min. W. **elevation:** 625m. **remarks:** Associated species: *Siratro*, *Centrosema* sp., *Zornia* species, *T. uncinatus*, *S. guianensis*. Plants dead. Wild. Seed.
- PI 544288 **donor id:** 6414. **origin:** Costa Rica. **collected:** February 17, 1988. **collector id:** 17/5B. **locality:** 14.8km from Tileran road to Monte Verde, Qubrado Grande, Guanacaste State. **latitude:** 10 deg. 25 min. N. **longitude:** 84 deg. 54 min. W. **elevation:** 1000m. **remarks:** Associated species: *Desmodium incanum*, *Desmodium* sp., *D. adscendens*, *D. intortum*, *C. mucunoides*, *Zornia* species. Wild. Seed.

PI 544079 to 544345-continued

- PI 544289 **donor id:** 6417. **origin:** Costa Rica. **collected:** February 17, 1988. **collector id:** 17/6A. **locality:** 1.1km past Florida road from Tileran to Canas, Florida, Guanacaste State. **latitude:** 10 deg. 24 min. N. **longitude:** 84 deg. 54 min. W. **elevation:** 850m. **remarks:** Associated species: *S. guianensis*, *T. uncinatus*. Wild. Seed.
- PI 544290 **donor id:** 6427. **origin:** Costa Rica. **collected:** February 17, 1988. **collector id:** 17/8D. **locality:** 1.2km before La Cruz road Tileran to Monte Verde, La Cruz, Guanacaste State. **latitude:** 10 deg. 21 min. N. **longitude:** 84 deg. 52 min. W. **elevation:** 1250m. **remarks:** Associated species: *Zornia*, *S. guianensis*, *D. barbatum*, *T. labialis*. Wild. Seed.
- PI 544291 **donor id:** 6429. **origin:** Costa Rica. **collected:** February 17, 1988. **collector id:** 17/9A. **locality:** 3.2km S of Santa Elena road (Monte Verde) road to Ruta 3, Monte Verde, Guanacaste State. **latitude:** 10 deg. 18 min. N. **longitude:** 84 deg. 50 min. W. **elevation:** 1175m. **remarks:** Associated species: *Zornia*, *S. Guianensis*, *D. Barbatum*. Plants dead. Wild. Seed.
- PI 544292 **donor id:** 6435. **origin:** Costa Rica. **collected:** February 17, 1988. **collector id:** 18/2. **locality:** Grazed in pasture of Ratana (*Ischaemum Ciliare*-poor quality but very aggressive and short grass), Rio Frio, Limon State. **latitude:** 10 deg. 22 min. N. **longitude:** 83 deg. 54 min. W. **elevation:** 100m. Wild. Seed.
- PI 544293 **donor id:** 6455. **origin:** Costa Rica. **collected:** February 24, 1988. **collector id:** 24/1A. **locality:** 6.4km S of Neily Coloradito, Puntarenas State. **latitude:** 8 deg. 36 min. N. **longitude:** 82 deg. 54 min. W. **elevation:** 25m. **remarks:** Associated species: *C. mucunoides*, *Galactia*, *D. barbatum*, *C. macrocarpum*, *T. uncinatus*. Wild. Seed.
- PI 544294 **donor id:** 6461. **origin:** Costa Rica. **collected:** February 24, 1988. **collector id:** 24/2. **locality:** 2.4km W of La Cuesta, old unpaved road to Laurel, La Cuesta, Puntarenas State. **latitude:** 8 deg. 30 min. N. **longitude:** 82 deg. 52 min. W. **elevation:** 10m. **remarks:** Associated species: *Centro*, *Calopo*. Plants almost dead. Wild. Seed.
- PI 544295 **donor id:** 6465. **origin:** Costa Rica. **collected:** February 24, 1988. **collector id:** 24/6A. **locality:** 4km E of Neily road to San Vito, Neily, Puntarenas State. **latitude:** 8 deg. 41 min. N. **longitude:** 82 deg. 57 min. W. **elevation:** 175m. **remarks:** Associated species: *Vigna*. Wild. Seed.

PI 544079 to 544345-continued

- PI 544296 **donor id:** 6468. **origin:** Costa Rica. **collected:** February 24, 1988. **collector id:** 24/7C. **locality:** 8km E of Neily road to San Vito, Puntarenas State. **latitude:** 8 deg. 41 min. N. **longitude:** 82 deg. 57 min. W. **elevation:** 600m. **remarks:** Associated species: Centrosema and mucuna sp. Wild. Seed.
- PI 544297 **donor id:** 6469. **origin:** Costa Rica. **collected:** February 24, 1988. **collector id:** 24/8A. **locality:** 12.3km E of Neily road to San Vito, Neily, Puntarenas State. **latitude:** 8 deg. 42 min. N. **longitude:** 82 deg. 56 min. W. **elevation:** 975m. **remarks:** Associated species: African stargrass, Teramnus uncinatus. Wild. Seed.
- PI 544298 **donor id:** 6472. **origin:** Costa Rica. **collected:** February 24, 1988. **collector id:** 24/10A. **locality:** 5.1km from San Vito New Airport road to La Union, San Vito, Puntarenas State. **latitude:** 8 deg. 49 min. N. **longitude:** 82 deg. 55 min. W. **elevation:** 1050m. **remarks:** Associated species: Teramnus uncinatus. Plants almost dead. Insect damage. Wild. Seed.
- PI 544299 **donor id:** 6475. **origin:** Costa Rica. **collected:** February 25, 1988. **collector id:** 25/1B. **locality:** 9.8km W of San Vito road to Buenos Aires, San Vito, Puntarenas State. **latitude:** 8 deg. 51 min. N. **longitude:** 83 deg. 02 min. W. **elevation:** 900m. **remarks:** Leaves small, green. Possible leaf virus. Associate species: Calopo, D. adscendens, Stylosanthes guianensis, Termanus uncinatus. Wild. Seed.
- PI 544300 **donor id:** 6492. **origin:** Costa Rica. **collected:** February 25, 1988. **collector id:** 25/7B. **locality:** Road marker KM119, 16km N of San Isidrio, San Jose State. **latitude:** 9 deg. 31 min. N. **longitude:** 83 deg. 43 min. W. **elevation:** 1550m. **remarks:** Associated species: Desmodium intortum. Wild. Seed.
- PI 544301 **donor id:** 6502. **origin:** Costa Rica. **collected:** November 08, 1988. **collector id:** 8-1MLC. **locality:** 15km from Puerto Carrillo to Hojanca, Guanacaste State. **latitude:** 9 deg. 58 min. N. **longitude:** 85 deg. 27 min. W. **elevation:** 400m. **remarks:** Rainfall 1978mm. Wild. Seed.
- PI 544302 **donor id:** 6504. **origin:** Costa Rica. **collected:** January 29, 1989. **collector id:** 29/1B. **locality:** Area around Hotel Boungainvillea, San Jose, San Jose State. **latitude:** 9 deg. 57 min. N. **longitude:** 84 deg. 05 min. W. **elevation:** 1175m. **remarks:** Annual rainfall 1987mm. Wild. Seed.

PI 544079 to 544345-continued

- PI 544303 **donor id:** 6507. **origin:** Costa Rica. **collected:** January 31, 1989. **collector id:** 31-1B. **locality:** 13.5km S of intersection Ruta 1 on Ruta 18, Tempisque Ferry, Guanacaste State. **latitude:** 10 deg. 15 min. N. **longitude:** 85 deg. 06 min. W. **elevation:** 0m. **remarks:** Annual rainfall 1775mm. Associated species: *Teramnus uncinatus*, *Calopogonium mucunoides*, *Centrosema plumierei*. Wild. Seed.
- PI 544304 **donor id:** 6509. **origin:** Costa Rica. **collected:** January 31, 1989. **collector id:** 31/2B. **other id:** 74014. **locality:** 20.0km S of intersection of Ruta 1 on Ruta 18, Tempisque Ferry, Guanacaste State. **latitude:** 10 deg. 14 min. N. **longitude:** 85 deg. 09 min. W. **elevation:** 75m. **remarks:** Annual rainfall 1775mm. Plant height 2.5m. Wild. Seed.
- PI 544305 **donor id:** 6511. **origin:** Costa Rica. **collected:** January 31, 1989. **collector id:** 31/2D. **other id:** 74014. **locality:** 20.0km S of intersection of Ruta 1 on Ruta 18, Tempisque Ferry, Guanacaste State. **latitude:** 10 deg. 14 min. N. **longitude:** 85 deg. 09 min. W. **elevation:** 75m. **remarks:** Annual rainfall 1775mm. Plant 1 m tall. Wild. Seed.
- PI 544306 **donor id:** 6513. **origin:** Costa Rica. **collected:** January 31, 1989. **collector id:** 31/4A. **other id:** 72115-Nicoya. **locality:** Nicoya, Guanacaste State. **latitude:** 10 deg. 08 min. N. **longitude:** 85 deg. 27 min. W. **elevation:** 150m. **remarks:** Annual rainfall 1689mm. Associated species: legume. Wild. Seed.
- PI 544307 **donor id:** 6516. **origin:** Costa Rica. **collected:** January 31, 1989. **collector id:** 31/5B. **locality:** 1.3km S of Curime, Guanacaste State. **latitude:** 10 deg. 07 min. N. **longitude:** 85 deg. 28 min. W. **elevation:** 150m. **remarks:** Annual rainfall 1978mm. Associated species: *S. humilis*, *Zornia* sp., *C. pubescens*, *A. villosa*. Wild. Seed.
- PI 544308 **donor id:** 6535. **origin:** Costa Rica. **collected:** February 01, 1989. **collector id:** 01/8. **locality:** 3.6km S of Cangrejal (La Soledad), Guanacaste State. **latitude:** 9 deg. 54 min. N. **longitude:** 85 deg. 20 min. W. **elevation:** 125m. **remarks:** Annual rainfall 2611mm. Associated species: narrow leaved *Centrosema calopo*, large leaved *Rhynchosia*. 6-7 articulations. Wild. Seed.

PI 544079 to 544345-continued

- PI 544309 **donor id:** 6538. **origin:** Costa Rica. **collected:** February 01, 1989. **collector id:** 01/11. **other id:** CIAT 72124 S.F.CO. **locality:** 7.3km N of Juan de Leon, Tigra, Puntarenas State. **latitude:** 9 deg. 56 min. N. **longitude:** 85 deg. 11 min. W. **elevation:** 75m. **remarks:** Annual rainfall 1526mm. Population scarce. Wild. Seed.
- PI 544310 **donor id:** 6542. **origin:** Costa Rica. **collected:** February 01, 1989. **collector id:** 01/12C. **locality:** 3.2km E of Hotel De Paso, Bajo Negro, Puntarenas State. **latitude:** 9 deg. 56 min. N. **longitude:** 85 deg. 00 min. W. **elevation:** 75m. **remarks:** Annual rainfall 2072mm. 3-4 articulations. Wild. Seed.
- PI 544311 **donor id:** 6549. **origin:** Costa Rica. **collected:** February 02, 1989. **collector id:** 02/4. **locality:** 9.0km W of Jicaral, Puntarenas State. **latitude:** 9 deg. 59 min. N. **longitude:** 85 deg. 11 min. W. **elevation:** 50m. **remarks:** Annual rainfall 2072mm. Wild. Seed.
- PI 544312 **donor id:** 6552. **origin:** Costa Rica. **collected:** February 02, 1989. **collector id:** 02/6B. **other id:** 74003-Santa Cruz. **locality:** 7.1km S from Santa Cruz road to Arado, 10km from Legarto, Santa Cruz, Guanacaste State. **latitude:** 10 deg. 13 min. N. **longitude:** 85 deg. 36 min. W. **elevation:** 250m. **remarks:** Annual rainfall 1862mm. Associated species: Calopogonium caerulium, Tropical kudzu. 3-4 articulations. Wild. Seed.
- PI 544313 **donor id:** 6557. **origin:** Costa Rica. **collected:** February 02, 1989. **collector id:** 02/8A. **other id:** 72118-Florida. **locality:** 4.8km from Cerro Vista Almar to Los Angeles, Cerro Vista Al Mar, Guanacaste State. **latitude:** 10 deg. 07 min. N. **longitude:** 85 deg. 36 min. W. **elevation:** 825m. **remarks:** Annual rainfall 1866mm. Wild. Seed.
- PI 544314 **donor id:** 6561. **origin:** Costa Rica. **collected:** February 02, 1989. **collector id:** 02/11. **other id:** 74017-Talolinga. **locality:** Polvazal, 4.5km N of Santa Barbara on road to Talolinga, Santa Barbara, Guanacaste State. **latitude:** 10 deg. 18 min. N. **longitude:** 85 deg. 31 min. W. **elevation:** 175m. **remarks:** Annual rainfall 1782mm. Wild. Seed.

PI 544079 to 544345-continued

- PI 544315 **donor id:** 6566. **origin:** Costa Rica. **collected:** February 03, 1989. **collector id:** 03/1B. **other id:** 74017-Talolinga. **locality:** Fine textured cracking clay soils, 3.0km E of Talolinga, el Cantina, Talolinga, Guanacaste State. **latitude:** 10 deg. 18 min. N. **longitude:** 85 deg. 29 min. W. **elevation:** 50m. **remarks:** Annual rainfall 1824mm. Associated species: Calopo. Wild. Seed.
- PI 544316 **donor id:** 6583. **origin:** Costa Rica. **collected:** February 6, 1989. **collector id:** 06/8D. **other id:** 78003-Puntarenas. **locality:** 3.5km S interection of Ruta 1 at Chomes entrance, road to Punta Morales, road to Costa Pajaros to W, San Gerado, Puntarenas State. **latitude:** 10 deg. 06 min. N. **longitude:** 84 deg. 55 min. W. **elevation:** 100m. **remarks:** Annual rainfall 1598mm. 5-6 articulations. Wild. Seed.
- PI 544317 **donor id:** 2872. **origin:** Brazil. **collected:** May 1978. **other id:** CPI 93579. **other id:** CIAT 9666. **received as:** A. americana var. americana. Wild. Seed.
- PI 544318 **donor id:** 3506. **origin:** Mexico. **collected:** March 28, 1980. **collector id:** 69A. **other id:** CPI 93667. **locality:** 1 km E of intersection Hwy 195 road to Jalpa, Tabasco State. **latitude:** 17 deg. 44 min. N. **longitude:** 92 deg. 55 min. W. **remarks:** Identified by V.E. Rudd. Wild. Seed.
- PI 544319 **donor id:** 3577. **origin:** Mexico. **collected:** April 01, 1980. **locality:** 70km road marker. **latitude:** 19 deg. 06 min. N. **longitude:** 97 deg. 01 min. W. **elevation:** 700m. **remarks:** Annual rainfall 700mm. Identified by V.E. Rudd. Wild. Seed.
- PI 544320 **donor id:** 4291. **origin:** Mexico. **collected:** February 25, 1985. **collector id:** 022A. **locality:** 0.1 km N of Colipa road to Vega de Alatorre, Colipa, Veracruz State. **latitude:** 19 deg. 56 min. N. **longitude:** 96 deg. 43 min. W. **elevation:** 225m. **remarks:** Identified by V.E. Rudd. Rainfall 2163mm. Wild. Seed.
- PI 544321 **donor id:** 4424. **origin:** Mexico. **collected:** March 05, 1985. **collector id:** 070C. **locality:** 0.9km E from Chiapas - Oaxaca border, Hwy 190, Tepanatepec, Chiapas State. **latitude:** 16 deg. 26 min. N. **longitude:** 94 deg. 05 min. W. **elevation:** 650m. **remarks:** Annual rainfall 1773mm. Identified by V.E. Rudd. Associated species: M. atropurpureum, Leucaena macrophylla. Wild. Seed.

- PI 544322 **donor id:** 4429. **origin:** Mexico. **collected:** March 05, 1985. **collector id:** 071D. **locality:** 5.6km E of Rizo de Oro or 1.6km E of Las Perlas Hwy 190, Chintalapa, Chiapas State. **latitude:** 16 deg. 29 min. N. **longitude:** 94 deg. 02 min. W. **elevation:** 825m. **remarks:** Annual rainfall 1773mm. Identified by V.E. Rudd. Associated species: *M. atropurpureum*, *Desmodium* sp., *S. guianensis*, *Leucaena macrophylla*. Wild. Seed.
- PI 544323 **donor id:** 4436. **origin:** Mexico. **collected:** March 05, 1985. **collector id:** 072G. **locality:** Pine forest, granite rock, grazed area. 0.4km up road to La Mina Microwave Tower which intersection is 3km E of Las Perlas, Hwy 190, Las Perlas, Chiapas State. **latitude:** 16 deg. 28 min. N. **longitude:** 94 deg. 01 min. W. **elevation:** 775m. **remarks:** Annual rainfall 1773mm. Identified by V.E. Rudd. Associated species: *S. guianensis*, *S. humilis*, *Aeschynomene* sp. *D. barbatum*. Wild. Seed.
- PI 544324 **donor id:** 4440. **origin:** Mexico. **collected:** March 05, 1985. **collector id:** 074C. **locality:** 7.6km E of Cintalapa, just W of road marker 83, Hwy 190, Cintalapa, Chiapas State. **latitude:** 16 deg. 43 min. N. **longitude:** 93 deg. 39 min. W. **elevation:** 500m. **remarks:** Annual rainfall 788mm. Identified by V.E. Rudd. Associated species: *D. virgatus*, *C. schottii*. Wild. Seed.
- PI 544325 **donor id:** 4443. **origin:** Mexico. **collected:** March 05, 1985. **collector id:** 075C. **locality:** El parque aguacero at end of road about 3.2km N of Hwy 190, 20m beyond concrete steps at bottom of road, Ocozocoautla, Chiapas State. **latitude:** 16 deg. 49 min. N. **longitude:** 93 deg. 30 min. W. **elevation:** 600m. **remarks:** Annual rainfall 827mm. Identified by V.E. Rudd. Associated species: *C. scottii*, *D. virgatus*, *Stylosanthes* sp., *V. adenantha*. Plants abundant. Plants dead. Wild. Seed.
- PI 544326 **donor id:** 4554. **origin:** Mexico. **collected:** March 12, 1985. **collector id:** 110A. **locality:** 3km S of intersection road to Rio Chancala, 9km S of Palenque, then W about 1.0km on narrow dirt road before going down steep slope, Palenque, Chiapas State. **latitude:** 17 deg. 26 min. N. **longitude:** 92 deg. 00 min. W. **elevation:** 250m. **remarks:** Annual rainfall 2032mm. Associated species: *Desmodium adscendens*, *D. Incanum*, *D. Sp.*, *Aeschynomene* sp., Plants height 1m. Plants dead. Wild. Seed.

PI 544079 to 544345-continued

- PI 544327 **donor id:** 4555. **origin:** Mexico. **collected:** March 12, 1985. **collector id:** 110B. **locality:** 3km S of Int. of road to Rio Chancala, 9km S of Palenque, then W about 1.0km on narrow dirt road before going down steep slope, Palenque, Chiapas State. **latitude:** 17 deg. 26 min. N. **longitude:** 92 deg. 00 min. W. **elevation:** 250m. **remarks:** Annual rainfall 2032mm. Identified by V.E. Rudd. Plant stems with long hairs. Plants 2m tall. Associated species: *A. americana*. Wild. Seed.
- PI 544328 **donor id:** 4566. **origin:** Mexico. **collected:** March 12, 1985. **collector id:** 114A. **locality:** 100m S of 17km road marker, Palenque road to La Libertad, Chiapas State. **latitude:** 17 deg. 39 min. N. **longitude:** 91 deg. 54 min. W. **elevation:** 25m. **remarks:** Annual rainfall 2032mm. Identified by V.E. Rudd. Plants abundant, some with mildew. Associated species: *A. paniculata*, *D. barbatum*, *S. guianensis*, *G. striata*. Wild. Seed.
- PI 544329 **donor id:** 4586. **origin:** Mexico. **collected:** March 13, 1985. **collector id:** 120A. **locality:** 15.7km W of Puente Tulija Hwy 186 toward Villahermosa, Macuspana, Tabasco State. **latitude:** 17 deg. 43 min. N. **longitude:** 92 deg. 33 min. W. **elevation:** 10m. **remarks:** Annual rainfall 2286mm. Identified by V.E. Rudd. Associated species: *Desmodium distortum*, *C. caeruleum*, *Clitoria* sp., *V. vexillate*. Perennial. Wild. Seed.
- PI 544330 **donor id:** 4588. **origin:** Mexico. **collected:** March 13, 1985. **collector id:** 121A. **locality:** 0.5km N of intersection of Hwy 186 on road to Ismate about 21km E of Villahermosa, Tabasco State. **latitude:** 17 deg. 58 min. N. **longitude:** 92 deg. 48 min. W. **elevation:** 10m. **remarks:** Annual rainfall 2238mm. Identified by V.E. Rudd. Associated species: *M. atropurpureum*. Perennial. Wild. Seed.
- PI 544331 **donor id:** 4592. **origin:** Mexico. **collected:** March 13, 1985. **collector id:** 123A. **locality:** 10.4km toward Ismate from Hwy 186, Ismate, Tabasco State. **latitude:** 17 deg. 58 min. N. **longitude:** 92 deg. 46 min. W. **remarks:** Annual rainfall 2238mm. Identified by V.E. Rudd. Associated species: *C. plumieri*, *D. virgatus*, *M. lathyroides*, unknown sp. Mildew present. Wild. Seed.

PI 544079 to 544345-continued

- PI 544332 **donor id:** 4616. **origin:** Mexico. **collected:** March 15, 1985. **collector id:** 132C. **locality:** 3.9km N on road to Agua Dulce from Hwy 180, Agua Dulce, Veracruz State. **latitude:** 18 deg. 05 min. N. **longitude:** 94 deg. 07 min. W. **elevation:** 20m. **remarks:** Annual rainfall 2818mm. Identified by V.E. Rudd. Associated species: *Alysicarpus vaginalis*, *Pueraria phaseoloides*, *Desmanthus virgatus*, *D. barbatus*, *M. atropurpureum*. Wild. Seed.
- PI 544333 **donor id:** 4621. **origin:** Mexico. **collected:** March 15, 1985. **collector id:** 133A. **locality:** 18km N of Hueyapan sign road marker 168km Hwy 180, Acayucan to Catemaco, Hueyapan de Ocampo, Veracruz State. **latitude:** 18 deg. 17 min. N. **longitude:** 95 deg. 07 min. W. **elevation:** 425m. **remarks:** Annual rainfall 2273mm. Identified by V.E. Rudd. Associated species: *Phaseolus lunatus*, *Teramnus uncinatus*, *G striata*, *C. plumieri*, *M. atropurpureum*, *C. pubescens*. Basalt soil. Wild. Seed.
- PI 544334 **donor id:** 4629. **origin:** Mexico. **collected:** March 15, 1985. **collector id:** 134B. **locality:** 0.5km S of Hotel Playa Azul, N on dirt road from Catemaco, Veracruz State. **latitude:** 18 deg. 26 min. N. **longitude:** 95 deg. 06 min. W. **elevation:** 375m. **remarks:** Annual rainfall 2273mm. Identified by V.E. Rudd. Associated species: *Vigna elegans*, *Teramnus uncinatus*, *Phaseolus lunatus*. Plants dead. Wild. Seed.
- PI 544335 **donor id:** 4673. **origin:** Mexico. **collected:** March 17, 1985. **collector id:** 151B. **locality:** Cracking clay soil, 16km S intersection Hwy 180 & 150 on Hwy 150, Veracruz, Veracruz State. **latitude:** 18 deg. 55 min. N. **longitude:** 96 deg. 12 min. W. **remarks:** Annual rainfall 7010mm. Identified by V.E. Rudd. Associated species: *M. atropurpureum*, *M. lathyroides*, *Desmanthus virgatus*. Plants wilting. Wild. Seed.
- PI 544336 **donor id:** 5507. **origin:** Belize. **collected:** April 05, 1981. **locality:** Very damp area, NW corner of C.A. Stone's property just off main road, at intersection of side road. **remarks:** Identified by V.E. Rudd. Wild. Seed.
- PI 544337 **donor id:** 5508. **origin:** Belize. **collected:** April 05, 1981. **locality:** 0.62km N of Wilson road, off Punta Gorda N entrance route. **remarks:** Identified by V.E. Rudd. Common. Annual. Wild. Seed.

PI 544079 to 544345-continued

- PI 544338 **donor id:** 3590. **origin:** Mexico. **collected:** October 24, 1979. **collector id:** 053. **other id:** CPI 84956. **other id:** MEX 053. **locality:** 52km on road from Cuernavaca to Iguala, Guerrero State. **latitude:** 19 deg. 00 min. N. **elevation:** 1050m. **remarks:** Identified by V.E. Rudd. Soil pH 7.2. Rainfall 950mm. **received as:** A. americana var. fabellata. Wild. Seed.
- PI 544339 **donor id:** 4716. **origin:** Costa Rica. **collected:** February 25, 1971. **collector id:** 053. **other id:** CR 54980. **locality:** NE part of University of Costa Rica, San Pedro, San Jose State. **latitude:** 09 deg. 57 min. N. **longitude:** 84 deg. 03 min. W. **elevation:** 1100m. **remarks:** Rainfall 1987mm. **received as:** A. americana var. flabellata. Wild. Seed.
- PI 544340 **donor id:** 4717. **origin:** Costa Rica. **collected:** November 15, 1946. **other id:** CR 36511. **locality:** Boca del Rio, Barranca, Puntarenas State. **latitude:** 09 deg. 58 min. N. **longitude:** 85 deg. 14 min. W. **elevation:** 4m. **remarks:** Annual rainfall 1500mm. **received as:** A americana var. flabellata. Wild. Seed.
- PI 544341 **donor id:** 4718. **origin:** Costa Rica. **collected:** November 19, 1980. **other id:** CR 82282. **locality:** Guardia, Coopesardinal, Liberia, Guanacaste State. **latitude:** 10 deg. 37 min. N. **longitude:** 85 deg. 26 min. W. **elevation:** 144m. **remarks:** Annual rainfall 960mm. **received as:** A. americana var. flabellata. Wild. Seed.
- PI 544342 **donor id:** 4719. **origin:** Nicaragua. **collected:** October 1975. **other id:** CR 60515. **locality:** Xerofita between lava flows, Volcan Santiago, Masaya State. **elevation:** 800m. **remarks:** Annual rainfall 5mm. **received as:** A. americana var flabellata. Wild. Seed.
- PI 544343 **donor id:** 5200. **origin:** Mexico. **collected:** September 12, 1980. **other id:** MEX 983. **locality:** Clay loam, 27.2km W of Teloloapan on road to Ciudad Altimitano, Teloloapan, Guerrero State. **latitude:** 18 deg. 00 min. N. **elevation:** 1450m. **remarks:** Annual rainfall 1000mm. Identified by V.E. Rudd. **received as:** A americana var. flabellata. Wild. Seed.
- PI 544344 **donor id:** 5204. **origin:** Mexico. **collected:** September 12, 1980. **other id:** MEX 998. **locality:** 87km W of Teloloapan on road to Ciudad, Teloloapan, Guerrero State. **latitude:** 18 deg. 00 min. N. **elevation:** 340m. **remarks:** Annual rainfall 800mm. Identified by V.E. Rudd. Germplasm Bank #8. **received as:** A. americana var. flabellata. Wild. Seed.

PI 544079 to 544345-continued

PI 544345 **donor id:** 5215. **origin:** Mexico. **collected:** September 12, 1980. **other id:** MEX 1078. **locality:** 4km NE of Tejupilco on road to Temascaltepec, Tejupilco, Mexico State. **latitude:** 19 deg. 00 min. N. **elevation:** 1450m. **remarks:** Annual rainfall 1700mm. Identified by V.E. Rudd. **received as:** *A. americana* var. *flabellata*. Wild. Seed.

PI 544346. *Arachis hypogaea* L. FABACEAE Peanut

Donated by: Mixon, A.C., Agricultural Research Service -- USDA, Univ. of Georgia Coastal Plain Exp. Sta., Tifton, Georgia, United States; and Alabama Agr. Exp. Sta.. **remarks:** *Aspergillus Flavus* Resistant Peanut Germplasm. Received November 04, 1974.

origin: United States. **origin institute:** Agricultural Research Service -- USDA, Univ. of Georgia Coastal Plain Exp. Sta., Tifton, Georgia 31794. **cultivar:** ASPERGILLUS FLAVUS RESISTANT PEANUT. **pedigree:** Selection of PI 337394 with light pink or flesh colored testa (PI 337394F). **other id:** GP-3. **source:** Crop Sci. 15(1):106 1975. **group:** CSR-PEANUT. **remarks:** Resistant to seed colonization by toxin-producing strains of *Aspergillus flavus*. Upright bunch habit growth. Pods small, with greater number of 2-segmented pods. Slight to moderate construction between seeds. Average 71% shelling. Seed count 269/100 g. Breeding Material. Seed.

PI 544347. *Avena sativa* L. POACEAE Common oat

Donated by: Forsberg, R.A., Wisconsin Agr. Exp. Sta., University of Wisconsin, Madison, Wisconsin, United States. **remarks:** Goodland Oat. Received October 25, 1990.

origin: United States. **origin institute:** Wisconsin Agr. Exp. Sta., University of Wisconsin-Madison, Madison, Wisconsin 53706. **cultivar:** GOODLAND. **pedigree:** Trispernia/BeLar/2/Goodfield/3/Goodfield/4/Garland. **other id:** PVP 7500004. **source:** Certificate in force. **group:** PVPO. **other id:** CV-327. **group:** CSR-OAT. **remarks:** Stiff-strawed spring oat. Kernels yellow, nonfluorescent. Groat protein high. Groat percentage and test weight average. Resistant to crown rust races 202 and 216, partially resistant to races 263, 290, 305 and 326. Susceptible to races 264 and 264B. AB genes present for stem rust resistance. Spring Annual. Cultivar. Seed.

PI 544348 to 544352. *Arachis hypogaea* L. FABACEAE Peanut

Donated by: Dwivedi, S.L., ICRISAT, Legumes Program, Patancheru, Andhra Pradesh, India. **remarks:** Nonnodulating Peanut Lines (ICGL1, ICGL2, ICGL3, ICGL4, ICGL5). Received October 15, 1990.

PI 544348 **origin:** India. **origin institute:** ICRISAT, Legumes Program, Patancheru, Andhra Pradesh 502324. **cultivar:** ICGL1. **pedigree:** NC 17/PI 259747. **other id:** GP-50. **group:** CSR-PEANUT. **remarks:** Growth habit erect. Branching sequential. Flowers orange. Pods 2-3-1 seeded, thick shelled, prominently reticulated. Seed tan. Spring Annual. Breeding Material. Seed.

PI 544349 **origin:** India. **origin institute:** ICRISAT, Legumes Program, Patancheru, Andhra Pradesh 502324. **cultivar:** ICGL2. **pedigree:** NC 17/PI 259747. **other id:** GP-51. **group:** CSR-PEANUT. **remarks:** Growth habit decumbent 3 to erect. Branching sequential. Flower garnet. Pods 2-3-4-1 seeded with beak and moderate to prominent reticulation. Seed purple. Spring Annual. Breeding Material. Seed.

PI 544350 **origin:** India. **origin institute:** ICRISAT, Legumes Program, Patancheru, Andhra Pradesh 502324. **cultivar:** ICGL3. **pedigree:** NC 17/PI 259747. **other id:** GP-52. **group:** CSR-PEANUT. **remarks:** Growth habit erect. Branching sequential. Flowers garnet. Pods 2-3-1 seeded with beak and moderate to prominent reticulation. Seed purple. Spring Annual. Breeding Material. Seed.

PI 544351 **origin:** India. **origin institute:** ICRISAT, Legumes Program, Patancheru, Andhra Pradesh 502324. **cultivar:** ICGL4. **pedigree:** NC 17/PI 259747. **other id:** GP-53. **group:** CSR-PEANUT. **remarks:** Growth habit erect. Branching alternate, many secondary branches. Flowers orange. Pods 3-2-4-1 seeded with slight to moderate constriction and beak. Seed tan. Spring Annual. Breeding Material. Seed.

PI 544352 **origin:** India. **origin institute:** ICRISAT, Legumes Program, Patancheru, Andhra Pradesh 502324. **cultivar:** ICGL5. **pedigree:** Shantung KU No.203/PI 259747. **other id:** GP-54. **group:** CSR-PEANUT. **remarks:** Growth habit erect. Branching sequential. Flowers orange. Pods 2-1-3 seeded, small, moderately reticulated. Seed tan. Spring Annual. Breeding Material. Seed.

PI 544353. *Trifolium repens* L. FABACEAE White clover

Donated by: Wofford, D.S., Florida Agr. Exp. Sta., University of Florida, Gainesville, Florida, United States. **remarks:** FL-ML White Clover Germplasm. Received October 15, 1990.

PI 544353-continued

origin: United States. **origin institute:** Florida Agr. Exp. Sta., University of Florida, Gainesville, Florida 32611. **cultivar:** FL-ML. **pedigree:** SC-1/Osceola. Selections intercrossed with subsequent selections for multifoliate leaf type and red leaf spot expression. **other id:** GP-3. **group:** CSR-CLOVER, WHITE. **remarks:** Multifoliate leaf characteristics. Approx. 39% of population produces leaves with four or more leaflets. One-half of population expresses Vr2 red leaf spot genes. Other general features are similar to other intermediate white clover populations. Perennial. Breeding Material. Seed.

PI 544354. *Glycine max* (L.) Merr. FABACEAE Soybean

Donated by: Caviness, C.E., Arkansas Agr. Exp.Sta., University of Arkansas, Fayetteville, Arkansas, United States. **remarks:** Walters Soybean. Received October 18, 1990.

origin: United States. **origin institute:** Arkansas Agr. Exp. Sta., University of Arkansas, Fayetteville, Arkansas 72701. **cultivar:** WALTERS. **pedigree:** Forrest(4)/Narrow(2), F6. **other id:** CV-285. **group:** CSR-SOYBEAN. **remarks:** Determinate growth habit. Flowers purple. Pubescence tawny. Pod walls tan. Seeds yellow with shiny coats and black hila. Maturity, plant height, lodging, and seed quality scores are similar to Forrest. Seed yield average 13.6gms per 100. Oil content 10.8%. Protein average 39.8%. Multiple disease and nematode resistance. Moderately susceptible to stem canker. Moderately sensitive to recommended rates of herbicide,. Cultivar. Seed.

PI 544355 to 545480. *Avena fatua* L. POACEAE Wild oats

Donated by: Briggles, L.W., USDA-ARS, Plant Science Institute, BARC-WEST, Beltsville, Maryland, United States. Received September 01, 1990.

PI 544355 **donor id:** AF-1. **origin:** United States. **collected:** July 08, 1973. **locality:** 2 mi. east of Lake Preston along Hwy. 14; oat field. **remarks:** Lemma and palea white to light gray, glabrous. Callus and rachilla short to heavy pubescence. Groat 73%. Groat protein 23.8%. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544356 **donor id:** AF-4. **origin:** United States. **collected:** July 08, 1973. **locality:** 5 mi. south of Hammer along Hwy. 81; oat field. **remarks:** Lemma and palea gray, slightly pubescent to glabrous. Callus and rachilla short to long pubescence. Groat 70%. Annual. Wild. Seed.
- PI 544357 **donor id:** AF-8. **origin:** United States. **collected:** July 08, 1973. **locality:** 2 mi. east of Cavour along Hwy. 14; wheat field. **remarks:** Lemma and palea gray, slightly pubescent. Callus and rachilla long pubescence. Groat protein 21.9-23.3%. Tolerant to BYDV at Urbana, IL. Annual. Wild. Seed.
- PI 544358 **donor id:** AF-13. **origin:** United States. **collected:** July 08, 1973. **locality:** 9 mi. south of Watertown along Hwy. 81; oat field. **remarks:** Lemma and palea gray, glabrous to slightly pubescent. Callus and rachilla short to long pubescence. Groat protein 22.3%. Tolerant to BYDV at Urbana, IL. Annual. Wild. Seed.
- PI 544359 **donor id:** AF-17. **origin:** United States. **collected:** August 03, 1973. **locality:** 10 mi. northwest of Brigham City along I-15; wheat field. **remarks:** Lemma and palea gray, glabrous. Callus and rachilla long pubescent. Annual. Wild. Seed.
- PI 544360 **donor id:** AF-18. **origin:** United States. **collected:** July 08, 1973. **locality:** 5 mi. north of Watertown along Hwy. 81; oat field. **remarks:** Lemma and palea gray, glabrous. Callus and rachilla short pubescence. Good tolerance to BYDV at Urbana, IL. Annual. Wild. Seed.
- PI 544361 **donor id:** AF-19. **origin:** United States. **collected:** July 08, 1973. **locality:** 15 mi. north of De Smet along Hwy. 25; flax field. **remarks:** Lemma and palea gray, glabrous to slight pubescence. Callus and rachilla medium to long pubescence. Groat 71%. Groat protein 22.5%. Annual. Wild. Seed.
- PI 544362 **donor id:** AF-23. **origin:** United States. **collected:** July 08, 1973. **locality:** 4 mi. south of Sisseton along Hwy. 81; oat field. **remarks:** Lemma and palea white. Kernels small, glabrous. Very slight pubescence on callus. Medium pubescence on rachilla. Annual. Wild. Seed.
- PI 544363 **donor id:** AF-24. **origin:** United States. **collected:** July 08, 1973. **locality:** 4 mi. south of Sisseton along Hwy. 81; oat field. **remarks:** Lemma and palea brown. Callus and rachilla glabrous to medium pubescence. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544364 **donor id:** AF-28. **origin:** United States. **collected:** July 08, 1973. **locality:** 5 mi. south of Webster along Hwy. 25; oat field. **remarks:** Lemma and palea gray, slight pubescence. Short pubescence on callus. Medium pubescence on rachilla. Tolerant to BYDV at Urbana, IL. Annual. Wild. Seed.
- PI 544365 **donor id:** AF-29. **origin:** United States. **collected:** July 08, 1973. **locality:** 12 mi. south of Britton on Hwy. 25; barley field. Heavy stand of Avena fatua. **remarks:** Lemma and palea dark gray. Kernels glabrous. Dehulls easily. Annual. Wild. Seed.
- PI 544366 **donor id:** AF-30. **origin:** United States. **collected:** July 08, 1973. **locality:** 10 mi. south of Britton along Hwy. 25; wheat field. Heavy stand of Avena fatua. **remarks:** Lemma and palea brown. Kernels very pubescent. Groat protein 23.2%. Annual. Wild. Seed.
- PI 544367 **donor id:** AF-33. **origin:** United States. **collected:** 1964. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea dark brown. Glabrous, except moderate pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544368 **donor id:** AF-34. **origin:** United States. **collected:** July 08, 1973. **locality:** 6 mi. east of Britton; wheat field. Abundant A. fatua in area. **remarks:** Lemma and palea brown, pubescent. Kernels small. Annual. Wild. Seed.
- PI 544369 **donor id:** AF-35. **origin:** United States. **collected:** July 08, 1973. **locality:** 6 mi. east of Britton; wheat field. Abundant A. fatua in area. **remarks:** Lemma and palea gray, glabrous. Long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544370 **donor id:** AF-36. **origin:** United States. **collected:** July 08, 1973. **locality:** 6 mi. east of Britton; wheat field. Abundant A. fatua in area. **remarks:** Lemma and palea brown. Kernels glabrous. Annual. Wild. Seed.
- PI 544371 **donor id:** AF-37. **origin:** United States. **collected:** July 08, 1973. **locality:** 6 mi. east of Britton; wheat field. Abundant A. fatua in area. **remarks:** Lemma and palea slate gray, glabrous; except short pubescence on callus and medium pubescence on rachilla. Groat protein 21.4%. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544372 **donor id:** AF-38. **origin:** United States. **collected:** July 08, 1973. **locality:** 10 mi. north of North Dakota-South Dakota border along Hwy. 81; oat field heavily infested with *A. fatua*. **remarks:** Lemma and palea white and glabrous. Long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544373 **donor id:** AF-39. **origin:** United States. **collected:** July 08, 1973. **locality:** 10 mi. north of North Dakota-South Dakota border along Hwy. 81; oat field heavily infested with *A. fatua*. **remarks:** Lemma and palea brown with moderate pubescence. Short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544374 **donor id:** AF-40. **origin:** United States. **collected:** July 08, 1973. **locality:** 10 mi. north of North Dakota-South Dakota border along Hwy. 81; oat field heavily infested with *A. fatua*. **remarks:** Lemma and palea gray or brown. Kernels glabrous. Dehulls easily. Annual. Wild. Seed.
- PI 544375 **donor id:** AF-41. **origin:** United States. **collected:** July 08, 1973. **locality:** 10 mi. north of North Dakota-South Dakota border along Hwy. 81; oat field heavily infested with *A. fatua*. **remarks:** Lemma and palea very dark gray. Kernels glabrous. Groat protein 21.8%. Annual. Wild. Seed.
- PI 544376 **donor id:** AF-43. **origin:** United States. **collected:** July 08, 1973. **locality:** 5 mi. west of Wahpeton along Hwy. 13; ditchbank. **remarks:** Lemma and palea dark gray. Kernels glabrous. Annual. Wild. Seed.
- PI 544377 **donor id:** AF-47. **origin:** United States. **collected:** July 08, 1973. **locality:** Wyndmere, along Hwy 13; oat field. **remarks:** Lemma and palea brown. Kernels glabrous with occasional light pubescence. Annual. Wild. Seed.
- PI 544378 **donor id:** AF-48. **origin:** United States. **collected:** July 08, 1973. **locality:** Near Forman, along Hwy. 32; oat field. **remarks:** Lemma and palea brown; pubescent or glabrous with pubescence on collar and rachilla. Annual. Wild. Seed.
- PI 544379 **donor id:** AF-49. **origin:** United States. **collected:** July 08, 1973. **locality:** 2 mi. north of Dumont along Hwy. 75; oat field. **remarks:** Lemma and palea dark gray, glabrous except pubescent callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544380 **donor id:** AF-50. **origin:** United States. **collected:** July 08, 1973. **locality:** Near Forman along Hwy 32; wheat field. **remarks:** Lemma and palea gray. Kernels glabrous. Groat protein 23.2%. Annual. Wild. Seed.
- PI 544381 **donor id:** AF-51. **origin:** United States. **collected:** July 09, 1973. **locality:** 8 mi. south of Milbank along Hwy. 77; barley field. A. fatua sparse. **remarks:** Lemma and palea dark brown, pubescent. Tolerant to BYDV at Urbana, IL. Annual. Wild. Seed.
- PI 544382 **donor id:** AF-53. **origin:** United States. **collected:** July 09, 1973. **locality:** 1 mi. north of Ortonville along Hwy 75; wheat field. **remarks:** Lemma and palea dark brown; kernels slightly pubescent. Annual. Wild. Seed.
- PI 544383 **donor id:** AF-55. **origin:** United States. **collected:** July 09, 1973. **locality:** 1 mi. north of Ortonville along Hwy. 75; wheat field. **remarks:** Lemma and palea gray; kernels glabrous. Annual. Wild. Seed.
- PI 544384 **donor id:** AF-56. **origin:** United States. **collected:** July 09, 1973. **locality:** 2 mi. north of Dumont along Hwy. 75; oat field. **remarks:** Lemma and palea gray; glabrous except heavy pubescence on callus and rachilla. Groat protein 20.3%. Annual. Wild. Seed.
- PI 544385 **donor id:** AF-57. **origin:** United States. **collected:** July 09, 1973. **locality:** 2 mi. north of Dumont along Hwy. 75; oat field. **remarks:** Lemma and palea brown; kernels very pubescent. Annual. Wild. Seed.
- PI 544386 **donor id:** AF-59. **origin:** United States. **collected:** July 09, 1973. **locality:** 10 mi. south of Breckenridge along Hwy. 75; oat field. **remarks:** Lemma and palea white; glabrous except heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544387 **donor id:** AF-61. **origin:** United States. **collected:** July 09, 1973. **locality:** 10 mi. south of Breckenridge along Hwy. 75; oat field. **remarks:** Lemma and palea brown or dark gray; kernels glabrous. M. Simons observed albino seedlings when evaluating for crown rust reaction. Annual. Wild. Seed.
- PI 544388 **donor id:** AF-62. **origin:** United States. **collected:** July 09, 1973. **locality:** 20 mi. south of Fargo along Hwy. 75; oat field. **remarks:** Lemma and palea white, glabrous; long pubescence on callus and rachilla. Very productive. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544389 **donor id:** AF-63. **origin:** United States. **collected:** July 09, 1973. **locality:** 7 mi. south of Fargo along Hwy. 75; wheat field. **remarks:** Lemma and palea brown; glabrous to pubescent with short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544390 **donor id:** AF-65. **origin:** United States. **collected:** July 09, 1973. **locality:** 7 mi. south of Fargo along Hwy. 75; wheat field. **remarks:** Lemma and palea white; kernels glabrous. Annual. Wild. Seed.
- PI 544391 **donor id:** AF-67. **origin:** United States. **collected:** July 10, 1973. **locality:** Near Argusville along old Hwy. 81; wheat field. **remarks:** Lemma and palea dark brown; kernels glabrous. Annual. Wild. Seed.
- PI 544392 **donor id:** AF-68. **origin:** United States. **collected:** July 10, 1973. **locality:** Near Argusville along old Hwy. 81; wheat field. **remarks:** Lemma and palea gray; kernels glabrous. Annual. Wild. Seed.
- PI 544393 **donor id:** AF-69. **origin:** United States. **collected:** July 10, 1973. **locality:** 3 mi. north of Hillsboro along Hwy. 81; oat field. **remarks:** Lemma and palea brown; slight pubescence. Groat protein 22.8%. Annual. Wild. Seed.
- PI 544394 **donor id:** AF-72. **origin:** United States. **collected:** 1971. **locality:** San Francisco. **remarks:** Lemma and palea light gray, pubescent; medium pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544395 **donor id:** AF-73. **origin:** United States. **collected:** July 10, 1973. **locality:** 1 mi. south of Ulen along Hwy. 32; oat field. **remarks:** Lemma and palea brown, slight pubescence; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544396 **donor id:** AF-74. **origin:** United States. **collected:** 1964. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea gray, glabrous except very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544397 **donor id:** AF-76. **origin:** United States. **collected:** 1971. **locality:** Ft. Collins. **remarks:** Lemma and palea brown, slight pubescence; very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544398 **donor id:** AF-79. **origin:** United States. **collected:** July 24, 1973. **locality:** 2 mi. south, 1.5 mi. west, .75 mi. S of Hazelton; low area in a flax field. **remarks:** Lemma and palea gray; kernels glabrous. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544399 **donor id:** AF-80. **origin:** United States. **collected:** July 24, 1910. **locality:** 2.75 mi. south, 2 mi. west of Hazelton; high area in a wheat field. **remarks:** Lemma and palea gray; kernels glabrous. Annual. Wild. Seed.
- PI 544400 **donor id:** AF-81. **origin:** United States. **collected:** July 24, 1973. **locality:** 3 mi. south, 2 mi. west of Hazelton; side hill in a wheat field. **remarks:** Lemma and palea gray; kernels glabrous. Annual. Wild. Seed.
- PI 544401 **donor id:** AF-82. **origin:** United States. **collected:** July 24, 1973. **locality:** 2.75 mi. south, 1.5 mi west of Hazelton; hill-top in a wheat field. **remarks:** Lemma and palea dark gray; kernels glabrous. Groat protein 23.5%. Annual. Wild. Seed.
- PI 544402 **donor id:** AF-83. **origin:** United States. **collected:** July 24, 1973. **locality:** 2.75 mi. south, 1.5 mi. west of Hazelton; level area in a wheat field. **remarks:** Lemma and palea white; kernels glabrous. Annual. Wild. Seed.
- PI 544403 **donor id:** AF-84. **origin:** United States. **collected:** July 28, 1973. **locality:** 4 mi. south of Ambrose along Hwy. 5; cropland. **remarks:** Lemma and palea gray, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544404 **donor id:** AF-85. **origin:** United States. **collected:** July 28, 1973. **locality:** .5 mi. south, 1.5 mi. west of Norma; wheat field. **remarks:** Lemma and palea gray or white; kernels glabrous. Groat protein 23.0%. Annual. Wild. Seed.
- PI 544405 **donor id:** AF-87. **origin:** United States. **collected:** August 01, 1973. **locality:** 3 mi. east, 2 mi. north of Kenmare; heavy clay soil. **remarks:** Lemma and palea gray; kernels glabrous. Annual. Wild. Seed.
- PI 544406 **donor id:** AF-88. **origin:** United States. **collected:** August 03, 1973. **locality:** 1 mi. west of Kenmare; ditch, clay soil. **remarks:** Lemma and palea gray, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544407 **donor id:** AF-89. **origin:** United States. **collected:** August 03, 1973. **locality:** 3 mi. west of Kenmare; durum wheat field; black soil. **remarks:** Lemma and palea white; kernels glabrous. Annual. Wild. Seed.
- PI 544408 **donor id:** AF-90. **origin:** United States. **collected:** August 1910. **locality:** near Kenmare. **remarks:** Lemma and palea gray; kernels glabrous. Groat protein 21.9-22.9%. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544409 **donor id:** AF-95. **origin:** United States. **collected:** August 04, 1973. **locality:** 2.5 mi. west of Kenaston; grassy area. **remarks:** Lemma and palea gray or white, pubescent; short pubescence on callus and rachilla. Groat 70%. Annual. Wild. Seed.
- PI 544410 **donor id:** AF-96. **origin:** United States. **collected:** August 05, 1973. **locality:** 3 mi. east, .5 mi. north of Kenmare; low area in summer fallow field. **remarks:** Lemma and palea dark brown; pubescent callus and rachilla. Annual. Wild. Seed.
- PI 544411 **donor id:** AF-97. **origin:** United States. **collected:** August 05, 1973. **locality:** 1.5 mi. south of Norma; high area in a soybean field. **remarks:** Lemma and palea brown; kernels glabrous. Annual. Wild. Seed.
- PI 544412 **donor id:** AF-98. **origin:** United States. **collected:** August 03, 1973. **locality:** 10 mi. northwest of Brigham City along I-15; irrigated wheat field. **remarks:** Lemma and palea white; kernels pubescent. Annual. Wild. Seed.
- PI 544413 **donor id:** AF-99. **origin:** United States. **collected:** August 03, 1973. **locality:** 10 mi. northwest of Brigham City along I-15; irrigated wheat field. **remarks:** Lemma and palea tan to gray, moderate pubescence; short pubescence on callus and rachilla. Groat protein 21.8%. Annual. Wild. Seed.
- PI 544414 **donor id:** AF-103. **origin:** United States. **collected:** August 03, 1973. **locality:** 8 mi. north of Utah-Idaho border along I-15; barley field. **remarks:** Lemma and palea white to tan; kernels pubescent. Groat protein 24.0%. Annual. Wild. Seed.
- PI 544415 **donor id:** AF-106. **origin:** United States. **collected:** August 03, 1973. **locality:** 2.2 mi. south of Malad City along I-15; barley field. **remarks:** Lemma and palea dark brown, pubescent. Annual. Wild. Seed.
- PI 544416 **donor id:** AF-107. **origin:** United States. **collected:** August 03, 1973. **locality:** 2.2 mi. south of Malad City along I-15; barley field. **remarks:** Lemma and palea gray; kernels pubescent. Annual. Wild. Seed.
- PI 544417 **donor id:** AF-110. **origin:** United States. **collected:** August 03, 1973. **locality:** Univ. of Idaho Res. Ext. Center, Aberdeen; oat nursery. **remarks:** Lemma and palea dark gray; kernels glabrous. Collected from an extremely productive plant with many tillers. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544418 **donor id:** AF-111. **origin:** United States. **collected:** August 03, 1973. **locality:** Univ. of Idaho Res. Ext. Center, Aberdeen; oat nursery. **remarks:** Lemma and palea dark gray; kernels pubescent. Tolerant to BYDV at Urbana, IL. Annual. Wild. Seed.
- PI 544419 **donor id:** AF-113. **origin:** United States. **collected:** August 06, 1973. **locality:** Univ. of Idaho Res. Ext. Center, Aberdeen; oat nursery. **remarks:** Lemma and palea dark gray; kernels glabrous. Collected from a very productive plant. Annual. Wild. Seed.
- PI 544420 **donor id:** AF-114. **origin:** United States. **collected:** August 07, 1973. **locality:** Univ. of Idaho Res. Ext. Center, Aberdeen; oat nursery. **remarks:** Lemma and palea dark brown; kernels pubescent; heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544421 **donor id:** AF-115. **origin:** United States. **collected:** August 08, 1973. **locality:** Univ. of Idaho Res. Ext. Center, Aberdeen; barley nursery. **remarks:** Lemma and palea dark brown; kernels pubescent; heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544422 **donor id:** AF-117. **origin:** United States. **collected:** August 08, 1973. **locality:** Univ. of Idaho Res. Ext. Center, Aberdeen; barley nursery. **remarks:** Lemma and palea dark brown; kernels pubescent. Extremely vigorous, tall; open panicle 1 inch long. Annual. Wild. Seed.
- PI 544423 **donor id:** AF-118. **origin:** United States. **collected:** August 08, 1973. **locality:** Univ. of Idaho Res. Ext. Center, Aberdeen; barley nursery. **remarks:** Lemma and palea brown, pubescent; long pubescence on callus and rachilla. Tolerant to BYDV at Urbana, IL. Annual. Wild. Seed.
- PI 544424 **donor id:** AF-120. **origin:** United States. **collected:** August 08, 1973. **locality:** Univ. of Idaho Res. Ext. Center, Aberdeen; barley nursery. **remarks:** Lemma and palea white; kernels glabrous. Annual. Wild. Seed.
- PI 544425 **donor id:** AF-121. **origin:** United States. **collected:** August 08, 1973. **locality:** Univ. of Idaho Res. Ext. Center, Aberdeen; barley nursery. **remarks:** Lemma and palea brown, pubescent; long pubescence on callus and rachilla. Very vigorous, tall. Annual. Wild. Seed.
- PI 544426 **donor id:** AF-122. **origin:** United States. **collected:** August 10, 1973. **locality:** 1 mi. south of Aberdeen along Hwy. 39; ditch bank. **remarks:** Lemma and palea gray; kernels glabrous. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544427 **donor id:** AF-123. **origin:** United States. **collected:** August 10, 1973. **locality:** 1 mi. south of Aberdeen along Hwy. 39; ditch bank. **remarks:** Lemma and palea dark brown; kernels glabrous. Annual. Wild. Seed.
- PI 544428 **donor id:** AF-124. **origin:** United States. **collected:** August 10, 1973. **locality:** 4 mi. north of American Falls along Hwy. 39; wheat field. **remarks:** Lemma and palea gray; kernels glabrous. Annual. Wild. Seed.
- PI 544429 **donor id:** AF-126. **origin:** United States. **collected:** August 09, 1973. **locality:** 6 mi. south of Aberdeen along Hwy. 39; roadside. **remarks:** Lemma and palea gray; kernels glabrous. Annual. Wild. Seed.
- PI 544430 **donor id:** AF-127. **origin:** United States. **collected:** August 28, 1973. **locality:** 1 mi. south of U.S.-Canada border, between Cardston, Alberta and Babb, MT; wheat field. **remarks:** Lemma and palea slate gray to dark gray, slightly pubescent; callus and rachilla glabrous to moderate pubescence. Annual. Wild. Seed.
- PI 544431 **donor id:** AF-130. **origin:** United States. **collected:** 1964. **collector id:** RNA-1. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea light gray, slightly pubescent; medium to long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544432 **donor id:** AF-131. **origin:** United States. **collected:** 1964. **collector id:** RNA-2-4. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea very white; kernels glabrous to slightly pubescent. Annual. Wild. Seed.
- PI 544433 **donor id:** AF-134. **origin:** United States. **collected:** 1964. **collector id:** RNA-5-6. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea dark gray or white; kernels glabrous. Annual. Wild. Seed.
- PI 544434 **donor id:** AF-136. **origin:** United States. **collected:** 1964. **collector id:** RNA-7. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea dull gray or white. Annual. Wild. Seed.
- PI 544435 **donor id:** AF-137. **origin:** United States. **collected:** 1964. **collector id:** RNA-8. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea very white; kernels slightly pubescent. Tolerant to BYDV at Urbana, IL. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544436 **donor id:** AF-138. **origin:** United States. **collected:** 1964. **collector id:** RNA-9. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea dull gray or white; kernels pubescent. Annual. Wild. Seed.
- PI 544437 **donor id:** AF-139. **origin:** United States. **collected:** 1964. **collector id:** RNA-10. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea dark brown; kernels slightly pubescent. Annual. Wild. Seed.
- PI 544438 **donor id:** AF-140. **origin:** United States. **collected:** 1964. **collector id:** RNA-11. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea brown; kernels glabrous. Annual. Wild. Seed.
- PI 544439 **donor id:** AF-141. **origin:** United States. **collected:** 1964. **collector id:** RNA-12. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea dark brown; kernels glabrous. Annual. Wild. Seed.
- PI 544440 **donor id:** AF-142. **origin:** United States. **collected:** 1964. **collector id:** RNA-13-16. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea brown to dark brown; kernels glabrous. Tolerant to BYDV at Urbana, IL. Annual. Wild. Seed.
- PI 544441 **donor id:** AF-146. **origin:** United States. **collected:** 1964. **collector id:** RNA-17-18. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea very white; kernels glabrous or moderately pubescent. Annual. Wild. Seed.
- PI 544442 **donor id:** AF-148. **origin:** United States. **collected:** 1964. **collector id:** RNA-19. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea dark brown, slightly pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544443 **donor id:** AF-149. **origin:** United States. **collected:** 1964. **collector id:** RNA-149. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea very white; kernels glabrous. Annual. Wild. Seed.
- PI 544444 **donor id:** AF-150. **origin:** United States. **collected:** 1964. **collector id:** RNA-21. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea dark brown, glabrous; long pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544445 **donor id:** AF-151. **origin:** United States. **collected:** 1964. **collector id:** RNA-22-23. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea dull gray or white; kernels glabrous. Very good tolerance to BYDV at Urbana, IL. Annual. Wild. Seed.
- PI 544446 **donor id:** AF-153. **origin:** United States. **collected:** 1964. **collector id:** RNA-24-26. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea dark brown; kernels glabrous. Very good tolerance to BYDV at Urbana, IL. Annual. Wild. Seed.
- PI 544447 **donor id:** AF-156. **origin:** United States. **collected:** 1964. **collector id:** RNA-27. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea gray or white; kernels glabrous. Annual. Wild. Seed.
- PI 544448 **donor id:** AF-157. **origin:** United States. **collected:** 1964. **collector id:** RNA-28. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea dark brown; kernels glabrous. Annual. Wild. Seed.
- PI 544449 **donor id:** AF-158. **origin:** United States. **collected:** 1964. **collector id:** RNA-29. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea very white; kernels slightly pubescent. Annual. Wild. Seed.
- PI 544450 **donor id:** AF-159. **origin:** United States. **collected:** 1964. **collector id:** RNA-30-31. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea gray; kernels glabrous. Annual. Wild. Seed.
- PI 544451 **donor id:** AF-161. **origin:** United States. **collected:** 1964. **collector id:** RNA-32. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea white; kernels glabrous. Annual. Wild. Seed.
- PI 544452 **donor id:** AF-162. **origin:** United States. **collected:** 1964. **collector id:** RNA-33. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea brown; kernels glabrous. Very good tolerance to BYDV at Urbana, IL. Annual. Wild. Seed.
- PI 544453 **donor id:** AF-163. **origin:** United States. **collected:** 1964. **collector id:** RNA-34. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea gray, white, or dark brown; kernels glabrous. Annual. Wild. Seed.
- PI 544454 **donor id:** AF-164. **origin:** United States. **collected:** 1964. **collector id:** RNA-35. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea brown; kernels slightly pubescent. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544455 **donor id:** AF-165. **origin:** United States. **collected:** 1964. **collector id:** RNA-36. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea gray or white; kernels glabrous. Annual. Wild. Seed.
- PI 544456 **donor id:** AF-166. **origin:** United States. **collected:** 1964. **collector id:** RNA-37. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea dark brown, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544457 **donor id:** AF-167. **origin:** United States. **collected:** 1964. **collector id:** RNA-38. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea dark brown; kernels slightly pubescent. Annual. Wild. Seed.
- PI 544458 **donor id:** AF-168. **origin:** United States. **collected:** 1964. **collector id:** RNA-39. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea brown or white; kernels moderately pubescent. Annual. Wild. Seed.
- PI 544459 **donor id:** AF-169. **origin:** United States. **collected:** 1964. **collector id:** RNA-40. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea dark brown; kernels glabrous. Annual. Wild. Seed.
- PI 544460 **donor id:** AF-170. **origin:** United States. **collected:** 1964. **collector id:** RNA-41. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea very white; kernels slightly pubescent. Annual. Wild. Seed.
- PI 544461 **donor id:** AF-171. **origin:** United States. **collected:** 1964. **collector id:** RNA-42. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea dark brown; kernels slightly pubescent. Annual. Wild. Seed.
- PI 544462 **donor id:** AF-172. **origin:** United States. **collected:** 1964. **collector id:** RNA-43. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea gray or white; kernels glabrous. May be a fatua/sativa cross. Annual. Wild. Seed.
- PI 544463 **donor id:** AF-173. **origin:** United States. **collected:** 1964. **collector id:** RNA-44. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea very white or brown; kernels slightly pubescent. Annual. Wild. Seed.
- PI 544464 **donor id:** AF-174. **origin:** United States. **collected:** 1964. **collector id:** RNA-45. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea brown or white; kernels moderately pubescent. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544465 **donor id:** AF-175. **origin:** United States. **collected:** 1964. **collector id:** RNA-46. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea dark brown; kernels pubescent. Very good tolerance to BYDV at Urbana, IL. Annual. Wild. Seed.
- PI 544466 **donor id:** AF-176. **origin:** United States. **collected:** 1964. **collector id:** RNA-47. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea brown or white; kernels moderately pubescent. Annual. Wild. Seed.
- PI 544467 **donor id:** AF-178. **origin:** United States. **collected:** 1964. **collector id:** RNA-49. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea white; kernels slightly pubescent. Annual. Wild. Seed.
- PI 544468 **donor id:** AF-179. **origin:** United States. **collected:** 1964. **collector id:** RNA-50. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea dark brown; kernels pubescent. Tolerant to BYDV at Urbana, IL. Annual. Wild. Seed.
- PI 544469 **donor id:** AF-180. **origin:** United States. **collected:** 1964. **collector id:** RNA-51. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea very white; kernels glabrous. Annual. Wild. Seed.
- PI 544470 **donor id:** AF-181. **origin:** United States. **collected:** 1964. **collector id:** RNA-52. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea gray or white; kernels glabrous. Annual. Wild. Seed.
- PI 544471 **donor id:** AF-182. **origin:** United States. **collected:** 1964. **collector id:** RNA-53. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea dark brown or white; kernels glabrous. Annual. Wild. Seed.
- PI 544472 **donor id:** AF-183. **origin:** United States. **collected:** 1964. **collector id:** RNA-54. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea white; kernels moderately pubescent. Annual. Wild. Seed.
- PI 544473 **donor id:** AF-184. **origin:** United States. **collected:** 1964. **collector id:** RNA-55. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea gray or white, glabrous; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544474 **donor id:** AF-185. **origin:** United States. **collected:** 1964. **collector id:** RNA-56. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea dark brown; kernels moderately pubescent. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544475 **donor id:** AF-186. **origin:** United States. **collected:** 1964. **collector id:** RNA-57. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea dark brown, slightly pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544476 **donor id:** AF-187. **origin:** United States. **collected:** 1964. **collector id:** RNA-187. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea gray or white; kernels glabrous. Annual. Wild. Seed.
- PI 544477 **donor id:** AF-188. **origin:** United States. **collected:** 1964. **collector id:** RNA-59. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea very white; kernels slightly pubescent. Tolerant to BYDV at Urbana, IL. Annual. Wild. Seed.
- PI 544478 **donor id:** AF-189. **origin:** United States. **collected:** 1964. **collector id:** RNA-60. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea brown or white; kernels glabrous. Annual. Wild. Seed.
- PI 544479 **donor id:** AF-190. **origin:** United States. **collected:** 1964. **collector id:** RNA-61. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea dark brown, slightly pubescent; medium to long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544480 **donor id:** AF-191. **origin:** United States. **collected:** 1964. **collector id:** RNA-62-64. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea white or gray; kernels glabrous. Annual. Wild. Seed.
- PI 544481 **donor id:** AF-194. **origin:** United States. **collected:** 1964. **collector id:** RNA-65. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea very white; kernels glabrous. Annual. Wild. Seed.
- PI 544482 **donor id:** AF-195. **origin:** United States. **collected:** 1964. **collector id:** RNA-66. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea gray or white; kernels glabrous. Annual. Wild. Seed.
- PI 544483 **donor id:** AF-196. **origin:** United States. **collected:** 1964. **collector id:** RNA-67. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea brown; kernels glabrous. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544484 **donor id:** AF-198. **origin:** United States. **collected:** 1964. **collector id:** RNA-69. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea brown, moderate pubescence; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544485 **donor id:** AF-199. **origin:** United States. **collected:** 1964. **collector id:** RNA-70-71. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea white to very white, glabrous to slightly pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544486 **donor id:** AF-201. **origin:** United States. **collected:** 1964. **collector id:** RNA-72-74. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea dark gray or white, glabrous; moderate pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544487 **donor id:** AF-204. **origin:** United States. **collected:** 1964. **collector id:** RNA-75. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea dark gray; kernels glabrous. Very good tolerance to BYDV at Urbana, IL. Annual. Wild. Seed.
- PI 544488 **donor id:** AF-205. **origin:** United States. **collected:** 1964. **collector id:** RNA-76. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea white, glabrous; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544489 **donor id:** AF-207. **origin:** United States. **collected:** 1964. **collector id:** RNA-78. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea white or gray, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544490 **donor id:** AF-208. **origin:** United States. **collected:** 1964. **collector id:** RNA-79. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea white, glabrous; long pubescence on callus and rachilla. Groat 70%. Annual. Wild. Seed.
- PI 544491 **donor id:** AF-209. **origin:** United States. **collected:** 1964. **collector id:** RNA-80. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea brown; kernels slightly pubescent. Annual. Wild. Seed.
- PI 544492 **donor id:** AF-210. **origin:** United States. **collected:** 1964. **collector id:** RNA-81. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea brown; kernels glabrous or slightly pubescent. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544493 **donor id:** AF-211. **origin:** United States. **collected:** 1964. **collector id:** RNA-82. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea very white; kernels slightly pubescent. Annual. Wild. Seed.
- PI 544494 **donor id:** AF-212. **origin:** United States. **collected:** 1964. **collector id:** RNA-83-84. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea dark brown; kernels glabrous or moderately pubescent. Annual. Wild. Seed.
- PI 544495 **donor id:** AF-214. **origin:** United States. **collected:** 1964. **collector id:** RNA-85. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea very white; kernels slightly pubescent. Annual. Wild. Seed.
- PI 544496 **donor id:** AF-215. **origin:** United States. **collected:** 1964. **collector id:** RNA-86. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea brown or white; kernels slightly pubescent. Annual. Wild. Seed.
- PI 544497 **donor id:** AF-216. **origin:** United States. **collected:** 1964. **collector id:** RNA-87. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea dark brown; kernels slightly pubescent. Annual. Wild. Seed.
- PI 544498 **donor id:** AF-217. **origin:** United States. **collected:** 1964. **collector id:** RNA-88. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea brown or white; kernels slightly pubescent to pubescent. Groat 70%. Annual. Wild. Seed.
- PI 544499 **donor id:** AF-218. **origin:** United States. **collected:** 1964. **collector id:** RNA-89. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea very white; kernels slightly pubescent to pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544500 **donor id:** AF-219. **origin:** United States. **collected:** 1964. **collector id:** RNA-90. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea white or gray; kernels glabrous. Annual. Wild. Seed.
- PI 544501 **donor id:** AF-220. **origin:** United States. **collected:** 1964. **collector id:** RNA-91. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea white or brown; kernels glabrous or slightly pubescent. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544502 **donor id:** AF-221. **origin:** United States. **collected:** 1964. **collector id:** RNA-92. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea very white; kernels slightly pubescent. Annual. Wild. Seed.
- PI 544503 **donor id:** AF-222. **origin:** United States. **collected:** 1964. **collector id:** RNA-93. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea brown; kernels glabrous. Annual. Wild. Seed.
- PI 544504 **donor id:** AF-223. **origin:** United States. **collected:** 1964. **collector id:** RNA-94-97. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea dark brown; kernels glabrous to very pubescent. Annual. Wild. Seed.
- PI 544505 **donor id:** AF-227. **origin:** United States. **collected:** 1964. **collector id:** RNA-98. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea very white; kernels slightly pubescent. Annual. Wild. Seed.
- PI 544506 **donor id:** AF-228. **origin:** United States. **collected:** 1964. **collector id:** RNA-99. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea brown or white; kernels moderately pubescent. Annual. Wild. Seed.
- PI 544507 **donor id:** AF-229. **origin:** United States. **collected:** 1964. **collector id:** RNA-100. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea brown or white; kernels slightly pubescent. Annual. Wild. Seed.
- PI 544508 **donor id:** AF-230. **origin:** United States. **collected:** 1964. **collector id:** RNA-101. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea very white; kernels slightly pubescent. Annual. Wild. Seed.
- PI 544509 **donor id:** AF-231. **origin:** United States. **collected:** 1964. **collector id:** RNA-102. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea brown, moderately pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544510 **donor id:** AF-232. **origin:** United States. **collected:** 1964. **collector id:** RNA-104-105. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea very white; kernels slightly pubescent. Annual. Wild. Seed.
- PI 544511 **donor id:** AF-234. **origin:** United States. **collected:** 1964. **collector id:** RNA-106. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea brown or white; kernels glabrous or slightly pubescent. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544512 **donor id:** AF-235. **origin:** United States. **collected:** 1964. **collector id:** RNA-107. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea very white; kernels slightly pubescent. Annual. Wild. Seed.
- PI 544513 **donor id:** AF-236. **origin:** United States. **collected:** 1964. **collector id:** RNA-108. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea dark brown; kernels pubescent. Annual. Wild. Seed.
- PI 544514 **donor id:** AF-237. **origin:** United States. **collected:** 1964. **collector id:** RNA-109. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea very white; kernels slightly pubescent. Annual. Wild. Seed.
- PI 544515 **donor id:** AF-238. **origin:** United States. **collected:** 1964. **collector id:** RNA-110. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea brown or white; kernels moderately pubescent. Annual. Wild. Seed.
- PI 544516 **donor id:** AF-239. **origin:** United States. **collected:** 1964. **collector id:** RNA-111. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea dark brown; kernels pubescent. Annual. Wild. Seed.
- PI 544517 **donor id:** AF-240. **origin:** United States. **collected:** 1964. **collector id:** RNA-112. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea gray or white; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544518 **donor id:** AF-241. **origin:** United States. **collected:** 1964. **collector id:** RNA-114. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea brown or white; kernels slightly pubescent. Annual. Wild. Seed.
- PI 544519 **donor id:** AF-242. **origin:** United States. **collected:** 1964. **collector id:** RNA-115. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea very white; kernels slightly pubescent. Annual. Wild. Seed.
- PI 544520 **donor id:** AF-243. **origin:** United States. **collected:** 1964. **collector id:** RNA-116. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea brown; kernels glabrous. Annual. Wild. Seed.
- PI 544521 **donor id:** AF-244. **origin:** United States. **collected:** 1964. **collector id:** RNA-117. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea brown or white; kernels glabrous. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544522 **donor id:** AF-245. **origin:** United States. **collected:** 1964. **collector id:** RNA-118. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea gray or white; kernels glabrous. Annual. Wild. Seed.
- PI 544523 **donor id:** AF-246. **origin:** United States. **collected:** 1964. **collector id:** RNA-119. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea brown or white; kernels glabrous. Annual. Wild. Seed.
- PI 544524 **donor id:** AF-247. **origin:** United States. **collected:** 1964. **collector id:** RNA-120. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea dark brown; kernels pubescent. Annual. Wild. Seed.
- PI 544525 **donor id:** AF-248. **origin:** United States. **collected:** 1964. **collector id:** RNA-121. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea very white; kernels slightly pubescent. Annual. Wild. Seed.
- PI 544526 **donor id:** AF-249. **origin:** United States. **collected:** 1964. **collector id:** RNA-122. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea dark brown; kernels slightly pubescent. Good tolerance to BYDV at Urbana, IL. Annual. Wild. Seed.
- PI 544527 **donor id:** AF-250. **origin:** United States. **collected:** 1964. **collector id:** RNA-123-126. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea brown; kernels glabrous to slightly pubescent. Annual. Wild. Seed.
- PI 544528 **donor id:** AF-253. **origin:** United States. **collected:** 1964. **collector id:** RNA-127. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea light brown or white; kernels glabrous. Annual. Wild. Seed.
- PI 544529 **donor id:** AF-254. **origin:** United States. **collected:** 1964. **collector id:** RNA-128-129. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea white; kernels glabrous to slightly pubescent. Annual. Wild. Seed.
- PI 544530 **donor id:** AF-256. **origin:** United States. **collected:** 1964. **collector id:** RNA-130. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea brown or white; kernels slightly pubescent. Annual. Wild. Seed.
- PI 544531 **donor id:** AF-257. **origin:** United States. **collected:** 1964. **collector id:** RNA-131-132. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea brown to dark brown; kernels glabrous to slightly pubescent. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544532 **donor id:** AF-259. **origin:** United States. **collected:** 1964. **collector id:** RNA-133-134. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea very white to light gray; kernels glabrous to slightly pubescent. Very good tolerance to BYDV at Urbana, IL. Annual. Wild. Seed.
- PI 544533 **donor id:** AF-261. **origin:** United States. **collected:** 1964. **collector id:** RNA-135. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea brown or tan; kernels glabrous. Annual. Wild. Seed.
- PI 544534 **donor id:** AF-262. **origin:** United States. **collected:** 1964. **collector id:** RNA-136. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea gray or white, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544535 **donor id:** AF-263. **origin:** United States. **collected:** 1964. **collector id:** RNA-137. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea brown; kernels glabrous. Very good tolerance to BYDV at Urbana, IL. Annual. Wild. Seed.
- PI 544536 **donor id:** AF-264. **origin:** United States. **collected:** 1964. **collector id:** RNA-138. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea gray or white; kernels glabrous. Annual. Wild. Seed.
- PI 544537 **donor id:** AF-265. **origin:** United States. **collected:** 1964. **collector id:** RNA-139-140. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea brown; kernels glabrous. Annual. Wild. Seed.
- PI 544538 **donor id:** AF-267. **origin:** United States. **collected:** 1964. **collector id:** RNA-141. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea white; kernels slightly pubescent. Annual. Wild. Seed.
- PI 544539 **donor id:** AF-268. **origin:** United States. **collected:** 1964. **collector id:** RNA-142-143. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea dull black; kernels glabrous or moderately pubescent. Annual. Wild. Seed.
- PI 544540 **donor id:** AF-270. **origin:** United States. **collected:** 1964. **collector id:** RNA-144. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea white, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544541 **donor id:** AF-271. **origin:** United States. **collected:** 1964. **collector id:** RNA-145. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea white; kernels slightly pubescent. Annual. Wild. Seed.
- PI 544542 **donor id:** AF-272. **origin:** United States. **collected:** 1964. **collector id:** RNA-146. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea gray or white; kernels glabrous. Annual. Wild. Seed.
- PI 544543 **donor id:** AF-273. **origin:** United States. **collected:** 1964. **collector id:** RNA-147. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea very white; kernels glabrous. Annual. Wild. Seed.
- PI 544544 **donor id:** AF-274. **origin:** United States. **collected:** 1964. **collector id:** RNA-148. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea white or light brown; kernels glabrous. Annual. Wild. Seed.
- PI 544545 **donor id:** AF-275. **origin:** United States. **collected:** 1964. **collector id:** RNA-149. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea dark brown, slightly pubescent; medium pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544546 **donor id:** AF-276. **origin:** United States. **collected:** 1964. **collector id:** RNA-150. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea gray or white; kernels glabrous. Annual. Wild. Seed.
- PI 544547 **donor id:** AF-277. **origin:** United States. **collected:** 1964. **collector id:** RNA-151. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea dark brown; kernels slightly pubescent. Annual. Wild. Seed.
- PI 544548 **donor id:** AF-278. **origin:** United States. **collected:** 1964. **collector id:** RNA-152-153. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea white; kernels glabrous or slightly pubescent. Annual. Wild. Seed.
- PI 544549 **donor id:** AF-280. **origin:** United States. **collected:** 1964. **collector id:** RNA-154-155. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea dark brown; kernels glabrous or slightly pubescent. Annual. Wild. Seed.
- PI 544550 **donor id:** AF-282. **origin:** United States. **collected:** 1964. **collector id:** RNA-156. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea white; kernels slightly pubescent. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544551 **donor id:** AF-283. **origin:** United States. **collected:** 1964. **collector id:** RNA-157. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea gray or white; kernels glabrous. Annual. Wild. Seed.
- PI 544552 **donor id:** AF-284. **origin:** United States. **collected:** 1964. **collector id:** RNA-158-159. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea dark brown, glabrous to slightly pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544553 **donor id:** AF-286. **origin:** United States. **collected:** 1964. **collector id:** RNA-160. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea gray or white; kernels glabrous. Annual. Wild. Seed.
- PI 544554 **donor id:** AF-288. **origin:** United States. **collected:** 1964. **collector id:** RNA-163. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea dark gray or white; kernels glabrous. Annual. Wild. Seed.
- PI 544555 **donor id:** AF-289. **origin:** United States. **collected:** 1964. **collector id:** RNA-164. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea blue-gray; kernels slightly pubescent. Annual. Wild. Seed.
- PI 544556 **donor id:** AF-290. **origin:** United States. **collected:** 1964. **collector id:** RNA-165. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea dark brown; kernels slightly pubescent. Annual. Wild. Seed.
- PI 544557 **donor id:** AF-291. **origin:** United States. **collected:** 1964. **collector id:** RNA-166. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea gray. Annual. Wild. Seed.
- PI 544558 **donor id:** AF-292. **origin:** United States. **collected:** 1964. **collector id:** RNA-167. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea dark brown, slightly pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544559 **donor id:** AF-293. **origin:** United States. **collected:** 1964. **collector id:** RNA-293. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea dark brown; kernels glabrous. Annual. Wild. Seed.
- PI 544560 **donor id:** AF-294. **origin:** United States. **collected:** 1964. **collector id:** RNA-169. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea gray; kernels glabrous. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544561 **donor id:** AF-295. **origin:** United States. **collected:** 1964. **collector id:** RNA-295. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea dark brown; kernels glabrous. Annual. Wild. Seed.
- PI 544562 **donor id:** AF-296. **origin:** United States. **collected:** 1964. **collector id:** RNA-171. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea dark brown; kernels slightly pubescent. Annual. Wild. Seed.
- PI 544563 **donor id:** AF-297. **origin:** United States. **collected:** 1964. **collector id:** RNA-172. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea dark brown; kernels glabrous. Annual. Wild. Seed.
- PI 544564 **donor id:** AF-298. **origin:** United States. **collected:** 1964. **collector id:** RNA-173. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea gray or white; kernels glabrous. Annual. Wild. Seed.
- PI 544565 **donor id:** AF-299. **origin:** United States. **collected:** 1964. **collector id:** RNA-174. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea dark brown, slightly pubescent; medium pubescence on rachilla, long pubescence on callus. Annual. Wild. Seed.
- PI 544566 **donor id:** AF-300. **origin:** United States. **collected:** 1964. **collector id:** RNA-175. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea light gray or white; kernels pubescent. Annual. Wild. Seed.
- PI 544567 **donor id:** AF-301. **origin:** United States. **collected:** 1964. **collector id:** RNA-176. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea white or gray, pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544568 **donor id:** AF-302. **origin:** United States. **collected:** 1964. **collector id:** RNA-177. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea dark brown, pubescent; medium pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544569 **donor id:** AF-303. **origin:** United States. **collected:** 1964. **collector id:** RNA-178. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea dark brown; kernels slightly pubescent; long pubescence on callus and rachilla. Groat 74%. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544570 **donor id:** AF-304. **origin:** United States. **collected:** 1964. **collector id:** RNA-179-183. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea brown to dark brown; kernels glabrous to pubescent. Annual. Wild. Seed.
- PI 544571 **donor id:** AF-309. **origin:** United States. **collected:** 1964. **collector id:** RNA-185. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea dull brown to blue gray; kernels slightly pubescent. Annual. Wild. Seed.
- PI 544572 **donor id:** AF-310. **origin:** United States. **collected:** 1964. **collector id:** RNA-186. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea white; kernels slightly pubescent. Annual. Wild. Seed.
- PI 544573 **donor id:** AF-311. **origin:** United States. **collected:** 1964. **collector id:** RNA-187. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea very white; kernels moderately pubescent. Annual. Wild. Seed.
- PI 544574 **donor id:** AF-312. **origin:** United States. **collected:** 1964. **collector id:** RNA-312. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea brown; kernels slightly pubescent. Annual. Wild. Seed.
- PI 544575 **donor id:** AF-313. **origin:** United States. **collected:** 1964. **collector id:** RNA-189. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea dark brown; kernels slightly pubescent. Very good tolerance to BYDV at Urbana, IL. Annual. Wild. Seed.
- PI 544576 **donor id:** AF-314. **origin:** United States. **collected:** 1964. **collector id:** RNA-190. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea white; kernels slightly pubescent. Annual. Wild. Seed.
- PI 544577 **donor id:** AF-315. **origin:** United States. **collected:** 1964. **collector id:** RNA-191. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea dark brown; kernels slightly pubescent. Annual. Wild. Seed.
- PI 544578 **donor id:** AF-316. **origin:** United States. **collected:** 1964. **collector id:** RNA-192-193. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea gray or white; kernels glabrous. Annual. Wild. Seed.
- PI 544579 **donor id:** AF-318. **origin:** United States. **collected:** 1964. **collector id:** RNA-194-195. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea brown; kernels pubescent. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544580 **donor id:** AF-320. **origin:** United States. **collected:** 1964. **collector id:** RNA-196-197. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea gray or white; kernels glabrous. Annual. Wild. Seed.
- PI 544581 **donor id:** AF-322. **origin:** United States. **collected:** 1964. **collector id:** RNA-198. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea gray or white; kernels glabrous. Very good tolerance to BYDV at Urbana, IL. Annual. Wild. Seed.
- PI 544582 **donor id:** AF-323. **origin:** United States. **collected:** 1964. **collector id:** RNA-199. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea dark brown; kernels pubescent. Annual. Wild. Seed.
- PI 544583 **donor id:** AF-324. **origin:** United States. **collected:** 1964. **collector id:** RNA-200. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea gray or white; kernels slightly pubescent. Annual. Wild. Seed.
- PI 544584 **donor id:** AF-325. **origin:** United States. **collected:** 1964. **collector id:** RNA-201. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea dark brown; kernels glabrous. Annual. Wild. Seed.
- PI 544585 **donor id:** AF-326. **origin:** United States. **collected:** 1964. **collector id:** RNA-202. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea white or light gray, slightly pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544586 **donor id:** AF-327. **origin:** United States. **collected:** 1964. **collector id:** RNA-203. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea gray, moderately pubescent; long pubescence on callus and rachilla. Good tolerance to BYDV at Urbana, IL. Annual. Wild. Seed.
- PI 544587 **donor id:** AF-328. **origin:** United States. **collected:** 1964. **collector id:** RNA-204. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea brown; kernels pubescent. Annual. Wild. Seed.
- PI 544588 **donor id:** AF-329. **origin:** United States. **collected:** 1964. **collector id:** RNA-205. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea gray or white; kernels glabrous. Tolerant to BYDV at Urbana, IL. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544589 **donor id:** AF-330. **origin:** United States. **collected:** 1964. **collector id:** RNA-206. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea gray or white, slightly pubescent; long pubescence on callus and rachilla. Tolerant to BYDV at Urbana, IL. Annual. Wild. Seed.
- PI 544590 **donor id:** AF-331. **origin:** United States. **collected:** 1964. **collector id:** RNA-207. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea brown, pubescent; medium pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544591 **donor id:** AF-332. **origin:** United States. **collected:** 1964. **collector id:** RNA-208. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea brown, pubescent; medium pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544592 **donor id:** AF-333. **origin:** United States. **collected:** 1964. **collector id:** RNA-209. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea very white; kernels slightly pubescent. Annual. Wild. Seed.
- PI 544593 **donor id:** AF-334. **origin:** United States. **collected:** 1964. **collector id:** RNA-210-211. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea brown, pubescent; medium pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544594 **donor id:** AF-336. **origin:** United States. **collected:** 1964. **collector id:** RNA-212. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea gray or white; kernels glabrous. Annual. Wild. Seed.
- PI 544595 **donor id:** AF-337. **origin:** United States. **collected:** 1964. **collector id:** RNA-213-214. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea dark brown; kernels pubescent. Annual. Wild. Seed.
- PI 544596 **donor id:** AF-339. **origin:** United States. **collected:** 1964. **collector id:** RNA-215. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea gray; kernels pubescent. Annual. Wild. Seed.
- PI 544597 **donor id:** AF-340. **origin:** United States. **collected:** 1964. **collector id:** RNA-216. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea dark brown; kernels pubescent. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544598 **donor id:** AF-341. **origin:** United States. **collected:** 1964. **collector id:** RNA-217. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea white or gray; kernels glabrous. Annual. Wild. Seed.
- PI 544599 **donor id:** AF-342. **origin:** United States. **collected:** 1964. **collector id:** RNA-218. **locality:** Red River Valley (MN/ND). **remarks:** Lemma and palea gray or white, slightly pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544600 **donor id:** AF-343. **origin:** United States. **collected:** July 19, 1973. **locality:** 6 mi. south; 3 mi. west of Makoti; roadside. **remarks:** Lemma and palea gray, glabrous; very short pubescence on callus and rachilla. All have sucker mouth. Some possibly hybrids. Annual. Wild. Seed.
- PI 544601 **donor id:** AF-344. **origin:** United States. **collected:** July 19, 1973. **locality:** 8 mi. south; 3 mi. west of Makoti in a fallow field. **remarks:** Lemma and palea gray; kernels glabrous. Annual. Wild. Seed.
- PI 544602 **donor id:** AF-345. **origin:** United States. **collected:** July 19, 1973. **locality:** 8 mi. south; 3 mi. west of Makoti; fallow field, low, poorly drained area. **remarks:** Lemma and palea dark brown or gray; kernels glabrous. Annual. Wild. Seed.
- PI 544603 **donor id:** AF-346. **origin:** United States. **collected:** July 19, 1973. **locality:** 7 mi. south; 3 mi. west of Makoti; hillside. **remarks:** Lemma and palea gray; kernels glabrous. Annual. Wild. Seed.
- PI 544604 **donor id:** AF-347. **origin:** United States. **collected:** July 19, 1973. **locality:** 6.5 mi. south; 3 mi. west of Makoti; low area in a fallow field. **remarks:** Lemma and palea gray; kernels glabrous. Annual. Wild. Seed.
- PI 544605 **donor id:** AF-348. **origin:** United States. **collected:** September 1973. **locality:** 5 mi. west of Roseglen, McLean Co. **remarks:** Lemma and palea light gray; kernels glabrous. Annual. Wild. Seed.
- PI 544606 **donor id:** AF-349. **origin:** United States. **collected:** August 05, 1973. **locality:** 5 mi. west of Roseglen, McLean Co.; low area in a wheat field. **remarks:** Lemma and palea gray; kernels glabrous. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544607 **donor id:** AF-350. **origin:** United States. **collected:** August 05, 1973. **locality:** 5 mi. west of Roseglen, McLean Co.; low area in a wheat field. **remarks:** Lemma and palea dark brown or white; kernels glabrous. Annual. Wild. Seed.
- PI 544608 **donor id:** AF-351. **origin:** United States. **collected:** August 05, 1973. **locality:** 5 mi. west of Roseglen, McLean Co.; edge of a field. **remarks:** Lemma and palea dark gray or white; kernels glabrous. Annual. Wild. Seed.
- PI 544609 **donor id:** AF-352. **origin:** United States. **collected:** August 05, 1973. **locality:** 5 mi. west of Roseglen, McLean Co.; oat field. **remarks:** Lemma and palea gray, very slight pubescence; moderate pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544610 **donor id:** AF-353. **origin:** United States. **collected:** September 1973. **locality:** 5 mi. west of Roseglen, McLean Co.; wheat field. **remarks:** Lemma and palea dark brown; kernels glabrous. Annual. Wild. Seed.
- PI 544611 **donor id:** AF-354. **origin:** United States. **collected:** August 10, 1973. **locality:** city park .5 mi. east of Bottineau; edge of wheat field. **remarks:** Lemma and palea dark gray; kernels pubescent; easily dehulls. Annual. Wild. Seed.
- PI 544612 **donor id:** AF-355. **origin:** United States. **collected:** August 10, 1973. **locality:** city park, .5 mi. east of Bottineau; edge of wheat field. **remarks:** Lemma and palea dark brown; kernels glabrous. Good tolerance to BYDV at Urbana, IL. Annual. Wild. Seed.
- PI 544613 **donor id:** AF-356. **origin:** United States. **collected:** August 10, 1973. **locality:** city park, .5 mi. east of Bottineau; edge of wheat field. **remarks:** Lemma and palea gray; kernels slightly pubescent. Annual. Wild. Seed.
- PI 544614 **donor id:** AF-357. **origin:** United States. **collected:** August 10, 1973. **locality:** city park, .5 mi. east of Bottineau; edge of wheat field. **remarks:** Lemma and palea brown; kernels glabrous or pubescent. Annual. Wild. Seed.
- PI 544615 **donor id:** AF-359. **origin:** United States. **collected:** August 19, 1973. **locality:** 6.5 mi. west; 3 mi. north of Souris (Sec18-T163N, R78W); roadside. **remarks:** Lemma and palea dull black to dark gray; kernels glabrous. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544616 **donor id:** AF-360. **origin:** United States. **collected:** July 30, 1973. **locality:** 1.5 mi. west, 1.75 mi. north of Roseglen. **remarks:** Lemma and palea dark gray, dull black, or white; kernels glabrous. Annual. Wild. Seed.
- PI 544617 **donor id:** AF-362. **origin:** United States. **collected:** August 02, 1973. **locality:** 13 mi. south of Plaza; poorly drained area. **remarks:** Lemma and palea dark brown; kernels pubescent. Annual. Wild. Seed.
- PI 544618 **donor id:** AF-363. **origin:** United States. **collected:** August 02, 1973. **locality:** 1.5 mi. west, 3 mi. north of Roseglen. **remarks:** Lemma and palea brown or dark gray; kernels glabrous. Annual. Wild. Seed.
- PI 544619 **donor id:** AF-364. **origin:** United States. **collected:** July 27, 1973. **locality:** 3 mi. west of Roseglen; summer fallow field, well-drained. **remarks:** Lemma and palea dull black or dark brown; kernels glabrous. Annual. Wild. Seed.
- PI 544620 **donor id:** AF-366. **origin:** United States. **collected:** July 27, 1973. **locality:** 3 mi. west of Roseglen; summer fallow field, well-drained. **remarks:** Lemma and palea brown; kernels glabrous. Tolerant to BYDV at Urbana, IL. Annual. Wild. Seed.
- PI 544621 **donor id:** AF-367. **origin:** United States. **collected:** July 27, 1973. **locality:** 3 mi. west, .25 mi. north of Roseglen; durum wheat field, low area. **remarks:** Lemma and palea dark gray; kernels glabrous. Annual. Wild. Seed.
- PI 544622 **donor id:** AF-369. **origin:** United States. **collected:** July 27, 1973. **locality:** 3 mi. west, .5 mi. north of Roseglen; wheat field, high area. **remarks:** Lemma and palea brown; kernels glabrous. Annual. Wild. Seed.
- PI 544623 **donor id:** AF-371. **origin:** United States. **collected:** 1973. **locality:** 3 mi. west of Roseglen. **remarks:** Lemma and palea gray to dark gray; kernels glabrous to slightly pubescent. Annual. Wild. Seed.
- PI 544624 **donor id:** AF-376. **origin:** United States. **collected:** September 07, 1973. **locality:** Univ. of California Tulelake Field Station; potato field. **remarks:** Lemma and palea brown; kernels pubescent. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544625 **donor id:** AF-377. **origin:** United States. **collected:** September 07, 1973. **locality:** Univ. of California Tulelake Field Station; potato field. **remarks:** Lemma and palea gray or white; kernels glabrous to slightly pubescent. Annual. Wild. Seed.
- PI 544626 **donor id:** AF-382. **origin:** United States. **collected:** September 07, 1973. **locality:** Univ. of California Tulelake Field Station; potato field. **remarks:** Lemma and palea gray; kernels glabrous. Annual. Wild. Seed.
- PI 544627 **donor id:** AF-387. **origin:** United States. **collected:** June 15, 1973. **locality:** 1 mi. west of La Moure; oat field with a high water table. **remarks:** Lemma and palea white to gray, slightly pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544628 **donor id:** AF-389. **origin:** United States. **collected:** July 10, 1973. **locality:** 3 mi. west, 2.5 mi. south of Edgeley; roadside. **remarks:** Lemma and palea white; kernels glabrous. Annual. Wild. Seed.
- PI 544629 **donor id:** AF-390. **origin:** United States. **collected:** July 10, 1973. **locality:** near Edgeley. **remarks:** Lemma and palea gray to dull black, glabrous to slight pubescence; short to long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544630 **donor id:** AF-397. **origin:** United States. **collected:** June 30, 1973. **locality:** 15 mi. west of Edgeley along Hwy. 281; edge of wheat field. **remarks:** Lemma and palea dark gray, pubescent; long, white pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544631 **donor id:** AF-398. **origin:** United States. **collected:** August 19, 1973. **locality:** 5.25 mi. north, .15 mi. west of Verona along County Hwy. 34; oat field. **remarks:** Lemma and palea gray; kernels glabrous. Annual. Wild. Seed.
- PI 544632 **donor id:** AF-399. **origin:** United States. **collected:** August 19, 1973. **locality:** 5.25 mi. north, 2 mi. west of Verona along County Hwy. 34; sunflower field. **remarks:** Lemma and palea dark brown, pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544633 **donor id:** AF-400. **origin:** United States. **collected:** August 19, 1973. **locality:** 5.25 mi. north, 2 mi. west of Verona along County Hwy. 34; sunflower field. **remarks:** Lemma and palea brown or gray or white, almost glabrous; kernels glabrous. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544634 **donor id:** AF-401. **origin:** United States. **collected:** September 20, 1973. **locality:** 1 mi. north of Aberdeen along Hwy. 39; barley field. **remarks:** Lemma and palea white or gray; kernels slightly pubescent. Annual. Wild. Seed.
- PI 544635 **donor id:** AF-402. **origin:** United States. **collected:** October 07, 1973. **locality:** 2 mi. S of Hwy 33 on Milk Creek Rd., 3-4 mi. E of Univ. of Idaho Tetonia Branch Exp. Station; edge of barley field. **remarks:** Lemma and palea dark brown; kernels slightly pubescent. Annual. Wild. Seed.
- PI 544636 **donor id:** AF-433. **origin:** United States. **collected:** April 1974. **locality:** near Brawley. **remarks:** Lemma and palea brown, pubescent to very pubescent; long pubescence on callus and rachilla. Groat 70%. Annual. Wild. Seed.
- PI 544637 **donor id:** AF-446. **origin:** United States. **collected:** April 07, 1974. **locality:** 2 mi. east of Brawley; south side of ditch bank. **remarks:** Lemma and palea brown, very pubescent; long pubescence on callus and rachilla. Groat 71%. Annual. Wild. Seed.
- PI 544638 **donor id:** AF-447. **origin:** United States. **collected:** April 07, 1974. **locality:** Carlo Pamo Ranch, near Brawley; ditch bank. **remarks:** Lemma and palea brown to dark brown, pubescent to very pubescent; medium to long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544639 **donor id:** AF-456. **origin:** United States. **collected:** April 07, 1974. **locality:** Carlo Pamo Ranch, near Brawley; ditch bank. **remarks:** Lemma and palea brown, very pubescent; long pubescence on callus and rachilla. Groat 70%. Annual. Wild. Seed.
- PI 544640 **donor id:** AF-458. **origin:** United States. **collected:** April 07, 1974. **locality:** Carlo Pamo Ranch, near Brawley; ditch bank. **remarks:** Lemma and palea white, slightly pubescent; medium-long pubescence on callus and rachilla. Protein 25%. Annual. Wild. Seed.
- PI 544641 **donor id:** AF-460. **origin:** United States. **collected:** April 07, 1974. **locality:** Carlo Pamo Ranch, near Brawley; ditch bank. **remarks:** Lemma and palea dark brown, very pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544642 **donor id:** AF-462. **origin:** United States. **collected:** April 07, 1974. **locality:** Carlo Pamo Ranch, near Brawley; ditch bank. **remarks:** Lemma and palea white, slightly pubescent; long pubescence on callus. Annual. Wild. Seed.
- PI 544643 **donor id:** AF-463. **origin:** United States. **collected:** April 07, 1974. **locality:** Carlo Pamo Ranch, near Brawley; ditch bank. **remarks:** Lemma and palea very dark brown, very pubescent; long pubescence on callus and rachilla. Protein 25.4%. Annual. Wild. Seed.
- PI 544644 **donor id:** AF-464. **origin:** United States. **collected:** April 07, 1974. **locality:** Carlo Pamo Ranch, near Brawley; ditch bank. **remarks:** Lemma and palea dark brown, very pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544645 **donor id:** AF-465. **origin:** United States. **collected:** March 31, 1974. **locality:** Univ. of California Exp. Station, Brawley. **remarks:** Lemma and palea white, slightly pubescent; long pubescence on callus. Annual. Wild. Seed.
- PI 544646 **donor id:** AF-467. **origin:** United States. **collected:** March 31, 1974. **locality:** Univ. of California Exp. Station, Brawley. **remarks:** Lemma and palea white, slightly pubescent; long pubescence on callus. Annual. Wild. Seed.
- PI 544647 **donor id:** AF-470. **origin:** United States. **collected:** March 31, 1974. **locality:** Univ. of California Exp. Station, Brawley. **remarks:** Lemma and palea white, glabrous to slightly pubescent; medium to long pubescence on callus and rachilla. Protein 25.4 - 26.3%. Annual. Wild. Seed.
- PI 544648 **donor id:** AF-480. **origin:** United States. **collected:** April 20, 1974. **locality:** east of Rochelle, McCulloch County. **remarks:** Lemma and palea brown, very pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544649 **donor id:** AF-483. **origin:** United States. **collected:** April 07, 1974. **locality:** Carlo Pamo Ranch, near Brawley. **remarks:** Lemma and palea dark brown, pubescent; medium-long pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544650 **donor id:** AF-484. **origin:** United States. **collected:** August 15, 1974. **locality:** 2 mi. west of Casselton on Don McIntyre Farm. **remarks:** Lemma and palea slate gray or white, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544651 **donor id:** AF-485. **origin:** United States. **collected:** August 15, 1974. **locality:** 2 mi. west of Casselton on Don McIntyre Farm. **remarks:** Lemma and palea gray or white, glabrous; long, white pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544652 **donor id:** AF-501. **origin:** United States. **collected:** July 08, 1974. **locality:** 13 mi. south of Canby along Hwy. 75; wheat field heavily infested with *A. fatua*. **remarks:** Lemma and palea brown, pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544653 **donor id:** AF-504. **origin:** United States. **collected:** July 08, 1974. **locality:** 4 mi. south of Russell along Hwy. 91; very heavy wild oat infestation. **remarks:** Lemma and palea dark brown, pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544654 **donor id:** AF-509. **origin:** United States. **collected:** July 08, 1974. **locality:** .5 mi. south of intersection Hwy. 91/14, 6 mi. south of Russell; flax field. **remarks:** Lemma and palea gray, glabrous; medium-long pubescence on callus and rachilla. Protein 26.2%. Annual. Wild. Seed.
- PI 544655 **donor id:** AF-510. **origin:** United States. **collected:** July 08, 1974. **locality:** 11 mi. south of Lake Wilson along Hwy. 91; flax field. **remarks:** Lemma and palea white, glabrous. Annual. Wild. Seed.
- PI 544656 **donor id:** AF-511. **origin:** United States. **collected:** July 09, 1974. **locality:** 5 mi. east of Wessington along Hwy. 14; wheat field. **remarks:** Lemma and palea gray or white, glabrous; medium-short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544657 **donor id:** AF-514. **origin:** United States. **collected:** July 09, 1974. **locality:** 5 mi. east of Wessington along Hwy. 14; wheat field. **remarks:** Lemma and palea dark gray or white, glabrous; medium pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544658 **donor id:** AF-515. **origin:** United States. **collected:** July 09, 1974. **locality:** 11 mi. east of Highmore along Hwy. 14; low fallow area in a wheat field. **remarks:** Lemma and palea dark brown, pubescent; medium long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544659 **donor id:** AF-519. **origin:** United States. **collected:** July 09, 1974. **locality:** 12 mi. west of Highmore along Hwy. 14; wheat field. **remarks:** Lemma and palea dark gray or white. Annual. Wild. Seed.
- PI 544660 **donor id:** AF-520. **origin:** United States. **collected:** July 09, 1974. **locality:** 30 mi. west of Highmore along Hwy. 14; wheat field. **remarks:** Lemma and palea dark gray or white. Protein 26.2%. Annual. Wild. Seed.
- PI 544661 **donor id:** AF-522. **origin:** United States. **collected:** July 09, 1974. **locality:** 11 mi. east of Pierre along Hwy. 14; wheat field. **remarks:** Lemma and palea dark gray or white, slightly pubescent to pubescent; long pubescence on callus and rachilla. Protein 26.4%. Annual. Wild. Seed.
- PI 544662 **donor id:** AF-525. **origin:** United States. **collected:** July 09, 1974. **locality:** 5 mi. west of Pierre along Hwy. 14; wheat field. **remarks:** Lemma and palea dark gray or white, slightly pubescent; medium pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544663 **donor id:** AF-526. **origin:** United States. **collected:** July 09, 1974. **locality:** 20 mi. east of Billsburg along Hwy. 34; wheat field thinly planted. **remarks:** Lemma and palea gray or white, glabrous; medium pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544664 **donor id:** AF-528. **origin:** United States. **collected:** July 09, 1974. **locality:** 6 mi. east of Enning along Hwy. 34; alfalfa field. **remarks:** Lemma and palea gray or white, glabrous; medium-short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544665 **donor id:** AF-530. **origin:** United States. **collected:** July 09, 1974. **locality:** 2 mi. west of Union Center along Hwy. 34; newly planted alfalfa field. **remarks:** Lemma and palea gray, glabrous; medium pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544666 **donor id:** AF-532. **origin:** United States. **collected:** July 10, 1974. **locality:** 6 mi. east of Deadwood along Hwy. 85; oat field. **remarks:** Lemma and palea gray, white, or brown; glabrous except callus. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544667 **donor id:** AF-534. **origin:** United States. **collected:** July 09, 1974. **locality:** 3 mi. west of Redfield along Hwy. 212; heavy infestation in an oat field. **remarks:** Lemma and palea dark brown, pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544668 **donor id:** AF-536. **origin:** United States. **collected:** July 09, 1974. **locality:** 3 mi. west of Redfield along Hwy 212; heavy infestation in an oat field. **remarks:** Lemma and palea gray, glabrous. Annual. Wild. Seed.
- PI 544669 **donor id:** AF-540. **origin:** United States. **collected:** July 09, 1974. **locality:** 5 mi. west of Redfield along Hwy. 212; oat field. **remarks:** Lemma and palea gray or white, glabrous; medium pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544670 **donor id:** AF-541. **origin:** United States. **collected:** July 09, 1974. **locality:** 5 mi. west of Redfield along Hwy. 212; oat field. **remarks:** Lemma and palea dark gray, slightly pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544671 **donor id:** AF-542. **origin:** United States. **collected:** July 09, 1974. **locality:** 6 mi. west of Redfield along Hwy 212. **remarks:** Lemma and palea dark gray, glabrous; medium to long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544672 **donor id:** AF-544. **origin:** United States. **collected:** July 09, 1974. **locality:** 10 mi. west of Redfield along Hwy. 212; oat field. **remarks:** Lemma and palea very light gray or off-white, glabrous; medium pubescence on callus and rachilla. Slight reddish tint on off-white seed. Annual. Wild. Seed.
- PI 544673 **donor id:** AF-546. **origin:** United States. **collected:** July 09, 1974. **locality:** North of Orient along Hwy 212. **remarks:** Lemma and palea dark gray, glabrous. Protein 25.3%. Annual. Wild. Seed.
- PI 544674 **donor id:** AF-549. **origin:** United States. **collected:** July 09, 1974. **locality:** 1 mi. north of Orient along Hwy. 212; wheat field. **remarks:** Lemma and palea gray, white, or light brown, glabrous, except callus. Protein 25.8%. Annual. Wild. Seed.
- PI 544675 **donor id:** AF-551. **origin:** United States. **collected:** July 09, 1974. **locality:** 5 mi. east of Faulkton at intersection of Hwy. 212/45; wheat field. **remarks:** Lemma and palea gray to dark gray, glabrous; medium to long pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544676 **donor id:** AF-553. **origin:** United States. **collected:** July 09, 1974. **locality:** 5 mi. east of Faulkton at intersection of Hwy. 212/45; wheat field. **remarks:** Lemma and palea dark gray or white, pubescent. Protein 25.8%. Annual. Wild. Seed.
- PI 544677 **donor id:** AF-556. **origin:** United States. **collected:** July 09, 1974. **locality:** 1 mi. east of Faulkton along Hwy. 212; spring wheat field. **remarks:** Lemma and palea white. Annual. Wild. Seed.
- PI 544678 **donor id:** AF-557. **origin:** United States. **collected:** July 09, 1974. **locality:** 10 mi. west of Faulkton along Hwy. 212; oat field. **remarks:** Lemma and palea gray or white, glabrous to slightly pubescent; short or long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544679 **donor id:** AF-561. **origin:** United States. **collected:** July 09, 1974. **locality:** 3 mi. west of Seneca along Hwy. 212; wheat field. **remarks:** Lemma and palea gray, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544680 **donor id:** AF-566. **origin:** United States. **collected:** July 09, 1974. **locality:** 12 mi. west. of Seneca along Hwy. 212. **remarks:** Lemma and palea light gray, glabrous; medium pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544681 **donor id:** AF-568. **origin:** United States. **collected:** July 09, 1974. **locality:** 1 mi. west of Gettysburg along Hwy. 212; wheat field. **remarks:** Lemma and palea gray to dark gray, glabrous to slightly pubescent; medium to long pubescence on callus and rachilla. Groat 70%. Annual. Wild. Seed.
- PI 544682 **donor id:** AF-572. **origin:** United States. **collected:** July 09, 1974. **locality:** 1 mi. west of Gettysburg along Hwy 212; wheat field. **remarks:** Lemma and palea gray, nearly glabrous; long pubescence on callus and rachilla. Protein 25.4%. Annual. Wild. Seed.
- PI 544683 **donor id:** AF-573. **origin:** United States. **collected:** July 09, 1974. **locality:** 1 mi. west of Gettysburg along Hwy. 212; wheat field. **remarks:** Lemma and palea gray, glabrous, except callus. Protein 25.8%. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544684 **donor id:** AF-574. **origin:** United States. **collected:** July 09, 1974. **locality:** 8 mi. east of the Missouri River along Hwy. 212; wheat field. **remarks:** Lemma and palea dark gray, glabrous; medium pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544685 **donor id:** AF-575. **origin:** United States. **collected:** July 09, 1974. **locality:** 8 mi. east of the Missouri River along Hwy. 212; wheat field. **remarks:** Lemma and palea gray, glabrous; medium pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544686 **donor id:** AF-577. **origin:** United States. **collected:** July 09, 1974. **locality:** 5 mi. west of the Missouri River along Hwy. 212; wheat field. **remarks:** Lemma and palea gray, glabrous; short to long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544687 **donor id:** AF-581. **origin:** United States. **collected:** July 09, 1974. **locality:** 5 mi. west of LaPlant along Hwy. 212; wheat field. **remarks:** Lemma and palea light gray or white, glabrous; medium pubescence on callus and rachilla. Possible resistant to cereal leaf beetle. Annual. Wild. Seed.
- PI 544688 **donor id:** AF-583. **origin:** United States. **collected:** July 09, 1974. **locality:** 5 mi. west of LaPlant along Hwy. 212; wheat field. **remarks:** Lemma and palea light gray, glabrous; medium pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544689 **donor id:** AF-587. **origin:** United States. **collected:** July 09, 1974. **locality:** West of Ridgeview along Hwy. 212; wheat field. **remarks:** Lemma and palea gray, slightly pubescent; long pubescence on callus and rachilla. Possible resistant to cereal leaf beetle. Annual. Wild. Seed.
- PI 544690 **donor id:** AF-592. **origin:** United States. **collected:** July 09, 1974. **locality:** 1 mi. west of Parade; wheat field. **remarks:** Lemma and palea dark brown or gray, glabrous to moderately pubescent; medium to long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544691 **donor id:** AF-595. **origin:** United States. **collected:** July 09, 1974. **locality:** 1 mi. west of Parade; wheat field. **remarks:** Lemma and palea gray or white, moderately pubescent; medium pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544692 **donor id:** AF-596. **origin:** United States. **collected:** July 09, 1974. **locality:** 5 mi. east of Dupree along Hwy. 212; oat field. **remarks:** Lemma and palea gray or white, glabrous; medium pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544693 **donor id:** AF-599. **origin:** United States. **collected:** July 09, 1974. **locality:** 1 mi. west of Dupree along Hwy. 212; oat field. **remarks:** Lemma and palea gray or white, glabrous; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544694 **donor id:** AF-600. **origin:** United States. **collected:** July 10, 1974. **locality:** 2 mi. south of Belle Fourche along Hwy. 85; oat field. **remarks:** Lemma and palea gray, glabrous to slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544695 **donor id:** AF-606. **origin:** United States. **collected:** July 10, 1974. **locality:** 5 northwest of Sundance along Hwy. 14; spring wheat field. **remarks:** Lemma and palea brown to dark brown, pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544696 **donor id:** AF-611. **origin:** United States. **collected:** July 10, 1974. **locality:** 10 mi. north of Gillette along Hwy. 14/16; triticale and barley field. **remarks:** Lemma and palea brown, nearly glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544697 **donor id:** AF-612. **origin:** United States. **collected:** July 10, 1974. **locality:** 5 mi. north of Gillette along Hwy. 14/16; triticale and barley field. **remarks:** Lemma and palea gray or white, glabrous; very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544698 **donor id:** AF-615. **origin:** United States. **collected:** July 10, 1974. **locality:** 11 mi. north of Gillette along Hwy. 14/16; wheat field. **remarks:** Lemma and palea gray to dark gray, glabrous to slightly pubescent; short to medium pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544699 **donor id:** AF-619. **origin:** United States. **collected:** July 10, 1974. **locality:** 5 mi. west of Spotted Horse along Hwy. 14/16; barley field. **remarks:** Lemma and palea white to gray, glabrous; short to long pubescence on callus and rachilla. Protein 25.8%. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544700 **donor id:** AF-620. **origin:** United States. **collected:** July 10, 1974. **locality:** 5 mi. west of Spotted Horse along Hwy. 14/16; barley field. **remarks:** Lemma and palea dark gray or white, pubescent. Annual. Wild. Seed.
- PI 544701 **donor id:** AF-623. **origin:** United States. **collected:** July 10, 1974. **locality:** 5 mi. west of Spotted Horse along Hwy. 14/16; barley field. **remarks:** Lemma and palea gray, glabrous; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544702 **donor id:** AF-624. **origin:** United States. **collected:** July 10, 1974. **locality:** 5 mi. west of Spotted Horse along Hwy. 14/16; barley field. **remarks:** Lemma and palea dark gray, slightly pubescent. Annual. Wild. Seed.
- PI 544703 **donor id:** AF-626. **origin:** United States. **collected:** July 10, 1974. **locality:** 5 mi. west of Spotted Horse along Hwy. 14/16; barley field. **remarks:** Lemma and palea light gray, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544704 **donor id:** AF-627. **origin:** United States. **collected:** July 10, 1974. **locality:** Leiter, along Hwy. 14/16; irrigated oat field. **remarks:** Lemma and palea light gray; slightly pubescent at callus. Annual. Wild. Seed.
- PI 544705 **donor id:** AF-628. **origin:** United States. **collected:** July 10, 1974. **locality:** Leiter, along Hwy. 14/16; irrigated oat field. **remarks:** Lemma and palea white, light gray, or gray, glabrous; short to long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544706 **donor id:** AF-630. **origin:** United States. **collected:** July 10, 1974. **locality:** Leiter, along Hwy. 14/16; irrigated oat field. **remarks:** Lemma and palea white, slightly pubescent at callus. Possible resistant to cereal leaf beetle. Annual. Wild. Seed.
- PI 544707 **donor id:** AF-633. **origin:** United States. **collected:** July 10, 1974. **locality:** Leiter, along Hwy. 14/16; irrigated oat field. **remarks:** Lemma and palea brown, pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544708 **donor id:** AF-634. **origin:** United States. **collected:** July 10, 1974. **locality:** 4 mi. west of Clearmont along Hwy. 14/16; wheat field. **remarks:** Lemma and palea gray, slightly pubescent at callus. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544709 **donor id:** AF-637. **origin:** United States. **collected:** July 10, 1974. **locality:** 4 mi. west of Clearmont along Hwy. 14/16; wheat field. **remarks:** Lemma and palea light gray to gray, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544710 **donor id:** AF-639. **origin:** United States. **collected:** July 10, 1974. **locality:** 5 mi. west of Clearmont along Hwy. 14/16; irrigated oat field. **remarks:** Lemma and palea brown, pubescent; long pubescence on callus and rachilla. Possible resistance to cereal leaf beetle. Annual. Wild. Seed.
- PI 544711 **donor id:** AF-642. **origin:** United States. **collected:** July 10, 1974. **locality:** 15 mi. southeast of Sheridan along Hwy. 14; wheat field. **remarks:** Lemma and palea white, glabrous; short pubescence on callus and rachilla. Long, large kernels; about 10% dehulled. Protein 25.9%. Annual. Wild. Seed.
- PI 544712 **donor id:** AF-643. **origin:** United States. **collected:** July 10, 1974. **locality:** 15 mi. southeast of Sheridan along Hwy. 14; wheat field. **remarks:** Lemma and palea gray to dark gray, glabrous to slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544713 **donor id:** AF-648. **origin:** United States. **collected:** July 11, 1974. **locality:** 2 mi. west of Shell along Hwy. 14; alfalfa field. **remarks:** Lemma and palea brown, pubescent; medium-short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544714 **donor id:** AF-651. **origin:** United States. **collected:** July 11, 1974. **locality:** 2 mi. west of Shell along Hwy. 14; alfalfa field. **remarks:** Lemma and palea brown, glabrous; medium-short pubescence on callus and rachilla. Possible resistance to cereal leaf beetle. Annual. Wild. Seed.
- PI 544715 **donor id:** AF-652. **origin:** United States. **collected:** July 11, 1974. **locality:** 6 mi. west of Shell along Hwy. 14; field of barley and oats. **remarks:** Lemma and palea light gray, glabrous to slightly pubescent; short to long pubescent on callus and rachilla. Possible resistance to cereal leaf beetle. Annual. Wild. Seed.
- PI 544716 **donor id:** AF-657. **origin:** United States. **collected:** July 11, 1974. **locality:** 9 mi. east of Greybull along Hwy. 14; barley field. **remarks:** Lemma and palea gray, slightly pubescent to pubescent; medium-short pubescence on callus and rachilla. Possible resistance to cereal leaf beetle. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544717 **donor id:** AF-662. **origin:** United States. **collected:** July 11, 1974. **locality:** 2 mi. west of Greybull along Hwy. 14; barley field with heavy infestation of *A. fatua*. **remarks:** Lemma and palea light gray to gray, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544718 **donor id:** AF-665. **origin:** United States. **collected:** July 11, 1974. **locality:** 9 mi. west of Greybull along Hwy. 14; barley field with a heavy infestation of *A. fatua*. **remarks:** Lemma and palea light gray, glabrous except callus and rachilla. Possible resistance to cereal leaf beetle. Annual. Wild. Seed.
- PI 544719 **donor id:** AF-666. **origin:** United States. **collected:** July 11, 1974. **locality:** 9 mi. west of Greybull along Hwy. 14; barley field heavily infested with *A. fatua*. **remarks:** Lemma and palea gray, slightly pubescent. Annual. Wild. Seed.
- PI 544720 **donor id:** AF-668. **origin:** United States. **collected:** July 11, 1974. **locality:** 6 mi. west of Greybull along Hwy. 14; barley field. **remarks:** Lemma and palea white, glabrous, except pubescence on callus and rachilla. Kernel long and slender. Possible resistance to cereal leaf beetle. Annual. Wild. Seed.
- PI 544721 **donor id:** AF-669. **origin:** United States. **collected:** July 11, 1974. **locality:** 15 mi. west of Greybull along Hwy. 14; barley field. **remarks:** Lemma and palea light gray to gray, glabrous to pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544722 **donor id:** AF-672. **origin:** United States. **collected:** July 11, 1974. **locality:** 15 mi. west of Greybull along Hwy. 14; barley field. **remarks:** Lemma and palea brown, pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544723 **donor id:** AF-673. **origin:** United States. **collected:** July 11, 1974. **locality:** 17 mi. west of Greybull along Hwy. 14. **remarks:** Lemma and palea light gray to gray, glabrous to slightly pubescent; callus and rachilla pubescent. Possible resistance to cereal leaf beetle. Annual. Wild. Seed.
- PI 544724 **donor id:** AF-677. **origin:** United States. **collected:** July 11, 1974. **locality:** 20 mi. west of Greybull along Hwy. 14; barley field. **remarks:** Lemma and palea light gray, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544725 **donor id:** AF-678. **origin:** United States. **collected:** July 11, 1974. **locality:** 4 mi. east of Cody along Hwy. 14; waste area with heavy wild oat infestation. **remarks:** Lemma and palea brown, slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544726 **donor id:** AF-681. **origin:** United States. **collected:** July 11, 1974. **locality:** 1 mi. south of Rexburg along Hwy. 20; wheat field. **remarks:** Lemma and palea brown, pubescent. Annual. Wild. Seed.
- PI 544727 **donor id:** AF-683. **origin:** United States. **collected:** July 30, 1974. **locality:** 3 mi. west of Wibaux along I-94; wheat field. **remarks:** Lemma and palea white, glabrous; very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544728 **donor id:** AF-684. **origin:** United States. **collected:** August 01, 1974. **locality:** 5 mi. south of St. Anthony along Hwy. 20; irrigated wheat field. **remarks:** Lemma and palea gray or white, pubescent; slight pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544729 **donor id:** AF-685. **origin:** United States. **collected:** August 04, 1974. **locality:** 6 mi. north of Aberdeen along Hwy. 39; oat field. **remarks:** Lemma and palea gray or white, glabrous; very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544730 **donor id:** AF-686. **origin:** United States. **collected:** August 05, 1974. **locality:** 23 mi. south of Great Falls along I-15; wheat field. **remarks:** Lemma and palea white, glabrous; very short pubescence on callus and rachilla; long kernels. Annual. Wild. Seed.
- PI 544731 **donor id:** AF-687. **origin:** United States. **collected:** August 07, 1984. **locality:** 22 mi. west of Grand Forks; wheat field. **remarks:** Lemma and palea gray, very short pubescence; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544732 **donor id:** AF-688. **origin:** United States. **collected:** July 26, 1974. **locality:** 1 mi. north of Montpelier along Hwy. 30; high, dry area in a wheat field. **remarks:** Lemma and palea gray or white, glabrous; very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544733 **donor id:** AF-694. **origin:** United States. **collected:** July 10, 1974. **locality:** 35 mi. south of Gillette along Hwy. 59; wheat field. **remarks:** Lemma and palea gray or white, glabrous; short to medium pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544734 **donor id:** AF-696. **origin:** United States. **collected:** July 10, 1974. **locality:** 1 mi. north of Tensleep along Hwy. 16; irrigated oat field. **remarks:** Lemma and palea brown, pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544735 **donor id:** AF-699. **origin:** United States. **collected:** July 10, 1974. **locality:** 1 mi. south of Tensleep along Hwy. 16; irrigated pasture. **remarks:** Lemma and palea gray or white, slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544736 **donor id:** AF-703. **origin:** United States. **collected:** July 10, 1974. **locality:** near Worland. **remarks:** Lemma and palea light gray to gray, glabrous; short to medium pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544737 **donor id:** AF-710. **origin:** United States. **collected:** July 10, 1974. **locality:** 1 mi. south of Worland along Hwy. 20; wheat field. **remarks:** Lemma and palea gray, glabrous; short pubescence on callus. Annual. Wild. Seed.
- PI 544738 **donor id:** AF-711. **origin:** United States. **collected:** July 10, 1974. **locality:** 2 mi. south of Worland along Hwy. 20; irrigation canal. **remarks:** Lemma and palea brown, pubescent. Annual. Wild. Seed.
- PI 544739 **donor id:** AF-712. **origin:** United States. **collected:** July 11, 1974. **locality:** South of Worland along Hwy. 20. **remarks:** Lemma and palea gray, slightly pubescent; very short pubescence on callus and rachilla. Possible resistance to cereal leaf beetle. Annual. Wild. Seed.
- PI 544740 **donor id:** AF-714. **origin:** United States. **collected:** July 11, 1974. **locality:** 5 mi. south of Worland along Hwy. 20; wet area in a fallow field. **remarks:** Lemma and palea brown, pubescent; medium pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544741 **donor id:** AF-715. **origin:** United States. **collected:** July 11, 1974. **locality:** 9 mi. south of Worland along Hwy. 20; oat and barley field. **remarks:** Lemma and palea gray, glabrous to slightly pubescent; short to medium pubescence on callus and rachilla. Possible resistance to cereal leaf beetle. Annual. Wild. Seed.
- PI 544742 **donor id:** AF-718. **origin:** United States. **collected:** July 11, 1974. **locality:** 22 mi. south of Worland along Hwy. 20; oat field. **remarks:** Lemma and palea gray, glabrous to slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544743 **donor id:** AF-720. **origin:** United States. **collected:** July 11, 1974. **locality:** 22 mi. south of Worland along Hwy. 20; oat field. **remarks:** Lemma and palea brown, pubescent. Possible resistance to cereal leaf beetle. Annual. Wild. Seed.
- PI 544744 **donor id:** AF-721. **origin:** United States. **collected:** July 11, 1974. **locality:** 28 mi. south of Worland along Hwy. 20; wheat field. **remarks:** Lemma and palea gray, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544745 **donor id:** AF-725. **origin:** United States. **collected:** July 11, 1974. **locality:** near Riverton. **remarks:** Lemma and palea gray to dark gray, glabrous; short to medium-long pubescence on callus and rachilla. Long, slender kernels. Possible resistance to cereal leaf beetle. Annual. Wild. Seed.
- PI 544746 **donor id:** AF-742. **origin:** United States. **collected:** July 11, 1974. **locality:** 3 mi. west of Soda Springs along Hwy. 30; wheat field. **remarks:** Lemma and palea gray, glabrous to slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544747 **donor id:** AF-743. **origin:** United States. **collected:** July 11, 1974. **locality:** 3 mi. west of Soda Springs along Hwy. 30; wheat field. **remarks:** Lemma and palea brown, slightly pubescent. Annual. Wild. Seed.
- PI 544748 **donor id:** AF-754. **origin:** United States. **collected:** July 14, 1974. **locality:** 2 mi. south of American Falls along Hwy. 37. **remarks:** Lemma and palea gray to dark gray, glabrous to slightly pubescent; pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544749 **donor id:** AF-756. **origin:** United States. **collected:** July 14, 1974. **locality:** 28 mi. south of American Falls along Hwy. 37; wheat field. **remarks:** Lemma and palea brown to dark pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544750 **donor id:** AF-758. **origin:** United States. **collected:** July 14, 1974. **locality:** 33 mi. south of American Falls along Hwy. 37; winter wheat field. **remarks:** Lemma and palea gray, glabrous; short pubescence on callus and rachilla. Protein 25.9%. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544751 **donor id:** AF-759. **origin:** United States. **collected:** July 14, 1974. **locality:** 33 mi. south of American Falls along Hwy. 37; wheat field. **remarks:** Lemma and palea gray to dark gray, glabrous; short pubescence on callus and rachilla. Possible resistance to cereal leaf beetle. Annual. Wild. Seed.
- PI 544752 **donor id:** AF-762. **origin:** United States. **collected:** July 14, 1974. **locality:** .5 mi. west of Malad along Hwy. 37; irrigated wheat field. with heavy infestation of *A. fatua*. **remarks:** Lemma and palea light gray or white, glabrous to slightly pubescent; short to medium-long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544753 **donor id:** AF-764. **origin:** United States. **collected:** July 14, 1974. **locality:** south of Malad. **remarks:** Lemma and palea light gray or white, glabrous or slightly pubescent; short to long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544754 **donor id:** AF-765. **origin:** United States. **collected:** July 14, 1974. **locality:** 2 mi. south of Malad; irrigated barley field. **remarks:** Lemma and palea brown, pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544755 **donor id:** AF-768. **origin:** United States. **collected:** July 14, 1974. **locality:** 10 mi. south of Idaho-Utah border along I-15; abandoned area with solid stand of *A. fatua* 5 ft. tall. **remarks:** Lemma and palea white, glabrous, except pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544756 **donor id:** AF-769. **origin:** United States. **collected:** July 14, 1974. **locality:** 10 mi. south of Idaho-Utah border along I-15; abandoned area with solid stand of *A. fatua* 5 ft. tall. **remarks:** Lemma and palea light gray or white, glabrous; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544757 **donor id:** AF-770. **origin:** United States. **collected:** July 14, 1974. **locality:** near Logan; wheat field with heavy infestation of *A. fatua*. **remarks:** Lemma and palea light gray to gray, glabrous to slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544758 **donor id:** AF-774. **origin:** United States. **collected:** July 14, 1974. **locality:** 2 mi. west of Logan along Hwy. 30; wheat field with a heavy infestation of *A. fatua*. **remarks:** Lemma and palea brown, slightly pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544759 **donor id:** AF-776. **origin:** United States. **collected:** July 14, 1974. **locality:** At Beaver Dam, 9 mi. west of Logan along Hwy. 30; barley field. **remarks:** Lemma and palea gray or white, glabrous; short or long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544760 **donor id:** AF-778. **origin:** United States. **collected:** July 14, 1974. **locality:** .5 mi. west of Garden City along Hwy. 89 (shore of Bear Lake); roadside opposite Garden City cemetery. **remarks:** Lemma and palea gray or white, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544761 **donor id:** AF-781. **origin:** United States. **collected:** July 16, 1974. **locality:** 2 mi. east of Casper along Hwy. 20/26; irrigated oat field. **remarks:** Lemma and palea white, glabrous, except pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544762 **donor id:** AF-782. **origin:** United States. **collected:** July 16, 1974. **locality:** 2 mi. east of Casper along Hwy. 20/26; irrigated oat field. **remarks:** Lemma and palea gray, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544763 **donor id:** AF-783. **origin:** United States. **collected:** July 16, 1974. **locality:** 2 mi. east of Casper along Hwy. 20/26; irrigated oat field. **remarks:** Lemma and palea white or very light gray. Annual. Wild. Seed.
- PI 544764 **donor id:** AF-784. **origin:** United States. **collected:** July 16, 1974. **locality:** 4 mi. west of Douglas near I-15 and La Prele Rd. exit; oat field. **remarks:** Lemma and palea gray or white, glabrous; short to medium pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544765 **donor id:** AF-789. **origin:** United States. **collected:** July 16, 1974. **locality:** near Manville; spring wheat field. **remarks:** Lemma and palea dark gray or white, glabrous to slightly pubescent; short to medium pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544766 **donor id:** AF-795. **origin:** United States. **collected:** July 16, 1974. **locality:** 5 mi. west of Lusk along Hwy. 20/18; low area in winter wheat field. **remarks:** Lemma and palea gray, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544767 **donor id:** AF-798. **origin:** United States. **collected:** July 16, 1974. **locality:** 15 mi. north of Newcastle along Hwy. 85; oat field. **remarks:** Lemma and palea dark gray or white, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544768 **donor id:** AF-804. **origin:** United States. **collected:** July 16, 1974. **locality:** 2 mi. north of Four Corners along Hwy. 585; spring wheat field. **remarks:** Lemma and palea brown, pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544769 **donor id:** AF-806. **origin:** United States. **collected:** July 16, 1974. **locality:** 7 mi. south of Alladin along Hwy. 111; spring wheat field. **remarks:** Lemma and palea slate gray, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544770 **donor id:** AF-807. **origin:** United States. **collected:** July 16, 1974. **locality:** south of Alladin along Hwy. 111. **remarks:** Lemma and palea gray, glabrous, except for pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544771 **donor id:** AF-809. **origin:** United States. **collected:** July 16, 1974. **locality:** .5 mi. south of Jct. Hwy. 111 & 24; spring wheat field. **remarks:** Lemma and palea gray, glabrous, except for pubescence on callus and rachilla. Possible high protein. Annual. Wild. Seed.
- PI 544772 **donor id:** AF-811. **origin:** United States. **collected:** July 16, 1974. **locality:** .5 mi. south of Jct. Hwy. 111 & 24; spring wheat field. **remarks:** Lemma and palea dark gray or white, glabrous, except for pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544773 **donor id:** AF-812. **origin:** United States. **collected:** July 17, 1974. **locality:** north of Belle Fourche. **remarks:** Lemma and palea gray, glabrous to pubescent; short to long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544774 **donor id:** AF-819. **origin:** United States. **collected:** July 17, 1974. **locality:** 40 mi. north of Belle Fourche along Hwy. 85; spring wheat field with heavy infestation of *A. fatua*. **remarks:** Lemma and palea brown, very pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544775 **donor id:** AF-823. **origin:** United States. **collected:** July 17, 1974. **locality:** 4-5 mi. east of Reva; oat field. **remarks:** Lemma and palea light gray, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544776 **donor id:** AF-826. **origin:** United States. **collected:** July 17, 1974. **locality:** west of Prairie City. **remarks:** Lemma and palea light gray to gray, glabrous to slightly pubescent; short to medium pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544777 **donor id:** AF-832. **origin:** United States. **collected:** July 17, 1974. **locality:** 5 mi. west of Prairie City along Hwy. 20; spring wheat field. **remarks:** Lemma and palea white, glabrous; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544778 **donor id:** AF-836. **origin:** United States. **collected:** July 17, 1974. **locality:** east of Prairie City along Hwy. 20. **remarks:** Lemma and palea gray or white, glabrous; heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544779 **donor id:** AF-839. **origin:** United States. **collected:** July 17, 1974. **locality:** 10 mi. east of Prairie City along Hwy. 20; wheat field. **remarks:** Lemma and palea brown, very slightly pubescent; minute pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544780 **donor id:** AF-840. **origin:** United States. **collected:** July 17, 1974. **locality:** 18 mi. east of Prairie City along Hwy. 20; wheat field. **remarks:** Lemma and palea light gray, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544781 **donor id:** AF-842. **origin:** United States. **collected:** July 17, 1974. **locality:** 1 mi. west of Bison along Hwy. 20; barley and oat field. **remarks:** Lemma and palea slate gray; heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544782 **donor id:** AF-844. **origin:** United States. **collected:** July 17, 1974. **locality:** 1 mi. east of Bison along Hwy. 20; oat field. **remarks:** Lemma and palea white; heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544783 **donor id:** AF-845. **origin:** United States. **collected:** July 17, 1974. **locality:** east of Bison along Hwy. 20. **remarks:** Lemma and palea light gray to gray, glabrous; short to long pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544784 **donor id:** AF-848. **origin:** United States. **collected:** July 17, 1974. **locality:** 10 mi. east of Bison along Hwy. 20; winter wheat field. **remarks:** Lemma and palea gray, glabrous; heavy pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 544785 **donor id:** AF-855. **origin:** United States. **collected:** July 17, 1974. **locality:** 31 mi. east of Bison along Hwy. 20; oat field. **remarks:** Lemma and palea white, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544786 **donor id:** AF-856. **origin:** United States. **collected:** July 17, 1974. **locality:** 31-32 mi. east of Bison along Hwy. 20. **remarks:** Lemma and palea gray, glabrous; heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544787 **donor id:** AF-859. **origin:** United States. **collected:** July 17, 1974. **locality:** west of Isabel along Hwy. 20. **remarks:** Lemma and palea gray, glabrous to slightly pubescent; short to long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544788 **donor id:** AF-862. **origin:** United States. **collected:** July 17, 1974. **locality:** 4 mi. west of Isabel along Hwy. 20; roadside. **remarks:** Lemma and palea light gray or white, pubescent; heavy pubescence on callus. Annual. Wild. Seed.
- PI 544789 **donor id:** AF-864. **origin:** United States. **collected:** July 17, 1974. **locality:** east of Isabel along Hwy. 20. **remarks:** Lemma and palea light gray to gray, glabrous; very short to long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544790 **donor id:** AF-869. **origin:** United States. **collected:** July 17, 1974. **locality:** 6 mi. east of Isabel along Hwy. 20; wheat field. **remarks:** Lemma and palea brown, pubescent. Annual. Wild. Seed.
- PI 544791 **donor id:** AF-872. **origin:** United States. **collected:** July 17, 1974. **locality:** east of Firesteel along Hwy. 20. **remarks:** Lemma and palea gray to dark gray, glabrous to slightly pubescent; short or long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544792 **donor id:** AF-875. **origin:** United States. **collected:** July 17, 1974. **locality:** 5 mi. east of Firesteel along Hwy. 20; summer fallow area. **remarks:** Lemma and palea white, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544793 **donor id:** AF-876. **origin:** United States. **collected:** July 17, 1974. **locality:** near Timber Lake along Hwy. 20. **remarks:** Lemma and palea gray, glabrous to slightly pubescent; very short to long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544794 **donor id:** AF-877. **origin:** United States. **collected:** July 17, 1974. **locality:** 6 mi. east of Firesteel along Hwy. 20; wheat field. **remarks:** Lemma and palea slate gray, slightly pubescent; heavy pubescence on callus. Annual. Wild. Seed.
- PI 544795 **donor id:** AF-878. **origin:** United States. **collected:** July 17, 1974. **locality:** 7 mi. east of Firesteel along Hwy. 20; oat variety demonstration plots. **remarks:** Lemma and palea white, glabrous; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544796 **donor id:** AF-885. **origin:** United States. **collected:** July 17, 1974. **locality:** near Trail City along Hwy. 20. **remarks:** Lemma and palea gray, glabrous; short or long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544797 **donor id:** AF-888. **origin:** United States. **collected:** July 17, 1974. **locality:** east of Trail City along Hwy. 20. **remarks:** Lemma and palea gray, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544798 **donor id:** AF-892. **origin:** United States. **collected:** July 17, 1974. **locality:** 5 mi. east of Trail City along Hwy. 20; oat field. **remarks:** Lemma and palea brown, slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544799 **donor id:** AF-894. **origin:** United States. **collected:** July 17, 1974. **locality:** 6 mi. east of Mobridge along Hwy. 20; wheat field. **remarks:** Lemma and palea gray, glabrous or slightly pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544800 **donor id:** AF-896. **origin:** United States. **collected:** July 17, 1974. **locality:** east of Glenham along Hwy. 20. **remarks:** Lemma and palea dark brown, very pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544801 **donor id:** AF-899. **origin:** United States. **collected:** July 17, 1974. **locality:** east of Glenham along Hwy. 12/20. **remarks:** Lemma and palea gray or white, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544802 **donor id:** AF-902. **origin:** United States. **collected:** July 17, 1974. **locality:** 11 mi. east of Glenham along Hwy. 12/20; wheat field. **remarks:** Lemma and palea brown, very pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544803 **donor id:** AF-904. **origin:** United States. **collected:** July 17, 1974. **locality:** near Selby. **remarks:** Lemma and palea gray, glabrous; very short to medium pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544804 **donor id:** AF-905. **origin:** United States. **collected:** July 17, 1974. **locality:** .5 mi. northwest of Selby along Hwy. 83; wheat field. **remarks:** Lemma and palea brown, very pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544805 **donor id:** AF-910. **origin:** United States. **collected:** July 17, 1974. **locality:** 13 mi. east of Selby along Hwy. 12; wheat field. **remarks:** Lemma and palea light gray to gray, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544806 **donor id:** AF-913. **origin:** United States. **collected:** July 17, 1974. **locality:** 7 mi. east of Bowdle along Hwy. 12; wheat field. **remarks:** Lemma and palea gray, pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544807 **donor id:** AF-915. **origin:** United States. **collected:** July 17, 1974. **locality:** east of Bowdle along Hwy. 12. **remarks:** Lemma and palea light gray to gray, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544808 **donor id:** AF-920. **origin:** United States. **collected:** July 17, 1974. **locality:** near Aberdeen along Hwy. 12. **remarks:** Lemma and palea gray, glabrous; very short or heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544809 **donor id:** AF-922. **origin:** United States. **collected:** July 18, 1974. **locality:** 3 mi. east of Aberdeen along Hwy. 12; wheat field. **remarks:** Lemma and palea light gray or white, glabrous; very short pubescence on callus and rachilla; slender seed. Annual. Wild. Seed.
- PI 544810 **donor id:** AF-925. **origin:** United States. **collected:** July 18, 1974. **locality:** 3 mi. east of Aberdeen along Hwy. 12; wheat field. **remarks:** Lemma and palea dark brown, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544811 **donor id:** AF-926. **origin:** United States. **collected:** July 18, 1974. **locality:** 3 mi. east of Aberdeen along Hwy. 12; wheat field. **remarks:** Lemma and palea gray, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544812 **donor id:** AF-927. **origin:** United States. **collected:** July 18, 1974. **locality:** east of Aberdeen along Hwy. 12. **remarks:** Lemma and palea gray to dark gray, glabrous to slightly pubescent; short to heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544813 **donor id:** AF-931. **origin:** United States. **collected:** July 18, 1974. **locality:** east of Aberdeen along Hwy. 12. **remarks:** Lemma and palea dark brown, slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544814 **donor id:** AF-933. **origin:** United States. **collected:** July 18, 1974. **locality:** near Groton. **remarks:** Lemma and palea gray, glabrous; very short to short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544815 **donor id:** AF-934. **origin:** United States. **collected:** July 18, 1974. **locality:** 15 mi. east of Aberdeen along Hwy. 12; flax field. **remarks:** Lemma and palea dark gray, slightly pubescent; heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544816 **donor id:** AF-935. **origin:** United States. **collected:** July 18, 1974. **locality:** 15 mi. east of Aberdeen along Hwy. 12; wheat field. **remarks:** Lemma and palea dark gray, slightly pubescent; heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544817 **donor id:** AF-937. **origin:** United States. **collected:** July 18, 1974. **locality:** 4 mi. east of Groton along Hwy. 12; wheat field. **remarks:** Lemma and palea brown, slightly pubescent or pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544818 **donor id:** AF-939. **origin:** United States. **collected:** July 18, 1974. **locality:** east of Groton along Hwy. 12. **remarks:** Lemma and palea light gray to gray, glabrous or slightly pubescent; short to long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544819 **donor id:** AF-946. **origin:** United States. **collected:** July 18, 1974. **locality:** 6 mi. west of Webster along Hwy. 12; barley field. **remarks:** Lemma and palea brown, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544820 **donor id:** AF-948. **origin:** United States. **collected:** July 18, 1974. **locality:** near Webster. **remarks:** Lemma and palea gray to dark gray, glabrous to slightly pubescent; short to long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544821 **donor id:** AF-949. **origin:** United States. **collected:** July 18, 1974. **locality:** 5 mi. west of Webster along Hwy. 12; flax field. **remarks:** Lemma and palea brown, pubescent; short pubescence on callus. Annual. Wild. Seed.
- PI 544822 **donor id:** AF-955. **origin:** United States. **collected:** July 18, 1974. **locality:** 2 mi. east of Webster along Hwy. 12; oat field. **remarks:** Lemma and palea white, pubescent. Protein 25.9%. Annual. Wild. Seed.
- PI 544823 **donor id:** AF-956. **origin:** United States. **collected:** July 18, 1974. **locality:** near Waubay. **remarks:** Lemma and palea gray to dark gray, glabrous; short to heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544824 **donor id:** AF-957. **origin:** United States. **collected:** July 18, 1974. **locality:** 5 mi. east of Webster along Hwy. 12; oat field. **remarks:** Lemma and palea dark brown, pubescent; short pubescence on callus. Annual. Wild. Seed.
- PI 544825 **donor id:** AF-962. **origin:** United States. **collected:** July 18, 1974. **locality:** 9 mi. east of Waubay along Hwy. 12; oat field. **remarks:** Lemma and palea white, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544826 **donor id:** AF-963. **origin:** United States. **collected:** July 18, 1974. **locality:** east of Waubay along Hwy. 12. **remarks:** Lemma and palea gray, glabrous to pubescent; short to heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544827 **donor id:** AF-967. **origin:** United States. **collected:** July 18, 1974. **locality:** Summit, along Hwy. 12; wheat field. **remarks:** Lemma and palea brown, pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544828 **donor id:** AF-968. **origin:** United States. **collected:** July 18, 1974. **locality:** west of Milbank along Hwy. 12. **remarks:** Lemma and palea light gray, glabrous to pubescent; callus and rachilla pubescent. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544829 **donor id:** AF-969. **origin:** United States. **collected:** July 18, 1974. **locality:** 10 mi. west of Milbank along Hwy. 12; wheat field. **remarks:** Lemma and palea dark brown, slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544830 **donor id:** AF-970. **origin:** United States. **collected:** July 18, 1974. **locality:** 9 mi. west of Milbank along Hwy. 12; rye field. **remarks:** Lemma and palea dark brown, slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544831 **donor id:** AF-971. **origin:** United States. **collected:** July 18, 1974. **locality:** 9 mi. west of Milbank along Hwy. 12; flax field. **remarks:** Lemma and palea gray, slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544832 **donor id:** AF-974. **origin:** United States. **collected:** July 18, 1974. **locality:** 1 mi. west of Milbank along Hwy. 12; wheat field. **remarks:** Lemma and palea white, glabrous; heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544833 **donor id:** AF-975. **origin:** United States. **collected:** July 18, 1974. **locality:** near Ortonville. **remarks:** Lemma and palea dark brown, slightly pubescent to pubescent; heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544834 **donor id:** AF-976. **origin:** United States. **collected:** July 18, 1974. **locality:** east of Ortonville along Hwy. 12. **remarks:** Lemma and palea light gray to gray, glabrous to slightly pubescent; short or heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544835 **donor id:** AF-978. **origin:** United States. **collected:** July 18, 1974. **locality:** 1 mi. east of Ortonville along Hwy. 12; wheat field with a very heavy infestation of *A. fatua*. **remarks:** Lemma and palea white, glabrous; heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544836 **donor id:** AF-980. **origin:** United States. **collected:** July 18, 1974. **locality:** east of Ortonville along Hwy. 12. **remarks:** Lemma and palea brown to dark brown, pubescent; short or long pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544837 **donor id:** AF-983. **origin:** United States. **collected:** July 18, 1974. **locality:** east of Ortonville along Hwy. 12. **remarks:** Lemma and palea gray, glabrous to slightly pubescent; short to heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544838 **donor id:** AF-987. **origin:** United States. **collected:** July 18, 1974. **locality:** 12 mi. west of Benson along Hwy. 12; flax field. **remarks:** Lemma and palea dark brown, slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544839 **donor id:** AF-989. **origin:** United States. **collected:** July 18, 1974. **locality:** 10 mi. west of Benson along Hwy. 12; oat field. **remarks:** Lemma and palea gray, pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544840 **donor id:** AF-991. **origin:** United States. **collected:** July 18, 1974. **locality:** Danvers, along Hwy. 12; wheat field. **remarks:** Lemma and palea dark brown, slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544841 **donor id:** AF-993. **origin:** United States. **collected:** July 18, 1974. **locality:** southeast of Benson along Hwy. 12. **remarks:** Lemma and palea gray, slightly pubescent; heavy pubescence on callus and rachilla. Possible resistance to cereal leaf beetle. Annual. Wild. Seed.
- PI 544842 **donor id:** AF-995. **origin:** United States. **collected:** July 18, 1974. **locality:** 1.5 mi. west of Atwater along Hwy. 12. **remarks:** Lemma and palea dark brown, very pubescent; medium-long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544843 **donor id:** AF-997. **origin:** United States. **collected:** July 29, 1974. **locality:** .5 mi. east of Regal along Hwy. 55; oat field. **remarks:** Lemma and palea gray, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544844 **donor id:** AF-999. **origin:** United States. **collected:** July 29, 1974. **locality:** 3 mi. west of Lowry along Hwy. 55; oat field. **remarks:** Lemma and palea dark brown, slightly pubescent; very short pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544845 **donor id:** AF-1000. **origin:** United States. **collected:** July 29, 1974. **locality:** near Farwell. **remarks:** Lemma and palea gray, glabrous to slightly pubescent; short to heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544846 **donor id:** AF-1005. **origin:** United States. **collected:** July 29, 1974. **locality:** .5 mi. west of Hoffman along Hwy. 55; wheat field. **remarks:** Lemma and palea white, glabrous; moderately heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544847 **donor id:** AF-1008. **origin:** United States. **collected:** July 29, 1974. **locality:** near Elbow Lake. **remarks:** Lemma and palea gray to dark gray, glabrous to moderately pubescent; short or heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544848 **donor id:** AF-1009. **origin:** United States. **collected:** July 29, 1974. **locality:** 2 mi. east of Elbow Lake along Hwy. 55; flax field. **remarks:** Lemma and palea white, glabrous; heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544849 **donor id:** AF-1011. **origin:** United States. **collected:** July 29, 1974. **locality:** 1 mi. west of Elbow Lake along Hwy. 55; wheat field. **remarks:** Lemma and palea gray, glabrous. Annual. Wild. Seed.
- PI 544850 **donor id:** AF-1014. **origin:** United States. **collected:** July 29, 1974. **locality:** near Elbow Lake. **remarks:** Lemma and palea gray to dark gray, slightly pubescent; moderate to heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544851 **donor id:** AF-1016. **origin:** United States. **collected:** July 29, 1974. **locality:** 4 mi. north of Elbow Lake along Hwy. 55; wheat field. **remarks:** Lemma and palea brown, moderately pubescent. Annual. Wild. Seed.
- PI 544852 **donor id:** AF-1019. **origin:** United States. **collected:** July 29, 1974. **locality:** 3 mi. east of Wendell along Hwy. 55. **remarks:** Lemma and palea gray to dark gray, slightly pubescent; moderate to long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544853 **donor id:** AF-1022. **origin:** United States. **collected:** July 29, 1974. **locality:** 3 mi. east of Wendell along Hwy. 55; barley field. **remarks:** Lemma and palea dark gray, slightly pubescent; moderate pubescence on callus and rachilla. Good tolerance to BYDV at Urbana, IL. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544854 **donor id:** AF-1024. **origin:** United States. **collected:** July 29, 1974. **locality:** near Wendell. **remarks:** Lemma and palea gray, slight to moderate pubescence. Annual. Wild. Seed.
- PI 544855 **donor id:** AF-1029. **origin:** United States. **collected:** July 29, 1974. **locality:** 6 mi. west of Nashua along Hwy. 55; sunflower field. **remarks:** Lemma and palea white, glabrous; callus and rachilla pubescent. Annual. Wild. Seed.
- PI 544856 **donor id:** AF-1030. **origin:** United States. **collected:** July 29, 1974. **locality:** 6 mi. west of Nashua along Hwy. 55; sunflower field. **remarks:** Lemma and palea dark brown, moderately pubescent; long pubescence on callus. Annual. Wild. Seed.
- PI 544857 **donor id:** AF-1031. **origin:** United States. **collected:** July 29, 1974. **locality:** near Tenney. **remarks:** Lemma and palea gray, glabrous to slightly pubescent; short to moderate pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544858 **donor id:** AF-1032. **origin:** United States. **collected:** July 29, 1974. **locality:** 2 mi. east of Tenney along Hwy. 55; wheat field. **remarks:** Lemma and palea brown, very slight or heavy pubescence; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544859 **donor id:** AF-1038. **origin:** United States. **collected:** July 29, 1974. **locality:** east of Hankinson along Hwy. 11. **remarks:** Lemma and palea brown, pubescent. Annual. Wild. Seed.
- PI 544860 **donor id:** AF-1040. **origin:** United States. **collected:** July 29, 1974. **locality:** near Hankinson. **remarks:** Lemma and palea gray, glabrous or pubescent; short or heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544861 **donor id:** AF-1042. **origin:** United States. **collected:** July 29, 1974. **locality:** 5 mi. west of Hankinson along Hwy. 11; wheat field. **remarks:** Lemma and palea white, glabrous; moderate pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544862 **donor id:** AF-1045. **origin:** United States. **collected:** July 29, 1974. **locality:** near Lidgerwood. **remarks:** Lemma and palea brown, slightly pubescent to pubescent; very short to medium pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544863 **donor id:** AF-1047. **origin:** United States. **collected:** July 29, 1974. **locality:** 3 mi. west of Lidgerwood along Hwy. 11; flax field. **remarks:** Lemma and palea brown or gray, pubescent. Annual. Wild. Seed.
- PI 544864 **donor id:** AF-1048. **origin:** United States. **collected:** July 29, 1974. **locality:** near Forman. **remarks:** Lemma and palea gray, glabrous; very short to moderate pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544865 **donor id:** AF-1049. **origin:** United States. **collected:** July 29, 1974. **locality:** near Cayuga. **remarks:** Lemma and palea light brown to brown, slightly pubescent to pubescent. Annual. Wild. Seed.
- PI 544866 **donor id:** AF-1054. **origin:** United States. **collected:** July 29, 1974. **locality:** near Oakes. **remarks:** Lemma and palea gray, glabrous; very short pubescence on callus and rachilla. Protein 25.8%. Annual. Wild. Seed.
- PI 544867 **donor id:** AF-1057. **origin:** United States. **collected:** July 29, 1974. **locality:** 2 mi. west of Oakes; wheat field. **remarks:** Lemma and palea light brown to tan, pubescent. Annual. Wild. Seed.
- PI 544868 **donor id:** AF-1058. **origin:** United States. **collected:** July 29, 1974. **locality:** 3 mi. west of Oakes; sudangrass field. **remarks:** Lemma and palea white, glabrous; moderate pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544869 **donor id:** AF-1059. **origin:** United States. **collected:** July 29, 1974. **locality:** 11 mi. west of Oakes; wheat field. **remarks:** Lemma and palea white, glabrous; moderate pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544870 **donor id:** AF-1060. **origin:** United States. **collected:** July 29, 1974. **locality:** near Monango. **remarks:** Lemma and palea light gray to gray, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544871 **donor id:** AF-1070. **origin:** United States. **collected:** July 29, 1974. **locality:** near Merricourt. **remarks:** Lemma and palea gray, glabrous or slightly pubescent; short to moderate pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544872 **donor id:** AF-1072. **origin:** United States. **collected:** July 29, 1974. **locality:** 3 mi. northwest of Merricourt; wheat field. **remarks:** Lemma and palea white, glabrous; moderate pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544873 **donor id:** AF-1073. **origin:** United States. **collected:** July 29, 1974. **locality:** near Edgeley. **remarks:** Lemma and palea gray, glabrous; short to moderate pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544874 **donor id:** AF-1076. **origin:** United States. **collected:** July 29, 1974. **locality:** 15 mi. northwest of Edgeley along Hwy. 34; wheat field. **remarks:** Lemma and palea dark brown, moderate pubescence. Annual. Wild. Seed.
- PI 544875 **donor id:** AF-1081. **origin:** United States. **collected:** July 29, 1974. **locality:** near Napoleon. **remarks:** Lemma and palea dark brown, short to moderate pubescence; short or long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544876 **donor id:** AF-1082. **origin:** United States. **collected:** July 29, 1974. **locality:** near Napoleon. **remarks:** Lemma and palea gray to dark gray, glabrous; short to very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544877 **donor id:** AF-1088. **origin:** United States. **collected:** July 30, 1974. **locality:** west of Mandan along old Hwy. 10. **remarks:** Lemma and palea brown, moderate pubescence; short pubescence on callus; moderate pubescence on rachilla. Annual. Wild. Seed.
- PI 544878 **donor id:** AF-1090. **origin:** United States. **collected:** July 30, 1974. **locality:** west of Mandan along old Hwy. 10. **remarks:** Lemma and palea gray, glabrous; short or heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544879 **donor id:** AF-1093. **origin:** United States. **collected:** July 30, 1974. **locality:** 19 mi. west of Mandan along old Hwy. 10; wheat field. **remarks:** Lemma and palea gray, pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544880 **donor id:** AF-1095. **origin:** United States. **collected:** July 30, 1974. **locality:** 1 mi. west of New Salem along old Hwy. 10; wheat field. **remarks:** Lemma and palea brown, glabrous; short pubescence on callus and rachilla; small kernels. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544881 **donor id:** AF-1096. **origin:** United States. **collected:** July 30, 1974. **locality:** 5 mi. west of New Salem along old Hwy. 10; oat field. **remarks:** Lemma and palea white, glabrous; heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544882 **donor id:** AF-1097. **origin:** United States. **collected:** July 30, 1974. **locality:** west of New Salem along old Hwy. 10. **remarks:** Lemma and palea gray to dark gray, glabrous; short or heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544883 **donor id:** AF-1101. **origin:** United States. **collected:** July 30, 1974. **locality:** 14 mi. west of New Salem along old Hwy. 10; wheat field. **remarks:** Lemma and palea white, glabrous; very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544884 **donor id:** AF-1102. **origin:** United States. **collected:** July 30, 1974. **locality:** 14 mi. west of New Salem along old Hwy. 10; wheat field. **remarks:** Lemma and palea gray, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544885 **donor id:** AF-1103. **origin:** United States. **collected:** July 30, 1974. **locality:** 19 mi. west of New Salem along old Hwy. 10; wheat field. **remarks:** Lemma and palea gray, glabrous; short pubescence on callus and rachilla. Groat 70%. Annual. Wild. Seed.
- PI 544886 **donor id:** AF-1104. **origin:** United States. **collected:** July 30, 1974. **locality:** near Glen Ullin. **remarks:** Lemma and palea brown to dark brown; heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544887 **donor id:** AF-1108. **origin:** United States. **collected:** July 30, 1974. **locality:** 10 mi. west of Glen Ullin along old Hwy. 10; wheat field. **remarks:** Lemma and palea gray, glabrous; moderate pubescence on callus and rachilla. Groat 70%. Annual. Wild. Seed.
- PI 544888 **donor id:** AF-1109. **origin:** United States. **collected:** July 30, 1974. **locality:** near Hebron. **remarks:** Lemma and palea brown to dark brown, glabrous to slightly pubescent; heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544889 **donor id:** AF-1111. **origin:** United States. **collected:** July 30, 1974. **locality:** near Hebron. **remarks:** Lemma and palea gray, glabrous; very short to heavy pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544890 **donor id:** AF-1119. **origin:** United States. **collected:** July 30, 1974. **locality:** near Taylor. **remarks:** Lemma and palea brown to dark brown, pubescent. Annual. Wild. Seed.
- PI 544891 **donor id:** AF-1120. **origin:** United States. **collected:** July 30, 1974. **locality:** near Taylor. **remarks:** Lemma and palea very light gray to gray, glabrous or pubescent; short or long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544892 **donor id:** AF-1126. **origin:** United States. **collected:** July 30, 1974. **locality:** near Dickinson. **remarks:** Lemma and palea dark brown, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544893 **donor id:** AF-1128. **origin:** United States. **collected:** July 30, 1974. **locality:** near Dickinson. **remarks:** Lemma and palea gray, glabrous; very short or heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544894 **donor id:** AF-1129. **origin:** United States. **collected:** July 30, 1974. **locality:** 1 mi. west of Dickinson along old Hwy. 10; wheat field. **remarks:** Lemma and palea gray, pubescent. Annual. Wild. Seed.
- PI 544895 **donor id:** AF-1136. **origin:** United States. **collected:** July 30, 1974. **locality:** west of Dickinson along old Hwy. 10. **remarks:** Lemma and palea gray, glabrous; short or heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544896 **donor id:** AF-1141. **origin:** United States. **collected:** July 30, 1974. **locality:** 10 mi. west of Medora along I-94; wheat field. **remarks:** Lemma and palea dark brown, pubescent. Annual. Wild. Seed.
- PI 544897 **donor id:** AF-1143. **origin:** United States. **collected:** July 30, 1974. **locality:** near North Dakota/Montana border along I-94. **remarks:** Lemma and palea dark brown, glabrous; very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544898 **donor id:** AF-1145. **origin:** United States. **collected:** July 30, 1974. **locality:** 3 mi. west of Wibaux along I-94; wheat field. **remarks:** Lemma and palea dark brown, slightly pubescent. Groat 70%. Annual. Wild. Seed.
- PI 544899 **donor id:** AF-1146. **origin:** United States. **collected:** July 31, 1974. **locality:** west of Glendive along I-94. **remarks:** Lemma and palea light gray, glabrous; very short pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544900 **donor id:** AF-1148. **origin:** United States. **collected:** July 31, 1974. **locality:** 8 mi. west of Glendive along I-94; ditch along highway. **remarks:** Lemma and palea white, glabrous; callus and rachilla pubescent. Annual. Wild. Seed.
- PI 544901 **donor id:** AF-1149. **origin:** United States. **collected:** July 31, 1974. **locality:** 65 mi. west of Glendive along I-94; ditch along highway. **remarks:** Lemma and palea gray, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544902 **donor id:** AF-1151. **origin:** United States. **collected:** July 31, 1974. **locality:** east of Sheffield along Hwy. 446. **remarks:** Lemma and palea light gray, glabrous; very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544903 **donor id:** AF-1153. **origin:** United States. **collected:** July 31, 1974. **locality:** near Forsythe. **remarks:** Lemma and palea light gray to gray, glabrous; very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544904 **donor id:** AF-1158. **origin:** United States. **collected:** July 31, 1974. **locality:** 3 mi. west of Forsythe along Hwy. 12; barley field. **remarks:** Lemma and palea dark brown, glabrous. Annual. Wild. Seed.
- PI 544905 **donor id:** AF-1160. **origin:** United States. **collected:** July 31, 1974. **locality:** 42 mi. west of Forsythe along Hwy. 12; roadside. **remarks:** Lemma and palea light gray, glabrous; short pubescence on callus and rachilla. Groat 71%. Annual. Wild. Seed.
- PI 544906 **donor id:** AF-1161. **origin:** United States. **collected:** July 31, 1974. **locality:** 11 mi. east of Roundup along Hwy. 12; alfalfa field. **remarks:** Lemma and palea white, glabrous; heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544907 **donor id:** AF-1163. **origin:** United States. **collected:** July 31, 1974. **locality:** 12 mi. east of Roundup along Hwy. 12; barley field. **remarks:** Lemma and palea white, glabrous; heavy pubescence on callus and rachilla. Groat 71%. Annual. Wild. Seed.
- PI 544908 **donor id:** AF-1164. **origin:** United States. **collected:** July 31, 1974. **locality:** east of Roundup along Hwy. 12. **remarks:** Lemma and palea gray, slightly pubescent. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544909 **donor id:** AF-1166. **origin:** United States. **collected:** July 31, 1974. **locality:** 6 mi. west of Roundup along Hwy. 12; oat field. **remarks:** Lemma and palea white, slightly pubescent. Annual. Wild. Seed.
- PI 544910 **donor id:** AF-1167. **origin:** United States. **collected:** July 31, 1974. **locality:** 6 mi. west of Roundup along Hwy. 12; oat field. **remarks:** Lemma and palea brown, pubescent. Annual. Wild. Seed.
- PI 544911 **donor id:** AF-1168. **origin:** United States. **collected:** July 31, 1974. **locality:** 14 mi. west of Roundup along Hwy. 12; barley field. **remarks:** Lemma and palea white, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544912 **donor id:** AF-1169. **origin:** United States. **collected:** July 31, 1974. **locality:** 14 mi. west of Roundup along Hwy. 12; barley field. **remarks:** Lemma and palea gray, glabrous; very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544913 **donor id:** AF-1172. **origin:** United States. **collected:** July 31, 1974. **locality:** 42 mi. west of Roundup along Hwy. 12; ditch bank. **remarks:** Lemma and palea brown, glabrous. Annual. Wild. Seed.
- PI 544914 **donor id:** AF-1173. **origin:** United States. **collected:** July 31, 1974. **locality:** 20 mi. east of Harlowton along Hwy. 12; oat field. **remarks:** Lemma and palea gray, pubescent. Annual. Wild. Seed.
- PI 544915 **donor id:** AF-1174. **origin:** United States. **collected:** July 31, 1974. **locality:** 20 mi. east of Harlowton along Hwy. 12; oat field. **remarks:** Lemma and palea white, glabrous; very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544916 **donor id:** AF-1175. **origin:** United States. **collected:** July 31, 1974. **locality:** 25 mi. south of Harlowton along Hwy. 191; barley field. **remarks:** Lemma and palea brown, pubescent. Groat 70%. Annual. Wild. Seed.
- PI 544917 **donor id:** AF-1176. **origin:** United States. **collected:** July 31, 1974. **locality:** north of Big Timber along Hwy. 191. **remarks:** Lemma and palea slate gray, glabrous; very short pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544918 **donor id:** AF-1179. **origin:** United States. **collected:** July 31, 1974. **locality:** 12 mi. west of Big Timber along Hwy. 10; wheat field. **remarks:** Lemma and palea dark brown, slightly pubescent. Annual. Wild. Seed.
- PI 544919 **donor id:** AF-1180. **origin:** United States. **collected:** July 31, 1974. **locality:** 12 mi. west of Big Timber along Hwy. 10; wheat field. **remarks:** Lemma and palea slate gray, glabrous; short pubescence on callus and rachilla. Protein 25.4%. Annual. Wild. Seed.
- PI 544920 **donor id:** AF-1181. **origin:** United States. **collected:** July 31, 1974. **locality:** 16 mi. west of Big Timber along Hwy. 10; barley field. **remarks:** Lemma and palea slate gray, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544921 **donor id:** AF-1182. **origin:** United States. **collected:** August 01, 1974. **locality:** 3-4 mi. south of Bozeman along Hwy. 191; barley field. **remarks:** Lemma and palea gray, glabrous to slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544922 **donor id:** AF-1184. **origin:** United States. **collected:** August 01, 1974. **locality:** 3 mi. south of Bozeman along Hwy. 191; barley field. **remarks:** Lemma and palea brown, pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544923 **donor id:** AF-1187. **origin:** United States. **collected:** August 01, 1974. **locality:** 1 mi. north of Ashton along Hwy. 20; barley field. **remarks:** Lemma and palea gray, glabrous; short pubescence on rachilla. Annual. Wild. Seed.
- PI 544924 **donor id:** AF-1188. **origin:** United States. **collected:** August 01, 1974. **locality:** north edge of St. Anthony along Hwy. 20; oat field. **remarks:** Lemma and palea brown, pubescent. Annual. Wild. Seed.
- PI 544925 **donor id:** AF-1190. **origin:** United States. **collected:** August 01, 1974. **locality:** 5 mi. south of St. Anthony along Hwy. 20; wheat field. **remarks:** Lemma and palea brown, pubescent. Annual. Wild. Seed.
- PI 544926 **donor id:** AF-1191. **origin:** United States. **collected:** August 01, 1974. **locality:** 2 mi. north of Rexburg along Hwy. 20; wheat field. **remarks:** Lemma white, palea gray, slightly pubescent; very short pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544927 **donor id:** AF-1192. **origin:** United States. **collected:** August 01, 1974. **locality:** near Rigby along Hwy. 20. **remarks:** Lemma and palea brown to dark brown, glabrous or pubescent; very short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 544928 **donor id:** AF-1193. **origin:** United States. **collected:** August 01, 1974. **locality:** 11 mi. south of Rexburg along Hwy. 20; wheat field. **remarks:** Lemma and palea gray, glabrous; very short pubescence on callus; medium pubescence on rachilla. Groat 70%. Annual. Wild. Seed.
- PI 544929 **donor id:** AF-1195. **origin:** United States. **collected:** August 01, 1974. **locality:** 6 mi. north of Rigby along Hwy. 20; wheat field with a heavy infestation of A. fatua. **remarks:** Lemma and palea brown, pubescent. Groat 70%. Annual. Wild. Seed.
- PI 544930 **donor id:** AF-1196. **origin:** United States. **collected:** August 04, 1974. **locality:** 6 mi. north of Aberdeen along Hwy. 39; oat field. **remarks:** Lemma and palea dark brown, slightly pubescent. Annual. Wild. Seed.
- PI 544931 **donor id:** AF-1197. **origin:** United States. **collected:** August 04, 1974. **locality:** near Springfield along Hwy. 39. **remarks:** Lemma and palea gray, glabrous; very short to short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544932 **donor id:** AF-1201. **origin:** United States. **collected:** August 04, 1974. **locality:** 3 mi. north of Rockford along Hwy. 39; wheat field. **remarks:** Lemma and palea gray, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544933 **donor id:** AF-1203. **origin:** United States. **collected:** August 04, 1974. **locality:** 22 mi. south of Idaho Falls along I-15; barley field with heavy infestation of A. fatua. **remarks:** Lemma and palea gray, glabrous. Annual. Wild. Seed.
- PI 544934 **donor id:** AF-1205. **origin:** United States. **collected:** August 04, 1974. **locality:** 3 mi. south of Idaho Falls along Hwy. 91; barley field. **remarks:** Lemma and palea brown, pubescent; short, stubby kernel. Annual. Wild. Seed.
- PI 544935 **donor id:** AF-1206. **origin:** United States. **collected:** August 04, 1974. **locality:** 3 mi. west of Dubois along I-15; barley field. **remarks:** Lemma and palea dark brown, slightly pubescent. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544936 **donor id:** AF-1207. **origin:** United States. **collected:** August 04, 1974. **locality:** 2 mi. south of Dillon along Hwy. 91; barley field. **remarks:** Lemma and palea dark brown, pubescent; short, stubby kernels. Annual. Wild. Seed.
- PI 544937 **donor id:** AF-1209. **origin:** United States. **collected:** August 04, 1974. **locality:** 2 mi. south of Dillon along Hwy. 91; barley field. **remarks:** Lemma white, palea gray; very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544938 **donor id:** AF-1210. **origin:** United States. **collected:** August 04, 1974. **locality:** 1 mi. north of Dillon along Hwy. 91; barley field. **remarks:** Lemma and palea slate gray, glabrous; very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544939 **donor id:** AF-1211. **origin:** United States. **collected:** August 05, 1974. **locality:** north of Helena. **remarks:** Lemma and palea brown to dark brown, slightly pubescent or pubescent; very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544940 **donor id:** AF-1216. **origin:** United States. **collected:** August 05, 1974. **locality:** 23 mi. south of Great Falls along I-15; wheat field. **remarks:** Lemma and palea very light gray, glabrous; heavy, tan pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544941 **donor id:** AF-1217. **origin:** United States. **collected:** August 05, 1974. **locality:** south of Great Falls along I-15; wheat field. **remarks:** Lemma and palea very light gray or gray, glabrous; very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544942 **donor id:** AF-1218. **origin:** United States. **collected:** August 05, 1974. **locality:** 20 mi. south of Great Falls along I-15; fence row. **remarks:** Lemma and palea brown, very pubescent. Annual. Wild. Seed.
- PI 544943 **donor id:** AF-1220. **origin:** United States. **collected:** August 05, 1974. **locality:** north of Great Falls along Hwy. 87. **remarks:** Lemma and palea light gray or gray, glabrous; very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544944 **donor id:** AF-1221. **origin:** United States. **collected:** August 05, 1974. **locality:** north of Great Falls along Hwy. 87. **remarks:** Lemma and palea brown, very pubescent. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544945 **donor id:** AF-1225. **origin:** United States. **collected:** August 05, 1974. **locality:** north of Great Falls along Hwy. 87. **remarks:** Lemma and palea gray, glabrous or slightly pubescent; very short or heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544946 **donor id:** AF-1228. **origin:** United States. **collected:** August 05, 1974. **locality:** 41 mi. north of Great Falls along Hwy. 87; roadside. **remarks:** Lemma and palea white, glabrous; heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544947 **donor id:** AF-1229. **origin:** United States. **collected:** August 05, 1974. **locality:** 49 mi. north of Great Falls along Hwy. 87; roadside. **remarks:** Lemma and palea brown, very pubescent. Annual. Wild. Seed.
- PI 544948 **donor id:** AF-1230. **origin:** United States. **collected:** August 05, 1974. **locality:** 1 mi. east of Havre along Hwy. 2; wheat field with heavy infestation of *A. fatua*. **remarks:** Lemma and palea slate gray, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544949 **donor id:** AF-1231. **origin:** United States. **collected:** August 05, 1974. **locality:** 1 mi. east of Havre along Hwy. 2; wheat field with heavy infestation of *A. fatua*. **remarks:** Lemma and palea dark brown, very pubescent. Annual. Wild. Seed.
- PI 544950 **donor id:** AF-1232. **origin:** United States. **collected:** August 05, 1974. **locality:** near Chinook along Hwy. 2. **remarks:** Lemma and palea light gray to gray, glabrous to slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544951 **donor id:** AF-1236. **origin:** United States. **collected:** August 05, 1974. **locality:** near Harlem along Hwy. 2. **remarks:** Lemma and palea light gray to gray, glabrous; very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544952 **donor id:** AF-1239. **origin:** United States. **collected:** August 05, 1974. **locality:** 9 mi. west of Malta along Hwy. 2; barley field. **remarks:** Lemma and palea dark brown, slightly pubescent; very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544953 **donor id:** AF-1240. **origin:** United States. **collected:** August 05, 1974. **locality:** 9 mi. west of Malta along Hwy. 2; barley field. **remarks:** Lemma and palea dark brown, very pubescent (woolly). Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544954 **donor id:** AF-1241. **origin:** United States. **collected:** August 06, 1974. **locality:** east of Malta along Hwy. 2. **remarks:** Lemma and palea gray, glabrous to slightly pubescent; short or heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544955 **donor id:** AF-1242. **origin:** United States. **collected:** August 06, 1974. **locality:** east of Malta along Hwy. 2. **remarks:** Lemma and palea brown, glabrous or slightly pubescent; very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544956 **donor id:** AF-1244. **origin:** United States. **collected:** August 06, 1974. **locality:** 5 mi. east of Malta along Hwy. 2; wheat field. **remarks:** Lemma and palea very dark gray, slightly pubescent; very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544957 **donor id:** AF-1249. **origin:** United States. **collected:** August 06, 1974. **locality:** near Saco along Hwy. 2. **remarks:** Lemma and palea gray, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544958 **donor id:** AF-1250. **origin:** United States. **collected:** August 06, 1974. **locality:** 24 mi. east of Malta along Hwy. 2; waste area. **remarks:** Lemma and palea brown, slightly pubescent; very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544959 **donor id:** AF-1251. **origin:** United States. **collected:** August 06, 1974. **locality:** 3 mi. east of Saco along Hwy. 2; wheat field. **remarks:** Lemma and palea gray, pubescent; heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544960 **donor id:** AF-1252. **origin:** United States. **collected:** August 06, 1974. **locality:** 3 mi. east of Saco along Hwy. 2; alfalfa field. **remarks:** Lemma and palea gray, slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544961 **donor id:** AF-1253. **origin:** United States. **collected:** August 06, 1974. **locality:** 4-5 mi. east of Saco along Hwy. 2. **remarks:** Lemma and palea dark brown, very pubescent (woolly). Annual. Wild. Seed.
- PI 544962 **donor id:** AF-1256. **origin:** United States. **collected:** August 06, 1974. **locality:** 5-6 mi. east of Saco along Hwy. 2. **remarks:** Lemma and palea brown, very pubescent. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544963 **donor id:** AF-1258. **origin:** United States. **collected:** August 06, 1974. **locality:** 6 mi. east of Saco along Hwy. 2; wheat field. **remarks:** Lemma and palea dark gray, slightly pubescent; very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544964 **donor id:** AF-1259. **origin:** United States. **collected:** August 06, 1974. **locality:** east of Saco along Hwy. 2. **remarks:** Lemma and palea light to dark gray, glabrous to slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544965 **donor id:** AF-1262. **origin:** United States. **collected:** August 06, 1974. **locality:** 16 mi. east of Saco along Hwy. 2; wheat field. **remarks:** Lemma and palea brown, slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544966 **donor id:** AF-1263. **origin:** United States. **collected:** August 06, 1974. **locality:** 19 mi. east of Saco along Hwy. 2; barley field. **remarks:** Lemma and palea dark brown, very pubescent. Protein 26.0%. Annual. Wild. Seed.
- PI 544967 **donor id:** AF-1264. **origin:** United States. **collected:** August 06, 1974. **locality:** east of Saco along Hwy. 2. **remarks:** Lemma and palea light or slate gray, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544968 **donor id:** AF-1267. **origin:** United States. **collected:** August 06, 1974. **locality:** 11 mi. east of Glasgow along Hwy. 2; wheat field. **remarks:** Lemma and palea light brown, glabrous. Annual. Wild. Seed.
- PI 544969 **donor id:** AF-1268. **origin:** United States. **collected:** August 06, 1974. **locality:** 23 mi. east of Glasgow along Hwy. 2; wheat field. **remarks:** Lemma and palea slate gray, glabrous. Annual. Wild. Seed.
- PI 544970 **donor id:** AF-1270. **origin:** United States. **collected:** August 06, 1974. **locality:** east of Glasgow along Hwy. 2. **remarks:** Lemma and palea dark brown, very pubescent (woolly). Annual. Wild. Seed.
- PI 544971 **donor id:** AF-1271. **origin:** United States. **collected:** August 06, 1974. **locality:** 26 mi. east of Glasgow along Hwy. 2; wheat field. **remarks:** Lemma and palea gray, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544972 **donor id:** AF-1273. **origin:** United States. **collected:** August 06, 1974. **locality:** 30 mi. east of Glasgow along Hwy. 2; wheat field. **remarks:** Lemma and palea brown, slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544973 **donor id:** AF-1274. **origin:** United States. **collected:** August 06, 1974. **locality:** 30 mi. east of Glasgow along Hwy. 2; wheat field. **remarks:** Lemma and palea dark brown, slightly pubescent; heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544974 **donor id:** AF-1275. **origin:** United States. **collected:** August 06, 1974. **locality:** west of Wolf Point along Hwy. 2. **remarks:** Lemma and palea gray, glabrous; short or heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544975 **donor id:** AF-1279. **origin:** United States. **collected:** August 06, 1974. **locality:** east of Wolf Point along Hwy. 2. **remarks:** Lemma and palea very light gray or light gray, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544976 **donor id:** AF-1282. **origin:** United States. **collected:** August 06, 1974. **locality:** 18 mi. east of Wolf Point along Hwy. 2; wheat field. **remarks:** Lemma and palea white, glabrous; heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544977 **donor id:** AF-1283. **origin:** United States. **collected:** August 06, 1974. **locality:** east of Poplar along Hwy. 2. **remarks:** Lemma and palea gray, glabrous or slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544978 **donor id:** AF-1284. **origin:** United States. **collected:** August 06, 1974. **locality:** 15 mi. east of Poplar along Hwy. 2; wheat field. **remarks:** Lemma and palea brown, glabrous; very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544979 **donor id:** AF-1290. **origin:** United States. **collected:** August 06, 1974. **locality:** east of Culbertson along Hwy. 2. **remarks:** Lemma and palea dark brown, very pubescent (woolly). Annual. Wild. Seed.
- PI 544980 **donor id:** AF-1291. **origin:** United States. **collected:** August 06, 1974. **locality:** 9 mi. east of Culbertson along Hwy. 2; wheat field. **remarks:** Lemma and palea gray, glabrous; pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544981 **donor id:** AF-1292. **origin:** United States. **collected:** August 06, 1974. **locality:** east of Culbertson along Hwy. 2. **remarks:** Lemma and palea dark brown, glabrous or slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544982 **donor id:** AF-1295. **origin:** United States. **collected:** August 06, 1974. **locality:** 2 mi. east of Montana/North Dakota line along Hwy. 2; wheat field. **remarks:** Lemma and palea very dark brown, pubescent. Annual. Wild. Seed.
- PI 544983 **donor id:** AF-1296. **origin:** United States. **collected:** August 06, 1974. **locality:** west of Williston along Hwy. 2. **remarks:** Lemma and palea gray, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544984 **donor id:** AF-1297. **origin:** United States. **collected:** August 06, 1974. **locality:** 2 mi. east of Montana/North Dakota line along Hwy. 2; wheat field. **remarks:** Lemma and palea white, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544985 **donor id:** AF-1298. **origin:** United States. **collected:** August 06, 1974. **locality:** 12 mi. west of Williston along Hwy. 2; wheat field. **remarks:** Lemma and palea dark brown, slightly pubescent; very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544986 **donor id:** AF-1300. **origin:** United States. **collected:** August 06, 1974. **locality:** west of Ray along Hwy. 2. **remarks:** Lemma and palea slate gray, glabrous to slightly pubescent; very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544987 **donor id:** AF-1305. **origin:** United States. **collected:** August 06, 1974. **locality:** 11 mi. west of Ray along Hwy. 2; wheat field. **remarks:** Lemma and palea very dark brown, slightly pubescent; very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544988 **donor id:** AF-1307. **origin:** United States. **collected:** August 06, 1974. **locality:** west of Ross along Hwy. 2. **remarks:** Lemma and palea dark brown, slightly pubescent or pubescent; very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544989 **donor id:** AF-1308. **origin:** United States. **collected:** August 06, 1974. **locality:** west of Ross along Hwy. 2. **remarks:** Lemma and palea gray, glabrous or slightly pubescent; very short pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544990 **donor id:** AF-1313. **origin:** United States. **collected:** August 06, 1974. **locality:** 5 mi. west of Ross along Hwy. 2; oat field. **remarks:** Lemma and palea brown, slightly pubescent; very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544991 **donor id:** AF-1314. **origin:** United States. **collected:** August 06, 1974. **locality:** 4 mi. east of Ross along Hwy. 2; wheat field. **remarks:** Lemma and palea white, glabrous; very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544992 **donor id:** AF-1315. **origin:** United States. **collected:** August 06, 1974. **locality:** west of Minot along Hwy. 2. **remarks:** Lemma and palea gray, glabrous; very short or heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544993 **donor id:** AF-1316. **origin:** United States. **collected:** August 06, 1974. **locality:** west of Minot along Hwy. 2. **remarks:** Lemma and palea gray, glabrous or slightly pubescent; short to very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544994 **donor id:** AF-1323. **origin:** United States. **collected:** August 07, 1974. **locality:** south of Kenmare along Hwy. 52. **remarks:** Lemma and palea gray, slightly pubescent; short or very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544995 **donor id:** AF-1324. **origin:** United States. **collected:** August 07, 1974. **locality:** south of Kenmare along Hwy. 52. **remarks:** Lemma and palea brown to dark brown, moderately pubescent or pubescent. Annual. Wild. Seed.
- PI 544996 **donor id:** AF-1327. **origin:** United States. **collected:** August 07, 1974. **locality:** 5 mi. south of Kenmare along Hwy. 52; barley field. **remarks:** Lemma and palea white, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544997 **donor id:** AF-1329. **origin:** United States. **collected:** August 07, 1974. **locality:** near Donnybrook along Hwy. 52. **remarks:** Lemma and palea dark brown, slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 544998 **donor id:** AF-1332. **origin:** United States. **collected:** August 07, 1974. **locality:** near Minot. **remarks:** Lemma and palea gray, glabrous or slightly pubescent; heavy pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 544999 **donor id:** AF-1333. **origin:** United States. **collected:** August 07, 1974. **locality:** near Minot. **remarks:** Lemma and palea gray, glabrous or slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545000 **donor id:** AF-1335. **origin:** United States. **collected:** August 07, 1974. **locality:** near Minot. **remarks:** Lemma and palea brown or very dark brown, slightly pubescent; very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545001 **donor id:** AF-1340. **origin:** United States. **collected:** August 07, 1974. **locality:** east of Minot along Hwy. 2. **remarks:** Lemma and palea gray, glabrous or slightly pubescent; short to very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545002 **donor id:** AF-1344. **origin:** United States. **collected:** August 07, 1974. **locality:** near Turner along Hwy. 2. **remarks:** Lemma and palea gray, pubescent. Annual. Wild. Seed.
- PI 545003 **donor id:** AF-1345. **origin:** United States. **collected:** August 07, 1974. **locality:** west of Rugby along Hwy. 2. **remarks:** Lemma and palea gray, glabrous or slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545004 **donor id:** AF-1350. **origin:** United States. **collected:** August 07, 1974. **locality:** 5 mi. west of Rugby along Hwy. 2; durum wheat field. **remarks:** Lemma and palea gray, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545005 **donor id:** AF-1351. **origin:** United States. **collected:** August 07, 1974. **locality:** east of Rugby along Hwy. 2. **remarks:** Lemma and palea dark brown, slight to moderate pubescence; short or heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545006 **donor id:** AF-1353. **origin:** United States. **collected:** August 07, 1974. **locality:** east of Rugby along Hwy. 2. **remarks:** Lemma and palea brown or dark brown, very pubescent. Annual. Wild. Seed.
- PI 545007 **donor id:** AF-1355. **origin:** United States. **collected:** August 07, 1974. **locality:** east of Rugby along Hwy. 2. **remarks:** Lemma and palea gray, glabrous or moderately pubescent; short or very heavy pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545008 **donor id:** AF-1360. **origin:** United States. **collected:** August 07, 1975. **locality:** near Churchs Ferry along Hwy. 2. **remarks:** Lemma and palea dark brown, slightly to moderately pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545009 **donor id:** AF-1361. **origin:** United States. **collected:** August 07, 1974. **locality:** near Churchs Ferry along Hwy. 2. **remarks:** Lemma and palea gray, slightly pubescent; heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545010 **donor id:** AF-1362. **origin:** United States. **collected:** August 07, 1974. **locality:** near Churchs Ferry along Hwy. 2. **remarks:** Lemma and palea gray, glabrous or slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545011 **donor id:** AF-1363. **origin:** United States. **collected:** August 07, 1974. **locality:** 7 mi. east of Leeds along Hwy. 2; durum wheat field. **remarks:** Lemma and palea dark brown, very pubescent. Annual. Wild. Seed.
- PI 545012 **donor id:** AF-1366. **origin:** United States. **collected:** August 07, 1974. **locality:** 8 mi. east of Churchs Ferry along Hwy. 2; wheat field. **remarks:** Lemma and palea white, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545013 **donor id:** AF-1369. **origin:** United States. **collected:** August 07, 1974. **locality:** east of Devils Lake along Hwy. 2. **remarks:** Lemma and palea dark brown, slightly pubescent; heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545014 **donor id:** AF-1371. **origin:** United States. **collected:** August 07, 1974. **locality:** east of Devils Lake along Hwy. 2. **remarks:** Lemma and palea gray, glabrous; very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545015 **donor id:** AF-1374. **origin:** United States. **collected:** August 07, 1974. **locality:** near Lakota along Hwy. 2. **remarks:** Lemma and palea gray, slightly pubescent; heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545016 **donor id:** AF-1375. **origin:** United States. **collected:** August 07, 1974. **locality:** 4 mi. east of Lakota along Hwy. 2; waste area. **remarks:** Lemma and palea gray, moderately pubescent; heavy pubescence on callus and rachilla. Lax, open panicle; long kernels. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545017 **donor id:** AF-1379. **origin:** United States. **collected:** August 07, 1974. **locality:** 39 mi. west of Grand Forks along Hwy. 2; wheat field. **remarks:** Lemma and palea gray, slightly pubescent; very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545018 **donor id:** AF-1381. **origin:** United States. **collected:** August 07, 1974. **locality:** 32 mi. west of Grand Forks along Hwy. 2; wheat field. **remarks:** Lemma and palea white, slightly pubescent; heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545019 **donor id:** AF-1382. **origin:** United States. **collected:** August 07, 1974. **locality:** west of Grand Forks along Hwy. 2. **remarks:** Lemma and palea brown to dark brown, moderately pubescent; heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545020 **donor id:** AF-1383. **origin:** United States. **collected:** August 07, 1974. **locality:** 32 mi. west of Grand Forks along Hwy. 2; wheat field. **remarks:** Lemma and palea very light gray/almost white, heavily pubescent. Annual. Wild. Seed.
- PI 545021 **donor id:** AF-1384. **origin:** United States. **collected:** August 07, 1974. **locality:** 28 mi. west of Grand Forks along Hwy. 2; soybean field. **remarks:** Lemma and palea slate gray/nearly black, glabrous; very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545022 **donor id:** AF-1389. **origin:** United States. **collected:** August 07, 1974. **locality:** near Grand Forks along Hwy. 2. **remarks:** Lemma and palea dark brown, slightly to moderately pubescent; heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545023 **donor id:** AF-1393. **origin:** United States. **collected:** August 08, 1974. **locality:** 3 mi. east of East Grand Forks along Hwy. 2; wheat field. **remarks:** Lemma and palea white, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545024 **donor id:** AF-1394. **origin:** United States. **collected:** August 08, 1974. **locality:** 1 mi. east of East Grand Forks along Hwy. 2; barley field. **remarks:** Lemma and palea brown, slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545025 **donor id:** AF-1395. **origin:** United States. **collected:** August 08, 1974. **locality:** near Fisher along Hwy. 2. **remarks:** Lemma and palea gray or slate gray, very slightly pubescent; heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545026 **donor id:** AF-1397. **origin:** United States. **collected:** August 08, 1974. **locality:** 5 mi. east of Fisher along Hwy. 2; roadside. **remarks:** Lemma and palea gray, glabrous; long pubescence on callus; very long pubescence on rachilla; pubescence buff or tan in color. Annual. Wild. Seed.
- PI 545027 **donor id:** AF-1398. **origin:** United States. **collected:** August 09, 1974. **locality:** .25 mi. south of Donaldson along Hwy. 75; wheat field. **remarks:** Lemma and palea dark brown, moderately pubescent; very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545028 **donor id:** AF-1399. **origin:** United States. **collected:** August 09, 1974. **locality:** 1 mi. south of Hallock along Hwy. 75; variety demonstration plots. **remarks:** Lemma and palea gray, moderately pubescent; heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545029 **donor id:** AF-1400. **origin:** United States. **collected:** August 09, 1974. **locality:** 3.5 mi. south of Humboldt along Hwy. 75; oat field. **remarks:** Lemma and palea dark brown, slightly pubescent; heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545030 **donor id:** AF-1401. **origin:** United States. **collected:** August 09, 1974. **locality:** 3.5 mi. south of Humboldt along Hwy. 75; oat field. **remarks:** Lemma and palea gray; heavy pubescence on callus. Annual. Wild. Seed.
- PI 545031 **donor id:** AF-1402. **origin:** United States. **collected:** August 09, 1974. **locality:** 2 mi. north of Humboldt along Hwy. 75; wheat field. **remarks:** Lemma and palea dark gray, moderately pubescent; heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545032 **donor id:** AF-1403. **origin:** United States. **collected:** August 09, 1974. **locality:** 2 mi. north of Humboldt along Hwy. 75; wheat field. **remarks:** Lemma and palea dark brown, slightly pubescent; very short pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545033 **donor id:** AF-1404. **origin:** United States. **collected:** August 09, 1974. **locality:** 2 mi. south of U.S.-Canada border along Hwy. 75; wheat field. **remarks:** Lemma and palea gray or slate gray, glabrous or very slightly pubescent; heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545034 **donor id:** AF-1406. **origin:** United States. **collected:** July 23, 1974. **locality:** .5 mi. south of Aberdeen along Hwy. 39; wheat field. **remarks:** Lemma and palea dark brown, slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545035 **donor id:** AF-1407. **origin:** United States. **collected:** July 23, 1974. **locality:** south of Aberdeen along Hwy. 39. **remarks:** Lemma and palea gray, glabrous or slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545036 **donor id:** AF-1412. **origin:** United States. **collected:** July 23, 1974. **locality:** 8 mi. south of Aberdeen along Hwy. 39; oat field. **remarks:** Lemma and palea gray, glabrous; heavy pubescence on callus and rachilla; kernels short, stubby. Annual. Wild. Seed.
- PI 545037 **donor id:** AF-1416. **origin:** United States. **collected:** July 23, 1974. **locality:** 2 mi. south of American Falls along Hwy. 37; wheat field. **remarks:** Lemma and palea dark brown, very slightly pubescent; very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545038 **donor id:** AF-1417. **origin:** United States. **collected:** July 23, 1974. **locality:** south of American Falls. **remarks:** Lemma and palea gray, glabrous or slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545039 **donor id:** AF-1422. **origin:** United States. **collected:** July 23, 1974. **locality:** 28 mi. south of American Falls along Hwy. 37; wheat field. **remarks:** Lemma and palea brown, slightly pubescent; very short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545040 **donor id:** AF-1430. **origin:** United States. **collected:** July 23, 1974. **locality:** west of Malad City along Hwy. 37. **remarks:** Lemma and palea gray, glabrous or slight pubescence; very short pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545041 **donor id:** AF-1438. **origin:** United States. **collected:** July 23, 1974. **locality:** near Malad City. **remarks:** Lemma and palea dark brown, pubescent. Annual. Wild. Seed.
- PI 545042 **donor id:** AF-1443. **origin:** United States. **collected:** July 23, 1974. **locality:** 5 mi. south of Malad City along I-15; barley field. **remarks:** Lemma and palea dark gray, glabrous; pubescent callus and rachilla. Annual. Wild. Seed.
- PI 545043 **donor id:** AF-1446. **origin:** United States. **collected:** July 24, 1974. **locality:** south edge of Mapleton along Hwy. 89; barley field. **remarks:** Lemma and palea brown, pubescent. Annual. Wild. Seed.
- PI 545044 **donor id:** AF-1448. **origin:** United States. **collected:** July 23, 1974. **locality:** 13 mi. west of Logan along Hwy. 84; wheat field. **remarks:** Lemma and palea gray, glabrous; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545045 **donor id:** AF-1450. **origin:** United States. **collected:** July 23, 1974. **locality:** 3 mi. east of Logan along Hwy. 30; barley field. **remarks:** Lemma and palea light gray, glabrous; heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545046 **donor id:** AF-1454. **origin:** United States. **collected:** July 23, 1974. **locality:** 5 mi. south of Logan along Hwy. 91; wheat field. **remarks:** Lemma and palea brown, pubescent. Annual. Wild. Seed.
- PI 545047 **donor id:** AF-1455. **origin:** United States. **collected:** July 23, 1974. **locality:** south of Logan along Hwy. 91. **remarks:** Lemma and palea gray, glabrous or slightly pubescent; short or heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545048 **donor id:** AF-1457. **origin:** United States. **collected:** July 23, 1974. **locality:** 16 mi. south of Logan along Hwy. 91; oat field. **remarks:** Lemma and palea brown or gray, pubescent. Annual. Wild. Seed.
- PI 545049 **donor id:** AF-1458. **origin:** United States. **collected:** July 23, 1974. **locality:** 9 mi. south of Riverton along Hwy. 68; barley field. **remarks:** Lemma and palea brown, slightly pubescent or pubescent. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545050 **donor id:** AF-1460. **origin:** United States. **collected:** July 23, 1974. **locality:** near Lehi. **remarks:** Lemma and palea gray, glabrous or moderately pubescent; very short or heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545051 **donor id:** AF-1463. **origin:** United States. **collected:** July 23, 1974. **locality:** 1 mi. west of Lehi along Hwy. 73; irrigation canal, barley field. **remarks:** Lemma and palea gray, pubescent. Annual. Wild. Seed.
- PI 545052 **donor id:** AF-1464. **origin:** United States. **collected:** July 24, 1974. **locality:** west edge of Springville; irrigation canal, barley field. **remarks:** Lemma and palea brown, slightly pubescent; very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545053 **donor id:** AF-1465. **origin:** United States. **collected:** July 24, 1974. **locality:** west edge of Springville; irrigation canal, barley field. **remarks:** Lemma and palea white, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545054 **donor id:** AF-1467. **origin:** United States. **collected:** July 24, 1974. **locality:** south edge of Mapleton along Hwy. 89; barley field. **remarks:** Lemma and palea brown pubescent; short kernels. Annual. Wild. Seed.
- PI 545055 **donor id:** AF-1468. **origin:** United States. **collected:** July 24, 1974. **locality:** south edge of Mapleton along Hwy. 89; barley field. **remarks:** Lemma and palea gray, glabrous; very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545056 **donor id:** AF-1470. **origin:** United States. **collected:** July 24, 1974. **locality:** 2 mi. west of Nephi along Hwy. 132; wheat field. **remarks:** Lemma and palea gray, glabrous; heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545057 **donor id:** AF-1473. **origin:** United States. **collected:** July 24, 1974. **locality:** 1 mi. west of Nephi along Hwy. 132; wheat field. **remarks:** Lemma and palea brown, pubescent. Annual. Wild. Seed.
- PI 545058 **donor id:** AF-1475. **origin:** United States. **collected:** July 24, 1974. **locality:** 1 mi. south of Levan along Hwy. 91; wheat field. **remarks:** Lemma and palea gray, glabrous to moderately pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545059 **donor id:** AF-1478. **origin:** United States. **collected:** July 24, 1974. **locality:** south edge of Scipio along Hwy. 91; barley field. **remarks:** Lemma and palea brown, slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545060 **donor id:** AF-1479. **origin:** United States. **collected:** July 24, 1974. **locality:** south edge of Scipio along Hwy. 91; barley field. **remarks:** Lemma and palea gray or slate gray, slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545061 **donor id:** AF-1481. **origin:** United States. **collected:** July 24, 1974. **locality:** 5 mi. south, 1 mi. west of Filmore at the Meadow turnoff; barley field. **remarks:** Lemma and palea slate gray, moderately pubescent; heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545062 **donor id:** AF-1485. **origin:** United States. **collected:** July 24, 1974. **locality:** north of Cedar City. **remarks:** Lemma and palea brown or dark brown, slightly pubescent to pubescent; short or heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545063 **donor id:** AF-1490. **origin:** United States. **collected:** July 24, 1974. **locality:** north edge of Cedar City; alfalfa/wheat field. **remarks:** Lemma and palea slate gray, slightly pubescent; very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545064 **donor id:** AF-1501. **origin:** United States. **collected:** July 25, 1974. **locality:** north of Circleville along Hwy. 89. **remarks:** Lemma and palea gray or slate gray, glabrous or slightly pubescent; short or heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545065 **donor id:** AF-1509. **origin:** United States. **collected:** July 25, 1974. **locality:** near Richfield along Hwy. 89. **remarks:** Lemma and palea brown or dark brown, slightly pubescent or pubescent; very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545066 **donor id:** AF-1510. **origin:** United States. **collected:** July 25, 1974. **locality:** near Richfield along Hwy. 89. **remarks:** Lemma and palea gray or slate gray, glabrous or slightly pubescent; short or very short pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545067 **donor id:** AF-1514. **origin:** United States. **collected:** July 25, 1974. **locality:** 6 mi. north of Richfield along Hwy. 89; barley field. **remarks:** Lemma and palea white, glabrous; heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545068 **donor id:** AF-1515. **origin:** United States. **collected:** July 25, 1974. **locality:** 6 mi. north of Richfield along Hwy. 89; barley field. **remarks:** Lemma and palea brown, slightly pubescent; very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545069 **donor id:** AF-1517. **origin:** United States. **collected:** July 25, 1974. **locality:** 11 mi. north of Richfield along Hwy. 89; barley field. **remarks:** Lemma and palea gray, glabrous or moderately pubescent; heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545070 **donor id:** AF-1520. **origin:** United States. **collected:** July 25, 1974. **locality:** .25 mi. north of Salina along Hwy. 89; barley field. **remarks:** Lemma and palea light gray or gray, slightly pubescent; very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545071 **donor id:** AF-1522. **origin:** United States. **collected:** July 25, 1974. **locality:** .25 mi. north of Salina along Hwy. 89; barley field. **remarks:** Lemma and palea dark brown, slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545072 **donor id:** AF-1523. **origin:** United States. **collected:** July 25, 1974. **locality:** 7 mi. north of Salina along Hwy. 89; irrigation ditch, alfalfa field. **remarks:** Lemma and palea light gray, glabrous; heavy pubescence on callus and rachilla; pubescence buff in color. Annual. Wild. Seed.
- PI 545073 **donor id:** AF-1524. **origin:** United States. **collected:** July 25, 1974. **locality:** 7 mi. north of Salina along Hwy. 89; irrigation ditch, alfalfa field. **remarks:** Lemma and palea white, glabrous; heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545074 **donor id:** AF-1527. **origin:** United States. **collected:** July 25, 1974. **locality:** northeast of Gunnison along Hwy. 89. **remarks:** Lemma and palea light gray, slightly pubescent. Annual. Wild. Seed.
- PI 545075 **donor id:** AF-1530. **origin:** United States. **collected:** July 25, 1974. **locality:** near Manti along Hwy. 89. **remarks:** Lemma and palea dark brown, pubescent to very pubescent. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545076 **donor id:** AF-1535. **origin:** United States. **collected:** July 25, 1974. **locality:** near Manti along Hwy. 89. **remarks:** Lemma and palea gray, pubescent. Annual. Wild. Seed.
- PI 545077 **donor id:** AF-1539. **origin:** United States. **collected:** July 25, 1974. **locality:** near Ephraim along Hwy. 89. **remarks:** Lemma and palea brown or dark brown, pubescent to very pubescent. Annual. Wild. Seed.
- PI 545078 **donor id:** AF-1542. **origin:** United States. **collected:** July 25, 1974. **locality:** near Mt. Pleasant along Hwy. 89. **remarks:** Lemma and palea gray, glabrous to very pubescent; very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545079 **donor id:** AF-1544. **origin:** United States. **collected:** July 25, 1974. **locality:** 4 mi. south of Mt. Pleasant along Hwy. 89; barley field. **remarks:** Lemma and palea dark brown, pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545080 **donor id:** AF-1549. **origin:** United States. **collected:** July 25, 1974. **locality:** 15 mi. south of Spanish Fork along Hwy. 89; barley field. **remarks:** Lemma and palea gray, very slightly pubescent; very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545081 **donor id:** AF-1551. **origin:** United States. **collected:** July 25, 1974. **locality:** .5 mi. south of Salem along Hwy. 50; barley field. **remarks:** Lemma and palea gray, very pubescent; short kernels. Annual. Wild. Seed.
- PI 545082 **donor id:** AF-1553. **origin:** United States. **collected:** July 25, 1974. **locality:** .5 mi. south of Salem along Hwy. 50; barley field. **remarks:** Lemma and palea gray, glabrous; heavy pubescence on callus and rachilla; short kernels. Annual. Wild. Seed.
- PI 545083 **donor id:** AF-1555. **origin:** United States. **collected:** July 25, 1974. **locality:** 5 mi. south of Heber City along Hwy. 189; barley field. **remarks:** Lemma and palea dark brown, slightly pubescent; very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545084 **donor id:** AF-1556. **origin:** United States. **collected:** July 25, 1974. **locality:** near Heber City. **remarks:** Lemma and palea gray, glabrous or very slightly pubescent; very short pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545085 **donor id:** AF-1561. **origin:** United States. **collected:** July 25, 1974. **locality:** east of Coalville. **remarks:** Lemma and palea brown, pubescent to very pubescent. Annual. Wild. Seed.
- PI 545086 **donor id:** AF-1566. **origin:** United States. **collected:** July 26, 1974. **locality:** near Bear Lake (Utah-Idaho border). **remarks:** Lemma and palea gray or slate gray, glabrous or slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545087 **donor id:** AF-1570. **origin:** United States. **collected:** July 26, 1974. **locality:** near shore of Bear Lake along Hwy. 89. **remarks:** Lemma and palea gray or slate gray, slightly pubescent; short or very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545088 **donor id:** AF-1572. **origin:** United States. **collected:** July 26, 1974. **locality:** north edge of St. Charles along Hwy. 89; barley field. **remarks:** Lemma and palea dark brown, pubescent. Annual. Wild. Seed.
- PI 545089 **donor id:** AF-1579. **origin:** United States. **collected:** July 26, 1974. **locality:** near Montpelier. **remarks:** Lemma and palea brown, pubescent. Annual. Wild. Seed.
- PI 545090 **donor id:** AF-1583. **origin:** United States. **collected:** July 26, 1974. **locality:** north of Montpelier along Hwy. 30. **remarks:** Lemma and palea gray or slate gray, glabrous or slightly pubescent; very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545091 **donor id:** AF-1593. **origin:** United States. **collected:** July 26, 1974. **locality:** west of Soda Springs along Hwy. 30. **remarks:** Lemma and palea gray, glabrous to moderately pubescent; short or very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545092 **donor id:** AF-1603. **origin:** United States. **collected:** July 26, 1974. **locality:** near Shelley along Hwy. 91. **remarks:** Lemma and palea gray, slightly pubescent; short or very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545093 **donor id:** AF-1609. **origin:** United States. **collected:** July 26, 1974. **locality:** 1 mi. north of Shelley along Hwy. 91; wheat field. **remarks:** Lemma and palea dark brown, pubescent; very short kernels. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545094 **donor id:** AF-1613. **origin:** United States. **collected:** July 26, 1974. **locality:** north of Idaho Falls along Hwy. 20. **remarks:** Lemma and palea gray, glabrous or slightly pubescent; very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545095 **donor id:** AF-1616. **origin:** United States. **collected:** July 26, 1974. **locality:** 11 mi. north of Idaho Falls along Hwy. 20; wheat field. **remarks:** Lemma and palea brown, moderately pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545096 **donor id:** AF-1617. **origin:** United States. **collected:** July 26, 1974. **locality:** 2 mi. north of Rigby along Hwy. 20; barley field with heavy infestation of *A. fatua*. **remarks:** Lemma and palea gray, very slightly pubescent; very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545097 **donor id:** AF-1618. **origin:** United States. **collected:** July 26, 1974. **locality:** 2 mi. north of Rigby along Hwy. 20; barley field with heavy infestation of *A. fatua*. **remarks:** Lemma and palea dark brown, very pubescent. Annual. Wild. Seed.
- PI 545098 **donor id:** AF-1621. **origin:** United States. **collected:** July 26, 1974. **locality:** near Rexburg along Hwy. 20. **remarks:** Lemma and palea gray, glabrous or slightly pubescent; very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545099 **donor id:** AF-1626. **origin:** United States. **collected:** July 26, 1974. **locality:** 1 mi. west of Tetonia along Hwy. 33; oat field. **remarks:** Lemma and palea gray, glabrous to slightly pubescent; short to very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545100 **donor id:** AF-1629. **origin:** United States. **collected:** July 26, 1974. **locality:** 25 mi. west of Tetonia along Hwy. 33; wheat field. **remarks:** Lemma and palea dark brown, glabrous or slightly pubescent; short or very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545101 **donor id:** AF-1630. **origin:** United States. **collected:** July 26, 1974. **locality:** 25 mi. west of Tetonia along Hwy. 33; wheat field. **remarks:** Lemma and palea gray, glabrous; heavy pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545102 **donor id:** AF-1633. **origin:** United States. **collected:** July 26, 1974. **locality:** 10 mi. west of Tetonia along Hwy. 33; fallow strip in dryland barley field. **remarks:** Lemma and palea gray, glabrous or slightly pubescent; very short or heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545103 **donor id:** AF-1641. **origin:** United States. **collected:** July 26, 1974. **locality:** near Ashton. **remarks:** Lemma and palea light gray or gray, glabrous; very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545104 **donor id:** AF-1644. **origin:** United States. **collected:** July 26, 1974. **locality:** 25 mi. north of Tetonia along Hwy. 32; wheat field. **remarks:** Lemma and palea dark brown, very pubescent. Annual. Wild. Seed.
- PI 545105 **donor id:** AF-1646. **origin:** United States. **collected:** July 26, 1974. **locality:** 25 mi. north of Tetonia along Hwy. 32; wheat field. **remarks:** Lemma and palea light gray, glabrous; heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545106 **donor id:** AF-1651. **origin:** United States. **collected:** July 27, 1974. **locality:** 8 mi. east of Livingston along I-90; wheat field. **remarks:** Lemma and palea dark brown, very pubescent (woolly). Annual. Wild. Seed.
- PI 545107 **donor id:** AF-1652. **origin:** United States. **collected:** July 27, 1974. **locality:** east of Livingston along I-90. **remarks:** Lemma and palea gray or slate gray, heavily pubescent; heavy brown pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545108 **donor id:** AF-1654. **origin:** United States. **collected:** July 27, 1974. **locality:** 15 mi. east of Livingston along I-90; fallow strip between winter wheat. **remarks:** Lemma and palea gray. Annual. Wild. Seed.
- PI 545109 **donor id:** AF-1655. **origin:** United States. **collected:** July 27, 1974. **locality:** 15 mi. east of Livingston along I-90; fallow strip between winter wheat. **remarks:** Lemma and palea very dark slate gray, glabrous; very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545110 **donor id:** AF-1656. **origin:** United States. **collected:** July 27, 1974. **locality:** 22 mi. east of Livingston along I-90; oat field. **remarks:** Lemma and palea brown, glabrous; very short pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545111 **donor id:** AF-1657. **origin:** United States. **collected:** July 27, 1974. **locality:** near Columbus along I-90. **remarks:** Lemma and palea light gray or slate gray, glabrous or slightly pubescent; short or very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545112 **donor id:** AF-1660. **origin:** United States. **collected:** July 27, 1974. **locality:** near Laurel along I-90. **remarks:** Lemma and palea light gray or gray, slightly pubescent; short to long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545113 **donor id:** AF-1661. **origin:** United States. **collected:** July 27, 1974. **locality:** 9 mi. east of Columbus along I-90. **remarks:** Lemma and palea gray, glabrous; heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545114 **donor id:** AF-1663. **origin:** United States. **collected:** July 27, 1974. **locality:** 10 mi. east of Columbus along I-90; oat field. **remarks:** Lemma and palea brown, moderately pubescent. Annual. Wild. Seed.
- PI 545115 **donor id:** AF-1664. **origin:** United States. **collected:** July 27, 1974. **locality:** 17 mi. east of Columbus along I-90. **remarks:** Lemma and palea dark slate gray, glabrous; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545116 **donor id:** AF-1665. **origin:** United States. **collected:** July 27, 1974. **locality:** 17 mi. east of Columbus along I-90; winter wheat field. **remarks:** Lemma and palea dark gray, glabrous; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545117 **donor id:** AF-1670. **origin:** United States. **collected:** July 27, 1974. **locality:** 1 mi. east, .5 mi. north of Laurel; corn field. **remarks:** Lemma and palea slate gray, very slight pubescence; very short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545118 **donor id:** AF-1672. **origin:** United States. **collected:** July 27, 1974. **locality:** near Lame Deer. **remarks:** Lemma and palea gray, very slightly pubescent; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545119 **donor id:** AF-1676. **origin:** United States. **collected:** July 27, 1974. **locality:** 21 mi. east of Lame Deer along Hwy. 212; abandoned field. **remarks:** Lemma and palea gray, slightly pubescent; very heavy pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545120 **donor id:** AF-1677. **origin:** United States. **collected:** July 27, 1974. **locality:** 21 mi. east of Lame Deer along Hwy. 212; abandoned field. **remarks:** Lemma and palea dark gray, glabrous; very short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545121 **donor id:** AF-1678. **origin:** United States. **collected:** July 27, 1974. **locality:** south of Miles City along Hwy. 312. **remarks:** Lemma and palea light gray or gray, glabrous or slightly pubescent; short pubescence on callus; short or medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545122 **donor id:** AF-1687. **origin:** United States. **collected:** July 28, 1974. **locality:** 8 mi. east of Miles City along Hwy. 12; oat field. **remarks:** Lemma and palea light gray, glabrous or slightly pubescent; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545123 **donor id:** AF-1691. **origin:** United States. **collected:** July 28, 1974. **locality:** east of Miles City along Hwy. 12. **remarks:** Lemma and palea light gray or gray, glabrous or slightly pubescent; short to medium pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545124 **donor id:** AF-1700. **origin:** United States. **collected:** July 28, 1974. **locality:** near Baker along Hwy. 12. **remarks:** Lemma and palea light gray or gray, glabrous or slightly pubescent; short or medium pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545125 **donor id:** AF-1711. **origin:** United States. **collected:** July 28, 1974. **locality:** near Montana-North Dakota border along Hwy. 12. **remarks:** Lemma and palea light gray or gray, glabrous or slightly pubescent; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545126 **donor id:** AF-1715. **origin:** United States. **collected:** July 28, 1974. **locality:** 7 mi. east of Montana-North Dakota border along Hwy. 12, then 1 mi north towards Ft. Dilts hist. site; wheat field. **remarks:** Lemma and palea dark brown, very pubescent (woolly). Annual. Wild. Seed.
- PI 545127 **donor id:** AF-1719. **origin:** United States. **collected:** July 28, 1974. **locality:** east of Rhame along Hwy. 12. **remarks:** Lemma and palea brown, slightly pubescent; short pubescence on callus; short, sparse pubescence on rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545128 **donor id:** AF-1722. **origin:** United States. **collected:** July 28, 1974. **locality:** near Bowman. **remarks:** Lemma and palea light gray, glabrous or slightly pubescent; short pubescence on callus; short or medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545129 **donor id:** AF-1725. **origin:** United States. **collected:** July 28, 1974. **locality:** .5 mi. north of Bowman along Hwy. 85; spring wheat field. **remarks:** Lemma and palea brown or dark brown, slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545130 **donor id:** AF-1727. **origin:** United States. **collected:** July 28, 1974. **locality:** 5 mi. north of Bowman along Hwy. 85; fallow area in wheat field. **remarks:** Lemma and palea light brown, very pubescent (woolly); very pubescent callus and rachilla. Annual. Wild. Seed.
- PI 545131 **donor id:** AF-1728. **origin:** United States. **collected:** July 28, 1974. **locality:** 5 mi. north of Bowman along Hwy. 85; fallow area in wheat field. **remarks:** Lemma and palea dark brown, very pubescent (woolly); very pubescent callus and rachilla. Annual. Wild. Seed.
- PI 545132 **donor id:** AF-1730. **origin:** United States. **collected:** July 28, 1974. **locality:** 12 mi. north of Bowman along Hwy. 85; oat field. **remarks:** Lemma and palea white, glabrous; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545133 **donor id:** AF-1731. **origin:** United States. **collected:** July 28, 1974. **locality:** north of Bowman along Hwy. 85. **remarks:** Lemma and palea light gray to dark gray, glabrous or slightly pubescent; callus glabrous or short pubescence; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545134 **donor id:** AF-1732. **origin:** United States. **collected:** July 28, 1974. **locality:** 12 mi. north of Bowman along Hwy. 85; oat field. **remarks:** Lemma and palea dark gray, very pubescent; very long and heavy pubescence on callus and rachilla (woolly). Annual. Wild. Seed.
- PI 545135 **donor id:** AF-1733. **origin:** United States. **collected:** July 28, 1974. **locality:** 22 mi. north of Bowman along Hwy. 85; winter wheat field. **remarks:** Lemma and palea dark brown, very pubescent (woolly). Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545136 **donor id:** AF-1739. **origin:** United States. **collected:** July 28, 1974. **locality:** 14 mi. west of New England along Hwy. 21; fallow area in wheat field. **remarks:** Lemma and palea light gray or gray, slightly pubescent; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545137 **donor id:** AF-1742. **origin:** United States. **collected:** July 28, 1974. **locality:** west of New England along Hwy. 21. **remarks:** Lemma and palea brown, pubescent. Annual. Wild. Seed.
- PI 545138 **donor id:** AF-1738. **origin:** United States. **collected:** July 28, 1974. **locality:** 4 mi. east of Amidon along Hwy. 85; oat field. **remarks:** Lemma and palea dark brown, very pubescent (woolly). Annual. Wild. Seed.
- PI 545139 **donor id:** AF-1744. **origin:** United States. **collected:** July 28, 1974. **locality:** 9 mi. west of New England along Hwy. 21; spring wheat field. **remarks:** Lemma and palea white, glabrous; long, heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545140 **donor id:** AF-1750. **origin:** United States. **collected:** July 28, 1974. **locality:** 5 mi. south of New England along Hwy. 21; low area in wheat field. **remarks:** Lemma and palea light gray, glabrous; medium pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545141 **donor id:** AF-1755. **origin:** United States. **collected:** July 28, 1974. **locality:** 6 mi. west of Regent along Hwy. 21; rape field. **remarks:** Lemma and palea gray, pubescent or very pubescent. Annual. Wild. Seed.
- PI 545142 **donor id:** AF-1757. **origin:** United States. **collected:** July 28, 1974. **locality:** 4 mi. east of Regent along Hwy. 21; spring wheat field. **remarks:** Lemma and palea light gray, slightly pubescent; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545143 **donor id:** AF-1758. **origin:** United States. **collected:** July 28, 1974. **locality:** 4 mi. east of Regent along Hwy. 21; spring wheat field. **remarks:** Lemma and palea light gray; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545144 **donor id:** AF-1765. **origin:** United States. **collected:** July 28, 1974. **locality:** 4 mi. west of Mott along Hwy. 21; wheat field. **remarks:** Lemma and palea gray, pubescent; heavy pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545145 **donor id:** AF-1766. **origin:** United States. **collected:** July 28, 1974. **locality:** 10 mi. east of Mott along Hwy. 21; sandy knoll in wheat field. **remarks:** Lemma and palea dark brown, moderately pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545146 **donor id:** AF-1767. **origin:** United States. **collected:** July 28, 1974. **locality:** near New Leipzig along Hwy. 21. **remarks:** Lemma and palea light gray, glabrous or slightly pubescent; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545147 **donor id:** AF-1777. **origin:** United States. **collected:** July 28, 1974. **locality:** east of Elgin along Hwy. 21. **remarks:** Lemma and palea light gray to gray, glabrous or slightly pubescent; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545148 **donor id:** AF-1783. **origin:** United States. **collected:** July 28, 1974. **locality:** east of Flasher. **remarks:** Lemma and palea light gray, glabrous; short or medium pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545149 **donor id:** AF-1784. **origin:** United States. **collected:** July 28, 1974. **locality:** 1 mi. west of Flasher along Hwy. 21; wheat field. **remarks:** Lemma and palea white, glabrous; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545150 **donor id:** AF-1785. **origin:** United States. **collected:** July 28, 1974. **locality:** 9 mi. east of Flasher along Hwy. 21; between fields of wheat and oats. **remarks:** Lemma and palea brown, slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545151 **donor id:** AF-1791. **origin:** United States. **collected:** July 28, 1974. **locality:** 15 mi. south of Mandan along Hwy. 6; wheat field. **remarks:** Lemma and palea light or very light gray, glabrous; short or very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545152 **donor id:** AF-1792. **origin:** United States. **collected:** July 28, 1974. **locality:** 15 mi. south of Mandan along Hwy. 6; wheat field. **remarks:** Lemma and palea brown, slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545153 **donor id:** AF-1797. **origin:** United States. **collected:** July 29, 1974. **locality:** 11 mi. south of Sterling along Hwy. 83; wet area in wheat field. **remarks:** Lemma and palea light gray or gray, glabrous or very slightly pubescent; short or very short pubescence on callus; short or medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545154 **donor id:** AF-1800. **origin:** United States. **collected:** July 29, 1974. **locality:** 18 mi. south of Sterling along Hwy. 83; low area in flax field. **remarks:** Lemma and palea brown, slightly pubescent; heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545155 **donor id:** AF-1801. **origin:** United States. **collected:** July 29, 1974. **locality:** near Hazelton. **remarks:** Lemma and palea light gray to gray, glabrous or slightly pubescent; short to medium pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545156 **donor id:** AF-1803. **origin:** United States. **collected:** July 29, 1974. **locality:** 1 mi. south of Hazelton along Hwy. 83; flax field. **remarks:** Lemma and palea brown, glabrous; short pubescence on callus; very short pubescence on rachilla. Annual. Wild. Seed.
- PI 545157 **donor id:** AF-1804. **origin:** United States. **collected:** July 29, 1974. **locality:** 1 mi. south of Hazelton along Hwy. 83; flax field. **remarks:** Lemma and palea dark brown, moderately pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545158 **donor id:** AF-1807. **origin:** United States. **collected:** July 29, 1974. **locality:** 9 mi. south of Hazelton along Hwy. 83; flax field. **remarks:** Lemma and palea dark brown, moderately pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545159 **donor id:** AF-1810. **origin:** United States. **collected:** July 29, 1974. **locality:** east of Linton along Hwy. 13. **remarks:** Lemma and palea light gray to gray, glabrous; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545160 **donor id:** AF-1815. **origin:** United States. **collected:** July 29, 1974. **locality:** east of Linton along Hwy. 13. **remarks:** Lemma and palea dark gray, slightly pubescent; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545161 **donor id:** AF-1816. **origin:** United States. **collected:** July 29, 1974. **locality:** 19 mi. east of Linton along Hwy. 13; sandy knoll in wheat field. **remarks:** Lemma and palea dark gray, slightly pubescent. Annual. Wild. Seed.
- PI 545162 **donor id:** AF-1819. **origin:** United States. **collected:** July 29, 1974. **locality:** 27 mi. east of Linton along Hwy. 13; wheat field. **remarks:** Lemma and palea white, glabrous; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545163 **donor id:** AF-1820. **origin:** United States. **collected:** July 29, 1974. **locality:** near Lehr along Hwy. 13. **remarks:** Lemma and palea light gray or gray, glabrous or slightly pubescent; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545164 **donor id:** AF-1822. **origin:** United States. **collected:** July 29, 1974. **locality:** 1 mi. east of Wishek along Hwy. 13; wheat field. **remarks:** Lemma and palea gray, slightly pubescent; very long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545165 **donor id:** AF-1824. **origin:** United States. **collected:** July 29, 1974. **locality:** 2 mi. east of Lehr along Hwy. 13; wheat field with heavy infestation of foxtail and A. fatua. **remarks:** Lemma and palea dark brown, moderately pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545166 **donor id:** AF-1825. **origin:** United States. **collected:** July 29, 1974. **locality:** 2 mi. east of Lehr along Hwy. 13; wheat field with heavy infestation of foxtail and A. fatua. **remarks:** Lemma and palea dark brown, moderately pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545167 **donor id:** AF-1826. **origin:** United States. **collected:** July 29, 1974. **locality:** 10 mi. east of Lehr along Hwy. 13; low area in wheat field. **remarks:** Lemma and palea white, glabrous; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545168 **donor id:** AF-1829. **origin:** United States. **collected:** July 29, 1974. **locality:** 16 mi. east of Lehr along Hwy. 13; flax field. **remarks:** Lemma and palea brown, moderately pubescent; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545169 **donor id:** AF-1830. **origin:** United States. **collected:** July 29, 1974. **locality:** east of Lehr along Hwy. 13. **remarks:** Lemma and palea dark brown, pubescent or very pubescent (woolly). Annual. Wild. Seed.
- PI 545170 **donor id:** AF-1833. **origin:** United States. **collected:** July 29, 1974. **locality:** 25 mi. east of Lehr along Hwy. 13; oat field. **remarks:** Lemma and palea gray, glabrous; very pubescent callus and rachilla. Annual. Wild. Seed.
- PI 545171 **donor id:** AF-1836. **origin:** United States. **collected:** July 29, 1974. **locality:** 30 mi. east of Lehr along Hwy. 13; wheat field. **remarks:** Lemma and palea dark brown, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545172 **donor id:** AF-1838. **origin:** United States. **collected:** July 29, 1974. **locality:** 1 mi. east of Edgeley along Hwy. 13; wheat field. **remarks:** Lemma and palea gray or light gray, glabrous or slightly pubescent; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545173 **donor id:** AF-1841. **origin:** United States. **collected:** July 29, 1974. **locality:** 9 mi. east of Edgeley along Hwy. 13; wheat field. **remarks:** Lemma and palea dark brown, pubescent; heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545174 **donor id:** AF-1845. **origin:** United States. **collected:** July 29, 1974. **locality:** 4 mi. east of La Moure along Hwy. 13; flax field. **remarks:** Lemma and palea gray, slightly pubescent; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545175 **donor id:** AF-1847. **origin:** United States. **collected:** July 29, 1974. **locality:** .5 mi. south of Verana along Hwy. 1/13; poor drained area in flax field. **remarks:** Lemma and palea white, glabrous; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545176 **donor id:** AF-1848. **origin:** United States. **collected:** July 29, 1974. **locality:** .5 mi. south of Verana along Hwy. 1/13; poorly drained area in flax field. **remarks:** Lemma and palea brown, slightly pubescent; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545177 **donor id:** AF-1850. **origin:** United States. **collected:** July 29, 1974. **locality:** 9 mi. south of Verana along Hwy. 1/13; low area in barley field. **remarks:** Lemma and palea white, glabrous; short pubescence on callus; sparse, medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545178 **donor id:** AF-1851. **origin:** United States. **collected:** July 29, 1974. **locality:** west of Gwinner. **remarks:** Lemma and palea light gray or gray, glabrous or slightly pubescent; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545179 **donor id:** AF-1859. **origin:** United States. **collected:** July 29, 1974. **locality:** 2 mi. east of Gwinner along Hwy. 13; low area in sunflower field. **remarks:** Lemma and palea dark brown, slightly pubescent; very heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545180 **donor id:** AF-1862. **origin:** United States. **collected:** July 29, 1974. **locality:** 9 mi. east of Gwinner along Hwy. 13; wheat field. **remarks:** Lemma and palea white or gray, glabrous or slightly pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545181 **donor id:** AF-1863. **origin:** United States. **collected:** July 29, 1974. **locality:** 9 mi. east of Gwinner along Hwy. 13; wheat field. **remarks:** Lemma and palea gray, slightly pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545182 **donor id:** AF-1864. **origin:** United States. **collected:** July 29, 1974. **locality:** 9 mi. east of Gwinner along Hwy. 13; wheat field. **remarks:** Lemma and palea brown or white; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545183 **donor id:** AF-1865. **origin:** United States. **collected:** July 29, 1974. **locality:** 21 mi. east of Gwinner along Hwy. 13; wheat field. **remarks:** Lemma and palea white, glabrous; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545184 **donor id:** AF-1866. **origin:** United States. **collected:** July 29, 1974. **locality:** 21 mi. east of Gwinner along Hwy. 13; wheat field. **remarks:** Lemma and palea brown, slightly pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545185 **donor id:** AF-1871. **origin:** United States. **collected:** July 29, 1974. **locality:** near Wahpeton. **remarks:** Lemma and palea light gray or gray, glabrous or slightly pubescent; short to long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545186 **donor id:** AF-1872. **origin:** United States. **collected:** July 29, 1974. **locality:** 41 mi. east of Gwinner along Hwy. 13; wheat field. **remarks:** Lemma and palea dark brown, very pubescent (woolly); long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545187 **donor id:** AF-1880. **origin:** United States. **collected:** July 29, 1974. **locality:** near Fergus Falls. **remarks:** Lemma and palea brown, very pubescent. Annual. Wild. Seed.
- PI 545188 **donor id:** AF-1881. **origin:** United States. **collected:** July 29, 1974. **locality:** 12 mi. east of Breckenridge along Hwy. 210; wheat field. **remarks:** Lemma and palea white, glabrous; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545189 **donor id:** AF-1884. **origin:** United States. **collected:** July 29, 1974. **locality:** near Fergus Falls. **remarks:** Lemma and palea dark brown or gray, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545190 **donor id:** AF-1886. **origin:** United States. **collected:** July 29, 1974. **locality:** 3 mi. south of Fergus Falls along Hwy. 59; oat field. **remarks:** Lemma and palea gray, moderately pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545191 **donor id:** AF-1887. **origin:** United States. **collected:** July 29, 1974. **locality:** 3 mi. south of Fergus Falls along Hwy. 59; oat field. **remarks:** Lemma and palea gray, slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545192 **donor id:** AF-1890. **origin:** United States. **collected:** July 29, 1974. **locality:** 12 mi. south of Fergus Falls along Hwy. 59; wheat field. **remarks:** Lemma and palea light gray or gray, slightly pubescent; heavy pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545193 **donor id:** AF-1895. **origin:** United States. **collected:** July 29, 1974. **locality:** 12 mi. east of Glenwood along Hwy. 28; winter wheat field. **remarks:** Lemma and palea white, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545194 **donor id:** AF-1898. **origin:** United States. **collected:** August 01, 1974. **locality:** near Callaway along Hwy. 59. **remarks:** Lemma and palea brown, glabrous; short or very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545195 **donor id:** AF-1901. **origin:** United States. **collected:** August 01, 1974. **locality:** north of Callaway along Hwy. 59. **remarks:** Lemma and palea gray, moderately pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545196 **donor id:** AF-1908. **origin:** United States. **collected:** August 01, 1974. **locality:** 5 mi. north of Detroit Lakes along Hwy. 59; wheat field. **remarks:** Lemma and palea gray, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545197 **donor id:** AF-1910. **origin:** United States. **collected:** August 01, 1974. **locality:** west of Mahanomen along Hwy. 200. **remarks:** Lemma and palea brown, slightly pubescent; short pubescence on callus; short or medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545198 **donor id:** AF-1913. **origin:** United States. **collected:** August 01, 1974. **locality:** 10 mi. west of Mahanomen along Hwy. 200; wheat field. **remarks:** Lemma and palea brown, moderately pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545199 **donor id:** AF-1915. **origin:** United States. **collected:** August 01, 1974. **locality:** 10 mi. west of Mahanomen along Hwy. 200; wheat field. **remarks:** Lemma and palea gray, slightly pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545200 **donor id:** AF-1916. **origin:** United States. **collected:** August 01, 1974. **locality:** near Ada along Hwy. 200. **remarks:** Lemma and palea brown or dark brown, very pubescent (woolly). Annual. Wild. Seed.
- PI 545201 **donor id:** AF-1922. **origin:** United States. **collected:** August 01, 1974. **locality:** near Halstad along Hwy. 200. **remarks:** Lemma and palea white, glabrous; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545202 **donor id:** AF-1923. **origin:** United States. **collected:** August 01, 1974. **locality:** 10 mi. west of Ada along Hwy. 200; wheat field. **remarks:** Lemma and palea white, glabrous; long pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545203 **donor id:** AF-1924. **origin:** United States. **collected:** August 01, 1974. **locality:** 10 mi. west of Ada along Hwy. 200; wheat field. **remarks:** Lemma and palea gray, slightly pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545204 **donor id:** AF-1926. **origin:** United States. **collected:** August 01, 1974. **locality:** near Hillsboro along Hwy. 200. **remarks:** Lemma and palea brown, slightly pubescent; short pubescence on callus; short or medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545205 **donor id:** AF-1931. **origin:** United States. **collected:** August 01, 1974. **locality:** 9 mi. east of Mayville along Hwy. 200; wheat field. **remarks:** Lemma and palea dark brown, very pubescent (woolly). Annual. Wild. Seed.
- PI 545206 **donor id:** AF-1934. **origin:** United States. **collected:** August 01, 1974. **locality:** .25 mi. west of Portland along Hwy. 200; oat field. **remarks:** Lemma and palea dark brown, slightly pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545207 **donor id:** AF-1936. **origin:** United States. **collected:** August 01, 1974. **locality:** .25 mi. west of Portland along Hwy. 200; oat field. **remarks:** Lemma and palea gray, slightly pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545208 **donor id:** AF-1937. **origin:** United States. **collected:** August 01, 1974. **locality:** 16 mi. west of Portland along Hwy. 200; wheat field. **remarks:** Lemma and palea gray, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545209 **donor id:** AF-1940. **origin:** United States. **collected:** August 01, 1974. **locality:** near Cooperstown along Hwy. 200. **remarks:** Lemma and palea brown or dark brown, very pubescent (woolly). Annual. Wild. Seed.
- PI 545210 **donor id:** AF-1941. **origin:** United States. **collected:** August 01, 1974. **locality:** near Cooperstown along Hwy. 200. **remarks:** Lemma and palea brown, glabrous or slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545211 **donor id:** AF-1942. **origin:** United States. **collected:** August 01, 1974. **locality:** near Finley along Hwy. 200. **remarks:** Lemma and palea gray, slightly pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545212 **donor id:** AF-1945. **origin:** United States. **collected:** August 01, 1974. **locality:** near Cooperstown along Hwy. 200. **remarks:** Lemma and palea gray, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545213 **donor id:** AF-1959. **origin:** United States. **collected:** August 01, 1974. **locality:** 7 mi. east of Carrington along Hwy. 200; wheat field. **remarks:** Lemma and palea gray, slightly pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545214 **donor id:** AF-1962. **origin:** United States. **collected:** August 02, 1974. **locality:** .5 mi. east of Carrington along Hwy. 200; flax field. **remarks:** Lemma and palea brown, pubescent. Annual. Wild. Seed.
- PI 545215 **donor id:** AF-1964. **origin:** United States. **collected:** August 02, 1974. **locality:** north of Jamestown along Hwy. 281. **remarks:** Lemma and palea gray, glabrous or slightly pubescent; short pubescence on callus; short or medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545216 **donor id:** AF-1965. **origin:** United States. **collected:** August 02, 1974. **locality:** 4 mi. north of Jamestown along Hwy. 281; wheat field. **remarks:** Lemma and palea dark brown, pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545217 **donor id:** AF-1968. **origin:** United States. **collected:** August 02, 1974. **locality:** 15 mi. north of Jamestown along Hwy. 281; wheat field. **remarks:** Lemma and palea brown, slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545218 **donor id:** AF-1971. **origin:** United States. **collected:** August 02, 1974. **locality:** south edge of Carrington along Hwy. 281; wet area in wheat field. **remarks:** Lemma and palea brown, slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545219 **donor id:** AF-1972. **origin:** United States. **collected:** August 02, 1974. **locality:** near Carrington. **remarks:** Lemma and palea gray, glabrous; short pubescence on callus; short or medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545220 **donor id:** AF-1980. **origin:** United States. **collected:** August 02, 1974. **locality:** 28 mi. west of Carrington along Hwy. 200; wheat field. **remarks:** Lemma and palea dark brown, very pubescent (woolly). Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545221 **donor id:** AF-1981. **origin:** United States. **collected:** August 02, 1974. **locality:** 28 mi. west of Carrington along Hwy. 200; wheat field. **remarks:** Lemma and palea brown, slightly pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545222 **donor id:** AF-1982. **origin:** United States. **collected:** August 02, 1974. **locality:** 28 mi. west of Carrington along Hwy. 200; wheat field. **remarks:** Lemma and palea gray, slightly pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545223 **donor id:** AF-1983. **origin:** United States. **collected:** August 02, 1974. **locality:** near Goodrich along Hwy. 200. **remarks:** Lemma and palea gray, glabrous or slightly pubescent; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545224 **donor id:** AF-1985. **origin:** United States. **collected:** August 02, 1974. **locality:** 1 mi. west of Hurdsfield along Hwy. 200. **remarks:** Lemma and palea dark brown, slightly pubescent; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545225 **donor id:** AF-1991. **origin:** United States. **collected:** August 02, 1974. **locality:** near McClusky along Hwy. 200. **remarks:** Lemma and palea brown or dark brown, glabrous or slightly pubescent; short pubescence on callus; short or medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545226 **donor id:** AF-1996. **origin:** United States. **collected:** August 02, 1974. **locality:** 13 mi. west of McClusky along Hwy. 200; low area in wheat field. **remarks:** Lemma and palea gray, slightly pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545227 **donor id:** AF-2000. **origin:** United States. **collected:** August 02, 1974. **locality:** near Riverdale. **remarks:** Lemma and palea gray, glabrous; short pubescence on callus; short or medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545228 **donor id:** AF-2001. **origin:** United States. **collected:** August 02, 1974. **locality:** near Riverdale. **remarks:** Lemma and palea brown or dark brown, glabrous or slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545229 **donor id:** AF-2010. **origin:** United States. **collected:** August 02, 1974. **locality:** 11 mi. west of Pick City along Hwy. 200; fallow area in wheat field. **remarks:** Lemma and palea gray, glabrous; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545230 **donor id:** AF-2013. **origin:** United States. **collected:** August 02, 1974. **locality:** near Zap along Hwy. 200. **remarks:** Lemma and palea gray or light gray, glabrous; short or medium pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545231 **donor id:** AF-2014. **origin:** United States. **collected:** August 02, 1974. **locality:** 3 mi. east of Beulah along Hwy. 200; low, wet area. **remarks:** Lemma and palea gray, glabrous; short pubescence on callus; medium pubescence on rachilla. Tolerant to BYDV at Urbana, IL. Annual. Wild. Seed.
- PI 545232 **donor id:** AF-2019. **origin:** United States. **collected:** August 02, 1974. **locality:** 11 mi. west of Zap along Hwy. 200; wheat field. **remarks:** Lemma and palea brown, slightly pubescent; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545233 **donor id:** AF-2021. **origin:** United States. **collected:** August 02, 1974. **locality:** west of Zap along Hwy. 200. **remarks:** Lemma and palea gray, glabrous; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545234 **donor id:** AF-2023. **origin:** United States. **collected:** August 02, 1974. **locality:** 5 mi. east of Dodge along Hwy. 200; wheat field. **remarks:** Lemma and palea gray, glabrous; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545235 **donor id:** AF-2025. **origin:** United States. **collected:** August 02, 1974. **locality:** near Dodge along Hwy. 200. **remarks:** Lemma and palea gray, glabrous or slightly pubescent; short or medium pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545236 **donor id:** AF-2026. **origin:** United States. **collected:** August 02, 1974. **locality:** 11 mi. east of Dodge along Hwy. 200; wheat field. **remarks:** Lemma and palea brown, slightly pubescent; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545237 **donor id:** AF-2030. **origin:** United States. **collected:** August 02, 1974. **locality:** near Killdeer along Hwy. 200. **remarks:** Lemma and palea gray, glabrous or slightly pubescent; short or medium pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545238 **donor id:** AF-2031. **origin:** United States. **collected:** August 02, 1974. **locality:** near Grassy Butte along Hwy. 200. **remarks:** Lemma and palea brown or dark brown, slightly pubescent; short pubescence on callus; short or medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545239 **donor id:** AF-2035. **origin:** United States. **collected:** August 02, 1974. **locality:** 12 mi. west of Killdeer along Hwy. 200; wheat field. **remarks:** Lemma and palea brown or gray, slightly or moderately pubescent; short or long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545240 **donor id:** AF-2040. **origin:** United States. **collected:** August 02, 1974. **locality:** 3 mi. north of Grassy Butte along Hwy. 200; barley field. **remarks:** Lemma and palea brown or gray, slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545241 **donor id:** AF-2041. **origin:** United States. **collected:** August 02, 1974. **locality:** near Watford City along Hwy. 200. **remarks:** Lemma and palea gray, glabrous or slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545242 **donor id:** AF-2043. **origin:** United States. **collected:** August 02, 1974. **locality:** 11 mi. south of Watford City along Hwy. 85/200; wheat field. **remarks:** Lemma and palea dark brown, slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545243 **donor id:** AF-2048. **origin:** United States. **collected:** August 02, 1974. **locality:** 4 mi. west of Watford City along Hwy. 200; wheat field. **remarks:** Lemma and palea brown or gray, glabrous; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545244 **donor id:** AF-2051. **origin:** United States. **collected:** August 02, 1974. **locality:** 16 mi. west of Watford City along Hwy. 200; barley field. **remarks:** Lemma and palea dark brown, very pubescent (woolly). Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545245 **donor id:** AF-2052. **origin:** United States. **collected:** August 02, 1974. **locality:** near Cartwright along Hwy. 200. **remarks:** Lemma and palea brown or dark brown, slightly pubescent; short pubescence on callus; short to medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545246 **donor id:** AF-2055. **origin:** United States. **collected:** August 02, 1974. **locality:** east of Cartwright along Hwy. 200. **remarks:** Lemma and palea brown or gray, slightly pubescent; short pubescence on callus; short to medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545247 **donor id:** AF-2060. **origin:** United States. **collected:** August 02, 1974. **locality:** near Sidney along Hwy. 200. **remarks:** Lemma and palea gray, glabrous or slightly pubescent; short pubescence on callus; short or medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545248 **donor id:** AF-2062. **origin:** United States. **collected:** August 02, 1974. **locality:** 9 mi. southwest of Fairview along Hwy. 200; roadside. **remarks:** Lemma and palea gray, slightly pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545249 **donor id:** AF-2069. **origin:** United States. **collected:** August 02, 1974. **locality:** 20 mi. west of Sidney along Hwy. 200; oat field. **remarks:** Lemma and palea gray or dark gray, glabrous or slightly pubescent; short to very short pubescence on callus; very short to medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545250 **donor id:** AF-2072. **origin:** United States. **collected:** August 02, 1974. **locality:** 32 mi. west of Sidney along Hwy. 200; winter wheat field. **remarks:** Lemma and palea brown, slightly pubescent; short pubescence on callus; short to medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545251 **donor id:** AF-2075. **origin:** United States. **collected:** August 02, 1974. **locality:** 1 mi. west of Richey along Hwy. 200; wheat field. **remarks:** Lemma and palea light gray, slightly pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545252 **donor id:** AF-2076. **origin:** United States. **collected:** August 02, 1974. **locality:** 1 mi. west of Richey along Hwy. 200; wheat field. **remarks:** Lemma and palea very light gray, glabrous; long pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545253 **donor id:** AF-2077. **origin:** United States. **collected:** August 02, 1974. **locality:** 1 mi. west of Richey along Hwy. 200; wheat field. **remarks:** Lemma and palea dark gray, glabrous; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545254 **donor id:** AF-2079. **origin:** United States. **collected:** August 02, 1974. **locality:** 3 mi. east of Circle along Hwy. 200; winter wheat field. **remarks:** Lemma and palea gray, slightly pubescent; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545255 **donor id:** AF-2080. **origin:** United States. **collected:** August 1974. **locality:** near Circle along Hwy. 200. **remarks:** Lemma and palea dark brown, glabrous or slightly pubescent; short pubescence on callus; short or medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545256 **donor id:** AF-2082. **origin:** United States. **collected:** August 03, 1974. **locality:** 8 mi. west of Circle along Hwy. 200; wheat field. **remarks:** Lemma and palea dark brown, very pubescent (woolly). Annual. Wild. Seed.
- PI 545257 **donor id:** AF-2084. **origin:** United States. **collected:** August 03, 1974. **locality:** near Winnett along Hwy. 200. **remarks:** Lemma and palea light gray or gray, slightly pubescent; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545258 **donor id:** AF-2085. **origin:** United States. **collected:** August 03, 1974. **locality:** west edge of Sand Springs along Hwy. 200; barley field. **remarks:** Lemma and palea dark brown, pubescent. Annual. Wild. Seed.
- PI 545259 **donor id:** AF-2087. **origin:** United States. **collected:** August 03, 1974. **locality:** west edge of Sand Springs along Hwy. 200; barley field. **remarks:** Lemma and palea brown, moderately pubescent; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545260 **donor id:** AF-2091. **origin:** United States. **collected:** August 03, 1974. **locality:** near Lewistown along Hwy. 200. **remarks:** Lemma and palea light gray to gray, glabrous or slightly pubescent; short pubescence on callus; short to medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545261 **donor id:** AF-2092. **origin:** United States. **collected:** August 03, 1974. **locality:** 24 mi. east of Lewistown along Hwy. 87/200; barley field. **remarks:** Lemma and palea brown, pubescent. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545262 **donor id:** AF-2093. **origin:** United States. **collected:** August 03, 1974. **locality:** 24 mi. east of Lewistown along Hwy. 87/200; barley field. **remarks:** Lemma and palea dark brown, very pubescent (woolly). Annual. Wild. Seed.
- PI 545263 **donor id:** AF-2096. **origin:** United States. **collected:** August 03, 1974. **locality:** west of Lewistown along Hwy. 200. **remarks:** Lemma and palea brown, pubescent. Annual. Wild. Seed.
- PI 545264 **donor id:** AF-2098. **origin:** United States. **collected:** August 03, 1974. **locality:** 6.5 mi. west of Lewistown along Hwy. 200; fallow area in wheat field. **remarks:** Lemma and palea gray, slightly pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545265 **donor id:** AF-2100. **origin:** United States. **collected:** August 03, 1974. **locality:** west of Lewistown along Hwy. 200. **remarks:** Lemma and palea gray, glabrous or slightly pubescent; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545266 **donor id:** AF-2106. **origin:** United States. **collected:** August 03, 1974. **locality:** 30 mi. west of Lewistown along Hwy. 200; wheat field. **remarks:** Lemma and palea light gray or gray, glabrous; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545267 **donor id:** AF-2109. **origin:** United States. **collected:** August 03, 1974. **locality:** 42 mi. west of Lewistown along Hwy. 200; wheat field. **remarks:** Lemma and palea dark brown, glabrous; very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545268 **donor id:** AF-2111. **origin:** United States. **collected:** August 03, 1974. **locality:** west of Lewistown along Hwy. 200. **remarks:** Lemma and palea dark brown, very pubescent (woolly). Annual. Wild. Seed.
- PI 545269 **donor id:** AF-2121. **origin:** United States. **collected:** August 03, 1974. **locality:** 15 mi. east of Great Falls along Hwy. 200; barley field. **remarks:** Lemma and palea gray, glabrous; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545270 **donor id:** AF-2122. **origin:** United States. **collected:** August 03, 1974. **locality:** near Great Falls. **remarks:** Lemma and palea brown or dark brown, very pubescent (woolly). Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545271 **donor id:** AF-2126. **origin:** United States. **collected:** August 03, 1974. **locality:** 4 mi. west of Vaughn along Hwy. 200; barley field. **remarks:** Lemma and palea dark brown, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545272 **donor id:** AF-2130. **origin:** United States. **collected:** August 03, 1974. **locality:** 37 mi. west of Valughn along Hwy. 200; wheat field. **remarks:** Lemma and palea gray, slightly pubescent; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545273 **donor id:** AF-2133. **origin:** United States. **collected:** August 03, 1974. **locality:** 22 mi. east of Missoula along Hwy. 200; barley field. **remarks:** Lemma and palea dark gray, slightly pubescent; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545274 **donor id:** AF-2134. **origin:** United States. **collected:** August 1974. **locality:** east of Missoula. **remarks:** Lemma and palea dark brown, very pubescent (woolly). Annual. Wild. Seed.
- PI 545275 **donor id:** AF-2135. **origin:** United States. **collected:** August 03, 1974. **locality:** 22 mi. east of Missoula along Hwy. 200; barley field. **remarks:** Lemma and palea gray, glabrous; long pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545276 **donor id:** AF-2136. **origin:** United States. **collected:** August 03, 1974. **locality:** 22 mi. east of Missoula along Hwy. 200; barley field. **remarks:** Lemma and palea dark brown, glabrous; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545277 **donor id:** AF-2139. **origin:** United States. **collected:** August 04, 1974. **locality:** east edge of Missoula along Broadway Ave.; barley field. **remarks:** Lemma and palea dark brown. Annual. Wild. Seed.
- PI 545278 **donor id:** AF-2140. **origin:** United States. **collected:** August 04, 1974. **locality:** 13 mi. south of Drummond on Hwy. Alt. 10; oat field. **remarks:** Lemma and palea gray, glabrous; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545279 **donor id:** AF-2143. **origin:** United States. **collected:** August 04, 1974. **locality:** 38 mi. north of Dillon along Hwy. 91; oat field. **remarks:** Lemma and palea dark brown, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545280 **donor id:** AF-2146. **origin:** United States. **collected:** August 04, 1974. **locality:** near Dillon. **remarks:** Lemma and palea dark brown, glabrous; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545281 **donor id:** AF-2149. **origin:** United States. **collected:** August 04, 1974. **locality:** 3 mi. north of Dillon along Hwy. 91; wheat field. **remarks:** Lemma and palea gray, slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545282 **donor id:** AF-2155. **origin:** United States. **collected:** August 04, 1974. **locality:** 22 mi. south of Harrison along Hwy. 287; barley field. **remarks:** Lemma and palea slate gray, slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545283 **donor id:** AF-2157. **origin:** United States. **collected:** August 04, 1974. **locality:** 22 mi. south of Harrison along Hwy. 287; barley field. **remarks:** Lemma and palea slate gray, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545284 **donor id:** AF-2159. **origin:** United States. **collected:** August 1974. **locality:** near St. Anthony. **remarks:** Lemma and palea gray or light gray, glabrous or slightly pubescent; short pubescence on callus; short or medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545285 **donor id:** AF-2167. **origin:** United States. **collected:** August 04, 1974. **locality:** north edge of St. Anthony along Hwy. 20; oat field. **remarks:** Lemma and palea dark brown, very pubescent (woolly). Annual. Wild. Seed.
- PI 545286 **donor id:** AF-2173. **origin:** United States. **collected:** August 13, 1974. **locality:** 2 mi. south of Rexburg; roadside. **remarks:** Lemma and palea light gray, slightly pubescent; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545287 **donor id:** AF-2176. **origin:** United States. **collected:** August 13, 1974. **locality:** near Rexburg. **remarks:** Lemma and palea dark brown, very pubescent (woolly). Annual. Wild. Seed.
- PI 545288 **donor id:** AF-2177. **origin:** United States. **collected:** August 13, 1974. **locality:** 10 mi. south of Rexburg; barley field. **remarks:** Lemma and palea dark brown, slightly pubescent; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545289 **donor id:** AF-2178. **origin:** United States. **collected:** August 13, 1974. **locality:** near Rexburg. **remarks:** Lemma and palea brown or dark brown, slightly pubescent; short pubescence on callus; short or medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545290 **donor id:** AF-2180. **origin:** United States. **collected:** August 13, 1974. **locality:** southwest of Roberts; fallow area in barley field. **remarks:** Lemma and palea dark brown, very pubescent (woolly). Annual. Wild. Seed.
- PI 545291 **donor id:** AF-2182. **origin:** United States. **collected:** August 13, 1974. **locality:** northwest of Idaho Falls. **remarks:** Lemma and palea gray, slightly pubescent; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545292 **donor id:** AF-2186. **origin:** United States. **collected:** August 29, 1974. **locality:** 27 mi. south of Missoula along Hwy. 93; wheat field. **remarks:** Lemma and palea gray, slightly pubescent; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545293 **donor id:** AF-2187. **origin:** United States. **collected:** August 29, 1974. **locality:** 27 mi. south of Missoula along Hwy. 93; wheat field. **remarks:** Lemma and palea gray, slightly pubescent; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545294 **donor id:** AF-2188. **origin:** United States. **collected:** August 29, 1974. **locality:** 10 mi. south of Polson along Hwy. 93; potato field. **remarks:** Lemma and palea gray, slightly pubescent; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545295 **donor id:** AF-2189. **origin:** United States. **collected:** August 29, 1974. **locality:** 10 mi. south of Polson along Hwy. 93; potato field. **remarks:** Lemma and palea gray, slightly pubescent; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545296 **donor id:** AF-2191. **origin:** United States. **collected:** August 30, 1974. **locality:** 5 mi. north of Kalispell along Hwy. 2; hay field. **remarks:** Lemma and palea brown, slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545297 **donor id:** AF-2196. **origin:** United States. **collected:** August 30, 1974. **locality:** near Cut Bank along Hwy. 2. **remarks:** Lemma and palea gray, glabrous or slightly pubescent; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545298 **donor id:** AF-2201. **origin:** United States. **collected:** August 30, 1974. **locality:** east of Shelby along Hwy. 2. **remarks:** Lemma and palea gray, slightly pubescent; short or long pubescence on callus; medium or long pubescence on rachilla. Annual. Wild. Seed.
- PI 545299 **donor id:** AF-2205. **origin:** United States. **collected:** August 30, 1974. **locality:** 27 mi. east of Shelby along Hwy. 2; wheat field. **remarks:** Lemma and palea brown, pubescent. Annual. Wild. Seed.
- PI 545300 **donor id:** AF-2206. **origin:** United States. **collected:** August 30, 1974. **locality:** 27 mi. east of Shelby along Hwy. 2; wheat field. **remarks:** Lemma and palea dark brown, very pubescent (woolly). Annual. Wild. Seed.
- PI 545301 **donor id:** AF-2207. **origin:** United States. **collected:** August 30, 1974. **locality:** near Rudyard along Hwy. 2. **remarks:** Lemma and palea gray or light gray, slightly pubescent; short pubescence on callus; short or medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545302 **donor id:** AF-2213. **origin:** United States. **collected:** August 30, 1974. **locality:** near Malta along Hwy. 2. **remarks:** Lemma and palea gray, glabrous or slightly pubescent; short pubescence on callus; short or medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545303 **donor id:** AF-2215. **origin:** United States. **collected:** August 30, 1974. **locality:** 2 mi. east of Saco along Hwy. 2; wheat field. **remarks:** Lemma and palea brown, slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545304 **donor id:** AF-2216. **origin:** United States. **collected:** August 30, 1974. **locality:** 2 mi. east of Saco along Hwy. 2; wheat field. **remarks:** Lemma and palea gray, slightly pubescent; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545305 **donor id:** AF-2218. **origin:** United States. **collected:** August 31, 1974. **locality:** south of Scobey. **remarks:** Lemma and palea gray, glabrous or slightly pubescent; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545306 **donor id:** AF-2221. **origin:** United States. **collected:** August 31, 1974. **locality:** 40 mi. south of Scobey along Hwy. 13; wheat field. **remarks:** Lemma and palea brown, slightly pubescent; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545307 **donor id:** AF-2224. **origin:** United States. **collected:** August 31, 1974. **locality:** south of Scobey along Hwy. 13. **remarks:** Lemma and palea gray, glabrous or slightly pubescent; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545308 **donor id:** AF-2226. **origin:** United States. **collected:** August 31, 1974. **locality:** 30 mi. south of Scobey along Hwy. 13; wheat field. **remarks:** Lemma and palea light gray, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545309 **donor id:** AF-2227. **origin:** United States. **collected:** August 31, 1974. **locality:** 23 mi. south of Scobey along Hwy. 13; wheat field. **remarks:** Lemma and palea gray with brown pubescence; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545310 **donor id:** AF-2229. **origin:** United States. **collected:** August 31, 1974. **locality:** 23 mi. south of Scobey along Hwy. 13; wheat field. **remarks:** Lemma and palea dark brown, pubescent. Annual. Wild. Seed.
- PI 545311 **donor id:** AF-2230. **origin:** United States. **collected:** August 31, 1974. **locality:** 6 mi. east of Scobey along Hwy. 5; wheat field. **remarks:** Lemma and palea gray, glabrous; short pubescence on callus; short or medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545312 **donor id:** AF-2233. **origin:** United States. **collected:** August 31, 1974. **locality:** 15 mi. east of Scobey along Hwy. 5; low area in barley field. **remarks:** Lemma and palea gray, slightly pubescent; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545313 **donor id:** AF-2236. **origin:** United States. **collected:** August 31, 1974. **locality:** east of Plentywood along Hwy. 5. **remarks:** Lemma and palea gray, glabrous or slightly pubescent; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545314 **donor id:** AF-2238. **origin:** United States. **collected:** August 31, 1974. **locality:** 4 mi. east of Plentywood along Hwy. 5; wheat field. **remarks:** Lemma and palea gray, slightly pubescent; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545315 **donor id:** AF-2240. **origin:** United States. **collected:** August 31, 1974. **locality:** 20 mi. east of Plentywood along Hwy. 5; low area in oat field. **remarks:** Lemma and palea very light gray, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545316 **donor id:** AF-2242. **origin:** United States. **collected:** August 31, 1974. **locality:** 12 mi. east of Westby, MT along Hwy. 5; low area in wheat field. **remarks:** Lemma and palea gray, slightly pubescent; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545317 **donor id:** AF-2243. **origin:** United States. **collected:** August 31, 1974. **locality:** 12 mi. east of Westby, MT along Hwy. 5; low area in wheat field. **remarks:** Lemma and palea gray, slightly pubescent; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545318 **donor id:** AF-2245. **origin:** United States. **collected:** August 31, 1974. **locality:** 11 mi. west of Crosby along Hwy. 5; wheat field. **remarks:** Lemma and palea gray, glabrous; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545319 **donor id:** AF-2248. **origin:** United States. **collected:** August 31, 1974. **locality:** east of Crosby along Hwy. 5. **remarks:** Lemma and palea brown, slightly pubescent; short pubescence on callus; short or medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545320 **donor id:** AF-2256. **origin:** United States. **collected:** August 31, 1974. **locality:** 37 mi. east of Crosby along Hwy. 5; construction area along road. **remarks:** Lemma and palea gray, glabrous or slightly pubescent; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545321 **donor id:** AF-2258. **origin:** United States. **collected:** August 31, 1974. **locality:** 37 mi. east of Crosby along Hwy. 5; construction area along road. **remarks:** Lemma and palea gray, glabrous; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545322 **donor id:** AF-2259. **origin:** United States. **collected:** August 31, 1974. **locality:** near Bowbells along Hwy. 5. **remarks:** Lemma and palea gray, glabrous or slightly pubescent; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545323 **donor id:** AF-2262. **origin:** United States. **collected:** August 31, 1974. **locality:** 9 mi. east of Bowbells along Hwy. 5; low area in wheat field. **remarks:** Lemma and palea brown, slightly pubescent; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545324 **donor id:** AF-2265. **origin:** United States. **collected:** August 31, 1974. **locality:** 21 mi. east of Bowbells along Hwy. 5; low area in wheat field. **remarks:** Lemma and palea very light gray or white, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545325 **donor id:** AF-2266. **origin:** United States. **collected:** August 31, 1974. **locality:** 21 mi. east of Bowbells along Hwy. 5; low area in wheat field. **remarks:** Lemma and palea gray, glabrous; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545326 **donor id:** AF-2267. **origin:** United States. **collected:** August 31, 1974. **locality:** near Tolley. **remarks:** Lemma and palea gray, glabrous or slightly pubescent; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545327 **donor id:** AF-2269. **origin:** United States. **collected:** August 31, 1974. **locality:** 6 mi. south of Tolley along County Rd. 7; low area in wheat field. **remarks:** Lemma and palea dark brown, very pubescent (woolly). Annual. Wild. Seed.
- PI 545328 **donor id:** AF-2270. **origin:** United States. **collected:** August 31, 1974. **locality:** 1 mi. north of Tolley along County Rd. 7; wheat field. **remarks:** Lemma and palea light brown, slightly pubescent; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545329 **donor id:** AF-2273. **origin:** United States. **collected:** August 31, 1974. **locality:** west of Bottineau along Hwy. 5. **remarks:** Lemma and palea gray, glabrous or slightly pubescent; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545330 **donor id:** AF-2274. **origin:** United States. **collected:** August 31, 1974. **locality:** .5 mi. west of Mohall along Hwy. 5; barley field. **remarks:** Lemma and palea brown or dark brown, very pubescent (woolly). Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545331 **donor id:** AF-2280. **origin:** United States. **collected:** August 31, 1974. **locality:** 7 mi. west of Bottineau along Hwy. 5; wheat field. **remarks:** Lemma and palea brown, slightly pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545332 **donor id:** AF-2282. **origin:** United States. **collected:** August 31, 1974. **locality:** 7 mi. west of Bottineau along Hwy. 5; wheat field. **remarks:** Lemma and palea light gray, glabrous; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545333 **donor id:** AF-2283. **origin:** United States. **collected:** September 01, 1974. **locality:** 14 mi. east of Bottineau along Hwy. 5; wheat field. **remarks:** Lemma and palea dark brown, very pubescent (woolly). Annual. Wild. Seed.
- PI 545334 **donor id:** AF-2284. **origin:** United States. **collected:** September 01, 1974. **locality:** 14 mi. east of Bottineau along Hwy. 5; wheat field. **remarks:** Lemma and palea gray, slightly pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545335 **donor id:** AF-2286. **origin:** United States. **collected:** September 01, 1974. **locality:** 1 mi. east of Rolla along Hwy. 5; low area in barley field. **remarks:** Lemma and palea gray, moderately pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545336 **donor id:** AF-2289. **origin:** United States. **collected:** September 01, 1974. **locality:** near Rocklake along Hwy. 5. **remarks:** Lemma and palea gray, glabrous; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545337 **donor id:** AF-2292. **origin:** United States. **collected:** September 01, 1974. **locality:** east of Rocklake along Hwy. 5. **remarks:** Lemma and palea brown, moderately pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545338 **donor id:** AF-2297. **origin:** United States. **collected:** September 01, 1974. **locality:** 28 mi. east of Rocklake along Hwy. 5; low area in wheat field. **remarks:** Lemma and palea brown, moderately pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545339 **donor id:** AF-2298. **origin:** United States. **collected:** September 01, 1974. **locality:** east of Langdon along Hwy. 5. **remarks:** Lemma and palea brown, slightly pubescent; short or long pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545340 **donor id:** AF-2299. **origin:** United States. **collected:** September 01, 1974. **locality:** 6 mi. east of Langdon along Hwy. 5; low area in wheat field. **remarks:** Lemma and palea gray, glabrous; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545341 **donor id:** AF-2300. **origin:** United States. **collected:** September 01, 1974. **locality:** 6 mi. east of Langdon along Hwy. 5; low area in wheat field. **remarks:** Lemma and palea white, glabrous; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545342 **donor id:** AF-2301. **origin:** United States. **collected:** September 01, 1974. **locality:** 25 mi. east of Langdon along Hwy. 5; wheat field. **remarks:** Lemma and palea dark brown, very pubescent (woolly). Annual. Wild. Seed.
- PI 545343 **donor id:** AF-2304. **origin:** United States. **collected:** September 01, 1974. **locality:** 7 mi. east of Cavalier along Hwy. 5; wheat field. **remarks:** Lemma and palea dark brown, very pubescent (woolly). Annual. Wild. Seed.
- PI 545344 **donor id:** AF-2305. **origin:** United States. **collected:** September 01, 1974. **locality:** 7 mi. east of Cavalier along Hwy. 5; wheat field. **remarks:** Lemma and palea gray, glabrous; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545345 **donor id:** AF-2306. **origin:** United States. **collected:** September 01, 1974. **locality:** 7 mi. west of Drayton along Hwy. 66; wheat field. **remarks:** Lemma and palea white, glabrous; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545346 **donor id:** AF-2310. **origin:** United States. **collected:** September 01, 1974. **locality:** 1 mi. west of Donaldson along Hwy. 11; low area in wheat field. **remarks:** Lemma and palea brown, pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545347 **donor id:** AF-2311. **origin:** United States. **collected:** September 01, 1974. **locality:** near Donaldson. **remarks:** Lemma and palea dark brown, very pubescent (woolly). Annual. Wild. Seed.
- PI 545348 **donor id:** AF-2313. **origin:** United States. **collected:** September 01, 1974. **locality:** 4 mi. south of Stephen along Hwy. 75; low area in wheat field. **remarks:** Lemma and palea gray, slightly pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545349 **donor id:** AF-2316. **origin:** United States. **collected:** September 01, 1974. **locality:** south of Crookston along Hwy. 9. **remarks:** Lemma and palea dark brown, very pubescent (woolly). Annual. Wild. Seed.
- PI 545350 **donor id:** AF-2321. **origin:** United States. **collected:** September 01, 1974. **locality:** 12 mi. south of Crookston along Hwy. 9; wheat field. **remarks:** Lemma and palea dark brown, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545351 **donor id:** AF-2323. **origin:** United States. **collected:** April 12, 1974. **locality:** northeast corner of Mesa Community College Campus, Mesa. **remarks:** Lemma and palea gray, slightly pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545352 **donor id:** AF-2324. **origin:** United States. **collected:** April 12, 1974. **locality:** Mesa. **remarks:** Lemma and palea dark brown, very pubescent (woolly). Annual. Wild. Seed.
- PI 545353 **donor id:** AF-2333. **origin:** United States. **collected:** July 17, 1974. **locality:** Southern Branch Exp. Station, Huntley. **remarks:** Lemma and palea gray or white, glabrous; short pubescence on callus; short or medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545354 **donor id:** AF-2335. **origin:** United States. **collected:** July 17, 1974. **locality:** Southern Branch Exp. Station, Huntley. **remarks:** Lemma and palea dark brown, very pubescent (woolly); heavy pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545355 **donor id:** AF-2337. **origin:** United States. **collected:** July 10, 1973. **locality:** along Hwy. 81. **remarks:** Lemma and palea gray, slightly pubescent; long pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545356 **donor id:** AF-2339. **origin:** United States. **collected:** May 14, 1975. **locality:** Las Cruces; across street from NMSU Police Station; irrigated pasture. **remarks:** Lemma and palea dark brown, very pubescent (woolly); long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545357 **donor id:** AF-2340. **origin:** United States. **collected:** May 17, 1975. **locality:** Tucson; near I-10 and Univ. of Arizona "Overpass" farm; barley plots. **remarks:** Lemma and palea brown, very pubescent (very woolly); long pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545358 **donor id:** AF-2344. **origin:** United States. **collected:** June 04, 1975. **locality:** Marana; Univ. of Arizona Exp. Station; barley plots. **remarks:** Lemma and palea brown or dark brown, pubescent or very pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545359 **donor id:** AF-2352. **origin:** United States. **collected:** June 04, 1975. **locality:** Marana; Univ. of Arizona Exp. Station; barley plots. **remarks:** Lemma and palea gray striped, pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545360 **donor id:** AF-2355. **origin:** United States. **collected:** June 04, 1975. **locality:** Marana; Univ. of Arizona Exp. Station; barley plots. **remarks:** Lemma and palea gray, slightly pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545361 **donor id:** AF-2359. **origin:** United States. **collected:** April 18, 1975. **locality:** 1 mi. east of Westover (Baylor County); wheat field. **remarks:** Lemma and palea dark brown, very pubescent (woolly); long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545362 **donor id:** AF-2360. **origin:** United States. **collected:** June 30, 1975. **locality:** 1 mi. southeast of Stockton (Rooks County); wheat field. **remarks:** Lemma and palea gray, glabrous; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545363 **donor id:** AF-2361. **origin:** United States. **collected:** July 26, 1975. **locality:** .5 mi. east of Reeder (Adams County); durum wheat field. **remarks:** Lemma and palea gray, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545364 **donor id:** AF-2362. **origin:** United States. **collected:** July 26, 1974. **locality:** .5 mi. north, .5 mi. east of Wibaux; roadside. **remarks:** Lemma and palea gray, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545365 **donor id:** AF-2363. **origin:** United States. **collected:** July 28, 1975. **locality:** 2 mi. northwest of RockLake (Towner County); durum wheat field. **remarks:** Lemma and palea brown to dark brown, slightly pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545366 **donor id:** AF-2364. **origin:** United States. **collected:** July 28, 1975. **locality:** 5 mi. north of Rugby (Pierce County); roadside. **remarks:** Lemma and palea dark brown, slightly pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545367 **donor id:** AF-2365. **origin:** United States. **collected:** July 28, 1975. **locality:** 7 mi. west of Balfour (McHenry County) along Hwy. 59; wheat field. **remarks:** Lemma and palea dark brown, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545368 **donor id:** AF-2367. **origin:** United States. **collected:** July 29, 1975. **locality:** Pekin (Nelson County); durum wheat field. **remarks:** Lemma and palea brown, slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545369 **donor id:** AF-2368. **origin:** United States. **collected:** July 24, 1975. **locality:** 1.5 mi. east of Johnson (Big Stone County) along Hwy. 28; wheat field. **remarks:** Lemma and palea brown, slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545370 **donor id:** AF-2369. **origin:** United States. **collected:** July 24, 1975. **locality:** 2 mi. west of Erwin (Kingsbury County); wheat field. **remarks:** Lemma and palea gray, glabrous; moderate pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545371 **donor id:** AF-2370. **origin:** United States. **collected:** July 24, 1975. **locality:** 3 mi. west, .5 mi. south of Montevideo (Lac Qui Parle County). **remarks:** Lemma and palea brown striped, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545372 **donor id:** AF-2371. **origin:** United States. **collected:** July 25, 1975. **locality:** 2 mi. north of Webster (Day County); oat field. **remarks:** Lemma and palea gray, glabrous; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545373 **donor id:** AF-2372. **origin:** United States. **collected:** July 25, 1975. **locality:** 12 mi. west, 5 mi. north of Polo (Hyde County) along Hwy. 47; oat field. **remarks:** Lemma and palea gray, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545374 **donor id:** AF-2373. **origin:** United States. **collected:** July 26, 1975. **locality:** .25 mi. north of Sentinal Butte (Golden Valley County); oat field. **remarks:** Lemma and palea gray, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545375 **donor id:** AF-2374. **origin:** United States. **collected:** July 26, 1975. **locality:** .25 mi. north of Sentinal Butte (Golden Valley County); oat field. **remarks:** Lemma and palea dark brown, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545376 **donor id:** AF-2375. **origin:** United States. **collected:** July 27, 1975. **locality:** 25 mi. east of Wolf Point (Roosevelt County) along Hwy. 13W; winter wheat field. **remarks:** Lemma and palea gray, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545377 **donor id:** AF-2376. **origin:** United States. **collected:** July 27, 1975. **locality:** 1 mi. south of Medicine Lake (Sheridan County); durum wheat field. **remarks:** Lemma and palea brown, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545378 **donor id:** AF-2377. **origin:** United States. **collected:** July 27, 1975. **locality:** 13 mi. south of Williston (McKenzie County) along Hwy. 85; wheat field. **remarks:** Lemma and palea gray, glabrous; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545379 **donor id:** AF-2378. **origin:** United States. **collected:** August 20, 1975. **locality:** Univ. of Idaho Res. & Ext. Center, Kimberly; barley plots. **remarks:** Lemma and palea brown, glabrous or slightly pubescent; short pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545380 **donor id:** AF-2380. **origin:** United States. **collected:** September 21, 1975. **locality:** 4 mi. north of Bonners Ferry (Kootenai River Valley); experimental plots; soil deficient in manganese. **remarks:** Lemma and palea light brown, pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545381 **donor id:** AF-2382. **origin:** United States. **collected:** September 21, 1975. **locality:** 4 mi. north of Bonners Ferry (Kootenai River Valley); experimental plots; soil deficient in manganese. **remarks:** Lemma and palea dark brown, slightly pubescent (woolly); long pubescence on callus; medium pubescence on rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545382 **donor id:** AF-2385. **origin:** United States. **collected:** September 21, 1975. **locality:** north of Bonners Ferry (Kootenai River Valley); soil deficient in manganese. **remarks:** Lemma and palea gray, glabrous; short pubescence on callus; short or medium pubescence on rachilla. Annual. Wild. Seed.
- PI 545383 **donor id:** AF-2386. **origin:** United States. **collected:** September 21, 1975. **locality:** 4 mi. north of Bonners Ferry (Kootenai River Valley); experimental plots; soil deficient in manganese. **remarks:** Lemma and palea gray, glabrous; long, white pubescence on callus; medium or long pubescence on rachilla. Annual. Wild. Seed.
- PI 545384 **donor id:** AF-2390. **origin:** United States. **collected:** September 21, 1975. **locality:** 8 mi. north of Bonners Ferry (Kootenai River Valley); soil deficient in manganese. **remarks:** Lemma and palea white, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545385 **donor id:** AF-2392. **origin:** United States. **collected:** September 21, 1975. **locality:** Univ. of Idaho Res. & Ext. Center, Sandpoint; experimental plots. **remarks:** Lemma and palea gray, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545386 **donor id:** AF-2393. **origin:** United States. **collected:** September 21, 1975. **locality:** Univ. of Idaho Res. & Ext. Center, Sandpoint; experimental plots. **remarks:** Lemma and palea light brown, slightly pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545387 **donor id:** AF-2394. **origin:** United States. **collected:** September 21, 1975. **locality:** Univ. of Idaho Res. & Ext. Center, Sandpoint; experimental plots. **remarks:** Lemma and palea dark brown, slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545388 **donor id:** AF-2396. **origin:** United States. **collected:** September 21, 1975. **locality:** Univ. of Idaho Exp. Farm, Moscow; oat field. **remarks:** Lemma and palea dark brown, pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545389 **donor id:** AF-2397. **origin:** United States. **collected:** September 22, 1975. **locality:** Univ. of Idaho Exp. Farm, Moscow; oat field. **remarks:** Lemma and palea light gray striped, glabrous; callus and rachilla pubescent. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545390 **donor id:** AF-2399. **origin:** United States. **collected:** September 22, 1975. **locality:** 4 mi. west of Grangeville along Hwy. 95; fallow area. **remarks:** Lemma and palea dark brown, very pubescent (woolly); long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545391 **donor id:** AF-2401. **origin:** United States. **collected:** September 02, 1975. **locality:** 4 mi. west of Nephi along Hwy. 132; fence row. **remarks:** Lemma and palea dark brown, very pubescent (woolly); long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545392 **donor id:** AF-2402. **origin:** United States. **collected:** September 02, 1975. **locality:** 3 mi. southwest of Delta. **remarks:** Lemma and palea gray, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545393 **donor id:** AF-2403. **origin:** United States. **collected:** August 19, 1975. **locality:** 4 mi. northwest of Wellsville (Cache County); dryland wheat field. **remarks:** Lemma and palea gray, glabrous; medium pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545394 **donor id:** AF-2404. **origin:** United States. **collected:** September 16, 1975. **locality:** 4 mi. south of Brigham City (Box Elder County) along Hwy. 89/91; fence row. **remarks:** Lemma and palea dark gray, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545395 **donor id:** AF-2405. **origin:** United States. **collected:** July 21, 1975. **locality:** 5 mi. west, 3mi. north of Torrington (Goshen County); barley field; sandy soil. **remarks:** Lemma and palea dark gray, glabrous; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545396 **donor id:** AF-2406. **origin:** United States. **collected:** August 09, 1975. **locality:** 8 mi. north, 1 mi. east of Rozet (Campbell County); dryland wheat field. **remarks:** Lemma and palea dark brown, very pubescent (woolly); long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545397 **donor id:** AF-2407. **origin:** United States. **collected:** July 24, 1975. **locality:** 2 mi. south, 3 mi. east of Burlington (Bighorn County); irrigated barley field. **remarks:** Lemma and palea brown, slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545398 **donor id:** AF-2408. **origin:** United States. **collected:** July 23, 1975. **locality:** 1 mi. east, 1mi. north of Powell (Park County); poorly drained area. **remarks:** Lemma and palea dark brown, pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545399 **donor id:** AF-2409. **origin:** United States. **collected:** August 10, 1975. **locality:** Van Tassel, along Hwy. 20; irrigated barley field. **remarks:** Lemma and palea dark brown, very pubescent (woolly); long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545400 **donor id:** AF-2410. **origin:** United States. **collected:** May 03, 1976. **locality:** near Red Oak (Dallas County). **remarks:** Lemma and palea dark brown, very pubescent (woolly); long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545401 **donor id:** AF-2411. **origin:** United States. **collected:** May 04, 1976. **locality:** Concho County; wheat field. **remarks:** Lemma and palea white to light gray, slightly pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545402 **donor id:** AF-2412. **origin:** United States. **collected:** May 04, 1976. **locality:** Lampasas County. **remarks:** Lemma and palea dark brown, very pubescent (woolly); long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545403 **donor id:** AF-2414. **origin:** United States. **collected:** May 05, 1976. **locality:** north of Truscott (Knox County). **remarks:** Lemma and palea white to light gray, pubescent; medium pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545404 **donor id:** AF-2415. **origin:** United States. **collected:** May 05, 1976. **locality:** O'Brien (Haskell County). **remarks:** Lemma and palea white to light gray, pubescent; medium pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545405 **donor id:** AF-2416. **origin:** United States. **collected:** May 06, 1976. **locality:** Olney (Young County). **remarks:** Lemma and palea dark brown, very pubescent (woolly); long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545406 **donor id:** AF-2417. **origin:** United States. **collected:** May 05, 1976. **locality:** .5 mi. north of Oklaunion (Wilbarger County); wheat field. **remarks:** Lemma and palea white, pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545407 **donor id:** AF-2418. **origin:** United States. **collected:** May 1976. **remarks:** Lemma and palea light gray, slightly pubescent; medium pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545408 **donor id:** AF-2424. **origin:** United States. **collected:** April 04, 1977. **locality:** west of Univ. of Arizona Exp. Station, Yuma. **remarks:** Lemma and palea tan, moderately pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545409 **donor id:** AF-2426. **origin:** United States. **collected:** April 04, 1977. **locality:** Avenue D and 8th Street, Yuma; back yard. **remarks:** Lemma and palea gray, slightly pubescent; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545410 **donor id:** AF-2429. **origin:** United States. **collected:** April 04, 1977. **locality:** near Avenue C, Yuma. **remarks:** Lemma and palea dark brown, very pubescent (woolly); long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545411 **donor id:** AF-2431. **origin:** United States. **remarks:** Lemma and palea white to light gray; medium pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545412 **donor id:** AF-2436. **origin:** Mexico. **collected:** September 1978. **locality:** Cuacula; barley field. **elevation:** 2574m. **remarks:** Lemma and palea light brown, glabrous; medium pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545413 **donor id:** AF-2439. **origin:** Mexico. **collected:** September 1978. **locality:** Cuacula; barley field. **elevation:** 2574m. **remarks:** Lemma and palea brown, pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545414 **donor id:** AF-2440. **origin:** Mexico. **collected:** September 1978. **locality:** Calpulalpan; barley field. **elevation:** 2495m. **remarks:** Lemma and palea brown, pubescent; long pubescence on callus and rachilla. Possible tolerance to BYDV. Annual. Wild. Seed.
- PI 545415 **donor id:** AF-2444. **origin:** Mexico. **collected:** September 1978. **locality:** near Tameris Bros. hacienda. **elevation:** 2489m. **remarks:** Lemma and palea tan, very pubescent (woolly). Annual. Wild. Seed.
- PI 545416 **donor id:** AF-2445. **origin:** Mexico. **collected:** September 1978. **locality:** near Tameris Bros. hacienda. **elevation:** 2489m. **remarks:** Lemma and palea tan, very pubescent (woolly). Possible tolerance to BYDV. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545417 **donor id:** AF-2446. **origin:** Mexico. **collected:** September 1978. **locality:** near Tameris Bros. hacienda. **elevation:** 2489m. **remarks:** Lemma and palea tan, very pubescent (woolly). Annual. Wild. Seed.
- PI 545418 **donor id:** AF-2447. **origin:** Mexico. **collected:** September 1978. **locality:** near Tameris Bros. hacienda. **elevation:** 2489m. **remarks:** Lemma and palea tan, very pubescent (woolly). Possible tolerance to BYDV. Annual. Wild. Seed.
- PI 545419 **donor id:** AF-2449. **origin:** Mexico. **collected:** September 1978. **locality:** Francisco villa. **elevation:** 2483m. **remarks:** Lemma and palea tan, very pubescent (woolly). Annual. Wild. Seed.
- PI 545420 **donor id:** AF-2452. **origin:** Mexico. **collected:** September 1978. **locality:** Nanacamilpa; wheat field. **elevation:** 2647m. **remarks:** Lemma and palea tan, very pubescent (woolly). Annual. Wild. Seed.
- PI 545421 **donor id:** AF-2456. **origin:** Mexico. **collected:** September 1978. **locality:** 5 mi. east of Apazaco; oat field. **elevation:** 2446m. **remarks:** Lemma and palea tan, very pubescent (woolly). Annual. Wild. Seed.
- PI 545422 **donor id:** AF-2460. **origin:** Mexico. **collected:** September 1978. **locality:** 4 to 5 km. south of Santo Tomas; barley field. **elevation:** 2489m. **remarks:** Lemma and palea white, pubescent; medium pubescence on callus; long pubescence on rachilla. Annual. Wild. Seed.
- PI 545423 **donor id:** AF-2461. **origin:** Mexico. **collected:** September 1978. **locality:** 4 to 5 km. south of Santo Tomas; barley field. **remarks:** Lemma and palea tan, very pubescent (woolly). Annual. Wild. Seed.
- PI 545424 **donor id:** AF-2466. **origin:** Mexico. **collected:** September 1978. **locality:** 2 km. north of intersection near Santo Tomas, 28 km. from Tulancingo; oat field. **elevation:** 2483m. **remarks:** Lemma and palea tan, very pubescent (woolly). Annual. Wild. Seed.
- PI 545425 **donor id:** AF-2469. **origin:** Mexico. **collected:** September 1978. **locality:** near Tecomulco; oat field. **elevation:** 2452m. **remarks:** Lemma and palea tan, very pubescent (woolly). Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545426 **donor id:** AF-2475. **origin:** Mexico. **collected:** September 1978. **locality:** near Tecomulco; oat field. **elevation:** 2452m. **remarks:** Lemma and palea tan, very pubescent (woolly). Possible tolerance to BYDV. Annual. Wild. Seed.
- PI 545427 **donor id:** AF-2477. **origin:** Mexico. **collected:** September 1978. **locality:** near Paredon; oat field. **elevation:** 2550m. **remarks:** Lemma and palea tan, very pubescent (woolly). Annual. Wild. Seed.
- PI 545428 **donor id:** AF-2483. **origin:** Mexico. **collected:** September 1978. **locality:** 3 km. west of Paredon; barley field. **elevation:** 2538m. **remarks:** Lemma and palea tan, very pubescent (woolly). Annual. Wild. Seed.
- PI 545429 **donor id:** AF-2487. **origin:** Mexico. **collected:** September 1978. **locality:** 3 km. west of Paredon; barley field. **elevation:** 2538m. **remarks:** Lemma and palea brown, pubescent; medium pubescence on callus; long pubescence on rachilla. Annual. Wild. Seed.
- PI 545430 **donor id:** AF-2489. **origin:** Mexico. **collected:** September 1978. **locality:** barley field. **elevation:** 2654m. **remarks:** Lemma and palea tan, very pubescent (woolly). Annual. Wild. Seed.
- PI 545431 **donor id:** AF-2497. **origin:** Mexico. **collected:** September 1978. **locality:** along toll road to Queretaro; roadside. **remarks:** Lemma and palea tan, very pubescent (woolly). Annual. Wild. Seed.
- PI 545432 **donor id:** AF-2501. **origin:** Mexico. **collected:** September 1978. **locality:** along toll road to Queretaro near 92.5 km. marker; maize field; heavy clay soil. **elevation:** 2312m. **remarks:** Lemma and palea tan, very pubescent (woolly). Possible tolerance to BYDV. Annual. Wild. Seed.
- PI 545433 **donor id:** AF-2503. **origin:** Mexico. **collected:** September 1978. **locality:** along toll road to Queretaro near 141 km. marker; barley field. **elevation:** 2184m. **remarks:** Lemma and palea tan, very pubescent (woolly). Annual. Wild. Seed.
- PI 545434 **donor id:** AF-2507. **origin:** Mexico. **collected:** September 1978. **locality:** along toll road to Queretaro near 141 km. marker; barley field. **remarks:** Lemma and palea tan, very pubescent (woolly). Possible tolerance to BYDV. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545435 **donor id:** AF-2508. **origin:** Mexico. **collected:** September 1978. **locality:** 8 km. north of Libres Puebla along Hwy. 129; oat field. **elevation:** 2348m. **remarks:** Lemma and palea brown, slightly pubescent; callus and rachilla glabrous. May be a hybrid: no callus florets in spikelet remain intact. Annual. Wild. Seed.
- PI 545436 **donor id:** AF-2509. **origin:** Mexico. **collected:** September 1978. **locality:** 8 km. north of Libres Puebla along Hwy. 129; oat field. **elevation:** 2348m. **remarks:** Lemma and palea tan, very pubescent (woolly). Possible tolerance to BYDV. Annual. Wild. Seed.
- PI 545437 **donor id:** AF-2510. **origin:** Mexico. **collected:** September 1978. **locality:** 8 km. north of Libres Puebla along Hwy. 129; oat field. **remarks:** Lemma and palea tan, very pubescent (woolly). Annual. Wild. Seed.
- PI 545438 **donor id:** AF-2514. **origin:** Mexico. **collected:** September 1978. **locality:** 1 km. south of Orienta. **elevation:** 2306m. **remarks:** Lemma and palea tan, very pubescent (woolly). Annual. Wild. Seed.
- PI 545439 **donor id:** AF-2517. **origin:** Mexico. **collected:** September 1978. **locality:** near San Martin along Hwy. 117; roadside. **elevation:** 2214m. **remarks:** Lemma and palea tan, very pubescent (woolly). Annual. Wild. Seed.
- PI 545440 **donor id:** AF-2520. **origin:** Mexico. **collected:** September 1978. **locality:** near San Martin along Hwy. 117; roadside. **elevation:** 2214m. **remarks:** Lemma and palea tan, very pubescent (woolly). Possible tolerance to BYDV. Annual. Wild. Seed.
- PI 545441 **donor id:** AF-2524. **origin:** Mexico. **collected:** September 1978. **locality:** near San Francisco; oat field. **elevation:** 2245m. **remarks:** Lemma and palea tan, very pubescent (woolly). Annual. Wild. Seed.
- PI 545442 **donor id:** AF-2525. **origin:** Mexico. **collected:** September 1978. **locality:** near San Francisco; oat field. **elevation:** 2245m. **remarks:** Lemma and palea tan, very pubescent (woolly). Annual. Wild. Seed.
- PI 545443 **donor id:** AF-2526. **origin:** Mexico. **collected:** September 1978. **locality:** near San Francisco; oat field. **elevation:** 2245m. **remarks:** Lemma and palea dark brown, slightly pubescent; very short pubescence on callus and rachilla. Possible tolerance to BYDV. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545444 **donor id:** AF-2528. **origin:** Mexico. **collected:** September 1978. **locality:** near San Francisco; oat field. **elevation:** 2245m. **remarks:** Lemma and palea tan, very pubescent (woolly). Possible tolerance to BYDV. Annual. Wild. Seed.
- PI 545445 **donor id:** AF-2529. **origin:** Mexico. **collected:** September 1978. **locality:** 4 to 5 mi. east of San Francisco along Hwy. 190; oat field. **elevation:** 2361m. **remarks:** Lemma and palea tan, very pubescent (woolly). Possible tolerance to BYDV. Annual. Wild. Seed.
- PI 545446 **donor id:** AF-2530. **origin:** Mexico. **collected:** September 1978. **locality:** 4 to 5 mi. east of San Francisco along Hwy. 190; oat field. **elevation:** 2361m. **remarks:** Lemma and palea tan, very pubescent (woolly). Annual. Wild. Seed.
- PI 545447 **donor id:** AF-2533. **origin:** Mexico. **collected:** September 1978. **locality:** 4 to 5 mi. east of San Francisco along Hwy. 190; oat field. **elevation:** 2361m. **remarks:** Lemma and palea tan, very pubescent (woolly). Annual. Wild. Seed.
- PI 545448 **donor id:** AF-2535. **origin:** Mexico. **collected:** September 1978. **locality:** 4 to 5 mi. east of San Francisco along Hwy. 190; oat field. **elevation:** 2361m. **remarks:** Lemma and palea tan, very pubescent (woolly). Annual. Wild. Seed.
- PI 545449 **donor id:** AF-2539. **origin:** Mexico. **collected:** September 1978. **locality:** 1 km. from Rio Frio along non-toll road to Puebla; oat field. **elevation:** 3618m. **remarks:** Lemma and palea tan, very pubescent (woolly). Annual. Wild. Seed.
- PI 545450 **donor id:** AF-2541. **origin:** Mexico. **collected:** September 1978. **locality:** 1 km. from Rio Frio along non-toll road to Puebla; oat field. **elevation:** 3618m. **remarks:** Lemma and palea tan or brown, pubescent or very pubescent. Annual. Wild. Seed.
- PI 545451 **donor id:** AF-2546. **origin:** Mexico. **collected:** September 1978. **locality:** 1 km. from Rio Frio along non-toll road to Puebla; oat field. **elevation:** 3618m. **remarks:** Lemma and palea tan or brown, pubescent or very pubescent. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545452 **donor id:** AF-2546A. **origin:** Mexico. **collected:** September 1978. **locality:** 1 km. from Rio Frio along non-toll road to Puebla; oat field. **elevation:** 3618m. **remarks:** Lemma and palea tan, very pubescent (woolly). Annual. Wild. Seed.
- PI 545453 **donor id:** AF-2547. **origin:** Mexico. **collected:** September 1978. **locality:** 1 km. from Rio Frio along non-toll road to Puebla; oat field. **elevation:** 3618m. **remarks:** Lemma and palea tan, very pubescent (woolly). Annual. Wild. Seed.
- PI 545454 **donor id:** AF-2549. **origin:** Mexico. **collected:** September 1978. **locality:** 1 km. from Rio Frio along non-toll road to Puebla; oat field. **elevation:** 3618m. **remarks:** Lemma and palea tan or brown, pubescent or very pubescent. Annual. Wild. Seed.
- PI 545455 **donor id:** AF-2550. **origin:** Mexico. **collected:** September 1978. **locality:** 2 km. east of Tiengo Stengo; oat field. **elevation:** 2580m. **remarks:** Lemma and palea tan or brown, pubescent or very pubescent. Annual. Wild. Seed.
- PI 545456 **donor id:** AF-2554. **origin:** Mexico. **collected:** September 1978. **locality:** 2 km. east of Tiengo Stengo; oat field. **elevation:** 2580m. **remarks:** Lemma and palea tan, very pubescent (woolly). Annual. Wild. Seed.
- PI 545457 **donor id:** AF-2555. **origin:** Mexico. **collected:** September 1978. **locality:** 4 to 5 km. north of Chepaultepec; oat field. **elevation:** 2544m. **remarks:** Lemma and palea tan, very pubescent (woolly). Possible tolerance to BYDV. Annual. Wild. Seed.
- PI 545458 **donor id:** AF-2562. **origin:** Mexico. **collected:** September 1978. **locality:** near Cidagem Exp. Station; oat field with abundance of smut. **elevation:** 2550m. **remarks:** Lemma and palea tan, very pubescent (woolly). Annual. Wild. Seed.
- PI 545459 **donor id:** AF-2564. **origin:** Mexico. **collected:** September 1978. **locality:** 46 km. west of Mexico City along Hwy. 15; maize field. **remarks:** Lemma and palea tan or brown, pubescent or very pubescent. Annual. Wild. Seed.
- PI 545460 **donor id:** AF-2565. **origin:** Mexico. **collected:** September 1978. **locality:** 46 km. west of Mexico City along Hwy. 15; maize field. **remarks:** Lemma and palea tan, very pubescent (woolly). Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545461 **donor id:** AF-2571. **origin:** Mexico. **collected:** September 1978. **remarks:** Lemma and palea tan, very pubescent (woolly). Annual. Wild. Seed.
- PI 545462 **donor id:** AF-2586. **origin:** Mexico. **collected:** September 1978. **remarks:** Lemma and palea tan or brown, pubescent. Annual. Wild. Seed.
- PI 545463 **donor id:** AF-2588. **origin:** Mexico. **collected:** September 1978. **remarks:** Lemma and palea white, glabrous; medium pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545464 **donor id:** AF-2590. **origin:** Mexico. **collected:** September 1978. **remarks:** Lemma and palea tan or brown, pubescent. Annual. Wild. Seed.
- PI 545465 **donor id:** AF-2592. **origin:** Mexico. **collected:** September 1978. **remarks:** Lemma and palea white, slightly pubescent; medium pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545466 **donor id:** AF-2593. **origin:** Mexico. **collected:** September 1978. **remarks:** Lemma and palea dark gray, glabrous; short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545467 **donor id:** AF-2594. **origin:** Mexico. **collected:** September 1978. **remarks:** Lemma and palea light tan, pubescent; long pubescence on callus and rachilla. Possible tolerance to BYDV. Annual. Wild. Seed.
- PI 545468 **donor id:** AF-2595. **origin:** Mexico. **collected:** September 1978. **remarks:** Lemma and palea dark gray, pubescent; long pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545469 **donor id:** AF-2600. **origin:** Mexico. **collected:** September 1978. **remarks:** Lemma and palea tan or brown, pubescent or very pubescent. Annual. Wild. Seed.
- PI 545470 **donor id:** AF-2602. **origin:** Mexico. **collected:** September 1978. **remarks:** Lemma and palea tan, pubescent; medium pubescence on callus and rachilla. Possible tolerance to BYDV. Annual. Wild. Seed.
- PI 545471 **donor id:** AF-2611. **origin:** Mexico. **collected:** September 1978. **remarks:** Lemma and palea tan, very pubescent (woolly). Annual. Wild. Seed.
- PI 545472 **donor id:** AF-2612. **origin:** Mexico. **collected:** September 1978. **remarks:** Lemma and palea white, pubescent; medium pubescence on callus and rachilla. Annual. Wild. Seed.

PI 544355 to 545480-continued

- PI 545473 **donor id:** AF-2619. **origin:** Mexico. **collected:** September 1978. **remarks:** Lemma and palea tan, very pubescent (woolly). Annual. Wild. Seed.
- PI 545474 **donor id:** AF-2627. **origin:** Mexico. **collected:** September 1978. **remarks:** Lemma and palea tan, very pubescent (woolly). Annual. Wild. Seed.
- PI 545475 **donor id:** AF-2629. **origin:** United States. **collected:** May 30, 1977. **locality:** Vernon, along Hwy. 287 just east of the Ramada Inn; wheat field. **remarks:** Lemma and palea white, very pubescent (woolly). Annual. Wild. Seed.
- PI 545476 **donor id:** AF-2630. **origin:** United States. **collected:** May 31, 1977. **locality:** 1 mi. north of Chilicothe; roadside. **remarks:** Lemma and palea white, very pubescent (woolly). Annual. Wild. Seed.
- PI 545477 **donor id:** AF-2631. **origin:** United States. **collected:** May 31, 1977. **locality:** 1 mi. north Chilicothe; alfalfa field. **remarks:** Lemma and palea brown, very pubescent (fuzzy). Annual. Wild. Seed.
- PI 545478 **donor id:** AF-2632. **origin:** United States. **collected:** May 30, 1977. **locality:** Vernon, along Hwy. 287 just east of the Ramada Inn; wheat field. **remarks:** Lemma and palea brown, glabrous; very short pubescence on callus and rachilla. Annual. Wild. Seed.
- PI 545479 **donor id:** AF-2633. **origin:** United States. **collected:** May 24, 1978. **locality:** southwest of Chatanooga at airport. **remarks:** Lemma and palea white, pubescent. Annual. Wild. Seed.
- PI 545480 **donor id:** AF-2634. **origin:** United States. **collected:** May 02, 1978. **locality:** near Killeen (Coryell County); wheat field. **remarks:** Lemma and palea dark brown, very pubescent (woolly). Earliest maturing A. fatua in a large field. Annual. Wild. Seed.

PI 545481. Avena hybrid POACEAE Wild oats

Donated by: Briggles, L.W., USDA-ARS, Plant Science Institute, BARC-WEST, Beltsville, Maryland, United States. Received September 01, 1990.

donor id: AF-1017. **origin:** United States. **collected:** July 29, 1974. **locality:** 4 mi. north of Elbow Lake along Hwy. 55; wheat field. **remarks:** Lemma and palea white, glabrous; short pubescence on callus; no sucker-mouth. Hybrid between fatua and sativa. Annual. Wild. Seed.

PI 545482. *Apium graveolens* L. APIACEAE Celery

Donated by: A. Duda & Sons, Inc, United States. Received October 24, 1990.

origin: United States. **cultivar:** GENE'S GEM 11-7. **other id:** PVP 9000267. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 545483. *Cucurbita pepo* L. CUCURBITACEAE Pumpkin

Donated by: Jaunsem, John, United States. Received October 24, 1990.

origin: United States. **cultivar:** SUGAR HILL. **other id:** PVP 9100011. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 545484. *Lactuca sativa* L. ASTERACEAE Lettuce

Donated by: Ferry-Morse Seed Company, United States. Received October 24, 1990.

origin: United States. **cultivar:** VANGO. **other id:** PVP 9100012. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 545485 to 545486. *Lactuca sativa* L. ASTERACEAE Lettuce

Donated by: Plant Genetics, Inc, United States. Received October 24, 1990.

PI 545485 **origin:** United States. **cultivar:** 711,712. **other id:** PVP 9100013. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 545486 **origin:** United States. **cultivar:** 713. **other id:** PVP 9100014. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 545487. *Pisum sativum* L. FABACEAE Pea

Donated by: Crites-Moscow Growers, Inc, United States. Received October 24, 1990.

origin: United States. **cultivar:** QUAD. **other id:** PVP 9100016. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 545488. *Cucurbita maxima* Duch. CUCURBITACEAE Pumpkin

Donated by: Hollar Seed Company, United States. Received October 24, 1990.

origin: United States. **cultivar:** HSR 449. **other id:** PVP 9100017. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 545489 to 545490. *Pisum sativum* L. FABACEAE Pea

Donated by: L.D. Maffei Seed Co, Inc, United States. Received October 24, 1990.

PI 545489 **origin:** United States. **cultivar:** M5X8501. **other id:** PVP 9100018. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 545490 **origin:** United States. **cultivar:** M2X8601. **other id:** PVP 9100019. **source:** Pending. **group:** PVPO. Cultivar. Seed.

PI 545491 to 545492. *Triticum aestivum* L. POACEAE Common wheat

Donated by: Dofing, S.M., University of Alaska Fairbanks, Palmer Research Center, 533 E. Fireweed, Palmer, Alaska, United States. Received October 19, 1990.

PI 545491 **origin:** United States. **origin institute:** USDA-ARS, Alaska Agric. & Forestry Exp. Station, Palmer Research Center, 533 E. Fireweed, Palmer, Alaska 99645. **cultivar:** CHENA. **remarks:** Early maturity. Cultivated. Cutting.

PI 545492 **origin:** United States. **origin institute:** USDA-ARS, Alaska Agric. & Forestry Exp. Station, Palmer Research Center, 533 E. Fireweed, Palmer, Alaska 99645. **cultivar:** VIGAL. **pedigree:** Victor I/Gasser. **remarks:** Early maturity. Cultivar. Seed.

PI 545493 to 545591. *Sorghum bicolor* (L.) Moench POACEAE Sorghum

Donated by: Ahluwalia, M., Agro. Energy Center, India Agricultural Res. Institute, New Delhi, India; and Dabas, B.S., Division of Germplasm Evaluation, NBPGR, New Delhi, India; and Nafie, N.A., Department of Agriculture Botany, Faculty of Agriculture, Shambat, Khartoum, Sudan. Received 1987.

PI 545493 to 545591-continued

- PI 545493 **donor id:** ADN 0241. **origin:** Sudan. **local name:** Faterita. **collected:** November 21, 1987. **collector id:** ADN 0241. **locality:** Farmland, 10km from Khartoum in a north direction, Khartoum Province. **remarks:** Sown July, harvested November. Seed brownish, leaves lobed, medium long. Plants tall, tillering at base. Sorghum bicolor spontanaem growing nearby. **received as:** S. bicolor subsp. sativa. Landrace. Seed.
- PI 545494 **donor id:** ADN 0242. **origin:** Sudan. **local name:** Faterita. **collected:** November 21, 1987. **collector id:** ADN 0242. **locality:** Farmland, 10km from Khartoum in a north direction, Khartoum Province. **received as:** S. bicolor subsp. sativa. Landrace. Seed.
- PI 545495 **donor id:** ADN 0243. **origin:** Sudan. **local name:** Faterita. **collected:** November 22, 1987. **collector id:** ADN 0243. **locality:** Farmland, 15km from Khartoum in a north direction, Khartoum Province. **received as:** S. bicolor subsp. sativa. Landrace. Seed.
- PI 545496 **donor id:** ADN 0244. **origin:** Sudan. **local name:** Faterita. **collected:** November 22, 1987. **collector id:** ADN 0244. **locality:** Farmland, 18km from Khartoum in a north direction, Khartoum Province. **received as:** S. bicolor subsp. sativa. Landrace. Seed.
- PI 545497 **donor id:** ADN 0245. **origin:** Sudan. **local name:** Faterita. **collected:** November 22, 1987. **collector id:** ADN 0245. **locality:** Farmland, 15km from Khartoum in a north direction, Khartoum Province. **received as:** S. bicolor subsp. sativa. Landrace. Seed.
- PI 545498 **donor id:** ADN 0246. **origin:** Sudan. **local name:** Giadamelhamam. **collected:** November 23, 1987. **collector id:** ADN 0246. **locality:** Farmland, 40km from Khartoum in a west direction, Khartoum Province. **received as:** S. bicolor subsp. sativa. Breeding Material. Seed.
- PI 545499 **donor id:** ADN 0247. **origin:** Sudan. **local name:** Dabar. **collected:** November 24, 1987. **collector id:** ADN 0247. **locality:** Farmland, 18km from Khartoum in a west direction, Khartoum Province. **received as:** S. bicolor subsp. sativa. Landrace. Seed.
- PI 545500 **donor id:** ADN 0248. **origin:** Sudan. **local name:** Labanelsha. **collected:** November 24, 1987. **collector id:** ADN 0248. **locality:** 4km from Kadugli in a north direction, Southern Korodofan Province. **received as:** S. bicolor subsp. sativa. Seed.

PI 545493 to 545591-continued

- PI 545501 **donor id:** ADN 0249. **origin:** Sudan. **local name:** Sofaria. **collected:** November 24, 1987. **collector id:** ADN 0249. **locality:** 4km from Kadugli in a north direction, Southern Kordofan Province. **received as:** *S. bicolor* subsp. *sativa*. Landrace. Seed.
- PI 545502 **donor id:** ADN 0250. **origin:** Sudan. **local name:** Kolain Ahamar. **collected:** November 24, 1987. **collector id:** ADN 0250. **locality:** 6km from Kadugli in a north direction, Southern Kordofan Province. **received as:** *S. bicolor* subsp. *sativa*. Landrace. Seed.
- PI 545503 **donor id:** ADN 0251. **origin:** Sudan. **local name:** Sajra. **collected:** November 25, 1987. **collector id:** ADN 0251. **locality:** Farmland, 2km from Fao in a east direction, Kassala. **received as:** *S. bicolor* subsp. *sativa*. Landrace. Seed.
- PI 545504 **donor id:** ADN 0252. **origin:** Sudan. **local name:** Safra. **collected:** November 25, 1987. **collector id:** ADN 0252. **locality:** Farmland, 4km from Fao in a east direction, Kassala. **received as:** *S. bicolor* subsp. *sativa*. Landrace. Seed.
- PI 545505 **donor id:** ADN 0254. **origin:** Sudan. **local name:** Incolip. **collected:** November 25, 1987. **collector id:** ADN 0254. **locality:** Farmland, 4km from Fao in a east direction, Kassala. **received as:** *S. bicolor* subsp. *spontania*. Landrace. Seed.
- PI 545506 **donor id:** ADN 0255. **origin:** Sudan. **local name:** Incolip. **collected:** November 25, 1987. **collector id:** ADN 0255. **locality:** Farmland, 4km from Fao in a east direction, Kassala. **received as:** *S. bicolor* subsp. *sativa*. Landrace. Seed.
- PI 545507 **donor id:** ADN 0256. **origin:** Sudan. **local name:** Safra. **collected:** November 25, 1987. **collector id:** ADN 0256. **locality:** Farmland, 8km from Fao in a east direction, Kassala. **received as:** *S. bicolor* subsp. *spontania*. Landrace. Seed.
- PI 545508 **donor id:** ADN 0257. **origin:** Sudan. **local name:** Wadfahal. **collected:** November 25, 1987. **collector id:** ADN 0257. **locality:** Farmland, 9km from Fao in a south direction, Kassala Province. **received as:** *S. bicolor* subsp. *sativa*. Landrace. Seed.
- PI 545509 **donor id:** ADN 0258. **origin:** Sudan. **local name:** Safra. **collected:** November 25, 1987. **collector id:** ADN 0258. **locality:** Farmland, Kassala. **received as:** *S. bicolor* subsp. *sativa*. Landrace. Seed.

PI 545493 to 545591-continued

- PI 545510 **donor id:** ADN 0259. **origin:** Sudan. **local name:** Faterita. **collected:** November 26, 1987. **collector id:** ADN 0259. **locality:** Farmland, 25km from Kassala in a north direction, Kassala. **received as:** S. bicolor subsp. sativa. Landrace. Seed.
- PI 545511 **donor id:** ADN 0260. **origin:** Sudan. **local name:** Faterita. **collected:** November 26, 1987. **collector id:** ADN 0260. **locality:** Farmland, 25km from Kassala in a north direction, Kassala. **received as:** S. bicolor subsp. sativa. Landrace. Seed.
- PI 545512 **donor id:** ADN 0261. **origin:** Sudan. **local name:** Faterita. **collected:** November 26, 1987. **collector id:** ADN 0261. **locality:** Farmland, 27km from Kassala in a north direction, Kassala. **received as:** S. bicolor subsp. sativa. Landrace. Seed.
- PI 545513 **donor id:** ADN 0262. **origin:** Sudan. **local name:** Gacb. **collected:** November 26, 1987. **collector id:** ADN 0262. **locality:** Farmland, 25km from Gacb in a east direction, Gacb Province. **received as:** S. bicolor subsp. sativa. Landrace. Seed.
- PI 545514 **donor id:** ADN 0263. **origin:** Sudan. **local name:** Iterita. **collected:** November 26, 1987. **collector id:** ADN 0263. **locality:** Farmland, 30km from Ciadarif, in a east direction, Kassala Province. **received as:** S. bicolor subsp. sativa. Landrace. Seed.
- PI 545515 **donor id:** ADN 0264. **origin:** Sudan. **local name:** Adar. **collected:** November 26, 1987. **collector id:** ADN 0264. **locality:** Farmland, 30km from Ciadarif in a west direction, Gacb Province. **received as:** S. bicolor subsp. spontania. Landrace. Seed.
- PI 545516 **donor id:** ADN 0265. **origin:** Sudan. **local name:** Faterita. **collected:** November 26, 1987. **collector id:** ADN 0265. **locality:** Farmland, 30km from Kassala in a west direction, Kassala. **received as:** S. bicolor subsp. sativa. Landrace. Seed.
- PI 545517 **donor id:** ADN 0266. **origin:** Sudan. **local name:** Faterita. **collected:** November 26, 1987. **collector id:** ADN 0266. **locality:** Farmland, 30km from Kassala in a west direction, Kassala. **received as:** S. bicolor subsp. spontania. Landrace. Seed.

PI 545493 to 545591-continued

- PI 545518 **donor id:** ADN 0268. **origin:** Sudan. **local name:** Faterita. **collected:** November 25, 1987. **collector id:** ADN 0268. **locality:** Farmland, 35km from Gadarif in a east direction, Kassala. **received as:** *S. bicolor* subsp. *sativa*. Landrace. Seed.
- PI 545519 **donor id:** ADN 0269. **origin:** Sudan. **local name:** Faterita. **collected:** November 26, 1987. **collector id:** ADN 0269. **locality:** Farmland, 40km from Gadarif in a east direction, Kassala. **received as:** *S. bicolor* subsp. *sativa*. Landrace. Seed.
- PI 545520 **donor id:** ADN 0270. **origin:** Sudan. **collected:** November 26, 1987. **collector id:** ADN 0270. **locality:** Farmland, 40km from Gadarif in a east direction, Kassala. **received as:** *S. bicolor* subsp. *spontania*. Landrace. Seed.
- PI 545521 **donor id:** ADN 0271. **origin:** Sudan. **local name:** Faterita. **collected:** November 26, 1987. **collector id:** ADN 0271. **locality:** Farmland, 40km from Gadarif in a east direction, Kassala Province. **received as:** *S. bicolor* subsp. *sativa*. Landrace. Seed.
- PI 545522 **donor id:** ADN 0272. **origin:** Sudan. **local name:** Faterita. **collected:** November 25, 1987. **collector id:** ADN 0272. **locality:** Farmland, 45km from Kassala in a west direction, Kassala Province. **received as:** *S. bicolor* subsp. *sativa*. Landrace. Seed.
- PI 545523 **donor id:** ADN 0273. **origin:** Sudan. **local name:** Faterita. **collected:** November 26, 1987. **collector id:** ADN 0273. **locality:** Farmland, 45km from Gadarif in a east direction, Kassala Province. **received as:** *S. bicolor* subsp. *sativa*. Landrace. Seed.
- PI 545524 **donor id:** ADN 0274. **origin:** Sudan. **local name:** Faterita. **collected:** November 26, 1987. **collector id:** ADN 0274. **locality:** Farmland, 45km from Gadarif in a east direction, Kassala Province. **received as:** *S. bicolor* subsp. *spontania*. Landrace. Seed.
- PI 545525 **donor id:** ADN 0275. **origin:** Sudan. **local name:** Faterita. **collected:** November 26, 1987. **collector id:** ADN 0275. **locality:** Farmland, 45km from Gadarif in a east north direction, Kassala Province. **received as:** *S. bicolor* subsp. *sativa*. Landrace. Seed.
- PI 545526 **donor id:** ADN 0276. **origin:** Sudan. **local name:** Faterita. **collected:** November 27, 1987. **collector id:** ADN 0276. **locality:** Farmland, 15km from Gadarif in a south direction, Kassala Province. **received as:** *S. bicolor* subsp. *sativa*. Landrace. Seed.

PI 545493 to 545591-continued

- PI 545527 **donor id:** ADN 0278. **origin:** Sudan. **local name:** Faterita. **collected:** November 27, 1987. **collector id:** ADN 0278. **locality:** Farmland, 80km from Gadarif in a south direction, Kassala Province. **received as:** S. bicolor subsp. sativa. Landrace. Seed.
- PI 545528 **donor id:** ADN 0279. **origin:** Sudan. **local name:** Faterita. **collected:** November 27, 1987. **collector id:** ADN 0279. **locality:** Farmland, 90km from Gadarif in a south direction, Kassala Province. **received as:** S. bicolor subsp. spontania. Landrace. Seed.
- PI 545529 **donor id:** ADN 0280. **origin:** Sudan. **local name:** Adar. **collected:** November 27, 1987. **collector id:** ADN 0280. **locality:** Farmland, 80km from Gadarif in a south direction, Kassala Province. **received as:** S. bicolor subsp. spontania. Landrace. Seed.
- PI 545530 **donor id:** ADN 0281. **origin:** Sudan. **local name:** Faterita. **collected:** November 27, 1987. **collector id:** ADN 0281. **locality:** Farmland, 100km from Gadarif in a south direction, Kassala Province. **received as:** S. bicolor subsp. spontania. Landrace. Seed.
- PI 545531 **donor id:** ADN 0282. **origin:** Sudan. **local name:** Faterita. **collected:** November 27, 1987. **collector id:** ADN 0282. **locality:** Farmland, 100km from Gadarif in a south direction, Kassala Province. **received as:** S. bicolor subsp. sativa. Landrace. Seed.
- PI 545532 **donor id:** ADN 0283. **origin:** Sudan. **local name:** Faterita. **collected:** November 27, 1987. **collector id:** ADN 0283. **locality:** Farmland, 100km from Gadarif in a south direction, Kassala Province. **received as:** S. bicolor subsp. spontania. Landrace. Seed.
- PI 545533 **donor id:** ADN 0284. **origin:** Sudan. **local name:** Faterita. **collected:** November 27, 1987. **collector id:** ADN 0284. **locality:** Farmland, 100km from Gadarif in a south direction, Kassala Province. **received as:** S. bicolor subsp. spontania. Landrace. Seed.
- PI 545534 **donor id:** ADN 0285. **origin:** Sudan. **collected:** November 27, 1987. **collector id:** ADN 0285. **locality:** Farmland, 100km from Gadarif in a south direction, Kassala Province. **received as:** S. bicolor subsp. spontania. Landrace. Seed.

PI 545493 to 545591-continued

- PI 545535 **donor id:** ADN 0286. **origin:** Sudan. **local name:** Faterita. **collected:** November 27, 1987. **collector id:** ADN 0286. **locality:** Farmland, 12km from Samsam in a north direction, Kassala Province. **received as:** S. bicolor subsp. spontania. Landrace. Seed.
- PI 545536 **donor id:** ADN 0287. **origin:** Sudan. **local name:** Faterita. **collected:** November 27, 1987. **collector id:** ADN 0287. **locality:** Farmland, 12km from Samsam in a north direction, Kassala Province. **received as:** S. bicolor subsp. sativa. Landrace. Seed.
- PI 545537 **donor id:** ADN 0288. **origin:** Sudan. **local name:** Adar. **collected:** November 27, 1987. **collector id:** ADN 0288. **locality:** Farmland, 14km from Samsam in a north direction, Kassala Province. **received as:** S. bicolor subsp. spontania. Landrace. Seed.
- PI 545538 **donor id:** ADN 0289. **origin:** Sudan. **local name:** Adar. **collected:** November 27, 1987. **collector id:** AND 0289. **locality:** Farmland, 16km from Samsam in a north direction, Kassala Province. **received as:** S. bicolor subsp. spontania. Landrace. Seed.
- PI 545539 **donor id:** ADN 0290. **origin:** Sudan. **local name:** Adar. **collected:** November 27, 1987. **collector id:** ADN 0290. **locality:** Farmland, 16km from Samsam, Kassala Province. **received as:** S. bicolor subsp. spontania. Landrace. Seed.
- PI 545540 **donor id:** ADN 0291. **origin:** Sudan. **local name:** Adar. **collected:** November 27, 1987. **collector id:** ADN 0291. **locality:** Farmland, 23km from Samsam in a north direction, Kassala Province. **received as:** S. bicolor subsp. spontania. Landrace. Seed.
- PI 545541 **donor id:** ADN 0292. **origin:** Sudan. **local name:** Adar. **collected:** November 27, 1987. **collector id:** ADN 0292. **locality:** Farmland, 16km from Samsam in a north direction, Kassala Province. **received as:** S. bicolor subsp. sativa. Landrace. Seed.
- PI 545542 **donor id:** ADN 0293. **origin:** Sudan. **local name:** Adar. **collected:** November 27, 1987. **collector id:** ADN 0293. **locality:** Farmland, 30km from Samsam, Kassala Province. **received as:** S. bicolor subsp. sativa. Landrace. Seed.
- PI 545543 **donor id:** ADN 0294. **origin:** Sudan. **local name:** Faterita. **collected:** November 27, 1987. **collector id:** ADN 0294. **locality:** Farmland, 30km from Samsam in a north direction, Kassala Province. **received as:** S. bicolor subsp. sativa. Landrace. Seed.

PI 545493 to 545591-continued

- PI 545544 **donor id:** ADN 0295. **origin:** Sudan. **local name:** Faterita. **collected:** November 27, 1987. **collector id:** ADN 0295. **locality:** Farmland, 35km from Samsam in a north direction, Kassala Province. **received as:** *S. bicolor* subsp. *sativa*. Landrace. Seed.
- PI 545545 **donor id:** ADN 0296. **origin:** Sudan. **local name:** Faterita Adar. **collected:** November 27, 1987. **collector id:** ADN 0296. **locality:** Farmland, 35km from Samsam in a north direction, Kassala Province. **received as:** *S. bicolor* subsp. *spontania*. Landrace. Seed.
- PI 545546 **donor id:** ADN 0297. **origin:** Sudan. **local name:** Adar. **collected:** November 27, 1987. **collector id:** ADN 0297. **locality:** Farmland, 40km from Samsam in a north direction, Kassala Province. **received as:** *S. bicolor* subsp. *spontania*. Landrace. Seed.
- PI 545547 **donor id:** ADN 0298. **origin:** Sudan. **local name:** Hybrid. **collected:** November 27, 1987. **collector id:** ADN 0298. **locality:** Farmland, 20km from Samsam in a east direction, Kassala Province. **received as:** *S. bicolor* subsp. *sativa*. Landrace. Seed.
- PI 545548 **donor id:** ADN 0299. **origin:** Sudan. **local name:** Adar. **collected:** November 27, 1987. **collector id:** ADN 0299. **locality:** Farmland, 30km from Samsam in a east direction, Kassala Province. **received as:** *S. bicolor* subsp. *sativa*. Landrace. Seed.
- PI 545549 **donor id:** ADN 0300. **origin:** Sudan. **local name:** Adar. **collected:** November 27, 1987. **collector id:** ADN 0300. **locality:** Farmland, 30km from Samsam in a east direction, Kassala Province. **received as:** *S. bicolor* subsp. *sativa*. Landrace. Seed.
- PI 545550 **donor id:** ADN 0302. **origin:** Sudan. **local name:** Adar. **collected:** November 28, 1987. **collector id:** ADN 0302. **locality:** Farmland, 25km from Samsam in a east direction, Kassala Province. **received as:** *S. bicolor* subsp. *sativa*. Landrace. Seed.
- PI 545551 **donor id:** ADN 0303. **origin:** Sudan. **local name:** Faterita. **collected:** November 28, 1987. **collector id:** ADN 0303. **locality:** Farmland, 40km from Samsam in a east direction, Kassala Province. **received as:** *S. bicolor* subsp. *sativa*. Landrace. Seed.

PI 545493 to 545591-continued

- PI 545552 **donor id:** ADN 0304. **origin:** Sudan. **local name:** Faterita. **collected:** November 28, 1987. **collector id:** ADN 0304. **locality:** Farmland, 40km from Samsam in a east direction, Kassala Province. **received as:** S. bicolor subsp. sativa. Landrace. Seed.
- PI 545553 **donor id:** ADN 0305. **origin:** Sudan. **local name:** Adar. **collected:** November 28, 1987. **collector id:** ADN 0305. **locality:** Farmland, 48km from Samsam in a east direction, Kassala Province. **received as:** S. bicolor subsp. spontania. Landrace. Seed.
- PI 545554 **donor id:** ADN 0306. **origin:** Sudan. **local name:** Faterita. **collected:** November 28, 1987. **collector id:** ADN 0306. **locality:** Farmland, 50km from Samsam in a east direction, Kassala Province. **received as:** S. bicolor subsp. sativa. Landrace. Seed.
- PI 545555 **donor id:** ADN 0307. **origin:** Sudan. **local name:** Faterita. **collected:** November 28, 1987. **collector id:** ADN 0307. **locality:** Farmland, 55km from Samsam in a east direction, Kassala Province. **received as:** S. bicolor subsp. sativa. Landrace. Seed.
- PI 545556 **donor id:** ADN 0308. **origin:** Sudan. **local name:** Faterita. **collected:** November 28, 1987. **collector id:** ADN 0308. **locality:** Farmland, 55km from Samsam in a east direction, Kassala Province. **received as:** S. bicolor subsp. sativa. Landrace. Seed.
- PI 545557 **donor id:** ADN 0309. **origin:** Sudan. **local name:** Adar. **collected:** November 28, 1987. **collector id:** ADN 0309. **locality:** Farmland, 57km from Samsam in a east direction, Kassala Province. **received as:** S. bicolor subsp. spontania. Landrace. Seed.
- PI 545558 **donor id:** ADN 0310. **origin:** Sudan. **local name:** Adar. **collected:** November 28, 1987. **collector id:** ADN 0310. **locality:** Farmland, 25km from Samsam in a south direction, Kassala Province. **received as:** S. bicolor subsp. spontania. Landrace. Seed.
- PI 545559 **donor id:** ADN 0311. **origin:** Sudan. **local name:** Adar. **collected:** November 28, 1987. **collector id:** ADN 0311. **locality:** Farmland, 26km from Samsam in a south direction, Kassala Province. **received as:** S. bicolor subsp. spontania. Landrace. Seed.

PI 545493 to 545591-continued

- PI 545560 **donor id:** ADN 0312. **origin:** Sudan. **local name:** Adar.
collected: November 28, 1987. **collector id:** ADN 0312.
locality: Farmland, 32km from Samsam in a south
direction, Kassala Province. **received as:** S. bicolor
subsp. spontania. Landrace. Seed.
- PI 545561 **donor id:** ADN 0313. **origin:** Sudan. **local name:** Adar.
collected: November 28, 1987. **collector id:** ADN 0313.
locality: Farmland, 34km from Samsam in a south
direction, Kassala Province. **received as:** S. bicolor
subsp. spontania. Landrace. Seed.
- PI 545562 **donor id:** ADN 0314. **origin:** Sudan. **local name:** Adar.
collected: November 28, 1987. **collector id:** ADN 0314.
locality: Farmland, 40km from Samsam in a south
direction, Kassala Province. **received as:** S. bicolor
subsp. spontania. Landrace. Seed.
- PI 545563 **donor id:** ADN 0315. **origin:** Sudan. **local name:** Adar.
collected: November 28, 1987. **collector id:** ADN 0315.
locality: Farmland, 45km from Samsam in a south
direction, Kassala Province. **received as:** S. bicolor
subsp. spontania. Landrace. Seed.
- PI 545564 **donor id:** ADN 0316. **origin:** Sudan. **local name:** Adar.
collected: November 28, 1987. **collector id:** ADN 0316.
locality: Farmland, 40km from Samsam in a south
direction, Kassala Province. **received as:** S. bicolor
subsp. spontania. Landrace. Seed.
- PI 545565 **donor id:** ADN 0317. **origin:** Sudan. **local name:** Adar.
collected: November 28, 1987. **collector id:** ADN 0317.
locality: Farmland, south of Samsam, Kassala Province.
received as: S. bicolor subsp. spontania. Landrace.
Seed.
- PI 545566 **donor id:** ADN 0319. **origin:** Sudan. **local name:** Adar.
collected: November 28, 1987. **collector id:** ADN 0319.
locality: Farmland, 44km from Samsam in a south
direction, Kassala Province. **received as:** S. bicolor
subsp. spontania. Landrace. Seed.
- PI 545567 **donor id:** ADN 0320. **origin:** Sudan. **local name:** Adar.
collected: November 28, 1987. **collector id:** ADN 0320.
locality: Farmland, 45km from Samsam in a south
direction, Kassala Province. **received as:** S. bicolor
subsp. spontania. Landrace. Seed.

PI 545493 to 545591-continued

- PI 545568 **donor id:** ADN 0321. **origin:** Sudan. **local name:** Faterita. **collected:** November 28, 1987. **collector id:** ADN 0321. **locality:** Farmland, 46km from Samsam in a south direction, Kassala Province. **received as:** S. bicolor subsp. sativa. Landrace. Seed.
- PI 545569 **donor id:** ADN 0322. **origin:** Sudan. **local name:** Adar. **collected:** November 28, 1987. **collector id:** ADN 0322. **locality:** Farmland, 80km from Samsam in a south direction, Kassala Province. **received as:** S. bicolor subsp. spontania. Landrace. Seed.
- PI 545570 **donor id:** ADN 0323. **origin:** Sudan. **local name:** Faterita. **collected:** November 28, 1987. **collector id:** ADN 0323. **locality:** Farmland, 100km from Samsam in a south direction, Kassala Province. **received as:** S. bicolor subsp. sativa. Landrace. Seed.
- PI 545571 **donor id:** ADN 0324. **origin:** Sudan. **local name:** Adar. **collected:** November 28, 1987. **collector id:** ADN 0324. **locality:** Farmland, 30km from Samsam in a south direction, Kassala Province. **received as:** S. bicolor subsp. spontania. Landrace. Seed.
- PI 545572 **donor id:** ADN 0325. **origin:** Sudan. **collected:** November 28, 1987. **collector id:** ADN 0325. **locality:** Farmland, south of Samsam, Kassala Province. **received as:** S. bicolor subsp. sativa. Landrace. Seed.
- PI 545573 **donor id:** ADN 0326. **origin:** Sudan. **local name:** Adar. **collected:** November 28, 1987. **collector id:** ADN 0326. **locality:** Farmland, 48km from Samsam in a south direction, Kassala Province. **received as:** S. bicolor subsp. spontania. Landrace. Seed.
- PI 545574 **donor id:** ADN 0327. **origin:** Sudan. **local name:** Adar. **collected:** November 28, 1987. **collector id:** ADN 0327. **locality:** Farmland, 100km from Samsam in a south direction, Kassala Province. **received as:** S. bicolor subsp. spontania. Landrace. Seed.
- PI 545575 **donor id:** ADN 0328. **origin:** Sudan. **local name:** Faterita. **collected:** November 28, 1987. **collector id:** ADN 0328. **locality:** Farmland, 25km from Samsam in a south direction, Kassala Province. **received as:** S. bicolor subsp. sativa. Landrace. Seed.
- PI 545576 **donor id:** ADN 0329. **origin:** Sudan. **local name:** Gadamelhamam. **collected:** November 28, 1987. **collector id:** ADN 0329. **locality:** Farmland, 40km from Samsam in a south direction, Kassala Province. **received as:** S. bicolor subsp. sativa. Landrace. Seed.

PI 545493 to 545591-continued

- PI 545577 **donor id:** ADN 0330. **origin:** Sudan. **local name:** Bionear.
collected: November 28, 1987. **collector id:** ADN 0330.
locality: Farmland, 45km from Samsam in a south
direction, Kassala Province. **received as:** *S. bicolor*
subsp. *sativa*. Landrace. Seed.
- PI 545578 **donor id:** ADN 0331. **origin:** Sudan. **local name:** Bionear.
collected: November 28, 1987. **collector id:** ADN 0331.
locality: Farmland, 44km from Samsam in a south
direction, Kassala Province. **received as:** *S. bicolor*
subsp. *sativa*. Landrace. Seed.
- PI 545579 **donor id:** ADN 0332. **origin:** Sudan. **local name:** Adar.
collected: November 29, 1987. **collector id:** ADN 0332.
locality: Farmland, 12km from Abunaama in a west
direction, Blue Nile Province. **received as:** *S. bicolor*
subsp. *spontania*. Landrace. Seed.
- PI 545580 **donor id:** ADN 0333. **origin:** Sudan. **local name:** Adar.
collected: November 29, 1987. **collector id:** ADN 0333.
locality: Farmland, 13km from Abunaama, Blue Nile
Province. **received as:** *S. bicolor* subsp. *spontania*.
Landrace. Seed.
- PI 545581 **donor id:** ADN 0334. **origin:** Sudan. **local name:** Adar.
collected: November 29, 1987. **collector id:** ADN 0334.
locality: Farmland, 13km from Abunaama, Blue Nile
province. **received as:** *S. bicolor* subsp. *spontania*.
Landrace. Seed.
- PI 545582 **donor id:** ADN 0335. **origin:** Sudan. **local name:** Adar.
collected: November 29, 1987. **collector id:** ADN 0335.
locality: Farmland, 14km from Abunaama in a west
direction, Blue Nile Province. **received as:** *S. bicolor*
subsp. *spontania*. Landrace. Seed.
- PI 545583 **donor id:** ADN 0336. **origin:** Sudan. **local name:** Adar.
collected: November 29, 1987. **collector id:** ADN 0336.
locality: Farmland, 18km from Abunaama in a west
direction, Blue Nile Province. **received as:** *S. bicolor*
subsp. *spontania*. Landrace. Seed.
- PI 545584 **donor id:** ADN 0337. **origin:** Sudan. **local name:** Adar.
collected: November 29, 1987. **collector id:** ADN 0337.
locality: Farmland, 32km from Abunaama in a west
direction, Blue Nile Province. **received as:** *S. bicolor*
subsp. *spontania*. Landrace. Seed.

PI 545493 to 545591-continued

PI 545585 **donor id:** ADN 0339. **origin:** Sudan. **local name:** Faterita. **collected:** November 30, 1987. **collector id:** ADN 0339. **locality:** Farmland, 25km from Abunaama in a west direction, Bluenile Province. **received as:** S. bicolor subsp. spontania. Landrace. Seed.

PI 545586 **donor id:** ADN 0338. **origin:** Sudan. **local name:** Faterita. **collected:** November 29, 1987. **collector id:** ADN 0338. **locality:** Farmland, 18km from Abunaama in a west direction, Bluenile Province. **received as:** S. bicolor subsp. sativa. Landrace. Seed.

PI 545587 **donor id:** ADN 0340. **origin:** Sudan. **local name:** Faterita. **collected:** November 30, 1987. **collector id:** ADN 0340. **locality:** Farmland, 40km west of Abunaama, Bluenile Province. **received as:** S. bicolor subsp. sativa. Landrace. Seed.

PI 545588 **donor id:** ADN 0341. **origin:** Sudan. **local name:** Adar. **collected:** November 30, 1987. **collector id:** ADN 0341. **locality:** Farmland, 45km from Abunaama in a west direction, Bluenile Province. **received as:** S. bicolor subsp. sativa. Landrace. Seed.

PI 545589 **donor id:** ADN 0342. **origin:** Sudan. **local name:** Adar. **collected:** November 30, 1987. **collector id:** ADN 0342. **locality:** Farmland, 45km from Abunaama in a west direction, Bluenile Province. **received as:** S. bicolor subsp. spontania. Landrace. Seed.

PI 545590 **donor id:** ADN 0344. **origin:** Sudan. **local name:** Adar. **collected:** November 30, 1987. **collector id:** ADN 0344. **locality:** Farmland, 55km from Abunaama in a west direction, Bluenile Province. **received as:** S. bicolor subsp. spontania. Landrace. Seed.

PI 545591 **donor id:** ADN 0345. **origin:** Sudan. **local name:** Faterita. **collected:** November 30, 1987. **collector id:** ADN 0345. **locality:** Farmland, 55km from Abunaama in a west direction, Bluenile Province. **received as:** S. bicolor subsp. sativa. Landrace. Seed.

PI 545592. *Medicago sativa* L. FABACEAE Alfalfa

Donated by: Smith, S.E., Arizona Agr. Exp. Sta., University of Arizona, Tucson, Arizona, United States. **remarks:** AZ-90NDC-ST Alfalfa Germplasm. Received November 26, 1990.

PI 545592-continued

origin: United States. **origin institute:** Arizona Agr. Exp. Sta., University of Arizona, Dept. of Plant Sciences, Tucson, Arizona 85721. **cultivar:** AZ-90NDC-ST. **pedigree:** Derived by two cycles of mass selection for increased forage yield under salt stress from AZ-88NDC (PI 527688). **other id:** GP-241. **group:** CSR-ALFALFA. **remarks:** Only known population of alfalfa deliberately selected for increased forage yield with saline irrigation. Forage yield under 30 mM NaCl irrigation is 18% greater than parental population. Fall dormancy similar to CUF 101. Pest resistance responses unknown. Perennial. Breeding Material. Seed.

PI 545593 to 545680. *Lolium* sp. POACEAE

Donated by: Metzger, R.J., Dept. of Crop Sciences, Oregon State University, Oregon State University, Corvallis, Oregon, United States. **remarks:** Received through R. Welty, National Forage Seed Production Research Center, 3450 S.W. Campus Wy., Oregon State University, Corvallis, Oregon. Received September 14, 1989.

PI 545593 **donor id:** 84TK006-019. **origin:** Turkey. **collected:** 1984. **other id:** W6 1678. **group:** W6. **locality:** 16km S of Mugla, Mugla province. **elevation:** 630m. Wild. Seed.

PI 545594 **donor id:** 84TK032-087. **origin:** Turkey. **collected:** 1984. **other id:** W6 1683. **group:** W6. **locality:** 15km NW Manavgat, Antalya province. **elevation:** 10m. Wild. Seed.

PI 545595 **donor id:** 84TK038-105.2. **origin:** Turkey. **collected:** 1984. **other id:** W6 1684. **group:** W6. **locality:** 35km SE Manavgat near Okurcalar village, Antalya province. **elevation:** 50m. Wild. Seed.

PI 545596 **donor id:** 84TK044-115. **origin:** Turkey. **collected:** 1984. **other id:** W6 1685. **group:** W6. **locality:** 58km SW Silifke, Mersin province. **elevation:** 250m. Wild. Seed.

PI 545597 **donor id:** 84TK050-125. **origin:** Turkey. **collected:** 1984. **other id:** W6 1686. **group:** W6. **locality:** 18km E Ceyhan/Adana Rd. junction on Hwy E5, Adana province. **elevation:** 80m. Wild. Seed.

PI 545598 **donor id:** 84TK054-133.1. **origin:** Turkey. **collected:** 1984. **other id:** W6 1687. **group:** W6. **locality:** 4km SE Iskenderun, Hatay (Antakya) province. **elevation:** 250m. Wild. Seed.

PI 545593 to 545680-continued

- PI 545599 **donor id:** 84TK056-144. **origin:** Turkey. **collected:** 1984.
other id: W6 1688. **group:** W6. **locality:** 10km SW
Antakya, Hatay (Antakya) province. **elevation:** 180m.
Wild. Seed.
- PI 545600 **donor id:** 84TK056-145. **origin:** Turkey. **collected:** 1984.
other id: W6 1689. **group:** W6. **locality:** 10km SW
Antakya, Hatay (Antakya) province. **elevation:** 180m.
Wild. Seed.
- PI 545601 **donor id:** 84TK058-155. **origin:** Turkey. **collected:** 1984.
other id: W6 1691. **group:** W6. **locality:** 13km S
Samandaga village, Hatay (Antakya) province. **elevation:**
175m. Wild. Seed.
- PI 545602 **donor id:** 84TK059-158. **origin:** Turkey. **collected:** 1984.
other id: W6 1692. **group:** W6. **locality:** 18km S
Samandaga village, Hatay (Antakya) province. **elevation:**
320m. Wild. Seed.
- PI 545603 **donor id:** 84TK061-163. **origin:** Turkey. **collected:** 1984.
other id: W6 1693. **group:** W6. **locality:** 5km from Syrian
border (Reyhanli) province. **elevation:** 110m. Wild.
Seed.
- PI 545604 **donor id:** 84TK064-011. **origin:** Turkey. **collected:** 1984.
other id: W6 1694. **group:** W6. **locality:** 1 km S Saparozu
village, Gaziantep province. **elevation:** 400m. Wild.
Seed.
- PI 545605 **donor id:** 84TK070-007. **origin:** Turkey. **collected:** 1984.
other id: W6 1695. **group:** W6. **locality:** 2km N Gaziantep
toward Yavuzeli, Gaziantep province. **elevation:** 940m.
Wild. Seed.
- PI 545606 **donor id:** 84TK071-011. **origin:** Turkey. **collected:** 1984.
other id: W6 1696. **group:** W6. **locality:** 14km N
Gaziantep toward Yavuzeli, Gaziantep province.
elevation: 850m. Wild. Seed.
- PI 545607 **donor id:** 84TK073-020. **origin:** Turkey. **collected:** 1984.
other id: W6 1697. **group:** W6. **locality:** 4km N Yavuzeli,
Gaziantep province. **elevation:** 450m. Wild. Seed.
- PI 545608 **donor id:** 84TK076-037. **origin:** Turkey. **collected:** 1984.
other id: W6 1698. **group:** W6. **locality:** 9km N. Araban
near Gaziantep/Adiyaman border, Gaziantep province.
elevation: 820m. Wild. Seed.
- PI 545609 **donor id:** 84TK077-041. **origin:** Turkey. **collected:** 1984.
other id: W6 1699. **group:** W6. **locality:** 10km S Besni,
Adiyaman province. **elevation:** 900m. Wild. Seed.

PI 545593 to 545680-continued

- PI 545610 **donor id:** 84TK084-069. **origin:** Turkey. **collected:** 1984.
other id: W6 1700. **group:** W6. **locality:** 6km S Narince
village, Adiyaman province. **elevation:** 850m. Wild.
Seed.
- PI 545611 **donor id:** 84TK085-006. **origin:** Turkey. **collected:** 1984.
other id: W6 1701. **group:** W6. **locality:** Regional Agr.
Res. Sta. Diyarbakir, Diyarbakir province. **elevation:**
820m. Wild. Seed.
- PI 545612 **donor id:** 84TK095-005. **origin:** Turkey. **collected:** 1984.
other id: W6 1702. **group:** W6. **locality:** Hwy 380 at Jct.
Diyarbakir-Bismil Rd., Diyarbakir province. **elevation:**
900m. Wild. Seed.
- PI 545613 **donor id:** 84TK096-009. **origin:** Turkey. **collected:** 1984.
other id: W6 1703. **group:** W6. **locality:** 19km SE
Diyarbakir/Bismil Jct. on way to Bismil, Diyarbakir
province. **elevation:** 750m. Wild. Seed.
- PI 545614 **donor id:** 84TK097-020.2. **origin:** Turkey. **collected:**
1984. **other id:** W6 1704. **group:** W6. **locality:** 4km NW
Bismil, Diyarbakir province. **elevation:** 750m. Wild.
Seed.
- PI 545615 **donor id:** 84TK099-028. **origin:** Turkey. **collected:** 1984.
other id: W6 1706. **group:** W6. **locality:** 12km N
Diyarbakir/Bingol Road Jct., Diyarbakir province.
elevation: 925m. Wild. Seed.
- PI 545616 **donor id:** 84TK100-033. **origin:** Turkey. **collected:** 1984.
other id: W6 1707. **group:** W6. **locality:** 28km N
Diyarbakir/Bingol Road Jct., Diyarbakir province.
elevation: 900m. Wild. Seed.
- PI 545617 **donor id:** 84TK101-040.1. **origin:** Turkey. **collected:**
1984. **other id:** W6 1708. **group:** W6. **locality:** 48km N
Diyarbakir/Bingol Road Jct., Diyarbakir province.
elevation: 1000m. Wild. Seed.
- PI 545618 **donor id:** 84TK101-040.2. **origin:** Turkey. **collected:**
1984. **other id:** W6 1709. **group:** W6. **locality:** 48km N
Diyarbakir/Bingol Road Jct., Diyarbakir province.
elevation: 1000m. Wild. Seed.
- PI 545619 **donor id:** 84TK104-054. **origin:** Turkey. **collected:** 1984.
other id: W6 1710. **group:** W6. **locality:** 4km NE Dicle,
Diyarbakir province. **elevation:** 925m. Wild. Seed.

PI 545593 to 545680-continued

- PI 545620 donor id: 84TK106-060.8. origin: Turkey. collected: 1984. other id: W6 1711. group: W6. locality: 8km SW Dicle, Diyarbakir province. elevation: 950m. Wild. Seed.
- PI 545621 donor id: 84TK106-064. origin: Turkey. collected: 1984. other id: W6 1712. group: W6. locality: 8km SW Dicle, Diyarbakir province. elevation: 950m. Wild. Seed.
- PI 545622 donor id: 84TK109-082. origin: Turkey. collected: 1984. other id: W6 1713. group: W6. locality: 25km SW Diyarbakir, Diyarbakir province. elevation: 1000m. Wild. Seed.
- PI 545623 donor id: 84TK112-098. origin: Turkey. collected: 1984. other id: W6 1714. group: W6. locality: 12km SW Siverek, Urfa province. elevation: 650m. Wild. Seed.
- PI 545624 donor id: 84TK114-099. origin: Turkey. collected: 1984. other id: W6 1715. group: W6. locality: 3km N Hilvan, Urfa province. elevation: 600m. Wild. Seed.
- PI 545625 donor id: 84TK116-106.4. origin: Turkey. collected: 1984. other id: W6 1716. group: W6. locality: 8km SW Hilvan (on roadside just west of a small village), Urfa province. elevation: 625m. Wild. Seed.
- PI 545626 donor id: 84TK120-004. origin: Turkey. collected: 1984. other id: W6 1718. group: W6. locality: NW Urfa, 33km SE Bozova, Urfa province. elevation: 700m. Wild. Seed.
- PI 545627 donor id: 84TK121-008. origin: Turkey. collected: 1984. other id: W6 1719. group: W6. locality: 18km SE Bozova, Urfa province. elevation: 725m. Wild. Seed.
- PI 545628 donor id: 84TK122-009.6. origin: Turkey. collected: 1984. other id: W6 1720. group: W6. locality: 5km N Urfa, Urfa province. elevation: 600m. Wild. Seed.
- PI 545629 donor id: 84TK123-015.2. origin: Turkey. collected: 1984. other id: W6 1721. group: W6. locality: 42km NE Urfa, Urfa province. elevation: 600m. Wild. Seed.
- PI 545630 donor id: 84TK124-018. origin: Turkey. collected: 1984. other id: W6 1722. group: W6. locality: 48km NE Urfa, Urfa province. elevation: 625m. Wild. Seed.
- PI 545631 donor id: 84TK125-024. origin: Turkey. collected: 1984. other id: W6 1723. group: W6. locality: 20km W Viransehir, Urfa province. elevation: 550m. Wild. Seed.

PI 545593 to 545680-continued

- PI 545632 **donor id:** 84TK129-032. **origin:** Turkey. **collected:** 1984. **other id:** W6 1724. **group:** W6. **locality:** On Ceylanpinar State Farm, Urfa province. **elevation:** 380m. Wild. Seed.
- PI 545633 **donor id:** 84TK134-009. **origin:** Turkey. **collected:** 1984. **other id:** W6 1725. **group:** W6. **locality:** 20km SE Siveret, Urfa province. **elevation:** 450m. Wild. Seed.
- PI 545634 **donor id:** 84TK137-020.1. **origin:** Turkey. **collected:** 1984. **other id:** W6 1726. **group:** W6. **locality:** 5km N of jct Nimrud Mt. Rd (to Narince village)/Diyarbakir Hwy Jct., Adiyaman province. **elevation:** 600m. Wild. Seed.
- PI 545635 **donor id:** 84TK138-024.7. **origin:** Turkey. **collected:** 1984. **other id:** W6 1727. **group:** W6. **locality:** 9km N on Narince Rd/Diyarbakir Jct., Adiyaman province. **elevation:** 500m. Wild. Seed.
- PI 545636 **donor id:** 84TK139-025.5. **origin:** Turkey. **collected:** 1984. **other id:** W6 1728. **group:** W6. **locality:** 3km NE Narince village on Nimurt Mt. Rd., Adiyman province. **elevation:** 525m. Wild. Seed.
- PI 545637 **donor id:** 84TK141-033. **origin:** Turkey. **collected:** 1984. **other id:** W6 1730. **group:** W6. **locality:** 31km SW Golbasi, Adiyaman province. **elevation:** 750m. Wild. Seed.
- PI 545638 **donor id:** 84TK153-008. **origin:** Turkey. **collected:** 1984. **other id:** W6 1736. **group:** W6. **locality:** Bergama stop 2, Izmir province. **elevation:** 50m. Wild. Seed.
- PI 545639 **donor id:** 84TK154-005. **origin:** Turkey. **collected:** 1984. **other id:** W6 1738. **group:** W6. **locality:** Aegean Agric. Res. Inst., Izmir province. **elevation:** 30m. Wild. Seed.
- PI 545640 **donor id:** 84TK159-041. **origin:** Turkey. **collected:** 1984. **other id:** W6 1741. **group:** W6. **locality:** 25km S Sarigal (10km N Buldan Jct.), Denizli province. **elevation:** 275m. Wild. Seed.
- PI 545641 **donor id:** 84TK160-050.10. **origin:** Turkey. **collected:** 1984. **other id:** W6 1742. **group:** W6. **locality:** 13km N Buldan Jct., Denizli province. **elevation:** 385m. Wild. Seed.
- PI 545642 **donor id:** 84TK205-003. **origin:** Turkey. **collected:** 1984. **other id:** W6 1747. **group:** W6. **locality:** Burhaniye-Ayvalk Rd. Jct. (at E city limit), Balikesir province. **elevation:** 20m. Wild. Seed.

PI 545593 to 545680-continued

- PI 545643 donor id: 84TK206-001. origin: Turkey. collected: 1984.
other id: W6 1748. group: W6. locality: 6km N Ayvalik,
Balikesir province. elevation: 4m. Wild. Seed.
- PI 545644 donor id: 84TK209-008. origin: Turkey. collected: 1984.
other id: W6 1750. group: W6. locality: 9km SE Ayvacik,
Canakkale province. elevation: 420m. Wild. Seed.
- PI 545645 donor id: 84TK216-004. origin: Turkey. collected: 1984.
other id: W6 1756. group: W6. locality: 2.5km NE
Lapseki, Canakkale province. elevation: 10m. Wild.
Seed.
- PI 545646 donor id: 84TK223-005. origin: Turkey. collected: 1984.
other id: W6 1759. group: W6. locality: 18km SE Balya,
Balikesir province. elevation: 200m. Wild. Seed.
- PI 545647 donor id: 84TK226-003. origin: Turkey. collected: 1984.
other id: W6 1762. group: W6. locality: 12km SE
Bandirma, Balikesir province. elevation: 30m. Wild.
Seed.
- PI 545648 donor id: 84TK228-009. origin: Turkey. collected: 1984.
other id: W6 1763. group: W6. locality: 3km E Erdek,
Balikesir province. elevation: 15m. Wild. Seed.
- PI 545649 donor id: 84TK230-007. origin: Turkey. collected: 1984.
other id: W6 1764. group: W6. locality: 11km NW
Karacabey, Bursa province. elevation: 20m. Wild. Seed.
- PI 545650 donor id: 84TK232-001. origin: Turkey. collected: 1984.
other id: W6 1766. group: W6. locality: 1 km SW
Zeytinbagi, Bursa province. elevation: 50m. Wild.
Seed.
- PI 545651 donor id: 84TK236-001. origin: Turkey. collected: 1984.
other id: W6 1767. group: W6. locality: 1 km S Gemlik,
Bursa province. elevation: 60m. Wild. Seed.
- PI 545652 donor id: 84TK247-001. origin: Turkey. collected: 1984.
other id: W6 1770. group: W6. locality: 4km S Inegol,
Bursa province. elevation: 300m. Wild. Seed.
- PI 545653 donor id: 84TK250-006. origin: Turkey. collected: 1984.
other id: W6 1771. group: W6. locality: Eskisehr
Station (Res. Material), Eskisehr province. elevation:
785m. Wild. Seed.
- PI 545654 donor id: 84TK262-001. origin: Turkey. collected: 1984.
other id: W6 1773. group: W6. locality: Museum site at
Sogut, Bilecik province. elevation: 750m. Wild. Seed.

PI 545593 to 545680-continued

- PI 545655 donor id: 84TK271-003. origin: Turkey. collected: 1984.
other id: W6 1778. group: W6. locality: 25km SW
Kandira, Kocaeli province. elevation: 270m. Wild.
Seed.
- PI 545656 donor id: 84TK290-006. origin: Turkey. collected: 1984.
other id: W6 1779. group: W6. locality: 16km E 7 Lakes
Park, Bolu province. elevation: 200m. Wild. Seed.
- PI 545657 donor id: 84TK301-006. origin: Turkey. collected: 1984.
other id: W6 1784. group: W6. locality: 21km E
Kursunlu, Cankiri province. elevation: 860m. Wild.
Seed.
- PI 545658 donor id: 84TK318-003. origin: Turkey. collected: 1984.
other id: W6 1786. group: W6. locality: 20km W Erfelek,
Sinop province. elevation: 600m. Wild. Seed.
- PI 545659 donor id: 84TK319-006. origin: Turkey. collected: 1984.
other id: W6 1787. group: W6. locality: 19km SE
Ayancik, Sinop province. elevation: 460m. Wild. Seed.
- PI 545660 donor id: 84TK327-004. origin: Turkey. collected: 1984.
other id: W6 1789. group: W6. locality: 19km S Cankiri,
Cankiri province. elevation: 710m. Wild. Seed.
- PI 545661 donor id: 84TK329-003. origin: Turkey. collected: 1984.
other id: W6 1790. group: W6. locality: 12km NE Ankara
city limit sign, Ankara province. elevation: 900m.
Wild. Seed.
- PI 545662 donor id: 84TK352-002. origin: Turkey. collected: 1984.
other id: W6 1794. group: W6. locality: 18km N
Beysekir, Konya province. elevation: 1120m. Wild.
Seed.
- PI 545663 donor id: 84TK353-003. origin: Turkey. collected: 1984.
other id: W6 1795. group: W6. locality: 36km NE
Beysekir, 19km SW Sarkikaraagac, Konya province.
elevation: 1175m. Wild. Seed.
- PI 545664 donor id: 84TK366.1-004. origin: Turkey. collected:
1984. other id: W6 1798. group: W6. locality: 11km NE
Yesilova, Burdur province. elevation: 1310m. Wild.
Seed.
- PI 545665 donor id: 84TK367-004. origin: Turkey. collected: 1984.
other id: W6 1799. group: W6. locality: 2km S
Kizilhisar, Denizli province. elevation: 1020m. Wild.
Seed.

PI 545593 to 545680-continued

- PI 545666 **donor id:** 84TK370-001. **origin:** Turkey. **collected:** 1984.
other id: W6 1802. **group:** W6. **locality:** 58km S Izmir,
Izmir province. **elevation:** 10m. Wild. Seed.
- PI 545667 **donor id:** 84TK371-004. **origin:** Turkey. **collected:** 1984.
other id: W6 1803. **group:** W6. **locality:** Menemen
Station, Izmir province. **elevation:** 30m. Wild. Seed.
- PI 545668 **donor id:** 84TK410-001. **origin:** Turkey. **collected:** 1984.
other id: W6 1806. **group:** W6. **locality:** 3km E Kirsehir,
Kirsehir province. **elevation:** 950m. Wild. Seed.
- PI 545669 **donor id:** 84TK426-003. **origin:** Turkey. **collected:** 1984.
other id: W6 1807. **group:** W6. **locality:** 6km NE
Pinarbasi, Kayseri province. **elevation:** 1510m. Wild.
Seed.
- PI 545670 **donor id:** 84TK435-003. **origin:** Turkey. **collected:** 1984.
other id: W6 1808. **group:** W6. **locality:** 12km W/S
Malatya, Malatya province. **elevation:** 1175m. Wild.
Seed.
- PI 545671 **donor id:** 84TK504-001. **origin:** Turkey. **collected:** 1984.
other id: W6 1816. **group:** W6. **locality:** 15km SE Van,
Van province. **elevation:** 2100m. Wild. Seed.
- PI 545672 **donor id:** 84TK552-002. **origin:** Turkey. **collected:** 1984.
other id: W6 1819. **group:** W6. **locality:** 31km S
Yuksekoa toward Semdinli, Hakkari province. **elevation:**
1650m. Wild. Seed.
- PI 545673 **donor id:** 84TK558-003. **origin:** Turkey. **collected:** 1984.
other id: W6 1821. **group:** W6. **locality:** 4km NW
Semdinli, Hakkari province. **elevation:** 1625m. Wild.
Seed.
- PI 545674 **donor id:** 84TK562-003. **origin:** Turkey. **collected:** 1984.
other id: W6 1822. **group:** W6. **locality:** 14km SW
Semdinli, Hakkari province. **elevation:** 1250m. Wild.
Seed.
- PI 545675 **donor id:** 84TK582-004. **origin:** Turkey. **collected:** 1984.
other id: W6 1826. **group:** W6. **locality:** 18km S Bitlis,
Bitlis province. **elevation:** 1225m. Wild. Seed.
- PI 545676 **donor id:** 84TK605-001. **origin:** Turkey. **collected:** 1984.
other id: W6 1830. **group:** W6. **locality:** 26km W Agri,
Agri province. **elevation:** 1825m. Wild. Seed.
- PI 545677 **donor id:** 84TK607-001. **origin:** Turkey. **collected:** 1984.
other id: W6 1831. **group:** W6. **locality:** 66km W Agri,
Agri province. **elevation:** 2040m. Wild. Seed.

PI 545593 to 545680-continued

PI 545678 **donor id:** 84TK623-001. **origin:** Turkey. **collected:** 1984.
other id: W6 1832. **group:** W6. **locality:** 7km E
Tortum-Norman Jct., Erzurum province. **elevation:** 1610m.
Wild. Seed.

PI 545679 **donor id:** 84TK628-001. **origin:** Turkey. **collected:** 1984.
other id: W6 1833. **group:** W6. **locality:** 10km NE Gole,
Kars province. **elevation:** 1975m. Wild. Seed.

PI 545680 **donor id:** 84TK632-001. **origin:** Turkey. **collected:** 1984.
other id: W6 1834. **group:** W6. **locality:** 53km E. Gole,
Kars province. **elevation:** 2150m. Wild. Seed.

PI 545681. *Rhus copallina* L. ANACARDIACEAE

Donated by: University of Guelph Arboretum, Guelph, Ontario, Canada.
Received February 13, 1984.

donor id: Sample #2. **origin:** Canada. **other id:** Ames
2806. **source:** NC-7. **group:** Ames. **locality:** Growing in
sand at roadside. N. Walsingham township,
Haldimand-Norfolk Region, Ontario. **latitude:** 42 deg. 42
min. N. **longitude:** 80 deg. 34 min. W. **elevation:** 198m.
Wild. Seed.

PI 545682. *Aronia melanocarpa* (Michaux) Elliot ROSACEAE

Donated by: University of Guelph Arboretum, Guelph, Ontario, Canada.
Received February 13, 1984.

donor id: Sample #61. **origin:** Canada. **other id:** Ames
2808. **source:** NC-7. **group:** Ames. **locality:** Growing in
sand, on the edge of wet woods. Walpole Island, Lambton
County, Ontario. **latitude:** 42 deg. 37 min. N.
longitude: 82 deg. 29 min. W. **elevation:** 177m. Wild.
Seed.

PI 545683. *Staphylea bumalda* DC. STAPHYLEACEAE

Donated by: Norges Landbrukshogskole, As, Norway. Received March
07, 1984.

donor id: Sample #93. **origin:** Norway. **other id:** Ames
2885. **source:** NC-7. **group:** Ames. Cultivated. Seed.

PI 545684. *Tithonia rotundifolia* (Miller) S. F. Blake ASTERACEAE

Donated by: Hortus Botanicus Academiae Silvotechnica, Leningrad, Russian SFSR, USSR. Received June 04, 1984.

donor id: Lot #495. **origin:** USSR. **other id:** Ames 2973.
source: NC-7. **group:** Ames. Cultivated. Seed.

PI 545685. *Ampelopsis aconitifolia* var. *glabra* Diels & Gilg VITACEAE

Donated by: Hortus Botanicus Pekinensis, Beijing, China. Received July 26, 1984.

donor id: Sample #551. **origin:** China. **other id:** Ames 3019. **source:** NC-7. **group:** Ames. Cultivated. Seed.

PI 545686. *Aronia melanocarpa* (Michaux) Elliot ROSACEAE

Donated by: University of Guelph Arboretum, Guelph, Ontario, Canada. Received November 21, 1984.

origin: Canada. **other id:** Ames 3198. **source:** NC-7.
group: Ames. **locality:** Kent County, Ontario. Wild. Seed.

PI 545687. *Aronia melanocarpa* (Michaux) Elliot ROSACEAE

Donated by: W.J. Beal Botanical Garden, Michigan State University, 412 Olds Hall, East Lansing, Michigan, United States. Received March 28, 1985.

donor id: Sample #908. **origin:** United States. **other id:** 631. **source:** W.J. Beal Botanical Garden, Michigan State U., E.Lansing,MI. **other id:** Ames 4180. **source:** NC-7.
group: Ames. **other id:** Ames 8060. **source:** NC-7. **group:** Ames. **locality:** Lake shore, Kent County, Michigan. Wild. Seed.

PI 545688 to 545689. *Zinnia peruviana* (L.) L. ASTERACEAE

Donated by: Monticello, P.O. Box 316, Charlottesville, Virginia, United States. Received January 13, 1986.

PI 545688 **origin:** United States. **other id:** Ames 4834. **source:** NC-7. **group:** Ames. Cultivated. Seed.

PI 545689 **origin:** United States. **other id:** Ames 4835. **source:** NC-7. **group:** Ames. Cultivated. Seed.

PI 545690. *Gypsophila oldhamiana* Miq. CARYOPHYLLACEAE

Donated by: National Arboretum, Washington, District of Columbia, United States. **remarks:** view agrcd. Received March 31, 1986.

origin: Korea, Republic of. **other id:** Ames 5028.
source: NC-7. **group:** Ames. **locality:** Poor soil on a rocky, sunny, cut-over slope. Twaeji Kogae, Satan Dong, Kyong Gi Do, Ongjin Gun, Taechong Myon, Taechong Island.
elevation: 80m. Wild. Plant.

PI 545691. *Alcea rosea* L. MALVACEAE

Donated by: Magyar Tudomanyos Akad. Okologiaies, Botanikai Kutatointezette, Institute of Ecology & Botany of Hungary, Vacratot, Hungary. Received June 17, 1986.

donor id: Sample #1813. **origin:** Hungary. **other id:** Ames 6045. **source:** NC-7. **group:** Ames. Perennial. Cultivated. Seed.

PI 545692. *Malva verticillata* L. MALVACEAE

Donated by: Magyar Tudomanyos Akad. Okologiaies, Botanikai Kutatointezete, Institute of Ecology & Botany of Hungary, Vacratot, Hungary. Received June 17, 1986.

donor id: Sample #1827. **origin:** Hungary. **other id:** Ames 6047. **source:** NC-7. **group:** Ames. **remarks:** 1985-86 Seed Exchange. Used as salad vegetable. Annual. Cultivated. Seed.

PI 545693. *Lavatera thuringiaca* L. MALVACEAE

Donated by: Widrlechner, M., North Central Regional P.I. Station, G206 Agronomy Bldg., Iowa State University, Ames, Iowa, United States. Received September 08, 1986.

origin: Netherlands. **other id:** Ames 6104. **source:** NC-7. **group:** Ames. **locality:** City park in 't Hool development, Eindhoven. Cultivated. Seed.

PI 545694. *Calendula officinalis* L. ASTERACEAE

Donated by: Johannessen, C., University of Oregon, Eugene, Oregon, United States. Received November 10, 1986.

PI 545694-continued

origin: India. **other id:** Ames 7545. **source:** NC-7.
group: Ames. **other id:** NSL 246059. **source:** Nat. Seed
Storage Laboratory, Fort Collins, CO.. **group:** NSSL.
locality: Flower garden, National Bureau of Plant Genetic
Resources. Cultivated. Seed.

PI 545695. *Zinnia angustifolia* Kunth ASTERACEAE

Donated by: Rzedowski, J., Instituto de Ecologia, Patzcuaro,
Michoacan, Mexico; and Boyle, T., University of Massachusetts at
Amherst, Amherst, Massachusetts, United States. Received March 04,
1987.

origin: Mexico. **other id:** Ames 7726. **source:** NC-7.
group: Ames. Seed.

PI 545696. *Zinnia peruviana* (L.) L. ASTERACEAE

Donated by: Rzedowski, J., Instituto de Ecologia, Patzcuaro,
Michoacan, Mexico; and Boyle, T., University of Massachusetts at
Amherst, Amherst, Massachusetts, United States. Received March 04,
1987.

origin: Mexico. **other id:** Ames 7727. **source:** NC-7.
group: Ames. Wild. Seed.

PI 545697. *Zinnia haageana* Regel ASTERACEAE

Donated by: Botanischer Garten, der Sektion Biowissenschaften, an
der Martin-Luther-Universität, 402 Halle (S.), German Democratic
Repub. Received .

origin: German Democratic Repub. **other id:** Ames 7997.
source: NC-7. **group:** Ames. Cultivated. Seed.

PI 545698 to 545700. *Calendula officinalis* L. ASTERACEAE

Donated by: Kleiman, R., USDA-ARS, Northern Regional Research
Center, 1815 N. University St., Peoria, Illinois, United States.
Received April 07, 1988.

PI 545698 **donor id:** NU 40519. **origin:** United Kingdom. **cultivar:**
RAYS OF SUNSHINE. **other id:** Ames 8308. **source:** NC-7.
group: Ames. Annual. Cultivar. Seed.

PI 545699 **donor id:** NU 40598. **origin:** United Kingdom. **other id:**
Ames 8310. **source:** NC-7. **group:** Ames. Annual.
Cultivated. Seed.

PI 545698 to 545700-continued

PI 545700 **donor id:** NU 40632. **origin:** United States. **other id:** Ames 8311. **source:** NC-7. **group:** Ames. Annual. Seed.

PI 545701. *Calendula suffruticosa* M. Vahl ASTERACEAE

Donated by: Kleiman, R., USDA-ARS, Northern Regional Research Center, 1815 N. University St., Peoria, Illinois, United States. Received April 07, 1988.

origin: United States. **other id:** Ames 8313. **source:** NC-7. **group:** Ames. Seed.

PI 545702 to 545703. *Lavatera trimestris* L. MALVACEAE

Donated by: Widrlechner, M., North Central Regional P.I. Station, G206 Agronomy Bldg., Iowa State University, Ames, Iowa, United States. Received October 05, 1988.

PI 545702 **origin:** Poland. **other id:** Ames 8595. **source:** NC-7. **group:** Ames. **locality:** Residence of Anna Dragula, Ocieka. Cultivated. Seed.

PI 545703 **origin:** Poland. **other id:** Ames 8596. **source:** NC-7. **group:** Ames. **locality:** Hotel garden, Radzikow. Cultivated. Seed.

PI 545704. *Linum flavum* L. LINACEAE Flax

Donated by: University of Warsaw, Botanical Institute, Botanical Garden, Warsaw, Poland. Received March 21, 1989.

donor id: Sample #1083. **origin:** Poland. **other id:** Ames 10279. **source:** NC-7. **group:** Ames. Seed.

PI 545705. *Zinnia violacea* Cav. ASTERACEAE

Donated by: Boyle, T., University of Massachusetts at Amherst, Amherst, Massachusetts, United States. Received May 22, 1989.

origin: Mexico. **other id:** Ames 10329. **source:** NC-7. **group:** Ames. **remarks:** Rzedowski collection. Wild. Seed.

PI 545706. *Calendula arvensis* L. ASTERACEAE

Donated by: Ogród Botaniczny, Uniwersytetu Marii Curie-Skłodowskiej, ul. Sławinkowska 3, Lublin, Poland. Received August 21, 1989.

PI 545706-continued

donor id: Sample #381. **origin:** Poland. **other id:** Ames 10736. **source:** NC-7. **group:** Ames. Cultivated. Seed.

PI 545707 to 545708. *Calendula suffruticosa* M. Vahl ASTERACEAE

Donated by: Ogród Botaniczny, Uniwersytetu Marii Curie-Skłodowskiej, ul. Sławinkowska 3, Lublin, Poland. Received August 21, 1989.

PI 545707 **origin:** Poland. **other id:** Sample #383. **other id:** Ames 10737. **source:** NC-7. **group:** Ames. Cultivated. Seed.

PI 545708 **origin:** Poland. **other id:** Sample #384. **other id:** Ames 10738. **source:** NC-7. **group:** Ames. Cultivated. Seed.

PI 545709. *Calendula officinalis* L. ASTERACEAE

Donated by: Ogród Botaniczny, Uniwersytetu Marii Curie-Skłodowskiej, ul. Sławinkowska 3, Lublin, Poland. Received August 21, 1989.

origin: Poland. **other id:** Sample #385. **other id:** Ames 10739. **source:** NC-7. **group:** Ames. Cultivated. Seed.

PI 545710. *Duchesnea indica* (Andrews) Focke ROSACEAE

Donated by: Ballington, J.R., North Carolina State University, Raleigh, North Carolina, United States. Received .

donor id: T-99. **origin:** United States. **origin institute id:** CDUC 4. **other id:** Ames 10759. **source:** NC-7. **group:** Ames. **locality:** Clinton. **remarks:** Four plants collected. Perennial. Wild. Plant.

PI 545711 to 545747. Potato species

Donated by: Bamberg, John, Inter-Regional Potato Intro. Station, USDA-ARS, Peninsula Experiment Station, Sturgeon Bay, Wisconsin, United States. **remarks:** Potato species (*Solanum* spp.) from Mexico. Received December 03, 1983.

PI 545711 *Solanum bulbocastanum* Dunal var. *bulbocastanum*
SOLANACEAE

origin: Mexico. **collected:** October 06, 1983. **collector id:** TRHRG 149. **locality:** 8 km towards Huitziltepec from El Platanal on Hwy 95 from Chilpancingo to Mexico City. Mixed vegetation of *Quercus*, *Acacia* etc. **elevation:** 1500m. Annual. Wild. Seed.

PI 545711 to 545747-continued

- PI 545712 *Solanum hintonii* Correll SOLANACEAE
origin: Mexico. **collected:** October 15, 1982. **collector id:** TRHRG 043. **locality:** About 6.5 km towards San Pedro Teneyac from the junction with Temascaltepec-Valle de Bravo road. Among rich herbaceous vegetation in a moist habitat. With *Quercus*, *Pinus*, *Guayaha*, and low shrubs. Along an arroyo. **elevation:** 1860m. **remarks:** Leaves 14cm, 2 jugate, no interjecteds, midribs prominent, slightly pigmented. Pubescence very sparse, but more very short hairs. Annual. Wild. Tuber.
- PI 545713 *Solanum hjertingii* Hawkes SOLANACEAE
origin: Mexico. **collected:** October 13, 1983. **collector id:** TRHRG 158. **locality:** Road to Sierra Hermosa, 6.3 km along road turning off from Hwy 57 at km 29 from Saltillo. Under *Juniperus*, *Pinus* etc., in the middle of thorny shrubs and trees. **elevation:** 2200m. **remarks:** No flowers. Annual. Wild. Seed.
- PI 545714 *Solanum hjertingii* Hawkes SOLANACEAE
origin: Mexico. **collected:** October 14, 1983. **collector id:** TRHRG 160. **locality:** Los Lirios, 50 km from Saltillo on the road to Allende. 700 m S of the village go up the slope towards the woods. In a fruit garden, protected by thorny shrubs under a *Pinus*. **elevation:** 2340m. Annual. Wild. Seed.
- PI 545715 *Solanum hjertingii* Hawkes SOLANACEAE
origin: Mexico. **collected:** October 15, 1983. **collector id:** TRHRG 163. **locality:** 5 km E of San Antonio de las Alazanas, village of Efigenia. Stony roadside, protected by *Agave* and *Opuntia*. **elevation:** 2350m. Annual. Wild. Seed.
- PI 545716 *Solanum iopetalum* (Bitter) Hawkes SOLANACEAE
origin: Mexico. **collected:** October 23, 1983. **collector id:** TRHRG 183. **locality:** Road from Tehuacan to Oaxaca, turning off at Coxcatlan, 24 km towards Zoquitlan, ca. 3 km past La Griega towards Coyomeapa. **elevation:** 2640m. **remarks:** Corolla violet, rotate, to 2.5cm diameter. Chromosome # probably 48 (clumpy). Annual. Wild. Seed.
- PI 545717 *Solanum morelliforme* Bitter & Munch SOLANACEAE
origin: Mexico. **collected:** October 06, 1983. **collector id:** TRHRG 147. **locality:** Going up from Mazatlan 10 km, (19 km S of Chilpancingo), ca. 1 km below Microwave Station. Growing as an epiphyte, on a rock and on an oak tree. **elevation:** 2200m. **remarks:** Small plants, yellowish, withering. Annual. Wild. Seed.

PI 545711 to 545747-continued

- PI 545718 *Solanum morelliforme* Bitter & Munch SOLANACEAE
origin: Mexico. **collected:** October 06, 1983. **collector id:** TRHRG 148. **locality:** Going up from Mazatlan 10 km, (19 km S of Chilpancingo), ca 1 km below microwave station. **elevation:** 2200m. Annual. Wild. Seed.
- PI 545719 *Solanum morelliforme* Bitter & Munch SOLANACEAE
origin: Mexico. **collected:** October 23, 1983. **collector id:** TRHRG 176. **locality:** Road from Tehuacan to Oaxaca, turning off at Coxcatlan, 20 km towards Zoquitlan. Growing as epiphytes on old trunks of *Quercus*. **elevation:** 2640m. **remarks:** Small plants with good fruits. No flowers. Annual. Wild. Seed.
- PI 545720 *Solanum morelliforme* Bitter & Munch SOLANACEAE
origin: Mexico. **collected:** October 23, 1983. **collector id:** TRHRG 178. **locality:** Road from Tehuacan to Oaxaca, turning off at Coxcatlan, 20 km towards Zoquitlan. Growing as epiphytes on old oak trunks. **elevation:** 2640m. **remarks:** Plant to 35cm long. Annual. Wild. Seed.
- PI 545721 *Solanum oxycarpum* Schiede SOLANACEAE
origin: Mexico. **collected:** October 23, 1983. **collector id:** TRHRG 180. **locality:** Road from Tehuacan to Oaxaca, turning off at Coxcatlan, 21 km towards Zoquitlan, La Griega, where road divides to Zoquitlan and Coyomeapa. Waste place on slope down from the road to cultivated fields and woods. **elevation:** 2660m. **remarks:** Plants with flowers and fruits. Annual. Wild. Seed.
- PI 545722 *Solanum papita* Rydb. SOLANACEAE
origin: Mexico. **collected:** September 22, 1983. **collector id:** TRHRG 112. **locality:** Along the track from Huejuquilla to Santa Lucia de la Sierra, 8 km S of Las Canoas. Mountain top area with open pine-oak forest. In moss, on and below calcareous rocks, rich black soil. **elevation:** 2640m. **remarks:** Plants growing to ca 10cm. Similar to #'s 110, 111; (plants to 15cm, leaves to 4 jugate with enlarged terminals, 0 interjecteds, calyx lobes ca 2mm, acuminate, fruit globose, green with dark stripes). Collected 1 small fruit. Annual. Wild. Seed.
- PI 545723 *Solanum papita* Rydb. SOLANACEAE
origin: Mexico. **collected:** September 22, 1983. **collector id:** TRHRG 113. **locality:** Along the track from Huejuquilla to Santa Lucia de la Sierra, 2 km E of Las Canoas. Open pine-oak forest, large boulders and black soil. **elevation:** 2750m. **remarks:** Daughter tubers with purple skin, fruit small with some markings. Annual. Wild. Seed.

PI 545711 to 545747-continued

- PI 545724 *Solanum papita* Rydb. SOLANACEAE
origin: Mexico. **collected:** September 23, 1983.
collector id: TRHRG 119. **locality:** Sierra de Sombrerete,
just below the microwave tower, 8 km from San Martin.
elevation: 3000m. Annual. Wild. Seed.
- PI 545725 *Solanum papita* Rydb. SOLANACEAE
origin: Mexico. **collected:** September 24, 1983.
collector id: TRHRG 122B. **locality:** S of Durango, 36 km
along track from La Ferreria to Aserradero La Flor. Open
pine-oak woodland with sparse ground cover. **elevation:**
2420m. **remarks:** Plants 5-20 cm tall. One small fruit
(6mm):daughter tubers ca 12mm white or with some purple.
Annual. Wild. Seed.
- PI 545726 *Solanum papita* Rydb. SOLANACEAE
origin: Mexico. **collected:** September 24, 1983.
collector id: TRHRG 125. **locality:** 3 km beyond La Flor
on the track to Las Bayas. Pine-oak forest with
perennials, including lupinus. **elevation:** 2700m.
remarks: Fruits ca 10mm., verrucose. Leaflets narrow,
acute, flowers small, ca pentagonal. Plants widespread.
Annual. Wild. Seed.
- PI 545727 *Solanum papita* Rydb. SOLANACEAE
origin: Mexico. **collected:** September 24, 1983.
collector id: TRHRG 127. **locality:** 8 km beyond La Flor
on the track to Las Bayas. Oak-pine forest. In moss on
boulder in black soil and leaf mould. **elevation:**
2810m. **remarks:** Small plants, 1 fruit, globose,
verrucose, ca 5 mm. Tubers white. Annual. Wild. Seed.
- PI 545728 *Solanum papita* Rydb. SOLANACEAE
origin: Mexico. **collected:** September 24, 1983.
collector id: TRHRG 128. **locality:** S of Durango, 68 km
along the track from La Ferreria to La Flor.
Predominantly Pinus with some small oak and Juniperus.
Beside the road in gravel. **elevation:** 2680m. **remarks:**
Fruits very small, globose, glaucous. Annual. Wild.
Seed.
- PI 545729 *Solanum papita* Rydb. SOLANACEAE
origin: Mexico. **collected:** September 25, 1983.
collector id: TRHRG 130. **locality:** 25 km W of El Salto
on hwy 40 at Las Rusias microwave tower. Predominantly
pine with some oak and juniper. In black soil, gravel and
moss. **elevation:** 2730m. **remarks:** Plants to ca 7cm.
Several with a single fruit, 7mm diameter, slightly
verrucose. Calyx lobes 3mm, acuminate, green. Annual.
Wild. Seed.

PI 545711 to 545747-continued

- PI 545730 *Solanum papita* Rydb. SOLANACEAE
origin: Mexico. **collected:** September 25, 1983.
collector id: TRHRG 136. **locality:** 12 km S of El Salto on the track to La Pena. Pine forest with some juniper in a mountainous area. **elevation:** 2710m. **remarks:** One large and several smaller plants, typical of the species in this area. Annual. Wild. Seed.
- PI 545731 *Solanum papita* Rydb. SOLANACEAE
origin: Mexico. **collected:** September 25, 1983.
collector id: TRHRG 137. **locality:** 16 km S of El Salto on the track to La Pena. Pine forest with a few oaks. **elevation:** 2790m. **remarks:** Plants small, including one with a fruit. Rather narrow leaflets. Annual. Wild. Seed.
- PI 545732 *Solanum papita* Rydb. SOLANACEAE
origin: Mexico. **collected:** September 25, 1983.
collector id: TRHRG 138. **locality:** 18 km S of El Salto on the track to La Pena. Pinus with *Quercus* and *Arbutus*. Along the road in moss and rocks, in the pine woods. **elevation:** 2810m. Annual. Wild. Seed.
- PI 545733 *Solanum schenckii* Bitter SOLANACEAE
origin: Mexico. **collected:** October 24, 1983. **collector id:** TRHRG 185. **locality:** On road from Orizaba to Puebla, km 107.8 from Puebla, about 40 km from Orizaba. Growing under *Pinus*, *Agave*, and fruit trees, in-between the fields. **elevation:** 2600m. **remarks:** No flowers; fruit ovoid, yellow and green marbled. Plants to 80cm, 2 pairs of laterals. Annual. Wild. Seed.
- PI 545734 *Solanum* sp. SOLANACEAE
origin: Mexico. **collected:** October 01, 1982. **collector id:** TRHRG 018. **locality:** 8 km towards Huiziltepec from El Platanal on Hwy 95 from Chilpancingo to Mexico. Among *Quercus*, *Fraxinus*, *Acacia* and other legumes, fan palms and some bamboo. **elevation:** 1480m. **remarks:** Plants less than 15 cm. No evidence of flowering. Spnov A. Annual. Wild. Tuber.
- PI 545735 *Solanum stoloniferum* Schldl. SOLANACEAE
origin: Mexico. **collected:** October 14, 1982. **collector id:** TRHRG 042. **locality:** 12 km from Hwy 55 on road thru San Pedro Tlanisco, about 2 km SW of Tlanisco. At the bottom of a slope growing under maguey and labiate. Scattered *Quercus* and *Pinus* on the slope. **elevation:** 2700m. **remarks:** Plants mostly senescent; sparsely pubescent; 3 jugate, rare interjected. Annual. Wild. Tuber.

PI 545711 to 545747-continued

- PI 545736 *Solanum stoloniferum* Schldl. SOLANACEAE
origin: Mexico. **collected:** September 06, 1983.
collector id: TRHRG 061. **locality:** Hwy 85, Zimapan to Tamazunchale, at Las Trancas, about 4 km E along the track towards Nicolas Flores. Mountainous area. Predominantly oak with some cedar and pine. Open vegetation on forest floor, dry, in leaf litter.
elevation: 2300m. **remarks:** Plants to 45cm, Leaves coarsely pubescent, flowers stellate, pale mauve, darker on back; fruit globose, glaucous with green stripes. Annual. Wild. Seed.
- PI 545737 *Solanum stoloniferum* Schldl. SOLANACEAE
origin: Mexico. **collected:** September 07, 1983.
collector id: TRHRG 068. **locality:** Hwy 85, Zimapan to Tamazunchale, near km 143 between Maguey Verde and Pelillos. Mountainous area. Pine-oak forest, steep N facing slope beside the road. Soil reddish, gravelly and dry. **elevation:** 2200m. **remarks:** Plants to 45cm; some flowers; few fruit, round, somewhat glaucous. Few immature new tubers, mother tubers collected. Annual. Wild. Seed.
- PI 545738 *Solanum stoloniferum* Schldl. SOLANACEAE
origin: Mexico. **collected:** September 07, 1983.
collector id: TRHRG 075. **locality:** Hwy 85, Zimapan to Tamazunchale, N of Barranca los Marmoles, about 3 km E along the track to La Encarnacion. Mountainous area. In a flat field by apple trees, growing in dark brown soil.
elevation: 2440m. **remarks:** Plants 60-90cm; corolla rotate, purple; not setting fruit well. Wart-like lesions on roots (spongospora?). Annual. Wild. Seed.
- PI 545739 *Solanum stoloniferum* Schldl. SOLANACEAE
origin: Mexico. **collected:** September 09, 1983.
collector id: TRHRG 091. **locality:** From Hwy 120, Cadereyta to Jalpan, about 19 km E towards San Joaquin, then about 5 km along track to El Doctor. Mountainous oak-pine forest. Open plant community in red soil on a slope. **elevation:** 2560m. **remarks:** Flowers pentagonal, mauve, fruit green. Annual. Wild. Seed.

PI 545711 to 545747-continued

- PI 545740 *Solanum stoloniferum* Schldl. SOLANACEAE
origin: Mexico. **collected:** September 22, 1983.
collector id: TRHRG 110. **locality:** Along track from Huejuquilla to Santa Lucia de la Sierra, 30 km W of turn to San Juan Capistrano. 45 degree SE facing slope in hilly area. Pine-oak forest with red soil and a black layer of leaf mould and litter. **elevation:** 2610m.
remarks: Plants ca 15cm, leaves to 4 jugate with enlarged terminals, 0 interjecteds, calyx lobes ca 2mm, acuminate, 3 groups (A,B,C) sampled. B with 1 fruit, globose, 7mm diameter, green with few dark stripes. Annual. Wild. Seed.
- PI 545741 *Solanum tarnii* Hawkes & Hjert. SOLANACEAE
origin: Mexico. **collected:** October 08, 1982. **collector id:** TRHRG 036. **locality:** La Quebradora, on Hwy 120, 50 km from Jalpan towards San Juan del Rio. Just W of the fire observation point at the 2550 m peak. Mountainous area with Pinus and cultivations of corn and maguey. Among scrub vegetation and rocks. **elevation:** 2600m.
remarks: Plants 20-50cm. tall, glabrous, 2-3 jugate, no interjecteds, leaflets elliptic-lanceolate, laterals sessile or decurrent. Tubers 1cm in diameter, white. Annual. Wild. Tuber.
- PI 545742 *Solanum tarnii* Hawkes & Hjert. SOLANACEAE
origin: Mexico. **collected:** September 04, 1983.
collector id: TRHRG 056. **locality:** About 14 km S of Huayacocotla, near Viborillos, on road to Tulancingo. Among magueys along field border, scattered in corn and at the edge of a pine-oak forest. In brown gravelly loam. **elevation:** 2410m. **remarks:** Plants to 45cm, softly pubescent throughout, leaves 2-3jugate with 0-4 interjecteds. Flowers stellate, strongly reflexed, white, articulation at or below center. Fruit conical, collected 11 Oct. Annual. Wild. Seed.
- PI 545743 *Solanum tuberosum* subsp. *andigena* Hawkes SOLANACEAE
origin: Mexico. **collected:** September 07, 1983.
collector id: TRHRG 076. **locality:** Hwy 85, Zimapan to Tamazunchale, at Durango, near km 166. Mountainous area. In terraced fields of an old arroyo, growing among the corn, in black soil. **elevation:** 2100m. **remarks:** Yellow tubers. Annual. Wild. Seed.

PI 545711 to 545747-continued

PI 545744 *Solanum tuberosum* subsp. *andigena* Hawkes SOLANACEAE
origin: Mexico. **collected:** September 08, 1983.
collector id: TRHRG 082. **locality:** From Las Trancas on Hwy 85, Zimapan to Jacala, about 7 km E towards Nicolas Flores, then 3 km NE on the track to Puerto de Piedra. In a corn field with red soil. **elevation:** 2510m.
remarks: Cultivated potatoes with purple flowers, abundant fruit, white tubers. Annual. Wild. Seed.

PI 545745 *Solanum verrucosum* Schldl. SOLANACEAE
origin: Mexico. **collected:** September 12, 1983.
collector id: TRHRG 093. **locality:** From Doctor Arroyo to Galeana road, about 35 km NE along track to Zaragoza, just beyond Puerto el Pino. On a slope near head of a barranca in mountains. Oak forest, with open plant community in very rocky, light brown soil. **elevation:** 2600m. **remarks:** Plant to ca 1m in protected places, to ca 10cm in open, dry places. Plants varying from short styles, apparently sterile, to normal styles with globose, verrucose fruit. Annual. Wild. Seed.

PI 545746 *Solanum verrucosum* Schldl. SOLANACEAE
origin: Mexico. **collected:** September 12, 1983.
collector id: TRHRG 096. **locality:** From Doctor Arroyo to Galeana road, about 60 km NE, beyond La Encantada, on track to Zaragoza. Mountainous oak forest. Open plant community in brown, rocky, gravelly soil, below the road. **elevation:** 2160m. **remarks:** Calyx acuminate, acumens 2-3mm, fruit globose, verrose. Annual. Wild. Seed.

PI 545747 *Solanum verrucosum* Schldl. SOLANACEAE
origin: Mexico. **collected:** October 27, 1983. **collector id:** TRHRG 197. **locality:** Cerro Jocotitlan, road up to the microwave station, 8 km above the village of Jocotitlan. Open woods of *Pinus* and *Quercus*. **elevation:** 3200m. **remarks:** Plants with flowers and fruits. Annual. Wild. Seed.

PI 545748 to 545811. Potato species

Donated by: Bamberg, John, Inter-Regional Potato Intro. Station, USDA-ARS, Peninsula Experiment Station, Sturgeon Bay, Wisconsin, United States. **remarks:** Potato species (*Solanum* spp.) from Mexico. Received December 03, 1984.

PI 545748 to 545811-continued

- PI 545748 *Solanum agrimonifolium* Rydb. SOLANACEAE
origin: Mexico. **collected:** October 20, 1984. **collector id:** TRHRG 277. **locality:** Road from San Cristobal de las Casas to Cerro Zontehuitz. 9.7 km along road to microonda tower, turning off the road to Tenejapa. At roadside among *Buddleia*, *Quercus*, and *Alnus* in rich soil. **latitude:** 16 deg. 49 min.. **longitude:** 92 deg. 35 min.. **elevation:** 2750m. **remarks:** Plants to 2m with thick stems, some flowers and many pointed fruits. Annual. Wild. Seed.
- PI 545749 *Solanum agrimonifolium* Rydb. SOLANACEAE
origin: Mexico. **collected:** October 20, 1984. **collector id:** TRHRG 278. **locality:** Road from San Cristobal de las Casas to Cerro Zontehuitz. 9.8 km along road to microonda tower, turning off road to Tenejapa. At roadside among *Buddleia*, *Quercus*, and *Alnus* in rich soil. **latitude:** 16 deg. 49 min.. **longitude:** 92 deg. 35 min.. **elevation:** 2760m. **remarks:** Plants to 2m with thick stems, some flowers and many pointed fruits. Annual. Wild. Seed.
- PI 545750 *Solanum agrimonifolium* Rydb. SOLANACEAE
origin: Mexico. **collected:** October 22, 1984. **collector id:** TRHRG 280. **locality:** Road from San Cristobal de las Casas to Cerro Zontehuitz. About 10 km along road to microonda tower, turning off the road to Tenejapa. At roadside among *Buddleia*, *Quercus*, and *Alnus* in rich soil. **latitude:** 16 deg. 48 min.. **longitude:** 92 deg. 35 min.. **elevation:** 2760m. **remarks:** Plants to 2m with thick stems, some flowers, and many pointed fruits. Annual. Wild. Seed.
- PI 545751 *Solanum bulbocastanum* subsp. *dolichophyllum* (Bitter) Hawkes SOLANACEAE
origin: Mexico. **collected:** September 29, 1984. **collector id:** TRHRG 237. **locality:** Jalpa-Guadalajara Hwy 54, 16 km N of Ixtlahuacan del Rio. Cedar woodland with oak on red soil, adjacent to the road. **latitude:** 20 deg. 59 min.. **longitude:** 103 deg. 10 min.. **elevation:** 1990m. **remarks:** Plants about 2.0cm, green. Mother and daughter tubers collected. Tubers globose, to 1.3cm. Annual. Wild. Tuber.
- PI 545752 *Solanum bulbocastanum* subsp. *dolichophyllum* (Bitter) Hawkes SOLANACEAE
origin: Mexico. **collected:** October 03, 1984. **collector id:** TRHRG 244. **locality:** East of Coatepec Harinas, between San Francisco and Porfirio Diaz. Hedgerow between the road and the corn field. In brown soil. **latitude:** 18 deg. 55 min.. **longitude:** 99 deg. 43 min.. **elevation:** 2450m. **remarks:** Plants to ca 1m. Fruit green, about 15mm diameter. Annual. Wild. Seed.

- PI 545753 *Solanum cardiophyllum* subsp. *ehrenbergii* Bitter
SOLANACEAE
origin: Mexico. **collected:** September 25, 1984.
collector id: TRHRG 211. **locality:** Hwy 49 at 67 km W of Zacatecas, then 1 km N along the track to Villa de Ramos. Along an uprooted row of *Opuntia*, in light brown soil.
latitude: 22 deg. 39 min.. **longitude:** 101 deg. 57 min..
elevation: 2160m. **remarks:** Plants 10-50 cm. Flowers mostly mauve or white with pale mauve acumens; abundant fruit; globose, ca 15mm diameter, with darker green stipes; tubers round-oval to 3cm. Annual. Wild. Seed.
- PI 545754 *Solanum demissum* Lindley SOLANACEAE
origin: Mexico. **collected:** September 21, 1984.
collector id: TRHRG 198. **locality:** From Toluca-Temascaltepec, Hwy 130, along Route 3 from La Puerta towards Sultepec at 14 km, just W of the road. Slopes of Nevado de Toluca. Pine forest with some undershrubs. In black soil. **latitude:** 19 deg. 07 min..
longitude: 99 deg. 49 min.. **elevation:** 3440m.
remarks: Small rosette plants; globose green fruit rarely sufficiently mature to harvest. Annual. Wild. Seed.
- PI 545755 *Solanum demissum* Lindley SOLANACEAE
origin: Mexico. **collected:** September 21, 1984.
collector id: TRHRG 202. **locality:** From Toluca-Temascaltepec, Hwy 130, along Route 3 from La Puerta towards Sultepec at 14 km, just W of the road. Slopes of Nevado de Toluca. In short grass under pines at the bottom of slope. In black soil. **latitude:** 19 deg. 07 min..
longitude: 99 deg. 49 min.. **elevation:** 3430m.
remarks: Small rosette plants. Flowers and fruit, fruit rarely sufficiently mature for harvest. Annual. Wild. Seed.
- PI 545756 *Solanum demissum* Lindley SOLANACEAE
origin: Mexico. **collected:** September 21, 1984.
collector id: TRHRG 203. **locality:** From Toluca-Temascaltepec, Hwy 130, along Route 3 from La Puerta towards Sultepec at 18 km, and about 1 km E along the track. Slopes of Nevado de Toluca. Under *Quercus*, in black soil. **latitude:** 19 deg. 60 min..
longitude: 99 deg. 51 min.. **elevation:** 3340m. **remarks:** Abundant globose, green fruit. Annual. Wild. Seed.

PI 545748 to 545811-continued

- PI 545757 *Solanum demissum* Lindley SOLANACEAE
origin: Mexico. **collected:** September 21, 1984.
collector id: TRHRG 204A. **locality:** From Toluca-Temascaltepec, Hwy 130, along Route 3 from La Puerta towards Sultepec at 18 km and about 1 km E along the track. Forested mountain slopes of Nevado with pine and some oak. Black soil. **latitude:** 19 deg. 06 min..
longitude: 99 deg. 51 min.. **elevation:** 3340m.
remarks: Small rosette plants. Rarely flowers, no mature fruit. Annual. Wild. Seed.
- PI 545758 *Solanum demissum* Lindley SOLANACEAE
origin: Mexico. **collected:** September 21, 1984.
collector id: TRHRG 204C. **locality:** From Toluca-Temascaltepec, Hwy 130, along Route 3 from La Puerta towards Sultepec at 18 km and about 1 km E along the track. Forested mountain slopes of Nevado with pine and some oak. Black soil. **latitude:** 19 deg. 06 min..
longitude: 99 deg. 51 min.. **elevation:** 3340m.
Annual. Wild. Seed.
- PI 545759 *Solanum demissum* Lindley SOLANACEAE
origin: Mexico. **collected:** October 11, 1984. **collector id:** TRHRG 261. **locality:** Road from Teacalco to Torre Forestal, 350 m before Estacion Microondas (N slope of Volcan Malinche). At roadside among the tall grass, shaded by Pinus. **latitude:** 19 deg. 18 min..
longitude: 98 deg. 92 min.. **elevation:** 2830m. Annual. Wild. Seed.
- PI 545760 *Solanum demissum* Lindley SOLANACEAE
origin: Mexico. **collected:** October 11, 1984. **collector id:** TRHRG 264. **locality:** Cerro Malinche, N slope, 4.7 km above Campamento de Montana, which is on the road from Teacalco to Torre Forestal. Pinus woods, in tall grass on roadside. **latitude:** 19 deg. 16 min..
longitude: 98 deg. 01 min.. **elevation:** 3400m. **remarks:** Fruits ovoid, some white spotting. Annual. Wild. Seed.
- PI 545761 *Solanum demissum* Lindley SOLANACEAE
origin: Mexico. **collected:** October 11, 1984. **collector id:** TRHRG 265. **locality:** N slope of Volcan La Malinche, 2.3 km above Campamento de Montana, which is on the road from Teacalco to Torre Forestal. Growing in tall grass at roadside under big pine trees. **latitude:** 19 deg. 17 min..
longitude: 98 deg. 02 min.. **elevation:** 3180m.
Annual. Wild. Seed.

PI 545748 to 545811-continued

- PI 545762 *Solanum demissum* Lindley SOLANACEAE
origin: Mexico. **collected:** October 11, 1984. **collector id:** TRHRG 268. **locality:** Slope of Cerro Conejo, 34 km from Apizaco towards Villarreal. In deep leaf mould of oak and Abies. **latitude:** 19 deg. 29 min.. **longitude:** 97 deg. 55 min.. **elevation:** 2930m. **remarks:** Plants to 20cm, maturing. Fruits ovoid, to 17mm long. Annual. Wild. Seed.
- PI 545763 *Solanum demissum* Lindley SOLANACEAE
origin: Mexico. **collected:** October 16, 1984. **collector id:** TRHRG 271. **locality:** 21.8 km N of Ixtlan de Juarez on hwy 175 to Tuxtepec. Mature oak-pine forest. In a waste place beside the road in red soil. **latitude:** 17 deg. 28 min.. **longitude:** 96 deg. 30 min.. **elevation:** 2870m. Annual. Wild. Seed.
- PI 545764 *Solanum demissum* Lindley SOLANACEAE
origin: Mexico. **collected:** November 01, 1984. **collector id:** TRHRG 289. **locality:** Perote, grounds of Perote Experimental Station. Growing as a weed in maize fields. **latitude:** 19 deg. 34 min.. **longitude:** 97 deg. 15 min.. **elevation:** 2400m. Annual. Wild. Seed.
- PI 545765 *Solanum demissum* Lindley SOLANACEAE
origin: Mexico. **collected:** November 02, 1984. **collector id:** TRHRG 294. **locality:** Road from Puebla and Cholula to Amecameca, just past highest point (Paso de Cortes), km 22 near the border with Edo. de Puebla. Pine woods. **latitude:** 19 deg. 05 min.. **longitude:** 98 deg. 40 min.. **elevation:** 3640m. Annual. Wild. Seed.
- PI 545766 *Solanum demissum* Lindley SOLANACEAE
origin: Mexico. **collected:** November 08, 1984. **collector id:** TRHRG 302. **locality:** Road from Ixtlahuaca to Mexico City, 35.7 km along road, slope of Cerro Canada Honda. Under pines and Senecio. **latitude:** 19 deg. 32 min.. **longitude:** 99 deg. 30 min.. **elevation:** 3570m. Annual. Wild. Seed.
- PI 545767 *Solanum demissum* Lindley SOLANACEAE
origin: Mexico. **collected:** November 08, 1984. **collector id:** TRHRG 304. **locality:** 44 km along the road from Ixtlahuaca to Mexico City, slope of Cerro Canada Honda. At roadside in the shade of trees and shrubs. **latitude:** 19 deg. 31 min.. **longitude:** 99 deg. 29 min.. **elevation:** 3370m. **remarks:** Roadside in shade of trees and shrubs. Annual. Wild. Seed.

PI 545748 to 545811-continued

- PI 545768 *Solanum hjertingii* Hawkes SOLANACEAE
origin: Mexico. **collected:** September 26, 1984.
collector id: TRHRG 239. **locality:** Rancho de Sr. Arzuaga at Las Playas in Sierra Tapon de Toro, NW of Sta. Anita (SW of Saltillo). Slope with *Pinus cimbroides*. **latitude:** 25 deg. 08 min.. **longitude:** 101 deg. 36 min..
elevation: 2300m. **remarks:** Fr globose, verrucose, to 1.2cm. Calyx lobes abruptly and shortly acuminate, midrib dark green and more or less glabrous. Tubers 1.5cm, oblong, rough with purple splash. Annual. Wild. Seed.
- PI 545769 *Solanum iopetalum* (Bitter) Hawkes SOLANACEAE
origin: Mexico. **collected:** September 21, 1984.
collector id: TRHRG 206. **locality:** From Toluca-Temascaltepec, Hwy 130, along Route 3 at about 30 km, immediately before Paredones. Undisturbed fir-pine forest, close to the NW side of the road. **latitude:** 19 deg. 02 min.. **longitude:** 99 deg. 53 min.. **elevation:** 2880m. **remarks:** Plants to 75cm, fruit conical. Some plants with raised orange pustules (2-3mm di) on underside of leaves.(*puccinia pittierana* P. Henn). Annual. Wild. Seed.
- PI 545770 *Solanum iopetalum* (Bitter) Hawkes SOLANACEAE
origin: Mexico. **collected:** October 18, 1984. **collector id:** TRHRG 275. **locality:** Road from Oaxaca to Puerto Angel, Hwy 175 at El Manzanal, km 144. **latitude:** 16 deg. 08 min.. **longitude:** 96 deg. 30 min.. **elevation:** 2710m. **remarks:** Conical fruit, ca 15 x 25mm, some green, some with darker mottle. Annual. Wild. Seed.
- PI 545771 *Solanum iopetalum* (Bitter) Hawkes SOLANACEAE
origin: Mexico. **collected:** November 06, 1984. **collector id:** TRHRG 295. **locality:** From Toluca-Temascaltepec Hwy 130 along route 3 at about km 30, immediately before Paredones (about .5 km NE of Paredones). Mixed dense *Abies* and *Pinus* forest. **latitude:** 19 deg. 02 min.. **longitude:** 99 deg. 53 min.. **elevation:** 2900m. **remarks:** "Papa Juliana". Annual. Wild. Seed.
- PI 545772 *Solanum iopetalum* (Bitter) Hawkes SOLANACEAE
origin: Mexico. **collected:** November 06, 1984. **collector id:** TRHRG 296. **locality:** Road from Toluca to Sultepec, about 5 km from Paredones towards Tequisquiapan. At roadside under big shrubs. **latitude:** 19 deg. 02 min.. **longitude:** 99 deg. 55 min.. **elevation:** 2730m. Annual. Wild. Seed.

PI 545748 to 545811-continued

- PI 545773 *Solanum morelliforme* Bitter & Munch SOLANACEAE
origin: Mexico. **collected:** October 10, 1984. **collector id:** TRHRG 259. **locality:** Parque Nacionales Valle de Piedras Encimadas, 4 km above Camotepec turning off Hwy 119, Tulancingo to Zacatlan. Epiphyte on rocks shaded by Pinus trees. In deep needle mould. **latitude:** 19 deg. 01 min.. **longitude:** 98 deg. 02 min.. **elevation:** 2500m. **remarks:** Plants small, ca 5-10cm, with fruits to ca 7mm diameter. Annual. Wild. Seed.
- PI 545774 *Solanum morelliforme* Bitter & Munch SOLANACEAE
origin: Mexico. **collected:** October 22, 1984. **collector id:** TRHRG 279. **locality:** Road from San Cristobal de las Casas to Huitepec, about 3 km along road after turning from mainroad, Hwy 190. Epiphyte on oak trunk in oak and pine woods. **latitude:** 16 deg. 48 min.. **longitude:** 92 deg. 45 min.. **elevation:** 2490m. **remarks:** Small plants with fruits. Annual. Wild. Seed.
- PI 545775 *Solanum morelliforme* Bitter & Munch SOLANACEAE
origin: Mexico. **collected:** October 23, 1984. **collector id:** TRHRG 281. **locality:** Hwy 190 from San Cristobal de las Casas to Comitán, turning off to microonda tower Laguna Chamula, 2.1 km along this road. Epiphyte on fallen pine trunk in oak and pine woods. **latitude:** 16 deg. 30 min.. **longitude:** 92 deg. 19 min.. **elevation:** 2400m. Annual. Wild. Seed.
- PI 545776 *Solanum oxycarpum* Schiede SOLANACEAE
origin: Mexico. **collected:** October 16, 1984. **collector id:** TRHRG 272. **locality:** 21.8 km N of Ixtlan de Juarez on Hwy 175 to Tuxtepec. Mature oak-pine forest. In moist, red soil. Growing under shrubs and perennials. **latitude:** 17 deg. 28 min.. **longitude:** 96 deg. 30 min.. **elevation:** 2870m. **remarks:** Plants to 50cm. Abundant fruits, conical, 22mm x 15mm. Annual. Wild. Seed.
- PI 545777 *Solanum oxycarpum* Schiede SOLANACEAE
origin: Mexico. **collected:** October 31, 1984. **collector id:** TRHRG 286. **locality:** Malpais de La Joya between Perote and Jalapa, about 32 km from Perote, km 176 on route 140. Among rocks in holes in lava. **latitude:** 19 deg. 37 min.. **longitude:** 97 deg. 02 min.. **elevation:** 2200m. **remarks:** Plants with few fruits, no flowers. Annual. Wild. Seed.

PI 545748 to 545811-continued

- PI 545778 *Solanum oxycarpum* Schiede SOLANACEAE
origin: Mexico. **collected:** October 31, 1984. **collector id:** TRHRG 287. **locality:** Malpais de La Joya between Perote and Jalapa, about 32 km from Perote, km 176 on route 140. Among rocks in holes in lava. **latitude:** 19 deg. 37 min.. **longitude:** 97 deg. 02 min.. **elevation:** 2200m. **remarks:** Fruits, but no flowers. Annual. Wild. Seed.
- PI 545779 *Solanum oxycarpum* Schiede SOLANACEAE
origin: Mexico. **collected:** November 01, 1984. **collector id:** TRHRG 288. **locality:** Turning off route 140 between Perote and Las Vigas, go S from Sierra de Agua (N slope of Cerro Cofre de Perote), 14 km above Pescados, Rajas. Very humid pine woods. **latitude:** 19 deg. 33 min.. **longitude:** 97 deg. 10 min.. **elevation:** 2840m. **remarks:** Big plants with fruits; no flowers. Annual. Wild. Seed.
- PI 545780 *Solanum polytrichon* Rydb. SOLANACEAE
origin: Mexico. **collected:** September 25, 1984. **collector id:** TRHRG 212. **locality:** Hwy 49 at 67 km W of Zacatecas, then 1 km N along the track to Villa de Ramos. Along an uprooted row of *Opuntia*, in light brownish soil. **latitude:** 22 deg. 39 min.. **longitude:** 101 deg. 57 min.. **elevation:** 2160m. **remarks:** Calyx lobes acuminate; corolla stellate, lobes 10mm long, pale purple; fruit to 2cm diameter, white speckled; tubers round to irregular oblong, to 4.5cm long. Annual. Wild. Seed.
- PI 545781 *Solanum polytrichon* Rydb. SOLANACEAE
origin: Mexico. **collected:** September 26, 1984. **collector id:** TRHRG 217. **locality:** Hwy 70, about 33 km from Aguascalientes, 10.2 km along the track past Milpillas de Arriba towards Potrero los Lopez. Grassland with *Quercus*. On altiplano with rock outcrops and rocky, brown-black soil. **latitude:** 21 deg. 57 min.. **longitude:** 102 deg. 36 min.. **elevation:** 2460m. **remarks:** Fruit about 12mm diameter, green with white spots. Annual. Wild. Seed.
- PI 545782 *Solanum polytrichon* Rydb. SOLANACEAE
origin: Mexico. **collected:** September 26, 1984. **collector id:** TRHRG 218. **locality:** Hwy 70, about 33 km from Aguascalientes, 10.2 km along the track past Milpillas de Arriba towards Potrero los Lopez. Grassland with *Quercus*. On altiplano with rock outcrops and rocky brown-black soil. **latitude:** 21 deg. 57 min.. **longitude:** 102 deg. 36 min.. **elevation:** 2460m. **remarks:** Fruit globose, about 10mm diameter, white spotted. Annual. Wild. Seed.

PI 545748 to 545811-continued

- PI 545783 *Solanum polytrichon* Rydb. SOLANACEAE
origin: Mexico. **collected:** September 27, 1984.
collector id: TRHRG 226. **locality:** Hwy 70, 12 km NW of Jalpa, 18 km along the track SE towards Tlachichila. On N slopes of the sierras under *Quercus*. In black, rocky soil. **latitude:** 21 deg. 35 min.. **longitude:** 102 deg. 51 min.. **elevation:** 2460m. **remarks:** Flowers white; fruit globose, about 1.2cm diameter with white verrucose spots; calyx acuminate, with pigmented midrib. Annual. Wild. Seed.
- PI 545784 *Solanum polytrichon* Rydb. SOLANACEAE
origin: Mexico. **collected:** September 28, 1984.
collector id: TRHRG 231. **locality:** Hwy 54, 10 km SW of Jalpa, 26.3 km along the track towards Tlaltenango. Oak woodland. In dark soil among rocks at the edge of an older road. **latitude:** 21 deg. 39 min.. **longitude:** 103 deg. 08 min.. **elevation:** 2400m. **remarks:** Small plants, some with severely crinkled leaves. Fruit globose, 1-2cm diameter, with white spotting and some dark green stripes; calyx with dark midrib. Annual. Wild. Seed.
- PI 545785 *Solanum polytrichon* Rydb. SOLANACEAE
origin: Mexico. **collected:** September 28, 1984.
collector id: TRHRG 232. **locality:** Hwy 54, 10 km SW of Jalpa, 26.3 km along the track towards Tlaltenango. Oak woodland. In dark soil among rocks at the edge of an older road. **latitude:** 21 deg. 39 min.. **longitude:** 103 deg. 08 min.. **elevation:** 2400m. **remarks:** Flowers white, stellate; fruit from single plant globose, to 1.6cm diameter. Annual. Wild. Seed.
- PI 545786 *Solanum polytrichon* Rydb. SOLANACEAE
origin: Mexico. **collected:** September 28, 1984.
collector id: TRHRG 233. **locality:** Hwy 54, 10 km SW of Jalpa, 26.3 km along the track towards Tlaltenango. Oak woodland. In dark soil among rocks at the edge of an older road. **latitude:** 21 deg. 39 min.. **longitude:** 103 deg. 08 min.. **elevation:** 2400m. **remarks:** Fruit globose, with darker markings and white spots, to 1.3cm diameter; calyx with dark midrib. Annual. Wild. Seed.

PI 545748 to 545811-continued

- PI 545787 *Solanum polytrichon* Rydb. SOLANACEAE
origin: Mexico. **collected:** September 28, 1984.
collector id: TRHRG 235. **locality:** Hwy 54, 10 km SW of Jalpa, 26.3 km along the track towards Tlaltenango. Oak woodland. In soil with high organic matter. **latitude:** 21 deg. 39 min.. **longitude:** 103 deg. 08 min.. **elevation:** 2400m. **remarks:** Fruit globose to 1.4cm diameter, white spotted and some darker striping (some with galls); calyx with long acumen, dark midrib, coarse pubescence. Annual. Wild. Seed.
- PI 545788 *Solanum polytrichon* Rydb. SOLANACEAE
origin: Mexico. **collected:** September 28, 1984.
collector id: TRHRG 236. **locality:** Hwy 54, 10 km SW of Jalpa, 28.2 km along the track towards Tlaltenango. Predominantly oak, with a few pines and other tree genera. Grey calcareous rocks, dark organic soil, E facing slope. **latitude:** 21 deg. 40 min.. **longitude:** 103 deg. 09 min.. **elevation:** 2520m. **remarks:** Plants with flowers and fruit; Fruit to 1.6cm, globose, white spotting and dark striping; calyx acuminate, pubescent, dark midrib. Annual. Wild. Seed.
- PI 545789 *Solanum polytrichon* Rydb. SOLANACEAE
origin: Mexico. **collected:** November 07, 1984. **collector id:** TRHRG 297. **locality:** Hwy 57, km 154 from Mexico City, between Palmillas and San Juan del Rio, near Palma de Romero. Shady area by a stone wall under Opuntias and thorny shrubs. **latitude:** 22 deg. 00 min.. **longitude:** 99 deg. 57 min.. **elevation:** 2200m. **remarks:** Fruits verrucose. Annual. Wild. Seed.
- PI 545790 *Solanum schenckii* Bitter SOLANACEAE
origin: Mexico. **collected:** October 25, 1984. **collector id:** TRHRG 283. **locality:** About km 228 on road from Mexico City to Orizaba, 5-6 km after the Esperanza Railway station. Growing under pines, Agave, fruit trees, and in-between the fields. **latitude:** 18 deg. 51 min.. **longitude:** 97 deg. 21 min.. **elevation:** 2470m. **remarks:** Plants to 80cm with two pairs of laterals. 1 plant with flowers, mauve. (2n=72; tripolar, diads). Annual. Wild. Seed.
- PI 545791 *Solanum schenckii* Bitter SOLANACEAE
origin: Mexico. **collected:** November 02, 1984. **collector id:** TRHRG 290. **locality:** Esperanza, going 9 km SE, about 2-3 km past Boca del Monte station on road to Cumbre de Aguila (Microonda station). At roadside under thorny shrubs. **latitude:** 18 deg. 50 min.. **longitude:** 97 deg. 20 min.. **elevation:** 2470m. **remarks:** No flowers, fruits like those of *S. verrucosum*. Plants to 60-100cm tall. Annual. Wild. Seed.

- PI 545792 *Solanum* sp. SOLANACEAE
origin: Mexico. **collected:** September 27, 1984.
collector id: TRHRG 224. **locality:** Hwy 70, 12 km NW of Jalpa, 14 km along the track SE towards Tlachichila. Formerly a *Quercus* forest, now mostly *Mimosa*. In black soil. **latitude:** 21 deg. 36 min.. **longitude:** 102 deg. 51 min.. **elevation:** 2220m. **remarks:** Plant with long pubescence; corolla white, pentagonal with prominent acumens; pedicel thickening above articulation; fruit globose, ca 15mm diameter, green with white spotting; calyx 4mm with 3mm acumens. Annual. Wild. Seed.
- PI 545793 *Solanum stoloniferum* Schldl. SOLANACEAE
origin: Mexico. **collected:** September 26, 1984.
collector id: TRHRG 222. **locality:** Hwy 70, at km 49 just before Calvillo, then N thru San Isidro and 12 km N of La Labor, beyond Temascal towards La Congoja. *Quercus* woodland on a NE facing slope. Open vegetation with adjacent dense *mimosa* scrub. Soil dark. **latitude:** 22 deg. 03 min.. **longitude:** 102 deg. 44 min.. **elevation:** 2300m. **remarks:** Plant coarsely pubescent; fruit 15mm diameter, globose, green with grey mottle; calyx lobes 3mm, acuminate; tuber oblong, 4 cm. Annual. Wild. Seed.
- PI 545794 *Solanum stoloniferum* Schldl. SOLANACEAE
origin: Mexico. **collected:** October 03, 1984. **collector id:** TRHRG 240. **locality:** Toluca-Sultepec Road #3, at about 32 km take turn to Coatepec. At 2.7 km turn E following tracks 7.7 km towards El Picacho. South of Agua Bendita. E facing slope in pine forest. In black soil, by a stream with good regeneration. **latitude:** 18 deg. 57 min.. **longitude:** 99 deg. 51 min.. **elevation:** 2670m. **remarks:** Fruit globose to 13mm, green. Above articulation calyx and pedicel sparsely pubescent. Calyx shortly acuminate. Annual. Wild. Seed.
- PI 545795 *Solanum stoloniferum* Schldl. SOLANACEAE
origin: Mexico. **collected:** October 03, 1984. **collector id:** TRHRG 241. **locality:** Toluca-Sultepec Road #3, at about 32 km take turn to Coatepec. At 2.7 km turn E following track 7.7 km towards El Picacho. South of Agua Bendita. E facing slope in pine forest. Under *Baccharis* shrub in black soil near stream. **latitude:** 18 deg. 57 min.. **longitude:** 99 deg. 51 min.. **elevation:** 2670m. **remarks:** Fruit globose to 13mm, green. Annual. Wild. Seed.

PI 545748 to 545811-continued

- PI 545796 *Solanum stoloniferum* Schldl. SOLANACEAE
origin: Mexico. **collected:** October 03, 1984. **collector id:** TRHRG 243. **locality:** Toluca-Sultepec Road #3, take turn at about 32 km to Coatepec. At 2.7 km turn E following track 10.5 km to El Picacho. Under Pinus and other trees between the track and corn field. **latitude:** 18 deg. 56 min.. **longitude:** 99 deg. 49 min.. **elevation:** 2630m. **remarks:** Fruit globose to ca 13mm, green; above pedicel articulation sparsely pubescent; calyx lobes sharply acuminate, acumens about 2.5mm. Annual. Wild. Seed.
- PI 545797 *Solanum stoloniferum* Schldl. SOLANACEAE
origin: Mexico. **collected:** October 03, 1984. **collector id:** TRHRG 245. **locality:** East of Coatepec Harinas, between San Francisco and Porfirio Diaz. Under Prunus capulin at the corner of the corn field. **latitude:** 18 deg. 55 min.. **longitude:** 99 deg. 43 min.. **elevation:** 2460m. **remarks:** Fruit globose, green to about 13mm. Mother tuber collected. Annual. Wild. Seed.
- PI 545798 *Solanum stoloniferum* Schldl. SOLANACEAE
origin: Mexico. **collected:** October 04, 1984. **collector id:** TRHRG 247. **locality:** Along Hwy 142 from Oaxtepec to Xochimilco, 2.5 km N of Morelos-Mexico state boundary. Hedgerow between the track and the fields. In black soil. **latitude:** 19 deg. 04 min.. **longitude:** 98 deg. 55 min.. **elevation:** 2680m. **remarks:** Fruit globose, green, to 16mm. Annual. Wild. Seed.
- PI 545799 *Solanum stoloniferum* Schldl. SOLANACEAE
origin: Mexico. **collected:** October 04, 1984. **collector id:** TRHRG 248. **locality:** Along Hwy 142 from Oaxtepec to Xochimilco, 2.5 km N of Morelos-Mexico state boundary. Hedgerow between the track and the fields. In black soil. **latitude:** 19 deg. 04 min.. **longitude:** 98 deg. 55 min.. **elevation:** 2680m. **remarks:** Fruit globose, green, to 16mm. Annual. Wild. Seed.
- PI 545800 *Solanum stoloniferum* Schldl. SOLANACEAE
origin: Mexico. **collected:** October 04, 1984. **collector id:** TRHRG 250. **locality:** Along Hwy 142 from Oaxtepec to Xochimilco, 6.1 km N of Morelos-Mexico state boundary, 3 km W towards CICITEC and 1 km along track. Under Quercus and Pinus. **latitude:** 19 deg. 06 min.. **longitude:** 98 deg. 57 min.. **elevation:** 2930m. **remarks:** Fruit globose, green (non-verrucose), about 14mm; calyx partly pigmented, acumens 2-3mm with short pubescence. (250B, 2n=48). Annual. Wild. Seed.

PI 545748 to 545811-continued

- PI 545801 *Solanum stoloniferum* Schldl. SOLANACEAE
origin: Mexico. **collected:** October 04, 1984. **collector id:** TRHRG 250B. **locality:** Along Hwy 142 from Oaxtepec to Xochimilco, 6.1 km N of Morelos-Mexico state boundary, 3 km W towards CICITEC and 1 km along track. Under *Quercus* and *Pinus*. **latitude:** 19 deg. 06 min.. **longitude:** 98 deg. 57 min.. **elevation:** 2930m. **remarks:** Fruit globose, green (non-verrucose), about 14mm; calyx partly pigmented, acuments 2-3mm with short pubescence. (250B, 2n=48). Annual. Wild. Seed.
- PI 545802 *Solanum stoloniferum* Schldl. SOLANACEAE
origin: Mexico. **collected:** October 04, 1984. **collector id:** TRHRG 254. **locality:** Along Hwy 142 from Oaxtepec to Xochimilco, 6.1 km N of Morelos-Mexico state boundary, 3 km W towards CICITEC and 1 km along track. Under *Quercus* and *Pinus*. **latitude:** 19 deg. 06 min.. **longitude:** 98 deg. 57 min.. **elevation:** 2930m. **remarks:** Corolla pentagonal, very pale blue; fruit globose, green. Annual. Wild. Seed.
- PI 545803 *Solanum stoloniferum* Schldl. SOLANACEAE
origin: Mexico. **collected:** October 18, 1984. **collector id:** TRHRG 273. **locality:** Hwy 175 to Puerto Angel, 22.6 km S of Miahuatlan. In red soil on a steep slope, in a waste place. **latitude:** 16 deg. 12 min.. **longitude:** 96 deg. 32 min.. **elevation:** 2380m. **remarks:** Fruit to 15mm, green with some pigmented stripes. Tubers to 4.5cm, flat oval, white skin. Annual. Wild. Seed.
- PI 545804 *Solanum stoloniferum* Schldl. SOLANACEAE
origin: Mexico. **collected:** November 02, 1984. **collector id:** TRHRG 293. **locality:** Road from Puebla and Cholula to Amecameca, between Volcan Iztaccihuatl and Volcan Popocatepetl, about 3.3 km from Cholula. At roadside under pines and shrubs. **latitude:** 19 deg. 05 min.. **longitude:** 98 deg. 32 min.. **elevation:** 3040m. Annual. Wild. Seed.
- PI 545805 *Solanum stoloniferum* Schldl. SOLANACEAE
origin: Mexico. **collected:** November 07, 1984. **collector id:** TRHRG 298. **locality:** Hwy 57, km 154 from Mexico City, between Palmillas and San Juan del Rio, near Palma de Romero. Shady area by a stone wall under *Opuntias* and thorny shrubs. **latitude:** 20 deg. 00 min.. **longitude:** 99 deg. 57 min.. **elevation:** 2200m. **remarks:** Fruits globose, big for CPH; 1 small fruit. Annual. Wild. Seed.

PI 545748 to 545811-continued

- PI 545806 *Solanum stoloniferum* Schldl. SOLANACEAE
origin: Mexico. **collected:** November 07, 1984. **collector id:** TRHRG 299. **locality:** Cerro El Zamorano, going up from Carboneras on road from Colon towards the W, 21.6 km from turning at Carboneras. Growing in the shade of big oaks and shrubs. **latitude:** 20 deg. 56 min.. **longitude:** 100 deg. 12 min.. **elevation:** 2820m. **remarks:** Fruits spherical, quite big for *S. cardiophyllum*. Annual. Wild. Seed.
- PI 545807 *Solanum stoloniferum* Schldl. SOLANACEAE
origin: Mexico. **collected:** November 08, 1984. **collector id:** TRHRG 301. **locality:** Route 55 from Queretaro to Toluca, 2.2 km NW of Acambay, near Dongu. At roadside under shrubs. **latitude:** 19 deg. 58 min.. **longitude:** 99 deg. 52 min.. **elevation:** 2650m. Annual. Wild. Seed.
- PI 545808 *Solanum tarnii* Hawkes & Hjert. SOLANACEAE
origin: Mexico. **collected:** October 09, 1984. **collector id:** TRHRG 257. **locality:** Turning off Hwy 85 (Zimapan/Jacala) at Las Trancas, go 6.4 km along road towards Nicolas Flores. Open roadside slope in Pinus woods among big stones. With *Salvia* and other herbs. **latitude:** 20 deg. 48 min.. **longitude:** 99 deg. 14 min.. **elevation:** 2440m. **remarks:** Plants up to 1m. Fruit ovoid, to 20mm long with white spotting and darker green stripes. Annual. Wild. Seed.
- PI 545809 *Solanum vallis-mexici* Juz. ex Buk. SOLANACEAE
origin: Mexico. **collected:** October 04, 1984. **collector id:** TRHRG 249. **locality:** Along Hwy 142 from Oaxtepec to Xochimilco, 6.1 km N of Morelos-Mexico state boundary, 3 km W towards CICITEC and 1 km along track. Under *Quercus* and *Pinus*. **latitude:** 19 deg. 06 min.. **longitude:** 98 deg. 57 min.. **elevation:** 2930m. **remarks:** Plants to about 100cm, past flowering but only small fruit to 7mm, globose, white verrucose, empty and sterile. Calyx acumens ca 3.0mm, pigmented, sparsely pubescent. Annual. Wild. Seed.
- PI 545810 *Solanum verrucosum* Schldl. SOLANACEAE
origin: Mexico. **collected:** September 21, 1984. **collector id:** TRHRG 199. **locality:** From Toluca-Temascaltepec, Hwy 130, along Route 3 from La Puerta towards Sultepec at 14 km, just W of the road. Slopes of Nevado de Toluca. Pine forest with some undershrubs. In black soil. **latitude:** 19 deg. 07 min.. **longitude:** 99 deg. 49 min.. **elevation:** 3440m. **remarks:** Plants with verrucose fruit. Annual. Wild. Seed.

PI 545748 to 545811-continued

PI 545811 *Solanum verrucosum* Schldl. SOLANACEAE
origin: Mexico. **collected:** October 04, 1984. **collector id:** TRHRG 251. **locality:** Along Hwy 142 from Oaxtepec to Xochimilco, 6.1 km N of Morelos-Mexico state boundary, 3 km W towards CICITEC and 1 km along track. Under *Quercus* and *Pinus*. **latitude:** 19 deg. 06 min.. **longitude:** 98 deg. 57 min.. **elevation:** 2930m. **remarks:** Plants with large (about 17mm diam) verrucose fruit. Annual. Wild. Seed.

PI 545812 to 545836. Potato species

Donated by: Bamberg, John, Inter-Regional Potato Intro. Station, USDA-ARS, Peninsula Experiment Station, Sturgeon Bay, Wisconsin, United States. **remarks:** Potato species (*Solanum* spp.) from Mexico. Received August 05, 1986.

PI 545812 *Solanum brachistotrichum* (Bitter) Rydb. SOLANACEAE
origin: Mexico. **collected:** September 25, 1984.
collector id: TRHRG 208. **locality:** From Rincon de Romos on hwy 45, 30 km along the track towards El Chiquihuitillo. Rancho Tierra Colorada. Hilly, dry rangeland. In a valley with scattered small oaks, *Mimosa* shrubs and *Opuntia*. **latitude:** 22 deg. 19 min.. **longitude:** 102 deg. 27 min.. **elevation:** 2420m. Annual. Wild. Tuber.

PI 545813 *Solanum brachistotrichum* (Bitter) Rydb. SOLANACEAE
origin: Mexico. **collected:** September 26, 1984.
collector id: TRHRG 213. **locality:** Hwy 70 about 33 km from Aguascalientes, 8.2 km along the track past Milpillas de Arriba towards Potrero. E facing slope with *Mimosa*, *Opuntia* and *Quercus*. In dark brown soil. **latitude:** 21 deg. 57 min.. **longitude:** 102 deg. 35 min.. **elevation:** 2320m. **remarks:** Daughter tubers to 2 cm. Annual. Wild. Seed.

PI 545814 *Solanum brachistotrichum* (Bitter) Rydb. SOLANACEAE
origin: Mexico. **collected:** September 26, 1984.
collector id: TRHRG 214. **locality:** Hwy 70 about 33 km from Aguascalientes, 8.2 km along the track past Milpillas de Arriba towards Potrero. E facing slope with *Mimosa*, *Opuntis*, and *Quercus*. In dark brown soil. **latitude:** 21 deg. 57 min.. **longitude:** 102 deg. 35 min.. **elevation:** 2320m. **remarks:** Tubers to 2.5cm, flat. Annual. Wild. Seed.

PI 545812 to 545836-continued

- PI 545815 *Solanum brachistotrichum* (Bitter) Rydb. SOLANACEAE
origin: Mexico. **collected:** September 26, 1984.
collector id: TRHRG 215. **locality:** Hwy 70, about 33 km
from Aguascalientes, 8.2 km along the track past
Milpillas de Arriba towards Potrero. E facing slope with
Mimosa, Opuntia and Quercus. In dark brown soil.
latitude: 21 deg. 57 min.. **longitude:** 102 deg. 35 min..
elevation: 2310m. **remarks:** Small plant with trifoliolate
leaves; daughter tuber round, about 1cm. Annual. Wild.
Tuber.
- PI 545816 *Solanum brachistotrichum* (Bitter) Rydb. SOLANACEAE
origin: Mexico. **collected:** September 26, 1984.
collector id: TRHRG 219. **locality:** Hwy 70, about 33 km
from Aguascalientes, 10.2 km along the track past
Milpillas de Arriba towards Potrero los Lopez. On an
altiplano, in rich, dark earth and leaf mould, under
Quercus. **latitude:** 21 deg. 57 min.. **longitude:** 102
deg. 36 min.. **elevation:** 2460m. **remarks:** Tuber about
15mm diameter, round. Annual. Wild. Tuber.
- PI 545817 *Solanum brachistotrichum* (Bitter) Rydb. SOLANACEAE
origin: Mexico. **collected:** September 26, 1984.
collector id: TRHRG 223. **locality:** Hwy 70, at km 49 just
before Calvillo, then N thru San Isidro and 12 km N of La
Labor, beyond Temascal towards La Congoja. On E facing
slope under Quercus, by rocks and cactus. Soil black.
latitude: 22 deg. 03 min.. **longitude:** 102 deg. 44 min..
elevation: 2300m. **remarks:** Round daughter tuber about
17mm diameter. Annual. Wild. Tuber.
- PI 545818 *Solanum bulbocastanum* subsp. *dolichophyllum* (Bitter)
Hawkes SOLANACEAE
origin: Mexico. **collected:** September 29, 1984.
collector id: TRHRG 238. **locality:** Jalpa-Guadalajara hwy
54, 16 km N of Ixtlahuacan del Rio. Oak-cedar (Thuja)
woodland on red soil. **latitude:** 20 deg. 59 min..
longitude: 103 deg. 10 min.. **elevation:** 1990m.
remarks: Tubers round-oblong to 1.5cm. Annual. Wild.
Tuber.
- PI 545819 *Solanum bulbocastanum* Dunal var. *bulbocastanum*
SOLANACEAE
origin: Mexico. **collected:** September 28, 1984.
collector id: TRHRG 229B. **locality:** Hwy 54, 10 km SW of
Jalpa, 20.2 km along the track towards Tlaltenango. Mixed
woodland of Quercus and other species. In dark soil with
leaf mould. **latitude:** 21 deg. 38 min.. **longitude:** 103
deg. 06 min.. **elevation:** 2160m. **remarks:** Small plant
with no flower or fruit; tubers to about 1.5 cm. Annual.
Wild. Tuber.

PI 545812 to 545836-continued

- PI 545820 *Solanum cardiophyllum* Lindley SOLANACEAE
origin: Mexico. **collected:** September 28, 1984.
collector id: TRHRG 234A. **locality:** Hwy 54, 10 km SW of Jalpa, 26.3 km along the track towards Tlaltenango. Oak woodland. Among rocks under the shade of a *Quercus* in dark soil. **latitude:** 21 deg. 39 min.. **longitude:** 103 deg. 08 min.. **elevation:** 2400m. **remarks:** Short pubescence and small brachistotrichum-like hairs; calyx lobes 4mm with 2mm acuminate; corolla lobes to 19mm, white with some mauve on back; anther 7mm, style 13mm; no fruit; tubers globose, flattened, 2.5cm diameter. Annual. Wild. Tuber.
- PI 545821 *Solanum cardiophyllum* Lindley SOLANACEAE
origin: Mexico. **collected:** September 28, 1984.
collector id: TRHRG 234B. **locality:** Hwy 54, 10 km SW of Jalpa, 26.3 km along the track toward Tlaltenango. Oak woodland. Among rocks below an older road. In dark soil. **latitude:** 21 deg. 39 min.. **longitude:** 103 deg. 08 min.. **elevation:** 2400m. **remarks:** Short pubescence and small brachistotrichum-like hairs; calyx lobes 4mm with 2mm acuminate; corolla lobes to 19mm, white with some mauve on back; anther 7mm, style 13mm; no fruit; tubers globose, flattened, to 2.5cm diameter. Annual. Wild. Tuber.
- PI 545822 *Solanum cardiophyllum* subsp. *ehrenbergii* Bitter
SOLANACEAE
origin: Mexico. **collected:** September 27, 1984.
collector id: TRHRG 227A. **locality:** Hwy 70, 12 km NW of Jalpa, 0.5 km beyond Tlachichila towards Sta. Gertrudis. Flat top of sierras. Along a rock wall between the track and the fields. In red soil. **latitude:** 21 deg. 33 min.. **longitude:** 102 deg. 46 min.. **elevation:** 2260m. **remarks:** Leaves thick, leathery; flowers stellate, white; no fruit. Tuber globose to 2.5cm diameter. Annual. Wild. Tuber.
- PI 545823 *Solanum cardiophyllum* subsp. *ehrenbergii* Bitter
SOLANACEAE
origin: Mexico. **collected:** September 27, 1984.
collector id: TRHRG 227B. **locality:** Hwy 70, 12 km NW of Jalpa, 0.5 km beyond Tlachichila towards Sta. Gertrudis. Flat top of sierras. Along a rock wall between the track and the field. In red soil. **latitude:** 21 deg. 33 min.. **longitude:** 102 deg. 46 min.. **elevation:** 2260m. **remarks:** Leaves thick, leathery; flowers stellate, white; no fruit. Tuber globose to 2.5cm diameter. Annual. Wild. Tuber.

PI 545812 to 545836-continued

- PI 545824 *Solanum cardiophyllum* subsp. *ehrenbergii* Bitter
SOLANACEAE
origin: Mexico. **collected:** September 28, 1984.
collector id: TRHRG 228. **locality:** Hwy 54, 10 km SW of Jalpa, 20.2 km along the track towards Tlaltenango. In mixed woodland of *Quercus* and other species. In dark soil with leaf mould. **latitude:** 21 deg. 38 min.. **longitude:** 103 deg. 06 min.. **elevation:** 2160m. **remarks:** Leaves simple, dark green, a lower leaf trifid with decurrent laterals; daughter tuber about 1.2cm diameter. Annual. Wild. Tuber.
- PI 545825 *Solanum nayaritense* (Bitter) Rydb. SOLANACEAE
origin: Mexico. **collected:** September 27, 1984.
collector id: TRHRG 225. **locality:** Hwy 70, 12 km NW of Jalpa, 18 km along the track SE towards Tlachichila. In a *Quercus* woodland. In open ground between rocks. **latitude:** 21 deg. 35 min.. **longitude:** 102 deg. 51 min.. **elevation:** 2460m. **remarks:** Plant about 10cm; leaf 3.5cm long, terminal leaflet 2.5 x 1.0cm, 1 pair decurrent laterals; tuber 1cm diameter. Most similar to *S. brachistotrichum* types. Annual. Wild. Tuber.
- PI 545826 *Solanum nayaritense* (Bitter) Rydb. SOLANACEAE
origin: Mexico. **collected:** October 09, 1984. **collector id:** TRHRG 270. **locality:** Near Sta. Anita, about 1.5 km NE of Sta. Teresa. In red soil. Rare weed mixed with many composites in corn field meseta. **latitude:** 22 deg. 30 min.. **longitude:** 104 deg. 46 min.. **elevation:** 2180m. **remarks:** Several plants with cream, stellate flowers, none setting fruit. Stolons thick, to 50cm long. Tubers to 3cm, round, flat, white skin. Annual. Wild. Seed.
- PI 545827 *Solanum nayaritense* (Bitter) Rydb. SOLANACEAE
origin: Mexico. **collected:** October 09, 1984. **collector id:** TRHRG 270A. **locality:** Near Sta. Anita, about 1.5 km NE of Sta. Teresa. In red soil. Rare weed mixed with many composites in corn field meseta. **latitude:** 22 deg. 30 min.. **longitude:** 104 deg. 46 min.. **elevation:** 2180m. **remarks:** Several plants with cream, stellate flowers, none setting fruit. Stolons thick, to 50cm long. Tubers to 3cm, round, flat, white skin. Annual. Wild. Tuber.
- PI 545828 *Solanum nayaritense* (Bitter) Rydb. SOLANACEAE
origin: Mexico. **collected:** October 09, 1984. **collector id:** TRHRG 270B. **locality:** Near Sta. Anita, about 1.5 km NE of Sta. Teresa. In red soil. Rare weed mixed with many composites in corn field meseta. **latitude:** 22 deg. 30 min.. **longitude:** 104 deg. 46 min.. **elevation:** 2180m. **remarks:** Several plants with cream, stellate flowers, none setting fruit. Stolons thick, to 50cm long. Tubers to 3cm, round, flat, white skin. Annual. Wild. Tuber.

PI 545812 to 545836-continued

- PI 545829 *Solanum semidemissum* Buk. SOLANACEAE
origin: Mexico. **collected:** October 11, 1984. **collector id:** TRHRG 266. **locality:** Slope of Cerro Conejo, about 40 km from Apizaco towards Villarreal. Growing under big pine trees in a stone wall. **latitude:** 19 deg. 30 min.. **longitude:** 97 deg. 55 min.. **elevation:** 3020m. **remarks:** Tubers lavender, small. Annual. Wild. Tuber.
- PI 545830 *Solanum* sp. SOLANACEAE
origin: Mexico. **collected:** October 18, 1984. **collector id:** TRHRG 274. **locality:** Hwy 175 to Puerto Angel, 22.6 km S of Miahuatlan. Scrub oak, ferns and tussock grass. **latitude:** 16 deg. 12 min.. **longitude:** 96 deg. 32 min.. **elevation:** 2380m. **remarks:** Plants to 25cm. Tuber compressed, flat, to 2cm diameter. Annual. Wild. Seed.
- PI 545831 *Solanum* sp. SOLANACEAE
origin: Mexico. **collected:** October 18, 1984. **collector id:** TRHRG 276. **locality:** Road from Oaxaca to Puerto Angel, Hwy 175, 2 km from S. Jose Pacifico towards La Fabrica. White calcareous rocks, black soil. Oaks and pines cut over. **latitude:** 16 deg. 10 min.. **longitude:** 96 deg. 29 min.. **elevation:** 2610m. **remarks:** Small mature plants and seedlings. Collected herb, tubers. Annual. Wild. Seed.
- PI 545832 *Solanum stenophyllidium* Bitter SOLANACEAE
origin: Mexico. **collected:** September 25, 1984. **collector id:** TRHRG 207. **locality:** From Rincon de Romos on Hwy 45, 30 km along the track towards El Chiquihuitillo. Rancho Tierra Colorada. Hilly, dry rangeland. In a valley with scattered small *Quercus*, *Mimosa* shrubs and *Opuntia*. Dark soil and leaf mould. **latitude:** 22 deg. 19 min.. **longitude:** 102 deg. 27 min.. **elevation:** 2420m. **remarks:** Plants to 50cm. Several flowered but none set fruit. Annual. Wild. Tuber.
- PI 545833 *Solanum stoloniferum* Schldl. SOLANACEAE
origin: Mexico. **collected:** October 04, 1984. **collector id:** TRHRG 252A. **locality:** Along Hwy 142 from Oaxtepec to Xochimilco, 6.1 km N of Morelos-Mexico state boundary, 3 km W towards CICITEC and 1 km along track. Predominantly *Pinus*, some *Quercus*, and among tussock grass. **latitude:** 19 deg. 06 min.. **longitude:** 98 deg. 57 min.. **elevation:** 2930m. **remarks:** Plants to ca 60cm, mostly mature; flowers dropping but no fruit; corolla pale purple, rotate; anthers orange and appear fertile. Annual. Wild. Tuber.

PI 545812 to 545836-continued

- PI 545834 *Solanum stoloniferum* Schldl. SOLANACEAE
origin: Mexico. **collected:** October 11, 1984. **collector id:** TRHRG 262. **locality:** Road from Teacalco to Torre Forestal, 350 m before Estacion Microondas (N slope of Volcan Malinche). At roadside among the tall grass, shaded by Pinus. **latitude:** 19 deg. 18 min.. **longitude:** 98 deg. 92 min.. **elevation:** 2830m. **remarks:** Small plants without flowers or fruits. Annual. Wild. Seed.
- PI 545835 *Solanum stoloniferum* Schldl. SOLANACEAE
origin: Mexico. **collected:** November 30, 1984. **collector id:** TRHRG 284. **locality:** Route 129 from Puebla to Teziutlan, S of Zaragoza, turn WNW towards Jilotepec and "Cerro Tres Cabezas", 6 km along road from pavement. Humid roadside, near pine and oak woods. **remarks:** No flowers or fruits. Annual. Wild. Tuber.
- PI 545836 *Solanum tuberosum* L. var. *tuberosum* SOLANACEAE
origin: Mexico. **collected:** October 11, 1984. **collector id:** TRHRG 267. **locality:** Slope of Cerro Conejo, about 40 km from Apizaco towards Villarreal. Growing under big pine trees in a stone wall. **latitude:** 19 deg. 30 min.. **longitude:** 97 deg. 55 min.. **elevation:** 3020m. **remarks:** Tubers fairly big, yellow. Annual. Wild. Tuber.

PI 545837 to 545930. Potato species

Donated by: Bamberg, John, Inter-Regional Potato Intro. Station, USDA-ARS, Peninsula Experiment Station, Sturgeon Bay, Wisconsin, United States. **remarks:** Potato species (*Solanum* spp.) from Bolivia. Received April 28, 1986.

- PI 545837 *Solanum acaule* Bitter subsp. *acaule* SOLANACEAE
origin: Bolivia. **collected:** March 01, 1986. **collector id:** HAO 013. **locality:** Prov. Ayopaya. 9 km from Kami on the road to Challa. Inside ruins of stone buildings now used as corrals for sheep. **latitude:** 17 deg. 25 min.. **longitude:** 66 deg. 50 min.. **elevation:** 3740m. Annual. Wild. Seed.
- PI 545838 *Solanum acaule* Bitter subsp. *acaule* SOLANACEAE
origin: Bolivia. **collected:** March 18, 1986. **collector id:** HAO 098. **locality:** Prov. Mendez. 2 km from Iscayachi on the road to Tarija. Near the river crossing. In open ground and edge of cultivated fields. **latitude:** 21 deg. 27 min.. **longitude:** 64 deg. 59 min.. **elevation:** 3400m. Annual. Wild. Seed.

PI 545837 to 545930-continued

- PI 545839 *Solanum acaule* Bitter subsp. *acaule* SOLANACEAE
origin: Bolivia. **collected:** March 19, 1986. **collector**
id: HAO 100. **locality:** Prov. Aviles. Chorcoya Mendez. 11
km from Iscayachi on road to Villazon. On and near stone
wall at edge of cultivated field. **latitude:** 21 deg. 34
min.. **longitude:** 65 deg. 02 min.. **elevation:** 3540m.
Annual. Wild. Seed.
- PI 545840 *Solanum acaule* Bitter subsp. *acaule* SOLANACEAE
origin: Bolivia. **collected:** March 19, 1986. **collector**
id: HAO 104. **locality:** Prov. Aviles. 52 km from
Iscayachi on the road to Villazon. Under muna muna bushes
in narrow ravine. **latitude:** 21 deg. 47 min.. **longitude:**
65 deg. 08 min.. **elevation:** 3720m. Annual. Wild.
Seed.
- PI 545841 *Solanum acaule* Bitter subsp. *acaule* SOLANACEAE
origin: Bolivia. **collected:** March 21, 1986. **collector**
id: HAO 116. **locality:** Prov. Sud Chicas or Nor Chicas.
Rio Blanco. 39-40 km from Tupiza checkpoint on road to
Cotagaita. About 350 m from road. Growing along a stream
bed. **latitude:** 21 deg. 08 min.. **longitude:** 65 deg. 48
min.. **elevation:** 3220m. **remarks:** Plants found by boys
from Rio Blanco. Annual. Wild. Seed.
- PI 545842 *Solanum acaule* Bitter subsp. *acaule* SOLANACEAE
origin: Bolivia. **collected:** March 22, 1986. **collector**
id: HAO 122. **locality:** Prov. Frias. 6 km from checkpoint
leaving Potosi on way to Sucre. Karachi Pampa. On stream
bank in damp, sandy soil. **latitude:** 19 deg. 32 min..
longitude: 65 deg. 44 min.. **elevation:** 3900m. Annual.
Wild. Seed.
- PI 545843 *Solanum acaule* Bitter subsp. *acaule* SOLANACEAE
origin: Bolivia. **collected:** April 02, 1986. **collector**
id: HAO 166. **locality:** Prov. Zudanez or Jaime Mendoza.
Corralon Mayu, the Sheep Improvement Station of the
Regional Development Corporation for Chuquisaca
(CORDECH). 68 km from Tarabuco on road to Azurduy. On
edge of sheep pastures. **latitude:** 19 deg. 27 min..
longitude: 64 deg. 44 min.. **elevation:** 3540m. Annual.
Wild. Seed.
- PI 545844 *Solanum alandiae* Cardenas SOLANACEAE
origin: Bolivia. **collected:** March 06, 1986. **collector**
id: HAO 025. **locality:** Prov. Mizque. 44 km from Epizana
on road to Sucre. Three km before village of Oyadas, 13
km before the crossing of the Rio Mizque, on the lower
side of road. On very steep slope with loose stones.
latitude: 17 deg. 54 min.. **longitude:** 65 deg. 06 min..
elevation: 2500m. Annual. Wild. Seed.

PI 545837 to 545930-continued

- PI 545845 *Solanum alandiae* Cardenas SOLANACEAE
origin: Bolivia. **collected:** March 06, 1986. **collector id:** HAO 028. **locality:** Prov. Campero. From Aiquile, start towards Epizana, turn right just outside of town towards Omereque. 2 km beyond this junction. On lower side of the road. Among stones, cactus, and thorny shrubs. **latitude:** 18 deg. 09 min.. **longitude:** 65 deg. 09 min.. **elevation:** 2300m. Annual. Wild. Seed.
- PI 545846 *Solanum arnezii* Cardenas SOLANACEAE
origin: Bolivia. **collected:** April 01, 1986. **collector id:** HAO 154. **locality:** Prov. Azurduy. On north edge of Abra Kasa going towards Tarabuco. 59 km from Azurduy. By road under bushes and along field margins and stone fences. **latitude:** 19 deg. 36 min.. **longitude:** 64 deg. 39 min.. **elevation:** 2600m. Annual. Wild. Seed.
- PI 545847 *Solanum arnezii* Cardenas SOLANACEAE
origin: Bolivia. **collected:** April 01, 1986. **collector id:** HAO 159. **locality:** Prov. Azurduy. 26 km from Abra Kasa (85 km from Azurduy) on the road to Tarabuco. 5 km before Cruz Kasa. Growing along stone wall. **latitude:** 19 deg. 33 min.. **longitude:** 64 deg. 39 min.. **elevation:** 3200m. Annual. Wild. Seed.
- PI 545848 *Solanum astleyi* Hawkes & Hjert. SOLANACEAE
origin: Bolivia. **collected:** March 22, 1986. **collector id:** HAO 126. **locality:** Prov. Saavedra. 78 km from Potosi on road to Sucre, 34 km beyond Betanzos. Upper side of road. Along pea field. **latitude:** 19 deg. 26 min.. **longitude:** 65 deg. 24 min.. **elevation:** 3280m. Annual. Wild. Seed.
- PI 545849 *Solanum berthaultii* Hawkes SOLANACEAE
origin: Bolivia. **collected:** March 04, 1986. **collector id:** HAO 017. **locality:** Prov. Mizque. Julpe. Near the Rio Julpe. Upstream from the crossing just before the village. On a steep west-facing slope of ravine beside the stream. **latitude:** 17 deg. 43 min.. **longitude:** 65 deg. 12 min.. **elevation:** 2200m. Annual. Wild. Seed.
- PI 545850 *Solanum berthaultii* Hawkes SOLANACEAE
origin: Bolivia. **collected:** March 08, 1986. **collector id:** HAO 052. **locality:** Prov. Yamparaez. Escana. 13 km from turn-off to Sotomayor from main road, 7 km after turning right from junction with Sotomayor road. Weed in and near maize fields and around fig trees. **latitude:** 19 deg. 16 min.. **longitude:** 65 deg. 11 min.. **elevation:** 2600m. Annual. Wild. Seed.

PI 545837 to 545930-continued

- PI 545851 *Solanum berthaultii* Hawkes SOLANACEAE
origin: Bolivia. **collected:** March 12, 1986. **collector id:** HAO 076. **locality:** Prov. Zudanez. 45 km from Tarabuco, 7 km beyond Icla on road to Azurduy. Slope below the roadway. Among spiny scrub vegetation. **latitude:** 19 deg. 19 min.. **longitude:** 64 deg. 50 min.. **elevation:** 2700m. Annual. Wild. Seed.
- PI 545852 *Solanum berthaultii* Hawkes SOLANACEAE
origin: Bolivia. **collected:** March 13, 1986. **collector id:** HAO 081. **locality:** Prov. Zudanez. 11 km beyond Zudanez on the road to Tomina. 3 km beyond Tejas. Growing in thorn hedge. **latitude:** 19 deg. 12 min.. **longitude:** 64 deg. 40 min.. **elevation:** 2300m. Annual. Wild. Seed.
- PI 545853 *Solanum boliviense* Dunal SOLANACEAE
origin: Bolivia. **collected:** March 15, 1986. **collector id:** HAO 086B. **locality:** Prov. Nor Cinti. Jatun Rumi. 68 km from Belen on road from Potosi to Tarija, also 68 km from Camargo going the other way. 4 km before Padcoya going to Camargo from Potosi. Growing on the edge of a field. **latitude:** 20 deg. 14 min.. **longitude:** 65 deg. 07 min.. **elevation:** 3420m. Annual. Wild. Seed.
- PI 545854 *Solanum doddsii* Correll SOLANACEAE
origin: Bolivia. **collected:** March 04, 1986. **collector id:** HAO 019. **locality:** Prov. Carrasco. 2 km from Totora on road to Sucre. About 300 m towards Sucre from the grain storage silos. Lower side of road. **latitude:** 17 deg. 44 min.. **longitude:** 65 deg. 06 min.. **elevation:** 2900m. Annual. Wild. Seed.
- PI 545855 *Solanum doddsii* Correll SOLANACEAE
origin: Bolivia. **collected:** March 06, 1986. **collector id:** HAO 024. **locality:** Prov. Mizque. 44 km from Epizana on road to Sucre. Three km before village of Oyadas, 13 km before the crossing of the Rio Mizque. On lower side of road. On very steep slope with loose stones. **latitude:** 17 deg. 54 min.. **longitude:** 65 deg. 06 min.. **elevation:** 2500m. Annual. Wild. Seed.
- PI 545856 *Solanum doddsii* Correll SOLANACEAE
origin: Bolivia. **collected:** March 06, 1986. **collector id:** HAO 026. **locality:** Prov. Campero. 5.6 km from Aiquile on road towards Epizana. Near the house of Florencio Ortiz Salazar. Growing on edges of maize fields in hedgerows made of thorn bushes. **latitude:** 18 deg. 10 min.. **longitude:** 65 deg. 10 min.. **elevation:** 2150m. **remarks:** Known locally as "aparuma". Annual. Wild. Seed.

PI 545837 to 545930-continued

- PI 545857 *Solanum doddsii* Correll SOLANACEAE
origin: Bolivia. **collected:** March 06, 1986. **collector id:** HAO 027. **locality:** Prov. Campero. 5.6 km from Aiquile on road towards Epizana. Near the house of Florencio Ortiz Salazar. On the edge of maize fields in dense hedgerows made of thorn bushes. **latitude:** 18 deg. 10 min.. **longitude:** 65 deg. 10 min.. **elevation:** 2150m. Annual. Wild. Seed.
- PI 545858 *Solanum doddsii* Correll SOLANACEAE
origin: Bolivia. **collected:** March 06, 1986. **collector id:** HAO 032. **locality:** Prov. Campero. From Aiquile, start toward Epizana, turn right just outside of town toward Omereque. 3.5 km beyond this junction. Among stones, cactus and thorny shrubs. **latitude:** 18 deg. 09 min.. **longitude:** 65 deg. 08 min.. **elevation:** 2300m. Annual. Wild. Seed.
- PI 545859 *Solanum doddsii* Correll SOLANACEAE
origin: Bolivia. **collected:** March 06, 1986. **collector id:** HAO 033. **locality:** Prov. Campero. 7 km from turn-off towards Omereque, 1 km beyond the village of Marquilla. On property belonging to Eduardo Beizaga. Weed in maize fields. **latitude:** 18 deg. 09 min.. **longitude:** 65 deg. 06 min.. **elevation:** 2260m. Annual. Wild. Seed.
- PI 545860 *Solanum doddsii* Correll SOLANACEAE
origin: Bolivia. **collected:** March 06, 1986. **collector id:** HAO 034. **locality:** Prov. Campero. At Uchu Chaj'ra, near La Angostura. 4 km from the turn-off towards Omereque, 2 km before village of Marquilla on property of Florencio Ortiz Salazar. **latitude:** 18 deg. 09 min.. **longitude:** 65 deg. 07 min.. **elevation:** 2300m. Annual. Wild. Seed.
- PI 545861 *Solanum doddsii* Correll SOLANACEAE
origin: Bolivia. **collected:** March 24, 1986. **collector id:** HAO 138. **locality:** Prov. Campero. 24 km north of Aiquile on road to Totora. 9 km before crossing Rio Mizque. Under spiny fences on the edges of fields. **latitude:** 17 deg. 59 min.. **longitude:** 65 deg. 07 min.. **elevation:** 2260m. Annual. Wild. Seed.
- PI 545862 *Solanum gandarillasii* Cardenas SOLANACEAE
origin: Bolivia. **collected:** March 04, 1986. **collector id:** HAO 018. **locality:** Prov. Mizque. Julpe. Near the Rio Julpe. Upstream from the crossing just before the village. On very steep, gravely, west-facing slope with loose stones in ravine along stream. **latitude:** 17 deg. 43 min.. **longitude:** 65 deg. 12 min.. **elevation:** 2200m. Annual. Wild. Seed.

PI 545837 to 545930-continued

- PI 545863 *Solanum gandarillasii* Cardenas SOLANACEAE
origin: Bolivia. **collected:** March 07, 1986. **collector id:** HAO 037. **locality:** Prov. Campero. 32 km from Aiquile, 2 km beyond Quiroga, on road to Sucre. In shade of thorny vegetation (cactus, Acacia, etc.) in arid, rocky terrain. **latitude:** 18 deg. 28 min.. **longitude:** 65 deg. 13 min.. **elevation:** 2000m. Annual. Wild. Seed.
- PI 545864 *Solanum gandarillasii* Cardenas SOLANACEAE
origin: Bolivia. **collected:** April 03, 1986. **collector id:** HAO 173. **locality:** Prov. Campero. 111 km north Sucre on the way to Aquile, 1 km south of Quiroga. In stoney places of arid zone among cactus, Acacia, Japhora. Where thorns protected from grazing goats. **latitude:** 18 deg. 27 min.. **longitude:** 65 deg. 13 min.. **elevation:** 1950m. Annual. Wild. Seed.
- PI 545865 *Solanum gourlayi* subsp. *pachytrichum* (Hawkes) Hawkes & Hjert. SOLANACEAE
origin: Bolivia. **collected:** March 14, 1986. **collector id:** HAO 083. **locality:** Prov. Saavedra. 11 km from Don Diego on road to Puna. 1 km before Chaqui. By stone walls on broadbean field margins, mostly among stones and protected by spiney bushes. **latitude:** 19 deg. 34 min.. **longitude:** 64 deg. 35 min.. **elevation:** 3460m. Annual. Wild. Seed.
- PI 545866 *Solanum gourlayi* subsp. *pachytrichum* (Hawkes) Hawkes & Hjert. SOLANACEAE
origin: Bolivia. **collected:** March 14, 1986. **collector id:** HAO 084A. **locality:** Prov. Saavedra. Chaqui. 12 km from Don Diego on road to Puna. Growing in cultivated field by stone wall next to the river. **latitude:** 19 deg. 34 min.. **longitude:** 64 deg. 35 min.. **elevation:** 3460m. Annual. Wild. Seed.
- PI 545867 *Solanum gourlayi* subsp. *pachytrichum* (Hawkes) Hawkes & Hjert. SOLANACEAE
origin: Bolivia. **collected:** March 14, 1986. **collector id:** HAO 085A. **locality:** Prov. Saavedra. Chaqui Bano. 17 km from Don Diego on road to Puna. Across the road from the hot springs in the town. By and on stone wall on edge of fields. **latitude:** 19 deg. 34 min.. **longitude:** 64 deg. 33 min.. **elevation:** 3600m. Annual. Wild. Seed.

PI 545837 to 545930-continued

- PI 545868 *Solanum hondelmannii* Hawkes & Hjert. SOLANACEAE
origin: Bolivia. **collected:** March 08, 1986. **collector id:** HAO 048. **locality:** Prov. Yamparaez. Escana. 13 km from turn-off to Sotomayor from main road, 7 km after turning right at junction leaving Sotomayor road. Weed in and around maize and other fields. **latitude:** 19 deg. 16 min.. **longitude:** 65 deg. 11 min.. **elevation:** 2600m. Annual. Wild. Seed.
- PI 545869 *Solanum hondelmannii* Hawkes & Hjert. SOLANACEAE
origin: Bolivia. **collected:** March 08, 1986. **collector id:** HAO 049. **locality:** Prov. Yamparaez. Escana. 13 km from turn-off to Sotomayor from main road, 7 km from right turn at junction leaving Sotomayor road. Weed in and around maize and other fields and along roadside. **latitude:** 19 deg. 16 min.. **longitude:** 65 deg. 11 min.. **elevation:** 2600m. Annual. Wild. Seed.
- PI 545870 *Solanum hondelmannii* Hawkes & Hjert. SOLANACEAE
origin: Bolivia. **collected:** March 08, 1986. **collector id:** HAO 050. **locality:** Prov. Yamparaez. Escana. 13km from turn-off to Sotomayor from main road, 7 km after turning right at junction leaving Sotomayor road. At the base of a fig tree. **latitude:** 19 deg. 16 min.. **longitude:** 65 deg. 11 min.. **elevation:** 2600m. Annual. Wild. Seed.
- PI 545871 *Solanum hondelmannii* Hawkes & Hjert. SOLANACEAE
origin: Bolivia. **collected:** March 09, 1986. **collector id:** HAO 054. **locality:** Prov. Yamparaez. Chamicle. 7 km from turn-off from the Sucre-Tarabuco road towards Sotomayor. About 1/2 km beyond the junction of the road to Escana. Weed in maize fields. **latitude:** 19 deg. 14 min.. **longitude:** 65 deg. 10 min.. **elevation:** 2700m. Annual. Wild. Seed.
- PI 545872 *Solanum hondelmannii* Hawkes & Hjert. SOLANACEAE
origin: Bolivia. **collected:** March 09, 1986. **collector id:** HAO 056. **locality:** Prov. Yamparaez. Chamicle. 7 km from turn-off from the Sucre-Tarabuco road toward Sotomayor. About 0.5 km beyond the junction of the road to Escana. Growing along roadside. **latitude:** 19 deg. 14 min.. **longitude:** 65 deg. 10 min.. **elevation:** 2700m. Annual. Wild. Seed.

PI 545837 to 545930-continued

- PI 545873 *Solanum hondelmannii* Hawkes & Hjert. SOLANACEAE
origin: Bolivia. **collected:** March 09, 1986. **collector id:** HAO 057. **locality:** Prov. Yamparaz. Chamicle. 7 km from turn-off from the Sucre-Tarabuco road toward Sotomayor. About 0.5 km beyond the junction of the road to Escana. Along stone wall bordering fields. **latitude:** 19 deg. 14 min.. **longitude:** 65 deg. 10 min.. **elevation:** 2700m. Annual. Wild. Seed.
- PI 545874 *Solanum hondelmannii* Hawkes & Hjert. SOLANACEAE
origin: Bolivia. **collected:** March 09, 1986. **collector id:** HAO 061. **locality:** Prov. Yamparaz. 10 km beyond the turn off from the Sucre-Tarabuco road toward Sotomayor. 3.7 km beyond the junction of the road to Escana. Growing as a weed in maize fields. **latitude:** 19 deg. 15 min.. **longitude:** 65 deg. 10 min.. **elevation:** 2640m. Annual. Wild. Seed.
- PI 545875 *Solanum hondelmannii* Hawkes & Hjert. SOLANACEAE
origin: Bolivia. **collected:** March 11, 1986. **collector id:** HAO 071. **locality:** Prov. Zudanez. 15 km beyond Icla on road to Azurduy. Near roadway. In hedges by road. **latitude:** 19 deg. 22 min.. **longitude:** 64 deg. 47 min.. **elevation:** 2740m. Annual. Wild. Seed.
- PI 545876 *Solanum hondelmannii* Hawkes & Hjert. SOLANACEAE
origin: Bolivia. **collected:** March 22, 1986. **collector id:** HAO 125. **locality:** Prov. Saavedra. 78 km from Potosi on road to Sucre, 34 km beyond Betanzos. Upper side of the road. Growing in a pea field. **latitude:** 19 deg. 26 min.. **longitude:** 65 deg. 24 min.. **elevation:** 3280m. Annual. Wild. Seed.
- PI 545877 *Solanum hondelmannii* Hawkes & Hjert. SOLANACEAE
origin: Bolivia. **collected:** March 22, 1986. **collector id:** HAO 130. **locality:** Prov. Saavedra. 82 km from Potosi on road to Sucre, 38 km from Betanzos. Upper side of the road. Growing at edge of field under spiny shrubs. **latitude:** 19 deg. 25 min.. **longitude:** 65 deg. 24 min.. **elevation:** 3100m. Annual. Wild. Seed.
- PI 545878 *Solanum hondelmannii* Hawkes & Hjert. SOLANACEAE
origin: Bolivia. **collected:** March 22, 1986. **collector id:** HAO 131. **locality:** Prov. Saavedra. 82 km from Potosi on road to Sucre, 38 km from Betanzos. Lower side of the road. Growing on edge of maize fields. **latitude:** 19 deg. 25 min.. **longitude:** 65 deg. 24 min.. **elevation:** 3100m. Annual. Wild. Seed.

PI 545837 to 545930-continued

- PI 545879 *Solanum hondelmannii* Hawkes & Hjert. SOLANACEAE
origin: Bolivia. **collected:** March 24, 1986. **collector id:** HAO 136B.2,.3. **locality:** Prov. Campero. 24 km north of Aiquile on road to Totora. 9 km before crossing Rio Mizque. Growing in shade under thorny shrubs and under fences made of thorn bushes. **latitude:** 17 deg. 59 min..
longitude: 65 deg. 07 min.. **elevation:** 2260m. Annual. Wild. Seed.
- PI 545880 *Solanum hoopesii* Hawkes & Okada SOLANACEAE
origin: Bolivia. **collected:** April 01, 1986. **collector id:** HAO 157. **locality:** Prov. Azurduy. 11 km from Abra Kasa on way to Tarabuco. 20 km before Cruz Kasa. Growing along roadside under bushes. **latitude:** 19 deg. 36 min..
longitude: 64 deg. 38 min.. **elevation:** 2500m.
remarks: spov A. Annual. Wild. Seed.
- PI 545881 *Solanum hoopesii* Hawkes & Okada SOLANACEAE
origin: Bolivia. **collected:** April 01, 1986. **collector id:** HAO 160. **locality:** Prov. Azurduy. 26 km from Abra Kasa (85 km from Azurduy) on the road to Tarabuco. 5 km before Cruz Kasa. Growing along stone wall. **latitude:** 19 deg. 33 min..
longitude: 64 deg. 39 min.. **elevation:** 3200m. **remarks:** spnov A. Annual. Wild. Seed.
- PI 545882 *Solanum hoopesii* Hawkes & Okada SOLANACEAE
origin: Bolivia. **collected:** April 01, 1986. **collector id:** HAO 161B. **locality:** Prov. Azurduy. 103 km from Azurduy, 13 km beyond Cruz Kasa, on the road to Tarabuco. 37 km before the junction where the road goes to the oil pumping station at Torre Pampa. Growing on ledges at the foot of high cliffs facing east. **latitude:** 19 deg. 29 min..
longitude: 64 deg. 42 min.. **elevation:** 3440m.
remarks: spnov A. Annual. Wild. Seed.
- PI 545883 *Solanum hybrid* SOLANACEAE
origin: Bolivia. **collected:** March 01, 1986. **collector id:** HAO 006. **locality:** Prov. Ayopaya. 10 km from Independencia on road to Challa. On lower side of the road. Among stones on edges of maize fields. **latitude:** 17 deg. 10 min..
longitude: 66 deg. 54 min.. **elevation:** 3000m. **remarks:** Locally frequent, known as "Yutu papa". Annual. Wild. Seed.

PI 545837 to 545930-continued

- PI 545884 Solanum hybrid SOLANACEAE
origin: Bolivia. **collected:** March 05, 1986. **collector id:** HAO 022. **locality:** Prov. Carrasco. 23 km from turn-off from Cochabamba-Santa Cruz road. 1 km out of the upper side of Pocona on the road to Huallapampa along oil pipeline. Felix Zuaznava's (sp.?) property. Among stones of a stone wall around a farmyard. **latitude:** 17 deg. 40 min.. **longitude:** 65 deg. 18 min.. **elevation:** 2740m. Annual. Wild. Seed.
- PI 545885 Solanum hybrid SOLANACEAE
origin: Bolivia. **collected:** March 06, 1986. **collector id:** HAO 030. **locality:** Prov. Campero. From Aiquile, start towards Epizana, turn right just outside of town toward Omereque. 3.2 km beyond this junction. Among stones, cactus and thorny shrubs. **latitude:** 18 deg. 09 min.. **longitude:** 65 deg. 08 min.. **elevation:** 2300m. Annual. Wild. Seed.
- PI 545886 Solanum hybrid SOLANACEAE
origin: Bolivia. **collected:** March 13, 1986. **collector id:** HAO 078. **locality:** Prov. Yamparaz or Zudanez. 25 km from Tarabuco on road to Zudanez. Under spiny hedge. About 1 km before village of Lamboyo. Growing under spiny hedge. **latitude:** 19 deg. 07 min.. **longitude:** 64 deg. 51 min.. **elevation:** 2600m. Annual. Wild. Seed.
- PI 545887 Solanum hybrid SOLANACEAE
origin: Bolivia. **collected:** March 15, 1986. **collector id:** HAO 086A. **locality:** Prov. Nor Cinti. Jatun Rumi. 68 km from Belen on road from Potosi to Tarija, also 68 km from Camargo going the other way. 4 km before Padcoya going to Camargo from Potosi. Growing on edge of a field. **latitude:** 20 deg. 14 min.. **longitude:** 65 deg. 07 min.. **elevation:** 3420m. Annual. Wild. Seed.
- PI 545888 Solanum hybrid SOLANACEAE
origin: Bolivia. **collected:** March 21, 1986. **collector id:** HAO 114. **locality:** Prov. Sud Chicas or Nor Chicas. Rio Blanco. 39-40 km from Tupiza checkpoint on road to Cotagaita. Under thorny bushes by roadside. **latitude:** 21 deg. 08 min.. **longitude:** 65 deg. 48 min.. **elevation:** 3220m. **remarks:** Known as "papa quipa". Annual. Wild. Seed.
- PI 545889 Solanum hybrid SOLANACEAE
origin: Bolivia. **collected:** March 22, 1986. **collector id:** HAO 127. **locality:** Prov. Saavedra. 78 km from Potosi on road to Sucre, 34 km beyond Betanzos. Upper side of the road. Growing in and near pea field. **latitude:** 19 deg. 26 min.. **longitude:** 65 deg. 24 min.. **elevation:** 3280m. Annual. Wild. Seed.

PI 545837 to 545930-continued

- PI 545890 *Solanum* hybrid SOLANACEAE
origin: Bolivia. **collected:** March 22, 1986. **collector**
id: HAO 133. **locality:** Prov. Saavedra. Retiro. 43 km
from Betanzos on road from Potosi to Sucre. On roadside
among shrubs and under fences made of dried thorn bushes.
latitude: 19 deg. 23 min.. **longitude:** 65 deg. 22 min..
elevation: 2820m. **remarks:** Known as "Yutu papa".
Annual. Wild. Seed.
- PI 545891 *Solanum* hybrid SOLANACEAE
origin: Bolivia. **collected:** April 01, 1986. **collector**
id: HAO 163. **locality:** Prov. Azurduy. 110 km from
Azurduy, 20 km beyond Cruz Kasa, 30 km before the Torre
Pampa junction, on the road to Tarabuco. About 300 m
above the road. At the base of a cliff among *Blumenbachia*
and in the open. **latitude:** 19 deg. 34 min.. **longitude:**
64 deg. 39 min.. **elevation:** 3700m. **remarks:** *hoopesii*
x ugentii hybrids. Annual. Wild. Seed.
- PI 545892 *Solanum* hybrid SOLANACEAE
origin: Bolivia. **collected:** April 09, 1986. **collector**
id: HAO 175. **locality:** Prov. Chapare. 9 km from the
turn-off at Aguirre from the Cochabamba-Chapare road.
Past new dams which are part of the hydroelectric project
at Korani. Growing on edges of oca fields. **latitude:** 17
deg. 18 min.. **longitude:** 65 deg. 44 min.. **elevation:**
3500m. Annual. Wild. Seed.
- PI 545893 *Solanum* infundibuliforme Philippi SOLANACEAE
origin: Bolivia. **collected:** March 19, 1986. **collector**
id: HAO 106. **locality:** Prov. Aviles. 53 km from
Iscayachi on road to Villazon. 5 km before Yunchara.
Growing on roadside and road banks. **latitude:** 21 deg. 48
min.. **longitude:** 65 deg. 08 min.. **elevation:** 3700m.
Annual. Wild. Seed.
- PI 545894 *Solanum* infundibuliforme Philippi SOLANACEAE
origin: Bolivia. **collected:** March 20, 1986. **collector**
id: HAO 107. **locality:** Prov. Sud Chicas. 13-16 km from
the checkpoint at Tupiza towards Cotagaita. On lower side
of the road. On steep rocky slopes under thorny bushes or
in the open and along dry steam beds. **latitude:** 21 deg.
22 min.. **longitude:** 65 deg. 48 min.. **elevation:**
3450m. Annual. Wild. Seed.
- PI 545895 *Solanum* leptophyes Bitter SOLANACEAE
origin: Bolivia. **collected:** March 14, 1986. **collector**
id: HAO 084B. **locality:** Prov. Saavedra. Chaqui. 12 km
from Don Diego on road to Puna. Growing in cultivated
field by stone wall next to the river. **latitude:** 19 deg.
34 min.. **longitude:** 64 deg. 35 min.. **elevation:**
3460m. Annual. Wild. Seed.

PI 545837 to 545930-continued

- PI 545896 *Solanum leptophyes* Bitter SOLANACEAE
origin: Bolivia. **collected:** March 14, 1986. **collector id:** HAO 085B. **locality:** Prov. Saavedra. Chaqui Bano. 17 km from Don Diego on road to Puna. Across the road from the hot springs in the town. Beside or on stone walls surrounding fields. **latitude:** 19 deg. 34 min.. **longitude:** 64 deg. 33 min.. **elevation:** 3600m. Annual. Wild. Seed.
- PI 545897 *Solanum megistacrolobum* Bitter SOLANACEAE
origin: Bolivia. **collected:** March 18, 1986. **collector id:** HAO 099. **locality:** Prov. Mendez. 4 km from Iscayachi on road to Tarija. Very near an old stone church just before starting to climb over the pass. Growing among piles of stones. **latitude:** 21 deg. 27 min.. **longitude:** 64 deg. 58 min.. **elevation:** 3500m. Annual. Wild. Seed.
- PI 545898 *Solanum megistacrolobum* Bitter SOLANACEAE
origin: Bolivia. **collected:** March 19, 1986. **collector id:** HAO 101. **locality:** Prov. Aviles. 11 km from Iscayachi on road to Villazon. Growing on and near stone wall bordering fields. **latitude:** 21 deg. 34 min.. **longitude:** 65 deg. 02 min.. **elevation:** 3540m. Annual. Wild. Seed.
- PI 545899 *Solanum megistacrolobum* Bitter SOLANACEAE
origin: Bolivia. **collected:** March 19, 1986. **collector id:** HAO 102. **locality:** Prov. Aviles. 14 km from Iscayachi on the road to Villazon. **latitude:** 21 deg. 35 min.. **longitude:** 65 deg. 02 min.. **elevation:** 3700m. Annual. Wild. Seed.
- PI 545900 *Solanum megistacrolobum* Bitter SOLANACEAE
origin: Bolivia. **collected:** March 19, 1986. **collector id:** HAO 103. **locality:** Prov. Aviles. 52 km from Iscayachi on the road to Villazon. Under muna muna bushes in narrow ravine. **latitude:** 21 deg. 47 min.. **longitude:** 65 deg. 08 min.. **elevation:** 3720m. Annual. Wild. Seed.
- PI 545901 *Solanum microdontum* Bitter SOLANACEAE
origin: Bolivia. **collected:** March 18, 1986. **collector id:** HAO 096. **locality:** Prov. Mendez. On the ascent of the Cuesta de Sama, 34 km beyond the checkpoint on the north side of Tarija, 6 km from the Reten Municipal de Tucumilla. On lower side of road. Growing among bushes. **latitude:** 21 deg. 29 min.. **longitude:** 64 deg. 54 min.. **elevation:** 3000m. Annual. Wild. Seed.

PI 545837 to 545930-continued

- PI 545902 *Solanum microdontum* subsp. *gigantophyllum* (Bitter) Hawkes & Hjert. SOLANACEAE
origin: Bolivia. **collected:** March 05, 1986. **collector id:** HAO 023. **locality:** Prov. Carrasco, 23 km from turn-off from Cochabamba-Santa Cruz road. 1 km out of the upper side of Pocona on road to Huallapampa, along oil pipeline. On Felix Zuaznava (sp.?) property. Dense bushes and trees, stone wall around farm. **latitude:** 17 deg. 40 min.. **longitude:** 65 deg. 18 min.. **elevation:** 2740m. Annual. Wild. Seed.
- PI 545903 *Solanum microdontum* subsp. *gigantophyllum* (Bitter) Hawkes & Hjert. SOLANACEAE
origin: Bolivia. **collected:** March 18, 1986. **collector id:** HAO 097. **locality:** Prov. Mendez. Cuesta de Sama. About 6 km beyond the Reten Municipal Tucumilla next to roadside spring with crosses on the hill above it. Stopping place for trucks climbing pass. Lower side of road. Growing under bushes and next to bridge. **latitude:** 21 deg. 29 min.. **longitude:** 64 deg. 54 min.. **elevation:** 3000m. **remarks:** Locally frequent. Annual. Wild. Seed.
- PI 545904 *Solanum microdontum* subsp. *gigantophyllum* (Bitter) Hawkes & Hjert. SOLANACEAE
origin: Bolivia. **collected:** March 30, 1986. **collector id:** HAO 151. **locality:** Prov. Azurduy. 14 km beyond Abra Kasa (170 km from Tarabuco) on road to Azurduy. Growing on roadside under dense growth of shrubs in narrow ravine. **latitude:** 19 deg. 45 min.. **longitude:** 64 deg. 33 min.. **elevation:** 2780m. **remarks:** One small population. Annual. Wild. Seed.
- PI 545905 *Solanum microdontum* subsp. *gigantophyllum* (Bitter) Hawkes & Hjert. SOLANACEAE
origin: Bolivia. **collected:** March 30, 1986. **collector id:** HAO 152. **locality:** Prov. Azurduy. 15 km beyond Tarvita on road to Azurduy. Growing on roadside under *Alnus jorullensis* trees. **latitude:** 19 deg. 52 min.. **longitude:** 64 deg. 32 min.. **elevation:** 2740m. Annual. Wild. Seed.
- PI 545906 *Solanum oplocense* Hawkes SOLANACEAE
origin: Bolivia. **collected:** March 20, 1986. **collector id:** HAO 109. **locality:** Prov. Sud Chicas. Turn left at checkpoint on north side of Tupiza, taking road towards Oploca. 9 km along road, take right fork towards San Miguel and Atacha. Site is 13 km from Tupiza checkpoint. Edge of maize field and Acacia thicket. **latitude:** 21 deg. 23 min.. **longitude:** 65 deg. 49 min.. **elevation:** 3100m. Annual. Wild. Seed.

PI 545837 to 545930-continued

- PI 545907 *Solanum oplocense* Hawkes SOLANACEAE
origin: Bolivia. **collected:** March 20, 1986. **collector id:** HAO 112. **locality:** Prov. Sud Chicas. Seito Grande. 17 km from checkpoint on north side of Tupiza, 8 km from the fork in the road, about 2 km before reaching Oploca. Near roadside. Under thorny fence. **latitude:** 21 deg. 22 min.. **longitude:** 65 deg. 51 min.. **elevation:** 3120m. Annual. Wild. Seed.
- PI 545908 *Solanum oplocense* Hawkes SOLANACEAE
origin: Bolivia. **collected:** March 21, 1986. **collector id:** HAO 113. **locality:** Prov. Sud Chicas or Nor Chicas. Rio Blanco. 39-40 km from Tupiza checkpoint on road to Cotagaita. Edge of sloping field under Acacia shrubs. Also under thorny fences and under bushes in waste places. **latitude:** 21 deg. 08 min.. **longitude:** 65 deg. 48 min.. **elevation:** 3220m. Annual. Wild. Seed.
- PI 545909 *Solanum oplocense* Hawkes SOLANACEAE
origin: Bolivia. **collected:** March 21, 1986. **collector id:** HAO 118. **locality:** Prov. Sud Chicas or Nor Chicas. Rio Blanco. 39-40 km from Tupiza checkpoint on road to Cotagaita. **latitude:** 21 deg. 08 min.. **longitude:** 65 deg. 48 min.. **elevation:** 3220m. **remarks:** Berries brought by a girl from Rio Blanco. Annual. Wild. Seed.
- PI 545910 *Solanum oplocense* Hawkes SOLANACEAE
origin: Bolivia. **collected:** March 24, 1986. **collector id:** HAO 136B.1. **locality:** Prov. Campero. 24 km north of Aiquile on road to Totora. 9 km before crossing Rio Mizque. In shade under spiny shrubs and fences made of thorn bushes. **latitude:** 17 deg. 59 min.. **longitude:** 65 deg. 07 min.. **elevation:** 2260m. Annual. Wild. Seed.
- PI 545911 *Solanum* sp. SOLANACEAE
origin: Bolivia. **collected:** March 11, 1986. **collector id:** HAO 072. **locality:** Prov. Zudanez, possibly Jaime Mendoza. 30 km beyond road to Azurduy. Among stones of corrals in heavily grazed area. **latitude:** 19 deg. 27 min.. **longitude:** 64 deg. 45 min.. **elevation:** 3400m. Annual. Wild. Seed.
- PI 545912 *Solanum sparsipilum* (Bitter) Juz. & Buk. SOLANACEAE
origin: Bolivia. **collected:** March 04, 1986. **collector id:** HAO 020. **locality:** Prov. Carrasco. On the upper side of the town of Totora. Growing in heavy weed growth along a stone wall next to the road. **latitude:** 17 deg. 43 min.. **longitude:** 65 deg. 06 min.. **elevation:** 2800m. Annual. Wild. Seed.

PI 545837 to 545930-continued

- PI 545913 *Solanum sparsipilum* (Bitter) Juz. & Buk. SOLANACEAE
origin: Bolivia. **collected:** March 15, 1986. **collector id:** HAO 087. **locality:** Prov. Nor Cinti. Jatun Rumi. 68 km from Belen on road from Potosi to Tarija, also 68 from Camargo going the other way. 4 km before Padcooya going to Camargo from Potosi. Growing on edge of broadbean field. **latitude:** 20 deg. 14 min.. **longitude:** 65 deg. 07 min.. **elevation:** 3420m. Annual. Wild. Seed.
- PI 545914 *Solanum sucrense* Hawkes SOLANACEAE
origin: Bolivia. **collected:** March 09, 1986. **collector id:** HAO 064. **locality:** Prov. Yamparaez. Granja "El Recreo". 3 km from the turn-off towards Sotomayor from the Sucre-Tarabuco road. On edges of apple and quince orchard in weedy area. **latitude:** 19 deg. 11 min.. **longitude:** 65 deg. 10 min.. **elevation:** 2820m. Annual. Wild. Seed.
- PI 545915 *Solanum sucrense* Hawkes SOLANACEAE
origin: Bolivia. **collected:** March 11, 1986. **collector id:** HAO 065. **locality:** Prov. Yamparaez (possibly over the border into Zudanez). 15 km from Tarabuco on the road to Icla. 200 meters beyond the Escuela San Jose de Paredon. Upper side of road among stones on retaining wall above road and on edge of potato field. **latitude:** 19 deg. 15 min.. **longitude:** 64 deg. 53 min.. **elevation:** 2900m. Annual. Wild. Seed.
- PI 545916 *Solanum sucrense* Hawkes SOLANACEAE
origin: Bolivia. **collected:** March 20, 1986. **collector id:** HAO 111. **locality:** Prov. Sud Chicas. 300 meters beyond left fork of the road from the checkpoint, this time going towards Oploca. 13 km from the checkpoint, 4 km from junction of San Miguel-Oploca fork in the road. Growing on the edge of maize fields. **latitude:** 21 deg. 24 min.. **longitude:** 65 deg. 50 min.. **elevation:** 3080m. Annual. Wild. Seed.
- PI 545917 *Solanum sucrense* Hawkes SOLANACEAE
origin: Bolivia. **collected:** March 21, 1986. **collector id:** HAO 117. **locality:** Prov. Sud Chicas or Nor Chicas. Rio Blanco. 39-40 km from Tupiza checkpoint on road to Cotagaita. Growing as a weed in broadbean fields. **latitude:** 21 deg. 08 min.. **longitude:** 65 deg. 48 min.. **elevation:** 3220m. Annual. Wild. Seed.

PI 545837 to 545930-continued

- PI 545918 *Solanum sucrensis* Hawkes SOLANACEAE
origin: Bolivia. **collected:** March 22, 1986. **collector id:** HAO 123. **locality:** Prov. Frias. Samasa. 18 km from checkpoint leaving Potosi on road to Sucre. Growing on railroad embankment and edge of field along stone wall. **latitude:** 19 deg. 29 min.. **longitude:** 65 deg. 38 min.. **elevation:** 3660m. Annual. Wild. Seed.
- PI 545919 *Solanum sucrensis* Hawkes SOLANACEAE
origin: Bolivia. **collected:** March 22, 1986. **collector id:** HAO 124. **locality:** Prov. Frias. 44 km from Potosi checkpoint on road from Potosi to Sucre. Growing along stone wall beside wheat field and into the crop. **latitude:** 19 deg. 31 min.. **longitude:** 65 deg. 32 min.. **elevation:** 3380m. Annual. Wild. Seed.
- PI 545920 *Solanum tarijense* Hawkes SOLANACEAE
origin: Bolivia. **collected:** March 08, 1986. **collector id:** HAO 040. **locality:** Prov. Yamparaez. Go from Sucre towards Tarabuco. Turn right about 40 km from Sucre, 25 km before Tarabuco, to take road to Sotomayor. 6 km from this turn-off. Among stones by field and on roadside. **latitude:** 19 deg. 12 min.. **longitude:** 65 deg. 10 min.. **elevation:** 2880m. **remarks:** Collection was a single berry. Annual. Wild. Seed.
- PI 545921 *Solanum tarijense* Hawkes SOLANACEAE
origin: Bolivia. **collected:** March 08, 1986. **collector id:** HAO 045. **locality:** Prov. Yamparaez. Sauce Pampa. Going towards Sotomayor, turn right on road to Escana. 1 km beyond this junction. Protected from grazing by stone walls. Among scrub algarrobo, columnar cactus, Acacia. **latitude:** 19 deg. 14 min.. **longitude:** 65 deg. 11 min.. **elevation:** 2750m. Annual. Wild. Seed.
- PI 545922 *Solanum tarijense* Hawkes SOLANACEAE
origin: Bolivia. **collected:** March 09, 1986. **collector id:** HAO 058. **locality:** Prov. Yamparaez. Chamicle. 7 km from turn off from the Sucre-Tarabuco road toward Sotomayor. About 0.7 km beyond junction of the road to Escana. Roadside under protection of thorny hedge and along stone walls bordering fields. **latitude:** 19 deg. 14 min.. **longitude:** 65 deg. 10 min.. **elevation:** 2700m. Annual. Wild. Seed.

PI 545837 to 545930-continued

- PI 545923 *Solanum tarijense* Hawkes SOLANACEAE
origin: Bolivia. **collected:** March 09, 1986. **collector id:** HAO 060. **locality:** Prov. Yampare. 10 km beyond the turn-off from the Sucre-Tarabuco road towards Sotomayor. 3.7 km beyond junction of road to Escana. On edges of fields and around stone piles in fields. **latitude:** 19 deg. 15 min.. **longitude:** 65 deg. 10 min.. **elevation:** 2640m. Annual. Wild. Seed.
- PI 545924 *Solanum tarijense* Hawkes SOLANACEAE
origin: Bolivia. **collected:** March 13, 1986. **collector id:** HAO 079. **locality:** Prov. Zudanez. 11 km beyond Zudanez on the road to Tomina. 3 km beyond Tejas. Growing as a weed in maize and barley fields. **latitude:** 19 deg. 12 min.. **longitude:** 64 deg. 40 min.. **elevation:** 2300m. Annual. Wild. Seed.
- PI 545925 *Solanum toralapanum* Cardenas & Hawkes SOLANACEAE
origin: Bolivia. **collected:** March 01, 1986. **collector id:** HAO 009. **locality:** Prov. Ayopaya. Outskirts of village of Charahuayco on the road to Challa from Independencia. On upper side of the roadway. On edge of a sloping field. **latitude:** 17 deg. 19 min.. **longitude:** 66 deg. 52 min.. **elevation:** 3700m. **remarks:** Growing as a large population. Annual. Wild. Seed.
- PI 545926 *Solanum toralapanum* Cardenas & Hawkes SOLANACEAE
origin: Bolivia. **collected:** March 18, 1986. **collector id:** HAO 094. **locality:** Prov. Mendez. On the Cuesta de Sama, 32 km beyond the checkpoint on the north side of Tarija, 4 km from the Reten Municipal Tucumilla checkpoint. On lower side of the road. On bank below road among stones and under bushes. **latitude:** 21 deg. 29 min.. **longitude:** 64 deg. 53 min.. **elevation:** 2950m. Annual. Wild. Seed.
- PI 545927 *Solanum toralapanum* Cardenas & Hawkes SOLANACEAE
origin: Bolivia. **collected:** March 28, 1986. **collector id:** HAO 143. **locality:** Prov. Arani. Toralapa Experiment Station, 2 km off the Cochabamba-Santa Cruz road, turning at km 71. Growing on edges of fields. **latitude:** 17 deg. 26 min.. **longitude:** 65 deg. 28 min.. **elevation:** 3490m. **remarks:** Locally known as "Katari papa", which means "Snake potato". Annual. Wild. Seed.

PI 545837 to 545930-continued

PI 545928 *Solanum toralapanum* Cardenas & Hawkes SOLANACEAE
origin: Bolivia. **collected:** April 09, 1986. **collector**
id: HAO 174. **locality:** Prov. Chapare. 9 km from the
turn-off at Aguirre from the Cochabamba-Chapare road.
Past new dams which are part of the hydroelectric project
at Korani. Growing on edges of oca fields. **latitude:** 17
deg. 18 min.. **longitude:** 65 deg. 44 min.. **elevation:**
3500m. Annual. Wild. Seed.

PI 545929 *Solanum tuberosum* subsp. *andigena* Hawkes SOLANACEAE
origin: Bolivia. **collected:** March 09, 1986. **collector**
id: HAO 063. **locality:** Prov. Yampare. Cota. 9 km from
the junction of the Sucre-Tarabuco road on the way to
Sotomayor. Growing as a weed in maize fields. **latitude:**
19 deg. 15 min.. **longitude:** 65 deg. 10 min.. **elevation:**
2550m. Annual. Wild. Seed.

PI 545930 *Solanum tuberosum* subsp. *andigena* Hawkes SOLANACEAE
origin: Bolivia. **collected:** March 28, 1986. **collector**
id: HAO 144. **locality:** Prov. Arani. Toralapa Experiment
Station, 2 km off the Cochabamba-Santa Cruz road, turning
at km 71. **latitude:** 17 deg. 26 min.. **longitude:** 65 deg.
28 min.. **elevation:** 3490m. **remarks:** True seeds of the
cultivated variety "Huaycha pacena". Annual. Wild.
Seed.

PI 545931 to 546033. Potato species

Donated by: Bamberg, John, Inter-Regional Potato Intro. Station,
USDA-ARS, Peninsula Experiment Station, Sturgeon Bay, Wisconsin,
United States. **remarks:** Potato species (*Solanum* spp.) from Bolivia.
Received April 05, 1987.

PI 545931 *Solanum acaule* Bitter subsp. *acaule* SOLANACEAE
origin: Bolivia. **collected:** March 11, 1987. **collector**
id: HOHL 184. **locality:** Prov. Ayopaya. Villa Pereira. 12
km from Kami on road to Cruze de Challa. 54 km before
reaching the paved road. Next to the village cafe. On
open slope. **latitude:** 17 deg. 28 min.. **longitude:** 66
deg. 48 min.. **elevation:** 3820m. **remarks:** Two plants
which were beginning to form berries were dug up and
transplanted in Cochabamba. Annual. Wild. Seed.

PI 545931 to 546033-continued

- PI 545932 *Solanum acaule* Bitter subsp. *acaule* SOLANACEAE
origin: Bolivia. **collected:** March 11, 1987. **collector id:** HOHL 185. **locality:** Probably Prov. Tapacari. At approximately km 102 on the Cochabamba-Confital road. 7.5 km beyond the Challa junction and 17 km before Confital. Across the river from the road. On a steep slope at the edge of cultivated fields. **latitude:** 17 deg. 38 min.. **longitude:** 66 deg. 45 min.. **elevation:** 3780m. Annual. Wild. Seed.
- PI 545933 *Solanum acaule* Bitter subsp. *acaule* SOLANACEAE
origin: Bolivia. **collected:** March 14, 1987. **collector id:** HOHL 191. **locality:** Prov. Arque or Tapacari. Kallani Alto. Km 86 on road from Cochabamba to Confital. Both sides of the road. Edges of fields, stone piles, rock walls. **latitude:** 17 deg. 38 min.. **longitude:** 66 deg. 39 min.. **elevation:** 3960m. **remarks:** Rosette plants with purple flowers. Annual. Wild. Seed.
- PI 545934 *Solanum acaule* Bitter subsp. *acaule* SOLANACEAE
origin: Bolivia. **collected:** March 14, 1987. **collector id:** HOHL 198. **locality:** Prov. Cercado. Km 168 on road from Cochabamba to Caracollo. On roadside growing in open ground. **latitude:** 17 deg. 39 min.. **longitude:** 67 deg. 00 min.. **elevation:** 4000m. Annual. Wild. Seed.
- PI 545935 *Solanum acaule* Bitter subsp. *acaule* SOLANACEAE
origin: Bolivia. **collected:** March 14, 1987. **collector id:** HOHL 199. **locality:** Prov. Cercado. 2 km after first toll gate of Caihuasi (before Caracollo on the road from Cochabamba). On sides of river bed under tola shrubs. **latitude:** 17 deg. 37 min.. **longitude:** 67 deg. 02 min.. **elevation:** 3870m. **remarks:** Rosette plants. No flowers remained, but many plants had formed berries. Annual. Wild. Seed.
- PI 545936 *Solanum acaule* Bitter subsp. *acaule* SOLANACEAE
origin: Bolivia. **collected:** March 17, 1987. **collector id:** HOHL 201. **locality:** Prov. Loayza. 12 km from Ayo Ayo on the road to Caracato. On stream bank and on edges of barley field. **latitude:** 17 deg. 03 min.. **longitude:** 67 deg. 53 min.. **elevation:** 3960m. **remarks:** Rosette plants. Annual. Wild. Seed.
- PI 545937 *Solanum acaule* Bitter subsp. *acaule* SOLANACEAE
origin: Bolivia. **collected:** March 17, 1987. **collector id:** HOHL 202. **locality:** Prov. Loayza. 20.8 km from Ayo Ayo on the road towards Caracato. Lower side of roadway. Steep slope with loose stones. **latitude:** 17 deg. 02 min.. **longitude:** 67 deg. 51 min.. **elevation:** 3990m. Annual. Wild. Seed.

PI 545931 to 546033-continued

- PI 545938 *Solanum acaule* Bitter subsp. *acaule* SOLANACEAE
origin: Bolivia. **collected:** March 17, 1987. **collector**
id: HOHL 204. **locality:** Prov. Loayza. Pomasara (the
upper one), 14.4 km from Ayo Ayo on the road to Caracato.
On edges of cultivated fields. **latitude:** 17 deg. 02
min.. **longitude:** 67 deg. 52 min.. **elevation:** 4020m.
Annual. Wild. Seed.
- PI 545939 *Solanum acaule* Bitter subsp. *acaule* SOLANACEAE
origin: Bolivia. **collected:** March 18, 1987. **collector**
id: HOHL 205. **locality:** Prov. Omasuyos. Gualata Chica. 6
km from Huarisata on road to Sorata, or 14 km from
Achacachi on the Sorata road. Rock walls by roadside.
latitude: 15 deg. 53 min.. **longitude:** 68 deg. 39 min..
elevation: 4080m. Annual. Wild. Seed.
- PI 545940 *Solanum acaule* Bitter subsp. *acaule* SOLANACEAE
origin: Bolivia. **collected:** March 18, 1987. **collector**
id: HOHL 207. **locality:** Prov. Omasuyos. Tare. 3.3 km
from Huarisata on the road to Escoma (not the usual road
from Achacachi to Escoma, but an alternate route used
when the lake covers parts of the main road). At the foot
of an adobe wall near irrigation ditch. **latitude:** 15
deg. 56 min.. **longitude:** 68 deg. 38 min.. **elevation:**
3940m. Annual. Wild. Seed.
- PI 545941 *Solanum acaule* Bitter subsp. *acaule* SOLANACEAE
origin: Bolivia. **collected:** March 20, 1987. **collector**
id: HOHL 210. **locality:** Prov. Camacho. Cemetery in the
town of Escoma. **latitude:** 15 deg. 38 min.. **longitude:**
69 deg. 04 min.. **elevation:** 3800m. **remarks:** Known
locally as "apharuma". Tends to grow where ground has
been recently cleared. Annual. Wild. Seed.
- PI 545942 *Solanum acaule* Bitter subsp. *acaule* SOLANACEAE
origin: Bolivia. **collected:** March 20, 1987. **collector**
id: HOHL 214. **locality:** Prov. Camacho or Munecas. On the
upper side of the Mina Matilde. 14.4 km from the junction
at Chaguaya towards Ambana. Lower side of the roadway. On
slope among loose stones. **latitude:** 15 deg. 43 min..
longitude: 68 deg. 51 min.. **elevation:** 4250m. Annual.
Wild. Seed.
- PI 545943 *Solanum acaule* Bitter subsp. *acaule* SOLANACEAE
origin: Bolivia. **collected:** March 20, 1987. **collector**
id: HOHL 215. **locality:** Probably Prov. Omasuyos. 11.2 km
from Umacha on way to Ambana. On upper side of the road.
In moist, dark soil at the foot of an embankment.
latitude: 15 deg. 50 min.. **longitude:** 68 deg. 45 min..
elevation: 4080m. Annual. Wild. Seed.

PI 545931 to 546033-continued

- PI 545944 *Solanum acaule* Bitter subsp. *acaule* SOLANACEAE
origin: Bolivia. **collected:** March 25, 1987. **collector**
id: HOHL 227. **locality:** Prov. Aroma or Loayza. 15 km
from Konani (where the road to Quime leaves the La
Paz-Oruro road) towards Quime. Growing on the roadside.
latitude: 17 deg. 20 min.. **longitude:** 67 deg. 23 min..
elevation: 4100m. Annual. Wild. Seed.
- PI 545945 *Solanum acaule* Bitter subsp. *acaule* SOLANACEAE
origin: Bolivia. **collected:** March 25, 1987. **collector**
id: HOHL 228. **locality:** Prov. Aroma. 9 km from Konani on
the road to Quime. At the foot of an adobe wall and as a
weed in quinoa and broadbean fields. **latitude:** 17 deg.
20 min.. **longitude:** 67 deg. 24 min.. **elevation:**
3920m. **remarks:** Extremely abundant. The air was filled
with the odor of the ripening berries covering the
ground. Annual. Wild. Seed.
- PI 545946 *Solanum acaule* Bitter subsp. *acaule* SOLANACEAE
origin: Bolivia. **collected:** March 26, 1987. **collector**
id: HOHL 232. **locality:** Prov. Cercado. 12.6 km from
Oruro on the road to Sacaca. At the foot of high cliffs.
latitude: 17 deg. 58 min.. **longitude:** 66 deg. 56 min..
elevation: 3860m. Annual. Wild. Seed.
- PI 545947 *Solanum acaule* Bitter subsp. *acaule* SOLANACEAE
origin: Bolivia. **collected:** March 26, 1987. **collector**
id: HOHL 233. **locality:** Prov. Cercado. 15.5 km from the
checkpoint leaving Oruro, or 1 km after Cala Cala towards
Sacaca. As a weed of barley fields and on the banks of a
stream. **latitude:** 17 deg. 59 min.. **longitude:** 66 deg.
55 min.. **elevation:** 3920m. **remarks:** Abundant in
barley field. Annual. Wild. Seed.
- PI 545948 *Solanum acaule* Bitter subsp. *acaule* SOLANACEAE
origin: Bolivia. **collected:** March 26, 1987. **collector**
id: HOHL 234. **locality:** Prov. Cercado. 9 km from Oruro
checkpoint, 33 km from Cala Cala on road to Sacaca.
Huastaca. Growing on the edges of a corral. **latitude:** 17
deg. 56 min.. **longitude:** 66 deg. 40 min.. **elevation:**
4120m. **remarks:** Locally known as "apharuma". Annual.
Wild. Seed.
- PI 545949 *Solanum acaule* Bitter subsp. *acaule* SOLANACEAE
origin: Bolivia. **collected:** March 27, 1987. **collector**
id: HOHL 238. **locality:** Prov. Ibanes. In the school yard
in the town of Sacaca, and also at the nearby flour mill.
latitude: 18 deg. 01 min.. **longitude:** 66 deg. 22 min..
elevation: 3700m. Annual. Wild. Seed.

PI 545931 to 546033-continued

- PI 545950 *Solanum acaule* Bitter subsp. *acaule* SOLANACEAE
origin: Bolivia. **collected:** March 27, 1987. **collector id:** HOHL 250. **locality:** Prov. Ibanes. Near Pacachani village, 18.2 km from Sacaca on road to Oruro. On lower side of road with many stone fences. A weed of barley and on the edges of various cultivated fields in the area. **latitude:** 18 deg. 00 min.. **longitude:** 66 deg. 26 min.. **elevation:** 3900m. **remarks:** Abundant. Annual. Wild. Seed.
- PI 545951 *Solanum acaule* Bitter subsp. *acaule* SOLANACEAE
origin: Bolivia. **collected:** March 28, 1987. **collector id:** HOHL 254. **locality:** Prov. Cercado. 1 km after Caihuasi on the road to Cochabamba from Oruro. In and around onion fields. **latitude:** 17 deg. 37 min.. **longitude:** 67 deg. 03 min.. **elevation:** 3900m. **remarks:** Frequent. Annual. Wild. Seed.
- PI 545952 *Solanum acaule* Bitter subsp. *acaule* SOLANACEAE
origin: Bolivia. **collected:** March 28, 1987. **collector id:** HOHL 255. **locality:** Prov. Tapacari. Irutambo. 62 km from Oruro towards Cochabamba (25 km from Caihuasi). Roadside. **latitude:** 17 deg. 47 min.. **longitude:** 66 deg. 49 min.. **elevation:** 4260m. Annual. Wild. Seed.
- PI 545953 *Solanum acaule* Bitter subsp. *acaule* SOLANACEAE
origin: Bolivia. **collected:** April 06, 1987. **collector id:** HOHL 285. **locality:** Prov. Azurduy. 30 km beyond Torre Pampa junction, 20 km before Cruz Kasa on road to Azurduy. Near cliffs 200m above road. Cliff base where cattle shelter. Among *Blumenbachia* and other vegetation where ground is heavily manured. **latitude:** 19 deg. 34 min.. **longitude:** 64 deg. 39 min.. **elevation:** 3730m. **remarks:** Most vines dead. Berries from HOHL 286 may have been mixed with this collection. Annual. Wild. Seed.
- PI 545954 *Solanum acaule* Bitter subsp. *acaule* SOLANACEAE
origin: Bolivia. **collected:** April 06, 1987. **collector id:** HOHL 291. **locality:** Prov. Azurduy. About 22 km beyond the Torre Pampa junction on the way to Azurduy. About 0.5 km along the cliffs in the direction of Tarabuco. Base of cliffs in manured soil where cattle take shelter. **latitude:** 19 deg. 31 min.. **longitude:** 64 deg. 41 min.. **elevation:** 3730m. **remarks:** Plants completely dried, but two very mature berries found, turning orange. Large and conical. Annual. Wild. Seed.

PI 545931 to 546033-continued

- PI 545955 *Solanum acaule* Bitter subsp. *acaule* SOLANACEAE
origin: Bolivia. **collected:** April 07, 1987. **collector id:** HOHL 292. **locality:** Prov. Zudanez. About 3 km from the sheep improvement station at Corralon Mayu on the side road to Cantargallo. On the edge of a potato field. **latitude:** 19 deg. 27 min.. **longitude:** 64 deg. 45 min.. **elevation:** 3580m. **remarks:** Vines completely dead. Local name "pisco papa" or bird potato. Annual. Wild. Seed.
- PI 545956 *Solanum acaule* Bitter subsp. *acaule* SOLANACEAE
origin: Bolivia. **collected:** April 07, 1987. **collector id:** HOHL 294. **locality:** Prov. Zudanez. Sheep station at Corralon Mayu. Growing around pens and corrals. **latitude:** 19 deg. 27 min.. **longitude:** 64 deg. 44 min.. **elevation:** 3450m. Annual. Wild. Seed.
- PI 545957 *Solanum acaule* Bitter subsp. *acaule* SOLANACEAE
origin: Bolivia. **collected:** April 20, 1987. **collector id:** HOHL 303. **locality:** Prov. Cercado. Parque Tunari. Road from district of Cala Cala in Cochabamba. 25 km from plazuela at Cala Cala, 20 km from new park entrance, left fork near top of ridge, called "Asnachinija"? In corral with manure and *Blumenbachia*. **latitude:** 17 deg. 17 min.. **longitude:** 66 deg. 10 min.. **elevation:** 4190m. **remarks:** Plants abundant. Very many conical fruit, yellowing with maturity. Flowers said to be purple. Annual. Wild. Seed.
- PI 545958 *Solanum arnezii* Cardenas SOLANACEAE
origin: Bolivia. **collected:** April 08, 1987. **collector id:** HOHL 297. **locality:** Prov. Azurduy. About 5 km before San Pedro on the road from Corralon Mayu. In maize field. **latitude:** 19 deg. 34 min.. **longitude:** 64 deg. 32 min.. **elevation:** 2000m. **remarks:** Local name "pisco papa". Vines dead. Berries round with tiny spots. Prominent stem wings. Flowers said to be white. Annual. Wild. Seed.
- PI 545959 *Solanum astleyi* Hawkes & Hjert. SOLANACEAE
origin: Bolivia. **collected:** April 04, 1987. **collector id:** HOHL 277. **locality:** Prov. Saavedra. 87 km from Sucre, 35 km before Betanzos going toward Potosi. Small colony in maize field. **latitude:** 19 deg. 26 min.. **longitude:** 65 deg. 24 min.. **elevation:** 3200m. **remarks:** Simple leaves, lanceolate, tapering to sharp points. Large round, green berries. No flowers. Local name "yutu papa". Annual. Wild. Seed.

PI 545931 to 546033-continued

- PI 545960 *Solanum berthaultii* Hawkes SOLANACEAE
origin: Bolivia. **collected:** March 11, 1987. **collector id:** HOHL 190. **locality:** Prov. Quillacollo. Vila Vila. Km 29 on the Cochabamba to Confital road. Near a small white chapel above the road. Surrounded by huge Agave plants, under shrubs. **latitude:** 17 deg. 31 min.. **longitude:** 66 deg. 18 min.. **elevation:** 2500m. **remarks:** Blue to purple flowers. White spots on fruit. Plants mature, yellowing. Two types of glandular trichomes. Annual. Wild. Seed.
- PI 545961 *Solanum berthaultii* Hawkes SOLANACEAE
origin: Bolivia. **collected:** March 14, 1987. **collector id:** HOHL 195. **locality:** Prov. Tapacari. At the junction Cruze de Challa, where the road to Independencia leaves the Cochabamba to Confital road at Km 94.5. Among stones on steep escarpment inaccessible to livestock. **latitude:** 17 deg. 38 min.. **longitude:** 66 deg. 42 min.. **elevation:** 3950m. **remarks:** Deep purple flowers, small plants, most of which were still just beginning to form berries. Annual. Wild. Seed.
- PI 545962 *Solanum berthaultii* Hawkes SOLANACEAE
origin: Bolivia. **collected:** April 09, 1987. **collector id:** HOHL 300. **locality:** Prov. Zudanez. About 300 meters from the town of Icla in a canyon above the town. Place called Potrillos. On steep slopes. **latitude:** 19 deg. 18 min.. **longitude:** 64 deg. 51 min.. **elevation:** 2650m. **remarks:** Vines dead. Berries round with white spots. Annual. Wild. Seed.
- PI 545963 *Solanum boliviense* Dunal SOLANACEAE
origin: Bolivia. **collected:** April 04, 1987. **collector id:** HOHL 275. **locality:** Prov. Saavedra. 87 km from Sucre, 35 km before Betanzos going toward Potosi. Upper side of the road. In a maize field. **latitude:** 19 deg. 26 min.. **longitude:** 65 deg. 24 min.. **elevation:** 3200m. **remarks:** One small colony. Annual. Wild. Seed.
- PI 545964 *Solanum boliviense* Dunal SOLANACEAE
origin: Bolivia. **collected:** April 04, 1987. **collector id:** HOHL 276B. **locality:** Prov. Saavedra. 87 km from Sucre, 35 km before Betanzos going toward Potosi. Upper side of the road. **latitude:** 19 deg. 26 min.. **longitude:** 65 deg. 24 min.. **elevation:** 3200m. Annual. Wild. Seed.

PI 545931 to 546033-continued

- PI 545965 *Solanum boliviense* Dunal SOLANACEAE
origin: Bolivia. **collected:** April 04, 1987. **collector id:** HOHL 278. **locality:** Prov. Saavedra. 1 km from Mojotorillo (about 6 km from Betanzos) on the way to Sucre. Growing as a weed in a cultivated potato field. **latitude:** 19 deg. 29 min.. **longitude:** 65 deg. 27 min.. **elevation:** 3120m. **remarks:** Only ca. 15 cm tall, but often with mature berries. Simple, round tipped leaves. Fruit dark green with white spots. Annual. Wild. Seed.
- PI 545966 *Solanum boliviense* Dunal SOLANACEAE
origin: Bolivia. **collected:** April 04, 1987. **collector id:** HOHL 279. **locality:** Prov. Saavedra. 1 km from Mojotorillo (about 6 km from Betanzos) on the way to Sucre. Weed in and near a barley field. **latitude:** 19 deg. 29 min.. **longitude:** 65 deg. 27 min.. **elevation:** 3120m. **remarks:** Distinguished from HOHL 278 by less pigmentation and absence of white spots on berries. Annual. Wild. Seed.
- PI 545967 *Solanum brevicaulle* Bitter SOLANACEAE
origin: Bolivia. **collected:** March 11, 1987. **collector id:** HOHL 189. **locality:** Probably Prov. Tapacari. Km 98 on Cochabamba-Confital road. 21 km before Confital from Cochabamba, at bridge crossing river. Stones and waste places of barley, oca and potato field edges and foot of cliff on shaded side of deep ravine. **latitude:** 17 deg. 38 min.. **longitude:** 66 deg. 44 min.. **elevation:** 3750m. **remarks:** Purple flowers, with light green, round berries. Bushy, short, compact plants. Some pubescence. Quite common. Annual. Wild. Seed.
- PI 545968 *Solanum brevicaulle* Bitter SOLANACEAE
origin: Bolivia. **collected:** March 14, 1987. **collector id:** HOHL 193. **locality:** Prov. Arque or Tapacari. Kallani Alto. Km 86 on road from Cochabamba to Confital. **latitude:** 17 deg. 38 min.. **longitude:** 66 deg. 39 min.. **elevation:** 3960m. **remarks:** Small plants, usually without having formed fruit. Deep purple flowers, rounded green berries. Common. Annual. Wild. Seed.
- PI 545969 *Solanum brevicaulle* Bitter SOLANACEAE
origin: Bolivia. **collected:** March 14, 1987. **collector id:** HOHL 196. **locality:** Prov. Tapacari. Challuma. Km 97 on the Cochabamba-Confital road. In a steep ravine among small plots of oca and potatoes against a cliff. **latitude:** 17 deg. 37 min.. **longitude:** 66 deg. 43 min.. **elevation:** 3700m. **remarks:** Usually small plants with no flowers remaining. Round, green berries. Annual. Wild. Seed.

PI 545931 to 546033-continued

PI 545970 *Solanum brevicaulle* Bitter SOLANACEAE
origin: Bolivia. **collected:** March 20, 1987. **collector id:** HOHL 212. **locality:** Prov. Camacho. 9.6 km from Escoma on the road to Italaque. In secluded spots near the bottom of the high cliff. **latitude:** 15 deg. 36 min.. **longitude:** 69 deg. 01 min.. **elevation:** 3900m. Annual. Wild. Seed.

PI 545971 *Solanum brevicaulle* Bitter SOLANACEAE
origin: Bolivia. **collected:** March 28, 1987. **collector id:** HOHL 256. **locality:** Prov. Tapacari. 17.6 km from Confital on the road to Cochabamba. At km 99.5 of the road. On river banks and edges of cultivated fields in narrow ravine. Also in protected waste places. **latitude:** 17 deg. 38 min.. **longitude:** 66 deg. 43 min.. **elevation:** 3840m. Annual. Wild. Seed.

PI 545972 *Solanum candolleianum* Berthault SOLANACEAE
origin: Bolivia. **collected:** March 20, 1987. **collector id:** HOHL 211. **locality:** Prov. Camacho. 9.6 km from Escoma on the road to Italaque. In crevices and ledges on cliff among *Blumenbachia* and other vegetation. In areas inaccessible to livestock. **latitude:** 15 deg. 36 min.. **longitude:** 69 deg. 01 min.. **elevation:** 3900m. **remarks:** Berries slightly elongated, sometimes with purple streaks. Purple flowers. Largest berries 2.5 cm in diameter. Rare. Annual. Wild. Seed.

PI 545973 *Solanum capsicibaccatum* Cardenas SOLANACEAE
origin: Bolivia. **collected:** March 24, 1987. **collector id:** HOHL 217. **locality:** Prov. Inquisivi. Irupaya. One hour's walk (about 5 km) from Quime on a trail leading northwards. Near path up to potato fields from the village. In thickets under dense shade of *Polylepis* woodland in damp places with rich organic soil. **latitude:** 17 deg. 02 min.. **longitude:** 67 deg. 15 min.. **elevation:** 3380m. **remarks:** Flowers white, stellate to pentagonal, fruit elongate, leaves single or 3 pairs of laterals. Local name "monte chok'e". Annual. Wild. Seed.

PI 545974 *Solanum circaeifolium* subsp. *quimense* Hawkes & Hjert. SOLANACEAE
origin: Bolivia. **collected:** March 25, 1987. **collector id:** HOHL 226. **locality:** Prov. Inquisivi. 5 km from Quime on road to Pongo. Moist places in shade of shrubs or in moss on top of or between large boulders in ruins in the forest. **latitude:** 17 deg. 04 min.. **longitude:** 67 deg. 16 min.. **elevation:** 3380m. **remarks:** Berries elongated, becoming whitish and/or with purple stripes as they matured. White, stellate flowers. Annual. Wild. Seed.

PI 545931 to 546033-continued

- PI 545975 *Solanum gourlayi* subsp. *pachytrichum* (Hawkes) Hawkes & Hjert. SOLANACEAE
origin: Bolivia. **collected:** April 02, 1987. **collector id:** HOHL 264. **locality:** Prov. Oropeza. Tranca Cocha. 29 km from the checkpoint leaving Sucre going toward Ravelo. Lower side of the road. In and around papa lisa field on steep slopes. **latitude:** 18 deg. 56 min.. **longitude:** 65 deg. 23 min.. **elevation:** 3200m. **remarks:** Narrow leaflets, quite pubescent. Plants senescent, dry. Berries slightly conical. Local name "al'ko papa". Annual. Wild. Seed.
- PI 545976 *Solanum gourlayi* subsp. *pachytrichum* (Hawkes) Hawkes & Hjert. SOLANACEAE
origin: Bolivia. **collected:** April 02, 1987. **collector id:** HOHL 265. **locality:** Prov. Oropeza. Tranca Cocha. 29 km from the checkpoint leaving Sucre going toward Ravelo. Lower side of the road. **latitude:** 18 deg. 56 min.. **longitude:** 65 deg. 23 min.. **elevation:** 3200m. **remarks:** Berries on ground, no living plants. Green, slightly conical. Annual. Wild. Seed.
- PI 545977 *Solanum gourlayi* subsp. *pachytrichum* (Hawkes) Hawkes & Hjert. SOLANACEAE
origin: Bolivia. **collected:** April 02, 1987. **collector id:** HOHL 268. **locality:** Prov. Oropeza. About 27 km from the checkpoint leaving Sucre on road to Ravelo. 200 m from road on lower side. In maize field. **latitude:** 18 deg. 57 min.. **longitude:** 65 deg. 22 min.. **elevation:** 3200m. **remarks:** Very dark green foliage. 3 pairs lateral leaflets. 1-2 pairs interjected leaflets. Pubescent. Large conical fruit. Annual. Wild. Seed.
- PI 545978 *Solanum gourlayi* subsp. *pachytrichum* (Hawkes) Hawkes & Hjert. SOLANACEAE
origin: Bolivia. **collected:** April 03, 1987. **collector id:** HOHL 270. **locality:** Prov. Oropeza. Cajamarca. 23.8 km from the Sucre checkpoint on the road to Ravelo. Near property of Felipe Hualla, about 100 m above the road. On edges of quinoa-potato fields on steep slope. **latitude:** 18 deg. 57 min.. **longitude:** 65 deg. 19 min.. **elevation:** 3000m. **remarks:** Dark green foliage. Leaflets narrow. Flowers deep violet with rotate corolla. Berries slightly conical. Annual. Wild. Seed.

PI 545931 to 546033-continued

- PI 545979 *Solanum gourlayi* subsp. *pachytrichum* (Hawkes) Hawkes & Hjert. SOLANACEAE
origin: Bolivia. **collected:** April 04, 1987. **collector id:** HOHL 276A. **locality:** Prov. Saavedra. 87 km from Sucre, 35 km before Betanzos going toward Potosi. Upper side of the road. **latitude:** 19 deg. 26 min.. **longitude:** 65 deg. 24 min.. **elevation:** 3200m. Annual. Wild. Seed.
- PI 545980 *Solanum* hybrid SOLANACEAE
origin: Bolivia. **collected:** March 28, 1987. **collector id:** HOHL 258. **locality:** Prov. Tapacari. 17.6 km from the Confital on the road to Cochabamba. At km 99.5 of the road. Cultivated. **latitude:** 17 deg. 38 min.. **longitude:** 66 deg. 43 min.. **elevation:** 3840m. **remarks:** Vines dead. Large green berries. Calyx with very long, asymmetrical sepals. Annual. Wild. Seed.
- PI 545981 *Solanum* hybrid SOLANACEAE
origin: Bolivia. **collected:** April 02, 1987. **collector id:** HOHL 269. **locality:** Prov. Oropeza. 14.5 km from the checkpoint leaving Sucre on the road to Ravelo. In small village at the home of a girl named Teodora Sino. At the base of a rock wall at the edge of a broadbean field. **latitude:** 19 deg. 00 min.. **longitude:** 65 deg. 20 min.. **elevation:** 3200m. **remarks:** Plants over 1 m long with large round white tubers, shallow eyes. Berries round, green. Vines dead. Annual. Wild. Seed.
- PI 545982 *Solanum* hybrid SOLANACEAE
origin: Bolivia. **collected:** April 04, 1987. **collector id:** HOHL 274. **locality:** Prov. Saavedra. Near marker for km 90 on Sucre-Potosi road. 86 km from Sucre, 36 km before Betanzos going towards Potosi. Upper side of the roadway. In an infrequently used corral made of cactus thorn branches on a ridge. **latitude:** 19 deg. 25 min.. **longitude:** 65 deg. 24 min.. **elevation:** 3100m. **remarks:** Hairs protruding from leaf margins. Round, light green berries. Large, spreading plant. Annual. Wild. Seed.
- PI 545983 *Solanum* hybrid SOLANACEAE
origin: Bolivia. **collected:** April 05, 1987. **collector id:** HOHL 281. **locality:** Prov. Zudanez. 30 km from Tarabuco on the road to Icla. 200-300 m to the upper side of the roadway, over the hilltop. Among molle and spiny vegetation, e.g., columnar cactus. **latitude:** 19 deg. 16 min.. **longitude:** 64 deg. 53 min.. **elevation:** 3000m. **remarks:** Vines dead. Two berries found on ground were round, green. Annual. Wild. Seed.

PI 545931 to 546033-continued

- PI 545984 *Solanum leptophyes* Bitter SOLANACEAE
origin: Bolivia. **collected:** March 26, 1987. **collector id:** HOHL 229. **locality:** Prov. Cercado. 12.6 km from Oruro on the road to Sacaca. In recesses and narrow ravines leading up a cliff and on the wall of a dam. Only where inaccessible to grazing animals. **latitude:** 17 deg. 58 min.. **longitude:** 66 deg. 56 min.. **elevation:** 3860m. **remarks:** Leaves narrow, pubescent, with greyish tinge. Berries round, green. Local girl said the flowers were purple. Annual. Wild. Seed.
- PI 545985 *Solanum leptophyes* Bitter SOLANACEAE
origin: Bolivia. **collected:** March 26, 1987. **collector id:** HOHL 230. **locality:** Prov. Cercado. 12.6 km from Oruro on the road to Sacaca. Going up to a high cliff. Growing in a ravine. **latitude:** 17 deg. 58 min.. **longitude:** 66 deg. 56 min.. **elevation:** 3860m. **remarks:** Leaves larger and broader than those of HOHL 229. Berries slightly elongated. Annual. Wild. Seed.
- PI 545986 *Solanum leptophyes* Bitter SOLANACEAE
origin: Bolivia. **collected:** March 26, 1987. **collector id:** HOHL 231. **locality:** Prov. Cercado. 12.6 km from Oruro on the road to Sacaca. Between a cliff and cultivated field. Growing among muna-muna scrub brush, the strong odor of which repels grazing animals. **latitude:** 17 deg. 58 min.. **longitude:** 66 deg. 56 min.. **elevation:** 3860m. **remarks:** Like *S. andigena*, but not cultivated. Flowers said to be purple, fruit round. Local names "apharuma" and "papa quipa". Annual. Wild. Seed.
- PI 545987 *Solanum leptophyes* Bitter SOLANACEAE
origin: Bolivia. **collected:** March 27, 1987. **collector id:** HOHL 236. **locality:** Prov. Ibanes. Near Sacaca. Hill behind a flour mill (El Molino) about 1/2 km below the town. Street leading down to the river from NE corner of main plaza. Steep slope on the hill behind mill and edges of wheat field where protected. **latitude:** 18 deg. 01 min.. **longitude:** 66 deg. 22 min.. **elevation:** 3680m. **remarks:** Flowers blue, fruit somewhat elongated, some with white spots. Leaflets rather elliptical, fairly parallel sides. Annual. Wild. Seed.

PI 545931 to 546033-continued

- PI 545988 *Solanum leptophyes* Bitter SOLANACEAE
origin: Bolivia. **collected:** March 27, 1987. **collector id:** HOHL 237. **locality:** Prov. Ibanes near Sacaca, hill behind flour mill. Street leading to river from NE corner of main plaza about 1.5 km below town. About 1 km down river from HOHL 236 in well protected places by river and in abandoned flour mill. **latitude:** 18 deg. 01 min.. **longitude:** 66 deg. 22 min.. **elevation:** 3680m. **remarks:** Blue flowers. Plants had been grazed by livestock. Annual. Wild. Seed.
- PI 545989 *Solanum leptophyes* Bitter SOLANACEAE
origin: Bolivia. **collected:** March 27, 1987. **collector id:** HOHL 239. **locality:** Prov. Ibanes. In the plaza in the town of Sacaca. **latitude:** 18 deg. 01 min.. **longitude:** 66 deg. 22 min.. **elevation:** 3700m. **remarks:** Round, green berries. Annual. Wild. Seed.
- PI 545990 *Solanum leptophyes* Bitter SOLANACEAE
origin: Bolivia. **collected:** March 27, 1987. **collector id:** HOHL 240. **locality:** Prov. Ibanes. At the school yard in Sacaca. Same location as HOHL 241, 242. Between an alfalfa plot in the yard and the adobe wall surrounding it. **latitude:** 18 deg. 01 min.. **longitude:** 66 deg. 22 min.. **elevation:** 3700m. **remarks:** Elongated, green berries; round, tan tubers. Annual. Wild. Seed.
- PI 545991 *Solanum leptophyes* Bitter SOLANACEAE
origin: Bolivia. **collected:** March 27, 1987. **collector id:** HOHL 241. **locality:** Prov. Ibanes. At the school yard in Sacaca. Same location as HOHL 240, 242. **latitude:** 18 deg. 01 min.. **longitude:** 66 deg. 22 min.. **elevation:** 3700m. **remarks:** Berries slightly elongated. Annual. Wild. Seed.
- PI 545992 *Solanum leptophyes* Bitter SOLANACEAE
origin: Bolivia. **collected:** March 27, 1987. **collector id:** HOHL 242. **locality:** Prov. Ibanes. At the schoolyard in Sacaca. Same location as HOHL 240, 241. **latitude:** 18 deg. 01 min.. **longitude:** 66 deg. 22 min.. **elevation:** 3700m. Annual. Wild. Seed.
- PI 545993 *Solanum leptophyes* Bitter SOLANACEAE
origin: Bolivia. **collected:** March 27, 1987. **collector id:** HOHL 244. **locality:** Prov. Ibanes. Near Sacaca. Near the flour mill complex by the river below the town. Same location as HOHL 236. At the foot of a rock wall at the edge of a cultivated field. **latitude:** 18 deg. 01 min.. **longitude:** 66 deg. 22 min.. **elevation:** 3680m. **remarks:** Berries are less elongate than those of HOHL 236, and have white spots. Some pigmentation on stem. Annual. Wild. Seed.

PI 545931 to 546033-continued

- PI 545994 *Solanum leptophyes* Bitter SOLANACEAE
origin: Bolivia. **collected:** March 27, 1987. **collector id:** HOHL 245. **locality:** Prov. Ibanes. Near Sacaca. Near the flour mill complex by the river below the town. Growing between a ditch and a stone wall. **latitude:** 18 deg. 01 min.. **longitude:** 66 deg. 22 min.. **elevation:** 3680m. **remarks:** Berries round, most with white spots. Somewhat variable. Annual. Wild. Seed.
- PI 545995 *Solanum leptophyes* Bitter SOLANACEAE
origin: Bolivia. **collected:** March 27, 1987. **collector id:** HOHL 247. **locality:** Prov. Ibanes. 1.6 km from Sacaca on road to Oruro. About 50 m above the road. At the edge of a cultivated field at the foot of a stone wall by a stream. **latitude:** 18 deg. 01 min.. **longitude:** 66 deg. 23 min.. **elevation:** 3700m. **remarks:** Plants wilting, but with many elongate berries. Locally abundant because whole area is protected from grazing. Annual. Wild. Seed.
- PI 545996 *Solanum leptophyes* Bitter SOLANACEAE
origin: Bolivia. **collected:** March 27, 1987. **collector id:** HOHL 248. **locality:** Prov. Ibanes. 1.6 km from Sacaca on road to Oruro. About 50 m above the roadway. At the edge of a cultivated field at the foot of a stone wall by a stream. **latitude:** 18 deg. 01 min.. **longitude:** 66 deg. 23 min.. **elevation:** 3700m. **remarks:** Berries elongate but distinguished from HOHL 247 by white spots. Annual. Wild. Seed.
- PI 545997 *Solanum leptophyes* Bitter SOLANACEAE
origin: Bolivia. **collected:** March 27, 1987. **collector id:** HOHL 249. **locality:** Dept. Ibanes. 1.6 km from Sacaca on road to Oruro. About 50 m above the roadway. At the edge of a cultivated field at the foot of a stone wall by a stream. **latitude:** 18 deg. 01 min.. **longitude:** 66 deg. 23 min.. **elevation:** 3700m. **remarks:** Distinguished from HOHL 247, 248 by round berries. Annual. Wild. Seed.
- PI 545998 *Solanum megistacrolobum* Bitter SOLANACEAE
origin: Bolivia. **collected:** March 27, 1987. **collector id:** HOHL 251. **locality:** Prov. Ibanes. Near Pacachani village, 18.2 km from Sacaca on road to Oruro. On the lower side of the road with many stone fences. At edges of cultivated fields and among tola shrubs. **latitude:** 18 deg. 00 min.. **longitude:** 66 deg. 26 min.. **elevation:** 3900m. Annual. Wild. Seed.

PI 545931 to 546033-continued

- PI 545999 *Solanum megistacrolobum* Bitter SOLANACEAE
origin: Bolivia. **collected:** April 07, 1987. **collector id:** HOHL 293. **locality:** Prov. Zudanez. In a quebrada (gulch) behind the sheep station at Corralon Mayu. In heavy grass on a steep slope. **latitude:** 19 deg. 27 min.. **longitude:** 64 deg. 44 min.. **elevation:** 3450m. **remarks:** Odor typical of *megistacrolobum*. Berries with white flecks, round, smooth. Annual. Wild. Seed.
- PI 546000 *Solanum megistacrolobum* Bitter SOLANACEAE
origin: Bolivia. **collected:** April 07, 1987. **collector id:** HOHL 295. **locality:** Prov. Azurduy. Several hundred meters over the ridge behind the sheep station at Corralon Mayu. **latitude:** 19 deg. 27 min.. **longitude:** 64 deg. 44 min.. **elevation:** 3350m. **remarks:** Local name "pisco papa". Pubescent with *megistacrolobum* odor. No flowers. Fruits elongate-rectangular, spotted. Annual. Wild. Seed.
- PI 546001 *Solanum* sp. SOLANACEAE
origin: Bolivia. **collected:** March 24, 1987. **collector id:** HOHL 222. **locality:** Prov. Inquisivi. 11 km from Quime on the way to Inquisivi. Around and in stone enclosures. **latitude:** 16 deg. 58 min.. **longitude:** 67 deg. 11 min.. **elevation:** 2900m. **remarks:** Vines dead but two berries found with help of a local boy. Annual. Wild. Seed.
- PI 546002 *Solanum* sp. SOLANACEAE
origin: Bolivia. **collected:** April 06, 1987. **collector id:** HOHL 283. **locality:** Prov. Azurduy. 37-38 km beyond the Torre Pampa junction on the Tarabuco-Azurduy road (about 127 km beyond Tarabuco, or 100 km before Azurduy). Some distance from the road, following the cliff formations. **latitude:** 19 deg. 36 min.. **longitude:** 64 deg. 37 min.. **elevation:** 3450m. **remarks:** Pubescent leaves and stems with purple pigmentation. Fruit conical, distinctly pointed, with white flecks. Annual. Wild. Seed.
- PI 546003 *Solanum* sp. SOLANACEAE
origin: Bolivia. **collected:** April 06, 1987. **collector id:** HOHL 286. **locality:** Prov. Azurduy. 30 km beyond the Torre Pampa junction, 20 km before Cruz Kasa on road to Azurduy. Near cliffs 200m above road. Cliff base where cattle shelter. Among *Blumenbachia* and other vegetation where ground is heavily manured. **latitude:** 19 deg. 34 min.. **longitude:** 64 deg. 39 min.. **elevation:** 3730m. **remarks:** Equal to HAO 163 (*hoopesii* x *ugentii*) collected in 1986? Berries conical, large deep purple flowers, long styles. Annual. Wild. Seed.

PI 545931 to 546033-continued

- PI 546004 *Solanum* sp. SOLANACEAE
origin: Bolivia. **collected:** April 06, 1987. **collector id:** HOHL 287. **locality:** Prov. Azurduy. 30 km beyond Torre Pampa jct., 20 km before Cruz Kasa, on road to Azurduy. 1 km along cliffs towards Tarabuco. Cliff base with columnar cacti, *Blumenbachia*, etc. in manured soil. Many *Viscachas* nearby may spread seed. **latitude:** 19 deg. 34 min.. **longitude:** 64 deg. 39 min.. **elevation:** 3730m. **remarks:** Berries more round, with less white, than those of HOHL 286. Annual. Wild. Seed.
- PI 546005 *Solanum* sp. SOLANACEAE
origin: Bolivia. **collected:** April 09, 1987. **collector id:** HOHL 301. **locality:** Prov. Yamparaez. Chinkana Mayu. 11.5 km from Tarabuco on the road to Icla. On property of Mr. Erasmo Quispe. In maize field and between maize and barley fields on very steep slope on bare ground. **latitude:** 19 deg. 14 min.. **longitude:** 64 deg. 54 min.. **elevation:** 3050m. **remarks:** Vines dead. Annual. Wild. Seed.
- PI 546006 *Solanum sparsipilum* (Bitter) Juz. & Buk. SOLANACEAE
origin: Bolivia. **collected:** March 10, 1987. **collector id:** HOHL 179. **locality:** Prov. Ayopaya. Chunahui. 10 km from the bridge leaving Independencia on the road to Kami. 50 km before Kami. About 100 m below road. In a stone enclosure, apparently an abandoned livestock pen in heavy brush. **latitude:** 17 deg. 10 min.. **longitude:** 66 deg. 55 min.. **elevation:** 3000m. **remarks:** Purple flowers, berries round, almost white toward the bottom, varicose. Annual. Wild. Seed.
- PI 546007 *Solanum sparsipilum* (Bitter) Juz. & Buk. SOLANACEAE
origin: Bolivia. **collected:** March 10, 1987. **collector id:** HOHL 181. **locality:** Prov. Ayopaya. 10 km from bridge leaving Independencia on road to Kami. On embankment below road. Steep rocky area among bushes. **latitude:** 17 deg. 10 min.. **longitude:** 66 deg. 55 min.. **elevation:** 3000m. **remarks:** Most plants small, underdeveloped. Light green berries spotted with white, slightly varicose. Annual. Wild. Seed.
- PI 546008 *Solanum sucrensis* Hawkes SOLANACEAE
origin: Bolivia. **collected:** April 05, 1987. **collector id:** HOHL 280. **locality:** Prov. Yamparaez. 15 km south of Tarabuco on road to Icla (25 km before Icla). 200 m beyond the Escuela San Jose de Paredon. Among stones on retaining wall on edge of wheat field. **latitude:** 19 deg. 15 min.. **longitude:** 64 deg. 53 min.. **elevation:** 3000m. **remarks:** Vines dead. Stems winged with some purple pigmentation. Berries found on ground were round, green. Annual. Wild. Seed.

PI 545931 to 546033-continued

- PI 546009 *Solanum toralapanum* Cardenas & Hawkes SOLANACEAE
origin: Bolivia. **collected:** March 09, 1987. **collector id:** HOHL 178. **locality:** Prov. Tapacari or Arque. Quilla. Km 85 on the Cochabamba to Confital road. 9 km before junction at Cruze de Challa. Volunteer in barley fields. **latitude:** 17 deg. 38 min.. **longitude:** 66 deg. 39 min.. **elevation:** 3900m. **remarks:** Purple flowers. Fairly common. Annual. Wild. Seed.
- PI 546010 *Solanum toralapanum* Cardenas & Hawkes SOLANACEAE
origin: Bolivia. **collected:** March 10, 1987. **collector id:** HOHL 182. **locality:** Prov. Ayopaya. 2 km from village of Charahuaycu on road to Kami. (19 km from Kami, 41 km from Independencia.) Above the road. On edges of cultivated fields. **latitude:** 17 deg. 19 min.. **longitude:** 66 deg. 52 min.. **elevation:** 3800m. **remarks:** Common. Annual. Wild. Seed.
- PI 546011 *Solanum toralapanum* Cardenas & Hawkes SOLANACEAE
origin: Bolivia. **collected:** March 11, 1987. **collector id:** HOHL 188. **locality:** Probably Prov. Tapacari. Km 98 on the Cochabamba-Confital road. 21 km before Confital coming from Cochabamba, where a bridge crosses the river. Steep slopes on bank of river and edges of barley fields. **latitude:** 17 deg. 38 min.. **longitude:** 66 deg. 44 min.. **elevation:** 3750m. Annual. Wild. Seed.
- PI 546012 *Solanum toralapanum* Cardenas & Hawkes SOLANACEAE
origin: Bolivia. **collected:** March 14, 1987. **collector id:** HOHL 192. **locality:** Prov. Arque or Tapacari. Kallani Alto. Km 86 on road from Cochabamba to Confital. At a farmstead below the road. On border of corrals. **latitude:** 17 deg. 38 min.. **longitude:** 66 deg. 39 min.. **elevation:** 3960m. Annual. Wild. Seed.
- PI 546013 *Solanum toralapanum* Cardenas & Hawkes SOLANACEAE
origin: Bolivia. **collected:** March 14, 1987. **collector id:** HOHL 194. **locality:** Prov. Tapacari. At the junction Cruze de Challa, where the road to Independencia leaves the Cochabamba to Confital road at Km 94.5. Above the settlement. Steep slopes on edges of cultivated fields. **latitude:** 17 deg. 38 min.. **longitude:** 66 deg. 42 min.. **elevation:** 3950m. Annual. Wild. Seed.
- PI 546014 *Solanum toralapanum* Cardenas & Hawkes SOLANACEAE
origin: Bolivia. **collected:** March 17, 1987. **collector id:** HOHL 200. **locality:** Prov. Loayza. 11.2 km from Ayo Ayo on the road to Caracato. Near Pomasara (there are two Pomasaras on this road--this was the upper one). In a small ravine. **latitude:** 17 deg. 03 min.. **longitude:** 67 deg. 53 min.. **elevation:** 3960m. Annual. Wild. Seed.

PI 545931 to 546033-continued

- PI 546015 *Solanum toralapanum* Cardenas & Hawkes SOLANACEAE
origin: Bolivia. **collected:** April 06, 1987. **collector id:** HOHL 282. **locality:** Prov. Azurduy. 37-38 km beyond the turn-off to Torre Pampa on the Tarabuco-Azurduy road (about 127 km beyond Tarabuco, or 100 km before Azurduy). In a quebrada (gulch) surrounded by cliffs where inaccessible to grazing livestock. **latitude:** 19 deg. 36 min.. **longitude:** 64 deg. 37 min.. **elevation:** 3450m. **remarks:** Small, maturing plants with simple, ovate leaves. Berries round to slightly elongate, light green, flecked with white. Annual. Wild. Seed.
- PI 546016 *Solanum tuberosum* subsp. *andigena* Hawkes SOLANACEAE
origin: Bolivia. **collected:** March 14, 1987. **collector id:** HOHL 197. **locality:** Prov. Tapacari. Challuma. Km 97 on the Cochabamba-Confital road. In a cultivated field. **latitude:** 17 deg. 37 min.. **longitude:** 66 deg. 43 min.. **elevation:** 3700m. **remarks:** Vines dead. Annual. Wild. Seed.
- PI 546017 *Solanum tuberosum* subsp. *andigena* Hawkes SOLANACEAE
origin: Bolivia. **collected:** March 20, 1987. **collector id:** HOHL 209. **locality:** Prov. Camacho. Cemetery in the town of Escoma. **latitude:** 15 deg. 38 min.. **longitude:** 69 deg. 04 min.. **elevation:** 3800m. **remarks:** Appearance of cultivated forms. Locals say tubers are good to eat, but stolons are very long -- up to 1 meter. Annual. Wild. Seed.
- PI 546018 *Solanum tuberosum* subsp. *andigena* Hawkes SOLANACEAE
origin: Bolivia. **collected:** March 20, 1987. **collector id:** HOHL 213. **locality:** Prov. Camacho. 4.8 km from Chaguaya on road to Mina Matilde. On the right side of the road. In corrals and abandoned stone structures. **latitude:** 15 deg. 44 min.. **longitude:** 68 deg. 58 min.. **elevation:** 3900m. Annual. Wild. Seed.
- PI 546019 *Solanum tuberosum* subsp. *andigena* Hawkes SOLANACEAE
origin: Bolivia. **collected:** March 24, 1987. **collector id:** HOHL 221. **locality:** Prov. Inquisivi. 1.7 km from the town square of Inquisivi on road to Capinata. On property of Mrs. Benedicta Pari. Weed in maize field. **latitude:** 16 deg. 54 min.. **longitude:** 67 deg. 07 min.. **elevation:** 2950m. **remarks:** Flowers said to be white. Tubers white. Fruit round with white spots. Local names "Pampa chok'e", "Quipa papa". Annual. Wild. Seed.

PI 545931 to 546033-continued

- PI 546020 *Solanum tuberosum* subsp. *andigena* Hawkes SOLANACEAE
origin: Bolivia. **collected:** March 26, 1987. **collector**
id: HOHL 235. **locality:** Prov. Arque. Town of Bolivar.
74.5 km from Oruro checkpoint going towards Sacaca. Near
the river that passes through the town. Growing on a
ledge above the river. **latitude:** 17 deg. 56 min..
longitude: 66 deg. 28 min.. **elevation:** 3800m.
remarks: Appears to be a cultivated form. Annual. Wild.
Seed.
- PI 546021 *Solanum tuberosum* subsp. *andigena* Hawkes SOLANACEAE
origin: Bolivia. **collected:** March 27, 1987. **collector**
id: HOHL 243. **locality:** Prov. Ibanes. Near Sacaca. Near
the flour mill complex by the river below the town. At
the edge of a wheat field. **latitude:** 18 deg. 01 min..
longitude: 66 deg. 22 min.. **elevation:** 3680m.
remarks: Like a cultivated form. Large, pigmented
berries. Local name "Papa quipa". Annual. Wild. Seed.
- PI 546022 *Solanum tuberosum* subsp. *andigena* Hawkes SOLANACEAE
origin: Bolivia. **collected:** March 27, 1987. **collector**
id: HOHL 246. **locality:** Prov. Ibanes. 1.6 km from Sacaca
on road to Oruro. From field belonging to Agapito Mamani.
Cultivated. **latitude:** 18 deg. 01 min.. **longitude:** 66
deg. 23 min.. **elevation:** 3700m. **remarks:** Said to be
the variety Sani Imilla. Annual. Wild. Seed.
- PI 546023 *Solanum tuberosum* subsp. *andigena* Hawkes SOLANACEAE
origin: Bolivia. **collected:** March 27, 1987. **collector**
id: HOHL 253. **locality:** Prov. Ibanes. 1.6 km from Sacaca
towards the town of Oruro. Lower side of roadway. From
field belonging to Agapito Mamani. Cultivated. **latitude:**
18 deg. 01 min.. **longitude:** 66 deg. 23 min.. **elevation:**
3700m. **remarks:** Called "Ilhuaycu". Annual. Wild.
Seed.
- PI 546024 *Solanum tuberosum* subsp. *andigena* Hawkes SOLANACEAE
origin: Bolivia. **collected:** March 28, 1987. **collector**
id: HOHL 257. **locality:** Prov. Tapacari. 17.6 km from
Confital on the road to Cochabamba. At km 99.5 of the
road. Weed in barley field. **latitude:** 17 deg. 38 min..
longitude: 66 deg. 43 min.. **elevation:** 3840m.
remarks: Vines dead. Annual. Wild. Seed.
- PI 546025 *Solanum tuberosum* subsp. *andigena* Hawkes SOLANACEAE
origin: Bolivia. **collected:** March 31, 1987. **collector**
id: HOHL 259. **locality:** Probably Prov. Campero. About
halfway between Totora and Omereque, near place called
"Chacras". Cultivated. **latitude:** 18 deg. 02 min..
longitude: 64 deg. 52 min.. **elevation:** 2500m. Annual.
Wild. Seed.

PI 545931 to 546033-continued

- PI 546026 *Solanum tuberosum* subsp. *andigena* Hawkes SOLANACEAE
origin: Bolivia. **collected:** April 02, 1987. **collector id:** HOHL 263. **locality:** Prov. Oropeza. Tranca Cocha. 29 km from the checkpoint leaving Sucre going toward Ravelo. Cultivated. **latitude:** 18 deg. 56 min.. **longitude:** 65 deg. 23 min.. **elevation:** 3200m. **remarks:** Called "Manzana". May have been more than one variety in the plot from which seeds were taken. Annual. Wild. Seed.
- PI 546027 *Solanum tuberosum* subsp. *andigena* Hawkes SOLANACEAE
origin: Bolivia. **collected:** April 03, 1987. **collector id:** HOHL 271. **locality:** Prov. Oropeza. Cajamarca. 23.8 km from the Sucre checkpoint on the road to Ravelo. Near property of Felipe Hualla, about 100m above the road. **latitude:** 18 deg. 57 min.. **longitude:** 65 deg. 19 min.. **elevation:** 3000m. Annual. Wild. Seed.
- PI 546028 *Solanum tuberosum* subsp. *andigena* Hawkes SOLANACEAE
origin: Bolivia. **collected:** April 09, 1987. **collector id:** HOHL 299. **locality:** Prov. Zudanez. At the Hacienda de Candelaria. About 23 km from Tarabuco on the road to Icla. In and around stone walls built to contain the river. **latitude:** 19 deg. 27 min.. **longitude:** 64 deg. 53 min.. **elevation:** 2850m. **remarks:** Stems with pigmentation and reticulated wings. Berries large, round with white spots. Tubers round, white, pea sized. Annual. Wild. Seed.
- PI 546029 *Solanum ugentii* Hawkes & Okada SOLANACEAE
origin: Bolivia. **collected:** April 06, 1987. **collector id:** HOHL 284. **locality:** Prov. Azurduy. 37-38 km beyond the turn-off to Torre Pampa on the Tarabuco-Azurduy road (about 127 km beyond Tarabuco, or 100 km before Azurduy). In a gulch by cliffs. **latitude:** 19 deg. 36 min.. **longitude:** 64 deg. 37 min.. **elevation:** 3450m. **remarks:** Berries less white than HOHL 283. Stem with straight wings. Leaves pubescent, terminal varying from round to pointed. Annual. Wild. Seed.
- PI 546030 *Solanum ugentii* Hawkes & Okada SOLANACEAE
origin: Bolivia. **collected:** April 06, 1987. **collector id:** HOHL 288. **locality:** Prov. Azurduy. 30 km beyond the Torre Pampa junction, 20 km before Cruz Kasa, on the road to Azurduy. About 2 km along the cliffs in the direction of Tarabuco. **latitude:** 19 deg. 33 min.. **longitude:** 64 deg. 39 min.. **elevation:** 3740m. **remarks:** Berries round, green, with no white spots. Annual. Wild. Seed.

PI 545931 to 546033-continued

- PI 546031 *Solanum ugentii* Hawkes & Okada SOLANACEAE
origin: Bolivia. **collected:** April 06, 1987. **collector id:** HOHL 289. **locality:** Prov. Azurduy. About 22 km beyond the Torre Pampa junction on the way to Azurduy. Base of cliffs in manured soil where cattle take shelter. Home of many viscachas which may spread seed. **latitude:** 19 deg. 31 min.. **longitude:** 64 deg. 41 min.. **elevation:** 3730m. **remarks:** Some berries slightly conical, white-spotted. Deep purple flowers. First laterals shortly petiolulate on rachis. Annual. Wild. Seed.
- PI 546032 *Solanum ugentii* Hawkes & Okada SOLANACEAE
origin: Bolivia. **collected:** April 06, 1987. **collector id:** HOHL 290. **locality:** Prov. Azurduy. About 22 km beyond the Torre Pampa junction on the way to Azurduy. About 0.5 km along the cliffs in the direction of Tarabuco. Base of cliffs in manured soil where cattle take shelter. **latitude:** 19 deg. 31 min.. **longitude:** 64 deg. 41 min.. **elevation:** 3730m. **remarks:** Berries round, with no white spots. Purple, pentagonal flowers, Pubescent foliage. Indistinct articulation, high. Annual. Wild. Seed.
- PI 546033 *Solanum ugentii* Hawkes & Okada SOLANACEAE
origin: Bolivia. **collected:** April 09, 1987. **collector id:** HOHL 298. **locality:** Prov. Yamparaez. Miska Mayu. 10 km south of Tarabuco on road to Icla. Lower side of the road. On the lower edge of a very steep slope of loose stones. At the edge of a potato field. **latitude:** 19 deg. 33 min.. **longitude:** 64 deg. 55 min.. **elevation:** 3000m. Annual. Wild. Seed.

PI 546034. *Avena sativa* L. POACEAE Common oat

Donated by: Forsberg, R.A., Wisconsin Agr. Exp. Sta., University of Wisconsin, Madison, Wisconsin, United States. **remarks:** Wright Oat. Received November 20, 1990.

PI 546034-continued

origin: United States. **origin institute:** Wisconsin Agr. Exp. Sta., University of Wisconsin - Madison, Madison, Wisconsin 53706. **cultivar:** WRIGHT. **pedigree:** Trispernia/Belar/2/Beedee/3/Beedee/4/Beedee. **other id:** CV-329. **group:** CSR-OAT. **other id:** PVP 7600036. **source:** Certificate in force. **group:** PVPO. **remarks:** Maturity midseason. Grain weight high. Test weight highest of any cultivar being grown in the North Central United States. Plants tall. Seeds light tan. Groat percentage above average. Groat protein moderately high. Groat oil concentration high. Resistant to crown rust races 202, 216, 239, 263, 290, and 326. Susceptible to races 264A, 264B, and 305. Resistant to stem rust races 7 and 7A and 2AH. Spring Annual. Cultivar. Seed.

PI 546035. Avena sativa L. POACEAE Common oat

Donated by: Forsberg, R.A., Wisconsin Agr. Exp. Sta., University of Wisconsin, Madison, Wisconsin, United States. **remarks:** Dal Oat. Received November 20, 1990.

origin: United States. **origin institute:** Wisconsin Agr. Exp. Sta., University of Wisconsin - Madison, Madison, Wisconsin 53706. **cultivar:** DAL. **pedigree:** Belar/Trispernia/2/Beedee. **other id:** CV-330. **group:** CSR-OAT. **other id:** PVP 7200136. **source:** Certificate in force. **group:** PVPO. **remarks:** Maturity late. Plant height intermediate. Kernels tan. Groat percentage and test weight high. Grain yields high. Groat concentration high. Resistant to naturally-occurring prevalent leaf rust races 202, 216, and 456. Susceptible to 264, 264B, and 305 and biotypes of crown rust identified as Canadian races 13, 20, 36, 50, 152, and 169 and to U.S. races 264B, Pc58, Pc59, and Pc62. AB genes present for stem. Spring Annual. Cultivar. Seed.

PI 546036. Avena sativa L. POACEAE Common oat

Donated by: Forsberg, R.A., Wisconsin Agr. Exp. Sta., University of Wisconsin, Madison, Wisconsin, United States. **remarks:** Froker Oat. Received November 20, 1990.

PI 546036-continued

origin: United States. **origin institute:** Wisconsin Agr. Exp. Sta., University of Wisconsin - Madison, Madison, Wisconsin 53706. **cultivar:** FROKER. **pedigree:** Beacon/2/Hawkeye/Victoria/3/CI 5190/4/Clintland/3/Garry/2/ Hawkeye/Victoria. **other id:** CV-331. **group:** CSR-OAT. **remarks:** Maturity late. Plant height intermediate. Kernels plump, attractive, yellow. Test weight high. Nonfluorescent. Resistant to crown rust races 203, 216, 290, 326, and 456. Susceptible to to races 264 and 264b. AB genes present for stem rust. Resistant to older Wisconsin races of loose smut. Susceptible to the Lodi race. Spring Annual. Cultivar. Seed.

PI 546037. *Avena sativa* L. POACEAE Common oat

Donated by: Forsberg, R.A., Wisconsin Agr. Exp. Sta., University of Wisconsin, Madison, Wisconsin, United States. **remarks:** Portal Oat. Received November 20, 1990.

origin: United States. **origin institute:** Wisconsin Agr. Exp. Sta., University of Wisconsin - Madison, Madison, Wisconsin 53706. **cultivar:** PORTAL. **pedigree:** PI 174544/Clintland/2/Garland. **other id:** CV-332. **group:** CSR-OAT. **remarks:** Maturity midseason. Plant height intermediate. Test weight average. Kernels yellow, tapering from middle to tip. Groat to hull ratios high. Grain yield average. Resistant to prevalent races of crown rust. Resistant to crown rust races 203, 216, 290, 294 and 326. AB genes present for stem rust resistance. Resistant to prevalent races of loose smut. Susceptible to barley yellow dwarf virus. Spring Annual. Cultivar. Seed.

PI 546038. *Glycine max* (L.) Merr. FABACEAE Soybean

Donated by: Orf, J.H., Minnesota Agr. Exp. Sta., University of Minnesota, St. Paul, Minnesota, United States. **remarks:** Kasota Soybean. Received November 20, 1990.

PI 546038-continued

origin: United States. **developer country:** United States.
origin institute: Minnesota Agr. Exp. Sta., University of
Minnesota, St. Paul, Wisconsin 55108. **cultivar:** KASOTA.
pedigree:
[Evans/((Lincoln2/Richland)/Korean)]/(Renville/Capital)]/
Clay)/Vickery. **other id:** CV-286. **group:** CSR-SOYBEAN.
other id: PVP 9100025. **source:** Pending. **group:** PVPO.
remarks: Indeterminate, mid maturity group I. Flowers
white. Pubescence gray. Pods brown. Seeds dull yellow
with buff hila. Rpslc gene present for resistance to
phytophthora root rot. Spring Annual. Cultivar. Seed.

PI 546039 to 546045. *Glycine max* (L.) Merr. FABACEAE Soybean

Donated by: Voldeng, H.D., Plant Res. Ctr. -- Agriculture Canada,
Ottawa, Ontario, Canada. **remarks:** Soybean Genetic Stocks, GS-3 to
GS-9. Received November 20, 1990.

PI 546039 **origin:** Canada. **origin institute:** Plant Res. Ctr. --
Agriculture Canada, Ottawa, Ontario K1A OC6. **cultivar:**
OT89-01. **pedigree:** PI 196529/7*Maple Arrow. **other id:**
GS-3. **group:** CSR-SOYBEAN. **remarks:** Determinate stem
growth. Insensitive to fluorescent daylength and
incandescent long daylength. Maturity group OO-I.
Genetic Material. Seed.

PI 546040 **origin:** Canada. **origin institute:** Plant Res. Ctr. --
Agriculture Canada, Ottawa, Ontario K1A OC6. **cultivar:**
OT89-02. **pedigree:** PI 196529/7*Maple Arrow. **other id:**
GS-4. **group:** CSR-SOYBEAN. **remarks:** Indeterminate stem
growth. Insensitive to fluorescent daylength and
incandescent long daylength. Maturity group OO-I.
Genetic Material. Seed.

PI 546041 **origin:** Canada. **origin institute:** Plant Res. Ctr. --
Agriculture Canada, Ottawa, Ontario K1A OC6. **cultivar:**
OT89-03. **pedigree:** McCall/7*Maple Amber. **other id:**
GS-5. **group:** CSR-SOYBEAN. **remarks:** Hilum light (I).
Insensitive to fluorescent daylength and incandescent
long daylength. Maturity group OO-I. Genetic Material.
Seed.

PI 546042 **origin:** Canada. **origin institute:** Plant Res. Ctr. --
Agriculture Canada, Ottawa, Ontario K1A OC6. **cultivar:**
OT89-04. **pedigree:** McCall/7*Maple Amber. **other id:**
GS-6. **group:** CSR-SOYBEAN. **remarks:** Hilum dark (i-i).
Insensitive to fluorescent daylength and incandescent
long daylength. Maturity group OO-I. Genetic Material.
Seed.

PI 546039 to 546045-continued

PI 546043 **origin:** Canada. **origin institute:** Plant Res. Ctr. -- Agriculture Canada, Ottawa, Ontario K1A OC6. **cultivar:** OT89-05. **pedigree:** PI 438477/2*Evans/2/7*L62-667. **other id:** GS-7. **group:** CSR-SOYBEAN. **remarks:** Insensitive to fluorescent daylength and incandescent long daylength. Maturity group OO-I. Genetic Material. Seed.

PI 546044 **origin:** Canada. **origin institute:** Plant Res. Ctr. -- Agriculture Canada, Ottawa, Ontario K1A OC6. **cultivar:** OT89-06. **pedigree:** OT89-05//L67-153. **other id:** GS-8. **group:** CSR-SOYBEAN. **remarks:** Insensitive to fluorescent daylength and incandescent long daylength. Maturity group OO-I. Genetic Material. Seed.

PI 546045 **origin:** Canada. **origin institute:** Plant Res. Ctr. -- Agriculture Canada, Ottawa, Ontario K1A OC6. **cultivar:** OT89-07. **pedigree:** PI 438477/2*Evans/5*Evans-e3. **other id:** GS-9. **group:** CSR-SOYBEAN. **remarks:** Insensitive to fluorescent daylength and incandescent long daylength. Maturity group OO-I. Genetic Material. Seed.

PI 546046 to 546053. *Glycine max* (L.) Merr. FABACEAE Soybean

Donated by: Voldeng, H.D., Plant Res. Ctr. -- Agriculture Canada, Ottawa, Ontario, Canada. **remarks:** Soybean Genetic Stocks, GS-10 to GS-17. Received November 20, 1990.

PI 546046 **origin:** Canada. **origin institute:** Plant Res. Ctr. -- Agriculture Canada, Ottawa, Ontario K1A OC6. **cultivar:** OT89-08. **pedigree:** L67-153/7*Maple Presto. **other id:** GS-10. **group:** CSR-SOYBEAN. **remarks:** Indeterminate growth habit. Can be used in agronomic or physiological studies where genetic background has to be minimal. Genetic Material. Seed.

PI 546047 **origin:** Canada. **origin institute:** Plant Res. Ctr. -- Agriculture Canada, Ottawa, Ontario K1A OC6. **cultivar:** OT89-09. **pedigree:** L67-153/7*Maple Presto. **other id:** GS-11. **group:** CSR-SOYBEAN. **remarks:** Determinate growth habit. Can be used in agronomic or physiological studies where genetic background has to be minimal. Genetic Material. Seed.

PI 546048 **origin:** Canada. **origin institute:** Plant Res. Ctr. -- Agriculture Canada, Ottawa, Ontario K1A OC6. **cultivar:** OT89-10. **pedigree:** OX611/8*Maple Presto. **other id:** GS-12. **group:** CSR-SOYBEAN. **remarks:** Leaflet ovate. Can be used in agronomic or physiological studies where genetic background has to be minimal. Genetic Material. Seed.

PI 546046 to 546053-continued

- PI 546049 **origin:** Canada. **origin institute:** Plant Res. Ctr. -- Agriculture Canada, Ottawa, Ontario K1A OC6. **cultivar:** OT89-11. **pedigree:** OX611/8*Maple Presto. **other id:** GS-13. **group:** CSR-SOYBEAN. **remarks:** Leaflet narrow. Can be used in agronomic or physiological studies where genetic background has to be minimal. Genetic Material. Seed.
- PI 546050 **origin:** Canada. **origin institute:** Plant Res. Ctr. -- Agriculture Canada, Ottawa, Ontario K1A OC6. **cultivar:** OT89-12. **pedigree:** L64-2671/7*Maple Presto. **other id:** GS-14. **group:** CSR-SOYBEAN. **remarks:** Nodulating. Can be used in agronomic or physiological studies where genetic background has to be minimal. Genetic Material. Seed.
- PI 546051 **origin:** Canada. **origin institute:** Plant Res. Ctr. -- Agriculture Canada, Ottawa, Ontario K1A OC6. **cultivar:** OT89-13. **pedigree:** L64-2671/7*Maple Presto. **other id:** GS-15. **group:** CSR-SOYBEAN. **remarks:** Nonnodulating. Can be used in agronomic or physiological studies where genetic background has to be minimal. Genetic Material. Seed.
- PI 546052 **origin:** Canada. **origin institute:** Plant Res. Ctr. -- Agriculture Canada, Ottawa, Ontario K1A OC6. **cultivar:** OT89-14. **pedigree:** Kingwa/7*Maple Presto. **other id:** GS-16. **group:** CSR-SOYBEAN. **remarks:** Leaf abscission (Ab) at maturity. Can be used in agronomic or physiological studies where genetic background has to be minimal. Genetic Material. Seed.
- PI 546053 **origin:** Canada. **origin institute:** Plant Res. Ctr. -- Agriculture Canada, Ottawa, Ontario K1A OC6. **cultivar:** OT89-15. **pedigree:** Kingwa/7*Maple Presto. **other id:** GS-17. **group:** CSR-SOYBEAN. **remarks:** Delayed leaf abscission at maturity. Can be used in agronomic or physiological studies where genetic background has to be minimal. Genetic Material. Seed.

PI 546054. *Glycine max* (L.) Merr. FABACEAE Soybean

Donated by: Voldeng, H.D., Plant Res. Ctr. -- Agriculture Canada, Ottawa, Ontario, Canada. **remarks:** OT89-16 Soybean Germplasm. Received November 20, 1990.

PI 546054-continued

origin: Canada. **origin institute:** Plant Res. Ctr. -- Agriculture Canada, Ottawa, Ontario K1A OC6. **cultivar:** OT89-16. **pedigree:** Merit/PI 153293/2/PI 189950)/3/3*Maple Arrow. **other id:** GP-125. **group:** CSR-SOYBEAN. **remarks:** Maturity early. Protein content high. Oil content low. Indeterminate growth habit. Pubescence brown. Pods brown. Flowers purple. Distinct dark green foliage throughout most of growing season. Seeds oval, yellow with brown hila and dull seed coat. Seed weight average 15.6g/100. Moderately tolerant to phytophthora root rot caused by Phytophthora megasperma. Breeding Material. Seed.

PI 546055. *Humulus lupulus* L. CANNABACEAE Hop

Donated by: Kenny, S.T., Washington Agr. Exp. Sta., Washington State University, Prosser, Washington, United States; and Agricultural Research Service -- USDA. **remarks:** Centennial Hop. Received November 30, 1990.

origin: United States. **origin institute:** Washington Agr. Exp. Sta., Washington State University, Prosser, Washington 99350. **cultivar:** CENTENNIAL. **pedigree:** OR6619-04/USDA63015M. **other id:** CV-17. **group:** CSR-HOP. **remarks:** Maturity early to mid-season. Spring regrowth excellent. Vigor good. Moderately resistant to hop downy mildew caused by *Pseudoperonospora humuli*. Hop cones have citrus-floral aroma. Brewing evaluations favorable. Cultivar. Plant.

PI 546056 to 546057. *Triticum aestivum* L. POACEAE Common wheat

Donated by: Souza, E., Idaho Agr. Exp. Sta., University of Idaho, Aberdeen, Idaho, United States. **remarks:** Joint release with Agricultural Research Service -- USDA. Received November 26, 1990.

PI 546056 **origin:** United States. **cultivar:** VANDAL. **pedigree:** CM16716-M-3M-2Y-3M-OY/A72483S-3-2. **other id:** PVP 9100144. **source:** Pending. **group:** PVPO. **remarks:** Semi-dwarf developed for high yield environments in the Pacific Northwest of U.S. Long season, spring variety. Leaf color intermediate green. Flag leaves broad, semi-erect. Inflorescence awned, mid-dense, with short, wide, glumes, glabrous having oblique shoulders and acuminate beaks. Chaff color white to yellow-white at maturity. Resistance to stripe rust races prevalent in the Pacific. Spring Annual. Cultivar. Seed.

PI 546056 to 546057-continued

PI 546057 **origin:** United States. **cultivar:** IDAHO DNSC-0.
pedigree: Twenty-one preliminary lines from Univ. of Idaho spring wheat program, 8 advanced breeding lines, 11 cultivars and 1 near-isogenic line of Chris carrying dominant male sterile gene derived from *Aegilops squarrosa*. **remarks:** Idaho Dark Northern Spring Population, Cycle 0. Random, mated, spring population developed using dominant gene conferring male sterility. Base population for recurrent selection and quantitative genetics research. Parents selected for stiff straw, good grain yield, and adaptation to Southeastern Idaho. Spring Annual. Breeding Material. Seed.

PI 546058. *Panicum validum* POACEAE

Donated by: Zuloaga, F.O., Instituto Botanica Darwinion, Labardem 200-C.C. No. 22, 1642 - San Isidro, Provide Bs. As., Argentina. Received December 17, 1986.

donor id: 2493. **origin:** Argentina. **collector id:** 2493.
other id: BE-1022. **other id:** Q 26645. Plant.

PI 546059. *Sorghum bicolor* (L.) Moench POACEAE Sorghum

Donated by: Duncan, R.R., Georgia Agr. Exp. Sta., University of Georgia, Griffin, Georgia, United States. Received December 10, 1990.

origin: United States. **cultivar:** GP11BR. **pedigree:** Initial F2/F3 segregating progeny from combinations of 1 or 2 of following converted international sorghums: IS1201, 1269, 1303, 1335, 1598, 2462, 2549, 2856, 3574, 7142, 7173, 7542, 8337, 12564, 12568, 12612, 12637, 12666, 17459. **remarks:** Tolerant to simultaneous applications involving 2X rates (9.35 L ha⁻¹) of metolachlor or alachlor without use of herbicide antidotes and in combination with atrazine. Three-dwarf (combine height). Seeds red and white. Panicles open to semi-open. Intermediate to high tolerance to anthracnose caused by *Colletotrichum graminicola*. Adapted to tropical and subtropical regions. Annual. Breeding Material. Seed.

PI 546060. *Triticum turgidum* L. POACEAE Durum wheat

Donated by: McLeod, J.G., Swift Current Res. Sta., Agriculture Canada, Swift Current, Saskatchewan, Canada. **remarks:** DT367 Durum Germplasm. Received December 10, 1990.

PI 546060-continued

origin: Canada. **origin institute:** Swift Current Res. Sta., Agriculture Canada, Swift Current, Saskatchewan S9H 3X2. **cultivar:** DT367. **pedigree:** S-017(DT216/Dt156//MOGH/Wells/3/RL3442/Lakota/4/Tacurtipol 25 /3*Tehuacango)/Wascana(Lakota/2*Pelissier)//7168(Introduction from University of Manitoba). **other id:** GP-328. **group:** CSR-WHEAT. **remarks:** High yielding on chernozem soils of Canadian Prairies. Resistant to *P. recondita*, *P. graminis*, *T. laevis*, *T. caries*. Moderately susceptible to *U. tritici*, *Pyrenophora tritici-repentis*. Moderately resistant to *Cochliobolus sativus* and *Septoria* spp. Awns and glumes white. Seed size large. Straw hollow internodes. Quality strong gluten. Protein low. High pigment loss in spaghetti processing. Annual. Breeding Material. Seed.

PI 546061. X *Pseudoroelymus* sp. POACEAE

Donated by: Asay, K.H., Agricultural Research Service -- USDA, Utah State University, Logan, Utah, United States; and Soil Conservation Service -- USDA; and Utah Agr. Exp. Sta.. **remarks:** SL-1 Wheatgrass Hybrid. Received December 10, 1990.

origin: United States. **origin institute:** Forage and Range Res. Lab, USDA-ARS, Utah State University, Logan, Utah 84322-6300. **cultivar:** SL-1. **pedigree:** *Pseudoroegneria spicata*/*Elymus lanceolatus*. **other id:** GP-4. **group:** CSR-WHEATGRASS. **remarks:** Amphiploid hybrid (2n=6x-42) between diploid form of bluebunch wheatgrass (*Pseudoroegneria spicata*), PI 232132, and tetraploid thickspike wheatgrass (*Elymus lanceolatus*), PI 236663. Genome constitution SSSSHH. One set of S genomes from bluebunch wheatgrass (SS) and other set of S and the H genomes from thickspike wheatgrass parent (SSHH). Culms large, more leaves per culm, and longer and wider leaves. Breeding Material. Seed.

PI 546062. *Allium ampeloprasum* L. LILIACEAE Leek

Donated by: T. W. Wood & Sons, Virginia, United States. Received 1961.

origin: United States. **cultivar:** LARGE FLAG. **remarks:** Early popular strain. Stems long, thick, white, well blanched, 1-1/2 inches thick and 7 to 10 inches long. Leaves large, medium drooping. Cultivated. Seed.

PI 546063 to 546064. *Allium ampeloprasum* L. LILIACEAE Leek

Donated by: Joseph Harris Company, Inc., Moreton Farm, Rochester, New York, United States. Received 1961.

PI 546063 **origin:** United States. **cultivar:** LOHMANS SELECT. Cultivated. Seed.

PI 546064 **origin:** United States. **cultivar:** SWISS SPECIAL.
remarks: Large, vigorous and hardy strain. Stalks broad, clear, white, longer and thicker. Superior to other strains. Flavor delicious. Tender. Cultivated. Seed.

PI 546065. *Allium ampeloprasum* L. LILIACEAE Leek

Donated by: Seed Res. Spec, California, United States. Received 1961.

origin: United States. **cultivar:** GIANT MUSSELBURG.
remarks: Maturity 150 days. Leaves medium green. Stems long, 8-1/2 to 9 inches by 2 inches thick. Large and mild. Fall and winter use. Cultivated. Seed.

PI 546066. *Allium ampeloprasum* L. LILIACEAE Leek

Donated by: W. Atlee Burpee Company, Pennsylvania, United States. Received 1961.

origin: United States. **cultivar:** BROAD LONDON OR AMERICAN FLAG. Cultivated. Seed.

PI 546067. *Allium ampeloprasum* L. LILIACEAE Leek

Donated by: Asgrow Seed Company, Michigan, United States. Received 1961.

origin: United States. **cultivar:** LARGE AMERICAN FLAG.
remarks: Maturity 150 days. Stems long, 8-10 inches, slender, by 1-1/2 inches thick. Leaves large, medium green. Cultivated. Seed.

PI 546068. *Allium ampeloprasum* L. LILIACEAE Leek

Donated by: Sluis & Groot, P.O. Box 13-1600aa, Enkhuizen, Holland. Received 1961.

origin: Netherlands. **cultivar:** THE LYON. Cultivated. Seed.

PI 546069. *Allium ampeloprasum* L. LILIACEAE Leek

Donated by: Joseph Harris Company, Inc., Moreton Farm, Rochester, New York, United States. Received 1963.

origin: United States. **cultivar:** ST GEORGE. **remarks:** Good strain for fall crops. Similar in type to Swiss Special but not as thick. Blanches well. Not recommended for wintering over. Flavor delicate and delicious. Cultivated. Seed.

PI 546070. *Allium cepa* L. LILIACEAE Onion

Donated by: Dessert Seed, California, United States. Received 1960.

origin: United States. **cultivar:** YELLOW BERMUDA. **remarks:** Maturity 95 days. Flesh extremely mild, juicy, white. Size medium, flattened. Skin color light straw-yellow. Cultivated. Seed.

PI 546071 to 546082. *Allium cepa* L. LILIACEAE Onion

Donated by: Agricultural Research Service -- USDA, Beltsville, Maryland, United States. Received 1961.

PI 546071 **origin:** United States. **cultivar:** B 01410 C. **pedigree:** Selection from F2 population of TEG 951/Crystal Grano. **remarks:** Pollen parent of White Granex F. hybrid. Bulbs white. Susceptible to pink root. Cultivated. Seed.

PI 546072 **origin:** United States. **cultivar:** B 02108 A. **remarks:** Male sterile parent of Early Harvest. Bulb globe shaped, yellow. Cultivated. Seed.

PI 546073 **origin:** United States. **cultivar:** B 02117 A. **remarks:** Seed parent of Premier. Fair seed producer. Cultivated. Seed.

PI 546074 **origin:** United States. **cultivar:** B 02117 B. **remarks:** Seed parent of Premier. Fair seed producer. Cultivated. Seed.

PI 546075 **origin:** United States. **cultivar:** B 02264 A PRR (TEX). Cultivated. Seed.

PI 546071 to 546082-continued

- PI 546076 **origin:** United States. **origin institute:** Texas Agr. Exp. Sta., Texas. **cultivar:** B 02264 B PRR (TEX). **remarks:** Pink root resistance derivative of B 2264 B, the B line of B 2264 (seed parent of F1 hybrid Epoch). Bulb globe shaped, attractive, yellow with well-filled shoulders and base. Should perform similar to B 2664 B except superior where the Texas strain of pink root is a problem. Cultivated. Seed.
- PI 546077 **origin:** United States. **cultivar:** B 12115 C. **remarks:** Bulb globe shaped, brown. Short day type. Cultivated. Seed.
- PI 546078 **origin:** United States. **cultivar:** L 303 A. **pedigree:** Male-sterile or seed parent is a selection from Eclipse. Pollen parent, B 1410 is from cross between TEG 951 and Crystal Grano. **remarks:** Intermediate resistance to pink root. Highly infested pink root soil should be avoided. Matures about 7-10 days later than Granex. Bulb thick, flat, intermediate shape between 2 parents. Stores well under dry well-aerated conditons. Cultivated. Seed.
- PI 546079 **origin:** United States. **origin institute:** USDA. **cultivar:** L 303 B. **pedigree:** Male sterile or seed parent is a selection from Eclipse. Pollen parent, B 1410 is selection out of an F2 population from Texas Early Grano 951 and Crystal Grano. Cultivated. Seed.
- PI 546080 **origin:** United States. **cultivar:** TEG 951 C. **pedigree:** Inbred out of TX Early Grano 502. **remarks:** Bulb globe shaped. Scales dry, light straw color, few. Flesh soft. Not recommended for wintering over. Slightly spindle shaped, top somewhat flattened. Short day type. Maturity about same as Excel. Pollen parent of Early Harvest. Cultivated. Seed.
- PI 546081 **origin:** United States. **cultivar:** YB 986 A. **pedigree:** Single cross. Male sterile or seed parent selection from Excel and similar except male sterile. Pollen parent TEG 951. **remarks:** Color light yellow. Shape thick flat intermediate between 2 parents. Flavor exceptionally mild. Adapted to South Texas, South California, South Arizona and same latitude locations. Stores significantly better than other hybrids tested. Cultivated. Seed.

PI 546071 to 546082-continued

PI 546082 **origin:** United States. **cultivar:** YB 986 B. **pedigree:** Single cross. Male sterile or seed parent selection from Excel and similar except male sterile. Pollen parent is TEG 951. **remarks:** Single cross. Male sterile or seed parent selection from Excel and similar except male sterile. Pollen parent is TEG 951. Color light yellow. Shape thick flat intermediate between 2 parents. Flavor exceptionally mild. Adapted to South Texas, South California, South Arizona and same latitude locations. Stores significantly better than other hybrids tested. Cultivated. Seed.

PI 546083. *Allium cepa* L. LILIACEAE Onion

Donated by: Wisconsin Agr. Exp. Sta., Wisconsin, United States. Received 1961.

origin: United States. **cultivar:** INDIAN QUEEN. **remarks:** Maturity 113 days. Bulb uniform in size, shape and color. Low percentage of peelers and high yield. Storage type selected for growing on muck and peat soils. Skin color very good. Percentage of number 1 bulbs very high. Cultivated. Seed.

PI 546084. *Allium cepa* L. LILIACEAE Onion

Donated by: Idaho Agr. Exp. Sta., Idaho, United States. Received 1961.

origin: United States. **cultivar:** B 12115-2 C. **remarks:** Bulb firm, hi-globe. Attractive yellow brown scales that adhere well in storage. Highly uniform in color, size and shape. Phenotype cannot be distinguished from B 12115 C, but widely scattered tests indicate that its hybrid will generally outyield hybrid, in which B 12115 C is pollen parent. Cultivated. Seed.

PI 546085 to 546086. *Allium cepa* L. LILIACEAE Onion

Donated by: T. W. Wood & Sons, Virginia, United States. Received 1961.

PI 546085 **origin:** United States. **cultivar:** EXTRA EARLY WHITE PEARL. **remarks:** Maturity 85 days, earliest white onion. Bulbs good size, pearly, tender, mild, best flavor. For spring onions, sow thickly in row during March or early April. Put out sets next fall to make large onions next spring before any other kinds are ready. Splendid for pickling. Cultivated. Seed.

PI 546085 to 546086-continued

PI 546086 **origin:** United States. **cultivar:** PRIZE TAKER/SPANISH KING. **remarks:** Large size. Flavor fine. Skin rich straw color. Flesh pure white, sweet, mild, tender. Ripens up firm and hard. Good cropper and always uniformly globe shaped with small neck. Young plants used as salad. Half grown early summer. Ripe during remainder of year. Cultivated. Seed.

PI 546087 to 546088. *Allium cepa* L. LILIACEAE Onion

Donated by: Corneli Seed Company, Missouri, United States. Received 1961.

PI 546087 **origin:** United States. **cultivar:** EXCEL 986. **remarks:** Maturity 92 days. Home market and shipping use. Very mild sweet variety developed from regular Yellow Bermuda. May be grown from plants, but satisfactory in South for growing large onions direct from seed. Not suitable for long storage. Short day type. Bulbs medium size, flat, with juicy, mild, white flesh of coarse texture. Skin thin, straw colored. Cultivated. Seed.

PI 546088 **origin:** United States. **cultivar:** SWEET SPANISH KEYSTONE YELLOW NO. 6. **remarks:** Used for home, market and storage. Selected and propagated at high elevation for over 18 years at Twin Falls, ID. Produces tremendous tonnage of U.S. No. 1 per acre. Stores over winter with remarkably low shrinkage. Vigorous grower, somewhat tolerant to thrip damage. Long day type. Bulbs large, perfect globe shape, small neck dries down nicely. Skin deep yellowish-brown, protective. Cultivated. Seed.

PI 546089 to 546097. *Allium cepa* L. LILIACEAE Onion

Donated by: Ferry-Morse Seed Company, California, United States. Received 1961.

PI 546089 **origin:** United States. **cultivar:** AUSTRALIAN BROWN. **remarks:** Maturity 100 days. Standard market variety of notably long keeping quality. Good for sets. Bulbs flattened, globe shape. Skin thick, chestnut brown. Flavor strong. Flesh cooks dark. Excellent for storage. Used for shipping, especially to Carribean areas. Flattened globe shape, extra tight scale, dark brown color. Flesh very firm, cream colored. Flavor strong. Adapted to Western growing areas. Cultivated. Seed.

PI 546090 **origin:** United States. **cultivar:** CALIFORNIA EARLY WONDER. Cultivated. Seed.

PI 546089 to 546097-continued

- PI 546091 **origin:** United States. **developer country:** United States. **origin institute:** University of California, Davis, California. **cultivar:** CALRED. **remarks:** Maturity 95 days. Early, slow bolting which permits fall planting in southern latitudes where they grow through winter and produce bulbs in spring. Bulbs slightly flattened, medium size. Flesh firm, mild. Color very deep purplish-red. Pronounced non-bolting tendency. Adapted to Southern California and South Texas. Cultivated. Seed.
- PI 546092 **origin:** United States. **origin institute:** University of California, Davis, California. **cultivar:** CALRED EARLY. **remarks:** Maturity 95 days. Bulbs slightly flattened, medium size. Flesh firm, mild. Color very deep purplish-red. Pronounced non-bolting tendency. Adapted to Southern California and South Texas. Cultivated. Seed.
- PI 546093 **origin:** United States. **origin institute:** USDA-ARS, College Station, Texas. **cultivar:** EARLY CRYSTAL. **remarks:** Maturity 80 days. Very early white variety. Resistant to pink root. Slow to bolt. Cultivated. Seed.
- PI 546094 **origin:** United States. **origin institute:** Ferry Morris. **cultivar:** EARLY WHITE GRANO. **remarks:** Developed to replace Grystal Grano. Strong slow-bolting character. Flesh firm. Interior clear white. Bulbs medium size and half globe shape, glistening white. Skin thicker than Crystal Grano. Cultivated. Seed.
- PI 546095 **origin:** United States. **cultivar:** EARLY YELLOW BERMUDA. **remarks:** Maturity 80 days. Used for home garden, storage and market. Similar in general to Excel 986 except earlier and resistant to pink rot. Bulbs medium size, flat. Flesh juicy, white and of coarse texture. Skin thin, straw colored. Cultivated. Seed.
- PI 546096 **origin:** United States. **cultivar:** SOUTHPORT RED GLOBE. **remarks:** Maturity 110 days. Used for storage and market. Bulb round. Skin dark red. Flesh firm, pinkish-white, strong. Cultivated. Seed.
- PI 546097 **origin:** United States. **cultivar:** STOCKTON YELLOW GLOBE. **remarks:** Maturity 97 days. Medium early, strong non-bolting variety for fall planting in California. Bulbs medium size, slightly flattened globe shape. Exterior color very light yellow, interior clear white, crisp and mild. Cultivated. Seed.

PI 546098. *Allium cepa* L. LILIACEAE Onion

Donated by: Vaughan-Jacklin Corporation, 5300 Katrine Avenue, Downer's Grove, Illinois, United States. Received 1961.

origin: United States. **cultivar:** GOLDEN GLOBE. **remarks:** Winter keeper type. 115 days from seed to bulbs. 90 days from seed to sets. 30 days from sets to bunching or pickling. 80 days from sets to bulbs. Mainly grown from seed or sets. Exceptionally fine yellow globe shape. Excellent keeping quality. Very productive. Cultivated. Seed.

PI 546099 to 546101. *Allium cepa* L. LILIACEAE Onion

Donated by: Northrup, King & Company, 1500 Jackson N.E., Minneapolis, Minnesota, United States. Received 1961.

PI 546099 **origin:** United States. **cultivar:** EBENEZER JAPANESE YELLOW. **remarks:** Maturity 105 days. Bulb medium size, thick-flattened, small neck. Skin yellow. Flesh fine textured, mild very firm. Popular set variety. Produces sets of unusual keeping quality which are spring planted to produce early onion bulbs for market. Cultivated. Seed.

PI 546100 **origin:** United States. **cultivar:** SWEET SPANISH UTAH STRAIN. **remarks:** Maturity 115 days. Bulb large, deep-globe shaped, small neck. Skin straw yellow. Flesh white, fine grained. Flavor mild. Keeping quality fair. Popular in the West and inter-mountain area as a shipping variety. Used for slicing. Popular with home and market gardeners because of large attractive size and mild flavor. Cultivated. Seed.

PI 546101 **origin:** United States. **origin institute:** Northrup King. **cultivar:** SWT SPANISH LOS ANIMAS SPECIAL. **remarks:** Maturity 112 days. Bulb large, deep globe shape, small neck. Skin straw colored. Flesh fine grained, white. Flavor mild. Cultivated. Seed.

PI 546102. *Allium cepa* L. LILIACEAE Onion

Donated by: W. Atlee Burpee Company, Pennsylvania, United States. Received 1961.

origin: United States. **cultivar:** RED WEATHERSFIELD. **remarks:** Maturity 105 days. Large size. Flesh white, lightly tinged with pinkish rose near the skin. Flavor strong. Flattened, deep rich purplish red, smooth, glossy skin. Cultivated. Seed.

PI 546103 to 546107. *Allium cepa* L. LILIACEAE Onion

Donated by: Joseph Harris Company, Inc., Moreton Farm, Rochester, New York, United States. Received 1961.

PI 546103 **origin:** United States. **cultivar:** EASTERN QUEEN. Cultivated. Seed.

PI 546104 **origin:** United States. **developer country:** United States. **origin institute:** Iowa Agr. Exp. Sta., Iowa. **cultivar:** IOWA 44. **remarks:** Bulb globe to high-globe shaped, very uniform. Dark yellow scales that adhere well in long storage, firm, medium size. Well suited to machine handling and prepackaging. Flesh flavor pungent. Cultivated. Seed.

PI 546105 **origin:** United States. **cultivar:** WHITE PORTUGAL. **remarks:** Maturity early. Bulb flat, white. Flavor mild. Excellent for pickling and early green onions and for sets and bunching. Cultivated. Seed.

PI 546106 **origin:** United States. **cultivar:** WHITE SWEET SPANISH CALIFORNIA. **remarks:** Maturity 110 days. Bulb fairly large, semi-globe with glistening white skin. Flesh white, rather soft and mild. Considerably earlier than the Utah strain and ripens down better. Not a long keeper. Cultivated. Seed.

PI 546107 **origin:** United States. **cultivar:** WINTER OVER. **remarks:** Resembles White Lisbon in general appearance but with distinctive features. Tops dark green. Winter hardiness fair. Slow to bolt in spring. Forms bulb quickly from spring planting and early fall sowing. Forms attractive bunch with dark tops in late fall. Cultivated. Seed.

PI 546108 to 546116. *Allium cepa* L. LILIACEAE Onion

Donated by: Seed Res. Spec, California, United States. Received 1961.

PI 546108 **origin:** United States. **origin institute:** Waldo Rohnert. **cultivar:** AB EXPORTER. **remarks:** Maturity 110 days. Used for sets, storage, market, and shipping. Special export strain. Bulb brown, larger, rounder than U.C. No. 5. Slower bolting. Cultivated. Seed.

PI 546109 **origin:** United States. **cultivar:** EARLY TEXAS WHITE GRANO. **remarks:** Short day type. Maturity 97 days. Market use. Bulb elongated, medium size, globe. Skin white, mild, non-bolting. Flesh white. Cultivated. Seed.

PI 546108 to 546116-continued

- PI 546110 **origin:** United States. **cultivar:** EARLY TEXAS YELLOW GRANO. **remarks:** Short day type. Used for market and shipping. Bulb soft, yellow, apple or top shaped globe. Skin fair. Adapted to upper Rio Grande Valley, New Mexico, and W. Texas. Deeper and two weeks later than Texas Early Grano 502. Cultivated. Seed.
- PI 546111 **origin:** United States. **cultivar:** EARLY YELLOW GRANO TEX 502. **remarks:** Maturity 85 days. Early market use. Bulb top-shaped, uniform, neck thin. Skin yellow. Flavor mild. Not for storage. Cultivated. Seed.
- PI 546112 **origin:** United States. **cultivar:** GREEN BUNCHING GLOBE. **remarks:** Maturity 95 days. Used as bulbs. Excellent bunching variety. Fine white roots. Cultivated. Seed.
- PI 546113 **origin:** United States. **cultivar:** GREEN BUNCHING WH SWT SPANISH. **remarks:** Maturity late. Bulb mild, white, for green bunching in summer. Stems pure white, grow rapidly. Also used for large late bulbs. Cultivated. Seed.
- PI 546114 **origin:** United States. **cultivar:** SWEET SPANISH COLORADO NO 6. **remarks:** Maturity 115 days. Market and storage use. Globe large. Skin yellow. Flesh white. Prolific, stores well. Heavy producer. Cultivated. Seed.
- PI 546115 **origin:** United States. **cultivar:** WHITE SWEET SPANISH JUMBO. **remarks:** Maturity 120 days. Bulb very large, white globular. Flesh firm, white, mild. Cultivated. Seed.
- PI 546116 **origin:** United States. **cultivar:** YELLOW SWEET SPANISH UT JUMBO. **remarks:** Maturity 120 days. Market and storage use. Bulb large, round, yellow, mild. Similar to Valencia but large. Stores well. Cultivated. Seed.

PI 546117. *Allium cepa* L. LILIACEAE Onion

Donated by: Burrell Seed Growers, Colorado, United States. Received 1961.

origin: United States. **origin institute:** Burrell Seed Growers. **cultivar:** BURRELLS YELLOW VALENCIA. **remarks:** Maturity 115 days. Full globe shape, deep bronze color, large size, and vigorous tops that are slow to ripen down and withstand thrips well. Keeps well. Excellent for shipping. Cultivated. Seed.

PI 546118 to 546129. *Allium cepa* L. LILIACEAE Onion

Donated by: Dessert Seed, California, United States. Received 1961.

- PI 546118 **origin:** United States. **cultivar:** CALIFORNIA EARLY RED. **remarks:** Intermediate variety, productive, highly non-bolting. Adapted to Central California where grown as transplant crop. Bulbs thick-flat. Scales thin, light red. Not for storage. Flesh soft and mild. Cultivated. Seed.
- PI 546119 **origin:** United States. **cultivar:** ECLIPSE L 303. **remarks:** Maturity 85 days. Early Crystal Wax type, maturing 7-10 days earlier than Eclipse. Resistant to pink root. Highly non-bolting. Bulbs deep-flat, uniform, attractive white. Flesh crisp, slightly more pungent than other Bermuda types. Cultivated. Seed.
- PI 546120 **origin:** United States. **cultivar:** EXTRA EARLY WHITE SWEET SPANISH. **remarks:** Long day variety. Very early type adapted to more southerly range. Forms mature bulbs when grown under conditions similar to Imperial Valley of California, but has tendency to bolt if planted too early in fall. Bulb slightly top-shaped, shiny. White scales that adhere well in handling. Flesh soft. Flavor very mild. Not suitable for storage. Cultivated. Seed.
- PI 546121 **origin:** United States. **cultivar:** HOME GARDEN BUNCHING. **remarks:** Ideal home garden variety. Exceptional vigor, winter hardiness, heat tolerance, and resistance to smut, yellow dwarf, and pink root. Rapid growth in early spring from overwintered plants, at which time flesh is crisp and mild. Flesh light pinkish tint. Cultivated. Seed.
- PI 546122 **origin:** United States. **cultivar:** IMPERIAL 48. **remarks:** Extra early, slow bolting, white Bermuda type matures approx. ten days earlier than Excel. Flesh soft, pungent, protected by tight white outer scales. Heavy yielder. Good shipping type. Cultivated. Seed.
- PI 546123 **origin:** United States. **cultivar:** IMPERIAL A M D. Cultivated. Seed.
- PI 546124 **origin:** United States. **cultivar:** ITALIAN RED. **remarks:** Very productive. Adapted to Central California as late-intermediate crop for immediate local consumption. Due to high non-bolting habit, can be over-wintered as transplant crop. Bulbs very large, torpedo or long oval shaped, with thin, purplish-red scales. Flesh soft and unexcelled in mildness, sweetness and flavor. Not adapted to humid regions or to the South. Cultivated. Seed.

PI 546118 to 546129-continued

- PI 546125 **origin:** United States. **origin institute:** Dessert Seed. **cultivar:** LONG WHITE SHANK. **remarks:** Green bunching type. Shank long, white. Leaves dark green, keep fresh appearance for considerable time after pulling. Flesh crisp, mild, and sweet. Cultivated. Seed.
- PI 546126 **origin:** United States. **cultivar:** RED BERMUDA. **remarks:** Adapted to same region as Yellow Bermuda and Crystal Wax and, except for red color, is similar to them in other characteristics. Cultivated. Seed.
- PI 546127 **origin:** United States. **origin institute:** Texas Agr. Exp. Sta., Texas. **cultivar:** TEXAS EARLY GRANO 502. **remarks:** Large, yellow, short day type, almost replaced Early Yellow Grano due to uniformity in size and shape, and its earliness. Foliage light green, upright, and shows some resistance to thrip damage. Bulbs more blocky and less top-shaped than Early Yellow Grano. Scales light yellow, thin and few in number. Flesh soft, juicy, and mild flavor. Not suited for storage. Heavy yielder. Cultivated. Seed.
- PI 546128 **origin:** United States. **origin institute:** Dessert Seed. **cultivar:** WHITE CREOLE. **remarks:** Used extensively in the South for dehydration purposes due to heavy solids content and long storage quality. Bulbs small to medium size, thick-flat. Several layers of dry scales that adhere well during handling and storage. Flesh white, pungent. Well suited to machine harvesting. Well adapted to area where Yellow Bermuda types grow. Maturity few days later than Yellow Bermuda. Cultivated. Seed.
- PI 546129 **origin:** United States. **cultivar:** YELLOW SWEET SPANISH M STRAIN. **remarks:** Selected for growing in Eastern Oregon-Southwest Idaho onion district but should be fairly widely adapted. Bulbs globe to high-globe shaped. Scales rather tough, dark yellow, adhere fairly well in handling and storage. Cultivated. Seed.

PI 546130 to 546131. *Allium cepa* L. LILIACEAE Onion

Donated by: L.P. Gunson & Company, New York, United States.
Received 1961.

- PI 546130 **origin:** United States. **cultivar:** ROCHESTER BRONZE GLOBE. Cultivated. Seed.
- PI 546131 **origin:** United States. **cultivar:** SUPERBRONZE. **remarks:** Bulb large, bronze. Color extra good. Cultivated. Seed.

PI 546132. *Allium cepa* L. LILIACEAE Onion

Donated by: Crookham Company, Idaho, United States. Received 1961.

origin: United States. **cultivar:** BRIGHAM YELLOW GLOBE.
pedigree: Selection from Southport Yellow Globe.
Cultivated. Seed.

PI 546133 to 546140. *Allium cepa* L. LILIACEAE Onion

Donated by: Asgrow Seed Company, Michigan, United States. Received 1961.

PI 546133 **origin:** United States. **cultivar:** CRYSTAL GRANO.
remarks: Maturity 90-95 days. Bulb top-shaped and globular. Will develop into large onion. Skin pure white. Flesh firm. Flavor mild. Early shipping type. Adapted to the Pacific coast, Texas and the Southwestern States generally. Cultivated. Seed.

PI 546134 **origin:** United States. **cultivar:** DOWNING YELLOW GLOBE.
remarks: Maturity 112 days. Bulb round to globe shape. Skin tough, dark yellow. Medium size. Flesh firm. Yields high percentage of #1 bulbs. Scales adhere well in storage. Flavor pungent. Cultivated. Seed.

PI 546135 **origin:** United States. **cultivar:** EARLY CRYSTAL 281.
remarks: Maturity 160 days. Primarily for first harvest in earliest onion area. Exceptionally early Crystal Wax type, maturing approx. ten days before Eclipse, producing smaller bulbs. Bulbs medium size, thick-flat. Skin white. Flesh white and mild. Almost free of splitting and bolting. Cultivated. Seed.

PI 546136 **origin:** United States. **cultivar:** EARLY YELLOW GLOBE.
remarks: Standard early maturing open pollinated variety used in the Northeast and Midwest for midsummer harvest and early shipment. Bulbs medium to medium-large size, full globe to deep globe shape. Flesh medium soft, mildly pungent. Skin attractive yellow. Not suited for prolonged storage, but can be held until late fall or early winter if properly cured. Cultivated. Seed.

PI 546137 **origin:** United States. **cultivar:** EBENEZER. **remarks:** Maturity 105 days. Bulb medium size, thick-flattened, small neck. Skin yellow. Flesh fine textured, mild, very firm. Produces sets of unusual keeping quality which are spring planted to produce early onion bulbs for market. Cultivated. Seed.

PI 546133 to 546140-continued

PI 546138 **origin:** United States. **cultivar:** ECLIPSE. **remarks:** Maturity 180 days. Bulbs medium size, thick flat. Skin attractive clear white. Flesh white, mild. Relatively free from bolting and splitting. Good resistance to pink root. Cultivated. Seed.

PI 546139 **origin:** United States. **cultivar:** EXCEL. **remarks:** Maturity 180 days. Heavy yielding variety resembling old Yellow Bermuda, but earlier with less splitting and bolting. Bulbs uniform, thick-flat, medium size. Skins yellow. Flesh white, mild. Cultivated. Seed.

PI 546140 **origin:** United States. **cultivar:** SAN JOAQUIN. **remarks:** Standard open pollinated variety. Non-bolting. Produces good yields of medium to large size bulbs. Satisfactory shipping quality. Bulbs top shape. Skin straw yellow, medium-firm. Flesh white, mild. Can be used in mid-South and along the Atlantic seaboard. Cultivated. Seed.

PI 546141 to 546150. *Allium cepa* L. LILIACEAE Onion

Donated by: Agricultural Research Service -- USDA, Beltsville, Maryland, United States. Received 1962.

PI 546141 **origin:** United States. **cultivar:** B 00126 A. **remarks:** Old inbred unofficially released to seed trade. Originated from Southport Yellow Globe. Combines well with B 2215 and B 12115. Cultivated. Seed.

PI 546142 **origin:** United States. **cultivar:** B 00126 B. **remarks:** Old inbred unofficially released to seed trade. Originated from Southport Yellow Globe. Combines well with B 2215 and B 12115. Cultivated. Seed.

PI 546143 **origin:** United States. **cultivar:** B 02190 A PRR (TEX). **pedigree:** Pink root resistant derivative of B 2190 (seed parent of F1 hybrid Fiesta). **remarks:** Selection should perform similarly to original strain except where Texas strain of pink root is a problem and then it should be superior. Cultivated. Seed.

PI 546144 **origin:** United States. **cultivar:** B 02190 B PRR (TEX). **pedigree:** Pink root-resistant derivative of B 2190 (seed parent of F1 hybrid Fiesta). **remarks:** Selection should perform similarly to original strain except where Texas strain of pink root is a problem and then it should be superior. Cultivated. Seed.

PI 546141 to 546150-continued

- PI 546145 **origin:** United States. **cultivar:** B 05546 A WHITE PER. **remarks:** Inbred. Bulbs high globe. Flesh fairly firm. Scales adhere well over long storage period. Both A & B lines have been distributed to seed trade and the inbred used extensively in production of hybrids. B 5546 when originally released was heterozygous for white perianth. Selections for white perianth were made, each plant selfed to test for possible segregation and true breeding lines were massed to retain. Cultivated. Seed.
- PI 546146 **origin:** United States. **cultivar:** B 05546 B WHITE PER. **remarks:** Inbred. Bulbs high globe. Flesh fairly firm. Scales adhere well over long storage period. Both A & B lines have been distributed to seed trade and the inbred used extensively in production of hybrids. B 5546 when originally released was heterozygous for white perianth. Selections for white perianth were made, each plant selfed to test for any possible segregation and true breeding lines were massed to. Cultivated. Seed.
- PI 546147 **origin:** United States. **cultivar:** B 12132 A. **pedigree:** Utah Sweet Spanish/Brigham Yellow Globe. **remarks:** Long day type hybrid. High yielding where adapted. Bulb globe shape. Flesh hard. Scales dark yellow, fairly retentive. Good performance and consistency as transplant crop in the North. Uniform. Good storage quality and yield. Less severely damaged by yellow blotch in epidemic conditions and matures few days earlier than Sweet Spanish. Cultivated. Seed.
- PI 546148 **origin:** United States. **cultivar:** IA 1718 A. **pedigree:** Derived from Iowa Yellow Globe 44. **remarks:** Inbred tested several years in hybrid combinations, shows promise in certain combinations for specific areas. Combines especially well with B 2215 and B 12115-2, which have been released, as well as unreleased inbreds. Especially desirable due to tight scales, unusual firmness, and superior storage quality. Remained dormant in storage longer than any tested to date (1960). Cultivated. Seed.
- PI 546149 **origin:** United States. **cultivar:** IA 1718 B. **pedigree:** Derived from Iowa Yellow Globe 44. **remarks:** Inbred tested several years in hybrid combinations, shows promise in certain combinations for specific areas. Combines especially well with B 2215 and B 12115-2, which have been released, as well as unreleased inbreds. Especially desirable due to tight scales, unusual firmness, and superior storage quality. Remained dormant in storage longer than others tested. Cultivated. Seed.

PI 546141 to 546150-continued

PI 546150 **origin:** United States. **cultivar:** U 16-3-10-2B.
pedigree: Inbred derived from Cochise Brown and can be used as seed parent in hybrid onion production. **remarks:** Early maturing, long day storage type. Bulb high globe. Flesh moderately firm. Scales dark brown. Combined well with unreleased Spanish inbreds in Utah. Spanish type hybrids involving this line are generally improved in storage quality. Cultivated. Seed.

PI 546151. *Allium cepa* L. LILIACEAE Onion

Donated by: Pieter-Wheeler Seed Co., California, United States. Received 1962.

origin: United States. **cultivar:** YELLOW GLOBE DANVERS.
remarks: Maturity 140 days. Bulbs medium size, round, small necks. Flesh white, with yellowish tint. Solid, crisp, fine texture, medium pungent. Flesh light, creamy. Skin deep yellow. Long day variety. Stores well. Home garden and market use. Cultivated. Seed.

PI 546152 to 546153. *Allium cepa* L. LILIACEAE Onion

Donated by: New Mexico Crop Imp. Assoc., New Mexico, United States. Received 1962.

PI 546152 **origin:** United States. **cultivar:** NEW MEXICO WHITE GRANO S-1. Cultivated. Seed.

PI 546153 **origin:** United States. **cultivar:** NEW MEXICO YELLOW GRANO. Cultivated. Seed.

PI 546154. *Allium cepa* L. LILIACEAE Onion

Donated by: Trapp and Sons, Michigan, United States. Received 1962.

origin: United States. **cultivar:** TRAPPS DOWNING YELLOW GLOBE. Cultivated. Seed.

PI 546155 to 546164. *Allium cepa* L. LILIACEAE Onion

Donated by: Rohnert, California, United States. Received 1963.

PI 546155 **origin:** United States. **cultivar:** AUSTRALIAN BROWN U C NO 5. **remarks:** Maturity 100 days. Used for sets, market and storage. Bulb flattened, globe-shaped. Skin tough, thick, brown. Flesh yellow. Flavor strong. Cultivated. Seed.

PI 546155 to 546164-continued

- PI 546156 **origin:** United States. **origin institute:** USDA-ARS, Beltsville, Maryland. **cultivar:** BELTSVILLE BUNCHING. **remarks:** Maturity 95 days. Bunching and market use. Long, white-green. Bulb small at full maturity. Mild, vigorous, fine for summer planting. Pink root and Yellow Dwarf tolerant. Tops fairly tall, gray-green. Shorter and slightly thicker stemmed than Evergreen Bunching. Produces somewhat less stems per clump. Cultivated. Seed.
- PI 546157 **origin:** United States. **origin institute:** USDA-ARS. **cultivar:** CRYSTAL WHITE WAX L303. **remarks:** Maturity 85 days. Bulbs medium size, clear white. Resistant to splitting. Relatively slow-bolting. Flesh soft and very mild. Shape thick, flat. Planted in fall in South Texas and Southern California. Cultivated. Seed.
- PI 546158 **origin:** United States. **cultivar:** GRANO 502. **remarks:** Maturity 168 days. Earlier and more uniform strain of older Yellow Babosa, which it replaces. Bulbs large, top-shaped. Skin straw-yellow. Flesh mild, white. Cultivated. Seed.
- PI 546159 **origin:** United States. **cultivar:** GREEN BUNCHING SELECT. **remarks:** Maturity 95 days. Bunching variety. Shank long, white. Tops fine, green. Flavor excellent. Cultivated. Seed.
- PI 546160 **origin:** United States. **cultivar:** L 036 YELLOW. **remarks:** Extra yellow Bermuda type. Highly resistant to pink root. very refined with small neck that cures down well at harvest. Bulbs medium sized, flat. Flesh solid, crisp. Flavor mild. Scales yellow, adhere well making attractive market pack. Excellent for winter growing and early spring shipment in the South. Cultivated. Seed.
- PI 546161 **origin:** United States. **cultivar:** S-1 WHITE GRANO. Cultivated. Seed.
- PI 546162 **origin:** United States. **cultivar:** SOUTHPORT YELLOW GLOBE. **remarks:** Maturity 115 days. Bulb deep globe shape, very productive. Good keeper. Flavor strong. Skin clear deep orange-yellow. Flesh slightly tinged yellow, firm and crisp. Good for shipping. Cultivated. Seed.
- PI 546163 **origin:** United States. **cultivar:** WHITE SWEET SPANISH BUNCHING. **remarks:** Maturity 110 days. Bulbs large, globe shape. Flesh clear white, firm, medium pungency. Skin attractive white. Stores fairly well. Cultivated. Seed.

PI 546155 to 546164-continued

PI 546164 **origin:** United States. **cultivar:** YELLOW GRANO. **remarks:** Maturity 90 days. Bulb top shape, medium size, early market type. Not long-keeping variety. Skin color light yellow. Flesh firm and mild flavored. Adapted for fall planting in Texas and the Pacific Southwest. Highly recommended as early market type. Cultivated. Seed.

PI 546165 to 546170. *Allium cepa* L. LILIACEAE Onion

Donated by: Ferry-Morse Seed Company, California, United States. Received 1963.

PI 546165 **origin:** United States. **cultivar:** AUSTRALIAN BROWN 100. **remarks:** Maturity 95 days. Improvement over regular Australian Brown. Slightly earlier, deeper color and ripens down better. Excellent keeper. Cultivated. Seed.

PI 546166 **origin:** United States. **cultivar:** CRYSTAL WHITE WAX. **remarks:** Maturity 95 days. Used mainly in South Texas and Southern California for fall planting to produce bulbs in spring for early shipment. Bulb very early, flat, small. Skin white. Flesh white, soft, sweet and mild. Cultivated. Seed.

PI 546167 **origin:** United States. **cultivar:** EVERGREEN BUNCHING. **remarks:** Maturity 60 days. Home and market garden variety for young or bunching. Produces cluster of 4-6 useful shoots from a single seed in first season. Used only for green onions. Cultivated. Seed.

PI 546168 **origin:** United States. **cultivar:** LONG RED ITALIAN. **remarks:** Maturity 120 days. Used in Central California and a few restricted areas elsewhere. Used for fall planting in California where it winters over without bolting to produce an early crop of bulbs. Bulbs long pointed at top and bottom, very large, pale red color. Flesh soft and very mild. Cultivated. Seed.

PI 546169 **origin:** United States. **cultivar:** WHITE AUSTRALIAN. **remarks:** Maturity 100 days. White storage type. Adapted to Central California. Globe shallow, medium size. Flesh firm. Storage good. Cultivated. Seed.

PI 546170 **origin:** United States. **cultivar:** WHITE GRANO. **remarks:** Maturity 100 days. Globes tall, medium size. Skin clear, glistening white. Flesh soft, white and mild, small tops, slow-bolting. Cultivated. Seed.

PI 546171 to 546174. *Allium cepa* L. LILIACEAE Onion

Donated by: Seed Res. Spec, California, United States. Received 1963.

PI 546171 **origin:** United States. **cultivar:** SOUTHPORT GREEN BUNCHING. **remarks:** Maturity 60 days. Used as bunching onion. Flavor mild, sweet. Color brilliant white. Cultivated. Seed.

PI 546172 **origin:** United States. **cultivar:** WHITE EBENEZER. **remarks:** Maturity 100 days. Used for storage, market and sets. Bulbs hard, white, somewhat flattened. General purpose use. Stores well. Cultivated. Seed.

PI 546173 **origin:** United States. **cultivar:** WHITE LISBON. **remarks:** Maturity 98 days. Used as bunching onion. Stalks long, clear white. Mild, vigorous, matures flat. Cultivated. Seed.

PI 546174 **origin:** United States. **cultivar:** YELLOW EBENEZER. **remarks:** Maturity 100 days. Sets and storage use. Bulb medium size, oblate. Skin yellow. Flesh white. Cultivated. Seed.

PI 546175 to 546188. *Allium cepa* L. LILIACEAE Onion

Donated by: Dessert Seed, California, United States. Received 1963.

PI 546175 **origin:** United States. **cultivar:** BURGUNDY. **pedigree:** Early selection from Lord Howe Island. **remarks:** Foliage resistant to attack by *Botrytis squamosa*. Bulbs thick-flat to flattened-globe in shape. Dry scales very dark red, color usually extends throughout bulb. Flesh soft. Flavor mild. Storage life short. Cultivated. Seed.

PI 546176 **origin:** United States. **origin institute:** Iowa Agr. Exp. Sta., Iowa. **cultivar:** IOWA YELLOW GLOBE 51. **remarks:** Long day variety. High globe. Flesh yellow, hard. Developed for Iowa muck soils. Dry storage. Pungent. Cultivated. Seed.

PI 546177 **origin:** United States. **origin institute:** Iowa Agr. Exp. Sta., Iowa. **cultivar:** IOWA YELLOW GLOBE 53. **pedigree:** Selection from Iowa 51 in 1953. **remarks:** Long day variety. High globe. Flesh yellow, hard. Developed for Iowa muck soils. Dry storage. Pungent. Cultivated. Seed.

PI 546175 to 546188-continued

- PI 546178 **origin:** United States. **cultivar:** L 365. **pedigree:** Selection of Crystal Wax/Excel. **remarks:** Short day variety. Highly resistant to Texas strain of pink root. Bulbs thick, flat. Scales white. Flavor mild. Excellent heavy root system. Bolts and splits more than desirable, but less than L 690. This can be minimized by planting later. Matures 10-14 days later than L 690. Cultivated. Seed.
- PI 546179 **origin:** United States. **cultivar:** R K W. **remarks:** Short day variety. Scales and flesh clear white. Flavor mild. Shape deep flat. Cultivated. Seed.
- PI 546180 **origin:** United States. **origin institute:** Louisiana State University, Louisiana. **cultivar:** RED CREOLE C-5. **remarks:** Resistant to Purple Blotch. Vigorous growth under semi-tropical, humid conditions. Flesh firm, very pungent. Good keeper. Bulbs small, thick-flat shape. Mature few days later than standard Yellow Bermuda. Cultivated. Seed.
- PI 546181 **origin:** United States. **cultivar:** WHITE MEXICAN. **remarks:** Short day variety. Adapted to the Tampico District of Mexico. Bulb shape flat. Storage life short. Fairly pungent. Many valuable genes for the onion breeder. Cultivated. Seed.
- PI 546182 **origin:** United States. **cultivar:** WHITE SWEET SPANISH UTAH. **remarks:** Maturity 110 days. Globular with small neck. Rather long keeper. Flesh firm. Large, white, sweet. Cultivated. Seed.
- PI 546183 **origin:** United States. **cultivar:** YELLOW CREOLE. **remarks:** Same as Red Creole except for color. Maturity 115 days. Used mainly in the South. Bulb flattened globe shape, medium size. Very solid and excellent keeper. Skin reddish. Flesh fine grained and very pungent, slightly pinkish in color. Cultivated. Seed.
- PI 546184 **origin:** United States. **cultivar:** YELLOW SWEET SPANISH BARLOW. **remarks:** Grown in the Eastern Oregon-Southwest Idaho onion district. High yielding, late maturing strain. Bulbs globe to flattened-globe shape. Scales yellow and rather thin. Flesh soft and mild. Cultivated. Seed.
- PI 546185 **origin:** United States. **cultivar:** YELLOW SWEET SPANISH HENDERSON. **remarks:** Yield light. Plant top small with clear-cut neck that cures down. Flesh firm. Flavor mild. Cultivated. Seed.

PI 546175 to 546188-continued

PI 546186 **origin:** United States. **cultivar:** YELLOW SWEET SPANISH PECKHAM. **remarks:** Late maturing strain developed in Southwest Idaho. Bulbs globe to high-globe shape, medium size. Scales dry, tough, dark yellow to bronze and adhere well in handling and storage. Good keeper if well matured and cured. Flesh firm and pungent. Cultivated. Seed.

PI 546187 **origin:** United States. **cultivar:** YELLOW SWEET SPANISH SUMIDA. **remarks:** Grown in the Eastern Oregon-Southwest Idaho onion district. Selected for non-doubling and storage qualities. Bulbs globe-shaped. Scales yellow, break easily in handling. Cultivated. Seed.

PI 546188 **origin:** United States. **cultivar:** YELLOW SWEET SPANISH WINEGAR. **remarks:** Maturity late. Globe large, yellow. One of the most popular present strains of Yellow Sweet Spanish. Cultivated. Seed.

PI 546189. *Allium cepa* L. LILIACEAE Onion

Donated by: Joseph Harris Company, Inc., Moreton Farm, Rochester, New York, United States. Received 1963.

origin: United States. **cultivar:** WHITE SPANISH BUNCHING STRAIN. **remarks:** Maturity late. Bulbs large, white. Slow to bulb. Vigorous grower. Stems uniform, long, clear white with strong tops. Flavor mild. Recommended for muck and upland use. May be grown for its very large white bulbs. Excellent green bunching onions in spring, summer or early fall. Cultivated. Seed.

PI 546190 to 546192. *Allium cepa* L. LILIACEAE Onion

Donated by: Asgrow Seed Company, Michigan, United States. Received 1963.

PI 546190 **origin:** United States. **cultivar:** LORD HOWE ISLAND. **remarks:** Bulbs medium-large, thick, flat. Scales deep red that adhere well. Flesh light purplish pink with deep red zones at inner junction of scales. Flavor exceptionally mild. Excellent for fresh market in the South. Cultivated. Seed.

PI 546191 **origin:** United States. **cultivar:** WHITE SWEET SPANISH 959. Cultivated. Seed.

PI 546190 to 546192-continued

PI 546192 **origin:** United States. **cultivar:** YELLOW SWEET SPANISH L.
remarks: Maturity late. Intended for long-season areas in Idaho, Washington, and Oregon. Bulbs very large, full globe shape. High percentage of jumbos. Scales attractive yellow-brown. Flesh moderately firm, sweet, mild. Well suited for restaurant use as sliced onions and for processed onion rings. Late winter shipment if properly cured and stored. Cultivated. Seed.

PI 546193 to 546197. *Allium cepa* L. LILIACEAE Onion

Donated by: Wyoming Agr. Exp. Sta., Wyoming, United States.
Received 1963.

PI 546193 **origin:** United States. **cultivar:** EARLY YELLOW SWEET SPANISH. Cultivated. Seed.

PI 546194 **origin:** United States. **cultivar:** ESPANOLA. Cultivated. Seed.

PI 546195 **origin:** United States. **cultivar:** NEW QUEEN. Cultivated. Seed.

PI 546196 **origin:** United States. **cultivar:** TORPEDO RED. Cultivated. Seed.

PI 546197 **origin:** United States. **cultivar:** VALENCIA SWEET SPANISH.
remarks: Maturity 110 days. Bulbs globe shape, light yellow. Flesh white, fine grained, mild, sweet. Cultivated. Seed.

PI 546198. *Allium cepa* L. LILIACEAE Onion

Donated by: Wyoming Agr. Exp. Sta., Wyoming, United States.
Received 1963.

origin: United States. **cultivar:** YELLOW SWEET SPANISH.
remarks: Maturity 125 days. Open pollinated variety for producing large bulbs for slicing. Bolting if subjected to prolonged cool weather. Bulbs large, full globe. High percentage of jumbos. Skin yellowish brown. Flesh medium soft-firm, mild and sweet. Fair storage qualities. Cultivated. Seed.

PI 546199. *Allium cepa* L. LILIACEAE Onion

Donated by: Corneli, Missouri, United States. Received 1964.

PI 546199-continued

origin: United States. **cultivar:** CRYSTAL WAX. **remarks:** Maturity 92 days, very early. Short day variety. Bulbs medium size, flat. Flesh white, coarse texture, juicy, mild and sweet. Flavor mild. Not suitable for long storage. Used for home garden and shipping. Clear white of the Bermuda group. Used mainly in the South for early shipping to northern markets. Cultivated. Seed.

PI 546200 to 546201. *Allium cepa* L. LILIACEAE Onion

Donated by: Pieter-Wheeler Seed Company, California, United States. Received 1964.

PI 546200 **origin:** United States. **cultivar:** WHITE SWEET SPANISH. **remarks:** Maturity 110 days. Leading white onion for northern areas. Bulbs large, globe shape. Flesh clear white, firm, medium pungency. Skin attractive white. Stores fairly well. Cultivated. Seed.

PI 546201 **origin:** United States. **cultivar:** YELLOW SWEET SPANISH UTAH. **remarks:** Maturity 115 days. Bulbs large, deep-globe shaped, small neck. Skin straw-yellow. Flesh white, fine grained. Flavor mild. Keeping quality fair. Popular in the West and inter-mountain area as a shipping variety. Used for slicing and hamburger purposes. Popular with home and market gardeners due to large attractive size and mild flavor. Cultivated. Seed.

PI 546202 to 546205. *Allium cepa* L. LILIACEAE Onion

Donated by: Gill Bros, Oregon, United States. Received 1964.

PI 546202 **origin:** United States. **cultivar:** IMPROVED GREEN BUNCHING. **remarks:** Improved strain of White Lisbon with taller tops and longer white meat. Cultivated. Seed.

PI 546203 **origin:** United States. **cultivar:** SELECT OREGON YELLOW GLOBE DANVERS. **remarks:** Bulbs large, nearly globe shape, small necks. Skin rather heavy, rich coppery yellow color. Flesh white, high quality. The famous Oregon long keeping variety. Cultivated. Seed.

PI 546204 **origin:** United States. **cultivar:** SOUTHPORT JUMBO WHITE GLOBE. **remarks:** Extra large strain of Southport White Globe. Globe very large. Good keepers. Cultivated. Seed.

PI 546202 to 546205-continued

PI 546205 **origin:** United States. **cultivar:** WALLA WALLA SWEET.
remarks: Bulbs large, early yellow. Flavor mild. Grown in Walla Walla territory for fall or early spring planting. Hardy against cold weather making them ideal for fall planting to winter over for first crop. Tops short. Cultivated. Seed.

PI 546206. *Allium cepa* L. LILIACEAE Onion

Donated by: Ferry-Morse Seed Company, California, United States. Received 1964.

origin: United States. **origin institute:** University of California, Davis, California. **cultivar:** STOCKTON G36B.
remarks: Maturity 110 days. Slow-bolting, mid-season, fall planted variety. Bulbs medium-large and somewhat top-shaped. Color medium yellow. Flesh white, crisp and mild. Cultivated. Seed.

PI 546207. *Allium cepa* L. LILIACEAE Onion

Donated by: Vaughan-Jacklin Corporation, 5300 Katrine Avenue, Downer's Grove, Illinois, United States. Received 1965.

origin: United States. **cultivar:** SOUTHPORT WHITE GLOBE.
remarks: Maturity 110 days. Early, ripens evenly. Fine keeper. Neck small, high-bred. True globe, pure white. Cultivated. Seed.

PI 546208. *Allium cepa* L. LILIACEAE Onion

Donated by: Asgrow Seed Company, Michigan, United States. Received 1965.

origin: United States. **cultivar:** RUBY. **remarks:** Maturity 105 days. Bulb deep globe shape, medium-large size, deep red color. Flesh firm and pungent. Cultivated. Seed.

PI 546209 to 546226. *Allium cepa* L. LILIACEAE Onion

Donated by: Agricultural Research Service -- USDA, Beltsville, Maryland, United States. Received 1966.

PI 546209 to 546226-continued

- PI 546209 **origin:** United States. **origin institute:** USDA-ARS, Beltsville, Maryland. **cultivar:** B 02108 B. **remarks:** Letter "B" preceding 2108 indicates Beltsville inbred. Letter "B" following B 2108 indicates companion line or maintenance line. Good seed producer (which is important in producing sgl-x hybrids). Cultivated. Seed.
- PI 546210 **origin:** United States. **origin institute:** USDA-ARS, Beltsville, Maryland. **cultivar:** B 02133 A. **remarks:** Both A & B lines of B 2133 have been distributed upon request. Letter "B" preceding 2133 indicates Beltsville inbred. Letter "A" following B 02133 indicates male-sterile line S ms ms. Very high globe. Long day type. Not for long storage. Vigorous for an inbred and easy to maintain. Cultivated. Seed.
- PI 546211 **origin:** United States. **origin institute:** USDA-ARS, Beltsville, Maryland. **cultivar:** B 02133 B. **remarks:** Both A and B lines have been distributed upon request. Letter "B" preceding 2133 indicates Beltsville inbred. Letter "B" following B 2133 indicates fertile companion or maintenance line N ms ms. Cultivated. Seed.
- PI 546212 **origin:** United States. **developer country:** United States. **origin institute:** USDA-ARS, Beltsville, Maryland. **cultivar:** B 02147 A. Cultivated. Seed.
- PI 546213 **origin:** United States. **origin institute:** USDA-ARS, Beltsville, Maryland. **cultivar:** B 02147 B. Cultivated. Seed.
- PI 546214 **origin:** United States. **origin institute:** USDA-ARS, Beltsville, Maryland. **cultivar:** B 02190 A. **remarks:** Both A & B lines have been distributed widely. Letter "B" preceding 2190 indicates Beltsville inbred. Letter "A" following indicates male-sterile line. Good seed producer (which is important when used for production of single-x hybrids). Cultivated. Seed.
- PI 546215 **origin:** United States. **origin institute:** USDA-ARS, Beltsville, Maryland. **cultivar:** B 02190 B. **remarks:** Both A & B lines have been distributed widely. Letter "B" preceding 2190 indicates Beltsville inbred. Letter "B" following B 2190 indicates fertile companion line or maintenance line. Good seed producer (which is important when used for production of single-x hybrids). Cultivated. Seed.
- PI 546216 **origin:** United States. **origin institute:** USDA-ARS, Beltsville, Maryland. **cultivar:** B 02207 A. Cultivated. Seed.

PI 546209 to 546226-continued

- PI 546217 **origin:** United States. **origin institute:** USDA-ARS, Beltsville, Maryland. **cultivar:** B 02207 B. Cultivated. Seed.
- PI 546218 **origin:** United States. **origin institute:** USDA-ARS, Beltsville, Maryland. **cultivar:** B 02215 C. **remarks:** Pollen parent of Elite. Distributed to seedsmen in 1/1953. Long day storage type. High globe shape. Flesh very firm with scales that adhere well during long storage period. Seed and pollen vigorous, productive and abundant. Cultivated. Seed.
- PI 546219 **origin:** United States. **origin institute:** USDA-ARS, Beltsville, Maryland. **cultivar:** B 02264 A. Cultivated. Seed.
- PI 546220 **origin:** United States. **origin institute:** USDA-ARS, Beltsville, Maryland. **cultivar:** B 02264 B. **remarks:** Seed parent of Epoch. Both A & B lines have been distributed widely throughout the seed trade in US and abroad. Bulb attractive, globe shape and well filled shoulders and base. Letter "B" preceding 2264 indicates Beltsville inbred. Letter "B" following B 2264 indicates fertile companion or maintenance line N ms ms. Cultivated. Seed.
- PI 546221 **origin:** United States. **origin institute:** USDA-ARS, Beltsville, Maryland. **cultivar:** B 05546 A. **remarks:** Inbred from common lot of seed. Both A & B lines have been distributed throughout the seed trade. Letter "B" preceding 5546 indicates Beltsville inbred. Letter "A" following B 5546 indicates male-sterile line S ms ms. Good vigor and easy to maintain. Cultivated. Seed.
- PI 546222 **origin:** United States. **cultivar:** B 05546 B. **remarks:** Letter "B" preceding 5546 indicates Beltsville inbred. Letter "B" following 5546 indicates fertile companion line or maintenance line N ms ms. Cultivated. Seed.
- PI 546223 **origin:** United States. **cultivar:** IA 0163 A. Cultivated. Seed.
- PI 546224 **origin:** United States. **cultivar:** IA 0163 B. Cultivated. Seed.
- PI 546225 **origin:** United States. **cultivar:** IA 2997 A. Cultivated. Seed.
- PI 546226 **origin:** United States. **cultivar:** IA 2997 A PRR O. Cultivated. Seed.

PI 546227. *Allium cepa* L. LILIACEAE Onion

Donated by: Northrup, King & Company, 1500 Jackson N.E.,
Minneapolis, Minnesota, United States. Received 1966.

origin: United States. **cultivar:** SHAMROCK. **pedigree:**
Selection from Southport White Globe for stripping.
remarks: Bulbs slowly, with silvery white shanks. Slimmer
than Perfecto Blanco. Cultivated. Seed.

PI 546228 to 546229. *Allium cepa* L. LILIACEAE Onion

Donated by: Dessert Seed, California, United States. Received 1966.

PI 546228 **origin:** United States. **cultivar:** IMPROVED BELTSVILLE
BUNCHING. Cultivated. Seed.

PI 546229 **origin:** United States. **cultivar:** RINGMASTER. **remarks:**
Similar characteristics and large size as Utah Spanish.
First single centered White Utah produced. Excellent
strain for French fried onion rings. Cultivated. Seed.

PI 546230. *Allium cepa* L. LILIACEAE Onion

Donated by: Oregon Agr. Exp. Sta., Oregon, United States. Received
1966.

origin: United States. **cultivar:** OSU 11. **pedigree:**
Polycross of four onion types: Oregon Danvers, Australian
Brown, Yellow Sweet Spanish and Yellow Globe. **remarks:**
Developed primarily for the Lake Labish area of W.
Oregon. Designed to produce higher yields. Bulb deep
yellow globe shape. Maturity approx. same as a Danvers in
West. Storage ability good to excellent. Tolerant to pink
rot. Cultivated. Seed.

PI 546231. *Allium cepa* L. LILIACEAE Onion

Donated by: Ferry-Morse Seed Company, California, United States.
Received 1967.

origin: United States. **origin institute:** University of
California, Davis, California. **cultivar:** STOCKTON G36.
remarks: Discontinued variety. Discard with loss of
germination. Bulbs medium large, somewhat top shaped.
Color medium yellow, interior white, crisp and mild.
Cultivated. Seed.

PI 546232 to 546233. *Allium cepa* L. LILIACEAE Onion

Donated by: Agricultural Research Service -- USDA, Beltsville, Maryland, United States. Received 1967.

PI 546232 **origin:** United States. **cultivar:** B 58-614 BROWN SEED. Cultivated. Seed.

PI 546233 **origin:** United States. **cultivar:** IA 2997 B PRR O. Cultivated. Seed.

PI 546234. *Allium cepa* L. LILIACEAE Onion

Donated by: Dessert Seed, California, United States. Received 1967.

origin: United States. **cultivar:** RED GRANO. Cultivated. Seed.

PI 546235. *Allium cepa* L. LILIACEAE Onion

Donated by: Twilley Seed Company, Otis, Maryland, United States. Received 1967.

origin: United States. **cultivar:** COMMANDER. **remarks:** Maturity 105 days. Bulbs deep globe. Excellent color, tight scales and uniform bulbs after long storage. Plants vigorous. Ripes uniformly and cures rapidly. Tops for machine harvest and prepacking, with good quality and appearance. Grows well from Northeast to Midwest. Cultivated. Seed.

PI 546236 to 546244. *Allium cepa* L. LILIACEAE Onion

Donated by: Agricultural Research Service -- USDA, Beltsville, Maryland, United States. Received 1968.

PI 546236 **origin:** United States. **cultivar:** B 00007-165 A. Cultivated. Seed.

PI 546237 **origin:** United States. **cultivar:** B 00007-165 B. Cultivated. Seed.

PI 546238 **origin:** United States. **cultivar:** B 00015-108 A PRR. Cultivated. Seed.

PI 546239 **origin:** United States. **cultivar:** B 00015-108 B PRR. Cultivated. Seed.

PI 546240 **origin:** United States. **cultivar:** B 01288 A. Cultivated. Seed.

PI 546236 to 546244-continued

PI 546241 **origin:** United States. **cultivar:** B 01288 B. Cultivated.
Seed.

PI 546242 **origin:** United States. **cultivar:** B 09166 B. Cultivated.
Seed.

PI 546243 **origin:** United States. **cultivar:** U 16-3-11 A.
Cultivated. Seed.

PI 546244 **origin:** United States. **cultivar:** U 16-3-11 B.
Cultivated. Seed.

PI 546245. *Allium cepa* L. LILIACEAE Onion

Donated by: E. State Farmers, United States. Received 1968.

origin: United States. **cultivar:** UTAH VALENCIA.
remarks: Maturity 125 days. Improved strain of sweet
Spanish onion from transplants. Average weight 2 lbs.
Bulb large, round. Skin yellow. Flesh white. Flavor mild.
Cultivated. Seed.

PI 546246. *Allium cepa* L. LILIACEAE Onion

Donated by: Pieter-Wheeler Seed Company, California, United States.
Received 1968.

origin: United States. **cultivar:** INDIAN SUMMER.
remarks: Danver's type. Skin dark bronze color, adheres
well. Bulb globe shaped, uniform, solid, averaging 2-1/2
to 3-1/2 inches in diameter and approx. 3 inches deep.
Matures one week to ten days later than Autumn Spice.
Stores well. Cultivated. Seed.

PI 546247. *Allium cepa* L. LILIACEAE Onion

Donated by: Ferry-Morse Seed Company, California, United States.
Received 1968.

origin: United States. **cultivar:** PERFECTO BLANCO.
pedigree: Selection from White Sweet Spanish type for
stripping. **remarks:** Bulbs slowly. Ideal for stripping
and bunching. Color white. Tops long, slender, blue-green
and long white stalks. Cultivated. Seed.

PI 546248. *Allium cepa* L. LILIACEAE Onion

Donated by: Joseph Harris Company, Inc., Moreton Farm, Rochester, New York, United States. Received 1968.

origin: United States. **cultivar:** BENNYS RED.
Cultivated. Seed.

PI 546249. *Allium cepa* L. LILIACEAE Onion

Donated by: Leatherman's Inc., Ohio, United States. Received 1969.

origin: United States. **cultivar:** WHITE KNIGHT BUNCHING.
Cultivated. Seed.

PI 546250 to 546251. *Allium cepa* L. LILIACEAE Onion

Donated by: W. Atlee Burpee Company, Pennsylvania, United States. Received 1971.

PI 546250 **origin:** United States. **cultivar:** EVERGREEN LONG WHITE BUNCHING. Cultivated. Seed.

PI 546251 **origin:** United States. **cultivar:** SWEET SPANISH.
Cultivated. Seed.

PI 546252. *Allium cepa* L. LILIACEAE Onion

Donated by: Hawaii Agr. Exp. Sta., Hawaii, United States. Received 1971.

origin: United States. **cultivar:** AWAHIA. **remarks:** Plant small, 12-15 inches high. Leaves blue-green. Bulbs medium size, 2-1/2 to 3 inches in diameter, averaging over 5 oz. per bulb, oblate or slightly flat shape. Holds flavor in cooking. Color red-brown. Flavor strong. Stores well. Cultivated. Seed.

PI 546253. *Allium cepa* L. LILIACEAE Onion

Donated by: Agway Inc., New York, United States. Received 1971.

origin: United States. **cultivar:** SWEET SPANISH UTAH. **remarks:** Maturity 125 days. Grown from transplants. Large, weigh up to 2 lbs, round. Skin yellow. Flesh white. Flavor mild. Seed sown directly in field averages 8 oz. in comparison to 12 oz. average when grown from transplants. Cultivated. Seed.

PI 546254 to 546255. *Allium cepa* L. LILIACEAE Onion

Donated by: Crookham Company, Idaho, United States. Received 1974.

PI 546254 **origin:** United States. **cultivar:** B 02267 A PRR T.
pedigree: Brigham Yellow Globe inbred. **remarks:** Seed parent of Empire. Inbred 2 generations. Good seed producer. High globe with slightly sloping shoulders. Though inbred matures late, excellent storage when properly matured and cured. Scales yellow, adhere well in storage. Flowering periods of B 2267 and B 2215 closely coincide. Cultivated. Seed.

PI 546255 **origin:** United States. **cultivar:** B 02267 B PRR T.
Cultivated. Seed.

PI 546256. *Allium cepa* L. LILIACEAE Onion

Donated by: Keystone Seed Company, United States. Received 1974.

origin: United States. **cultivar:** SCANION. **other id:** PVP 7300001. **source:** Certificate in force. **group:** PVPO.
Cultivated. Seed.

PI 546257 to 546258. *Allium cepa* L. LILIACEAE Onion

Donated by: Dessert Seed Co., United States. Received 1975.

PI 546257 **origin:** United States. **cultivar:** RED CREOLE PRR. **other id:** PVP 7300048. **source:** Certificate in force. **group:** PVPO. Cultivated. Seed.

PI 546258 **origin:** United States. **cultivar:** WHITE CREOLE PRR.
other id: PVP 7300047. **source:** Certificate in force.
group: PVPO. Cultivated. Seed.

PI 546259. *Allium cepa* L. LILIACEAE Onion

Donated by: Joseph Harris Company, Inc., Moreton Farm, Rochester, New York, United States. Received 1975.

origin: United States. **cultivar:** KAGA. Cultivated.
Seed.

PI 546260. *Allium cepa* L. LILIACEAE Onion

Donated by: Agway Inc., New York, United States. Received 1976.

PI 546260-continued

origin: United States. **cultivar:** LONG WHITE BUNCHING.
remarks: Hardy variety for over wintering to produce early scallions for spring bunching. Does not form bulbs. Single plants produce clusters of four to six green shoots with white stems. Spring sowing also for early summer crops. Cultivated. Seed.

PI 546261 to 546262. *Allium cepa* L. LILIACEAE Onion

Donated by: Asgrow Seed Company, Michigan, United States. Received 1977.

PI 546261 **origin:** United States. **origin institute:** Texas Agr. Exp. Sta., Texas. **cultivar:** TEXAS GRANO 502 PRR. **remarks:** Pink root resistant version of Texas Grano 502. Bulbs similar in shape and color as original, smaller size. Well suited for producing jumbo grades. Cultivated. Seed.

PI 546262 **origin:** United States. **cultivar:** TROPEX. Cultivated. Seed.

PI 546263. *Allium cepa* L. LILIACEAE Onion

Donated by: Seed Res. Spec, California, United States. Received 1979.

origin: United States. **cultivar:** SWEET SPANISH VALENCIA.
remarks: Maturity 108 days. Used for bulbs, bunching and shipping. Bulbs large, globe shape, yellow. Commercial grower variety. Flesh white, sweet, mild. Stores fair. Cultivated. Seed.

PI 546264. *Allium cepa* L. LILIACEAE Onion

Donated by: Agricultural Research Service -- USDA, Beltsville, Maryland, United States. Received 1979.

origin: United States. **cultivar:** B 12132 B. **pedigree:** Utah Sweet Spanish/Brigham Yellow Globe. **remarks:** Long day type. High yielding where adapted. Bulb globe shape. Flesh hard. Scales dark yellow, fairly retentive. Consistent good performance when used as transplant crop in the North. Advantages over Sweet Spanish are uniformity, good storage quality, yield, less severely damaged by purple blotch in epidemic conditions and maturity few days earlier. Cultivated. Seed.

PI 546265. *Allium cepa* L. LILIACEAE Onion

Donated by: Asgrow Seed Company, United States. Received 1979.

origin: United States. **cultivar:** EXCEL G. **other id:** PVP 7800064. **source:** Certificate in force. **group:** PVPO. Cultivated. Seed.

PI 546266 to 546267. *Allium cepa* L. LILIACEAE Onion

Donated by: Dessert Seed, California, United States. Received 1979.

PI 546266 **origin:** United States. **cultivar:** B 02129 A. Cultivated. Seed.

PI 546267 **origin:** United States. **cultivar:** B 02129 B. Cultivated. Seed.

PI 546268 to 546273. *Allium cepa* L. LILIACEAE Onion

Donated by: Dessert Seed Co., United States. Received 1980.

PI 546268 **origin:** United States. **cultivar:** BLANCO DURO. **other id:** PVP 8000040. **source:** Certificate in force. **group:** PVPO. Cultivated. Seed.

PI 546269 **origin:** United States. **cultivar:** BROOKS PRR. **other id:** PVP 8000041. **source:** Certificate in force. **group:** PVPO. Cultivated. Seed.

PI 546270 **origin:** United States. **cultivar:** COLOSSAL. **other id:** PVP 7900076. **source:** Certificate in force. **group:** PVPO. Cultivated. Seed.

PI 546271 **origin:** United States. **cultivar:** NEW MEXICO WHITE GRANO PRR. **other id:** PVP 7900086. **source:** Certificate in force. **group:** PVPO. Cultivated. Seed.

PI 546272 **origin:** United States. **cultivar:** NEW MEXICO YELLOW GRANO PRR. **other id:** PVP 7900117. **source:** Certificate in force. **group:** PVPO. Cultivated. Seed.

PI 546273 **origin:** United States. **cultivar:** RED SUNSET. **other id:** PVP 8000039. **source:** Certificate in force. **group:** PVPO. Cultivated. Seed.

PI 546274 to 546276. *Allium cepa* L. LILIACEAE Onion

Donated by: Dessert Seed Co., United States. Received 1981.

PI 546274 to 546276-continued

PI 546274 **origin:** United States. **cultivar:** EARLY GRAND PRR. **other id:** PVP 8000161. **source:** Certificate in force. **group:** PVPO. Cultivated. Seed.

PI 546275 **origin:** United States. **cultivar:** SWEET WINTER. **other id:** PVP 8100166. **source:** Certificate in force. **group:** PVPO. Cultivated. Seed.

PI 546276 **origin:** United States. **cultivar:** TEXSPAN PRR. **other id:** PVP 8000159. **source:** Certificate in force. **group:** PVPO. Cultivated. Seed.

PI 546277. *Allium cepa* L. LILIACEAE Onion

Donated by: Moran Seeds, Inc., United States; and Oshita, Inc..
Received 1982.

origin: United States. **cultivar:** OMO M. **other id:** PVP 8200019. **source:** Certificate in force. **group:** PVPO. Cultivated. Seed.

PI 546278. *Allium cepa* L. LILIACEAE Onion

Donated by: Arco Seed Company, United States. Received 1983.

origin: United States. **cultivar:** CRYSTAL WAX PICKLING. **other id:** PVP 8300083. **source:** Certificate in force. **group:** PVPO. Cultivated. Seed.

PI 546279 to 546281. *Allium cepa* L. LILIACEAE Onion

Donated by: Dessert Seed Co., United States. Received 1984.

PI 546279 **origin:** United States. **cultivar:** GLORY. **other id:** PVP 8100128. **source:** Certificate in force. **group:** PVPO. Cultivated. Seed.

PI 546280 **origin:** United States. **cultivar:** PARADISE. **other id:** PVP 8100129. **source:** Certificate in force. **group:** PVPO. Cultivated. Seed.

PI 546281 **origin:** United States. **cultivar:** REGAL. **other id:** PVP 8100130. **source:** Certificate in force. **group:** PVPO. Cultivated. Seed.

PI 546282 to 546305. *Allium cepa* L. LILIACEAE Onion

Received 1985.

PI 546282 to 546305-continued

PI 546282 origin: United States. cultivar: 11278 TR. Cultivated.
PI 546283 origin: United States. cultivar: 11377 TR. Cultivated.
PI 546284 origin: United States. cultivar: 1459B. Cultivated.
PI 546285 origin: United States. cultivar: 2399B. Cultivated.
PI 546286 origin: United States. cultivar: 2923A. Cultivated.
PI 546287 origin: United States. cultivar: 2923B. Cultivated.
PI 546288 origin: United States. cultivar: 2935A. Cultivated.
PI 546289 origin: United States. cultivar: 2935B. Cultivated.
PI 546290 origin: United States. cultivar: 4535B. Cultivated.
PI 546291 origin: United States. cultivar: 5718A. Cultivated.
PI 546292 origin: United States. cultivar: 5718B. Cultivated.
PI 546293 origin: United States. cultivar: 611-1B. Cultivated.
PI 546294 origin: United States. cultivar: 611A PRR. Cultivated.
PI 546295 origin: United States. cultivar: 611B PRR. Cultivated.
PI 546296 origin: United States. cultivar: 6693A. Cultivated.
PI 546297 origin: United States. cultivar: 6693B. Cultivated.
PI 546298 origin: United States. cultivar: 7728A. Cultivated.
PI 546299 origin: United States. cultivar: 7728B. Cultivated.
PI 546300 origin: United States. cultivar: 8155A. Cultivated.
PI 546301 origin: United States. cultivar: 8155B. Cultivated.
PI 546302 origin: United States. cultivar: 826B. Cultivated.
PI 546303 origin: United States. cultivar: 9885C TR. Cultivated.
PI 546304 origin: United States. cultivar: 9897A TR. Cultivated.
PI 546305 origin: United States. cultivar: 9897B TR. Cultivated.

PI 546306. *Allium cepa* L. LILIACEAE Onion

Donated by: Asgrow Seed Company, United States. Received 1985.

PI 546306-continued

origin: United States. **cultivar:** CONTESSA. **other id:**
PVP 8500193. **source:** Certificate in force. **group:** PVPO.
Cultivated.

PI 546307 to 546321. *Allium cepa* L. LILIACEAE Onion

Donated by: Mclellan, K., Quali-sel Seeds, P.O. Box 311, Parma,
Idaho, United States. Received 1986.

PI 546307 **origin:** United States. **cultivar:** B2923B. Cultivated.

PI 546308 **origin:** United States. **cultivar:** M1459B. Cultivated.

PI 546309 **origin:** United States. **cultivar:** M2399B. Cultivated.

PI 546310 **origin:** United States. **cultivar:** M2935A. Cultivated.

PI 546311 **origin:** United States. **cultivar:** M2935B. Cultivated.

PI 546312 **origin:** United States. **cultivar:** M4535B. Cultivated.

PI 546313 **origin:** United States. **cultivar:** M5718A. Cultivated.

PI 546314 **origin:** United States. **cultivar:** M5718B. Cultivated.

PI 546315 **origin:** United States. **cultivar:** M611-1APRR.
Cultivated.

PI 546316 **origin:** United States. **cultivar:** M611-1BPRR.
Cultivated.

PI 546317 **origin:** United States. **cultivar:** M611APRR. Cultivated.

PI 546318 **origin:** United States. **cultivar:** M611BPRR. Cultivated.

PI 546319 **origin:** United States. **cultivar:** M8155A. Cultivated.

PI 546320 **origin:** United States. **cultivar:** M8155B. Cultivated.

PI 546321 **origin:** United States. **cultivar:** M826B. Cultivated.

PI 546322. *Allium cepa* L. LILIACEAE Onion

Donated by: Corona, James, United States. Received 1986.

origin: United States. **cultivar:** CORONA ITALIAN RED.
other id: PVP 8600072. **source:** Certificate in force.
group: PVPO. Cultivated.

PI 546323. *Allium cepa* L. LILIACEAE Onion

Donated by: Asgrow Seed Company, United States. Received 1986.

origin: United States. **cultivar:** GALA. **other id:** PVP 8600148. **source:** Certificate in force. **group:** PVPO. Cultivated.

PI 546324. *Allium cepa* L. LILIACEAE Onion

Donated by: Nickerson-Zwaan, United States. Received 1988.

origin: United States. **cultivar:** EVEREST. **other id:** PVP 8800045. **source:** Pending. **group:** PVPO. Cultivated.

PI 546325 to 546327. *Allium cepa* L. LILIACEAE Onion

Donated by: Texas Agr. Exp. Sta., Texas, United States. Received 1988.

PI 546325 **origin:** United States. **cultivar:** DORADA. **other id:** PVP 8800208. **source:** Pending. **group:** PVPO. Cultivated.

PI 546326 **origin:** United States. **cultivar:** PERLA. **other id:** PVP 8800209. **source:** Pending. **group:** PVPO. Cultivated.

PI 546327 **origin:** United States. **cultivar:** TEXAS GRANO 438. **other id:** PVP 8800207. **source:** Pending. **group:** PVPO. Cultivated.

PI 546328. *Allium cepa* L. LILIACEAE Onion

Donated by: Sunseeds, P.O. Box 181, 110 E Ross Ave, El Centro, California, United States. Received 1988.

origin: United States. **cultivar:** CRYSTAL WAX L303. **remarks:** Maturity 85 days. Bulbs clear white, medium size. Resistant to splitting. Slow-bolting. Flesh soft, very mild. Shape thick, flat. Planted in fall in South Texas and Southern California. Cultivated.

PI 546329 to 546330. *Allium cepa* L. LILIACEAE Onion

Donated by: Nickerson-Zwaan B.V., United States. Received 1989.

PI 546329 **origin:** United States. **cultivar:** NIZ 0110. **other id:** PVP 8900276. **source:** Pending. **group:** PVPO. Cultivated.

PI 546330 **origin:** United States. **cultivar:** NIZ 0111. **other id:** PVP 8900277. **source:** Pending. **group:** PVPO. Cultivated.

PI 546331. *Allium fistulosum* L. LILIACEAE Bunching onion

Donated by: Seed Res. Spec, California, United States. Received 1961.

origin: United States. **cultivar:** WHITE LISBON. **remarks:** Bunching type. Stalks long, clear white. Mild, vigorous, matures flat. Cultivated. Seed.

PI 546332. *Allium fistulosum* L. LILIACEAE Bunching onion

Donated by: Asgrow Seed Company, Michigan, United States. Received 1961.

origin: United States. **cultivar:** EVERGREEN (NEBUKA). **remarks:** Maturity 60 days. Hardy, non-bulbing variety, used in the East and Midwest. Stems long, slender, pure white and tender. Flavor delicate. Slow bolting. Resistant to pink root, thrips and smut. Cultivated. Seed.

PI 546333. *Allium fistulosum* L. LILIACEAE Bunching onion

Donated by: Vaughan-Jacklin Corporation, 5300 Katrine Avenue, Downer's Grove, Illinois, United States. Received 1968.

origin: United States. **cultivar:** HE-SHI-KO. **remarks:** Maturity 50 days. Early bunch type. Hardy. May be sown spring or fall. Fall sowing will produce green onions very early in spring. Cultivated. Seed.

PI 546334. *Allium fistulosum* L. LILIACEAE Bunching onion

Donated by: Joseph Harris Company, Inc., Moreton Farm, Rochester, New York, United States. Received 1970.

origin: United States. **cultivar:** JAPANESE BUNCHING. **remarks:** Popular for home use and market as green bunching type. Does not form bulb but makes long slim "scallions" of good quality. When spaced, multiplies to several stalks per plant. Hardy, used for wintering over and for summer or fall crop. Cultivated. Seed.

PI 546335. *Allium fistulosum* L. LILIACEAE Bunching onion

Donated by: Northrup, King & Company, 1500 Jackson N.E., Minneapolis, Minnesota, United States. Received 1975.

PI 546335-continued

origin: United States. **cultivar:** WHITE WELSH. **remarks:** Winterhardy. Non-bulbing. Used exclusively for green bunching. May be sown in late summer or fall and shoots will attain marketable size the following spring before green onions from sets are offered. Perennial. Cultivated. Seed.

PI 546336 to 546344. Allium hybrid LILIACEAE

Donated by: Agricultural Research Service -- USDA, Beltsville, Maryland, United States. Received 1988.

PI 546336 **origin:** United States. **developer country:** United States. **origin institute:** USDA-ARS, Beltsville, Maryland. **cultivar:** f-c 8407. **pedigree:** A. fistulosum PI 223853 'Kujyu-negi' genic male-sterile / A. cepa 'Southport White Globe' Asgrow amphidiploid (colchicine). **remarks:** Beltsville bunching type. Seedling vigor. Winter hardiness. Cultivated. Seed.

PI 546337 **origin:** United States. **developer country:** United States. **origin institute:** USDA-ARS, Beltsville, Maryland. **cultivar:** f-c 8432. **pedigree:** A. fistulosum PI 223853 'Kujyu-negi' genic male-sterile / a. cepa 'White Knight' Asgrow amphidiploid (colchicine-induced). **remarks:** Beltsville bunching type. Seedling vigor. Winter hardiness. Cultivated. Seed.

PI 546338 **origin:** United States. **developer country:** United States. **origin institute:** USDA-ARS, Beltsville, Maryland. **cultivar:** f-c 8434. **pedigree:** A. fistulosum PI 223853 'Kujyu-negi' genic male-sterile / A. cepa (PI 239633 / 'Penn Dutch Long Bottle' F2) amphidiploid (colchicine). **remarks:** Beltsville bunching type. Seedling vigor. Winter hardiness. Cultivated. Seed.

PI 546339 **origin:** United States. **developer country:** United States. **origin institute:** USDA-ARS, Beltsville, Maryland. **cultivar:** f-c 8492. **pedigree:** A. fistulosum PI 223853 'Kujyu-negi' genic male-sterile / A. cepa (P52-374A = White Sweet Spanish / PI 246322 F3) amphidiploid (colchicine). **remarks:** Beltsville bunching type. Seedling vigor. Winter hardiness. Cultivated. Seed.

PI 546336 to 546344-continued

PI 546340 **origin:** United States. **developer country:** United States.
origin institute: USDA-ARS, Beltsville, Maryland.
cultivar: f-c 8497. **pedigree:** A. fistulosum PI 223853
'Kujyu-negi' genic male-sterile / A. cepa rw 74-9-32 (= recessive white White Sweet Spanish inbred) amphidiploid (colchicine-induced). **remarks:** Beltsville bunching type. Seedling vigor. Winter hardiness. About one third of population has yellow scales. Cultivated. Seed.

PI 546341 **origin:** United States. **developer country:** United States.
origin institute: USDA-ARS, Beltsville, Maryland.
cultivar: f-c 8615. **pedigree:** A. fistulosum PI 433631
'Kincho Long White Bunching' / A. cepa 'Southport White Globe' Asgrow amphidiploid (colchicine). **remarks:** Beltsville bunching type. Seedling vigor. Winter hardiness. Cultivated. Seed.

PI 546342 **origin:** United States. **developer country:** United States.
origin institute: USDA-ARS, Beltsville, Maryland.
cultivar: f-r 8115. **pedigree:** Male-sterile A. fistulosum (derived from top onion) / A. roylei PI 243009 amphidiploid (colchicine-induced). **remarks:** Slightly bulbing, doubling. Winter hardiness. Bulb scales dry, yellowish-brown. Flower stalks 90cm, slender. Petals and sepals pale pink to greenish-yellow. Perennial. Cultivated. Seed.

PI 546343 **origin:** United States. **developer country:** United States.
origin institute: USDA-ARS, Beltsville, Maryland.
cultivar: ga-c 76. **pedigree:** A. galanthum PI 280091 / A. cepa inbred B 2215 C (Brigham Yellow Globe) amphidiploid (colchicine-induced). **remarks:** Medium bulbing. Winter hardiness. Bulb scales dry, reddish-brown. Flower stalks up to 178cm. Has shown resistance to natural infection by downy mildew, Peronospora destructor at Beltsville. Perennial. Cultivated. Seed.

PI 546344 **origin:** United States. **developer country:** United States.
origin institute: USDA-ARS, Beltsville, Maryland.
cultivar: r-f 8124. **pedigree:** A. roylei PI 243009 / A. fistulosum cv. Ishikura (Ono Company, Japan) amphidiploid (colchicine-induced). **remarks:** Slightly bulbing, doubling. Winter hardiness. Bulb scales dry, yellowish-brown. Flower stalks 90cm, slender. Petals and sepals pale pink to green-yellow. Perennial. Cultivated. Seed.

PI 546345. *Allium pseudocepa* Schrenk LILIACEAE

Donated by: Agricultural Research Service -- USDA, Beltsville, Maryland, United States. Received 1978.

PI 546345-continued

origin: USSR. **cultivar:** C 541. Cultivated. Seed.

PI 546346. *Allium pseudocepa* Schrenk LILIACEAE

Donated by: Agricultural Research Service -- USDA, Beltsville, Maryland, United States. Received 1979.

origin: United States. **cultivar:** CALIF NO 565.
Cultivated. Seed.

PI 546347. *Allium schoenoprasum* L. LILIACEAE Chives

Donated by: W. Atlee Burpee Company, Pennsylvania, United States.
Received 1977.

origin: United States. **cultivar:** CHIVES. **remarks:**
Mildest onion taste. Tops used for flavoring. Extremely
easy to grow from seeds. Cultivated. Seed.

PI 546348. *Stokesia laevis* (Hill) E. Greene ASTERACEAE Stokes' aster

Donated by: Lonsberry Gardens, P.O. Box 135, Oakford, Illinois,
United States. Received September 21, 1971.

origin: United States. **other id:** B-60405. **remarks:**
Ornamental type. **received as:** *Stokesia cyanea*.
Perennial. Cultivated. Plant.

Scientific Name Cross Reference

Abelmoschus esculentus	542594	546335	
Aegilops biuncialis	542144-	Allium hybrid	546336-546344
542170		Allium pseudocepa	546345-
Aegilops columnaris	542171	546346	
Aegilops comosa	542172-542177	Allium sativum	543048-543049
Aegilops crassa	542178	Allium schoenoprasum	546347
Aegilops cylindrica	542179	Amaranthus sp.	542595-542596
Aegilops geniculata		Ampelopsis aconitifolia	
subsp. geniculata	542180-	var. glabra	545685
542190		Aniseia martinicensis	543813
Aegilops hybrid	542191	Anthyllis vulneraria	
Aegilops juvenalis	542192-	subsp. carpatica	542779-
542193		542781	
Aegilops kotschy	542194-	Antirrhinum majus	542416-
542195		542431	
Aegilops longissima	542196	Apium graveolens	542396, 545482
Aegilops markgrafii		Arachis hypogaea	542961, 544346,
var. markgrafii	542197-	544348-544352	
542210, 542219		Arachis hypogaea	
Aegilops neglecta	542211-	subsp. hypogaea	542960
542218, 542220-542230		Aronia melanocarpa	545682,
Aegilops neglecta		545686-545687	
subsp. neglecta	542231-	Asparagus hybrid	542615
542234		Astragalus sp.	542782
Aegilops neglecta subsp. recta		Avena fatua	542090-542091,
542235		544355-545480	
Aegilops peregrina		Avena hybrid	545481
subsp. cylindrostachys		Avena sativa	542591-542593,
542236		544347, 546034-546037	
Aegilops sharonensis	542237	Benincasa hispida	542597-
Aegilops speltoides	542238	542598	
Aegilops speltoides		Beta vulgaris	542971
var. ligustica	542239-	Brassica napus	542983-542984,
542258		543937	
Aegilops speltoides		Cajanus cajan	543177
var. speltoides	542259-	Calendula arvensis	545706
542276		Calendula officinalis	545694,
Aegilops tauschii		545698-545700, 545709	
subsp. tauschii	542277-	Calendula suffruticosa	545701,
542278		545707-545708	
Aegilops triuncialis	542279-	Capsicum annuum	542599-542604,
542361		542977, 543809-543811	
Aegilops umbellulata	542362-	Capsicum sp.	543178-543208
542384		Carthamus tinctorius	543974-
Aegilops ventricosa	542385	544063	
Aeschynomene americana	544079-	Centrosema plumieri	542963
544345		Chamaecytisus prolifer	543808
Agrostis stolonifera		Cicer arietinum	542605, 543009-
var. palustris	542088-	543012, 543050-543065, 543921	
542089, 543248		Cichorium endivia	544067
Alcea rosea	545691	Citrullus colocynthis	542616
Allium ampeloprasum	546062-	Citrullus lanatus	542112-
546069		542123, 542606, 542617, 543212	
Allium cepa	546070-546330	Citrullus sp.	543209-543211
Allium fistulosum	546331-	Crotalaria ochroleuca	543869

Cucumis africanus	542125-542133	Lablab purpureus	542609,543231
Cucumis anguria	542134-542135, 543751	Lactuca sativa	542386,543927, 543959-543972,544066,545484-545486
Cucumis melo	542618-542619, 543752	Lagenaria siceraria	542610
Cucumis sp.	542136-542137	Lagenaria sp.	543232-543236
Cucurbita maxima	545488	Lathyrus sativus	543071
Cucurbita moschata	542607	Lathyrus sp.	542690
Cucurbita pepo	542050,545483	Lavatera thuringiaca	545693
Cucurbita sp.	543215-543230	Lavatera trimestris	545702-545703
Cyamopsis tetragonoloba	542608	Lens culinaris	543066-543070, 543920
Cyclanthera pedata	543213-543214	Limnanthes alba var. alba	543894
Cynara scolymus	542054	Linum flavum	545704
Dactylis glomerata	542783, 543748	Lolium perenne	542980-542981, 543833,543835
Desmanthus illinoensis	543895-543914	Lolium sp.	545593-545680
Desmanthus virgatus	543915	Lonchocarpus sp.	543763-543764
Duchesnea indica	545710	Lotus corniculatus	542784-542785
Festuca arundinacea	542051, 543836-543839,543929-543931, 544064	Lotus sp.	542786-542792
Festuca rubra subsp. commutata	543834,543928	Lotus tenuis	542793
Glycine max	542042-542046, 542053,542055-542067,542070-542071,542392-542393,542399,542402-542404,542709-542712,542768-542769,542969-542970,542972,542982,543793-543795,543832,543855-543857,543932-543936,544354,546038-546054	Luffa aegyptiaca	542611
Gossypium barbadense	542397, 542770-542775,542978,543753-543760	Lupinus albus	543013-543028
Gossypium hirsutum	542049, 542398,542973-542974,543252,543812,543858-543868,543926,544073-544074	Lupinus angustifolius	543029-543030
Gypsophila oldhamiana	545690	Lupinus hispanicus	543031
Helianthus annuus	543006, 543743-543746	Lupinus sp.	543032
Helianthus hybrid	543742, 543747	Lycopersicon esculentum	542390
Hordeum vulgare	542047,542391, 542707-542708,544075-544078	Macroptilium atropurpureum	543261-543397
Humulus lupulus	546055	Malva verticillata	545692
Inga sp.	543761	Medicago lupulina	542794, 543033
Ipomoea batatas	542073-542075	Medicago orbicularis	543034
Ipomoea ochracea	542076	Medicago polymorpha	543035-543036
Ipomoea pes-caprae	543814	Medicago polymorpha var. vulgaris	543037
Ipomoea sp.	542077-542080	Medicago sativa	542620-542625, 542967-542968,542995-542996, 544068,545592
Ipomoea tiliacea	542081-542087	Medicago sp.	542795-542800, 543038-543041
Ipomoea trifida	543815-543831	Medicago truncatula	543042
Jacaranda sp.	543762	Melilotus sp.	542801
		Momordica balsamina	542138
		Momordica charantia	543237
		Nicotiana tabacum	543765-543768,543792,543922
		Oenothera lipsiensis	542395
		Oryza sativa	542068-542069, 542394,543851-543853,543873-543875,543884-543888
		Oryza sp.	543876-543883

<i>Pachyrhizus tuberosus</i>	543238-543239	541841
<i>Panicum validum</i>	546058	<i>Pyrus korshinskyi</i>
<i>Papaver somniferum</i>	542691	subsp. <i>bucharica</i>
<i>Papaver sp.</i>	542692	<i>Pyrus mamorensis</i>
<i>Paspalum vaginatum</i>	543854	<i>Pyrus nivalis</i>
<i>Pennisetum divisum</i>	542626	<i>Pyrus pashia</i>
<i>Pennisetum glaucum</i>	542627-542637, 543749	541871-541890, 541892-541895
<i>Pennisetum sp.</i>	542139	<i>Pyrus pseudopashia</i>
<i>Pennisetum sphacelatum</i>	543796-543799	541896
<i>Pennisetum thunbergii</i>	543800-543806	<i>Pyrus pyrifolia</i>
<i>Pennisetum villosum</i>	543807	541757, 541762-541766, 541897-541908, 541910-541943
<i>Phaseolus coccineus</i>	542613	<i>Pyrus regelii</i>
<i>Phaseolus vulgaris</i>	542388-542389, 543249-543251, 543923-543925, 544071-544072	541944-541947
<i>Phaseolus vulgaris</i>		<i>Pyrus salicifolia</i>
var. <i>vulgaris</i>	543043-543047	541948-541953
<i>Pisum sativum</i>	542387, 545487, 545489-545490	<i>Pyrus sp.</i>
<i>Poa pratensis</i>	543938	541954, 541956, 541959-541964, 541966-541972
<i>Prunus armeniaca</i>	543940-543946, 543948, 543958	<i>Pyrus syriaca</i>
<i>Prunus cerasus</i>	543951-543954	541973-541983
<i>Prunus domestica</i>	543956-543957	<i>Pyrus ussuriensis</i>
<i>Prunus domestica</i>		541909, 541955, 541965, 541984-542033
subsp. <i>insititia</i>	543949	<i>Pyrus x bretschnideri</i>
<i>Prunus dulcis</i>	543950	542034
<i>Prunus hybrid</i>	543947	<i>Pyrus x canescens</i>
<i>Prunus mume</i>	543955	542035
<i>Prunus salicina</i>		<i>Pyrus x phaeocarpa</i>
var. <i>mandshurica</i>	543939	542037
<i>Pyrus communis</i>	541500-541559, 541743, 541958	<i>Pyrus x serrulata</i>
<i>Pyrus communis</i> subsp. <i>caucasica</i>	541560-541566, 541957	542038-542040
<i>Pyrus communis</i> var. <i>pyraster</i>	541567-541569	<i>Pyrus xerophila</i>
<i>Pyrus complexa</i>	542036	542041
<i>Pyrus cordata</i>	541570-541591	<i>Raphanus sativus</i>
<i>Pyrus cossonii</i>	541592-541594	542614
<i>Pyrus dimorphophylla</i>	541595-541612	<i>Rheedia sp.</i>
<i>Pyrus elaeagrifolia</i>	541613-541631	543769-543770
<i>Pyrus fauriei</i>	541632-541661	<i>Rhus copallina</i>
<i>Pyrus gharbiana</i>	541662-541669	545681
<i>Pyrus glabra</i>	541670	<i>Rhynchosia totta</i>
<i>Pyrus hondoensis</i>	541671-541704	542140-542143
<i>Pyrus hybrid</i>	541705-541742, 541744-541756, 541758-541761, 541767-541824, 541891	<i>Saccharum hybrid</i>
<i>Pyrus koehnei</i>	541825-541839	542964
<i>Pyrus korshinskyi</i>	541840-	<i>Saccharum officinarum</i>
		542102-542105
		<i>Secale cereale</i>
		542467-542470, 542476-542477, 542567-542574, 543398-543729
		<i>Sesamum indicum</i>
		542048, 543240-543241
		<i>Solanum acaule</i> subsp. <i>acaule</i>
		545837-545843, 545931-545957
		<i>Solanum agrimonifolium</i>
		545748-545750
		<i>Solanum alandiae</i>
		545844-545845
		<i>Solanum arnezii</i>
		545846-545847, 545958
		<i>Solanum astleyi</i>
		545848, 545959
		<i>Solanum berthaultii</i>
		545849-545852, 545960-545962
		<i>Solanum boliviense</i>
		545853, 545963-545966
		<i>Solanum brachistotrichum</i>
		545812-545817
		<i>Solanum brevicaule</i>
		545967-545971
		<i>Solanum bulbocastanum</i>
		subsp. <i>dolichophyllum</i>
		545751-545752, 545818
		<i>Solanum bulbocastanum</i>

var. bulbocastanum	545711,	545913,546006-546007
545819		Solanum stenophyllidium
Solanum candolleanum	545972	545832
Solanum capsicibaccatum	545973	Solanum stoloniferum
Solanum cardiophyllum	545820-	545735-
545821		545740,545793-545807,545833-
Solanum cardiophyllum		545835
subsp. ehrenbergii	545753,	Solanum sucrense
545822-545824		545914-545919,
Solanum circaeifolium		546008
subsp. quimense	545974	Solanum tarijense
Solanum demissum	545754-545767	545920-
Solanum doddsii	545854-545861	545924
Solanum gandarillasii	545862-	Solanum tarnii
545864		545741-545742,
Solanum gourlayi		545808
subsp. pachytrichum	545865-	Solanum toralapanum
545867,545975-545979		545925-
Solanum hintonii	545712	545928,546009-546015
Solanum hjertingii	545713-	Solanum tuberosum
545715,545768		subsp. andigena
Solanum hondelmannii	545868-	545743-
545879		545744,545929-545930,546016-
Solanum hoopesii	545880-545882	546028
Solanum hybrid	545883-545892,	Solanum tuberosum
545980-545983		var. tuberosum
Solanum infundibuliforme		545836
545893-545894		Solanum ugentii
Solanum iopetalum	545716,	546029-546033
545769-545772		Solanum vallis-mexici
Solanum leptophyes	545895-	545809
545896,545984-545997		Solanum verrucosum
Solanum megistacrolobum	545897-	545745-
545900,545998-546000		545747,545810-545811
Solanum melongena	542612	Sorghum bicolor
Solanum microdontum	545901	542405-542415,
Solanum microdontum		542638-542648,542717-542767,
subsp. gigantophyllum		542962,542985-542994,542997-
545902-545905		543005,543074-543175,543243-
Solanum morelliforme	545717-	543247,543253-543260,543730-
545720,545773-545775		543740,543750,544069,545493-
Solanum nayaritense	545825-	545591,546059
545828		Sorghum halepense
Solanum oplocense	545906-	542649
545910		Spilanthes sp.
Solanum oxycarpum	545721,	543771
545776-545779		Staphylea bumalda
Solanum papita	545722-545732	545683
Solanum polytrichon	545780-	Stenotaphrum secundatum
545789		542966
Solanum schenckii	545733,	Stokesia laevis
545790-545791		546348
Solanum semidemissum	545829	Tamarindus indica
Solanum sp.	545734,545792,	543772
545830-545831,545911,546001-		Tithonia rotundifolia
546005		545684
Solanum sparsipilum	545912-	Trifolium alpestre
		542802-
		542812
		Trifolium ambiguum
		542965
		Trifolium angustifolium
		542813-
		542816
		Trifolium arvense
		542817-
		542818
		Trifolium bocconeii
		542819
		Trifolium campestre
		542820-
		542826
		Trifolium fragiferum
		542827-
		542829
		Trifolium hybridum
		542830
		Trifolium longidentatum
		542831-
		542832
		Trifolium medium
		542833-542838
		Trifolium montanum
		542839-
		542861
		Trifolium ochroleucum
		542862-
		542863

Trifolium pallidum 542864
 Trifolium pannonicum 542865
 Trifolium pratense 542866-
 542900
 Trifolium repens 542901-542916,
 544353
 Trifolium rubens 542917-542925
 Trifolium scabrum 542926-
 542929
 Trifolium sp. 542930-542932
 Trifolium trichopterum 542933-
 542934
 Trigonella foenum-graecum
 543072-543073
 Trigonella sp. 542092-542098,
 542693-542699
 Tripsacum dactyloides 543889-
 543892
 Triticum aestivum 542072,
 542400-542401, 542432-542465,
 542575-542577, 542583-542589,
 542650-542675, 542704-542706,
 542975-542976, 542979, 543007,
 543791, 543893, 545491-545492,
 546056-546057
 Triticum boeoticum 542475
 Triticum durum 542471, 542590
 Triticum hybrid 542478-542508,
 542578-542582
 Triticum macha 542466
 Triticum militinae 542472
 Triticum monococcum 542473-
 542474
 Triticum turgidum 542676-
 542680, 546060
 UNDETERMINED sp. 542935-542936,
 543773
 UNIDENT-Cucurbitaceae sp.
 542124
 Ulmus parvifolia 543176
 Vicia sativa 542700-542703
 Vigna unguiculata 542052,
 542681, 543242, 544070
 Vitex sp. 543774
 X Pseudoroelymus sp. 546061
 X Tritico-secale sp. 542509-
 542566
 Zea mays subsp. mays 542099-
 542101, 542106-542111, 542682-
 542689, 542713-542716, 542776-
 542778, 542937-542959, 543008,
 543741, 543775-543790, 543840-
 543850, 543870-543872, 543916-
 543919, 543973, 544065
 Zinnia angustifolia 545695
 Zinnia haageana 545697
 Zinnia peruviana 545688-545689,

545696
 Zinnia violacea

545705

Common Name Cross Reference

Achocha	543213-543214	544074	
Aegilops	542144-542385	Cowpea	542052, 543242, 544070
Alfalfa	542967-542968, 542995-542996, 544068, 545592	Durum wheat	542471, 546060
Almond	543950	Dutch clover	542901-542916
Alsike clover	542830	Eastern gamagrass	543889-543892
Apricot	543940-543946, 543948, 543958	Eggplant	542612
Asian Pear	541897-541898, 541903-541909, 541931, 541954-541955, 541962, 541965-541966, 541985-542002, 542004-542008, 542010, 542022-542025	Einkorn	542473-542474
Balsam pear	543237	Endive	544067
Barley	542047, 542391, 542707-542708, 544075-544078	Evening primrose	542395
Barrel medic	543042	Feathertop	543807
Bean	543249-543251	Fenugreek	543072-543073
Bell pepper	542977	Garden bean	543043-543047, 544071-544072
Birdsfoot trefoil	542784-542785	Garlic	543048-543049
Black medic	542794, 543033	Globe artichoke	542054
Blue lupine	543029-543030	Grass pea	543071
Bunching onion	546331-546335	Guar	542608
Buttonclover	543034	Hop	546055
California burclover	543035-543036	Hungarian clover	542865
Celery	542396, 545482	Hyacinth bean	543231
Chewings fescue	543834, 543928	Hybrid wheat	542507-542508
Chickpea	542605, 543009-543012, 543050-543070, 543921	Illinois bundleflower	543895-543914
Chinese Pear	542015, 542019, 542026, 542028	Japanese apricot	543955
Chives	546347	Johnsongrass	542649
Colocynth	542616	Joint-vetch	544079-544345
Common oat	542591-542593, 544347, 546034-546037	Kentucky bluegrass	543938
Common rye	542467-542470, 542476-542477	Kura clover	542965
Common vetch	542700-542703	Lablab bean	542609
Common wheat	542072, 542400-542401, 542432-542465, 542575-542577, 542650-542675, 542704-542706, 542975-542976, 542979, 543007, 545491-545492, 546056-546057	Lacebark elm	543176
Corn	542099-542101, 542106-542111, 542682-542689, 542776-542778, 542937-542959, 543008, 543741, 543775-543790, 543840-543850, 543870-543872, 543916-543919, 543973, 544065	Large hop clover	542820-542826
Cotton	542049, 542397-542398, 542770-542775, 542973-542974, 543252, 543812, 543926, 544073-	Leek	546062-546069
		Lentil	543920
		Lettuce	542386, 543927, 544066, 545484-545486
		Luffa	542611
		Melo	542618-542619
		Melon	543752
		Millet	542626
		Mountain clover	542802-542812
		Narrowleaf trefoil	542793
		Okra	542594
		Onion	546070-546330
		Opium poppy	542691
		Orchardgrass	542783, 543748
		Oriental Pear	541899-541902, 541910-541916, 541918-541930, 541932-541943
		Oriental pear	541917
		Pea	542387, 545487, 545489-545490
		Peanut	542960-542961, 544346, 544348-544352
		Pear	541500-541569, 541705-

541824
 Pearl millet 542627-542637,
 543749
 Pepper 542599-542604
 Perennial Ryegrass 543835
 Perennial ryegrass 542980-
 542981,543833
 Pinto bean 543923-543925
 Plum 543949,543956-543957
 Popcorn 542713-542716
 Pumpkin 542050,545483,545488
 Purple bean 543261-543397
 RYE 542567-542574
 Radish 542614
 Rape 543937
 Red clover 542866-542900
 Rice 542068-542069,542394,
 543851-543853,543873-543875,
 543884-543888
 Rough clover 542926-542929
 Rye 543398-543729
 Safflower 543974-544063
 Sand Pear 542003,542009,542011-
 542014,542016-542018,542020-
 542021,542027,542029-542033
 Sea Island cotton 542978,
 543753-543760
 Sesame 542048,543240-543241
 Snap bean 542388-542389
 Snapdragon 542416-542431
 Sorghum 542407-542415,542638-
 542648,542717-542767,542985-
 542994,542997-543005,543243-
 543247,543253-543260,543730-
 543740,543750,544069,545493-
 545591,546059
 Sour cherry 543951-543954
 Soybean 542042-542046,542053,
 542055-542067,542070-542071,
 542392-542393,542399,542402-
 542404,542709-542712,542768-
 542769,542969-542970,542972,
 542982,543793-543795,543832,
 543855-543857,543932-543936,
 544354,546038-546054
 Stokes' aster 546348
 Strawberry clover 542827-
 542829
 Sudangrass 542405-542406,
 542962
 Sugarbeet 542971
 Sugarcane 542102-542105,542964
 Sunflower 543006
 Sweet potato 542073-542075
 TRITICALE 542509-542566
 Tagasate 543808
 Tall fescue 542051,543836-

543839,543929-543931,544064
 Tamarind 543772
 Tobacco 543765-543768,543792,
 543922
 Tomato 542390
 Upland cotton 543858-543868
 Watermelon 542112-542123,
 542606,542617,543212
 Waxgourd 542597-542598
 West Indian gerkin 543751
 West Indian gherkin 542134-
 542135
 Wheat 542466,542472,542578-
 542590
 Wheat hybrid 542478-542506
 White clover 542813-542816,
 544353
 White flowered gourd 542610
 White lupine 543013-543028,
 543031
 Wild einkorn 542475
 Wild oats 544355-545481
 Willow-leaved pear 541592,
 541948-541951,541953
 Winter rape 542983-542984
 Winter wheat 543893
 Yambean 543238-543239
 Zigzag clover 542833-542838

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)