



United States  
Department of  
Agriculture

Agricultural  
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August 1997

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# Plant Inventory No. 205

Plant Materials Introduced  
January 1 to December 31, 1996  
(Nos. 592562 to 596293)

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# **Plant Inventory No. 205**

**Plant Materials Introduced  
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**R.A. Norris, editor**



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Plant Inventory No. 205 is a listing of plant materials introduced into the U.S. National Plant Germplasm System during calendar year 1996. It is not a listing of plant material for distribution.

Questions about data organization and proper plant identifications should be directed to the editor: R.A. Norris, National Germplasm Resources Laboratory, 10300 Baltimore Blvd., Bldg., 003, 4<sup>th</sup> Floor, Beltsville, MD 20705.

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The following were collected by Peter Lawrence, Australian Tropical Field Crops, Genetics Resources Center, P.O. Box 201, Biloela, Queensland 4715, Australia. Received 11/15/1995.

**PI 592562. *Sorghum macrospermum* Garber**

Wild. 2253; 241162. Collected 04/04/1995 in Australia. Latitude 14 deg. 24' 34'' S. Longitude 132 deg. 11' 51'' E. 7.9 km N Katherine River Bridge on Stuart Hwy near Katherine. Rocky limestone outcrop. Overstory: Mixed eucalypt. Understory: Annual and perennial grass. Soiltype: Limestone. Mature seed.

**PI 592563. *Sorghum timorense* (Kunth) Buse**

Wild. 2017; 241228. Collected 05/03/1992 in Australia. Latitude 16 deg. 7' 4'' S. Longitude 133 deg. 25' 37'' E. 22.4 km N of Carpentaria Hwy T/O on Stuart Hwy near Daly Water. Plain. Overstory: Mixed eucalypt. Understory: Perennial and annual grass. Soiltype: Gravelly sand.

**PI 592564. *Sorghum intrans* F. Muell. ex Benth.**

Wild. 2024; 243363. Collected 03/11/1994 in Northern Territory, Australia. Latitude 14 deg. 2' 37'' S. Longitude 131 deg. 57' 9'' E. Elevation 182 m. 1.4 km S Cullen River Bridge near Pine Creek on Stuart Hwy. Depression. Overstory: Intermittently wet. Understory: Mixed eucalypt annual and perennial sorghum. Soiltype: Gravelly sand. Early maturing.

**PI 592565. *Sorghum intrans* F. Muell. ex Benth.**

Wild. 2027; 243365. Collected 03/11/1994 in Northern Territory, Australia. Latitude 14 deg. 20' 24'' S. Longitude 132 deg. 7' 24'' E. Elevation 187 m. 35.3 km S Ferguson River near Pine Creek on Stuart Hwy. Plain. Overstory: E. miniata. Understory: E. tetradonta. Soiltype: Gravel sand.

**PI 592566. *Sorghum intrans* F. Muell. ex Benth.**

Wild. 2030; 243367. Collected 03/11/1994 in Northern Territory, Australia. Latitude 14 deg. 27' 1'' S. Longitude 132 deg. 14' 35'' E. Elevation 111 m. 2.8 km N Katherine River Bridge on Stuart Hwy near Katherine. Plain. Overstory: Mixed eucalypt. Understory: Annual sorghum. Soiltype: Gravelly loam.

**PI 592567. *Sorghum interjectum* Lazarides**

Wild. 2033; 243370. Collected 03/12/1994 in Northern Territory, Australia. Latitude 14 deg. 39' 18'' S. Longitude 132 deg. 40' 15'' E. Elevation 226 m. 1.0 km E Stuart Hwy on Beswick Rd near Katherine. Plain. Overstory: Mixed eucalypt and acacia. Understory: Perennial grass. Soiltype: Clay loam. Hairy culm base.

**PI 592568. *Sorghum stipoides* (Ewart & Jean White) C. Gardner & C. E. Hubb.**

Wild. 2034; 243371. Collected 03/12/1994 in Northern Territory, Australia. Latitude 14 deg. 33' 54'' S. Longitude 133 deg. 6' 22'' E. Elevation 120 m. 1.0 km W of Beswick on Beswick Rd near Katherine. Depression. Overstory: Intermittently wet. Understory: Mixed eucalypt

and acacia annual sorghum. Soiltype: Sandy loam. Vigorous annual.

**PI 592569. *Sorghum plumosum* (R. Br.) P. Beauv.**

Wild. 2035; 243372. Collected 03/12/1994 in Northern Territory, Australia. Latitude 14 deg. 33' 0'' S. Longitude 133 deg. 1' 39'' E. Elevation 234 m. 10.2 km W of Beswick on Beswick Rd near Katherine. Creek bank. Overstory: Mixed eucalypt and acacia. Understory: Annual and perennial sorghum. Soiltype: Clay loam. Hairy nodes, vigorous.

**PI 592570. *Sorghum exstans* Lazarides**

Wild. 2039; 243374. Collected 03/12/1994 in Northern Territory, Australia. Latitude 14 deg. 33' 10'' S. Longitude 133 deg. 0' 42'' E. Elevation 231 m. 12.1 km W of Beswick on Beswick Rd near Katherine. Overstory: Mixed eucalypt and acacia. Understory: Annual sorghum. Soiltype: Gravelly loam.

**PI 592571. *Sorghum plumosum* (R. Br.) P. Beauv.**

Wild. 2040; 243375. Collected 03/12/1994 in Northern Territory, Australia. Latitude 14 deg. 46' 47'' S. Longitude 132 deg. 53' 55'' E. Elevation 180 m. 29.9 km S of Beswick T/O on Stuart Hwy near Mataranka. Plain. Overstory: Mixed eucalypt and acacia. Understory: Annual and perennial grass. Soiltype: Sandy loam. Green, hairy nodes.

**PI 592572. *Sorghum stipoides* (Ewart & Jean White) C. Gardner & C. E. Hubb.**

Wild. 2041; 243376. Collected 03/12/1994 in Northern Territory, Australia. Latitude 14 deg. 52' 3'' S. Longitude 132 deg. 59' 52'' E. Elevation 142 m. 44.5 km S of Beswick T/O on Stuart Hwy near Mataranka. Plain. Overstory: Mixed eucalypt and acacia. Understory: Annual and perennial grass. Soiltype: Sandy loam. Early maturing.

**PI 592573. *Sorghum plumosum* (R. Br.) P. Beauv.**

Wild. 2042; 243377. Collected 03/12/1994 in Northern Territory, Australia. Latitude 15 deg. 6' 13'' S. Longitude 133 deg. 4' 30'' E. Elevation 99 m. N end Warlock Ponds on Stuart Hwy near Mataranka. Depression. Overstory: Intermittently wet. Understory: Mixed eucalypt & acacia annual & perennial grass. Soiltype: Loam. Vigorous.

**PI 592574. *Sorghum plumosum* (R. Br.) P. Beauv.**

Wild. 2043; 243378. Collected 03/12/1994 in Northern Territory, Australia. Latitude 15 deg. 6' 55'' S. Longitude 133 deg. 4' 31'' E. Elevation 122 m. 1.3 km S of Warlock Ponds on Stuart Hwy near Mataranka. Plain. Overstory: Mixed eucalypt and acacia. Understory: Perennial sorghum. Soiltype: Loam. Glabrous, fine stem.

**PI 592575. *Sorghum stipoides* (Ewart & Jean White) C. Gardner & C. E. Hubb.**

Wild. 2044; 243379. Collected 03/12/1994 in Northern Territory, Australia. Latitude 15 deg. 7' 12'' S. Longitude 133 deg. 4' 29'' E. Elevation 152 m. 20.2 km S of Mataranka HS T/O on Stuart Hwy near Mataranka. Depression. Overstory: Intermittently wet. Understory: Mixed eucalypt & acacia, annual & perennial sorghu. Soiltype: Clay loam.

**PI 592576. *Sorghum plumosum* (R. Br.) P. Beauv.**

Wild. 2045; 243380. Collected 03/12/1994 in Northern Territory,

Australia. Latitude 15 deg. 25' 30'' S. Longitude 133 deg. 10' 49'' E.  
Elevation 202 m. 55.8 km S of Mataranka HS T/O on Stuart Hwy near  
Mataranka. Plain. Overstory: Mixed eucalypt and acacia. Understory:  
Perennial grass. Soiltype: Clay loam. Most seed dropped.

**PI 592577. *Sorghum plumosum* (R. Br.) P. Beauv.**

Wild. 2046; 243381. Collected 03/12/1994 in Northern Territory,  
Australia. Latitude 15 deg. 44' 56'' S. Longitude 133 deg. 22' 14'' E.  
Elevation 219 m. 26.1 km S of Larrimah on Stuart Hwy near Larrimah.  
Plain. Overstory: Mixed eucalypt and acacia. Understory: Perennial  
grass. Soiltype: Clay loam. Blue, hairy stem.

**PI 592578. *Sorghum stipoides* (Ewart & Jean White) C. Gardner & C. E. Hubb.**

Wild. 2047; 243382. Collected 03/12/1994 in Northern Territory,  
Australia. Latitude 15 deg. 4' 49'' S. Longitude 133 deg. 7' 15'' E.  
Elevation 164 m. Old Elsey Cemetery on Stuart Hwy near Mataranka. Plain.  
Overstory: Mixed eucalypt and acacia. Understory: Perennial and annual  
sorghum. Soiltype: Sand. 50% mature.

**PI 592579. *Sorghum stipoides* (Ewart & Jean White) C. Gardner & C. E. Hubb.**

Wild. 2048; 243383. Collected 03/12/1994 in Northern Territory,  
Australia. Latitude 15 deg. 4' 49'' S. Longitude 133 deg. 7' 15'' E.  
Elevation 164 m. Old Elsey Cemetery on Stuart Hwy near Mataranka. Plain.  
Overstory: Mixed eucalypt and acacia. Understory: Perennial and annual  
sorghum. Soiltype: Sand. Green, hairy nodes.

**PI 592580. *Sorghum intrans* F. Muell. ex Benth.**

Wild. 2049; 243384. Collected 03/13/1994 in Northern Territory,  
Australia. Latitude 14 deg. 31' 46'' S. Longitude 132 deg. 13' 43'' E.  
Elevation 158 m. 4.6 km W of low level crossing T/O on Victoria Hwy near  
Katherine. Roadside. Undulating. Overstory: Mixed eucalypt and acacia.  
Understory: Perennial and annual grass. Soiltype: Clay loam.

**PI 592581. *Sorghum stipoides* (Ewart & Jean White) C. Gardner & C. E. Hubb.**

Wild. 2050; 243385. Collected 03/13/1994 in Northern Territory,  
Australia. Latitude 14 deg. 44' 0'' S. Longitude 132 deg. 2' 12'' E.  
Elevation 70 m. 35.6 km W low level crossing T/O on Victoria Hwy near  
Katherine. Roadside. Undulating. Overstory: Mixed eucalypt & acacia.  
Understory: Perennial & annual grass. Soiltype: Gravelly loam.

**PI 592582. *Sorghum intrans* F. Muell. ex Benth.**

Wild. 2051; 243386. Collected 03/13/1994 in Northern Territory,  
Australia. Latitude 14 deg. 45' 5'' S. Longitude 131 deg. 55' 4'' E.  
Elevation 156 m. 2.0 km N of CSIRO Mambaloo on Victoria Hwy near  
Katherine. Inland dune. Overstory: Mixed eucalypt & acacia. Understory:  
Annual sorghum. Soiltype: Sand. Mixed.

**PI 592583. *Sorghum plumosum* (R. Br.) P. Beauv.**

Wild. 2053; 243388. Collected 03/13/1994 in Northern Territory,  
Australia. Latitude 14 deg. 47' 31'' S. Longitude 131 deg. 56' 33'' E.  
Elevation 126 m. CSIRO Mambaloo T/O on Victoria Hwy near Katherine.  
Plain. Overstory: Mixed eucalypt & acacia. Understory: Perennial &



annual grass. Soiltype: Clay loam. Leaf broad, blue.

**PI 592584. *Sorghum bulbosum* Lazarides**

Wild. 2055; 243390. Collected 03/13/1994 in Northern Territory, Australia. Latitude 15 deg. 8' 33'' S. Longitude 131 deg. 40' 52'' E. Elevation 192 m. 36.5 km W of Scott Ck T/O on Victoria Hwy near Katherine. Plain. Overstory: Mixed eucalypt and acacia. Understory: Perennial and annual grass. Soiltype: Gravelly loam. Tall.

**PI 592585. *Sorghum bulbosum* Lazarides**

Wild. 2057; 243392. Collected 03/13/1994 in Northern Territory, Australia. Latitude 15 deg. 35' 20'' S. Longitude 131 deg. 16' 30'' E. Elevation 133 m. Campbell Springs on Victoria Hwy near Victoria River. Creek bank. Overstory: E. papuana. Understory: E. foelschcana, annual & perennial grass. Soiltype: Sandy loam. Tall green annual.

**PI 592586. *Sorghum plumosum* (R. Br.) P. Beauv.**

Wild. 2058; 243393. Collected 03/13/1994 in Northern Territory, Australia. Latitude 15 deg. 35' 29'' S. Longitude 130 deg. 59' 10'' E. Elevation 81 m. 18.5 km W of Victoria River bridge on Victoria Hwy. Plain. Overstory: Mixed eucalypt. Understory: Annual and perennial grass. Soiltype: Rocky loam. Vigorous green perennial.

**PI 592587. *Sorghum bulbosum* Lazarides**

Wild. 2059; 243394. Collected 03/13/1994 in Northern Territory, Australia. Latitude 15 deg. 44' 55'' S. Longitude 130 deg. 44' 1'' E. Elevation 82 m. 2.8 km W of Skull Ck on Victoria Hwy near Victoria River. Roadside. Plain. Overstory: Mixed eucalypt. Understory: Annual and perennial grass. Soiltype: Gravelley loam.

**PI 592588. *Sorghum interjectum* Lazarides**

Wild. 2062; 243396. Collected 03/13/1994 in Northern Territory, Australia. Latitude 15 deg. 57' 31'' S. Longitude 129 deg. 33' 39'' E. Elevation 84 m. 117.5 km W of Timber Ck on Victoria Hwy. Scarp edge. Overstory: Mixed eucalypt. Understory: Annual and perennial grass. Soiltype: Skeletal. Green perennial.

**PI 592589. *Sorghum bulbosum* Lazarides**

Wild. 2063; 243397. Collected 03/13/1994 in Western Australia, Australia. Latitude 16 deg. 7' 4'' S. Longitude 128 deg. 44' 16'' E. Elevation 176 m. Lake Argle lookout on Lake Argle Rd. Mountain ridge. Overstory: Mixed eucalypt. Understory: Annual sorghum. Soiltype: Skeletal. Green annual.

**PI 592590. *Sorghum bulbosum* Lazarides**

Wild. 2064; 243398. Collected 03/13/1994 in Western Australia, Australia. Latitude 16 deg. 2' 12'' S. Longitude 128 deg. 48' 49'' E. Elevation 75 m. Matchbox Ck on Lake Argle Rd. Depression. Overstory: Intermittently wet. Understory: Scattered eucalypt, annual sorghum. Soiltype: Sandy loam. Tall, green.

**PI 592591. *Sorghum stipoides* (Ewart & Jean White) C. Gardner & C. E. Hubb.**

Wild. 2065; 243399. Collected 03/14/1994 in Western Australia, Australia. Latitude 15 deg. 31' 10'' S. Longitude 128 deg. 35' 0'' E. Elevation

49 m. 0.6 km S of Carlton St gate on Carlton Hill Station Road  
Kununurra. Plain. Overstory: Melaleuca. Understory: Eucalyptus, annual  
sorghum. Soiltype: Clay loam. Tall annual.

**PI 592592. *Sorghum stipoides* (Ewart & Jean White) C. Gardner & C. E. Hubb.**

Wild. 2066; 243400. Collected 03/14/1994 in Western Australia, Australia  
. Latitude 15 deg. 30' 17'' S. Longitude 128 deg. 50' 24'' E. Elevation  
106 m. 16.0 km N of Carlton Rd T/O on Spirit Hill Rd near Kununurra.  
Inland clay pan. Overstory: Mixed eucalypt & acacia. Understory: Annual  
& perennial grass. Soiltype: Clay loam. Fine leaf.

**PI 592593. *Sorghum interjectum* Lazarides**

Wild. 2067; 243401. Collected 03/14/1994 in Western Australia, Australia  
. Latitude 15 deg. 46' 10'' S. Longitude 128 deg. 38' 46'' E. Elevation  
96 m. 7.7 km N of Packsaddle Plain T/O on Great Northern Hwy near  
Kununurra. Undulating. Overstory: Mixed eucalypt and acacia. Understory:  
Annual and perennial grass. Soiltype: Gravelly loam. Fine leaf.

**PI 592594. *Sorghum stipoides* (Ewart & Jean White) C. Gardner & C. E. Hubb.**

Wild. 2068; 243402. Collected 03/14/1994 in Western Australia, Australia  
. Latitude 15 deg. 46' 43'' S. Longitude 128 deg. 34' 11'' E. 15.4 km N  
of Packsaddle T/O on Great Northern Hwy near Kununurra. Scalded area.  
Mountain ridge. Overstory: Mixed eucalypt and acacia. Understory: Annual  
and perennial grass. Soiltype: Gravelly loam.

**PI 592595. *Sorghum stipoides* (Ewart & Jean White) C. Gardner & C. E. Hubb.**

Wild. 2069; 243403. Collected 03/14/1994 in Western Australia, Australia  
. Latitude 15 deg. 51' 27'' S. Longitude 128 deg. 20' 7'' E. Elevation  
36 m. 4.1 km N Halls Ck T/O on Great Northern Hwy near Wyndham. Plain.  
Overstory: Scattered Eucalyptus. Understory: Lysicarpus, annual &  
perennial grass. Soiltype: Gravelly sand. Tall annual.

**PI 592596. *Sorghum stipoides* (Ewart & Jean White) C. Gardner & C. E. Hubb.**

Wild. 2070; 243404. Collected 03/14/1994 in Western Australia, Australia  
. Latitude 15 deg. 37' 4'' S. Longitude 128 deg. 13' 56'' E. Elevation  
70 m. 35.7 km N of Halls Ck T/O on Great Northern Hwy. Plain. Overstory:  
Mixed eucalypt. Understory: Annual and perennial grass. Soiltype:  
Gravelly loam.

**PI 592597. *Sorghum stipoides* (Ewart & Jean White) C. Gardner & C. E. Hubb.**

Wild. 2071; 243405. Collected 03/14/1994 in Western Australia, Australia  
. Latitude 15 deg. 34' 30'' S. Longitude 128 deg. 14' 10'' E. Elevation  
41 m. Parry Ck Nature Reserve 2.3 km off Great Northern Hwy near  
Wyndham. Fresh water swamp. Overstory: Scattered Lysicarpus. Understory:  
Annual & perennial grass. Soiltype: Clay. Grey, glabrous.

**PI 592598. *Sorghum interjectum* Lazarides**

Wild. 2072; 243406. Collected 03/14/1994 in Western Australia, Australia  
. Latitude 15 deg. 34' 39'' S. Longitude 128 deg. 14' 4'' E. Elevation  
12 m. Parry Ck Nature Reserve 2.0 km off Great Northern Hwy near

Wyndham. Fresh water swamp. Overstory: Scattered *Lysicarpus*. Understory: Annual and perennial grass. Soiltype: Clay loam. Brown.

**PI 592599. *Sorghum stipoides*** (Ewart & Jean White) C. Gardner & C. E. Hubb.

Wild. 2073; 243407. Collected 03/14/1994 in Western Australia, Australia . Latitude 15 deg. 27' 8'' S. Longitude 128 deg. 7' 3'' E. Elevation 78 m. Five Rivers Lookout Wyndham. Mountain ridge. Overstory: *E. miniata*. Understory: *E. phoenicea*, annual sorghum, *spinifex*. Skeletal.

**PI 592600. *Sorghum stipoides*** (Ewart & Jean White) C. Gardner & C. E. Hubb.

Wild. 2074; 243408. Collected 03/15/1994 in Western Australia, Australia . Latitude 16 deg. 10' 24'' S. Longitude 128 deg. 22' 36'' E. Elevation 90 m. 38.2 km S of Halls Ck T/O on Great Northern Hwy near Wyndham. Plain. Overstory: Mixed eucalypt. Understory: Annual sorghum. Soiltype: Clay loam.

**PI 592601. *Sorghum plumosum*** (R. Br.) P. Beauv.

Wild. 2075; 243409. Collected 03/15/1994 in Western Australia, Australia . Latitude 16 deg. 10' 42'' S. Longitude 128 deg. 22' 49'' E. Elevation 108 m. 39.0 km S of Halls Ck T/O on Great Northern Hwy near Wyndham. Rocky ridge. Overstory: Mixed eucalypt. Understory: Annual and perennial sorghum. Soiltype: Gravelly clay loam. Green perennial.

**PI 592602. *Sorghum bulbosum*** Lazarides

Wild. 2076; 243410. Collected 03/15/1994 in Western Australia, Australia . Latitude 16 deg. 28' 39'' S. Longitude 128 deg. 12' 34'' E. Elevation 230 m. 80.4 km S of Halls Ck T/O on Great Northern Hwy near Turkey Ck. Plain. Overstory: Mixed eucalypt. Understory: *E. terminalis*, annual grass. Soiltype: Gravelly sand. Green annual.

**PI 592603. *Sorghum interjectum*** Lazarides

Wild. 2077; 243411. Collected 03/15/1994 in Western Australia, Australia . Latitude 16 deg. 28' 7'' S. Longitude 128 deg. 12' 38'' E. Elevation 200 m. 79.4 km S of Halls Ck T/O on Great Northern Hwy near Turkey Ck. Plain. Overstory: Mixed eucalypt. Understory: *E. terminalis*, annual grass. Soiltype: Sandy loam. Green perennial.

**PI 592604. *Sorghum interjectum*** Lazarides

Wild. 2080; 243412. Collected 03/15/1994 in Western Australia, Australia . Latitude 16 deg. 43' 34'' S. Longitude 128 deg. 15' 47'' E. Elevation 187 m. 111.4 km S of Halls Ck T/O on Great Northern Hwy near Turkey Ck. Depression. Overstory: Intermittently wet. Understory: Mixed eucalypt, *E. Terminalis*, annual grass. Soiltype: Gravelly sandy clay.

**PI 592605. *Sorghum interjectum*** Lazarides

Wild. 2082; 243413. Collected 03/15/1994 in Western Australia, Australia . Latitude 17 deg. 11' 10'' S. Longitude 128 deg. 7' 43'' E. Elevation 350 m. 21.7 km S of Turkey Ck on Great Northern Hwy. Hillside. Overstory: Scattered eucalypt. Understory: Perennial grass. Soiltype: Rocky loam. Fine stem.

**PI 592606. *Sorghum interjectum*** Lazarides

Wild. 2083; 243414. Collected 03/15/1994 in Western Australia, Australia

. Latitude 17 deg. 28' 41'' S. Longitude 127 deg. 56' 51'' E. Elevation 311 m. Ord River Crossing on Great Northern Hwy near Turkey Creek. Bank permanent river. Overstory: Eucalyptus. Understory: Lysicarpus, perennial grass. Soiltype: Sandy loam. Green perennial.

**PI 592607. *Sorghum bulbosum* Lazarides**

Wild. 2085; 243416. Collected 03/15/1994 in Western Australia, Australia . Latitude 18 deg. 8' 52'' S. Longitude 127 deg. 43' 7'' E. Elevation 520 m. 90 km S of Ord River crossing on Great Northern Hwy near Halls Ck. Hillside. Overstory: Scattered eucalypt. Understory: Annual and perennial grass. Soiltype: Gravelly loam.

**PI 592608. *Sorghum interjectum* Lazarides**

Wild. 2086; 243417. Collected 03/15/1994 in Western Australia, Australia . Latitude 18 deg. 13' 24'' S. Longitude 127 deg. 40' 16'' E. Elevation 426 m. 0.5 km N of Halls Ck on Great Northern Hwy. Channel. Overstory: Intermittently. Understory: Eucalyptus papuana, annual & perennial grass. Soiltype: Rocky loam. Green perennial.

**PI 592609. *Sorghum interjectum* Lazarides**

Wild. 2087; 243418. Collected 03/15/1994 in Western Australia, Australia . Latitude 18 deg. 32' 9'' S. Longitude 127 deg. 16' 38'' E. Elevation 380 m. 54.1 km W of Halls Ck on Great Northern Hwy. Overstory: Scattered shrubs. Understory: Spinfex, annual grass. Soiltype: Gravelly loam. Green perennial.

**PI 592610. *Sorghum plumosum* (R. Br.) P. Beauv.**

Wild. 2088; 243419. Collected 03/16/1994 in Western Australia, Australia . Latitude 18 deg. 7' 19'' S. Longitude 125 deg. 38' 38'' E. Elevation 121 m. 14.1 km along Geike Gorge Rd near Fitzroy Crossing. Undulating. Overstory: Mixed eucalypt. Understory: Perennial sorghum. Soiltype: Loam. Pure stand.

**PI 592611. *Sorghum interjectum* Lazarides**

Wild. 2091; 243422. Collected 03/15/1994 in Western Australia, Australia . Latitude 18 deg. 0' 15'' S. Longitude 125 deg. 17' 21'' E. Elevation 157 m. 37.3 km W of Fitzroy Crossing on Great Northern Hwy. Plain. Overstory: Mixed E. terminalis. Understory: Lysicarpus, annual & perennial grass. Soiltype: Clay loam. Green perennial.

**PI 592612. *Sorghum ecarinatum* Lazarides**

Wild. 2093; 243423. Collected 03/16/1994 in Western Australia, Australia . Latitude 18 deg. 19' 8'' S. Longitude 125 deg. 39' 16'' E. Elevation 157 m. 16.3 km E of Fitzroy Crossing on Great Northern Hwy. Plain. Overstory: Mixed acacia and eucalypt. Understory: Annual and perennial grass. Soiltype: Sandy loam.

**PI 592613. *Sorghum interjectum* Lazarides**

Wild. 2094; 243424. Collected 03/16/1994 in Western Australia, Australia . Latitude 18 deg. 41' 21'' S. Longitude 125 deg. 53' 25'' E. Elevation 179 m. Roadside 67.8 km E of Fitzroy Crossing on Great Northern Hwy. Plain. Overstory: Scattered acacia and eucalypt. Understory: Annual & perennial grass. Soiltype: Clay loam.

**PI 592614. *Sorghum stipoides* (Ewart & Jean White) C. Gardner & C. E. Hubb.**

- Wild. 2095; 243425. Collected 03/16/1994 in Western Australia, Australia . Latitude 18 deg. 45' 1'' S. Longitude 126 deg. 0' 48'' E. Elevation 269 m. 82.5 km E of Fitzroy Crossing on Great Northern Hwy. Plain. Overstory: Scattered acacia and eucalypt. Understory: Spinifex, sorghum. Soiltype: Clay loam.
- PI 592615. *Sorghum interjectum* Lazarides**  
Wild. 2097; 243426. Collected 03/16/1994 in Western Australia, Australia . Latitude 18 deg. 46' 22'' S. Longitude 126 deg. 45' 3'' E. Elevation 309 m. 163.3 km E of Fitzroy Crossing on Great Northern Hwy. Tableland. Overstory: Scattered acacia. Understory: Spinifex, sorghum. Soiltype: Clay loam. Red.
- PI 592616. *Sorghum bulbosum* Lazarides**  
Wild. 2098; 243427. Collected 03/17/1994 in Western Australia, Australia . Latitude 15 deg. 58' 37'' S. Longitude 128 deg. 57' 47'' E. Elevation 86 m. 1.4 km E of Lake Argyle T/O on Great Northern Hwy. Plain. Overstory: Scattered eucalypt. Understory: Annual sorghum. Soiltype: Gravelly loam.
- PI 592617. *Sorghum amplum* Lazarides**  
Wild. 2099; 243428. Collected 03/17/1994 in Western Australia, Australia . Latitude 15 deg. 58' 37'' S. Longitude 128 deg. 57' 47'' E. Elevation 86 m. 1.4 km E of Lake Argyle T/O on Great Northern Hwy. Hillside. Overstory: Scattered eucalypt. Understory: Annual and perennial grass. Soiltype: Gravelly loam.
- PI 592618. *Sorghum bulbosum* Lazarides**  
Wild. 2101; 243430. Collected 03/17/1994 in Western Australia, Australia . Latitude 16 deg. 0' 17'' S. Longitude 128 deg. 58' 16'' E. Elevation 179 m. 1.3 km S of Victoria Hwy on Old Duncan Rd. Undulating. Overstory: *E. brevifolia*. Understory: *Dodonea*, *spinifex*, sorghum. Soiltype: Gravelly loam.
- PI 592619. *Sorghum timorense* (Kunth) Buse**  
Wild. 2103; 243431. Collected 03/17/1994 in Western Australia, Australia . Latitude 16 deg. 11' 57'' S. Longitude 129 deg. 3' 6'' E. Elevation 58 m. 16.2 km S of Victoria Hwy on Duncan Hwy. Creek bank. Overstory: *E. papuana*. Understory: *E. tectifica*, perennial grass. Soiltype: Sandy loam.
- PI 592620. *Sorghum timorense* (Kunth) Buse**  
Wild. 2104; 243432. Collected 03/17/1994 in Western Australia, Australia . Latitude 16 deg. 0' 16'' S. Longitude 129 deg. 28' 54'' E. Elevation 81 m. 25.1 km E of Keep River on Victoria Hwy. Plain. Overstory: Scattered *Melaleuca*. Understory: Perennial grass. Soiltype: Clay. Yellow.
- PI 592621. *Sorghum bulbosum* Lazarides**  
Wild. 2105; 243433. Collected 03/17/1994 in Western Australia, Australia . Latitude 16 deg. 0' 16'' S. Longitude 129 deg. 28' 54'' E. Elevation 81 m. 25.1 km E of Keep River on Victoria Hwy. Plain. Overstory: Scattered *Melaleuca*. Understory: Perennial grass. Soiltype: Clay. Brown.



**PI 592622. *Sorghum bulbosum* Lazarides**

Wild. 2106; 243434. Collected 03/17/1994 in Northern Territory, Australia. Latitude 15 deg. 52' 37'' S. Longitude 129 deg. 52' 10'' E. Elevation 62 m. 15.6 km E of West Baines River on Victoria Hwy. Plain. Overstory: Scattered Melaleuca. Understory: Chloris, sorghum. Soiltype: Clay. Brown, tall annual.

**PI 592623. *Sorghum interjectum* Lazarides**

Wild. 2107; 243435. Collected 03/17/1994 in Northern Territory, Australia. Latitude 15 deg. 48' 6'' S. Longitude 129 deg. 58' 1'' E. Elevation 67 m. 29.3 km E of West Baines River on Victoria River. Plain. Overstory: Lysicarpus. Understory: E. terminalis, annual & perennial sorghum. Soiltype: Clay. Brown.

**PI 592624. *Sorghum bulbosum* Lazarides**

Wild. 2108; 243436. Collected 03/17/1994 in Northern Territory, Australia. Latitude 15 deg. 35' 45'' S. Longitude 130 deg. 19' 10'' E. Elevation 85 m. 74.9 km E of West Baines River on Victoria Hwy near Timber Creek. Plain. Overstory: Mixed eucalypt and acacia. Understory: Annual sorghum. Soiltype: Clay loam.

**PI 592625. *Sorghum stipoideum* (Ewart & Jean White) C. Gardner & C. E. Hubb.**

Wild. 2109; 243437. Collected 03/18/1994 in Northern Territory, Australia. Latitude 14 deg. 28' 33'' S. Longitude 132 deg. 17' 24'' E. Elevation 138 m. 3.7 km S of Katherine River on Stuart Hwy, Katherine. Plain. Overstory: Mixed eucalypt and acacia. Understory: Annual sorghum. Soiltype: Clay loam.

**PI 592626. *Sorghum intrans* F. Muell. ex Benth.**

Wild. 2111; 243439. Collected 03/18/1994 in Northern Territory, Australia. Latitude 14 deg. 14' 17'' S. Longitude 132 deg. 2' 34'' E. Elevation 190 m. 19.8 km N of Katherine Rural College T/O on Stuart Hwy. Undulating. Overstory: Mixed eucalypt and acacia. Understory: Annual sorghum. Soiltype: Gravelly sand. Hairy nodes.

**PI 592627. *Sorghum intrans* F. Muell. ex Benth.**

Wild. 2113; 243441. Collected 03/18/1994 in Northern Territory, Australia. Latitude 13 deg. 32' 43'' S. Longitude 131 deg. 13' 19'' E. Elevation 89 m. 3.1 km N of Green Ant Ck on Old Stuart Hwy near Hayes Ck. Creek bank. Overstory: Mixed eucalypt and acacia. Understory: Annual and perennial grass. Soiltype: Sandy loam. Glabrous nodes.

**PI 592628. *Sorghum plumosum* (R. Br.) P. Beauv.**

Wild. 2114; 243442. Collected 03/18/1994 in Northern Territory, Australia. Latitude 13 deg. 32' 43'' S. Longitude 131 deg. 13' 19'' E. Elevation 89 m. 3.1 km N of Green Ant Ck on Old Stuart Hwy near Hayes Ck. Creek bank. Overstory: Mixed eucalypt and acacia. Understory: Annual and perennial grass. Soiltype: Sandy loam. Leafy hairy.

**PI 592629. *Sorghum intrans* F. Muell. ex Benth.**

Wild. 2115; 243443. Collected 03/18/1994 in Northern Territory, Australia. Latitude 13 deg. 15' 24'' S. Longitude 131 deg. 6' 18'' E. Elevation 53 m. 1.5 km S of Stuart Hwy T/O on Old Stuart Hwy near

Adelaide River. Hillside. Overstory: Mixed eucalypt and acacia.  
Understory: Annual and perennial grass. Soiltype: Gravelly loam.

**PI 592630. *Sorghum intrans* F. Muell. ex Benth.**

Wild. 2116; 243444. Collected 03/18/1994 in Northern Territory, Australia. Latitude 13 deg. 9' 21'' S. Longitude 131 deg. 6' 18'' E. Elevation 42 m. 9.3 km N of Adelaide River on Stuart Hwy. Roadside. Plain. Overstory: Mixed eucalypt and Melaleuca. Understory: Annual & perennial grass. Soiltype: Clay loam. Green.

**PI 592631. *Sorghum intrans* F. Muell. ex Benth.**

Wild. 2117; 243445. Collected 03/18/1994 in Northern Territory, Australia. Latitude 13 deg. 2' 25'' S. Longitude 131 deg. 7' 2'' E. Elevation 162 m. 23.2 km N of Adelaide River on Stuart Hwy. Roadside. Hillside. Overstory: Mixed eucalypt. Understory: Annual sorghum. Soiltype: Gravelly loam.

**PI 592632. *Sorghum exstans* Lazarides**

Wild. 2118; 243446. Collected 03/18/1994 in Northern Territory, Australia. Latitude 12 deg. 40' 39'' S. Longitude 131 deg. 4' 45'' E. Elevation 140 m. Berry Springs T/O on Stuart Hwy near Noonamah. Plain. Overstory: E. tetradonta. Understory: E. miniata, annual and perennial grass. Soiltype: Gravelly sand. Green annual.

**PI 592633. *Sorghum exstans* Lazarides**

Wild. 2121; 243449. Collected 03/19/1994 in Northern Territory, Australia. Latitude 12 deg. 51' 4'' S. Longitude 131 deg. 35' 12'' E. Elevation 35 m. Goanna Park T/O on Arnhem Hwy. Plain. Overstory: Mixed eucalypt. Understory: Annual sorghum. Soiltype: Clay loam. Annual.

**PI 592634. *Sorghum intrans* F. Muell. ex Benth.**

Wild. 2122; 243450. Collected 03/19/1994 in Northern Territory, Australia. Latitude 12 deg. 51' 8'' S. Longitude 131 deg. 49' 39'' E. Elevation 85 m. Point Stuart T/O on Arnhem Hwy. Undulating. Overstory: Mixed eucalypt. Understory: Annual and perennial grass. Soiltype: Gravelly loam. Annual, hairy nodes.

**PI 592635. *Sorghum brachypodum* Lazarides**

Wild. 2125; 243453. Collected 03/19/1994 in Northern Territory, Australia. Latitude 12 deg. 42' 52'' S. Longitude 132 deg. 24' 1'' E. Elevation 70 m. CSIRO Kapalga gate on Arnhem Hwy near Jabiru. Plain. Overstory: Mixed eucalypt. Understory: Annual and perennial grass. Soiltype: Gravelly sand. Annual, hairy seed.

**PI 592636. *Sorghum brachypodum* Lazarides**

Wild. 2126; 243454. Collected 03/19/1994 in Northern Territory, Australia. Latitude 12 deg. 40' 36'' S. Longitude 132 deg. 50' 36'' E. Elevation 94 m. Jabiru Ring Road East Jabiru. Plain. Overstory: Mixed eucalypt. Understory: Annual sorghum. Soiltype: Gravelly sand. Annual, hairy seed.

**PI 592637. *Sorghum plumosum* (R. Br.) P. Beauv.**

Wild. 2130; 243457. Collected 03/25/1994 in Northern Territory, Australia. Latitude 16 deg. 1' 32'' S. Longitude 131 deg. 48' 13'' E. Jasper Gorge campsite on Jasper Gorge Rd. Creek bank. Overstory: Mixed

eucalypt and acacia. Understory: Annual and perennial sorghum. Soiltype: Sandy loam. Perennial.

**PI 592638. *Sorghum timorense* (Kunth) Buse**

Wild. 2131; 243458. Collected 03/27/1994 in Northern Territory, Australia. Latitude 16 deg. 6' 55'' S. Longitude 130 deg. 57' 30'' E. Elevation 136 m. 300m E yards Victoria River Research Station Kidman Springs. Railway bank. Undulating. Overstory: Eucalypt. Understory: Lysicarpus, *E. terminalis*, annual sorghum. Soiltype: Clay loam. Red, hairy nodes.

**PI 592639. *Sorghum plumosum* (R. Br.) P. Beauv.**

Wild. 2141; 243463. Collected 04/11/1994 in Queensland, Australia. Latitude 18 deg. 17' 8'' S. Longitude 143 deg. 18' 13'' E. Elevation 288 m. Einslie River 26.4 km W of Georgetown on Gulf Development Rd. Gully. Overstory: Intermittently wet. Understory: Mixed eucalypt, annual and perennial grass. Soiltype: Gravelly loam. Green perennial.

**PI 592640. *Sorghum timorense* (Kunth) Buse**

Wild. 2153; 243468. Collected 04/12/1994 in Queensland, Australia. Latitude 17 deg. 45' 46'' S. Longitude 140 deg. 55' 0'' E. Elevation 23 m. 15.4 km W of Normanton T/O on Burketown Development Rd. Plain. Overstory: Treeless. Understory: Perennial and annual grass. Soiltype: Cracking clay. Tall annual.

**PI 592641. *Sorghum timorense* (Kunth) Buse**

Wild. 2154; 243469. Collected 04/12/1994 in Queensland, Australia. Latitude 17 deg. 55' 21'' S. Longitude 140 deg. 43' 10'' E. Elevation 140 m. 46.7 km W of Burketown Development Rd on McAlister Station Rd. Plain. Overstory: Scattered Lysicarpus. Understory: Perennial and annual grass. Soiltype: Cracking clay. Tall annual.

**PI 592642. *Sorghum timorense* (Kunth) Buse**

Wild. 2156; 243471. Collected 04/12/1994 in Queensland, Australia. Latitude 18 deg. 46' 10'' S. Longitude 140 deg. 30' 25'' E. Elevation 82 m. 24.2 km S of McAlister T/O on Burketown Development Rd. Plain. Overstory: Scattered Lysicarpus. Understory: Perennial and annual grass. Soiltype: Cracking clay. Annual.

**PI 592643. *Sorghum timorense* (Kunth) Buse**

Wild. 2157; 243472. Collected 04/12/1994 in Queensland, Australia. Latitude 18 deg. 55' 27'' S. Longitude 140 deg. 27' 23'' E. Elevation 91 m. 42.8 km S of McAlister T/O on Burketown Development Rd. Plain. Overstory: Mixed eucalypt and acacia. Understory: Perennial & annual grass. Soiltype: Clay loam. Red, annual, hairy nodes.

**PI 592644. *Sorghum timorense* (Kunth) Buse**

Wild. 2159; 243474. Collected 04/12/1994 in Queensland, Australia. Latitude 18 deg. 12' 44'' S. Longitude 139 deg. 51' 50'' E. Elevation 40 m. 3.0 km W of Leichardt Falls on Austus Downs Rd. Plain. Overstory: Scattered Lysicarpus. Understory: Eucalyptus, perennial and annual grass. Soiltype: Cracking clay.

**PI 592645. *Sorghum timorense* (Kunth) Buse**

Wild. 2164; 243476. Collected 04/14/1994 in Queensland, Australia.

Latitude 17 deg. 46' 54'' S. Longitude 139 deg. 28' 43'' E. Elevation 4 m. 7.7 km SW of Burketown on Gregory Downs RTd. Plain. Overstory: Treeless. Understory: Perennial and annual grass. Soiltype: Cracking clay.

**PI 592646. *Sorghum plumosum* (R. Br.) P. Beauv.**

Wild. 2166; 243478. Collected 04/14/1994 in Queensland, Australia. Latitude 17 deg. 58' 9'' S. Longitude 139 deg. 6' 34'' E. Elevation 20 m. 21.8 km W of Albert River crossing on Old Coast Rd. Plain. Overstory: Mixed eucalypt. Understory: Perennial grass. Soiltype: Loam. Brown, green perennial. 50% drop.

**PI 592647. *Sorghum plumosum* (R. Br.) P. Beauv.**

Wild. 2167; 243479. Collected 04/14/1994 in Queensland, Australia. Latitude 17 deg. 56' 41'' S. Longitude 138 deg. 50' 8'' E. Elevation 91 m. 1.9 km W of Doomadges T/O on Old Coast Rd. Plain. Overstory: Mixed eucalypt. Understory: Perennial grass. Soiltype: Clay loam. Green perennial. 70% drop.

**PI 592648. *Sorghum laxiflorum* Bailey**

Wild. 2169; 243481. Collected 04/14/1994 in Queensland, Australia. Latitude 17 deg. 21' 31'' S. Longitude 138 deg. 15' 12'' E. Elevation 101 m. 16.3 km W of Hellsgate on Old Coast Rd. Creek bank. Overstory: *E. camaldulensis*. Understory: *E. terminalis*, annual and perennial grass. Soiltype: Sandy loam. Stoniferous annual.

**PI 592649. *Sorghum plumosum* (R. Br.) P. Beauv.**

Wild. 2170; 243482. Collected 04/14/1994 in Queensland, Australia. Latitude 17 deg. 12' 28'' S. Longitude 138 deg. 2' 1'' E. Elevation 59 m. 49.4 km W of Hells Gate on Old Coast Rd. Plain. Overstory: *Eucalyptus papuana*. Understory: Perennial grass. Soiltype: Clay. Brown, green perennial. 50% drop.

**PI 592650. *Sorghum plumosum* (R. Br.) P. Beauv.**

Wild. 2172; 243483. Collected 04/15/1994 in Northern Territory, Australia. Latitude 16 deg. 43' 7'' S. Longitude 138 deg. 15' 36'' E. Elevation 4 m. 0.2 km S of beach on Wollogorang Station Rd to coast. Coastal dune. Overstory: *Casuarina*. Understory: Annual and perennial grass. Soiltype: Sand. Green perennial. 80% drop.

**PI 592651. *Sorghum laxiflorum* Bailey**

Wild. 2174; 243484. Collected 04/15/1994 in Northern Territory, Australia. Latitude 16 deg. 47' 1'' S. Longitude 138 deg. 10' 7'' E. Elevation 121 m. 67.9 km N of Wollogorang on Wollogorang Station Rd to coast. Alluvial plain. Overstory: *E. papuana*. Understory: *E. tectifera*, annual and perennial grass. Soiltype: Clay loam.

**PI 592652. *Sorghum plumosum* (R. Br.) P. Beauv.**

Wild. 2175; 243485. Collected 04/15/1994 in Northern Territory, Australia. Latitude 16 deg. 48' 13'' S. Longitude 138 deg. 10' 5'' E. Elevation 108 m. 66.6 km N of Wollogorang on Wollogorang Station Rd to coast. Alluvial plain. Overstory: *E. papuana*. Understory: *E. tectifera*, annual and perennial grass. Soiltype: Clay loam. Green perennial. 50% drop.

**PI 592653. *Sorghum laxiflorum* Bailey**

Wild. 2176; 243486. Collected 04/15/1994 in Northern Territory, Australia. Latitude 16 deg. 56' 3'' S. Longitude 138 deg. 3' 12'' E. Elevation 96 m. 39.3 km N of Wologorang on Wologorang Station Rd to coast. Depression. Overstory: Intermittently wet. Understory: E. papuana, E. tectifera, perennial grass. Soiltype: Loam. Vigorous annual, 50% mature.

**PI 592654. *Sorghum plumosum* (R. Br.) P. Beauv.**

Wild. 2177; 243487. Collected 04/15/1994 in Northern Territory, Australia. Latitude 17 deg. 8' 46'' S. Longitude 137 deg. 35' 44'' E. Elevation 196 m. 44.4 km W of Wologorang on Old Coast Rd. Undulating. Overstory: E. terminalis. Understory: Bloodwood, mixed perennials. Soiltype: Clay loam. Vigorous perennial.

**PI 592655. *Sorghum plumosum* (R. Br.) P. Beauv.**

Wild. 2178; 243488. Collected 04/15/1994 in Northern Territory, Australia. Latitude 16 deg. 57' 45'' S. Longitude 137 deg. 23' 8'' E. Elevation 144 m. 76.2 km W of Wologorang on Old Coast Rd. Hillside. Overstory: Box. Understory: Bloodwood, mixed perennials. Soiltype: Gravelly loam. Many secondary tillers.

**PI 592656. *Sorghum matarankense* Garber & Snyder**

Wild. 2183; 243491. Collected 04/15/1994 in Northern Territory, Australia. Latitude 16 deg. 4' 46'' S. Longitude 136 deg. 19' 1'' E. Elevation 50 m. 0.2 km E of McArthur River on Old Coast Rd. Eroded old levee. Gully. Overstory: Intermittently wet. Understory: Scattered eucalypt, annual grass. Soiltype: Loam.

**PI 592657. *Sorghum laxiflorum* Bailey**

Wild. 2184; 243492. Collected 04/15/1994 in Northern Territory, Australia. Latitude 16 deg. 3' 58'' S. Longitude 136 deg. 18' 40'' E. Elevation 50 m. Booraloola boat ramp, Booraloola. Levee. Gully. Overstory: Intermittently wet. Understory: Melaleuca, Eucalyptus, annual and perennial grass. Soiltype: Sandy loam.

**PI 592658. *Sorghum timorense* (Kunth) Buse**

Wild. 2187; 243494. Collected 04/17/1994 in Northern Territory, Australia. Latitude 16 deg. 3' 54'' S. Longitude 136 deg. 18' 18'' E. Elevation 45 m. 0.1 km W of Rocky Creek, Booraloola. Plain. Overstory: Acacia. Understory: Eucalyptus, annual and perennial grass. Soiltype: Clay loam.

**PI 592659. *Sorghum matarankense* Garber & Snyder**

Wild. 2188; 243495. Collected 04/17/1994 in Northern Territory, Australia. Latitude 16 deg. 4' 46'' S. Longitude 136 deg. 18' 27'' E. Elevation 41 m. 1.0 km E of Booraloola at junction Tableland Hwy. Undulating. Overstory: Scattered eucalypt. Understory: Annual and perennial grass. Soiltype: Clay loam.

**PI 592660. *Sorghum stipoides* (Ewart & Jean White) C. Gardner & C. E. Hubb.**

Wild. 2192; 243496. Collected 04/17/1994 in Northern Territory, Australia. Latitude 16 deg. 15' 11'' S. Longitude 136 deg. 4' 19'' E. Elevation 76 m. 39.8 km S of Tableland Hwy T/O on Tableland Hwy. Gully.



Overstory: Intermittently wet. Understory: Eucalypt, acacia, annual and perennial grass. Soiltype: Gravelly loam. Vigorous annual.

**PI 592661. *Sorghum timorense* (Kunth) Buse**

Wild. 2195; 243498. Collected 04/17/1994 in Northern Territory, Australia. Latitude 16 deg. 26' 49'' S. Longitude 136 deg. 3' 39'' E. Elevation 80 m. 63 km S of Tableland Hwy T/O on Tableland Hwy. Plain. Overstory: Lysicarpus. Understory: Eucalyptus, annual and perennial grass. Soiltype: Cracking clay.

**PI 592662. *Sorghum laxiflorum* Bailey**

Wild. 2196; 243499. Collected 04/17/1994 in Northern Territory, Australia. Latitude 16 deg. 38' 51'' S. Longitude 135 deg. 50' 58'' E. Elevation 12 m. Leila River crossing McArthur River Station, Tableland Hwy. Gully. Overstory: Intermittently wet. Understory: E. papuana, Casuarina, annual and perennial grass. Soiltype: Sandy loam. Mature.

**PI 592663. *Sorghum timorense* (Kunth) Buse**

Wild. 2198; 243500. Collected 04/17/1994 in Northern Territory, Australia. Latitude 17 deg. 25' 30'' S. Longitude 135 deg. 39' 33'' E. Elevation 381 m. 93.8 km S of Cape Crawford on Tableland Hwy. Gully. Overstory: Intermittently wet. Understory: Eucalyptus terminalis, annual & perennial grass. Soiltype: Cracking clay.

**PI 592664. *Sorghum timorense* (Kunth) Buse**

Wild. 2200; 243502. Collected 04/17/1994 in Northern Territory, Australia. Latitude 17 deg. 50' 21'' S. Longitude 135 deg. 38' 56'' E. Elevation 247 m. 145 km S of Cape Crawford on Tableland Hwy. Plateau. Overstory: Tableland. Understory: Treeless, annual and perennial grass. Soiltype: Cracking clay.

**PI 592665. *Sorghum timorense* (Kunth) Buse**

Wild. 2202; 243503. Collected 04/17/1994 in Northern Territory, Australia. Latitude 18 deg. 24' 54'' S. Longitude 135 deg. 56' 42'' E. Elevation 290 m. 224 km S of Cape Crawford on Tableland Hwy. Overgrazed area. Plateau. Overstory: Tableland. Understory: Treeless, annual sorghum. Soiltype: Cracking clay.

**PI 592666. *Sorghum timorense* (Kunth) Buse**

Wild. 2206; 243504. Collected 04/19/1994 in Queensland, Australia. Latitude 20 deg. 59' 31'' S. Longitude 141 deg. 50' 12'' E. Elevation 149 m. Toorak Research Station T/O on Kyluma Julia Ck Rd. Plain. Overstory: Scattered eucalypt. Understory: Perennial grass. Soiltype: Clay loam. Fine stem.

**PI 592667. *Sorghum timorense* (Kunth) Buse**

Wild. 2207; 243505. Collected 04/20/1994 in Queensland, Australia. Latitude 20 deg. 22' 25'' S. Longitude 141 deg. 26' 54'' E. Elevation 129 m. 42.1 km N of Julia Ck on Normanton Rd. Undulating. Overstory: Treeless. Understory: Perennial grass. Soiltype: Cracking clay. Fine stem.

**PI 592668. *Sorghum timorense* (Kunth) Buse**

Wild. 2209; 243506. Collected 04/20/1994 in Queensland, Australia. Latitude 19 deg. 52' 23'' S. Longitude 141 deg. 1' 3'' E. Elevation 192

m. 27.2 km N of Cloncurry River on Normanton Rd. Undulating. Overstory: Scattered eucalypt. Understory: Perennial grass. Soiltype: Cracking clay. Fine stem.

**PI 592669. *Sorghum plumosum* (R. Br.) P. Beauv.**

Wild. 2210; 243507. Collected 04/20/1994 in Queensland, Australia. Latitude 20 deg. 29' 10'' S. Longitude 144 deg. 24' 7'' E. Elevation 424 m. 54 km N of Hughendon on Kennedy Development Rd. Undulating. Overstory: Eucalyptus crebra. Understory: Perennial grass. Soiltype: Euchrozem. Fine leaf, few culms.

**PI 592670. *Sorghum plumosum* (R. Br.) P. Beauv.**

Wild. 2212; 243508. Collected 04/21/1994 in Queensland, Australia. Latitude 20 deg. 52' 43'' S. Longitude 144 deg. 30' 47'' E. Elevation 419 m. 36.3 km E of Hughendon on Flinders Hwy. Undulating. Overstory: Eucalyptus crebra. Understory: Perennial grass. Soiltype: Euchrozem. Green.

**PI 592671. *Sorghum plumosum* (R. Br.) P. Beauv.**

Wild. 2213; 243509. Collected 04/21/1994 in Queensland, Australia. Latitude 20 deg. 39' 19'' S. Longitude 145 deg. 16' 2'' E. Elevation 549 m. 123.1 km E of Hughendon on Flinders Hwy. Undulating. Overstory: Eucalyptus crebra. Understory: Perennial grass. Soiltype: Sandy loam. Mostly dropped.

**PI 592672. *Sorghum plumosum* (R. Br.) P. Beauv.**

Wild. 2214; 243510. Collected 04/21/1994 in Queensland, Australia. Latitude 20 deg. 19' 57'' S. Longitude 145 deg. 41' 53'' E. Elevation 387 m. 25.5 W of Balfa Creek on Flinders Hwy. Undulating. Overstory: E. crebra, bloodwood. Understory: Perennial grass. Soiltype: Sandy loam. Tall, vigorous, hairy base.

**PI 592673. *Sorghum laxiflorum* Bailey**

Wild. 2215; 243511. Collected 04/21/1994 in Queensland, Australia. Latitude 19 deg. 50' 4'' S. Longitude 146 deg. 41' 56'' E. Elevation 179 m. Eight Mile Ck. 55.3 km E of Charters Towers on Flinders Hwy. Gully. Overstory: Intermittently wet. Understory: Mixed eucalypt, annual and perennial grass. Soiltype: Sandy loam. Half mature.

**PI 592674. *Sorghum laxiflorum* Bailey**

Wild. 2216; 243512. Collected 04/21/1994 in Queensland, Australia. Latitude 19 deg. 40' 0'' S. Longitude 146 deg. 52' 6'' E. Elevation 50 m. Paddock T330 CSIRO Lansdown Res. Stn. on Flinders Hwy. Plain. Overstory: Mixed eucalypt. Understory: Annual and perennial grass. Soiltype: Solodic clay. Mature.

**PI 592675. *Sorghum nitidum* (M. Vahl) Pers.**

Wild. 2218; 243514. Collected 04/21/1994 in Queensland, Australia. Latitude 19 deg. 36' 13'' S. Longitude 147 deg. 1' 43'' E. Elevation 41 m. 22.7 km SE of Woodstock on Giru Woodstock Rd. Plain. Overstory: Eucalyptus bloodwood. Understory: Guinea grass. Soiltype: Solodic clay. Tall green perennial.

**PI 592676. *Sorghum nitidum* (M. Vahl) Pers.**

Wild. 2220; 243516. Collected 04/21/1994 in Queensland, Australia.

Latitude 19 deg. 29' 34'' S. Longitude 147 deg. 26' 34'' E. Elevation 20 m. 10.5 km E of Ayr on Alva Beach Rd. Plain. Overstory: Treeless. Understory: Guinea grass, sorghum. Soiltype: Clay.

**PI 592677. *Sorghum nitidum* (M. Vahl) Pers.**

Wild. 2221; 243517. Collected 04/22/1994 in Queensland, Australia. Latitude 19 deg. 20' 51'' S. Longitude 146 deg. 46' 52'' E. Elevation 375 m. 0.5 km S of Mt. Stuart lookout on Mt. Stuart Rd, Townsville. Hillside. Overstory: Mixed eucalypt. Understory: Themeda, Heteropogon sorghum. Soiltype: Loam. Awned, half mature.

**PI 592678. *Sorghum laxiflorum* Bailey**

Wild. 2223; 243519. Collected 04/22/1994 in Queensland, Australia. Latitude 19 deg. 21' 45'' S. Longitude 146 deg. 50' 1'' E. Elevation 20 m. 0.5 km N of Flinders Hwy on Mt. Stuart Rd, Townsville. Hillside. Roadside. Overstory: Eucalyptus. Understory: Heteropogon sorghum. Soiltype: Granitic sandy loam. Mature.

**PI 592679. *Sorghum interjectum* Lazarides**

Wild. 2096; 243531. Collected 03/16/1994 in Australia. Latitude 18 deg. 47' 11'' S. Longitude 126 deg. 25' 11'' E. Elevation 289 m. 127.3 km E of Fitzroy Crossing on Great Northern Hwy. Plateau. Overstory: Tableland. Understory: Scattered acacia, eucalypt, spinifex sorghum. Soiltype: Clay loam. Red.

**PI 592680. *Sorghum nitidum* (M. Vahl) Pers.**

Wild. 2225; 243534. Collected 05/18/1994 in Australia. Latitude 23 deg. 12' 40'' S. Longitude 150 deg. 32' 23'' E. Elevation 34 m. 7.5 km E of East Lakes Rd T/O on Bruce Hwy, N of Rockhampton. Roadside. Undulating. Overstory: Mixed eucalypt. Understory: Perennial grass. Soiltype: Loam. Green perennial.

**PI 592681. *Sorghum nitidum* (M. Vahl) Pers.**

Wild. 2226; 243535. Collected 05/18/1994 in Australia. Latitude 22 deg. 47' 40'' S. Longitude 150 deg. 37' 7'' E. Elevation 36 m. 6.9 km N of Byfield on Byfield Rd. Roadside. Undulating. Overstory: Mixed eucalypt. Understory: Perennial grass. Soiltype: Sandy loam. Hairy stems and nodes.

**PI 592682. *Sorghum nitidum* (M. Vahl) Pers.**

Wild. 2227; 243536. Collected 05/23/1994 in Australia. Latitude 23 deg. 11' 40'' S. Longitude 150 deg. 28' 39'' E. Elevation 59 m. 1.6 km N of Bakers Rd, 14 km N of Yeppoon T/O on Bruce Hwy. Grazed paddock. Undulating. Overstory: Treeless. Understory: Perennial grass. Soiltype: Clay loam.

**PI 592683. *Sorghum stipoides* (Ewart & Jean White) C. Gardner & C. E. Hubb.**

Wild. 2299; 243555. Collected 03/26/1995 in Australia. Latitude 13 deg. 59' 8'' S. Longitude 136 deg. 28' 55'' E. Angurugu River crossing map unit 6, Groote Eyland. River Levee. Overstory: Mixed eucalypt. Understory: Annual and perennial grasses. Soiltype: Sand. 3 weeks before maturity.

**PI 592684. *Sorghum interjectum* Lazarides**

Wild. 2300; 243556. Collected 03/26/1995 in Australia. Latitude 13 deg. 59' 27'' S. Longitude 136 deg. 28' 46'' E. Elevation 170 m. 0.5 km E of Angurugu River crossing map unit 6, Groote Eyland. Plain. Overstory: Eucalyptus tetradonta. Understory: E. miniata, annual and perennial grasses. Soiltype: Gravelly sand. Tall green perennial mature.

**PI 592685. *Sorghum interjectum* Lazarides**

Wild. 2228; 243557. Collected 03/26/1995 in Australia. Latitude 14 deg. 6' 7'' S. Longitude 136 deg. 31' 28'' E. Elevation 67 m. Road to Amagula Pools, Groote Eyland. Undulating. Overstory: Eucalyptus tetradonta. Understory: Perennial grasses. Soiltype: Gravelly loam. Green perennial, vegetation.

**PI 592686. *Sorghum interjectum* Lazarides**

Wild. 2229; 243558. Collected 03/26/1995 in Australia. Latitude 14 deg. 14' 27'' S. Longitude 136 deg. 19' 34'' E. Elevation 117 m. South Point, Groote Eyland. Undulating. Overstory: Treeless. Understory: Perennial sorghum. Soiltype: Sand. Primary dune.

**PI 592687. *Sorghum interjectum* Lazarides**

Wild. 2232; 243560. Collected 03/27/1995 in Australia. Latitude 12 deg. 16' 16'' S. Longitude 136 deg. 53' 41'' E. Elevation 29 m. Yirrkala dump near Nhulunbuy. Opposite old mining area. Plain. Overstory: Eucalyptus tetradonta. Understory: E. miniata, perennial grasses. Soiltype: Red gravel loam.

**PI 592688. *Sorghum interjectum* Lazarides**

Wild. 2234; 243561. Collected 03/28/1995 in Australia. Latitude 12 deg. 32' 1'' S. Longitude 136 deg. 34' 19'' E. Elevation 69 m. 81 km SW of 3 Ways T/O near Nhulunbuy. Cleared paddock. Undulating. Overstory: Eucalyptus tetradonta. Understory: Perennial grasses. Soiltype: Gravelly loam.

**PI 592689. *Sorghum interjectum* Lazarides**

Wild. 2235; 243562. Collected 03/28/1995 in Australia. Latitude 12 deg. 46' 33'' S. Longitude 136 deg. 13' 48'' E. Elevation 33 m. 146 km SWS of 3 Ways T/O near Nhulunbuy. Poorly drained. Plain. Overstory: Eucalyptus. Understory: Melaleuca, perennial grass. Soiltype: Gravelly loam.

**PI 592690. *Sorghum interjectum* Lazarides**

Wild. 2237; 243563. Collected 03/29/1995 in Australia. Lake Evella airstrip. Plain. Overstory: Eucalyptus tetradonta. Understory: Perennial grass. Soiltype: Gravelly loam.

**PI 592691. *Sorghum interjectum* Lazarides**

Wild. 2238; 243564. Collected 03/29/1995 in Australia. Latitude 12 deg. 0' 9'' S. Longitude 135 deg. 35' 13'' E. Elevation 26 m. 2.4 km E Galiwinku airstrip on Elcho Island. Plain. Overstory: Eucalyptus miniata. Understory: Perennial grass. Soiltype: Gravelly loam.

**PI 592692. *Sorghum interjectum* Lazarides**

Wild. 2239; 243565. Collected 03/30/1995 in Australia. Ramingining airstrip. Plain. Overstory: Eucalyptus tetradonta. Understory: Perennial grass. Soiltype: Gravelly loam.

- PI 592693. *Sorghum intrans* F. Muell. ex Benth.**  
Wild. 2241; 243567. Collected 03/31/1995 in Australia. Latitude 12 deg. 2' 58'' S. Longitude 134 deg. 13' 30'' E. Elevation 2 m. Maningrida township. Plain. Overstory: Eucalyptus tetradonta. Understory: Annual sorghum. Soiltype: Gravelly sand. Green. 10 days early.
- PI 592694. *Sorghum plumosum* (R. Br.) P. Beauv.**  
Wild. 2242; 243568. Collected 03/31/1995 in Australia. Latitude 11 deg. 8' 48'' S. Longitude 132 deg. 34' 54'' E. Elevation 5 m. Minjilang township, Croker Island. Primary dune. Overstory: Mixed eucalypt. Understory: Perennial sorghum. Soiltype: Sand. Vigorous perennial. Hairy nodes.
- PI 592695. *Sorghum plumosum* (R. Br.) P. Beauv.**  
Wild. 2246; 243569. Collected 04/02/1995 in Australia. Latitude 11 deg. 43' 40'' S. Longitude 130 deg. 52' 19'' E. 3 km N Pickataramoor on Melville Island. Undulating. Overstory: Mixed eucalypt accacia. Understory: Perennial grass. Soiltype: Sandy loam. Tall green perennial.
- PI 592696. *Sorghum exstans* Lazarides**  
Wild. 2247; 243570. Collected 04/02/1995 in Australia. Latitude 11 deg. 38' 25'' S. Longitude 130 deg. 37' 54'' E. 37 km N Pickataramoor on Melville Island. Gully. Overstory: Intermittently wet. Understory: Mixed eucalypt, annual sorghum. Soiltype: Deep sand. Tall annual.
- PI 592697. *Sorghum intrans* F. Muell. ex Benth.**  
Wild. 2250; 243571. Collected 04/03/1995 in Australia. Latitude 12 deg. 26' 15'' S. Longitude 131 deg. 3' 9'' E. Elevation 30 m. Darwin High School, Darwin. Coastal headland. Overstory: Mixed eucalypt. Understory: Annual sorghum. Soiltype: Gravelly sand.
- PI 592698. *Sorghum stipoides* (Ewart & Jean White) C. Gardner & C. E. Hubb.**  
Wild. 2251; 243572. Collected 04/03/1995 in Australia. Latitude 12 deg. 26' 15'' S. Longitude 131 deg. 3' 9'' E. Vestey's Beach Rd, Darwin. Gully. Overstory: Intermittently wet. Understory: Mixed eucalypt, annual sorghum. Soiltype: Gravelly sand. Fine complex seedheads.
- PI 592699. *Sorghum grande* Lazarides**  
Wild. 2254; 243573. Collected 04/04/1995 in Australia. Latitude 14 deg. 27' 27'' S. Longitude 132 deg. 15' 0'' E. Elevation 88 m. 1 km N Katherine River Bridge on Stuart Hwy near Katherine. Roadside. Plain. Overstory: Mixed eucalypt. Understory: Annual and perennial grass. Soiltype: Clay loam. Seed dropped.
- PI 592700. *Sorghum ecarinatum* Lazarides**  
Wild. 2255; 243574. Collected 04/04/1995 in Australia. Latitude 14 deg. 26' 21'' S. Longitude 132 deg. 16' 31'' E. Elevation 116 m. Knotts Crossing Katherine River near Katherine. River bank. Overstory: Mixed eucalypt. Understory: Annual and perennial grass. Soiltype: Sandy loam.
- PI 592701. *Sorghum timorense* (Kunth) Buse**  
Wild. 2256; 243575. Collected 04/04/1995 in Australia. Latitude 15 deg. 6' 19'' S. Longitude 133 deg. 4' 34'' E. Elevation 106 m. North side



Warlock Ponds 20 km S Mataranka on Stuart Hwy. Depression. Overstory: Intermittently wet. Understory: Box/bloodwood, annual and perennial grass. Soiltype: Loam. Pruinose annual.

**PI 592702. *Sorghum matarankense* Garber & Snyder**

Wild. 2257; 243576. Collected 04/04/1995 in Australia. Latitude 15 deg. 41' 15'' S. Longitude 133 deg. 18' 18'' E. Elevation 210 m. 193.8 km S Katherine on Stuart Hwy near Larrimah. Roadside depression. Plain. Overstory: Bloodwood. Understory: Annual and perennial grass. Soiltype: Sandy loam. Green annual.

**PI 592703. *Sorghum timorense* (Kunth) Buse**

Wild. 2258; 243577. Collected 04/04/1995 in Australia. Latitude 15 deg. 43' 52'' S. Longitude 133 deg. 21' 24'' E. Elevation 198 m. 201.4 km S of Katherine on Stuart Hwy near Larrimah. Roadside depression. Plain. Overstory: Mixed eucalypt. Understory: Annual and perennial grass. Soiltype: Sandy loam. Pruinose annual.

**PI 592704. *Sorghum laxiflorum* Bailey**

Wild. 2270; 243580. Collected 05/15/1995 in Australia. Latitude 15 deg. 28' 18'' S. Longitude 145 deg. 11' 13'' E. 6.9 km N of Cairns T/O on Cooktown/Hopevale Rd near Cooktown. Roadside gully. Overstory: Intermittently wet. Understory: Mixed eucalypt, perennial grass. Soiltype: Gravelly loam.

**PI 592705. *Sorghum angustum* S. T. Blake**

Wild. 2271; 243581. Collected 05/15/1995 in Australia. Latitude 15 deg. 18' 28'' S. Longitude 144 deg. 48' 48'' E. 33.5 km W of Hopevale T/O on Battle Camp Rd to Laura near Cooktown. Swampy. Plain. Overstory: Mixed eucalypt Melaleuca. Understory: Annual and perennial grass. Soiltype: Deep red sand. Green seed.

**PI 592706. *Sorghum laxiflorum* Bailey**

Wild. 2272; 243582. Collected 05/15/1995 in Australia. Latitude 15 deg. 20' 57'' S. Longitude 144 deg. 27' 20'' E. Laura River crossing, 75.2 km W of Hopevale T/O on Battle Camp near Cooktown. River levee. Overstory: Mixed eucalypt. Understory: Annual and perennial grass. Soiltype: Sandy loam.

**PI 592707. *Sorghum angustum* S. T. Blake**

Wild. 2273; 243583. Collected 05/15/1995 in Australia. Latitude 15 deg. 22' 32'' S. Longitude 144 deg. 6' 36'' E. 43.6 km N of Laura on Peninsular Development Rd near Laura. Plain. Overstory: Mixed eucalypt Melaleuca. Understory: Annual and perennial grass. Soiltype: Deep red sand.

**PI 592708. *Sorghum laxiflorum* Bailey**

Wild. 2274; 243584. Collected 05/15/1995 in Australia. Latitude 15 deg. 1' 26'' S. Longitude 144 deg. 39' 48'' E. Morehead River crossing, 106.5 km N of Laura on Peninsular Development Rd. River levee. Overstory: Mixed eucalypt Melaleuca. Understory: Annual and perennial grass. Soiltype: Sandy loam. Not mature.

**PI 592709. *Sorghum angustum* S. T. Blake**

Wild. 2275; 243585. Collected 05/16/1995 in Australia. Latitude 14 deg.

31' 52'' S. Longitude 143 deg. 25' 42'' E. 32.5 km N of Musgrave Station on Peninsular Development Rd near Laura. Plain. Overstory: Mixed eucalypt. Understory: Annual and perennial grass. Soiltype: Deep sand.

**PI 592710. *Sorghum laxiflorum* Bailey**

Wild. 2277; 243587. Collected 05/16/1995 in Australia. Latitude 13 deg. 37' 27'' S. Longitude 143 deg. 3' 44'' E. Creek crossing 19.7 km N of Coen airport T/O on Peninsular Development Rd. Creek bank. Overstory: Gallery forest. Understory: Annual and perennial grass. Soiltype: Deep sand. Vigorous annual.

**PI 592711. *Sorghum angustum* S. T. Blake**

Wild. 2278; 243588. Collected 05/16/1995 in Australia. Latitude 13 deg. 37' 27'' S. Longitude 143 deg. 3' 44'' E. 19.7 km N of Coen airport T/O on Peninsular Development Rd. Creek bank. Overstory: Gallery forest. Understory: Annual and perennial grass. Soiltype: Sandy loam. Vigorous.

**PI 592712. *Sorghum angustum* S. T. Blake**

Wild. 2280; 243589. Collected 05/16/1995 in Australia. Latitude 13 deg. 27' 30'' S. Longitude 142 deg. 57' 40'' E. 0.5 km E of Peninsular Development Rd on Peach River Rd, 3 km S of Archer River Roadhouse. Plain. Overstory: Eucalyptus tetradonta bloodwood. Understory: Annual and perennial grass. Soiltype: Sandy loam. Mature.

**PI 592713. *Sorghum laxiflorum* Bailey**

Wild. 2282; 243590. Collected 05/16/1995 in Australia. Latitude 13 deg. 27' 5'' S. Longitude 142 deg. 57' 43'' E. 2.7 km E of Peninsular Development Rd on Peach River Rd, 3 km S of Archer River Roadhouse. River levee. Overstory: Mixed eucalypt accacia. Understory: Annual grasses. Soiltype: Deep sand. Vigorous.

**PI 592714. *Sorghum laxiflorum* Bailey**

Wild. 2286; 243591. Collected 05/17/1995 in Australia. Latitude 12 deg. 42' 10'' S. Longitude 142 deg. 21' 50'' E. 77.5 km NW of Bamaga T/O on Weipa Rd near Weipa. Depression. Overstory: Intermittently wet. Understory: Bloodwood/box, annual and perennial grass. Soiltype: Clay loam. Mature.

**PI 592715. *Sorghum laxiflorum* Bailey**

Wild. 2290; 243593. Collected 05/18/1995 in Australia. Latitude 12 deg. 39' 43'' S. Longitude 142 deg. 40' 0'' E. 0.7 km W of Batavia Homestead on Peninsular Development Rd. Creek bank. Overstory: Bloodwood. Understory: Annual and perennial grasses. Soiltype: Sandy loam. Vigorous.

**PI 592716. *Sorghum angustum* S. T. Blake**

Wild. 2293; 243595. Collected 05/18/1995 in Australia. Latitude 14 deg. 8' 51'' S. Longitude 143 deg. 15' 2'' E. 26.1 km S of Coen on Peninsular Development Rd. Undulating. Overstory: Bloodwood. Understory: Erthrophleum, annual and perennial grasses. Soiltype: Sandy loam.

**PI 592717. *Sorghum angustum* S. T. Blake**

Wild. 2296; 243597. Collected 05/19/1995 in Australia. Latitude 14 deg. 23' 55'' S. Longitude 143 deg. 21' 45'' E. 50.0 km N of Musgrave Station on Peninsular Development Rd. Slope. Overstory: Mixed eucalypt

Melaleuca. Understory: Annual and perennial grasses. Soiltype: Deep sand. Fine stemmed.

**PI 592718. *Sorghum angustum* S. T. Blake**

Wild. 2297; 243598. Collected 05/19/1995 in Australia. Latitude 14 deg. 56' 57'' S. Longitude 143 deg. 33' 20'' E. Windmill Ck crossing 18.8 km S of Musgrave Station on Peninsular Development Rd.. Creek bank. Overstory: Mixed eucalypt Melaleuca. Understory: Annual grasses. Soiltype: Deep sand. Variable maturity.

**PI 592719. *Sorghum angustum* S. T. Blake**

Wild. 2298; 243599. Collected 05/19/1995 in Australia. Latitude 15 deg. 31' 43'' S. Longitude 144 deg. 22' 38'' E. 4.0 km N of Laura on Peninsular Development Rd. Plain. Overstory: Eucalyptus tetradonta bloodwood. Understory: Annual and perennial grasses. Soiltype: Deep sand. Mature.

**PI 592720. *Sorghum laxiflorum* Bailey**

Wild. 454; 243600. Collected 04/20/1995 in Australia. Latitude 14 deg. 26' 21'' S. Longitude 132 deg. 16' 31'' E. Elevation 116 m. Knotts Crossing Katherine River near Katherine. River bank. Overstory: Mixed eucalypt. Understory: Annual and perennial grasses. Soiltype: Sandy loam.

**PI 592721. *Sorghum exstans* Lazarides**

Wild. 229; 243601. Collected 03/03/1995 in Australia. CSIRO laboratories, Darwin. Plain. Soiltype: Sandy loam.

**PI 592722. *Sorghum intrans* F. Muell. ex Benth.**

Wild. 2301; 243602. Collected 04/12/1995 in Australia. Latitude 12 deg. 2' 58'' S. Longitude 134 deg. 13' 30'' E. Near Maningrida.

**PI 592723. *Sorghum plumosum* (R. Br.) P. Beauv.**

Wild. 2302; 243603. Collected 04/12/1995 in Australia. Latitude 12 deg. 2' 58'' S. Longitude 134 deg. 13' 30'' E. Near Maningrida.

The following were developed by C.D.M. Sarwar, Pulses Research Center, Bangladesh Agricultural Res. Institute, Gazipur 1701, Bangladesh; Masudul Quader, Pulses Research Center, Bangladesh Agricultural Res. Institute, Gazipur 1701, Bangladesh. Received 01/05/1996.

**PI 592724. *Lathyrus sativus* L.**

Cultivar. Pureline. "BARIKHESARI-1"; 8612. CV-132. Pedigree - LSD-5 / LC . Low neurotoxin. Height 70cm. Maturity 115 days. Seeds large (58gm 1000 seed-1). Protein 27.9%. B-N-Oxalyl-diaminopropionic acid (ODAP) content 0.006mg gram seed-1.

The following were collected by Charles E. Simpson, Texas A&M University, P. O. Box 292, Stephenville, Texas 76401, United States; Israel G. Vargas C., Museo de Historia Natural "Noel Kempff Mercado", Facultad de Ciencias Agricolas, Universidad Autonoma "Gabriel Rene Moreno", Santa Cruz, Bolivia; David E. Williams, USDA, ARS, Natl. Germplasm Resources Laboratory, Building 003, Room 400, BARC-West, Beltsville, Maryland 20705-2350, United States.

Donated by David E. Williams, USDA, ARS, Natl. Germplasm Resources Laboratory, Building 003, Room 400, BARC-West, Beltsville, Maryland 20705-2350, United States. Received 08/31/1994.

**PI 592725. *Capsicum* sp.**

Wild. 1267; aribibi. Collected 05/21/1994 in Santa Cruz, Bolivia. Latitude 19 deg. 32' 6'' S. Longitude 63 deg. 13' 49'' W. Elevation 850 m. Cordillera. Roadside, 2km south of Rio Saipuru on road to Charagua. Fruits small, red, ovoid, 1cm long, piquant.

**PI 592726. *Ipomoea* sp.**

Wild. 1276. Collected 05/26/1994 in Santa Cruz, Bolivia. Latitude 18 deg. 51' 48'' S. Longitude 62 deg. 39' 26'' W. Elevation 400 m. Cordillera. Banados del Izozog, 62.5km northwest of San Silvestre on road to Pailon. Roadside vegetation, shrubs, low trees. Vine twining, herbaceous. Flowers white, bloom overnight on the full moon. Common.

The following were collected by Charles E. Simpson, Texas A&M University, P. O. Box 292, Stephenville, Texas 76401, United States; David E. Williams, USDA, ARS, Natl. Germplasm Resources Laboratory, Building 003, Room 400, BARC-West, Beltsville, Maryland 20705-2350, United States. Donated by David E. Williams, USDA, ARS, Natl. Germplasm Resources Laboratory, Building 003, Room 400, BARC-West, Beltsville, Maryland 20705-2350, United States. Received 08/31/1994.

**PI 592727. *Lycianthes asarifolia* (Kunth & C. Bouche) Bitter**

Wild. 1278; motojobobo. Collected 05/27/1994 in Santa Cruz, Bolivia. Andres Ibanez. Jardin Botanico de Santa Cruz, ca. 7km east of city on road to Cotoca. Plants herbaceous. Stems prostrate growing at or just below soil surface. Flowers translucent white. Fruits ovoid 1.0-2.5cm long, orange when ripe. Agrestic, commonly tolerated in shaded lawns and chacos. Fruits edible, acid-sweet tasting, often eaten raw especially by children. When abundant, fruits used to prepare "tabilla" candy and preserves. Common.

The following were developed by Rollin G. Sears, Kansas State University, Department of Agronomy, Throckmorton Hall, Manhattan, Kansas 66506-5501, United States; T.S. Cox, USDA, ARS, Plant Science and Entomology Research, Department of Agronomy, Manhattan, Kansas 66506-5501, United States; Bikram S. Gill, Kansas State University, Wheat Genetic Resources Center, Department of Plant Pathology, Manhattan, Kansas 66506, United States; T. Hussien, Kansas State University, Dept. of Plant Pathology, Manhattan, Kansas 66506, United States. Received 01/16/1996.

**PI 592728. *Triticum aestivum* L., nom. cons.**

Breeding. Pureline. KS92WGRC16. GP-500. Pedigree - Triumph 64/3/KS8010-71/TA2470//TAM 200. Has Lr43 gene for leaf rust resistance transferred from TA2470 of *Triticum tauschii*. Resistant to all races of *P. recondita* at seedling and adult-plant stages.

The following were developed by Rollin G. Sears, Kansas State University, Department of Agronomy, Throckmorton Hall, Manhattan, Kansas 66506-5501,

United States; Jimmie H. Hatchett, USDA-ARS, Dept of Entomology, Waters Hall, Manhattan, Kansas 66506-4004, United States; B. Friebe, Kansas State University, Wheat Genetics Resource Center, Dept. of Plant Pathology, Throckmorton Hall, Manhattan, Kansas 66506-5502, United States; E.E. Sebesta, USDA, ARS, 1301 N. Western St., Stillwater, Oklahoma 74075, United States; T.S. Cox, USDA, ARS, Plant Science and Entomology Research, Department of Agronomy, Manhattan, Kansas 66506-5501, United States; Bikram S. Gill, Kansas State University, Wheat Genetic Resources Center, Department of Plant Pathology, Manhattan, Kansas 66506, United States. Received 01/16/1996.

**PI 592729. *Triticum aestivum* L., nom. cons.**

Breeding. Pureline. KS92WGRC17. GP-501. Pedigree - TAM 106/4/Suwon 92/Balbo rye//TAM 106/3/Amigo. Has T6BS-6BL-6RL wheat-rye translocation, which carries the H25 gene for resistance to all known biotypes of Hessian fly.

**PI 592730. *Triticum aestivum* L., nom. cons.**

Breeding. Pureline. KS92WGRC18. GP-502. Pedigree - Vona/4/Suwon 92/Balbo rye//TAM 106/3/Amigo. Has T4BS-4BL-6RL wheat-rye translocation with the H25 gene for resistance to all known biotypes of Hessian fly.

**PI 592731. *Triticum aestivum* L., nom. cons.**

Breeding. Pureline. KS92WGRC19. GP-503. Pedigree - Vona/4/Suwon 92/Balbo rye//TAM 106/3/Amigo. Has T4BS-4BL-6RL wheat-rye translocation with the H25 gene for resistance to all known biotypes of Hessian fly. Also has the T1AL-1RS wheat-rye translocation.

**PI 592732. *Triticum aestivum* L., nom. cons.**

Breeding. Pureline. KS92WGRC20. GP-504. Pedigree - TAM 101/4/Suwon 92/Balbo rye//TAM 106/3/Amigo. Has a T4AS-4AL-6RL-4AL wheat-rye translocation with the H25 gene for resistance to all known biotypes of Hessian fly.

The following were developed by R. J. Lambert, University of Illinois, Dept. of Agronomy, W-203 Turner Hall, Urbana, Illinois 61801-4798, United States. Received 01/16/1996.

**PI 592733. *Zea mays* L. ssp. *mays***

Breeding. Inbred. R228. PL-177. Pedigree - Inbreds Mo17 / Brazil 900. Resistance to leaf blights (*Exserohilum turcicum*, *Bipolaris maydis*, *Bipolaris zeicola*, and *Colletotrichum graminicola*) and stalk rots (*Diplodia maydis*, *Colletotrichum graminicola*, *Gibberella zeae*, and *Fusarium moniliforme*). Leaf area blighted 25% compared to 63% for Mo17. 8cm taller than Mo17, and tassels and silks 8 days later. Tassels have yellow anthers and pink silks. Ears have 12 to 14 kernel rows with white cobs and semi-dent kernels. AES 900 maturity group.

**PI 592734. *Zea mays* L. ssp. *mays***

Breeding. Inbred. R229. PL-178. Pedigree - B73 / Brazil inbred 479. Multiple resistance to leaf blights (*Exserohilum turcicum*, *Bipolaris maydis*, *Bipolaris zeicola*, and *Colletotrichum graminicola*) and stalk rots (*Diplodia maydis*, *Gibberella zeae*, and *Fusarium moniliforme*). Leaf area blighted 67% compared to 78% for B73. Tassels and silks 2 to 4 days later than B73 and has yellow anthers and green silks. Ears have 14-16

kernel rows with white cobs and semi-dent yellow kernels. AES 900 maturity group.

**PI 592735. *Zea mays* L. ssp. *mays***

Breeding. Inbred. R230. PL-179. Pedigree - B73 / Brazil inbred 509. Multiple resistance to leaf blights (*Exserohilum turcicum*, *Bipolaris maydis*, *Bipolaris zeicola*, and *Colletotrichum graminicola*) and stalk rots (*Diplodia maydis*, *Gibberella zea*, and *Fusarium moniliforme*). Leaf area blighted 62% compared to 78% for B73. Anthers yellow and silks pink. Tassels and silks about 5 to 7 days later than B73. Ear type similar to B73, but has white cobs with 14-16 kernel rows and hard yellow dent type 509 (Mo17 x 509) Mo17 BC2S kernels. AES 300 maturity group.

The following were donated by Junior Gordon, 7405 Shoals Branch Road, Primm Springs, Tennessee 38476, United States. Received 01/16/1996.

**PI 592736. *Arachis hypogaea* L.**

Cultivated. GORDEN ALLEN. Similar in appearance to Tennessee Red with hulls slightly more angular, harder, and higher ridges. Plants with less leaves per stem, bigger leaves, less hair, and slightly stronger taste than Tennessee Red.

The following were collected by J.R. Harlan, USDA-ARS, Bureau of Plant Industry, Soils, and Agricultural Engineering, Beltsville, Maryland 20705-2350, United States. Received 01/16/1996.

**PI 592737. *Brassica nigra* (L.) Koch**

Uncertain. Collected 06/28/1948 in Balikesir, Turkey. Seed store, Ayvalik. Separation of species from original PI 169064.

The following were developed by Carl W. Johnson, California Cooperative Rice Research Foundation, Inc., P.O. Box 306, Biggs, California 95917, United States; S.T. Tseng, California Cooperative Rice Research Foundation, Inc., P.O. Box 306, Biggs, California 95917, United States; Kent S. McKenzie, California Cooperative Rice Research, Foundation, Inc., P.O. Box 306, Biggs, California 95917, United States; Jeff Oster, California Cooperative Rice Research, Foundation, Inc., P.O. Box 306, Biggs, California 95917, United States; J.E. Hill, University of California, Cooperative Extension Service, Dept. of Agronomy & Range Science, Davis, California, United States; D.M. Brandon, California Cooperative Rice Research Foundation, Inc., Biggs, California, United States. Received 01/12/1996.

**PI 592738. *Oryza sativa* L.**

Cultivar. Pureline. "S-102"; 91-Y-171; NSGC 6109. CV-104; PVP 9600305. Pedigree - Calpearl/Calmochi 101//Calpearl. Very early maturing, semidwarf, short grain. High head and total milled yield potential in five years of milling tests. 8% larger and more translucent kernel than S-201, the current California short-grain cultivar of similar quality type. Very similar to S-201 in physicochemical testing but some differences may be associated with the large kernel size. Lower level of chalkiness and average of 17 d earlier than S-201. Pubescent although

not heavily awned. Susceptible to stem rot and aggregate sheath spot. Reaction to diseases not prevalent in California is unknown.

**PI 592739. *Oryza sativa* L.**

Cultivar. Pureline. "L-204"; 92-Y-093; NSGC 6110. CV-105; PVP 9700052. Pedigree - Lemont//Tainung-sen-yu 2414/L-201. Early maturing long-grain rice. Photoperiod non-sensitive. Heads an average of 2 and 5 days earlier than L-203 and L-202, respectively. Seedling vigor similar to L-203 and slightly better than L-202. Plants awnless with glabrous leaves and hulls and about 1-2 inches taller than L-202 and L-203 when headed. Lodging resistance similar to L-202 and L-203. Yield more than 3% and 5% higher than L-202 and L-203, respectively. Apparent amylose content about 2% less than L-202 and L-203, and similar to traditional Southern U.S. rice varieties. Intermediate alkali spreading value.

**PI 592740. *Oryza sativa* L.**

Cultivar. Pureline. "A-201"; 91-Y-631; NSGC 6111. CV-106; PVP 9700051. Pedigree - L-202/PI 457920//L-202. Semidwarf aromatic long-grain rice. Photoperiod non-sensitive. Kernal brown, pericarp light brown. Heads about same time as L-202 and averages 8 days earlier than A-301. Plants awnless with glabrous leaves and hulls. Plant height about 2-3 inches taller than A-301 when headed. More likely to become very leafy under excessive nitrogen fertilization. Poor milling yield like A-301. Reaction to stem rot and aggregate sheath spot diseases similar to A-301. Intermediate alkali spreading value, and apparent amylose content 2-3% higher than A-301.

The following were developed by Blaine E. Johnson, University of Nebraska, Department of Agronomy, 326 Keim Hall, Lincoln, Nebraska 68583-0915, United States; Ricardo Preciado-Ortiz, Campo Experimental Bajio, Km. 65, Carr. Celaya-Sn. Miguel, Apdo. Post. 110, Celaya, Guanajuato, Mexico; Donald Hall, University of Nebraska, Dept. of Agronomy, Lincoln, Nebraska 68583-0915, United States. Received 02/28/1996.

**PI 592741. *Zea mays* L. ssp. *mays***

Genetic. Inbred. 93Nex307; N801w; 95LN53005. PL-180. Pedigree - Selfed from a population of 50% BSS13, with the other 50% of equal contributions of the CIMMYT populations PR7822, AC7642, Eto Sel Espy Foll, Braquitico, Bco Cristalino, PPMG, V401, and Bco Dentado 2. Evaluated as a line per se at Lincoln, Nebraska. Approximately 67 days from planting to initiation of pollen shed. Silk emergence begins approximately two days after pollen shed begins. Plants approximately 157cm in height with ears 76cm. Ears slightly tapered and contain twelve rows of kernal with no dent, but hard, white vitreous endosperm.

The following were developed by R.S. Albrechtsen, Utah Agr. Exp. Sta., Utah State University, Dept. of Plant Science, Logan, Utah 84322-4820, United States; W. Dewey, Utah State University, Dept. of Plants, Soils, and Biometeorology, Logan, Utah 4820, United States; S.M. Clawson, Utah State University, Dept. of Plants, Soils, and Biometeorology, Logan, Utah 84322-4820, United States; Gus Koerner, Utah State University, Plant Science Dept., Logan, Utah 84322-4820, United States; Bruce Bugbee, Utah State University, Logan, Utah 84322-4820, United States. Received 03/14/1996.

**PI 592742. *Triticum aestivum* L., nom. cons.**

Cultivar. Pureline. "USU-APOGEE". CV-840. Pedigree - Parula/Super dwarf. Hard red spring dwarf developed for high yields in controlled environments. Selected for short height, high yield, and resistance to calcium-induced tip necrosis. Extremely fast development rate. Heads emerge 21 days after emergence in continuous light with a constant 25 C temperature. Small flag leaves (14 to 20cm long depending on temperature during development). Close correlation between flag leaf size and head size (seeds per head) in yield trials. Resistant to the severe leaf tip necrosis that occurs in rapid growth conditions, particularly continuous light. Leaf tip necrosis (top 30% of the leaf) is associated with calcium-deficiency. Consistently outyields all other full dwarf (less than 0.5 m tall) cultivars tested. In warm temperature conditions (constant 23 C) the yield advantage is about 30%.

The following were developed by Arthur Yates & Co. Pty., Ltd., Rockhampton, Queensland 4700, Australia. Received 03/28/1995.

**PI 592743. *Lactuca sativa* L.**

Cultivar. "LEO82;PSR2879". PVP 9500283.

The following were developed by Paragon Seed, Inc., United States. Received 03/28/1996.

**PI 592744. *Lactuca sativa* L.**

Cultivar. "GREEN BEAUTY". PVP 9600110.

The following were developed by Pace Foods, Division of Campbell Soup Company, Texas, United States. Received 03/28/1996.

**PI 592745. *Capsicum annuum* L.**

Cultivar. "H78-1R". PVP 9600138.

**PI 592746. *Capsicum annuum* L.**

Cultivar. "HM1-Y". PVP 9600139.

The following were developed by CAS Custom Farming, Inc., dba Holland Cottonseed, United States. Received 03/28/1996.

**PI 592747. *Gossypium hirsutum* L.**

Cultivar. "HOLLAND 186". PVP 9600141.

The following were developed by Jacob Hartz Seed Company, Inc., Arkansas, United States. Received 03/28/1996.

**PI 592748. *Glycine max* (L.) Merr.**

Cultivar. "H 4994". PVP 9600142.

**PI 592749. *Glycine max* (L.) Merr.**



Cultivar. "H 6255". PVP 9600143.

The following were developed by Kimberly Campbell, Ohio State University, Ohio Agric. Res. and Development Center, Dept. of Horticulture & Crop Science, Wooster, Ohio 44691-4096, United States; Robert W. Gooding, Ohio State University, Ohio Agricultural Research & Development Center, Department of Agronomy, Wooster, Ohio 44691-4096, United States; H.N. Lafever, Ohio Agr. Res. and Dev. Center, Ohio State University, Department of Agronomy, Wooster, Ohio 44691-3878, United States; Larry D. Herald, Ohio State University, Dept. of Horticulture and Crop Science, Ohio Agric. Res. and Development Ctr., Wooster, Ohio 44691, United States. Received 03/28/1996.

**PI 592750. *Triticum aestivum* L., nom. cons.**

Cultivar. Pureline. "GLORY". CV-841; PVP 9600144. Pedigree - Tyler/Pioneer 2550. Soft red winter type. Juvenile growth habit erect. Spikes mostly erect with white chaff color. Heads typically possess 15 spikelets, apically awnletted. Glumes glabrous, long, wide with acuminate beaks. Kernels long, averaging 7 mm, red, ovate, narrow creases, rounded cheeks, and noncollared, medium length brush. Lodging resistant with superior winter survival. Moderate levels of adult-plant resistance to powdery mildew (*Blumeria graminis*), good resistance to wheat yellow mosaic virus, wheat soilborne mosaic virus, and barley yellow dwarf virus. Possesses Lr11, plus unidentified genes for resistance to leaf rust (*Puccinia recondita*).

The following were developed by Western Plant Breeders, Phoenix, Arizona, United States. Received 03/28/1996.

**PI 592751. *X Tritordeum* sp.**

Cultivar. "BORDER". PVP 9600145. Pedigree - *Hordeum vulgare*/*Triticum aestivum*.

The following were developed by Pure Line Seeds, Inc., P.O. Box 8866, Moscow, Idaho 83843, United States. Received 03/28/1996.

**PI 592752. *Pisum sativum* L.**

Cultivar. "FINESS". PVP 9600146.

**PI 592753. *Pisum sativum* L.**

Cultivar. "LEGACY". PVP 9600147.

The following were developed by Research and Development Institute, Inc., 1711 W. College, Montana State University, Bozeman, Montana 59715, United States. Received 03/28/1996.

**PI 592754. *Carthamus tinctorius* L.**

Cultivar. "ERLIN". PVP 9600148.

The following were developed by Turf Seed, Inc., Pure Seed Testing, P.O. Box 250, Hubbard, Oregon 97032, United States. Received 03/28/1996.

**PI 592755. *Festuca rubra* L.**  
Cultivar. "POLARIS". PVP 9600149.

The following were developed by Jeff P. Tomkins, Clemson University, Department of Agronomy and Soils, 275 Poole Agric. Center Box 340359, Clemson, South Carolina 29634-0359, United States; Emerson R. Shipe, Clemson University, Department of Agronomy and Soils, 275 Poole Agricultural Center, Clemson, South Carolina 29634-0359, United States; J.D. Mueller, Edisto Res. and Educ. Ctr., Dept. of Plant Pathology and Physiology, Blackville, South Carolina 29817, United States; P.F., Jr. Williams, Clemson University, Dept. of Agronomy, Clemson, South Carolina 29634, United States; Stephen Lewis, Clemson University, Dept. of Plant Pathology & Physiology, Clemson, South Carolina 29634-0377, United States. Received 03/28/1996.

**PI 592756. *Glycine max* (L.) Merr.**  
Cultivar. Pureline. "Dillon"; SC84-931. CV-368; PVP 9600151. Pedigree - Centennial X Young. Maturity group VI that matures from mid to late October in the southern USA. Growth habit determinate. Flowers purple, gray pubescence, and tan pod walls at maturity. Mature plants average 75-85cm in height. Seed size 14.5g 100 seed-1. Seeds yellow with buff hila color varying in intensity from light to dark. Seed protein and oil average 424 and 207g kg-1 seed, respectively. Resistant to southern root-knot nematode (*Meloidogyne incognita*). Resistant to foliar diseases bacterial pustule (*Xanthomonas campestris*), soybean mosaic virus, and races of frogeye leaf spot (*Cercospora soja*) prevalent in the southern USA. Susceptible to soybean cyst nematode (*Heterodera glycines*).

The following were developed by Seed Research of Oregon, Inc., Corvallis, Oregon, United States. Received 03/28/1996.

**PI 592757. *Festuca rubra* ssp. *fallax* (Thuill.) Nyman**  
Cultivar. "SANDPIPER". PVP 9600152.

The following were developed by Jerome D. Franckowiak, North Dakota State University, Department of Plant Sciences, P.O. Box 5051, Fargo, North Dakota 58105-5051, United States; Brian J. Steffenson, North Dakota State University, Department of Plant Pathology, P.O. Box 5012, Fargo, North Dakota 58105-5012, United States; Richard Horsley, North Dakota State University, Dept of Plant Sciences, Fargo, North Dakota 58105-5051, United States; P.B. Schwarz, North Dakota State University, Dept. of Cereal Science, Fargo, North Dakota 58105-5051, United States. Received 03/28/1996.

**PI 592758. *Hordeum vulgare* L. ssp. *vulgare***  
Cultivar. Pureline. "FOSTER". CV-268; PVP 9600154. Pedigree - Robust/6/Glenn/4/Nordic//Dickson/Trophy/3/Azure/5/Glenn/Karl. Released 1995. Awns semi-smooth. Kernels covered. Rachilla hairs long. Aleurone white. 4 cm shorter, heads 1 d earlier, better straw, and yields about 5% more than Robust. Resistant to spot blotch (*Cochliobolus sativus*) and prevalent pathotypes of wheat stem rust (*Puccinia graminis* f. sp. *tritici*) in Midwest U.S. except Pgt-QCC. Moderately susceptible to net blotch (*Pyrenophora teres*), and susceptible to loose smut (*Ustilago*

tritici). Percent grain protein up to 1.5 percentage units lower than Robust.

The following were developed by NDSU Research Foundation, North Dakota, United States. Received 03/28/1996.

**PI 592759. *Triticum aestivum* L., nom. cons.**  
Cultivar. "GLUPRO". PVP 9600155. Hard red spring type.

The following were developed by Robert K. Bacon, University of Arkansas, Dept. of Agronomy, 115 Plant Science Bldg., Fayetteville, Arkansas 72701, United States. Received 03/28/1996.

**PI 592760. *Triticum aestivum* L., nom. cons.**  
Cultivar. "JAYPEE". PVP 9600156.

The following were developed by NDSU Research Foundation, North Dakota, United States. Received 03/28/1996.

**PI 592761. *Triticum aestivum* L., nom. cons.**  
Cultivar. "ERNEST". PVP 9600157. Hard red spring type.

**PI 592762. *Zea mays* L. *ssp. mays***  
Cultivar. "ND277". PVP 9600160.

**PI 592763. *Zea mays* L. *ssp. mays***  
Cultivar. "ND278". PVP 9600161.

**PI 592764. *Zea mays* L. *ssp. mays***  
Cultivar. "ND279W". PVP 9600162.

The following were developed by Pioneer Hi-Bred International, Inc., United States. Received 03/28/1996.

**PI 592765. *Zea mays* L. *ssp. mays***  
Cultivar. "PH15A". PVP 9600163.

**PI 592766. *Zea mays* L. *ssp. mays***  
Cultivar. "PH18E". PVP 9600164.

**PI 592767. *Zea mays* L. *ssp. mays***  
Cultivar. "PH19A". PVP 9600165.

**PI 592768. *Zea mays* L. *ssp. mays***  
Cultivar. "PH20A". PVP 9600166.

**PI 592769. *Zea mays* L. *ssp. mays***  
Cultivar. "PH25A". PVP 9600167.

**PI 592770. *Zea mays* L. *ssp. mays***  
Cultivar. "PH39A". PVP 9600168.

- PI 592771. *Zea mays* L. *ssp. mays*  
Cultivar. "PH40B". PVP 9600169.
- PI 592772. *Zea mays* L. *ssp. mays*  
Cultivar. "PH41E". PVP 9600170.
- PI 592773. *Zea mays* L. *ssp. mays*  
Cultivar. "PH44A". PVP 9600171.
- PI 592774. *Zea mays* L. *ssp. mays*  
Cultivar. "PH47A". PVP 9600172.
- PI 592775. *Zea mays* L. *ssp. mays*  
Cultivar. "PH63A". PVP 9600173.
- PI 592776. *Zea mays* L. *ssp. mays*  
Cultivar. "PH63B". 9600174.
- PI 592777. *Zea mays* L. *ssp. mays*  
Cultivar. "PH67A". PVP 9600175.
- PI 592778. *Zea mays* L. *ssp. mays*  
Cultivar. "PH80B". PVP 9600176.
- PI 592779. *Zea mays* L. *ssp. mays*  
Cultivar. "PHFW4". PVP 9600177.
- PI 592780. *Zea mays* L. *ssp. mays*  
Cultivar. "PHND1". PVP 9600178.
- PI 592781. *Zea mays* L. *ssp. mays*  
Cultivar. "PHRF1". PVP 9600179.

The following were developed by Del Monte Corporation, California, United States. Received 03/28/1996.

- PI 592782. *Phaseolus vulgaris* L.  
Cultivar. "DMC 04-05". PVP 9600181.
- PI 592783. *Phaseolus vulgaris* L.  
Cultivar. "DMC 04-80". PVP 9600182.

The following were developed by NDSU Research Foundation, North Dakota, United States. Received 03/28/1996.

- PI 592784. *Hordeum vulgare* L.  
Cultivar. "LOGAN". PVP 9600183.

The following were developed by South Dakota Agr. Exp. Sta., South Dakota, United States. Received 03/28/1996.

**PI 592785. *Triticum aestivum* L., nom. cons.**  
Cultivar. "RUSS". PVP 9600184.

The following were developed by Nunhems Zaden B.V., Haelen Lb., Netherlands.  
Received 03/28/1996.

**PI 592786. *Phaseolus vulgaris* L.**  
Cultivar. "SAURUS". PVP 9600185.

The following were developed by Barham Seeds, Inc., 7080 Yorktown Drive,  
Gilroy, California 95021, United States. Received 03/28/1996.

**PI 592787. *Citrullus lanatus* (Thunb.) Matsum. & Nakai**  
Cultivar. "R26". PVP 9600186.

The following were developed by Pybas Vegetable Seed Co., Inc., United States  
. Received 03/28/1996.

**PI 592788. *Lactuca sativa* L.**  
Cultivar. "GOLIATH". PVP 9600187.

The following were developed by Kaneko Seeds Co., Ltd., Maebashi City, Japan.  
Received 03/28/1996.

**PI 592789. *Glycine max* (L.) Merr.**  
Cultivar. "Akibiyori". PVP 9600188.

**PI 592790. *Glycine max* (L.) Merr.**  
Cultivar. "Suzunishiki". PVP 9600189.

The following were developed by Jeff Wilson, USDA, ARS, Forage & Turf  
Research, Georgia Coastal Plain Experiment Station, Tifton, Georgia 31793,  
United States; Glenn W. Burton, USDA, ARS, Forage & Turf Research, Georgia  
Coastal Plain Experiment Station, Tifton, Georgia 31793, United States; Wayne  
W. Hanna, USDA, ARS, Coastal Plains Experiment Station, P.O. Box 748, Tifton,  
Georgia 31793, United States; R.N. Gates, USDA, ARS, Coastal Plain Exp. Sta.,  
Tifton, Georgia 31793, United States; G.M. Hill, University of Georgia, Dept.  
of Animal Science, Coastal Plain Exp. Stn., Tifton, Georgia 31793, United  
States. Received 03/28/1996.

**PI 592791. *Pennisetum glaucum* (L.) R. Br.**  
Cultivar. "TIFLEAF 3". CV-14; PVP 9600190. Pedigree - 3-way dwarf hybrid  
between dwarf cytoplasmic-nuclear male sterile single cross F1 hybrid  
Tift 8593 and dwarf pollinator, Tift 383. Semi-dwarf reaching height of  
222cm compared to 224cm for Tifleaf 2 at same planting date. Forage  
yields and in vitro dry matter digestibility similar to Tifleaf 2.  
Better rust (*Puccinia substriata*) resistance ( $P=0.05$ ) than Tifleaf 2.  
Heifers grazing produced gains equal to those grazing Tifleaf 2. Yield  
of commercial hybrid seed can usually be doubled by producing hybrid  
seed on Tift 8593 instead of on inbred Tift 85DA1.

The following were developed by Wayne W. Hanna, USDA, ARS, Coastal Plains Experiment Station, P.O. Box 748, Tifton, Georgia 31793, United States. Received 03/28/1996.

**PI 592792. *Pennisetum glaucum* (L.) R. Br.**

Cultivar. Inbred. "TIFT 93". PL-28; PVP 9600191. Pedigree - Derived from a pollen shedding plant selected from 89 plants of a pearl millet cms Tift 23D(2)A(1) x MN2 (2n=6x=42) (pearl millet x napiergrass interspecific hybrid) cross. Dwarf inbred averaging 122cm in height at maturity. Flowers 71 and 85 days after June 30 and May 7 planting dates, respectively. Seeds brownish gray. Sheds abundant pollen. Can be used to produce a cytoplasmic-nuclear male sterile (cms) F1 hybrid that produces twice as much commercial hybrid seed as produced on an inbred.

The following were developed by Lloyd R. Nelson, Texas Agricultural Experiment Station, The Texas A&M University System, Agricultural Research and Extension Center, Overton, Texas 75684-0290, United States. Received 08/01/1995.

**PI 592793. *Triticum aestivum* L., nom. cons.**

Breeding. Pureline. TX 82-11; NSGC 6112. Pedigree - IN 6525-6A-197/McNair 1003. Soft red winter wheat. Resistant to leaf rust. Good powdery mildew and Septoria nodorum resistance. Very good tillering. Good soft wheat quality. Low test weight.

The following were developed by David S. Marshall, Texas A&M University, Research & Extension Center, 17360 Coit Road, Dallas, Texas 75252-6599, United States. Received 08/01/1995.

**PI 592794. *Triticum aestivum* L., nom. cons.**

Breeding. Pureline. TX 89D2142; NSGC 6113. Pedigree - Oasis/Coker 68-15. Soft red winter wheat. Good source of adult-plant leaf rust resistance.

The following were developed by Ron D. Barnett, University of Florida, North Florida Res. & Ed. Center, R.#3, Box 4370, Quincy, Florida 32351, United States. Received 08/01/1995.

**PI 592795. *Triticum aestivum* L., nom. cons.**

Breeding. Pureline. FL 8643-G13-N9-3-PG5-G5; NSGC 6114. Pedigree - FL7920/Stella//FL7946/FL303 sib. Soft red winter wheat. Carries Biotype L Hessian fly resistance and probably has H9, H10 genes.

The following were developed by Robert I. Wolfe, Agriculture and Agri-Food Canada, Field Crop Development Centre, 5030 - 50 Street, Lacombe, Alberta T4L 1W8, Canada; J.G.N. Davidson, Agriculture and Agri-Food Canada, Box 748, Beaverlodge, Alberta T0H 0C0, Canada; S.M. Dofing, Agricultural and Forestry Experiment Station, 533 E. Fireweed, Palmer, Alaska 99645, United States; Philip Clarke, Agriculture & Agri-Food Canada, 195 Dafoe Road, Winnipeg, Manitoba R3T 2M9, Canada. Received 01/23/1996.

**PI 592796. *Hordeum vulgare* L. ssp. *vulgare***

Cultivar. Pureline. "AC ALBRIGHT"; PGR27230; BT670; 3703. CV-263. Pedigree - Otrá/6/(Weibull 1514-64)Morgenrot/5/Tammi/4/Maja/3/Opal//Hanna/Svanhals. Released 1993. Early hulled spring 6-row feed barley. Resembling Otal in most traits but about 9.4% higher yielding and 2 days later maturing. Head nodding. Lemma awns rough with green tip. Glume awns long, purplish tip. Aleurone yellow. Rachilla hairs short. Some lateral kernel overlap. Basal marking incomplete horseshoe depression. Susceptible to common diseases of barley in northwestern Canada, *Rhynchosporium secalis*, *Pyrenophora teres*, *Ustilago* spp., *Helminthosporium gramineum*, and common root rot (*Cochliobolus sativus* and *Fusarium*). Registered in Canada 1993.

The following were developed by Robert I. Wolfe, Agriculture and Agri-Food Canada, Field Crop Development Centre, 5030 - 50 Street, Lacombe, Alberta T4L 1W8, Canada; J.G.N. Davidson, Agriculture and Agri-Food Canada, Box 748, Beaverlodge, Alberta T0H 0C0, Canada; Philip Clarke, Agriculture & Agri-Food Canada, 195 Dafoe Road, Winnipeg, Manitoba R3T 2M9, Canada; D.G. Faris, Agriculture and Agri-Food Canada, 3946 Morgan St., Victoria, British Columbia V8X 3Z8, Canada. Received 01/23/1996.

**PI 592797. *Hordeum vulgare* L. ssp. *vulgare***

Cultivar. Pureline. "AC STACEY"; PGR26729; 3172; NRGB84-8; BT664; BT663. CV-264. Pedigree - Otal/Melvin. Released 1989. Hulled early maturing spring 6-row feed barley. Head nodding. Lemma and glume awns rough with green tip. Glume awns short. Aleurone yellow. Rachilla hairs short. Height fairly short. Some lateral kernel overlap. Many lemma veins purple. Basal marking a horseshoe depression. Excellent resistance to *Rhynchosporium secalis*. Resistant to *Pyrenophora teres* Wpg857, susc. to 102 & 858. Susceptible to *Ustilago hordei* and *U. nigra*, and highly susceptible to *U. nuda*. Susceptible to *Helminthosporium gramineum*, common root rot (*Cochliobolus sativus* and *Fusarium* spp.) and to *Puccinia graminis*. Registered in Canada 1989.

**PI 592798. *Hordeum vulgare* L. ssp. *vulgare***

Cultivar. Pureline. "JACKSON"; BT657; PGR27231; CN17839; Bv.56918-10; NRGB78-6; 2463. CV-265. Pedigree - Fjola/Husky (H64-35,BT607)/Pomo. Released 1985. Hulled, early maturing, spring, 6-row feed barley. Head fairly long and dense, curved near base. Aleurone yellow to pale blue. Rachilla hairs short. Lateral lemma veins barbed. Lemma awn long, rough, tip green. Lemma and palea finely wrinkled. Glume covered with long hairs, awn 4-5 times glume. Rachis edges tapered, hairy. Basal marking of kernel transverse crease. Test weight good. High yield for time of release. Susceptible to common barley diseases in northwestern Canada, particularly *Rhynchosporium secalis*. Susceptible to neck break. Registered in Canada 1985.

The following were developed by Robert I. Wolfe, Agriculture and Agri-Food Canada, Field Crop Development Centre, 5030 - 50 Street, Lacombe, Alberta T4L 1W8, Canada; Ken Campbell, Agriculture Canada, Plant Research Centre, Bldg 75, Plant Gene Resources, Ottawa, Ontario K1A 0C6, Canada; R.B. Irvine, Saskatchewan Irrigation Development Centre, Outlook, Saskatchewan S0L 2N0,

Canada. Received 04/11/1980.

**PI 592799. *Hordeum vulgare* L. ssp. *vulgare***

Cultivar. Pureline. "LEDUC"; Br. DS4-1; BT 337; CN2363; 2277; CIho 15852 . CV-260. Pedigree - Steptoe/Klondike. Released 1982. Hulled mid-season spring 6-row feed barley. Aleurone yellow. Rachilla hairs short. Lateral lemma veins barbed, awn rough, green tip. Glume covered with short hairs, awn short. Rachis edges tapered, glabrous. Susceptible to *Ustilago nuda*. Moderately resistant to *U. hordei* and *U. nigra*. Moderately resistant to *Rhynchosporium secalis*. Susceptible to *Puccinia graminis*, T gene, Pgt-QCC. Susceptible to *Pyrenophora teres* Winnipeg #102, res. to 857, mod. res. to 858. Susceptible to *Septoria passerinii* Wpg. #692. Moderately susceptible to common root rot (*Cochliobolus sativus* and *Fusarium* spp.).

The following were developed by Carl A. Griffey, Virginia Polytechnic Institute & State University, Dept. of Crop, Soil, & Environmental Sciences, 334-A Smyth Hall, Blacksburg, Virginia 24061-0404, United States; T. M. Starling, Virginia Polytechnic Inst. and State Univ., Virginia Agr. Exp. Sta., Department of Agronomy, Blacksburg, Virginia, United States; A.M. Price, VPI & SU, Crop & Soil Environmental Sciences, Blacksburg, Virginia, United States; W.L. Sisson, VPI & SU, Crop & Soil Environmental Sciences, Blacksburg, Virginia, United States; D.E. Brann, VPI & SU, Crop & Soil Environmental Sciences, Blacksburg, Virginia, United States. Received 01/23/1996.

**PI 592800. *Hordeum vulgare* L. ssp. *vulgare***

Cultivar. Pureline. "CALLAO"; VA 90-41-14. CV-267; PVP 9600260. Pedigree - Boone/Henry//Sussex. Released 1994. Short statured, early maturing, six-row winter feed barley with semi-compact spikes possessing awns of intermediate length. Head emergence (Julian=105 d) very early, similar to Sussex and 8 d earlier than Boone. Plant height (33 inches) 7-8 inches shorter than Sussex and Boone. Straw strength fair, similar to Boone. Moderate winter hardiness, and hardier than Sussex or Boone. Kernels very plump and exceptional grain volume weight (51 lb/bu), being 3 lb/bu higher than Boone. Resistant to powdery mildew (*Blumeria graminis*) and barley yellow dwarf, and superior to Boone in this respect. More resistant to leaf rust (*Puccinia hordei*) than Sussex and Boone but moderately susceptible to race 30.

The following were developed by Peggy Thaxton, Texas A&M University, Texas A&M University, Dept. of Soil and Crop Science, College Station, Texas 77843, United States; Kamal M. El-Zik, Texas A&M University, Department of Soil & Crop Sciences, College Station, Texas 77843, United States. Received 01/23/1996.

**PI 592801. *Gossypium hirsutum* L.**

Cultivar. Pureline. "TAMCOT SPHINX"; MAR-CD3PIHP45H-2-89. CV-109; PVP 9600134. Pedigree - [(Tamcot CD3Hx Para Inta) x Paymaster 145]. Glanded, normal leaf, normal bract, nectaried cotton, and is as hirsute as Tamcot HQ95. Growth habit cylindrical shape. Pollen cream color. Bolls storm resistant. Plant 4cm taller and less determinate than Tamcot HQ95. Produces significantly higher fiber quality and increased yield



potential than previously released Tamcot cultivars. Fiber length averages 1.07 inches, strength 28.8 g/tex, elongation 7.2, and micronaire 4.8. Higher levels of resistance to insects and diseases than those reported for Tamcot CAMD-E.

The following were developed by Jim Shine, Sugarcane Field Station, Star Route Box 8, Canal Point, Florida 33438, United States; B. Glaz, USDA, ARS, Sugarcane Field Station, Canal Point, Florida 33438, United States; P.Y.P. Tai, USDA-ARS, Sugarcane Field Station, Star Route Box 8, Canal Point, Florida 33438, United States; Christopher W. Deren, University of Florida, Institute of Food and Agriculture, EREC Box 8003, Belle Glade, Florida 33430, United States; Jimmie D. Miller, USDA, ARS, Sugarcane Field Station, Star Route Box 8, Canal Point, Florida 33438, United States; Jack C. Comstock, USDA-ARS, Sugarcane Field Station, Star Route Box 8, Canal Point, Florida 33438, United States. Received 01/23/1996.

**PI 592802. *Saccharum* hybrid**

Cultivar. "CP 84-1591". CV-103. Pedigree - Complex hybrid of *Saccharum officinarum*, *S. barberi*, *S. spontaneum*, and *S. sinense* selected from CP 72-1370 / CP 68-1022. Released as a sand land sugarcane. Stalk diameter large. Cane yield equals or exceeds check cultivars. Sugar concentration slightly less than check varieties. Adequate resistance to sugarcane mosaic virus, leaf scald (*Xanthomonas albilineans*), eye spot (*Bipolaris sacchari*), smut (*Ustilago scitaminea*) and rust (*Puccinia melanocephala*). Vegetatively propagated.

The following were donated by Instituto Nacional de Tecnologia Agropecuaria, EEA El Colorado, Formosa R.A.C.C. 5 3603, Argentina. Received 12/07/1993.

**PI 592803. *Acroceras macrum* Stapf**

Uncertain. BE-5018; Q 32741.

The following were donated by Burrell Seed Growers, Colorado, United States. Received 1961.

**PI 592804. *Capsicum annuum* L.**

Cultivated. BURRELLS ROCKY FORD.

The following were donated by Seed Research Specialists, California, United States. Received 1961.

**PI 592805. *Capsicum annuum* L.**

Cultivated. CHILE BOLITO.

The following were donated by Vaughan-Jacklin Corporation, 5300 Katrine Avenue, Downer'S Grove, Illinois 60515, United States. Received 1965.

**PI 592806. *Capsicum annuum* L.**

Cultivated. SUNNYBROOK.

The following were donated by Ferry-Morse Seed Company, United States.  
Received 1961.

**PI 592807. *Capsicum annuum* L.**  
Cultivated. SWEET YELLOW LONG.

The following were donated by Vaughan-Jacklin Corporation, 5300 Katrine Avenue, Downer'S Grove, Illinois 60515, United States. Received 1961.

**PI 592808. *Capsicum annuum* L.**  
Cultivated. WISCONSIN LAKES.

The following were donated by Ferry-Morse Seed Company, United States.  
Received 1961.

**PI 592809. *Capsicum annuum* L.**  
Cultivated. WONDERGREEN.

The following were donated by New Mexico Crop Imp. Assoc., New Mexico, United States. Received 1962.

**PI 592810. *Capsicum annuum* L.**  
Cultivated. SANDIA A.

**PI 592811. *Capsicum annuum* L.**  
Cultivated. NO 6-4. Medium tall plants. Pods 6 1/2 x 1 1/2", green to red, pendulous. New Mexico Impr. Assoc., New Mexico. Apr. 1962.

The following were donated by Petoseed Company, California, United States.  
Received 1962.

**PI 592812. *Capsicum annuum* L.**  
Cultivated. HUNGARIAN YELLOW WAX HOT.

**PI 592813. *Capsicum annuum* L.**  
Cultivated. RED CHERRY LARGE HOT.

**PI 592814. *Capsicum annuum* L.**  
Cultivated. RED CHERRY SMALL HOT.

**PI 592815. *Capsicum annuum* L.**  
Cultivated. CHERRY SWEET.

The following were donated by Joseph Harris Company, Inc., Moreton Farm, Rochester, New York 14624, United States. Received 1962.

**PI 592816. *Capsicum annuum* L.**  
Cultivated. SWEET BANANA.

The following were donated by Robinson & Sons, Lawrence, California, United States. Received 1962.

**PI 592817. *Capsicum annuum* L.**  
Cultivated. CALIFORNIA WONDER M R.

The following were donated by Ferry-Morse Seed Company, California, United States. Received 1962.

**PI 592818. *Capsicum annuum* L.**  
Cultivated. BULGARIAN.

**PI 592819. *Capsicum annuum* L.**  
Cultivated. YELLOW SWEET LONG.

The following were donated by Seed Research Specialists, California, United States. Received 1962.

**PI 592820. *Capsicum annuum* L.**  
Cultivated. HUNGARIAN YELLOW WAX HOT.

**PI 592821. *Capsicum annuum* L.**  
Cultivated. PIMIENTO.

The following were donated by Kuner-Empson Canning, Colorado, United States. Received 1962.

**PI 592822. *Capsicum annuum* L.**  
Cultivated. KUNERS SWEET CHERRY.

The following were donated by Ferry-Morse Seed Company, United States. Received 1963.

**PI 592823. *Capsicum annuum* L.**  
Cultivated. WORLD BEATER.

The following were donated by Wyoming USDA, ARS, Wyoming, United States. Received 1977.

**PI 592824. *Capsicum annuum* L.**  
Cultivated. WINDSOR A.

The following were donated by Burgess Seed and Plant Company, Galesburg, Michigan, United States. Received 1964.

**PI 592825. *Capsicum annuum* L.**  
Cultivated. KING OF THE NORTH.

The following were donated by Illinois Agr. Exp. Sta., University of Illinois, Urbana, Illinois 61801, United States. Received 1964.

**PI 592826. *Capsicum annuum* L.**

Cultivated. LINCOLN BELL. Vigorous, erect plant habit. Fruit set well above soil. Relatively broad leaves protect fruit from sunscald. Resistant to tobacco mosaic. Heavy fruit set thru cool season. Illinois Research 6(2):3, 1964. Seed World, June 26, 1964.

The following were donated by Corneli, Missouri, United States. Received 1964.

**PI 592827. *Capsicum annuum* L.**

Cultivated. SWEET BANANA.

The following were donated by W. Atlee Burpee Company, United States. Received 1964.

**PI 592828. *Capsicum annuum* L.**

Cultivated. LARGE CHERRY.

**PI 592829. *Capsicum annuum* L.**

Cultivated. PIMIENTO TRUHART.

The following were donated by Petoseed Company, California, United States. Received 1964.

**PI 592830. *Capsicum annuum* L.**

Cultivated. CALIFORNIA WONDER M R.

The following were donated by Farmer Seed Nursery Company, Fairbault, Minnesota, United States. Received 1965.

**PI 592831. *Capsicum annuum* L.**

Cultivated. SWEET CHOCOLATE.

The following were donated by H.G. Hastings Company, Atlanta, Georgia, United States. Received 1965.

**PI 592832. *Capsicum annuum* L.**

Cultivated. IMPROVED TRUHART PIMIENTO.

**PI 592833. *Capsicum annuum* L.**

Cultivated. ROYAL KING. Tall plant (24-28") with heavy foliage. High yield. Fruits 4-lobed, medium thick flesh, dark green to bright scarlet. Hastings Seed Co., Atlanta, Georgia, July 1965.

The following were donated by Petoseed Company, California, United States.

Received 1965.

**PI 592834. *Capsicum annuum* L.**

Cultivated. TITAN. Tall plant (26-32"), medium spreading, good yield and set. Large foliage. Resistant to tobacco mosaic virus. 4-lobed, blocky fruit, medium green with glossy sheen, pendulous. Petoseed, Saticoy, California, Nov. 1965.

The following were donated by Ferry-Morse Seed Company, United States.  
Received 1968.

**PI 592835. *Capsicum annuum* L.**

Cultivated. YOLO WONDER 43.

The following were donated by Farmer Seed Nursery Company, Fairbault, Minnesota, United States. Received 1970.

**PI 592836. *Capsicum annuum* L.**

Cultivated. NOSEGAY. Plant compact, small. Fruit upright, conical, purple at maturity. Farmer Seed and Nursery Co., p.20, 1969.

The following were donated by W. Atlee Burpee Company, United States.  
Received 1971.

**PI 592837. *Capsicum annuum* L.**

Cultivated. CHINESE GIANT.

The following were donated by K. Kmiecik, J. W. Jung Seed Company, Randolph, Wisconsin 53956, United States. Received 1979.

**PI 592838. *Capsicum annuum* L.**

Cultivated. 347 YELLOW BELLE.

The following were developed by Ken F. Grafton, North Dakota State University, Plant Sciences Department, P.O. Box 5051 SU Station, Fargo, North Dakota 58105-5051, United States; K.C. Chang, North Dakota State University, Dept. of Food and Nutrition, Fargo, North Dakota 58105, United States; J.R. Venette, North Dakota State University, Dept. of Plant Pathology, Fargo, North Dakota 58105, United States. Received 01/24/1996.

**PI 592839. *Phaseolus vulgaris* L.**

Cultivar. Pureline. "HATTON". CV-133; PVP 9600109. Pedigree - 83-003A/40842//83B229/3/5-383/83003/4/T295/TOPAZ. Similar in appearance to most traditional pinto cultivars. Maturity medium-early, approx. 94 days. Flowers white, semi-prostrate (Type IIIa) architecture. Pods cluster near base of plant and are not distributed equally throughout the plant profile. Erect canopy, height approx. 47cm. Seed acceptable pinto shape and color, but consistently larger than many pinto cultivars. Resistant to pathogroups I, II, III, IV, and VII of bean common mosaic virus. Moderately resistant to susceptible reactions to

bean rust (*Uromyces appendiculatus*). Susceptible to white mold (*Sclerotinia sclerotiorum*).

The following were developed by Robert L. Anderson, Cornell University, New York Agr. Exp. Station, Dept. of Horticultural Sciences, Geneva, New York 14456-0462, United States. Received 02/21/1995.

**PI 592840. *Prunus cerasus* L.**

Cultivar. "Surefire"; 29-2-44; GPRU 1. Collected in New York, United States. Pedigree - Borchert Black Sour x NY 6935 (Richmorency x Schattenmorelle). Late blooming tart cherry. Fruit: symmetrical, slight cordate; 24mm diam. x 20mm long; skin and flesh bright red; pit oblong-conic, small. Strong cherry flavor. Firmness similar to Montmorency; slightly more acid than Montmorency. Fruit ripens 65 days after full bloom. No rain-induced cracking. Tree: medium vigor, semi-upright, with relatively few branches. Cropping on spurs and previous season's growth; self-fruitful; flowers 5 to 7 days after Montmorency.

The following were developed by W.A. Alderman, Near East Foundation, Salonica, Greece. Donated by Gaylord Mink, Washington State University, Irrigated Agricultural Res. & Ext. Ctr., Route 2, Box 2953-A, Prosser, Washington 99350, United States. Received 02/24/1995.

**PI 592841. *Prunus cerasus* L.**

Cultivar. "North Star"; IR 117-1-7; GPRU 2. Collected in Minnesota, United States. Pedigree - EM x Serbia.

The following were donated by Gaylord Mink, Washington State University, Irrigated Agricultural Res. & Ext. Ctr., Route 2, Box 2953-A, Prosser, Washington 99350, United States. Received 02/24/1995.

**PI 592842. *Prunus fruticosa* Pallas**

Cultivar. "Dwarfrich"; IR 258-3-3; GPRU 3.

**PI 592843. *Prunus fruticosa* Pallas**

Uncertain. IR 323-2-3; GPRU 4; *P. fruticosa*.

**PI 592844. *Prunus cerasus* L.**

Cultivar. "Del Nord"; IR 1141-1-1; GPRU 5.

**PI 592845. *Prunus cerasus* L.**

Cultivar. "Montmorency"; IR 309-2-4; GPRU 6. Collected in France.

**PI 592846. *Prunus cerasus* L.**

Landrace. "Schatten Morello"; IR 1049-1-1; GPRU 7. Collected in Germany.

**PI 592847. *Prunus cerasus* L.**

Cultivar. "English Morello"; IR 93-3-3; GPRU 8. Collected in Germany.

The following were developed by W.A. Alderman, Near East Foundation,

Salonica, Greece. Donated by Gaylord Mink, Washington State University, Irrigated Agricultural Res. & Ext. Ctr., Route 2, Box 2953-A, Prosser, Washington 99350, United States. Received 02/24/1995.

**PI 592848. *Prunus cerasus* L.**

Cultivar. "Meteor"; IR 116-2-6; GPRU 9. Collected in Minnesota, United States. Pedigree - Montmorency x Russian seedling.

The following were donated by Gaylord Mink, Washington State University, Irrigated Agricultural Res. & Ext. Ctr., Route 2, Box 2953-A, Prosser, Washington 99350, United States. Received 02/24/1995.

**PI 592849. *Prunus cerasus* L.**

Cultivar. "Mesabi"; IR 1270-1; GPRU 10.

**PI 592850. *Prunus fruticosa* Pallas**

Uncertain. IR 881-2-1; GPRU 11; *P. fruticosa* (FR2).

**PI 592851. *Prunus fruticosa* Pallas**

Uncertain. IR 880-1-1; GPRU 12; *P. fruticosa* (FR1).

**PI 592852. *Prunus fruticosa* Pallas**

Uncertain. IR 882-1-1; GPRU 13; *P. fruticosa* (FR8).

The following were collected by Ralph Scorza, USDA, ARS, Appalachian Fruit Research Station, Route 2, P.O. Box 45 Wiltshire Road, Kearneysville, West Virginia 25430, United States. Received 03/01/1995.

**PI 592853. *Prunus cerasus* L.**

Cultivar. "Cigany 59"; Q22538A; GPRU 19. Collected in Hungary.

The following were donated by Inst. Sadowictwa Kwiaciarsstwa, 96-100 Skierniewice, Pomologiczna 18, Poland. Received 03/01/1995.

**PI 592854. *Prunus cerasus* L.**

Cultivar. "Pozog 29"; Q24290B; GPRU 20.

The following were donated by Gaylord Mink, Washington State University, Irrigated Agricultural Res. & Ext. Ctr., Route 2, Box 2953-A, Prosser, Washington 99350, United States. Received 03/08/1995.

**PI 592855. *Prunus cerasus* L.**

Cultivar. "Englaise Timpurii"; 26e-6-24; GPRU 23. Collected in Romania.

The following were developed by J. Apostol, Enterprise for Research and Extension, Budapest, Hungary. Donated by Amy F. Iezzoni, Michigan State University, Department of Horticulture, Horticulture Building, Lansing, Michigan 48823, United States. Received 03/08/1995.

**PI 592856. *Prunus cerasus* L.**

Cultivar. "Erdi Botermo"; II-37-15; GPRU 24. Collected in Hungary.  
Pedigree - Pandy 38 x Nagy Angol.

The following were donated by Amy F. Iezzoni, Michigan State University, Department of Horticulture, Horticulture Building, Lansing, Michigan 48823, United States. Received 03/08/1995.

**PI 592857. *Prunus cerasus* L.**

Cultivar. "Altaiskaja"; IV-7-6; GPRU 25. Collected in Russian Federation.

**PI 592858. *Prunus cerasus* L.**

Cultivar. "Ideal"; 25-11-50; GPRU 26. Collected in Russian Federation.

**PI 592859. *Prunus cerasus* L.**

Cultivar. "Dropia"; 26e-6-1; GPRU 27. Collected in Romania. Pedigree - Vladimskaja o.p.

The following were developed by J. Apostol, Enterprise for Research and Extension, Budapest, Hungary. Donated by Amy F. Iezzoni, Michigan State University, Department of Horticulture, Horticulture Building, Lansing, Michigan 48823, United States. Received 03/08/1995.

**PI 592860. *Prunus cerasus* L.**

Cultivar. "Csengodi Csokros"; II-30-29; GPRU 28. Collected in Hungary.

The following were donated by Amy F. Iezzoni, Michigan State University, Department of Horticulture, Horticulture Building, Lansing, Michigan 48823, United States. Received 03/08/1995.

**PI 592861. *Prunus cerasus* L.**

Cultivar. "Ameriana del Pescara"; RS-2-18; GPRU 29. Collected in Italy.

The following were developed by J. Apostol, Enterprise for Research and Extension, Budapest, Hungary. Donated by Amy F. Iezzoni, Michigan State University, Department of Horticulture, Horticulture Building, Lansing, Michigan 48823, United States. Received 03/08/1995.

**PI 592862. *Prunus cerasus* L.**

Cultivar. "M 172"; 26-12-16; GPRU 30. Collected in Hungary.

The following were donated by Amy F. Iezzoni, Michigan State University, Department of Horticulture, Horticulture Building, Lansing, Michigan 48823, United States. Received 03/08/1995.

**PI 592863. *Prunus cerasus* L.**

Cultivar. "Cerise Magnifique de Sceaux"; RS-3-7; GPRU 31. Collected in France.

The following were developed by J. Apostol, Enterprise for Research and



Extension, Budapest, Hungary. Donated by Amy F. Iezzoni, Michigan State University, Department of Horticulture, Horticulture Building, Lansing, Michigan 48823, United States. Received 03/08/1995.

**PI 592864. *Prunus cerasus* L.**

Cultivar. "Meteor Korai"; 26e-6-28; GPRU 32. Collected in Hungary.  
Pedigree - Pandy x Nagy Angol.

The following were donated by Amy F. Iezzoni, Michigan State University, Department of Horticulture, Horticulture Building, Lansing, Michigan 48823, United States. Received 03/08/1995.

**PI 592865. *Prunus cerasus* L.**

Cultivar. "Ukrainische Griotte"; RS-1-15; GPRU 33. Collected in Russian Federation.

**PI 592866. *Prunus cerasus* L.**

Cultivar. "Steinsbar"; 26-2-2; GPRU 34. Collected in Denmark.

**PI 592867. *Prunus cerasus* L.**

Landrace. "Pandy 114"; 26e-6-26; GPRU 35. Collected in Hungary.

The following were developed by J. Apostol, Enterprise for Research and Extension, Budapest, Hungary. Donated by Amy F. Iezzoni, Michigan State University, Department of Horticulture, Horticulture Building, Lansing, Michigan 48823, United States. Received 03/08/1995.

**PI 592868. *Prunus cerasus* L.**

Cultivar. "Erdi Jubileum"; 26-12-2; GPRU 36. Collected in Hungary.  
Pedigree - Pandy 38 x Eugenia.

The following were donated by Amy F. Iezzoni, Michigan State University, Department of Horticulture, Horticulture Building, Lansing, Michigan 48823, United States. Received 03/08/1995.

**PI 592869. *Prunus cerasus* L.**

Cultivar. "Tschernokorka"; RS-3-5; GPRU 37. Collected in Russian Federation.

**PI 592870. *Prunus cerasus* L.**

Cultivar. "Fructbare von Michurin"; II-9-3; GPRU 38. Collected in Russian Federation.

**PI 592871. *Prunus cerasus* L.**

Cultivar. "Sumadinka"; 25-1-64; GPRU 39. Collected in Yugoslavia.  
Pedigree - Heimann's Conserve x UNKNOWN.

**PI 592872. *Prunus cerasus* L.**

Cultivar. "Studencheskaja"; IV-6-15; GPRU 40.

**PI 592873. *Prunus cerasus* L.**

Cultivar. "Oblacinska"; 25-5-66; GPRU 41. Collected in Yugoslavia.

**PI 592874. *Prunus cerasus* L.**

Cultivar. "Pozog"; 25-15-67; GPRU 42. Collected in Poland.

The following were developed by J. Apostol, Enterprise for Research and Extension, Budapest, Hungary. Donated by Amy F. Iezzoni, Michigan State University, Department of Horticulture, Horticulture Building, Lansing, Michigan 48823, United States. Received 03/08/1995.

**PI 592875. *Prunus cerasus* L.**

Cultivar. "Korai Pipacs Meggy"; 25-1-65; GPRU 43. Collected in Hungary.  
Pedigree - Pandy x Csaszar.

**PI 592876. *Prunus cerasus* L.**

Cultivar. "Favorit"; IV-10-54; GPRU 44. Collected in Hungary. Pedigree - Pandy x Montreuilli.

The following were donated by Amy F. Iezzoni, Michigan State University, Department of Horticulture, Horticulture Building, Lansing, Michigan 48823, United States. Received 03/08/1995.

**PI 592877. *Prunus cerasus* L.**

Cultivar. "Kelleris 16"; 26e-6-19; GPRU 45. Collected in Denmark.  
Pedigree - Ostheimer x Fruheste der Mark.

The following were developed by J. Apostol, Enterprise for Research and Extension, Budapest, Hungary. Donated by Amy F. Iezzoni, Michigan State University, Department of Horticulture, Horticulture Building, Lansing, Michigan 48823, United States. Received 03/08/1995.

**PI 592878. *Prunus cerasus* L.**

Cultivar. "Ujgehertoi Furtos"; II-30-40; GPRU 46. Collected in Hungary.

The following were donated by Amy F. Iezzoni, Michigan State University, Department of Horticulture, Horticulture Building, Lansing, Michigan 48823, United States. Received 03/08/1995.

**PI 592879. *Prunus cerasus* L.**

Landrace. "Mocanesti 16"; III-22-39; GPRU 47. Collected in Romania.

**PI 592880. *Prunus cerasus* L.**

Cultivar. "Nefris"; RS-2-3; GPRU 48. Collected in Poland.

**PI 592881. *Prunus cerasus* L.**

Landrace. "Lubskaya"; II-14-9; GPRU 49. Collected in Russian Federation.

**PI 592882. *Prunus cerasus* L.**

Cultivar. "Sarandi"; 26-1-12; GPRU 50. Collected in Hungary.

**PI 592883. *Prunus cerasus* L.**

Cultivar. "Ferracida"; 26-1-2; GPRU 51. Collected in Italy.

- PI 592884. *Prunus fruticosa* Pallas**  
Wild. "BMT 3"; 26e-1-4; GPRU 52. Collected in Hungary.
- PI 592885. *Prunus fruticosa* Pallas**  
Wild. "Paza 1"; 26e-2-4; GPRU 53. Collected in Hungary.
- PI 592886. *Prunus fruticosa* Pallas**  
Wild. "Bt 1"; 26e-1-51; GPRU 54. Collected in Hungary.
- PI 592887. *Prunus fruticosa* Pallas**  
Wild. "BMS 4"; 26e-1-25; GPRU 55. Collected in Hungary.
- PI 592888. *Prunus fruticosa* Pallas**  
Wild. "BS 2"; 26e-1-18; GPRU 56. Collected in Hungary.
- PI 592889. *Prunus fruticosa* Pallas**  
Wild. "Pazt 2"; 26e-1-11; GPRU 57. Collected in Hungary.
- PI 592890. *Prunus cerasus* L.**  
Cultivar. "Griot Moskovskii"; II-38-22; GPRU 58. Collected in Russian Federation.

The following were developed by Wayne W. Hanna, USDA, ARS, Coastal Plains Experiment Station, P.O. Box 748, Tifton, Georgia 31793, United States.  
Received 03/28/1996.

- PI 592891. *Pennisetum glaucum* (L.) R. Br.**  
Cultivar. "TIFT 8593". GS-2; PVP 9600192. Pedigree - Cytoplasmic nuclear male sterile (cms) F1 hybrid from the cross Tift 85DA4 / Tift 93.  
Produces up to twice as much commercial hybrid seed when pollinated with inbred Tift 383 to produce Tifleaf 3 as does Tift 85DA4 alone. Seeds brownish-gray. Inflorescences about 27cm long compared with 16cm for Tift 85DA4. Flowers approx. 71 and 84 days after June 30 and May 7, respectively.

The following were developed by Northrup King Company, 1500 Jackson N.E., Minneapolis, Minnesota 55413, United States. Received 03/28/1996.

- PI 592892. *Glycine max* (L.) Merr.**  
Cultivar. "S08-80". PVP 9600193.
- PI 592893. *Glycine max* (L.) Merr.**  
Cultivar. "S18-11". PVP 9600194.
- PI 592894. *Glycine max* (L.) Merr.**  
Cultivar. "S23-06". PVP 9600195.

The following were developed by Hisparroz, S.A., Spain. Received 03/28/1996.

- PI 592895. *Oryza sativa* L.**  
Cultivar. "ISLA". PVP 9600196.

**PI 592896. *Oryza sativa* L.**  
Cultivar. "DENOSA". PVP 9600197.

The following were developed by Carl S. Hoveland, University of Georgia, College of Agric. & Environmental Sci., Department of Crop and Soil Sciences, Athens, Georgia 30602-7272, United States; Joseph H. Bouton, University of Georgia, Department of Crop & Soil Sciences, 3111 Plant Sciences Building, Athens, Georgia 30602, United States; Ronny R. Duncan, University of Georgia, Georgia Agricultural Exp. Station, Department of Agronomy, Griffin, Georgia 30223-1797, United States; R.N. Gates, USDA, ARS, Coastal Plain Exp. Sta., Tifton, Georgia 31793, United States; D.T. Wood, University of Georgia, Dept. of Crop and Soil Sciences, Athens, Georgia 30602, United States; University of Georgia Research Foundation, Inc., Georgia, United States. Received 03/23/1996.

**PI 592897. *Festuca arundinacea* Schreber**  
Cultivar. "JESUP"; GA-Jesup Improved; GA-Jesup Improved-EI; GA-Jesup Improved-EF. CV-60; PVP 9600391. Pedigree - 15 clone synthetic originating from Kentucky 31 tall fescue. Adapted to the southeastern U.S. and low maintenance, marginal areas of the tall fescue transition zone. Intended for use as forage and turf. Average heading date equal to Georgia 5 and Kentucky 31, but earlier than Rebel and later than AU Triumph. Endophyte-infected (EI), consistently demonstrated better long term plant stand survival than Kentucky 31 (EI) and as good or better survival than Georgia 5. Endophyte-free (EF), showed better ability than AU Triumph to maintain stands after harsh summer conditions, and to give steer gains similar to alfalfa in low-maintenance turf conditions. Endophyte-infected demonstrated more persistence and a superior ability to retain stands than either Kentucky 31 (EI) or Rebel.

The following were developed by Jorge A. Acosta-Gallegos, National Research Institute for Forestry Agriculture, CIRNOC-INIFAP-SARAH, Bean Program, Valle de Mexico Experimental Station, Chapingo, Mexico 56230, Mexico; E. Lopez-Salinas, National Research Institute for Forestry, Agric. & Livestock, Bean Program, Cotaxtla Exp. Stn., Veracruz, Veracruz CP 91700, Mexico; E.N. Becerra-Leor, National Research Institute for Forestry, Agric. & Livestock, Bean Program, Cotaxtla Exp. Sta., Veracruz, Veracruz CP 91700, Mexico; G. Frayre-Vazquez, National Research Institute for Forestry, Agric. & Livestock, Izapa Exp. Stn., Apdo. Postal 50, Tapachula, Chiapas, Mexico; S.H. Orozco, Centro Internacional de Agricultura Tropical, Apdo. Aereo 6713, Cali, Colombia; S.E. Beebe, Centro Internacional de Agricultura Tropical, Apdo. Aereo 6713, Cali, Colombia. Received 03/19/1996.

**PI 592898. *Phaseolus vulgaris* L.**  
Cultivar. "NEGRO TACANA"; DOR390. CV-138. Pedigree - (DOR 364/G 18521)/(DOR 365/LM30630). Indeterminate type II growth habit adapted to lowland tropics of Mexico and Central America. Resistant to Bean Golden Mosaic Virus and anthracnose and tolerant to rust and angular leaf spot. Average flowering and maturity dates are 38 and 90 days after planting.

The following were collected by S.M. Lim, USDA, ARS, University of Illinois,

Department of Plant Pathology, Urbana, Illinois 61801, United States.  
Received 1993.

**PI 592899. Glycine max** (L.) Merr.  
Cultivated. SY 930166. Collected 02/03/1989 in China.

**PI 592900. Glycine max** (L.) Merr.  
Cultivated. SY 930168. Collected 02/03/1989 in China.

**PI 592901. Glycine max** (L.) Merr.  
Cultivated. SY 930169. Collected 02/03/1989 in China.

The following were donated by T.E. Carter, USDA, ARS, North Carolina State University, 3127 Ligon Street Box 7631, Raleigh, North Carolina 27695-7631, United States; S. Miyazaki, Natl. Inst. of Agrobiological Resources, Kannondai, Tsukuba, Ibaraki, Japan. Received 08/04/1993.

**PI 592902. Glycine max** (L.) Merr.  
Cultivated. Inbred. Akiyoshi; SY 940002. = PI561383.

**PI 592903. Glycine max** (L.) Merr.  
Cultivated. Inbred. Geden Shirazu 1; SY 940005.

**PI 592904. Glycine max** (L.) Merr.  
Cultivated. Inbred. Hougyoku; SY 940006.

**PI 592905. Glycine max** (L.) Merr.  
Cultivated. Inbred. Kitami nagaha; SY 940008.

**PI 592906. Glycine max** (L.) Merr.  
Cultivated. Inbred. Shirotae; SY 940017.

Unknown source. Received 10/07/1993.

**PI 592907. Glycine max** (L.) Merr.  
Cultivated. Inbred. #19 YY; YY; SY 940021.

Unknown source. Received 10/07/1993.

**PI 592907 A. Glycine max** (L.) Merr.

Unknown source. Received 10/07/1993.

**PI 592907 B. Glycine max** (L.) Merr.

Unknown source. Received 10/07/1993.

**PI 592907 C. Glycine max** (L.) Merr.

Unknown source. Received 10/07/1993.

**PI 592907 D. Glycine max (L.) Merr.**

Unknown source. Received 10/07/1993.

**PI 592908. Glycine max (L.) Merr.**

Cultivated. Inbred. #20 BrBr; BrBr; SY 940022.

Unknown source. Received 10/07/1993.

**PI 592909. Glycine max (L.) Merr.**

Cultivated. Inbred. #21 BlBl; BlBl; SY 940023.

Unknown source. Received 10/07/1993.

**PI 592910. Glycine max (L.) Merr.**

Cultivated. Inbred. #22 YY; YY; SY 940024.

Unknown source. Received 10/07/1993.

**PI 592911. Glycine max (L.) Merr.**

Cultivated. Inbred. #23 YBl; YBl; SY 940025.

Unknown source. Received 10/07/1993.

**PI 592911 A. Glycine max (L.) Merr.**

Unknown source. Received 10/07/1993.

**PI 592911 B. Glycine max (L.) Merr.**

Unknown source. Received 10/07/1993.

**PI 592912. Glycine max (L.) Merr.**

Cultivated. Inbred. #24 YY; YY; SY 940026.

Unknown source. Received 10/07/1993.

**PI 592912 A. Glycine max (L.) Merr.**

Unknown source. Received 10/07/1993.

**PI 592912. Glycine max** (L.) Merr.

Unknown source. Received 10/07/1993.

**PI 592913. Glycine max** (L.) Merr.

Cultivated. Inbred. #25 YY; YY; SY 940027.

The following were donated by Gai Junyi, Germplasm Bank, Soybean Research Institute,, Nanjing Agricultural University, Nanjing, Jiangsu, China.  
Received 03/1994.

**PI 592914. Glycine max** (L.) Merr.

Cultivated. Inbred. 1138-2; SY 9401001.

The following were donated by Ruzhen Chang, Chinese Academy of Agricultural Sciences, Institute of Crop Germplasm Resources, Beijing, China. Received 03/1994.

**PI 592915. Glycine max** (L.) Merr.

Cultivated. Inbred. Hei he 9 hao; ZDD 17672; SY 9403001.

**PI 592916. Glycine max** (L.) Merr.

Cultivated. Inbred. Feng shou 21; ZDD 17690; SY 9403002.

**PI 592917. Glycine max** (L.) Merr.

Cultivated. Inbred. Dong nong 42; SY 9403003.

**PI 592918. Glycine max** (L.) Merr.

Cultivated. Inbred. He feng 30; ZDD 17687; SY 9403004.

**PI 592919. Glycine max** (L.) Merr.

Cultivated. Inbred. He feng 31; ZDD 17688; SY 9403005.

**PI 592920. Glycine max** (L.) Merr.

Cultivated. Inbred. He feng 33; SY 9403006.

**PI 592921. Glycine max** (L.) Merr.

Cultivated. Inbred. Hei nong 37; SY 9403007.

**PI 592922. Glycine max** (L.) Merr.

Cultivated. Inbred. Hong feng 3 hao; ZDD 06833; SY 9403008.

**PI 592923. Glycine max** (L.) Merr.

Cultivated. Inbred. Ken nong 2 hao; ZDD 17679; SY 9403009.

**PI 592924. Glycine max** (L.) Merr.

Cultivated. Inbred. Ken nong 4 hao; SY 9403010.

- PI 592925. *Glycine max* (L.) Merr.  
Cultivated. Inbred. Bai nong 1 hao; ZDD 07240; SY 9403011.
- PI 592926. *Glycine max* (L.) Merr.  
Cultivated. Inbred. Tong nong 8 hao; ZDD 17876; SY 9403012.
- PI 592927. *Glycine max* (L.) Merr.  
Cultivated. Inbred. Chen dou 4 hao; ZDD 20648; SY 9403013.
- PI 592928. *Glycine max* (L.) Merr.  
Cultivated. Inbred. Gong dou 4 hao; ZDD 20670; SY 9403014.
- PI 592929. *Glycine max* (L.) Merr.  
Cultivated. Inbred. Guan dou 1 hao; ZDD 11220; SY 9403015.
- PI 592930. *Glycine max* (L.) Merr.  
Cultivated. Inbred. Xiang chun dou 12; ZDD 21930; SY 9403016.
- PI 592931. *Glycine max* (L.) Merr.  
Cultivated. Inbred. Yin huang 4 hao; ZDD 19368; SY 9403017.
- PI 592932. *Glycine max* (L.) Merr.  
Cultivated. Inbred. Zao shu 9 hao; ZDD 08031; SY 9403018.
- PI 592933. *Glycine max* (L.) Merr.  
Cultivated. Inbred. Zao shu 14; ZDD 08029; SY 9403019.
- PI 592934. *Glycine max* (L.) Merr.  
Cultivated. Inbred. Zhe chun 2 hao; SY 9403020.
- PI 592935. *Glycine max* (L.) Merr.  
Cultivated. Inbred. Fu dou 1 hao; ZDD 21497; SY 9403021.
- PI 592936. *Glycine max* (L.) Merr.  
Cultivated. Inbred. Ji dou 7 hao; ZDD 18632; SY 9403022.
- PI 592937. *Glycine max* (L.) Merr.  
Cultivated. Inbred. Jin dou 14; ZDD 18846; SY 9403023.
- PI 592938. *Glycine max* (L.) Merr.  
Cultivated. Inbred. Jin dou 15; ZDD 18847; SY 9403024.
- PI 592939. *Glycine max* (L.) Merr.  
Cultivated. Inbred. Jin dou 16; ZDD 18848; SY 9403025.
- PI 592940. *Glycine max* (L.) Merr.  
Cultivated. Inbred. Jin dou 17; ZDD 18849; SY 9403026.
- PI 592941. *Glycine max* (L.) Merr.  
Cultivated. Inbred. Liao 86-5453; ZDD 18077; SY 9403027.
- PI 592942. *Glycine max* (L.) Merr.  
Cultivated. Inbred. 7605; ZDD 09874; SY 9403028.



- PI 592943. **Glycine max** (L.) Merr.  
Cultivated. Inbred. Lu dou 6 hao; ZDD 09889; SY 9403029.
- PI 592944. **Glycine max** (L.) Merr.  
Cultivated. Inbred. Tie feng 22; ZDD 07652; SY 9403030.
- PI 592945. **Glycine max** (L.) Merr.  
Cultivated. Inbred. Zhong huang 1 hao; ZDD 18399; SY 9403031.
- PI 592946. **Glycine max** (L.) Merr.  
Cultivated. Inbred. Ji dou 4 hao; ZDD 18630; SY 9403032.
- PI 592947. **Glycine max** (L.) Merr.  
Cultivated. Inbred. Jin yi 9 hao; ZDD 18878; SY 9403033.
- PI 592948. **Glycine max** (L.) Merr.  
Cultivated. Inbred. Jin yi 10 hao; ZDD 18879; SY 9403034.
- PI 592949. **Glycine max** (L.) Merr.  
Cultivated. Inbred. Yu dou 18; ZDD 10093; SY 9403035.
- PI 592950. **Glycine max** (L.) Merr.  
Cultivated. Inbred. Yu dou 11; ZDD 19405; SY 9403036.
- PI 592951. **Glycine max** (L.) Merr.  
Cultivated. Inbred. Zheng 133; ZDD 19407; SY 9403037.
- PI 592952. **Glycine max** (L.) Merr.  
Cultivated. Inbred. Zheng 77249; ZDD 10095; SY 9403038.
- PI 592953. **Glycine max** (L.) Merr.  
Cultivated. Inbred. Zhong dou 19; ZDD 11579; SY 9403039.
- PI 592954. **Glycine max** (L.) Merr.  
Cultivated. Inbred. Nin zhen 1 hao; ZDD 11242; SY 9403040.

Unknown source. Received 06/30/1994.

- PI 592955. **Glycine max** (L.) Merr.  
Cultivated. Inbred. SY 9410001.

Unknown source. Received 06/30/1994.

- PI 592956. **Glycine max** (L.) Merr.  
Cultivated. SY 9411001.

Unknown source. Received 06/1995.

- PI 592957. **Glycine max** (L.) Merr.  
Cultivated. Inbred. Chang nong 5; SY 9508001.

Unknown source. Received 06/1995.

**PI 592958. Glycine max** (L.) Merr.  
Cultivated. Inbred. Chang nong 6; SY 9508002.

Unknown source. Received 06/1995.

**PI 592959. Glycine max** (L.) Merr.  
Cultivated. Inbred. Chang nong 7; SY 9508003.

Unknown source. Received 06/1995.

**PI 592960. Glycine max** (L.) Merr.  
Cultivated. Inbred. Dong nong 38; SY 9508004.

Unknown source. Received 06/1995.

**PI 592961. Glycine max** (L.) Merr.  
Cultivated. Inbred. Dong nong 41; SY 9508005.

Unknown source. Received 06/1995.

**PI 592962. Glycine max** (L.) Merr.  
Cultivated. Inbred. Hei nong 30; SY 9508006.

Unknown source. Received 06/01/1995.

**PI 592962 A. Glycine max** (L.) Merr.

Unknown source. Received 06/01/1995.

**PI 592962 B. Glycine max** (L.) Merr.

Unknown source. Received 06/1995.

**PI 592963. Glycine max** (L.) Merr.  
Cultivated. Inbred. Hei nong 31; SY 9508007.

Unknown source. Received 06/1995.

**PI 592964. Glycine max** (L.) Merr.  
Cultivated. Inbred. Hei nong 32; SY 9508008.

Unknown source. Received 06/1995.

**PI 592965. *Glycine max* (L.) Merr.**  
Cultivated. Inbred. Hei nong 33; SY 9508009.

Unknown source. Received 06/1995.

**PI 592966. *Glycine max* (L.) Merr.**  
Cultivated. Inbred. Hei nong 35; SY 9508010.

Unknown source. Received 06/1995.

**PI 592967. *Glycine max* (L.) Merr.**  
Cultivated. Inbred. Hei nong 36; SY 9508011.

Unknown source. Received 06/1995.

**PI 592968. *Glycine max* (L.) Merr.**  
Cultivated. Inbred. Jilin 25; SY 9508012.

Unknown source. Received 06/1995.

**PI 592969. *Glycine max* (L.) Merr.**  
Cultivated. Inbred. Jilin 28; SY 9508013.

Unknown source. Received 06/1995.

**PI 592970. *Glycine max* (L.) Merr.**  
Cultivated. Inbred. Jilin 29; SY 9508014.

Unknown source. Received 06/1995.

**PI 592971. *Glycine max* (L.) Merr.**  
Cultivated. Inbred. Jin dou 35; SY 9508015.

Unknown source. Received 06/1995.

**PI 592972. *Glycine max* (L.) Merr.**  
Cultivated. Inbred. Kaiyu 9; SY 9508016.

Unknown source. Received 06/1995.

**PI 592973. *Glycine max* (L.) Merr.**  
Cultivated. Inbred. Kaiyu 10; SY 9508017.

Unknown source. Received 06/1995.

**PI 592974. Glycine max** (L.) Merr.  
Cultivated. Inbred. Liao dou 10; SY 9508018.

Unknown source. Received 06/1995.

**PI 592975. Glycine max** (L.) Merr.  
Cultivated. Inbred. Sui nong 5; SY 9508019.

Unknown source. Received 06/1995.

**PI 592976. Glycine max** (L.) Merr.  
Cultivated. Inbred. Sui nong 8; SY 9508020.

Unknown source. Received 06/1995.

**PI 592977. Glycine max** (L.) Merr.  
Cultivated. Inbred. Sui nong 9; SY 9508021.

Unknown source. Received 06/1995.

**PI 592978. Glycine max** (L.) Merr.  
Cultivated. Inbred. Tie feng 24; SY 9508022.

Unknown source. Received 06/1995.

**PI 592979. Glycine max** (L.) Merr.  
Cultivated. Inbred. Tie feng 25; SY 9508023.

Unknown source. Received 06/1995.

**PI 592980. Glycine max** (L.) Merr.  
Cultivated. Inbred. Tie feng 26; SY 9508024.

Unknown source. Received 06/1995.

**PI 592981. Glycine max** (L.) Merr.  
Cultivated. Inbred. Tie feng 27; SY 9508025.

The following were developed by Edward J. Souza, University of Idaho, Aberdeen Research & Extension Center, P.O. Box AA, Aberdeen, Idaho 83210, United States; J.M. Windes, Idaho Agr. Exp. Sta., Univ. of Idaho, Plant, Soils, and Entomological Sci., Aberdeen Research and Extension Ctr., Aberdeen, Idaho 83210, United States; D.W. Sunderman, USDA-ARS, Univ. of Idaho Research & Extension Center, P.O. Box AA, Aberdeen, Idaho 83210, United States; Katherine O'Brien, University of Idaho, Aberdeen Research & Extension Center, P.O. Box AA, Aberdeen, Idaho 83210, United States. Received 04/02/1996.

**PI 592982. *Triticum aestivum* L., nom. cons.**

Cultivar. Pureline. "WHITEBIRD"; IDO392; NSGC 6125. CV-837. Pedigree - Owens/IDO159. Soft white spring wheat with dark green foliage and erect juvenile growth habit. Heads approx. 3 d earlier than Treasure and 2 d later than Centennial. Approx. 2cm shorter than Fieldwin at heading. Heads lax, awned with glumes long, medium wide, with square shoulders and acuminate beak. White chaffed mid-season similar to Penawawa at maturity. Seed elliptical with wide, shallow crease. Resistance to stripe rust. Moderate resistance to leaf rust (*P. recondita*) and stem rust (*P. graminis*). Lodging resistance comparable to Penawawa and significantly better than Treasure. Grain milling and baking qualities similar to Treasure.

**PI 592983. *Triticum aestivum* L., nom. cons.**

Cultivar. Pureline. "POMERELLE"; NSGC 6126. CV-838. Pedigree - A771084S-B/IDO246. Soft white spring wheat similar in appearance to Treasure. Foliage dark green with semi-prostrate juvenile growth habit. Heads approx. 1 d earlier and is approx. 2cm shorter than Treasure at heading. Semi-clavate, awned head type with long and wide glumes, oblique shoulders and acuminate beak. Long season with chaff white at maturity. Seed oval, wide and shallow at the crease. Resistance to stripe rust and stem rust (*P. graminis*). Moderate susceptibility to leaf rust (*P. recondita*). Significantly better lodging resistance than Treasure. Grain milling and baking quality similar to Treasure.

The following were developed by Suzi Halbert, University of Idaho, University Research & Education Center, P.O. Box AA, Aberdeen, Idaho 83210, United States; Edward J. Souza, University of Idaho, Aberdeen Research & Extension Center, P.O. Box AA, Aberdeen, Idaho 83210, United States; C.M. Smith, University of Idaho, Dept of Plant, Soil & Entomological Sci., Moscow, Idaho 83843, United States; Robert S. Zemetra, University of Idaho, Department of Plant, Soil and Entomology, Moscow, Idaho 83843, United States; J.M. Windes, Idaho Agr. Exp. Sta., Univ. of Idaho, Plant, Soils, and Entomological Sci., Aberdeen Research and Extension Ctr., Aberdeen, Idaho 83210, United States; S.S. Quisenberry, University of Nebraska, Dept. of Entomol., Lincoln, Nebraska 68583-0816, United States; D.J. Shotzko, University of Idaho, Dept. of Plant, Soils, Entomol. Sci., Moscow, Idaho 83844, United States; P.F. Lamb, University of Idaho, Dept. of Plant, Soils, Entomol. Sci., Moscow, Idaho 83844, United States. Received 04/02/1996.

**PI 592984. *Triticum aestivum* L., nom. cons.**

Breeding. Pureline. IDO471A; Idaho 471A; NSGC 6127. GP-518. Pedigree - PI 294994/4\*Centennial. Similar to Centennial in appearance. Coleoptiles green, erect juvenile growth habit, and green foliage without waxy bloom. Heads mid-dense, erect, and awned. Heading date 2 d later than Centennial. At maturity, chaff white and soft white seed. Resistance to Russian wheat aphid (*Diuraphis noxia*). Similar to Centennial for yield and test weight. Resistance to stripe rust (*Puccinia striiformis*). Milling and baking quality similar to Centennial.

**PI 592985. *Triticum aestivum* L., nom. cons.**

Breeding. Pureline. IDO471B; Idaho 471B; NSGC 6128. GP-519. Pedigree - PI 294994/4\*Centennial. Similar to Centennial in appearance. Coleoptiles

green, erect juvenile growth habit, and green foliage without waxy bloom. Heads mid-dense, erect, and awned. Heading date similar to Centennial. At maturity, chaff white and soft white seed. Resistance to Russian wheat aphid (*Diuraphis noxia*). Similar to Centennial for yield and test weight. Resistance to stripe rust (*Puccinia striiformis*). Milling and baking qualities similar to Centennial.

The following were developed by Edward J. Souza, University of Idaho, Aberdeen Research & Extension Center, P.O. Box AA, Aberdeen, Idaho 83210, United States. Received 04/02/1996.

**PI 592986. *Triticum aestivum* L., nom. cons.**

Breeding. Pureline. IDO488; NSGC 6129. Pedigree - PI 294994/4\*Centennial.

The following were developed by Suzi Halbert, University of Idaho, University Research & Education Center, P.O. Box AA, Aberdeen, Idaho 83210, United States; Edward J. Souza, University of Idaho, Aberdeen Research & Extension Center, P.O. Box AA, Aberdeen, Idaho 83210, United States; C.M. Smith, University of Idaho, Dept of Plant, Soil & Entomological Sci., Moscow, Idaho 83843, United States; Robert S. Zemetra, University of Idaho, Department of Plant, Soil and Entomology, Moscow, Idaho 83843, United States; J.M. Windes, Idaho Agr. Exp. Sta., Univ. of Idaho, Plant, Soils, and Entomological Sci., Aberdeen Research and Extension Ctr., Aberdeen, Idaho 83210, United States; S.S. Quisenberry, University of Nebraska, Dept. of Entomol., Lincoln, Nebraska 68583-0816, United States; D.J. Shotzko, University of Idaho, Dept. of Plant, Soils, Entomol. Sci., Moscow, Idaho 83844, United States; P.F. Lamb, University of Idaho, Dept. of Plant, Soils, Entomol. Sci., Moscow, Idaho 83844, United States. Received 04/02/1996.

**PI 592987. *Triticum aestivum* L., nom. cons.**

Breeding. Pureline. IDO472; Idaho 472; NSGC 6130. GP-520. Pedigree - PI 137739/3\*Penawawa. Similar to Penawawa in appearance. Coleoptile green, erect juvenile growth habit, and green foliage with absent waxy bloom. Heads mid-dense, erect, and awned. Flowers approx. 2 d later than Penawawa and 5cm taller than Penawawa. Chaff white at maturity. Seed soft white and elliptical in shape with angular cheeks. Seed crease mid-wide but deeper than Penawawa. Resistance to Russian wheat aphid (*Diuraphis noxia*). Significantly reduced D. noxia induced leaf rolling and leaf folding than Penawawa. Grain yield similar to Penawawa. Grain volume weight significantly lower than Penawawa. Resistance to stripe rust (*Puccinia striiformis*) similar to Penawawa. Milling and baking qualities similar to Penawawa.

The following were developed by Richard Pickering, Crop & Food Research, Private Bag 4704, Christchurch, New Zealand. Received 04/02/1996.

**PI 592988. *Hordeum vulgare* L. ssp. *vulgare***

Breeding. 53A8; NSGC 6131. Pedigree - Doubled haploid derived from a heterozygous recombinant, 30X2, selection from the cross Golden Promise//Golden Promise/*Hordeum bulbosum* Ch2920/4/Colch. Homozygous doubled haploid barley. Carries a pubescent leaf sheath, derived from *H. bulbosum*. Shows some characteristics of a winter type barley under long

day lengths.

The following were developed by Ferry-Morse Seed Company, United States.  
Received 1983.

**PI 592989. *Beta vulgaris* L.**

Cultivar. "RED BARON"; NSL 181925. PVP 8200060.

The following were developed by United AgriSeeds, Inc., Illinois, United States. Received 1987.

**PI 592990. *Triticum aestivum* L., nom. cons.**

Cultivar. Pureline. "7101"; NSL 209735. PVP 8700068.

The following were donated by Universidad De San Carlos De Guatemala, Ciudad Universitaria, Guatemala. Received 03/27/1984.

**PI 592991. *Ipomoea* sp.**

Wild. Chino A; C 13739; Q 24531; CAMOTE BLANCO.

The following were donated by Guillermo Delgado, Universidad Nacional Pedro Ruiz Gallo, 8 De Octubra No. 637, Lambayeque, Peru. Received 09/05/1985.

**PI 592992. *Ipomoea batatas* (L.) Lam. var. *batatas***

Uncertain. 95; C 16679; Q 25730.

The following were donated by F. Martin, USDA-ARS, Tropical Research Station, P.O. Box 70, Mayaguez, Puerto Rico. Received 04/27/1987.

**PI 592993. *Ipomoea batatas* (L.) Lam. var. *batatas***

Cultivar. "PERLA"; BE-1227; SPV-93; Q 26771. White fleshed, low sweet attractive form. Potential as an early variety (10 weeks).

The following were donated by Dan Austin, Florida Atlantic University, Department of Biological Services, Boca Raton, Florida 33431, United States. Received 10/26/1987.

**PI 592994. *Ipomoea batatas* (L.) Lam. var. *batatas***

Cultivar. "CUBA 1"; BE-1532; Q 26989. Collected in Cuba.

**PI 592995. *Ipomoea batatas* (L.) Lam. var. *batatas***

Cultivar. "CUBA 3"; BE-1532; Q 26991. Collected in Cuba.

The following were donated by Australian Department of Agriculture, Institute of Plant Sciences, Burnley Gardens, Swan Street, Burnley, Australia. Received 02/09/1993.

**PI 592996. *Ipomoea batatas* (L.) Lam. var. *batatas***

Uncertain. IPS 141; BE-4494; BIS. 50; Q 29646.

The following were developed by M. C. Saxena, Int. Center for Agricultural Research in the Dry Areas, P.O. Box 5466, Aleppo, Syria; R.S. Malhotra, Int. Center for Agricultural Research in the Dry Areas, ICARDA Beirut Office, Dalia Bldg., 2nd Floor, Verdun, P.O. Box 114/5055, Beirut, Lebanon; W. Erskine, Int. Center for Agricultural Research in the Dry Areas, P.O. Box 5466, Aleppo, Syria. Received 01/30/1996.

**PI 592997. *Lens culinaris* Medikus**

Breeding. Pureline. ILL 5582. GP-5. Pedigree - Single-plant selection (78526002) from land race NEL 8 collected in Amman, Jordan, by the Arid Land Agric. Dev. Program of the Ford Foundation in 1972. Standing ability and yield good. Cotyledons yellow. Seeds medium-large (average seed mass 4.3g 100 seeds-1) and testa brown without pattern. Protein content 24.6% and cooking time 39 min. Averaged over 19 trials in Syria, flowered in 120 days, matured in 168 days and plants attained a height of 32cm. Resistant to Ascochyta blight (*Ascochyta fabae*). Susceptible to rust (*Uromyces fabae*) and vascular wilt (*Fusarium oxysporum*).

The following were developed by M. C. Saxena, Int. Center for Agricultural Research in the Dry Areas, P.O. Box 5466, Aleppo, Syria; W. Erskine, Int. Center for Agricultural Research in the Dry Areas, P.O. Box 5466, Aleppo, Syria; B. Bayaa, University of Aleppo, Aleppo, Syria. Received 01/14/1993.

**PI 592998. *Lens culinaris* Medikus**

Breeding. Pureline. ILL 5588; W6 11175. GP-6. Pedigree - Single-plant selection (78526013) from land race NEL 16 collected at Salt, Jordan by the Arid Land Agric. Dev. Prog. of the Ford Foundation in 1972. Cotyledons red. Seeds small (average seed mass 2.8g 100 seeds-1) and testa mid-brown without pattern. Protein content 28.8% and cooking time of 35 min. Averaged over 16 trials in Syria, flowered in 118 days, matured in 158 days and attained plant height of 31cm. Resistant to Ascochyta blight (*Ascochyta fabae*) and vascular wilt (*Fusarium oxysporum*). Susceptible to lentil rust (*Uromyces fabae*).

The following were donated by Sunseeds, Inc., California, United States. Received 01/31/1996.

**PI 592999. *Allium roylei* Stearn**

Cultivated. 217; G 30722. Collected 1959 in Former Soviet Union.

The following were developed by Victor E. Vallega, Istituto Sperimentale per la Cerealicoltura, Via Cassia 176, Roma, Italy. Received 01/29/1996.

**PI 593000. *Triticum durum* Desf.**

Breeding. V. 40113A; NSGC 6115. Pedigree - Valgerardo/Trinakria. Glauous. Near-isogenic pair with V. 40113B. From F15 plants bulked in F13.

**PI 593001. *Triticum durum* Desf.**



Breeding. V. 40113B; NSGC 6116. Pedigree - Valgerardo/Trinakria.  
Non-glaucous. Near-isogenic pair with V. 40113A. From F15 plants bulked in F13.

**PI 593002. *Triticum durum* Desf.**

Breeding. V. 903-5; NSGC 6117. Pedigree - PI 355491 (T. dicoccon)/Raineri (T. durum). Awned. Near-isogenic pair with V. 903-9. From F7 plants bulked in F5.

**PI 593003. *Triticum durum* Desf.**

Breeding. V. 903-9; NSGC 6118. Pedigree - PI 355491 (T. dicoccon)/Raineri (T. durum). Awnless. Near-isogenic pair with V. 903-5. From F7 plants bulked in F5.

**PI 593004. *Triticum durum* Desf.**

Breeding. V. 429; NSGC 6119. Pedigree - PI 355491 (T. dicoccon)/Aldura (T. durum). Awnless, semi-dwarf, early, free-threshing. Sib to V. 433 and V. 453. From F7 plants bulked in F5.

**PI 593005. *Triticum durum* Desf.**

Breeding. V. 433; NSGC 6120. Pedigree - PI 355491 (T. dicoccon)/Aldura (T. durum). Awnless, semi-dwarf, early, free-threshing. Sib of V. 429 and V. 453. From F7 plants bulked in F5.

**PI 593006. *Triticum durum* Desf.**

Breeding. V. 453; NSGC 6121. Pedigree - PI 355491 (T. dicoccon)/Aldura (T. durum). Awnless, semi-dwarf, early, free-threshing. Sib of V. 429 and V. 433. From F7 plants bulked in F5.

The following were developed by James L. Brewbaker, University of Hawaii, Dept. of Horticulture, 3190 Maile Way, Honolulu, Hawaii 96822, United States. Received 01/31/1996.

**PI 593007. *Zea mays* L. *ssp. mays***

Breeding. Inbred. Hi25. PL-181. Pedigree - B14ABC6 for Ht. Kernel color yellow, dent type. Silk date 59 days. Plant height 140cm. Ear height 59cm. Husk no. 9.8. Row no. 15.0. Kernels per row 23.4. Kernel weight 24.3gm. Resistant to maize mosaic virus.

**PI 593008. *Zea mays* L. *ssp. mays***

Breeding. Inbred. Hi26. PL-182. Pedigree - Sister line (MV conversion) of CIZIE (=K577CxHy)BC2. Kernel color yellow, flint type. Silk date 59 days. Plant height 162cm. Ear height 77cm. Husk no. 9.2. Row no. 15.4. Kernels per row 35.2. Kernel weight 22.6gm. Resistant to maize mosaic virus.

**PI 593009. *Zea mays* L. *ssp. mays***

Breeding. Inbred. Hi27. PL-183. Pedigree - Sister line (MV conversion) of CM104(India), (=ATheo 21(B)#). Kernel color yellow, flint type. Silk date 61 days. Plant height 160cm. Ear height 84cm. Husk no. 11.9. Row no. 14.4. Kernels per row 22.5. Kernel weight 20.8gm. Resistant to maize mosaic virus.

**PI 593010. *Zea mays* L. *ssp. mays***

Breeding. Inbred. Hi28. PL-184. Pedigree - Sister line (MV conversion) of CM105 (India), (=Peru 330##329C#). Kernel color yellow, flint type. Silk date 60 days. Plant height 160cm. Ear height 84cm. Husk no. 14.4. Row no. 15.0. Kernels per row 27.3. Kernel weight 25.2gm. Resistant to maize mosaic virus.

**PI 593011. *Zea mays* L. *ssp. mays***

Breeding. Inbred. Hi29. PL-185. Pedigree - Sister line (MV conversion) of CM111 (India), (=Cuba 342-2-2-#). Kernel color yellow, flint type. Silk date 60 days. Plant height 173cm. Ear height 84cm. Husk no. 13.7. Row no. 13.7. Kernels per row 31.7. Kernel weight 23.3gm. Resistant to maize mosaic virus.

**PI 593012. *Zea mays* L. *ssp. mays***

Breeding. Inbred. Hi30. PL-186. Pedigree - AA8 (Hi) (=Hawaiian Sugar). Kernel color yellow, flint type. Silk date 58 days. Plant height 149cm. Ear height 61cm. Husk no. 8.6. Row no. 13.7. Kernels per row 26.0. Kernel weight 24.7gm. Resistant to maize mosaic virus.

**PI 593013. *Zea mays* L. *ssp. mays***

Breeding. Inbred. Hi31. PL-187. Pedigree - B68(=(41.2504BAArg.Flt. x B14)BC3). Kernel color yellow, dent type. Silk date 60 days. Plant height 151cm. Ear height 68cm. Husk no. 8.5. Row no. 15.4. Kernels per row 22.2. Kernel weight 19.0gm. Resistant to maize mosaic virus.

**PI 593014. *Zea mays* L. *ssp. mays***

Breeding. Inbred. Hi33. PL-188. Pedigree - Sister line (MV conversion) of Oh545(=(M14 x CI187-2)Oh45)BC1). Kernel color yellow, dent type. Silk date 59 days. Plant height 143cm. Ear height 61cm. Husk no. 8.8. Row no. 15.7. Kernels per row 30.9. Kernel weight 29.9gm. Resistant to maize mosaic virus.

**PI 593015. *Zea mays* L. *ssp. mays***

Breeding. Inbred. Hi34. PL-189. Pedigree - Antigua 2D. Kernel color yellow, flint type. Silk date 63 days. Plant height 140cm. Ear height 63cm. Husk no. 11.6. Row no. 13.3. Kernels per row 30.0. Kernel weight 23.1. Resistant to maize mosaic virus.

**PI 593016. *Zea mays* L. *ssp. mays***

Breeding. Inbred. Hi35. PL-190. Pedigree - Sister line (MV conversion) of CM109 (India), from Dixie 18. Kernel color bronze, flint type. Silk date 59 days. Plant height 156cm. Ear height 78cm. Husk no. 12.3. Row no. 15.0. Kernels per row 30.4. Kernel weight 24.3gm. Resistant to maize mosaic virus.

**PI 593017. *Zea mays* L. *ssp. mays***

Breeding. Inbred. Hi39. PL-191. Pedigree - Antigua Grp.2 x Hi25. Kernel color yellow, dent/flint type. Silk date 63 days. Plant height 151cm. Ear height 80cm. Husk no. 9.3. Row no. 14.4. Kernels per row 29.8. Kernel weight 26.6gm. Resistant to maize mosaic virus.

**PI 593018. *Zea mays* L. *ssp. mays***

Breeding. Inbred. Hi40. PL-192. Pedigree - Antigua Grp.2 x Hi25. Kernel color pale yellow, flint type. Silk date 59 days. Plant height 160cm. Ear height 60cm. Husk no. 12.5. Row no. 13.4. Kernels per row 26.8.

Kernel weight 20.5gm. Resistant to maize mosaic virus.

**PI 593019. *Zea mays* L. ssp. *mays***

Breeding. Inbred. Hi41. PL-193. Pedigree - Antigua Grp.2 x Hi25. Kernel color yellow, dent/flint type. Silk date 66 days. Plant height 134cm. Ear height 52cm. Husk no. 8.2. Row no. 12.9. Kernels per row 24.8. Kernel weight 22.0gm. Resistant to maize mosaic virus.

The following were developed by Daryl T. Bowman, North Carolina State University, Department of Crop Science, Box 8604, Raleigh, North Carolina 27695-8604, United States; Steven Leath, USDA, ARS, North Carolina State University, Dept. of Plant Pathology, Raleigh, North Carolina 27695, United States; Charles F. Murphy, USDA, ARS, Room 240, Building 005, BARC-West, 10300 Baltimore Avenue, Beltsville, Maryland 20705-2350, United States; R.A. Navarro, North Carolina State University, North Carolina Agric. Exp. Station, Raleigh, North Carolina, United States; Paul Murphy, North Carolina State University, 840 Method Road, Unit 3, Box 7629, Raleigh, North Carolina 27695, United States. Received 01/31/1996.

**PI 593020. *Avena sativa* L.**

Cultivar. Pureline. "RODGERS". CV-341. Pedigree - Coker 80-33 / NC 81-376. Winter oat adapted to Southeastern U.S. Juvenile growth habit semiprostrate. Mature leaf carriage drooping. Height and maturity medium. Panicles equilateral. Partial resistance to crown rust (*Puccinia coronata*). Moderate to high tolerance to barley yellow dwarf virus. Moderate winterhardiness. Moderate to poor tolerance to oat soil-borne mosaic virus.

The following were developed by Ricetec, Inc., Texas, United States. Received 02/01/1996.

**PI 593021. *Oryza sativa* L.**

Cultivar. "BASMATI 867". PVP 9600077.

The following were developed by Pure-Seed Testing, Inc., P.O. Box 449, Hubbard, Oregon 97032, United States. Received 02/01/1996.

**PI 593022. *Poa pratensis* L.**

Cultivar. "RITA". PVP 9600078.

The following were developed by Iowa Agr. Exp. Sta., Iowa State University, Ames, Iowa 50011, United States. Received 02/01/1996.

**PI 593023. *Citrullus lanatus* (Thunb.) Matsum. & Nakai**

Cultivar. "CRIMSON BEAUTY". PVP 9600079.

The following were developed by Iowa State University, Department of Agronomy, Ames, Iowa 50011, United States. Received 02/01/1996.

**PI 593024. *Citrullus lanatus* (Thunb.) Matsum. & Nakai**

Cultivar. "IA-1". PVP 9600080.

The following were developed by Busch Agricultural Resources, Inc., United States. Received 02/01/1996.

**PI 593025. *Hordeum vulgare* L. ssp. *vulgare***  
Cultivar. "2B89-4311". PVP 9600081.

**PI 593026. *Hordeum vulgare* L. ssp. *vulgare***  
Cultivar. "6B89-2027". PVP 9600082.

**PI 593027. *Hordeum vulgare* L. ssp. *vulgare***  
Cultivar. "6B92-7098". PVP 9600083.

**PI 593028. *Hordeum vulgare* L. ssp. *vulgare***  
Cultivar. "6B88-3213". PVP 9600084.

The following were developed by Petoseed Company, Inc., United States. Received 02/01/1996.

**PI 593029. *Phaseolus vulgaris* L.**  
Cultivar. "UNIDOR". PVP 9600085.

**PI 593030. *Phaseolus vulgaris* L.**  
Cultivar. "CANBERRA". PVP 9600086.

The following were developed by Agripro Seeds, Inc., United States. Received 02/01/1996.

**PI 593031. *Triticum aestivum* L., nom. cons.**  
Cultivar. "W88-039". PVP 9600087.

**PI 593032. *Triticum aestivum* L., nom. cons.**  
Cultivar. "WI88-052-13". PVP 9600088.

The following were developed by S & W Seed Company, United States. Received 02/01/1996.

**PI 593033. *Medicago sativa* L.**  
Cultivar. "SW 9301". PVP 9600089.

The following were developed by Paragon Seed, Inc., United States. Received 02/01/1996.

**PI 593034. *Lactuca sativa* L.**  
Cultivar. "JUPITER". PVP 9600090.

**PI 593035. *Lactuca sativa* L.**  
Cultivar. "ORION". PVP 9600093.

The following were developed by Abbott & Cobb, Inc., United States. Received 02/01/1996.

PI 593036. *Zea mays* L. *ssp. mays*  
Cultivar. 781. PVP 9600094.

The following were developed by Holden's Foundation Seeds, Inc., United States. Received 02/01/1996.

PI 593037. *Zea mays* L. *ssp. mays*  
Cultivar. "LH178". PVP 9600095.

PI 593038. *Zea mays* L. *ssp. mays*  
Cultivar. "LH227". PVP 9600096.

PI 593039. *Zea mays* L. *ssp. mays*  
Cultivar. "LH233". PVP 9600097.

PI 593040. *Zea mays* L. *ssp. mays*  
Cultivar. "LH234". PVP 9600098.

PI 593041. *Zea mays* L. *ssp. mays*  
Cultivar. "LH235". PVP 9600099.

PI 593042. *Zea mays* L. *ssp. mays*  
Cultivar. "LH280". PVP 9600100.

The following were developed by Paragon Seed, Inc., United States. Received 02/01/1996.

PI 593043. *Lactuca sativa* L.  
Cultivar. "VENUS". PVP 9600101.

The following were developed by North Dakota State University, North Dakota Agricultural Exp. Sta., Fargo, North Dakota 58105, United States. Received 02/01/1996.

PI 593044. *Triticum aestivum* L., nom. cons.  
Cultivar. 2398. PVP 9600102. Hard red winter wheat.

The following were developed by Rijk Zwaan Zaadteelt en Zaadhandel B.V., Netherlands. Received 02/01/1996.

PI 593045. *Brassica oleracea* var. *botrytis* L.  
Cultivar. "DIPLOMAT". PVP 9600107.

The following were developed by Stoneville Pedigreed Seed Company, United States. Received 02/01/1996.

**PI 593046. *Gossypium hirsutum* L.**  
Cultivar. "ST 495". PVP 9600108.

The following were developed by J. H. Hatchett, USDA, ARS, Kansas State University, Waters Hall - Dep. of Entomology, Manhattan, Kansas 66506-4004, United States; Scott Haley, South Dakota State University, Plant Science Department, Box 2140-C, Brookings, South Dakota 57007, United States; P. Stephen Baenziger, University of Nebraska, Department of Agronomy, 330 Keim Hall, Lincoln, Nebraska 68583-0915, United States; J.W. Schmidt, University of Nebraska, Nebraska Agricultural Experiment Station, Lincoln, Nebraska, United States; L.A. Nelson, Nebraska Agr. Exp. Sta., University of Nebraska-Lincoln, Lincoln, Nebraska 68583-0915, United States; David D. Baltensperger, University of Nebraska, Panhandle Res. & Ext. Center, 4502 Avenue I, Scottsbluff, Nebraska 69361-4939, United States; Don V. McVey, USDA, ARS, University of Minnesota, Cereal Rust Laboratory, St. Paul, Minnesota 55105, United States; B. Moreno-Sevilla, University of Nebraska, Dept. of Agronomy, Lincoln, Nebraska 68583, United States; C.J. Peterson, USDA, ARS, University of Nebraska, Dept. of Agronomy, Lincoln, Nebraska 68583, United States; D.R. Shelton, University of Nebraska, Dept. of Agronomy, Lincoln, Nebraska 68583, United States; John E. Watkins, University of Nebraska, Dept. of Plant Pathology, Lincoln, Nebraska 68583, United States; J. Krall, University of Wyoming Research and Extension Center, Route 1, Box 374, Torrington, Wyoming 88420, United States. Received 02/06/1996.

**PI 593047. *Triticum aestivum* L., nom. cons.**  
Cultivar. Pureline. "PRONGHORN"; NE88584; NSGC 6122. CV-848. Pedigree - Centura/Dawn//Colt sib. Tall hard red winter wheat with medium maturity. Chaff white, awned. Moderate straw strength. Moderate resistance to stem rust (contains Sr6 and Sr17) and moderately susceptible to leaf rust. Susceptible to Biotype Great Plains of Hessian fly, soilborne mosaic virus, and wheat streak mosaic virus. Winterhardiness comparable to other cultivars adapted and commonly grown in Nebraska and South Dakota. Genetically high test weight. Recommended growing area is the dryland wheat production areas of the Panhandle of Nebraska, eastern Wyoming, and western South Dakota. Coleoptile long, similar to Scout 66 and can be planted deep in dry seedbeds. Tolerant to aluminum toxic soils. Milling and baking properties acceptable.

The following were donated by R. Stafford, USDA, ARS, P.O. Box 1658, Vernon, Texas 76384, United States. Received 1980.

**PI 593048. *Cyamopsis tetragonoloba* (L.) Taubert**  
Breeding. TX73-2731; NSL 113032. GP-33.

**PI 593049. *Cyamopsis tetragonoloba* (L.) Taubert**  
Breeding. TX71-3292; NSL 113033. GP-34.

The following were donated by USDA, SCS, New Jersey Agr. Exp. Station, New Jersey, United States. Received 1977.

**PI 593050. *Chamaecrista fasciculata* (Michaux) E. Greene**  
Breeding. NSL 95795; NJ-39.

The following were donated by Mississippi SCS, Mississippi, United States.  
Received 1987.

**PI 593051. *Desmanthus illinoensis* (Michaux) MacMillan ex Robinson & Fern.**

Breeding. NSL 208731; 190-V-NPMM 1.

The following were donated by USDA-SCS, Florida Plant Materials Center,  
Florida, United States. Received 1963.

**PI 593052. *Desmodium incanum* DC.**

Breeding. NSL 22663; F-314. Collected in Puerto Rico.

The following were donated by Maryland Agr. Exp. Sta., Maryland, United  
States. Received 1961.

**PI 593053. *Kummerowia stipulacea* (Maxim.) Makino**

Cultivar. "ROWAN"; REG NO 1; NSL 6437. CV-1.

The following were donated by USDA, ARS, Texas Agric. Exp. Station, Texas,  
United States. Received 1976.

**PI 593054. *Cyamopsis tetragonoloba* (L.) Taubert**

Breeding. NSL 91496; G-04.

The following were donated by B. F. Berrier, 1407 Grand, Canon City, Colorado  
80212, United States. Received 1985.

**PI 593055. *Lablab purpureus* (L.) Sweet**

Breeding. 604B; NSL 194063; Loblolly Pole/Hyacinth/Dobas.

The following were donated by Mississippi SCS, Mississippi, United States.  
Received 1987.

**PI 593056. *Chamaecrista nictitans* (L.) Moench**

Breeding. NSL 208729; 190-V-NPMM 3.

The following were donated by USDA-SCS, Florida Plant Materials Center,  
Florida, United States. Received 1963.

**PI 593057. *Desmodium incanum* DC.**

Breeding. NSL 22664; F-672.

The following were donated by USDA, ARS, Texas Agric. Exp. Station, Texas,  
United States. Received 1976.

**PI 593058. *Cyamopsis tetragonoloba* (L.) Taubert**  
Breeding. NSL 91497; G-05.

The following were donated by R. Stafford, USDA, ARS, P.O. Box 1658, Vernon, Texas 76384, United States. Received 1983.

**PI 593059. *Cyamopsis tetragonoloba* (L.) Taubert**  
Breeding. TX 78-3726; NSL 174413. GP-4.

The following were collected by D. Savithrunme, AICP, Plant Sciences, GKVK, Bangalore, India. Donated by Tony Hall, University of California - Riverside, Riverside, California, United States. Received 02/01/1995.

**PI 593060. *Vigna unguiculata* (L.) Walp. *ssp. unguiculata***  
Wild. UCR 497; CG 331. Collected 02/01/1988 in India.

**PI 593061. *Vigna unguiculata* (L.) Walp. *ssp. unguiculata***  
Wild. UCR 509; UPC 126. Collected 02/01/1988 in India.

The following were collected by Jeff Ehlers, University of California, Riverside, Department of Botany & Plant Sciences-072, Riverside, California 92521-0124, United States. Donated by Tony Hall, University of California - Riverside, Riverside, California, United States. Received 02/01/1995.

**PI 593062. *Vigna unguiculata* (L.) Walp. *ssp. unguiculata***  
Wild. UCR 521; KVu 3-2-1. Collected 04/01/1988 in Kenya. Brown spot on end.

**PI 593063. *Vigna unguiculata* (L.) Walp. *ssp. unguiculata***  
Wild. UCR 522; KVu 4-P3. Collected 04/01/1988 in Kenya.

**PI 593064. *Vigna unguiculata* (L.) Walp. *ssp. unguiculata***  
Wild. UCR 528; KVu 30-P1. Collected 04/01/1988 in Kenya. Darker on mid rib.

**PI 593065. *Vigna unguiculata* (L.) Walp. *ssp. unguiculata***  
Wild. UCR 570; KVu 301-P2. Collected 04/01/1988 in Kenya.

**PI 593066. *Vigna unguiculata* (L.) Walp. *ssp. unguiculata***  
Wild. UCR 601; KVu 352 B. Collected 04/01/1988 in Kenya.

**PI 593067. *Vigna unguiculata* (L.) Walp. *ssp. unguiculata***  
Wild. UCR 626; KVu 439 A. Collected 04/01/1988 in Kenya.

**PI 593068. *Vigna unguiculata* (L.) Walp. *ssp. unguiculata***  
Wild. UCR 650; KVu 465. Collected 04/01/1988 in Kenya.

The following were collected by C. J. DeMooy, Colorado State University, Colorado Agricultural Experiment Station, Department of Agronomy, Fort Collins, Colorado, United States. Donated by Tony Hall, University of California - Riverside, Riverside, California, United States. Received



02/01/1995.

- PI 593069. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 736; BOTS 4D. Collected 09/01/1987 in Botswana.
- PI 593070. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 737; BOTS 4E. Collected 09/01/1987 in Botswana.
- PI 593071. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 743; BOTS 6C. Collected 09/01/1987 in Botswana.
- PI 593072. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 749; BOTS 7K. Collected 09/01/1987 in Botswana. Two  
phenotypes.
- PI 593073. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 750; BOTS 8A. Collected 09/01/1987 in Botswana.
- PI 593074. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 754; BOTS 8H. Collected 09/01/1987 in Botswana.
- PI 593075. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 755; BOTS 9A. Collected 09/01/1987 in Botswana.
- PI 593076. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 761; BOTS 12C. Collected 09/01/1987 in Botswana.
- PI 593077. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 764; BOTS 13B. Collected 09/01/1987 in Botswana.
- PI 593078. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 766; BOTS 13D. Collected 09/01/1987 in Botswana.  
Photosensitive.
- PI 593079. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 767; BOTS 13F. Collected 09/01/1987 in Botswana.  
Photosensitive.
- PI 593080. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 770; BOTS 13K. Collected 09/01/1987 in Botswana.
- PI 593081. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 771; BOTS 14. Collected 09/01/1987 in Botswana.  
Photosensitive.
- PI 593082. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 773; BOTS 16A. Collected 09/01/1987 in Botswana.
- PI 593083. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 783; BOTS 20F. Collected 09/01/1987 in Botswana.
- PI 593084. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 786; BOTS 22. Collected 09/01/1987 in Botswana.
- PI 593085. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**

- Wild. UCR 797; BOTS 29C. Collected 09/01/1987 in Botswana. Few buff specks.
- PI 593086. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 798; BOTS 29D. Collected 09/01/1987 in Botswana.
- PI 593087. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 817; BOTS 45. Collected 09/01/1987 in Botswana.
- PI 593088. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 819; BOTS 47A. Collected 09/01/1987 in Botswana.
- PI 593089. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 828; BOTS 52B. Collected 09/01/1987 in Botswana.
- PI 593090. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 829; BOTS 52C. Collected 09/01/1987 in Botswana.
- PI 593091. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 833; BOTS 56. Collected 09/01/1987 in Botswana.
- PI 593092. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 836; BOTS 60C. Collected 09/01/1987 in Botswana.
- PI 593093. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 844; BOTS 67A. Collected 09/01/1987 in Botswana.
- PI 593094. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 850; BOTS 69A. Collected 09/01/1987 in Botswana.
- PI 593095. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 856; BOTS 72C. Collected 09/01/1987 in Botswana.
- PI 593096. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 867; BOTS 83. Collected 09/01/1987 in Botswana.
- PI 593097. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 868; BOTS 84. Collected 09/01/1987 in Botswana.
- PI 593098. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 873; BOTS 89. Collected 09/01/1987 in Botswana. Black specks.
- PI 593099. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 876; BOTS 92. Collected 09/01/1987 in Botswana.
- PI 593100. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 877; BOTS 93. Collected 09/01/1987 in Botswana.
- PI 593101. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 878; BOTS 94. Collected 09/01/1987 in Botswana.
- PI 593102. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 881; BOTS 96. Collected 09/01/1987 in Botswana.
- PI 593103. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**

Wild. UCR 886; BOTS 100A. Collected 09/01/1987 in Botswana.

**PI 593104. *Vigna unguiculata* (L.) Walp. ssp. unguiculata**

Wild. UCR 887; BOTS 100B. Collected 09/01/1987 in Botswana.

**PI 593105. *Vigna unguiculata* (L.) Walp. ssp. unguiculata**

Wild. UCR 893; BOTS 105. Collected 09/01/1987 in Botswana.  
Photosensitive. Purple specks.

**PI 593106. *Vigna unguiculata* (L.) Walp. ssp. unguiculata**

Wild. UCR 894; BOTS 106A. Collected 09/01/1987 in Botswana.

**PI 593107. *Vigna unguiculata* (L.) Walp. ssp. unguiculata**

Wild. UCR 896; BOTS 107. Collected 09/01/1987 in Botswana.

**PI 593108. *Vigna unguiculata* (L.) Walp. ssp. unguiculata**

Wild. UCR 897; BOTS 108. Collected 09/01/1987 in Botswana.

**PI 593109. *Vigna unguiculata* (L.) Walp. ssp. unguiculata**

Wild. UCR 904; BOTS 111C. Collected 09/01/1987 in Botswana.

**PI 593110. *Vigna unguiculata* (L.) Walp. ssp. unguiculata**

Wild. UCR 907; BOTS 114A. Collected 09/01/1987 in Botswana.

**PI 593111. *Vigna unguiculata* (L.) Walp. ssp. unguiculata**

Wild. UCR 908; BOTS 115. Collected 09/01/1987 in Botswana.

**PI 593112. *Vigna unguiculata* (L.) Walp. ssp. unguiculata**

Wild. UCR 910; BOTS 116B. Collected 09/01/1987 in Botswana.

**PI 593113. *Vigna unguiculata* (L.) Walp. ssp. unguiculata**

Wild. UCR 911; BOTS 117. Collected 09/01/1987 in Botswana.

**PI 593114. *Vigna unguiculata* (L.) Walp. ssp. unguiculata**

Wild. UCR 913; BOTS 118B. Collected 09/01/1987 in Botswana.

**PI 593115. *Vigna unguiculata* (L.) Walp. ssp. unguiculata**

Wild. UCR 914; BOTS 119. Collected 09/01/1987 in Botswana.

**PI 593116. *Vigna unguiculata* (L.) Walp. ssp. unguiculata**

Wild. UCR 921; BOTS 126. Collected 09/01/1987 in Botswana.

**PI 593117. *Vigna unguiculata* (L.) Walp. ssp. unguiculata**

Wild. UCR 922; BOTS 127. Collected 09/01/1987 in Botswana.

**PI 593118. *Vigna unguiculata* (L.) Walp. ssp. unguiculata**

Wild. UCR 928; BOTS 132. Collected 09/01/1987 in Botswana.

**PI 593119. *Vigna unguiculata* (L.) Walp. ssp. unguiculata**

Wild. UCR 930; BOTS 134. Collected 09/01/1987 in Botswana.

**PI 593120. *Vigna unguiculata* (L.) Walp. ssp. unguiculata**

Wild. UCR 931; BOTS 135. Collected 09/01/1987 in Botswana.

**PI 593121. *Vigna unguiculata* (L.) Walp. ssp. unguiculata**

- Wild. UCR 932; BOTS 136. Collected 09/01/1987 in Botswana.
- PI 593122. *Vigna unguiculata* (L.) Walp. ssp. *unguiculata***  
Wild. UCR 933; BOTS 137A. Collected 09/01/1987 in Botswana. Band of brown specks on bottom.
- PI 593123. *Vigna unguiculata* (L.) Walp. ssp. *unguiculata***  
Wild. UCR 936; BOTS 139A. Collected 09/01/1987 in Botswana. Brown specks.
- PI 593124. *Vigna unguiculata* (L.) Walp. ssp. *unguiculata***  
Wild. UCR 938; BOTS 141. Collected 09/01/1987 in Botswana. Photosensitive. Purple shading.
- PI 593125. *Vigna unguiculata* (L.) Walp. ssp. *unguiculata***  
Wild. UCR 951; BOTS 155. Collected 09/01/1987 in Botswana.
- PI 593126. *Vigna unguiculata* (L.) Walp. ssp. *unguiculata***  
Wild. UCR 956; BOTS 160. Collected 09/01/1987 in Botswana.
- PI 593127. *Vigna unguiculata* (L.) Walp. ssp. *unguiculata***  
Wild. UCR 958; BOTS 162. Collected 09/01/1987 in Botswana. UCR 467.
- PI 593128. *Vigna unguiculata* (L.) Walp. ssp. *unguiculata***  
Wild. UCR 959; BOTS 163. Collected 09/01/1987 in Botswana.
- PI 593129. *Vigna unguiculata* (L.) Walp. ssp. *unguiculata***  
Wild. UCR 961; BOTS 165. Collected 09/01/1987 in Botswana. Loose seed coat.
- PI 593130. *Vigna unguiculata* (L.) Walp. ssp. *unguiculata***  
Wild. UCR 962; BOTS 166. Collected 09/01/1987 in Botswana.
- PI 593131. *Vigna unguiculata* (L.) Walp. ssp. *unguiculata***  
Wild. UCR 970; BOTS 174. Collected 09/01/1987 in Botswana.
- PI 593132. *Vigna unguiculata* (L.) Walp. ssp. *unguiculata***  
Wild. UCR 973; BOTS 180. Collected 09/01/1987 in Botswana.
- PI 593133. *Vigna unguiculata* (L.) Walp. ssp. *unguiculata***  
Wild. UCR 981; BOTS 189. Collected 09/01/1987 in Botswana.
- PI 593134. *Vigna unguiculata* (L.) Walp. ssp. *unguiculata***  
Wild. UCR 994; BOTS 211. Collected 09/01/1987 in Botswana.
- PI 593135. *Vigna unguiculata* (L.) Walp. ssp. *unguiculata***  
Wild. UCR 1002; BOTS 221. Collected 09/01/1987 in Botswana.
- PI 593136. *Vigna unguiculata* (L.) Walp. ssp. *unguiculata***  
Wild. UCR 1006; BOTS 225. Collected 09/01/1987 in Botswana.
- PI 593137. *Vigna unguiculata* (L.) Walp. ssp. *unguiculata***  
Wild. UCR 1010; BOTS 228. Collected 09/01/1987 in Botswana.
- PI 593138. *Vigna unguiculata* (L.) Walp. ssp. *unguiculata***

- Wild. UCR 1011; BOTS 229. Collected 09/01/1987 in Botswana. Faint eye.
- PI 593139. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1014; BOTS 232. Collected 09/01/1987 in Botswana. Loose seed coat.
- PI 593140. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1023; BOTS 241. Collected 09/01/1987 in Botswana.
- PI 593141. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1036; BOTS 251A. Collected 09/01/1987 in Botswana.
- PI 593142. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1040; BOTS 253B. Collected 09/01/1987 in Botswana.
- PI 593143. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1053; BOTS 264B. Collected 09/01/1987 in Botswana.
- PI 593144. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1054; BOTS 264C. Collected 09/01/1987 in Botswana.
- PI 593145. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1059; BOTS 266F. Collected 09/01/1987 in Botswana.
- PI 593146. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1061; BOTS 268B. Collected 09/01/1987 in Botswana.
- PI 593147. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1062; BOTS 268H. Collected 09/01/1987 in Botswana.
- PI 593148. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1065; BOTS 269C. Collected 09/01/1987 in Botswana.
- PI 593149. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1069; BOTS 270. Collected 09/01/1987 in Botswana.
- PI 593150. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1073; BOTS 272A. Collected 09/01/1987 in Botswana.
- PI 593151. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1074; BOTS 273. Collected 09/01/1987 in Botswana.
- PI 593152. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1075; BOTS 275C. Collected 09/01/1987 in Botswana.
- PI 593153. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1078; BOTS 278G. Collected 09/01/1987 in Botswana.
- PI 593154. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1080; BOTS 279D. Collected 09/01/1987 in Botswana.
- PI 593155. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1081; BOTS 279G. Collected 09/01/1987 in Botswana.
- PI 593156. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**

- Wild. UCR 1084; BOTS 280C. Collected 09/01/1987 in Botswana.
- PI 593157. *Vigna unguiculata* (L.) Walp. *ssp. unguiculata***  
Wild. UCR 1091; BOTS 285A. Collected 09/01/1987 in Botswana.
- PI 593158. *Vigna unguiculata* (L.) Walp. *ssp. unguiculata***  
Wild. UCR 1095; BOTS 286D. Collected 09/01/1987 in Botswana.
- PI 593159. *Vigna unguiculata* (L.) Walp. *ssp. unguiculata***  
Wild. UCR 1096; BOTS 287. Collected 09/01/1987 in Botswana.  
Photosensitive.
- PI 593160. *Vigna unguiculata* (L.) Walp. *ssp. unguiculata***  
Wild. UCR 1098; BOTS 289A. Collected 09/01/1987 in Botswana.
- PI 593161. *Vigna unguiculata* (L.) Walp. *ssp. unguiculata***  
Wild. UCR 1099; BOTS 289G. Collected 09/01/1987 in Botswana.
- PI 593162. *Vigna unguiculata* (L.) Walp. *ssp. unguiculata***  
Wild. UCR 1103; BOTS 291. Collected 09/01/1987 in Botswana.
- PI 593163. *Vigna unguiculata* (L.) Walp. *ssp. unguiculata***  
Wild. UCR 1107; BOTS 293D. Collected 09/01/1987 in Botswana.
- PI 593164. *Vigna unguiculata* (L.) Walp. *ssp. unguiculata***  
Wild. UCR 1108; BOTS 294E. Collected 09/01/1987 in Botswana.
- PI 593165. *Vigna unguiculata* (L.) Walp. *ssp. unguiculata***  
Wild. UCR 1109; BOTS 295A. Collected 09/01/1987 in Botswana.
- PI 593166. *Vigna unguiculata* (L.) Walp. *ssp. unguiculata***  
Wild. UCR 1111; BOTS 296D. Collected 09/01/1987 in Botswana.
- PI 593167. *Vigna unguiculata* (L.) Walp. *ssp. unguiculata***  
Wild. UCR 1112; BOTS 298A. Collected 09/01/1987 in Botswana.
- PI 593168. *Vigna unguiculata* (L.) Walp. *ssp. unguiculata***  
Wild. UCR 1114; BOTS 298C. Collected 09/01/1987 in Botswana.
- PI 593169. *Vigna unguiculata* (L.) Walp. *ssp. unguiculata***  
Wild. UCR 1116; BOTS 303. Collected 09/01/1987 in Botswana.
- PI 593170. *Vigna unguiculata* (L.) Walp. *ssp. unguiculata***  
Wild. UCR 1119; BOTS 306. Collected 09/01/1987 in Botswana. Brown  
specks.
- PI 593171. *Vigna unguiculata* (L.) Walp. *ssp. unguiculata***  
Wild. UCR 1132; BOTS 327. Collected 09/01/1987 in Botswana.
- PI 593172. *Vigna unguiculata* (L.) Walp. *ssp. unguiculata***  
Wild. UCR 1140; BOTS 337. Collected 09/01/1987 in Botswana.
- PI 593173. *Vigna unguiculata* (L.) Walp. *ssp. unguiculata***  
Wild. UCR 1144; BOTS 343. Collected 09/01/1987 in Botswana.

- PI 593174. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1145; BOTS 345. Collected 09/01/1987 in Botswana.
- PI 593175. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1148; BOTS 350. Collected 09/01/1987 in Botswana.
- PI 593176. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1152; BOTS 355. Collected 09/01/1987 in Botswana.
- PI 593177. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1170; BOTS 375. Collected 09/01/1987 in Botswana.
- PI 593178. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1171; BOTS 376. Collected 09/01/1987 in Botswana.
- PI 593179. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1172; BOTS 377. Collected 09/01/1987 in Botswana.
- PI 593180. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1177; BOTS 383. Collected 09/01/1987 in Botswana.
- PI 593181. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1178; BOTS 384. Collected 09/01/1987 in Botswana. Purple  
veins radiate from eye.
- PI 593182. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1179; BOTS 385. Collected 09/01/1987 in Botswana.
- PI 593183. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1184; BOTS 389. Collected 09/01/1987 in Botswana. Purple  
shading.
- PI 593184. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1187; BOTS 392. Collected 09/01/1987 in Botswana.
- PI 593185. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1188; BOTS 393. Collected 09/01/1987 in Botswana.
- PI 593186. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1189; BOTS 394. Collected 09/01/1987 in Botswana.
- PI 593187. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1190; BOTS 395. Collected 09/01/1987 in Botswana.
- PI 593188. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1191; BOTS 396. Collected 09/01/1987 in Botswana.
- PI 593189. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1192; BOTS 397. Collected 09/01/1987 in Botswana.
- PI 593190. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1194; BOTS 399. Collected 09/01/1987 in Botswana.
- PI 593191. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1197; BOTS 402. Collected 09/01/1987 in Botswana.

- PI 593192. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1198; BOTS 403. Collected 09/01/1987 in Botswana.
- PI 593193. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1200; BOTS 405. Collected 09/01/1987 in Botswana.
- PI 593194. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1201; BOTS 406. Collected 09/01/1987 in Botswana.
- PI 593195. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1202; BOTS 407. Collected 09/01/1987 in Botswana.
- PI 593196. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1205; BOTS 410. Collected 09/01/1987 in Botswana.
- PI 593197. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1208; BOTS 413. Collected 09/01/1987 in Botswana.
- PI 593198. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1209; BOTS 414. Collected 09/01/1987 in Botswana.
- PI 593199. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1218; BOTS 423. Collected 09/01/1987 in Botswana.
- PI 593200. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1226; BOTS 430. Collected 09/01/1987 in Botswana.
- PI 593201. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1227; BOTS 431. Collected 09/01/1987 in Botswana.
- PI 593202. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1229; BOTS 433. Collected 09/01/1987 in Botswana.
- PI 593203. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1230; BOTS 434. Collected 09/01/1987 in Botswana.
- PI 593204. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1236; BOTS 439. Collected 09/01/1987 in Botswana.
- PI 593205. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1247; BOTS 450. Collected 09/01/1987 in Botswana.
- PI 593206. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1248; BOTS 451A. Collected 09/01/1987 in Botswana.
- PI 593207. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1251; BOTS 451D. Collected 09/01/1987 in Botswana.
- PI 593208. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1253; BOTS 452. Collected 09/01/1987 in Botswana.
- PI 593209. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1258; BOTS 457. Collected 09/01/1987 in Botswana. Some buff specks.



- PI 593210. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1265; BOTS 465. Collected 09/01/1987 in Botswana. Buff specks.
- PI 593211. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1279; BOTS 480. Collected 09/01/1987 in Botswana.
- PI 593212. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1286; BOTS 486. Collected 09/01/1987 in Botswana.
- PI 593213. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1294; BOTS 498. Collected 09/01/1987 in Botswana.
- PI 593214. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1298; BOTS 503B. Collected 09/01/1987 in Botswana.
- PI 593215. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1307; BOTS 506B. Collected 09/01/1987 in Botswana.
- PI 593216. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1315; BOTS 514A. Collected 09/01/1987 in Botswana.
- PI 593217. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1321; BOTS 514G. Collected 09/01/1987 in Botswana. Photosensitive.
- PI 593218. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1325; BOTS 519. Collected 09/01/1987 in Botswana.
- PI 593219. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1328; BOTS 522. Collected 09/01/1987 in Botswana. Two phenotypes "A".
- PI 593220. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1329; BOTS 523. Collected 09/01/1987 in Botswana.
- PI 593221. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1331; BOTS 525. Collected 09/01/1987 in Botswana. Some buff specks.
- PI 593222. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 1333; BOTS 527. Collected 09/01/1987 in Botswana.

The following were collected by Institut Senegalais de Rech. Agricole, BP 53, Bambey, Senegal. Donated by Tony Hall, University of California - Riverside, Riverside, California, United States. Received 02/01/1995.

- PI 593223. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 3347; 59-30. Collected 10/20/1991 in Senegal. CNH.
- PI 593224. *Vigna unguiculata* (L.) Walp. **ssp. unguiculata**  
Wild. UCR 3352; 60-7. Collected 10/20/1991 in Senegal. CNT.

The following were collected by B.B. Singh, International Institute of Tropical Agriculture, Grain Legume Improvement Program, Ibadan, Nigeria. Donated by Tony Hall, University of California - Riverside, Riverside, California, United States. Received 02/01/1995.

**PI 593225. *Vigna unguiculata* (L.) Walp. *ssp. unguiculata***  
Wild. UCR 4545; IT89KD-245. Collected 06/01/1992 in Nigeria. Curled pods.

**PI 593226. *Vigna unguiculata* (L.) Walp. *ssp. unguiculata***  
Wild. UCR 4546; IT89KD-252. Collected 06/01/1992 in Nigeria.

**PI 593227. *Vigna unguiculata* (L.) Walp. *ssp. unguiculata***  
Wild. UCR 4561; TVu 298; GROIT; FD 64191. Collected 03/02/1992 in Nigeria.

The following were collected by Mark Sterner, Inland Empire Foods, Riverside, California, United States. Donated by Tony Hall, University of California - Riverside, Riverside, California, United States. Received 02/01/1995.

**PI 593228. *Vigna unguiculata* (L.) Walp. *ssp. unguiculata***  
Wild. UCR 4665; MPINDI 1. Collected 11/06/1992 in Uganda.

**PI 593229. *Vigna unguiculata* (L.) Walp. *ssp. unguiculata***  
Wild. UCR 4667; MPINDI 3. Collected 11/06/1992 in Uganda.

The following were collected by C. J. DeMooy, Colorado State University, Colorado Agricultural Experiment Station, Department of Agronomy, Fort Collins, Colorado, United States. Donated by Tony Hall, University of California - Riverside, Riverside, California, United States. Received 02/01/1995.

**PI 593230. *Vigna unguiculata* (L.) Walp. *ssp. unguiculata***  
Wild. UCR 4673; BOTS 178. Collected 05/01/1986 in Botswana.

**PI 593231. *Vigna unguiculata* (L.) Walp. *ssp. unguiculata***  
Wild. UCR 4675; BOTS 274. Collected 05/01/1986 in Botswana.

**PI 593232. *Vigna unguiculata* (L.) Walp. *ssp. unguiculata***  
Wild. UCR 4676; BOTS 528. Collected 05/01/1986 in Botswana.

The following were donated by Agricultural Research Service -- USDA, Beltsville Agricultural Research Center, Beltsville, Maryland 20705, United States. Received 1961.

**PI 593233. *Melilotus albus* Medikus**  
Cultivar. "DENTA"; NSL 5477. CV-5. Pedigree - Hubam (*M. albus*) / *M. dentatus* (coumarin-free). Vigor and productivity combined with low coumarin character by back crossing with three additional cutlivars and two other accessions of *M. albus*. Released 1961. A low coumarin (non-bitter) cultivar.

The following were developed by Agricultural Research Service -- USDA, Beltsville Agricultural Research Center, Beltsville, Maryland 20705, United States. Received 1961.

**PI 593234. *Melilotus albus* Medikus**

Cultivar. "SPANISH"; "MADRID WHITE"; NSL 5479. CV-1. Pedigree - Derived from PI 27465 which was donated by the Madrid Botanical Garden in Madrid, Spain in 1910. Released 1926. White flowered biennial, vigorous in early seedling stage. Maturity early enough to escape the drought hazard common in the eastern part of the Great Plains states.

The following were developed by Texas Agricultural Experiment Station, College Station, Texas, United States. Donated by Beltsville USDA, ARS, Beltsville, Maryland, United States. Received 1963.

**PI 593235. *Melilotus albus* Medikus**

Cultivar. "ISRAEL"; NSL 5482. Pedigree - From PI 200355 which was introduced from Israel in 1952. Released 1957. Annual with long growing season. In south Texas, can be planted in October and will continue growth until early August. Large stems, large leaves, and grows taller than other varieties.

The following were developed by Karl F. Manke, Texas Agricultural Experiment Station, Lower Rio Grande Valley Station, Weslaco, Texas, United States. Donated by Agricultural Research Service -- USDA, Beltsville Agricultural Research Center, Beltsville, Maryland 20705, United States. Received 1975.

**PI 593236. *Melilotus albus* Medikus**

Cultivar. "EMERALD"; NSL 30287. Pedigree - Selected from the progeny of a hybrid between Hubam clover and a many stemmed, crown branching, leafy, green-seeded biennial, white blossomed sweetclover selected at Brookings South Dakota in 1935. The original cross and first selections were made at Brookings, South Dakota in 1935. Released 1944. Annual, many stemmed, fine stemmed, crown branching, leafy, white blossomed, and green seeded. Shorter and not as coarse as other annual sweetclovers. Greater recovery after close grazing than other annual sweetclovers. Fineness of stems and leafiness due to a single recessive genetic factor.

The following were developed by M.H. Yu, USDA, ARS, U.S. Agricultural Research Station, 1636 East Alisal St., Salinas, California 93905, United States. Received 02/13/1996.

**PI 593237. *Beta vulgaris* var. *maritima* (L.) Moq.**

Breeding. Population. Mi-1. GP-170. Pedigree - Pooled seed increased from open pollination of PI 546426 plants with fewer than 10 galls and protuberances, evaluated 40 days after *Meloidogyne incognita* race 1 J2 inoculations. Mostly annual, multigerm, partially self-compatible, varied in bolting, plant type, and pigmentation. After seedlings were inoculated with 1,000 second-stage *M. incognita* Race 1 juveniles per

plant, about 55 percent of the plants were rated resistant. Plants with zero or fewer than 10 root gall and protuberance counts, and with none to low nematode reproductions observed, were classified as resistant. The nematode resistance is heritable. Valuable for sugarbeet root-knot nematode resistance breeding research.

The following were developed by Dan Phillips, University of Georgia, Department of Plant Pathology, Georgia Experiment Station, Experiment, Georgia 30223, United States; Richard S. Hussey, University of Georgia, College of Agric. and Envirn. Sciences, Department of Plant Pathology, Athens, Georgia 30602-7274, United States; H. Roger Boerma, University of Georgia, Department of Crop & Soil Science, 3111 Plant Sciences Building, Athens, Georgia 30602-7272, United States; E. Dale Wood, University of Georgia, Dept. of Crop & Soil Sciences, Athens, Georgia 30602, United States; S.L. Finnerty, University of Georgia, Dept. of Plant Pathology, Athens, Georgia 30602, United States; Bruce M. Luzzi, University of Guelph, Dept. of Crop Science, Guelph, Ontario N1G 2W1, Canada; John P. Tamulonis, University of Georgia, Dept. of Crop and Soil Sciences, Athens, Georgia, United States. Received 01/25/1996.

**PI 593238. *Glycine max* (L.) Merr.**

Breeding. Pureline. G93-9106. GP-180. Pedigree - G83-559 x (G80-1515(2) x PI 200538), F4. High resistance to peanut root-knot nematode (*Meloidogyne arenaria*). Similar resistance to Ma as PI 200538 but higher seed yield. Maturity group VII. Matures 8 d later than Bryan and 2 d later than PI 200538. 2cm taller and more susceptible to lodging than Bryan. Flowers white, gray pubescence, tan pod walls, and determinate growth habit. Seed have yellow coat and buff hilum. Also resistant to southern (M. incognita) and javanese (M. javanica) root-knot nematodes, race 3 and race 14 of SCN, and bacterial pustule (*Xanthomonas campestris* pv. *glycines*).

The following were developed by S.L. Dwivedi, Int. Crops Res. Inst. for the Semi-Arid Tropics, Genetic Resources Program, Patancheru P.O., Andhra Pradesh 502 324, India; S.N. Nigam, Int. Crops Res. Inst. for the Semi-Arid Tropics, Legumes Program, Patancheru, Andhra Pradesh 502 324, India; A.G.S. Reddy, Int. Crops Res. Inst. for the Semi-Arid Tropics, Asia Center, Patancheru, Andhra Pradesh 502324, India; D.V.R. Reddy, Int. Crops Res. Inst. for the Semi-Arid Tropics, ICRISAT Asia Center, Patancheru, Andhra Pradesh 502 324, India; G.V. Ranga, Int. Crops Res. Inst. for the Semi-Arid Tropics, Patancheru P.O., Andhra Pradesh 502 324, India. Received 02/12/1996.

**PI 593239. *Arachis hypogaea* ssp. *fastigiata* Waldron**

Cultivated. Pureline. ICGV 86388. GP-77. Pedigree - (Dh 3-20/USA 20//Nc Ac 2232) F2-B1-B1-B1-B1. Growth habit erect with sequential branching, medium-sized elliptic dark-green leaves. Pods small, two-seeded, and characterized by none to slight constriction, moderate reticulation, and absence of beak. Meat content 70%. Seeds tan in color, and average 100 seed mass of 37g. Seeds contain 53% oil. Resistance to Peanut Bud Necrosis Disease and Peanut Bud Necrosis Virus and its vector (*Thrips palmi*).

The following were developed by J. L. Sherwood, Oklahoma State University, Department of Plant Pathology, Stillwater, Oklahoma 74078, United States; Robert Hunger, Oklahoma State University, Dept. of Plant Pathology, 110 NRC, Stillwater, Oklahoma 74078-9947, United States; Brett F. Carver, Oklahoma State University, Department of Agronomy, 368 Agriculture Hall North, Stillwater, Oklahoma 74078-0507, United States; E.L. Smith, Oklahoma Agr. Exp. Sta., Oklahoma State University, Stillwater, Oklahoma 74078, United States; B.G. Jordan, RiceTec Inc., Alvis, Texas 77512, United States; R.G. Ward, Stoneville Pedigreed Seed Company, Maricopa, Arizona 85239, United States. Received 02/15/1996.

**PI 593240. *Triticum aestivum* L., nom. cons.**

Breeding. Pureline. OK91P648. GP-505. Pedigree - 2555 sib/Vona//2180. Tolerance to aluminum-toxic, acidic soils in a genetic background with outstanding grain yield potential. In solution culture, seedlings show a similar hematoxylin stain pattern as Atlas 66, and in the field under low pH (<4.5), tolerance ratings are excellent. Adult-plant resistance to leaf rust (*Puccinia recondita*) and segregates for resistance to wheat soil-borne mosaic virus. Plants semi-dwarf and winterhardy in the southern Great Plains. Kernel hardness lower than acceptable limits for hard red winter wheat.

The following were developed by Farman Jodari, Louisiana State University, Rice Research Station, P.O. Box 1429, Crowley, Louisiana 70527, United States ; Don Groth, Rice Research Station, Louisiana State University, Agric. Exp. Station, P.O. Box 1429, Crowley, Louisiana 70429-1429, United States; Steve D. Linscombe, Rice Research Station, Louisiana Agricultural Experimental Sta., P.O. Box 1429, Crowley, Louisiana 70527, United States; P.K. Bollich, Rice Research Station, P.O. Box 1429, Crowley, Louisiana 70527-1429, United States; L.M. White, Rice Research Station, P.O. Box 1429, Crowley, Louisiana 70527-1429, United States; R.T. Dunand, Rice Research Station, P.O. Box 1429, Crowley, Louisiana 70527-1429, United States; Karen Bett, USDA, ARS, Southern Regional Research Center, P.O. Box 19687, New Orleans, Louisiana 70179, United States. Received 02/15/1996.

**PI 593241. *Oryza sativa* L.**

Cultivar. Pureline. "DELLROSE". CV-100. Pedigree - Lemont / Della. Long-grain, aromatic, early maturing and semidwarf with high first crop, second crop, and head rice yield potentials. Average days from seeding to 50% heading 89, and average plant height 98cm. Grain yield average 6858 kg ha<sup>-1</sup>. Average head rice yield 623 g kg<sup>-1</sup>. Concentrations of primary rice aroma compound (2-Acetyl-1-pyrroline) average 988 ng g<sup>-1</sup> (1095 ng g<sup>-1</sup> for Della). Susceptible to sheath blight (*Rhizoctonia solani*). Moderately susceptible to blast (*Pyricularia grisea*). Leaves, lemma, and palea glabrous. Spikelet straw colored and awnless.

The following were developed by Larry R. Teuber, University of California, Department of Agronomy & Range Science, Davis, California 95616-8515, United States; W.L. Green, University of California, Agronomy and Range Science, Davis, California 95616-8515, United States. Received 01/29/1996.

**PI 593242. *Medicago sativa* L. ssp. *sativa***

Breeding. Population. UCRD-C(L)2; UC-1160. GP-306. Pedigree - UCRD-C(L)2

. Germplasm pool selected from Vernal for decreased receptacle diameter through 2 cycles of phenotypic recurrent selection. Approx. 45 plants intercrossed in each cycle.

**PI 593243. *Medicago sativa* L. ssp. *sativa***

Breeding. Population. UCWSS/P-B(L)2; UC-1169. GP-321. Pedigree - UCWSS/P-B(L)2. Germplasm pool selected from Team for decreased seed yield at through 2 cycles of phenotypic recurrent selection. Approx. 45 plants intercrossed in each cycle.

**PI 593244. *Medicago sativa* L. ssp. *sativa***

Breeding. Population. UCWSS/P-C(L)2; UC-1176. GP-323. Pedigree - UCWSS/P-C(L)2. Germplasm pool selected from Vernal for decreased seed yield through 2 cycles of phenotypic recurrent selection. Approx. 45 plants intercrossed in each cycle.

**PI 593245. *Medicago sativa* L. ssp. *sativa***

Breeding. Population. UCDS/P-A(L)2; UC-1142. GP-325. Pedigree - UCDS/P-A(L)2. Germplasm pool selected from CUF101 for decreased seeds per pod through 2 cycles of phenotypic recurrent selection. Approx. 45 plants intercrossed in each cycle.

**PI 593246. *Medicago sativa* L. ssp. *sativa***

Breeding. Population. UCDS/P-B(L)2; UC-1166. GP-327. Pedigree - UCDS/P-B(L)2. Germplasm pool selected from Team for decreased number of seeds per pod through 2 cycles of phenotypic recurrent selection. Approx. 45 plants intercrossed in each cycle.

**PI 593247. *Medicago sativa* L. ssp. *sativa***

Breeding. Population. UCDS/P-C(L)2; UC-1172. GP-329. Pedigree - UCDS/P-C(L)2. Germplasm pool selected from Vernal for decreased number of seeds per pod through 2 cycles of phenotypic recurrent selection. Approx. 45 plants intercrossed in each cycle.

**PI 593248. *Medicago sativa* L. ssp. *sativa***

Breeding. Population. UCDS/P-C(H)2; UC-1173. GP-330. Pedigree - UCDS/P-C(H)2. Germplasm pool selected from Vernal for increased number of seeds per pod through 2 cycles of phenotypic recurrent selection. Approx. 45 plants intercrossed in each cycle.

**PI 593249. *Medicago sativa* L. ssp. *sativa***

Breeding. Population. UCDS-A(L)2; UC-1141. GP-307. Pedigree - UCDS-A(L)2. Germplasm pool selected from CUF101 for decreased seed yield through 2 cycles of phenotypic recurrent selection. Approx. 45 plants intercrossed in each cycle.

**PI 593250. *Medicago sativa* L. ssp. *sativa***

Breeding. Population. UCDS-A(H)2; UC-1147. GP-308. Pedigree - UCDS-A(HL)2. Germplasm pool selected from CUF101 for increased seed yield through 2 cycles of phenotypic recurrent selection. Approx. 45 plants intercrossed in each cycle.

**PI 593251. *Medicago sativa* L. ssp. *sativa***

Breeding. Population. UCWSS-A(H)2; UC-1149. GP-309. Pedigree - UCWSS-A(H)2. Germplasm pool selected from CUF101 for increased seed

yield through 2 cycles of phenotypic recurrent selection. Approx. 45 plants intercrossed in each cycle.

**PI 593252. *Medicago sativa* L. ssp. *sativa***

Breeding. Population. UCWSS-A(L)2; UC-1163. GP-312. Pedigree - UCWSS-A(L)2. Germplasm pool selected from CUF101 for decreased seed yield through 2 cycles of phenotypic recurrent selection. Approx. 45 plants intercrossed in each cycle.

**PI 593253. *Medicago sativa* L. ssp. *sativa***

Breeding. Population. UCDS-B(L)2; UC-1165. GP-313. Pedigree - UCDS-B(L)2. Germplasm pool selected from Team for decreased seed yield at through 3 cycles of phenotypic recurrent selection. Approx. 45 plants intercrossed in each cycle.

**PI 593254. *Medicago sativa* L. ssp. *sativa***

Breeding. Population. UCDS-C(L)2; UC-1171. GP-316. Pedigree - UCDS-C(L)2. Germplasm pool selected from Vernal for decreased seed yield through 2 cycles of phenotypic recurrent selection. Approx. 45 plants intercrossed in each cycle.

**PI 593255. *Medicago sativa* L. ssp. *sativa***

Breeding. Population. UCWSS-C(L)2; UC-1174. GP-317. Pedigree - UCWSS-C(L)2. Germplasm pool selected from Vernal for decreased seed yield through 2 cycles of phenotypic recurrent selection. Approx. 45 plants intercrossed in each cycle.

The following were developed by Dennis Thomas, University of Illinois, Department of Agronomy, 1102 S. Goodwin Avenue, Urbana, Illinois 61801, United States; C.D. Nickell, University of Illinois, Department of Agronomy, 1102 S. Goodwin Avenue, Urbana, Illinois 61801, United States; T.R. Cary, University of Illinois, Illinois Agr. Exp. Sta., Dept. of Agronomy, Urbana, Illinois 61801, United States; Paul Stephens, Pioneer Hi-Bred International, 2999 East 350th Road, Suite 102, La Salle, Illinois 61301, United States. Received 02/15/1996.

**PI 593256. *Glycine max* (L.) Merr.**

Cultivar. "Cisne"; LN90-4129. CV-348; PVP 9600136. Pedigree - F4 selection from Burlison x Asgrow A3733. Indeterminate Group IV maturity (relative maturity 4.4) similar to Spencer. Compared to Spencer averaged 2% higher seed yield, 25 mg/seed-1 higher seed weight, 8 g/kg-1 higher seed protein concentration, and 12 cm shorter plant height. Similar to Spencer in seed quality and seed oil concentration. Has Rps 1-b and Rps 3 genes for resistance to phytophthora rot. Susceptible to brown stem rot, soybean cyst nematode (races 3 & 4) and sudden death syndrome. Flowers purple, tawny pubescence, tan pods at maturity, and dull yellow seeds with black hila.

The following were developed by Dennis Thomas, University of Illinois, Department of Agronomy, 1102 S. Goodwin Avenue, Urbana, Illinois 61801, United States; Jay Tharp, University of Illinois, Department of Agronomy, 1102 S. Goodwin Avenue, Urbana, Illinois 61801, United States; C.D. Nickell, University of Illinois, Department of Agronomy, 1102 S. Goodwin Avenue,

Urbana, Illinois 61801, United States; Greg Noel, USDA-ARS, University of Illinois, Department of Plant Pathology, Urbana, Illinois 61801, United States; T.R. Cary, University of Illinois, Illinois Agr. Exp. Sta., Dept. of Agronomy, Urbana, Illinois 61801, United States. Received 02/15/1996.

**PI 593257. Glycine max (L.) Merr.**

Breeding. LN90-4524. CV-349. Pedigree - F4 selection from LN86-4668 x Asgrow A3733. Group III maturity (relative maturity 3.7) averaging 1 day earlier than Linford and 4 days later than Resnik. Compared with Linford at noninfested SCN locations averaged 6% higher seed yield, and 10 cm shorter plant height. At SCN infested locations, seed yield was 15% higher than Linford and 17% higher than Resnik. When evaluated against SCN in the greenhouse, is susceptible to races 1 & 2, moderately resistant to races 3,4,& 5, and resistant to race 14. Flowers purple, tawny pubescence, brown pods at maturity, and dull yellow seeds with black hila.

The following were developed by Dennis Thomas, University of Illinois, Department of Agronomy, 1102 S. Goodwin Avenue, Urbana, Illinois 61801, United States; C.D. Nickell, University of Illinois, Department of Agronomy, 1102 S. Goodwin Avenue, Urbana, Illinois 61801, United States; T.R. Cary, University of Illinois, Illinois Agr. Exp. Sta., Dept. of Agronomy, Urbana, Illinois 61801, United States; D. Heavner, University of Illinois, Dept. of Crop Sciences, 1102 S. Goodwin, Urbana, Illinois 61801, United States. Received 02/15/1996.

**PI 593258. Glycine max (L.) Merr.**

Cultivar. "Macon"; LN89-295. CV-350; PVP 9600135. Pedigree - F4 selection from Sherman x Resnik. Indeterminate Group III maturity (relative maturity 3.9) 5 days later than Resnik. Compared with Resnik averaged 10% higher seed yield, 25 mg seed-1 larger seeds, 6 g/kg-1 lower seed protein, 4 g/kg-1 lower seed oil, and 5cm plant height. Susceptible to phytophthora rot (races 1,4 and 7), brown stem rot, and moderately resistant to sudden death syndrome. Flowers white, tawny pubescence, brown pods at maturity, and dull yellow seeds with black hila.

The following were developed by Dennis Thomas, University of Illinois, Department of Agronomy, 1102 S. Goodwin Avenue, Urbana, Illinois 61801, United States; C.D. Nickell, University of Illinois, Department of Agronomy, 1102 S. Goodwin Avenue, Urbana, Illinois 61801, United States; T.R. Cary, University of Illinois, Illinois Agr. Exp. Sta., Dept. of Agronomy, Urbana, Illinois 61801, United States; D.J. Johnson, University of Illinois, Dept. of Crop Sciences, 1102 S. Goodwin, Urbana, Illinois 61801, United States; D. Gay, University of Illinois, Dept. of Crop Sciences, 1102 S. Goodwin, Urbana, Illinois 61801, United States. Received 02/15/1996.

**PI 593259. Glycine max (L.) Merr.**

Cultivar. "Iroquois"; LN88-10534. CV-351; PVP 9600137. Pedigree - F4 selection from LN81-1029 x Asgrow A2943. Indeterminate Group III maturity (relative maturity 3.0) similar to Resnik. Compared with Resnik averaged 3% higher seed yield, and 7.5 cm taller plant height. Similar to Resnik in lodging, seed weight, seed quality score, and seed protein



and oil concentration. Resistant to race 1 and susceptible to races 4 & 7 of phytophthora rot. Susceptible to brown stem rot, soybean cyst nematode (races 3 & 4), and sudden death syndrome. Flowers purple, gray pubescence, brown pods, seeds yellow with intermediate seed coat luster and imperfect black hila.

The following were collected by Ken H. Quesenberry, University of Florida, Department of Agronomy, 304 Newell Hall, Gainesville, Florida 32611-0500, United States; Gary A. Pederson, USDA, ARS, Crop Sci. Research Lab, Forage Research Unit, Mississippi State, Mississippi 39762-5367, United States; Yana K. Guteva, Institute of Introduction and Plant Genetic Resources, Sadovo, Plovdiv 4122, Bulgaria; Siyka Angelova, Institute of Introduction and Plant Genetic Resources, 4122 Sadovo, Plovdiv, Bulgaria; Datcho P. Shamov, Institute of Introduction and Plant Genetic Resources, 4122 Sadovo, Plovdiv, Bulgaria. Donated by Gary A. Pederson, USDA, ARS, Crop Sci. Research Lab, Forage Research Unit, Mississippi State, Mississippi 39762-5367, United States. Received 08/31/1994.

**PI 593260. *Trifolium aureum* Pollich**

Wild. 93-25. Collected 08/02/1993 in Bulgaria. Bright yellow flower. Large yellow reflexed head but not campestre. Few plants with yellow reflexed head. Florets much larger than campestre.

**PI 593261. *Trifolium aureum* Pollich**

Wild. 93-40. Collected 08/04/1993 in Bulgaria. Latitude 42 deg. 2' 19'' N. Longitude 23 deg. 54' 8'' E. Elevation 1140 m. 8-10 km west of Velingrad on road to Jundola. Sandy clay loam; 50% sand, 15% silt, 35% clay. Grasses and Forbes; open mountain meadows. Bright yellow flower.

**PI 593262. *Trifolium dubium* Sibth.**

Wild. 93-78. Collected 08/07/1993 in Bulgaria. Latitude 41 deg. 37' 45'' N. Longitude 23 deg. 20' 11'' E. Elevation 645 m. 6-8 km east of Sandanski on road to Jane Sandanski. Sandy loam-silt loam; 47% sand, 50% silt, 3% clay. Meadow grasses; edge of sand field along creek. Narrow valley with stream. Yellow flower. Very fine stems, few florets per head, petiolate leaves.

**PI 593263. *Trifolium echinatum* var. *carmeli* (Boiss.) Gibelli & Belli**

Wild. 93-75. Collected 08/06/1993 in Bulgaria. Latitude 41 deg. 24' 11'' N. Longitude 23 deg. 21' 40'' E. Elevation 180 m. Edge of Chuchulega village near creek. Silty loam; 30% sand, 53% silt, 17% clay. Dry grassland; low valley. Occasional. Pinkish white flower.

**PI 593264. *Trifolium subterraneum* L. ssp. *subterraneum***

Wild. 93-108. Collected 08/02/1993 in Bulgaria. Latitude 42 deg. 4' N. Longitude 27 deg. 33' E. Elevation 270 m. Near Petrova Niva, Strandja Mountains. Obtained from Yana Guteva, Sadovo. White flower. Black seeds.

**PI 593265. *Trifolium suffocatum* L.**

Wild. 93-109. Collected 11/29/1993 in Bulgaria. Latitude 42 deg. 11' N. Longitude 27 deg. 27' E. Elevation 240 m. 7-8 km east of Bosna, Strandja Mountains. Dry, stoney. Obtained from Dr. Yana Guteva, Sadovo. Bulgarian collection number 92 20 67a. White flower.

The following were collected by Norman L. Taylor, University of Kentucky, Department of Agronomy, N-122 Agric. Sci. Bldg. -N, Lexington, Kentucky 40546-0019, United States; Ken H. Quesenberry, University of Florida, Department of Agronomy, 304 Newell Hall, Gainesville, Florida 32611-0500, United States. Received 10/17/1995.

**PI 593266. *Trifolium hirtum* All.**

Cultivated. C-1. Collected 06/02/1994 in California, United States. Latitude 38 deg. 33' 21'' N. Longitude 121 deg. 58' 58'' W. Yolo County. About 9 miles west of Davis on Highway 31, then 1/4 mile on gravel road next to reservoir. Open exposure on a level slope. Disturbed soil.

**PI 593267. *Trifolium dubium* Sibth.**

Wild. C-2; Hop Clover. Collected 06/03/1994 in California, United States. Latitude 39 deg. 14' 5'' N. Longitude 121 deg. 17' 7'' W. Elevation 130 m. About 15 miles East of Marysville, on Rte. 20, then 6 miles NE on Peoria Rd. to Sierra Foothills Experiment Station. Mountain foothills along bank of creek leading to Yuba River, 60% sand, 27% sh, 13% clay, pH 6.9. Soil thin rocky. Slope 25-30 degrees, southern aspect. Scrub oak, grasslands with wild oat, pine, bromus, introduced *T. hirtum*. Upright.

**PI 593268. *Trifolium microcephalum* Pursh**

Wild. C-3. Collected 06/03/1994 in California, United States. Latitude 39 deg. 14' 5'' N. Longitude 121 deg. 17' 7'' E. Elevation 130 m. About 15 miles East of Marysville, on Rte. 20, then 6 miles NE on Peoria Rd. to Sierra Foothills Experiment Station. Mountain foothills along bank of creek leading to Yuba River, 60% sand, 27% sh, 13% clay. Soil thin rocky. Slope 25-30 degrees, southern aspect. Scrub oak, grasslands with wild oat, pine, bromus, introduced *Trifolium hirtum*. Upright.

**PI 593269. *Trifolium willdenovii* Sprengel**

Wild. C-3A. Collected 06/03/1994 in California, United States. Latitude 39 deg. 14' 5'' N. Longitude 121 deg. 17' 7'' W. Elevation 130 m. About 15 miles East of Marysville, on Rte. 20, then 6 miles NE on Peoria Rd. to Sierra Foothills Experiment Station. Mountain foothills along bank of creek leading to Yuba River, 60% sand, 27% sh, 13% clay, pH 6.9. Soil thin rocky. Slope 25-30 degrees, southern aspect. Scrub oak, grasslands with wild oat, pine, bromus, introduced *Trifolium hirtum*. Upright.

**PI 593270. *Trifolium ciliolatum* Benth.**

Wild. C-3B. Collected 06/03/1994 in California, United States. Latitude 39 deg. 14' 5'' N. Longitude 121 deg. 17' 7'' E. Elevation 130 m. About 15 miles East of Marysville, on Rte. 20, then 6 miles NE on Peoria Rd. to Sierra Foothills Experiment Station. Mountain foothills along bank of creek leading to Yuba River, 60% sand, 27% sh, 13% clay. Soil thin rocky. Slope 25-30 degrees, southern aspect. Scrub oak, grasslands with wild oat, pine, bromus, introduced *Trifolium hirtum*. Upright.

**PI 593271. *Trifolium ciliolatum* Benth.**

Wild. C-4. Collected 06/03/1994 in California, United States. Latitude 39 deg. 14' 5'' N. Longitude 121 deg. 17' 7'' W. Elevation 130 m. About 15 miles East of Marysville, on Rte. 20, then 6 miles on Peoria Rd. to

Sierra Foothills Experiment Station. Mountain foothills along bank of creek leading to Yuba River, 60% sand, 27% sh, 13% clay. Soil thin rocky. Slope 25-30 degrees, southern aspect. Scrub oak, grasslands with wild oat, pine, bromus, introduced *Trifolium hirtum*. Upright.

**PI 593272. *Trifolium willdenovii* Sprengel**

Wild. C-5; Tomcat Clover. Collected 06/03/1994 in California, United States. Latitude 39 deg. 14' 5'' N. Longitude 121 deg. 17' 7'' W. Elevation 130 m. About 15 miles East of Marysville, on Rte. 20, then 6 miles NE on Peoria Rd. to Sierra Foothills Experiment Station. Mountain foothills along bank of creek leading to Yuba River, 60% sand, 27% sh, 13% clay. Soil thin rocky. Slope 25-30 degrees, southern aspect. Scrub oak, grasslands with wild oat, pine, bromus, introduced *Trifolium hirtum*. Upright.

**PI 593273. *Trifolium willdenovii* Sprengel**

Wild. C-6; Tomcat clover. Collected 06/03/1994 in California, United States. Latitude 39 deg. 17' 15'' N. Longitude 121 deg. 17' 21'' W. Elevation 500 m. About 15 miles East of Marysville, on Rte. 20, then 6 miles NE on Peoria Rd. to Sierra Foothills Experiment Station. Along Road 6. Mountain foothills along bank of creek leading to Yuba River, 47% sand, 33% sh, 20% clay, pH 6.0. Soil thin rocky. Slope 20 degrees, eastern aspect. Scrub oak, grasslands with wildoat, pine, bromus, introduced *Trifolium hirtum*. Upright.

**PI 593274. *Trifolium ciliolatum* Benth.**

Wild. C-7. Collected 06/03/1994 in California, United States. Latitude 39 deg. 17' 15'' N. Longitude 121 deg. 17' 21'' W. Elevation 500 m. About 15 miles East of Marysville, on Rte. 20, then 6 miles NE on Peoria Rd. to Sierra Foothills Experiment Station. Along Road 6. Mountain foothills along bank of creek leading to Yuba River, 47% sand, 33% sh, 20% clay, pH 6.0. Soil thin rocky. Slope 20 degrees, eastern aspect. Scrub oak, grasslands with wild oat, pine, bromus, introduced *Trifolium hirtum*. Upright.

**PI 593275. *Trifolium albopurpureum* Torrey & A. Gray**

Wild. C-8. Collected 06/03/1994 in California, United States. Latitude 39 deg. 17' 15'' N. Longitude 121 deg. 17' 21'' W. Elevation 500 m. About 15 miles East of Marysville, on Rte. 20, then 6 miles NE on Peoria Rd. to Sierra Foothills Experiment Station. Along Road 6. Mountain foothills along bank of creek leading to Yuba River, 47% sand, 33% sh, 20% clay, pH 6.0. Soil thin rocky. Slope 20 degrees, eastern aspect. Scrub oak, grasslands with wild oat, pine, bromus, introduced *Trifolium hirtum*. Upright. Very pubescent calyx, shatters easily.

**PI 593276. *Trifolium microcephalum* Pursh**

Wild. C-9. Collected 06/03/1994 in California, United States. Latitude 39 deg. 17' 15'' N. Longitude 121 deg. 17' 21'' W. Elevation 500 m. About 15 miles East of Marysville, on Rte. 20, then 6 miles NE on Peoria Rd. to Sierra Foothills Experiment Station. Along Road 6. Mountain foothills along bank of creek leading to Yuba River, 47% sand, 33% sh, 20% clay, pH 6.0. Soil thin rocky. Slope 25-30 degrees, southern aspect. Scrub oak, grasslands with wild oat, pine, bromus, introduced *Trifolium hirtum*.

- PI 593277. *Trifolium bifidum* var. *decipiens* E. Greene**  
Wild. C-10. Collected 06/03/1994 in California, United States. Latitude 39 deg. 14' 5'' N. Longitude 121 deg. 17' 7'' W. About 15 miles East of Marysville, on Rte. 20, then 6 miles NE on Peoria Rd. to Sierra Foothills Experiment Station. Along Road 6. Mountain foothills along bank of creek leading to Yuba River, 47% sand, 33% sh, 20% clay, pH 6.0. Soil thin rocky. Slope 25-30 degrees, southern aspect. Scrub oak, grasslands with wild oat, pine, bromus, introduced *Trifolium hirtum*. Upright, low growing. Seeds black. May be a mixture of tall and short types, perhaps mixed with some *Trifolium dubium* which it resembles except for the black seeds.
- PI 593278. *Trifolium macraei* Hook. & Arn.**  
Wild. C-11. Collected 06/04/1994 in California, United States. Latitude 38 deg. 19' 5'' N. Longitude 123 deg. 4' 15'' W. Elevation 15 m. Sonoma County. Bodega Bay Marine Research Lab., Bodega Bay, 3 miles East Shore Drive. Sandy bluff overlooking Pacific Ocean. 87% sand, 13% sh, 0 clay. pH 6.5. Prostrate. Flowers purple.
- PI 593279. *Trifolium barbigerum* Torrey**  
Wild. C-12. Collected 06/04/1994 in California, United States. Sonoma Co. Bodega Bay Marine Research Lab, UCD. Bodega Bay, 3 miles of East Shore Drive. 87% sand, 13% sh, 0 clay. pH 6.5. Procumbent.
- PI 593280. *Trifolium gracilentum* Torrey & A. Gray**  
Wild. C-13. Collected 06/04/1994 in California, United States. Sonoma County. Bodega Bay Marine Research Lab, UCD. Bodega Bay 3 miles east of Shore Drive. 87% sand, 13% sh, 0 clay. pH 6.5. Flowers reddish purple, upright.
- PI 593281. *Trifolium fucatum* Lindley**  
Wild. C-14. Collected 06/04/1994 in California, United States. Sonoma County. Bodega Bay Marine Research Lab, UCD. Bodega Bay 3 miles east of Shore Drive. 87% sand, 13% sh, 0 clay. pH 6.5. Cream flower turning pink with maturity. Several additional plants sampled on bluff overlooking ocean.
- PI 593282. *Trifolium variegatum* Nutt.**  
Wild. C-16. Collected 06/04/1994 in California, United States. Latitude 38 deg. 18' N. Longitude 122 deg. 47' 18'' W. Elevation 60 m. Two Rock. Walker Road, 3 miles N of Two Rock; Button Ranch. Grassy pasture. Silt-loam. 27% sand, 60% sh, 13% clay. pH 6.0. Flowers purple, procumbent.
- PI 593283. *Trifolium microcephalum* Pursh**  
Wild. C-17. Collected 06/04/1994 in California, United States. Latitude 38 deg. 18' 3'' N. Longitude 122 deg. 46' 37'' W. Elevation 90 m. Two Rock, California; Walker Rd., 3 miles N of Two Rock; Button Ranch. Grassy pasture; sandy loam. 67% sand, 33% sh, 0 clay. pH 5.7. Upright but short, low growing. Flowers white.
- PI 593284. *Trifolium variegatum* Nutt.**  
Wild. C-18. Collected 06/04/1994 in California, United States. Latitude 38 deg. 18' 3'' N. Longitude 122 deg. 46' 37'' W. Elevation 90 m. Two Rock, California; Walker Rd., 3 miles N of Two Rock; Button Ranch.

Grassy pasture; sandy loam, 67% sand, 33% sh, 0 clay. pH 5.7. Upright but low growing. Flowers lavender.

**PI 593285. *Trifolium bifidum* var. *decipiens* E. Greene**

Wild. C-19. Collected 06/04/1994 in California, United States. Latitude 38 deg. 18' 3'' N. Longitude 122 deg. 46' 37'' W. Elevation 90 m. Two Rock, California; Walker Rd., 3 miles N of Two Rock; Button Ranch. Grassy pasture; sandy loam, 67% sand, 33% sh, 0 clay. pH 5.7. Low growing. Flowers pink to purple. This accession is distinct from var. *bifidum* which has leaflets deeply bifid (forked), but none of this found.

**PI 593286. *Trifolium ciliolatum* Benth.**

Wild. C-20. Collected 06/04/1994 in California, United States. Latitude 38 deg. 18' 3'' N. Longitude 122 deg. 46' 37'' W. Elevation 90 m. Two Rock, California; Walker Rd., 3 miles N of Two Rock; Button Ranch. Grassy pasture; sandy loam, 67% sand, 33% sh, 0 clay. pH 5.7. Upright. Flowers white to pink to purple.

**PI 593287. *Trifolium gracilentum* Torrey & A. Gray**

Wild. C-20A. Collected 06/04/1994 in California, United States. Latitude 38 deg. 18' 3'' N. Longitude 122 deg. 46' 37'' W. Elevation 90 m. Two Rock, California; Walker Rd., 3 miles N of Two Rock; Button Ranch. Grassy pasture; sandy loam, 67% sand, 33% sh, 0 clay. pH 5.7.

**PI 593288. *Trifolium microdon* Hook. & Arn.**

Wild. C-21. Collected 06/04/1994 in California, United States. Latitude 38 deg. 18' 3'' N. Longitude 122 deg. 46' 37'' W. Elevation 90 m. Two Rock, California; Walker Rd., 3 miles N of Two Rock; Button Ranch. Grassy pasture; sandy loam, 67% sand, 33% sh, 0 clay. pH 5.7. Upright. Flowers pale pink to whitish.

**PI 593289. *Trifolium oliganthum* Steudel**

Wild. C-22; Tomcat clover. Collected 06/04/1994 in California, United States. Latitude 38 deg. 18' 3'' N. Longitude 122 deg. 46' 37'' W. Elevation 90 m. Two Rock, California; Walker Rd., 3 miles N of Two Rock; Button Ranch. Grassy pasture; sandy loam, 67% sand, 33% sh, 0 clay. pH 5.7. Upright. Flowers reddish purple. One envelope possibly mixed with *oliganthum* but other envelope (same no.) thought to be pure. Will separate at a later date if possible.

**PI 593290. *Trifolium willdenovii* Sprengel**

Wild. C-22A. Collected 06/04/1994 in California, United States. Latitude 38 deg. 18' 3'' N. Longitude 122 deg. 46' 37'' W. Elevation 90 m. Two Rock, California; Walker Rd., 3 miles N of Two Rock; Button Ranch. Grassy pasture; sandy loam, 67% sand, 33% sh, 0 clay. pH 5.7. One envelope possibly mixed with *oliganthum* but other envelope (same no.) thought to be pure. This is the second envelope.

**PI 593291. *Trifolium willdenovii* Sprengel**

Wild. C-24; Tomcat clover. Collected 06/06/1994 in California, United States. Latitude 38 deg. 24' 10'' N. Longitude 122 deg. 14' 14'' W. Elevation 470 m. Napa. 4 miles NE on Atlas Peek Rd. Chapparel foothills with vernal pools; wild oat, bunch grasses, *festuca californicum*, scrub oak, vicia, western wild rye, ryegrass. Sandy loam; 67% sand, 33% sh, 0

clay. pH 6.0. Prickly heads. Upright. Flowers purple.

**PI 593292. *Trifolium microcephalum* Pursh**

Wild. C-25. Collected 06/06/1994 in California, United States. Latitude 38 deg. 24' 10'' N. Longitude 122 deg. 14' 14'' W. Elevation 470 m. Napa. 4 miles NE on Atlas Peak Rd. Chapparel foothills with vernal pools; wild oat, bunch grasses, *festuca californicum*, scrub oak, vicia, western wild rye, ryegrass. Sandy loam; 67% sand, 33% sh, 0 clay. pH 6.0. Upright. Low growing. Plants short. Flowers white pink.

**PI 593293. *Trifolium microdon* Hook. & Arn.**

Wild. C-26. Collected 06/06/1994 in California, United States. Latitude 38 deg. 24' 10'' N. Longitude 122 deg. 14' 14'' W. Elevation 470 m. Napa. 4 miles NE on Atlas Peak Rd. Chapparel foothills with vernal pools; wild oat, bunch grasses, *festuca californicum*, scrub oak, vicia, western wild rye, ryegrass. Sandy loam; 67% sand, 33% sh, 0 clay. pH 6.0. Upright but short. Flowers pink white.

**PI 593294. *Trifolium variegatum* Nutt.**

Wild. C-27. Collected 06/04/1994 in California, United States. Latitude 38 deg. 24' 10'' N. Longitude 122 deg. 14' 14'' W. Elevation 470 m. Napa. 4 miles NE on Atlas Peak Rd. Chapparel foothills; along drain from vernal pool. Decumbent. Flowers purple with white tip.

**PI 593295. *Trifolium depauperatum* Desv.**

Wild. C-28. Collected 06/06/1994 in California, United States. Latitude 38 deg. 24' 10'' N. Longitude 122 deg. 14' 14'' W. Elevation 470 m. Napa. 4 miles NE on Atlas Peak Rd. Chapparel foothills; along edge of dried-up vernal pool. Plants upright but very short.

**PI 593296. *Trifolium obtusiflorum* Hook. & Arn.**

Wild. C-29; Swamp clover. Collected 06/06/1994 in California, United States. Latitude 38 deg. 38' 6'' N. Longitude 122 deg. 24' 29'' W. Elevation 220 m. Napa. Pope Valley; Wallace Farm; 3 miles NE of Wantrup Wildlife Sanctuary; Creek about 1/2 mile N of farmhouse. Among rocks along bank of dry creek. Sandy soil; 93% sand, 7% sh, 0 clay. pH 7.3. Nice tall plants, very prickly calyx teeth. Upright. Flowers purple.

**PI 593297. *Trifolium gracilentum* Torrey & A. Gray**

Wild. C-30. Collected 06/06/1994 in California, United States. Latitude 38 deg. 37' 54'' N. Longitude 122 deg. 23' 18'' W. Elevation 210 m. Pope Valley. Wallace Farm; 3 miles NE of Wantrup Wildlife Sanctuary. Field at farm entrance about 1/2 mile S. of farmhouse. Pasture field, ryegrass, wild oat, medusa head. Sandy loam; 87% sand, 7% sh, 7% clay; pH 7.0. Scattered, hard to locate plants in open pasture. Procumbent.

**PI 593298. *Trifolium fucatum* Lindley**

Wild. C-32. Collected 06/06/1994 in California, United States. Latitude 38 deg. 39' 9'' N. Longitude 122 deg. 25' 39'' W. Elevation 240 m. Napa County. Pope Valley; Old Barnett Ranch; End of Barnett Rd., 1/4 mile N of cemetery. Abandoned grape vineyard; Sandy loam; 60% sand, 40% sh, 0 clay; pH 6.7. Rare scattering plants in between rows of grapes abandoned due to phylloxera. Plants erect.

**PI 593299. *Trifolium willdenovii* Sprengel**

Wild. C-33; Tomcat clover. Collected 06/06/1994 in California, United States. Latitude 38 deg. 38' 21'' N. Longitude 122 deg. 26' 4'' W. Elevation 400 m. Napa County. Pope Valley; Howell Mtn. Rd. 1 mile SW of Pope-Childs Rd. Roadside bank; short forbes and brush. Clay loam; 40% sand, 20% sh, 40% clay; pH 6.0. Upright.

The following were collected by Jake Ruygt, 3549 Willis Drive, Napa, California 94558, United States. Donated by Norman L. Taylor, University of Kentucky, Department of Agronomy, N-122 Agric. Sci. Bldg. -N, Lexington, Kentucky 40546-0019, United States; Ken H. Quesenberry, University of Florida, Department of Agronomy, 304 Newell Hall, Gainesville, Florida 32611-0500, United States. Received 10/17/1995.

**PI 593300. *Trifolium gracilentum* Torrey & A. Gray**

Wild. C-34. Collected 06/06/1994 in California, United States. Latitude 38 deg. 28' 45'' N. Longitude 122 deg. 27' 55'' W. Elevation 120 m. Napa County St. Helena; 1/2 mile S of Sulphur Springs Ave. on Lewelling Ranch. Procumbent.

**PI 593301. *Trifolium microdon* Hook. & Arn.**

Wild. C-35. Collected 06/06/1994 in California, United States. Latitude 38 deg. 28' 45'' N. Longitude 122 deg. 27' 55'' W. Elevation 120 m. Napa County. St. Helena, 1/2 mile S of Sulphur Springs Ave. on Lewelling Ranch. Upright, short.

**PI 593302. *Trifolium ciliolatum* Benth.**

Wild. C-36. Collected 06/06/1994 in California, United States. Latitude 38 deg. 28' 45'' N. Longitude 122 deg. 27' 55'' W. Elevation 120 m. Napa County. St. Helena, 1/2 mile S of Sulphur Springs Ave. on Lewelling Ranch. Upright.

The following were collected by Norman L. Taylor, University of Kentucky, Department of Agronomy, N-122 Agric. Sci. Bldg. -N, Lexington, Kentucky 40546-0019, United States; Ken H. Quesenberry, University of Florida, Department of Agronomy, 304 Newell Hall, Gainesville, Florida 32611-0500, United States. Received 10/17/1995.

**PI 593303. *Trifolium microcephalum* Pursh**

Wild. C-37. Collected 06/06/1994 in California, United States. Latitude 38 deg. 28' 45'' N. Longitude 122 deg. 27' 55'' W. Elevation 120 m. Napa Co. St. Helena, 1/2 mile S of Sulphur Springs Ave. on Lewelling Ranch. Upright, short.

The following were collected by Vern L. Yadon, 1119 Buena Viast Avenue, Pacific Grove, California 93950, United States. Donated by Norman L. Taylor, University of Kentucky, Department of Agronomy, N-122 Agric. Sci. Bldg. -N, Lexington, Kentucky 40546-0019, United States. Received 10/17/1995.

**PI 593304. *Trifolium polyodon* E. Greene**

Wild. C-38. Collected 06/07/1994 in California, United States. Latitude 36 deg. 35' 44'' N. Longitude 121 deg. 57' 40'' W. Elevation 8 m. Pacific Grove. Monterey Country Club, South Moss Beach, 1/4 mile N of

Bud Rd, along 17 mile drive. Sandy beach. Sandy loam; 80% sand, 13% sh, 7% clay; pH 5.7. 1994 seed.

**PI 593305. *Trifolium trichocalyx* A. A. Heller**

Wild. C-40. Collected 06/07/1994 in California, United States. Latitude 36 deg. 35' 1'' N. Longitude 121 deg. 35' 29'' W. Elevation 200 m. Pacific Grove. Intersection of Castenella Way and unnamed street. Area burned in 1987 or 1989; sandy; Clay loam; 47% sand, 27% sh, 27% clay; pH 5.6. Vern Yadon stated that plants were frequent after burn, but not seen much since. Seed harvested from pot grown at home in 1994.

The following were collected by Norman L. Taylor, University of Kentucky, Department of Agronomy, N-122 Agric. Sci. Bldg. -N, Lexington, Kentucky 40546-0019, United States. Received 10/17/1995.

**PI 593306. *Trifolium polyodon* E. Greene**

Wild. C-41. Collected 06/07/1994 in California, United States. Latitude 36 deg. 34' 37'' N. Longitude 121 deg. 50' 28'' W. Elevation 78 m. Pacific Grove. Olmstead Rd., Hwy 68, Monterra Ranch. Pasture field. Sandy loam; 60% sand, 33% sh, 7% clay; pH 5.5. Soil wet in winter but dried very hard in summer. Plants low growing.

The following were collected by Randall Morgan, 3500 N. Main St., Soquel, California 95073, United States. Donated by Norman L. Taylor, University of Kentucky, Department of Agronomy, N-122 Agric. Sci. Bldg. -N, Lexington, Kentucky 40546-0019, United States. Received 10/17/1995.

**PI 593307. *Trifolium buckwestiorum* Isely**

Wild. C-42. Collected 06/08/1994 in California, United States. Latitude 37 deg. N. Longitude 122 deg. W. Elevation 210 m. Swanton, Santa Cruz Co. Along old road bed; Scott Creek watershed. Shallow depression that collects water in winter; Associated with live oak, not in open grassland; Clay loam. Prostrate. Flowers white.

**PI 593308. *Trifolium variegatum* Nutt.**

Wild. C-44. Collected 06/08/1994 in California, United States. Latitude 37 deg. N. Longitude 122 deg. W. Elevation 213 m. Scotts Valley; 1/4 mile north of school, north of Vine Hill School Road. Grasslands. Semi-erect. Flowers purple with white tip. Scattered within a small area (30' long).

**PI 593309. *Trifolium barbigerum* Torrey**

Wild. C-45. Collected 06/09/1994 in California, United States. Latitude 37 deg. N. Longitude 122 deg. W. Elevation 213 m. Scotts Valley; 1/4 mile north of school, north of Vine Hill School Rd. Grasslands. Decumbent. Flowers purple with white tip. Scattered.

**PI 593310. *Trifolium depauperatum* Desv.**

Wild. C-46. Collected 06/08/1994 in California, United States. Scotts Valley; 1/4 mile north of school; north of Vine Hill School Rd. Sandy clay loam. Bare patch in midst of grassland. Very thin soil over bedrock. Decumbent. Monoculture. Flowers pink.



- PI 593311. *Trifolium barbigerum* var. *andrewsii* A. Gray**  
 Wild. C-47. Collected 06/08/1994 in California, United States. Latitude 37 deg. N. Longitude 122 deg. W. Elevation 213 m. Scotts Valley; 1/4 mile north of school, north of Vine Hill School Rd. Bare patch in midst of grassland. Growing with *Lasthenia californica*. *T. grayii* (inland race according to Morgan). Decumbent. Dense monoculture. Flowers purple with white tip.
- PI 593312. *Trifolium depauperatum* Desv.**  
 Wild. C-48. Collected 06/08/1994 in California, United States. Latitude 37 deg. N. Longitude 122 deg. W. Elevation 800 m. Santa Cruz Co. 1/2 mile from site 18 (west); Scotts Valley, just N of Casa Way. Open grasslands, bare patches caused by thin soil over bedrock. Seed from 1989; all others until now, 1994 variety *truncatum* of *depauperatum* according to Isley. Decumbent. Flowers purple.
- PI 593313. *Trifolium fucatum* Lindley**  
 Wild. C-49. Collected 06/08/1994 in California, United States. Latitude 37 deg. N. Longitude 122 deg. W. Elevation 366 m. Santa Clara Co. Mt. Motonna Co. Park; 1/2 mile along Merry-go-round trail along Sprig lake. Serpentine slope; grass, no other clover. Semi-erect. Dense colony. Flowers cream.
- PI 593314. *Trifolium variegatum* Nutt.**  
 Wild. C-50. Collected 06/08/1994 in California, United States. Latitude 37 deg. N. Longitude 122 deg. W. Elevation 213 m. Santa Cruz Co.; Scotts Valley; 1/4 mile north of school; north of Vine Hill School Rd. Grassland. Flowers are pink and more numerous per head than other *variegatum*; calyx is green, not purple tipped.
- PI 593315. *Trifolium variegatum* Nutt.**  
 Wild. C-51. Collected 06/08/1994 in California, United States. Latitude 37 deg. N. Longitude 122 deg. W. Elevation 210 m. Swanton, Santa Cruz Co. Along old road bed going from Purdy Aluminum Scott Creek Watershed. This is the normal *variegatum* which occurs with the pseudo *variegatum*. Plants grow from seed collected in wild. This seed then is from the garden. Flowers purple with white tip.
- PI 593316. *Trifolium barbigerum* var. *andrewsii* A. Gray**  
 Wild. C-52. Collected 06/09/1994 in California, United States. Latitude 37 deg. N. Longitude 122 deg. W. Elevation 15 m. San Mateo Co. Bean Hollow Beach; on Highway 1 S. of Pescadero; 2 1/2 miles S. of Pescadero Rd. intersection. Sandy beach with *Lathenia* along trail; bare ground; sandy loam. Site description by Morgan. Two collections (one from garden and one from field). Large form along coast - *T. grayii* according to Morgan. Flowers purple with white tip.
- PI 593317. *Trifolium variegatum* Nutt.**  
 Wild. C-53. Collected 06/09/1994 in California, United States. Latitude 37 deg. N. Longitude 122 deg. W. Elevation 61 m. Western city limits of Santa Cruz along and S of Highway 1, W of Meder St. Open grasslands mixed with *T. variegatum* and *T. barbigerum*; sandy loam. Big showy heads. Flowers purple with white tip.
- PI 593318. *Trifolium barbigerum* Torrey**

Wild. C-54. Collected 06/09/1994 in California, United States. Latitude 37 deg. N. Longitude 122 deg. W. Elevation 152 m. Santa Cruz; near summit of Swanton Rd., 1/2 mile S of summit; 1/2 mile inland of Pelican Rock. Level coastal terrace; open grassland with typical *barbigerum* nearby that does not appear to hybridize with this form. Sandy loam. Known in only 2-3 locations.

**PI 593319. *Trifolium macraei* Hook. & Arn.**

Wild. C-55. Collected 06/09/1994 in California, United States. Latitude 37 deg. N. Longitude 122 deg. W. Elevation 61 m. Western city limits of Santa Cruz along and S of Highway 1, W of Meder St. Open grasslands mixed with *Trifolium variegatum* and *Trifolium barbigerum*. 1981 seed. Semi-erect; few scattered plants.

The following were collected by Lowell Ahart. Donated by Norman L. Taylor, University of Kentucky, Department of Agronomy, N-122 Agric. Sci. Bldg. -N, Lexington, Kentucky 40546-0019, United States. Received 10/17/1995.

**PI 593320. *Trifolium barbigerum* var. *andrewsii* A. Gray**

Wild. C-56. Collected 06/06/1994 in California, United States. Elevation 61 m. Butte Co. Oraville; T 20 N, R 3 E; Southwest 1/4 Sect. 27. About 1/2 mile east of large PG&E substation. East of Cottonwood Creek, about 4 miles NW of Oraville. Dark brown to black gravelly soil, side of small vernal pool or swale. Few plants found. Only form of *Trifolium barbigerum* found in Butte Co.

The following were collected by Randall Morgan, 3500 N. Main St., Soquel, California 95073, United States. Donated by Norman L. Taylor, University of Kentucky, Department of Agronomy, N-122 Agric. Sci. Bldg. -N, Lexington, Kentucky 40546-0019, United States. Received 10/17/1995.

**PI 593321. *Trifolium albopurpureum* Torrey & A. Gray**

Wild. C-57. Collected 07/01/1994 in California, United States. Latitude 37 deg. N. Longitude 122 deg. W. Elevation 213 m. Santa Cruz Co. Scotts Valley; 1/4 mile N of Vine Hill school; in grasslands. Undisturbed soil; decomposed mud stone; native grasses and herbs mixed. Received July 14, 1994; site not seen by N. L. Taylor.

The following were collected by Lowell Ahart. Donated by Norman L. Taylor, University of Kentucky, Department of Agronomy, N-122 Agric. Sci. Bldg. -N, Lexington, Kentucky 40546-0019, United States. Received 10/17/1995.

**PI 593322. *Trifolium fucatum* Lindley**

Wild. C-58. Collected 07/01/1994 in California, United States. Elevation 61 m. Butte Co., Biggs. Northside of Biggs Princeton Road about 2 miles west of Biggs. Fallow rice field, dark bare clay soil. Seed collected in spring of 1992 by Lowell Ahart. Although very rare in Butte Co., sometimes common in fallow rice fields. Erect. Flowers yellow.

The following were collected by Norman L. Taylor, University of Kentucky, Department of Agronomy, N-122 Agric. Sci. Bldg. -N, Lexington, Kentucky

40546-0019, United States; Ken H. Quesenberry, University of Florida, Department of Agronomy, 304 Newell Hall, Gainesville, Florida 32611-0500, United States. Received 10/17/1995.

**PI 593323. *Trifolium amoenum* E. Greene**

Wild. C-59. Collected 07/25/1994 in California, United States. Latitude 38 deg. 23' 34'' N. Longitude 123 deg. 0' 3'' W. Bodega Bay, Sonoma County, also known as Occidental. Collected in wild in July 1993. From culture July 8, 1994 to July 11, 1994. Thought to be lost but rediscovered and presented by Peter Connors. Upright, vigorous.

The following were collected by Randall Morgan, 3500 N. Main St., Soquel, California 95073, United States. Donated by Norman L. Taylor, University of Kentucky, Department of Agronomy, N-122 Agric. Sci. Bldg. -N, Lexington, Kentucky 40546-0019, United States. Received 10/17/1995.

**PI 593324. *Trifolium barbigerum* Torrey**

Wild. C-61. Collected 1994 in California, United States. Salano Co. Jepsom Prairie Reserve; South of Davis. Edge of small, shallow vernal pool; very dry in summer, and baked hard. Plants closest to T. pseudobarbigerum. Flowers pale.

The following were collected by Ken H. Quesenberry, University of Florida, Department of Agronomy, 304 Newell Hall, Gainesville, Florida 32611-0500, United States; Warren Williams, Margot Forde Genetics Resources Centre, New Zealand. Received 10/17/1995.

**PI 593325. *Trifolium arvense* L.**

Wild. OR-2; Shop Clover. Collected 07/30/1994 in Oregon, United States. 3 miles W of Florence at turn off to Florence beach/Sivslow River. Sand dunes, roadway. Upright.

The following were collected by Norman L. Taylor, University of Kentucky, Department of Agronomy, N-122 Agric. Sci. Bldg. -N, Lexington, Kentucky 40546-0019, United States; Ken H. Quesenberry, University of Florida, Department of Agronomy, 304 Newell Hall, Gainesville, Florida 32611-0500, United States; Warren Williams, Margot Forde Genetics Resources Centre, New Zealand. Received 10/17/1995.

**PI 593326. *Trifolium microdon* Hook. & Arn.**

Wild. OR-6. Collected 08/02/1994 in Oregon, United States. Latitude 43 deg. 1' 59'' N. Longitude 123 deg. 58' 41'' W. Coos Co. NE about 2-3 miles from Bridge, Oregon. Logging road; Euphoria Ridge No. 1.; meadow type grasses; stony steep slope; soil sand. Erect.

**PI 593327. *Trifolium variegatum* Nutt.**

Wild. OR-7. Collected 08/02/1994 in Oregon, United States. Latitude 43 deg. 1' 55'' N. Longitude 123 deg. 58' 41'' W. Coos Co. NE about 2-3 miles from Bridge, Oregon. Erect.

**PI 593328. *Trifolium albopurpureum* Torrey & A. Gray**

Wild. OR-8. Collected 08/02/1994 in Oregon, United States. Latitude 43

deg. 1' 59'' N. Longitude 123 deg. 58' 41'' W. Coos Co. NE about 2-3 miles from Bridge, Oregon. Low growing.

**PI 593329. *Trifolium variegatum* Nutt.**

Wild. OR-10. Collected 08/03/1994 in Oregon, United States. Latitude 42 deg. 24' 8'' N. Longitude 125 deg. 25' 19'' W. Elevation 1030 m. Curry Co., Agness. 8 miles NNW of Agness, U.S. Forest Service Road. Serpentine rock face, nothing on face but clover, *T. microcephalum*. Sandy loam, pH 7.0. Traveled Rt. 33, then 3336, then 3340 from Lake of Woods, then to 110. Guided by Viva Stansells.

**PI 593330. *Trifolium microcephalum* Pursh**

Wild. OR-11. Collected 08/03/1994 in Oregon, United States. Latitude 42 deg. 24' 8'' N. Longitude 124 deg. 25' 19'' W. Agness, OR; Siskiyou Nat'l Forest. Eight miles NNW of Agness. Below *T. monanthum* site, along roadside. Very low.

**PI 593331. *Trifolium cyathiferum* Lindley**

Wild. OR-12. Collected 08/04/1994 in Oregon, United States. Latitude 43 deg. 15' 27'' N. Longitude 123 deg. 1' 38'' W. Elevation 275 m. Douglas Co. 1/2 mile SE of Peel on Gravel Road, Thunder Mountain Rd. Roadside near rocky ledge, grassy weeds along Thunder Mountain Rd, Gravel Rd., sandy loam with coarse sand, pH 7.0. Guides: Mildred Thiele, Lois Hopkins, Mary Carlson; Douglas Co. Museum Associates. Upright, scattered, heads mostly shattered.

**PI 593332. *Trifolium cyathiferum* Lindley**

Wild. OR-24. Collected 08/09/1994 in Oregon, United States. Latitude 45 deg. 11' 24'' N. Longitude 118 deg. 32' 31'' W. Elevation 1500 m. Union Co. Starkey Experimental Forest. Road runs E & W. In ditch along side of gravel road, open meadow in pine trees; silt loam; pH 6.6. Decumbent. Spots of plants rather occasional but dense.

**PI 593333. *Trifolium cyathiferum* Lindley**

Wild. OR-30. Collected 08/10/1994 in Oregon, United States. Wallawa. Involucre seems more cupped than earlier collection of *T. cyathiferum*. Low growing.

**PI 593334. *Trifolium microcephalum* Pursh**

Wild. OR-31. Collected 08/11/1994 in Oregon, United States. Latitude 45 deg. 41' 11'' N. Longitude 121 deg. 18' 6'' W. Elevation 240 m. Tom McCall Preserve, Mayer State Park; approximately 8 miles west of Dalles on Ore 30. Rocky, open slope; grass species, no trees; on bluff over the Columbia River; sandy loam; pH 6.4. Low growing.

**PI 593335. *Trifolium cyathiferum* Lindley**

Wild. OR-32. Collected 08/11/1994 in Oregon, United States. Latitude 45 deg. 41' 11'' N. Longitude 121 deg. 18' 6'' W. Elevation 240 m. Tom McCall Preserve, Mayer State Park. Upright, low growing.

The following were collected by Karl Urban, 2517 W Hailey Ave., Pendleton, Oregon 97801, United States; Michael Rohde, 2517 W Hailey Ave., Pendleton, Oregon 97801, United States. Donated by Norman L. Taylor, University of Kentucky, Department of Agronomy, N-122 Agric. Sci. Bldg. -N, Lexington,

Kentucky 40546-0019, United States; Ken H. Quesenberry, University of Florida, Department of Agronomy, 304 Newell Hall, Gainesville, Florida 32611-0500, United States. Received 10/17/1995.

**PI 593336. *Trifolium cyathiferum* Lindley**

Wild. OR-39; Cup clover. Collected 08/15/1994 in Oregon, United States. Latitude 45 deg. 16' N. Longitude 118 deg. 48' W. Elevation 1527 m. Near "Lucky Strike Bench Mark" on Forest Rd. 5412, Granite Meadows.

**PI 593337. *Trifolium cyathiferum* Lindley**

Wild. OR-40; Cup clover. Collected 08/02/1994 in Oregon, United States. Latitude 45 deg. 43' N. Longitude 117 deg. 59' W. Elevation 1536 m. Near Ballon Tree Springs, Partridge Rd. Union Co.

**PI 593338. *Trifolium macrocephalum* (Pursh) Poiret**

Wild. OR-41; Big headed clover; W6 17569. Collected 08/01/1994 in Oregon, United States. Latitude 45 deg. 46' N. Longitude 118 deg. 3' W. Elevation 1539 m. Bald Mountain Helipad, Unatilla Co. Presented to N. Taylor and K. Quesenberry.

The following were collected by Mary Carlson, Douglas County Museum of History and Natural History, P. O. Box 1550, Roseberg, Oregon 97470, United States; Lois Hopkins, Douglas County Museum of History and Natural History, P. O. Box 1550, Roseberg, Oregon 97470, United States; Mildred Thiele, Douglas County Museum of History and Natural History, P. O. Box 1550, Roseberg, Oregon 97470, United States. Donated by Norman L. Taylor, University of Kentucky, Department of Agronomy, N-122 Agric. Sci. Bldg. -N, Lexington, Kentucky 40546-0019, United States; Ken H. Quesenberry, University of Florida, Department of Agronomy, 304 Newell Hall, Gainesville, Florida 32611-0500, United States. Received 10/17/1995.

**PI 593339. *Trifolium cyathiferum* Lindley**

Wild. OR-43. Collected 08/09/1994 in Oregon, United States. Elevation 990 m. Douglas Co., Tiller. South on Elk Creek Hw 1 to 1610 to 300 1/8 mile. Small pond on east side of road at bottom of a slope. Assoc. with *Madia gracilis*, grasses, *Menth* sp, *Carex* sp. Collected late in season. Much seed has been dispersed.

The following were donated by Todd Wehner, North Carolina State University, Department of Horticultural Science, P.O. Box 7609, Raleigh, North Carolina 27695-7609, United States; Bill Rhodes, Clemson University, Dept. of Horticulture, E-1417 & AS Building, Clemson, South Carolina 29634-0375, United States; James D. McCreight, USDA, ARS, Agricultural Research Station, 1636 E. Alisal Street, Salinas, California 93905, United States; Weihong Gu, Shanghai Horticultural Institute, Shanghai Academy of Agricultural Sciences, Shanghai, China; Xingping Zhang, Clemson University, Department of Horticulture, E-1417 & AS Building, Clemson, South Carolina 29634-0375, United States. Received 02/21/1995.

**PI 593340. *Citrullus lanatus* (Thunb.) Matsum. & Nakai**

Landrace. ZWRM 2; Tai Hei Xi Gua. 100-400 black and brown seed. Fruit small.

**PI 593341. *Citrullus lanatus* (Thunb.) Matsum. & Nakai**  
Landrace. ZWRM 3; Bin Gua. Light and dark seed color. Fruit medium size.

**PI 593342. *Citrullus lanatus* (Thunb.) Matsum. & Nakai**  
Landrace. ZWRM 4; Shan Bai. Less than 25 large, light brown seed.

The following were donated by Todd Wehner, North Carolina State University, Department of Horticultural Science, P.O. Box 7609, Raleigh, North Carolina 27695-7609, United States; Bill Rhodes, Clemson University, Dept. of Horticulture, E-1417 & AS Building, Clemson, South Carolina 29634-0375, United States; James D. McCreight, USDA, ARS, Agricultural Research Station, 1636 E. Alisal Street, Salinas, California 93905, United States; Xingping Zhang, Clemson University, Department of Horticulture, E-1417 & AS Building, Clemson, South Carolina 29634-0375, United States; Guolian Zhang. Received 02/21/1995.

**PI 593343. *Citrullus lanatus* (Thunb.) Matsum. & Nakai**  
Landrace. ZWRM 9. 100-400 tan with black tip seed. Fruit oblong, light-green skin color, red flesh. Early, good quality, easy fruit-set under humid conditions.

**PI 593344. *Citrullus lanatus* (Thunb.) Matsum. & Nakai**  
Landrace. ZWRM 10. 100-400 medium-small, brown with black seed. Fruit round, medium-striped skin color, red flesh. Early, very thin rind, super fruit-set under humid conditions.

**PI 593345. *Citrullus lanatus* (Thunb.) Matsum. & Nakai**  
Landrace. ZWRM 11. 100-400 medium-large, white with black seed. Skin color light green, red flesh, large fruit (>14 lb). High yield, fair quality. Good resistance to foliage diseases.

The following were donated by Todd Wehner, North Carolina State University, Department of Horticultural Science, P.O. Box 7609, Raleigh, North Carolina 27695-7609, United States; Bill Rhodes, Clemson University, Dept. of Horticulture, E-1417 & AS Building, Clemson, South Carolina 29634-0375, United States; James D. McCreight, USDA, ARS, Agricultural Research Station, 1636 E. Alisal Street, Salinas, California 93905, United States; Xingping Zhang, Clemson University, Department of Horticulture, E-1417 & AS Building, Clemson, South Carolina 29634-0375, United States; Chinese Academy of Agricultural Science, Institute of Pomology, Zhengzhou, Henan 450004, China. Received 02/21/1995.

**PI 593346. *Citrullus lanatus* (Thunb.) Matsum. & Nakai**  
Landrace. ZWRM 21; Fuzhou Gua. 50-100 medium-small, black seed. Resistant to Fusarium wilt.

**PI 593347. *Citrullus lanatus* (Thunb.) Matsum. & Nakai**  
Landrace. ZWRM 22; Yixuang. 50-100 medium-small, black seed. Fruit round, light green skin color, red flesh. Nematode resistant.

**PI 593348. *Citrullus lanatus* (Thunb.) Matsum. & Nakai**  
Landrace. ZWRM 23; Zhongyu No. 1. 50-100 medium-small, tan with black tip seed. Fruit round, medium striped skin color, red flesh. Early

maturity. Nematode resistant.

- PI 593349. *Citrullus lanatus* (Thunb.) Matsum. & Nakai**  
Landrace. ZWRM 24; Shan Bei. 50-100 large, white seed. Fruit round, white skin color, white flesh.
- PI 593350. *Citrullus lanatus* (Thunb.) Matsum. & Nakai**  
Landrace. ZWRM 25; Malingua. 50-100 medium-small, black-brown seed. Fruit oblong, medium striped skin color, yellow flesh. Early maturity.

The following were donated by Todd Wehner, North Carolina State University, Department of Horticultural Science, P.O. Box 7609, Raleigh, North Carolina 27695-7609, United States; Bill Rhodes, Clemson University, Dept. of Horticulture, E-1417 & AS Building, Clemson, South Carolina 29634-0375, United States; James D. McCreight, USDA, ARS, Agricultural Research Station, 1636 E. Alisal Street, Salinas, California 93905, United States; Xingping Zhang, Clemson University, Department of Horticulture, E-1417 & AS Building, Clemson, South Carolina 29634-0375, United States; Chinese Academy of Agricultural Science, Vegetable and Floral Research Institute, Zhengzhou, Henan 450004, China. Received 02/21/1995.

- PI 593351. *Citrullus lanatus* (Thunb.) Matsum. & Nakai**  
Landrace. ZWRM 26; Hetaowen. 50-100 large, red seed. Fruit oblong fruit, light green skin color, yellow flesh.

The following were donated by Todd Wehner, North Carolina State University, Department of Horticultural Science, P.O. Box 7609, Raleigh, North Carolina 27695-7609, United States; Bill Rhodes, Clemson University, Dept. of Horticulture, E-1417 & AS Building, Clemson, South Carolina 29634-0375, United States; James D. McCreight, USDA, ARS, Agricultural Research Station, 1636 E. Alisal Street, Salinas, California 93905, United States; Xingping Zhang, Clemson University, Department of Horticulture, E-1417 & AS Building, Clemson, South Carolina 29634-0375, United States; Chinese Academy of Agricultural Science, Institute of Pomology, Zhengzhou, Henan 450004, China. Received 02/21/1995.

- PI 593352. *Citrullus lanatus* (Thunb.) Matsum. & Nakai**  
Landrace. ZWRM 27; Xiao Hua Li Hu. 50-100 medium-small, white with black seed. Fruit round, medium striped skin color, red flesh.
- PI 593353. *Citrullus lanatus* (Thunb.) Matsum. & Nakai**  
Landrace. ZWRM 28; Beigua. 50-100 medium-small, brown seed. Fruit oval, wide striped skin color, small (3 lb.).
- PI 593354. *Citrullus lanatus* (Thunb.) Matsum. & Nakai**  
Landrace. ZWRM 29; Taojin. 50-100 large, white with tan tip seed. Fruit round, narrow striped skin color, yellow flesh.

The following were donated by Todd Wehner, North Carolina State University, Department of Horticultural Science, P.O. Box 7609, Raleigh, North Carolina 27695-7609, United States; Bill Rhodes, Clemson University, Dept. of Horticulture, E-1417 & AS Building, Clemson, South Carolina 29634-0375,

United States; James D. McCreight, USDA, ARS, Agricultural Research Station, 1636 E. Alisal Street, Salinas, California 93905, United States; Ming Wang, Northwestern Agricultural Universtiy, Department of Horticulture, Yangling, Shaanxi, China; Xingping Zhang, Clemson University, Department of Horticulture, E-1417 & AS Building, Clemson, South Carolina 29634-0375, United States. Received 02/21/1995.

- PI 593355. *Citrullus lanatus* (Thunb.) Matsum. & Nakai  
Landrace. ZWRM 46. 50-100 seed. F2 (typical Chinese cultivated x African relative).
- PI 593356. *Citrullus lanatus* (Thunb.) Matsum. & Nakai  
Landrace. ZWRM 47; Lanzhou Edible Seed. Less than 25 white with dark brown seed, edible. Flesh white.
- PI 593357. *Citrullus lanatus* (Thunb.) Matsum. & Nakai  
Landrace. ZWRM 48; High quality commercial. 50-100 medium-small, dark brown mottled seed.
- PI 593358. *Citrullus lanatus* (Thunb.) Matsum. & Nakai  
Landrace. ZWRM 49; Yellow Rind Watermelon. 50-100 medium-small, black seed.
- PI 593359. *Citrullus lanatus* (Thunb.) Matsum. & Nakai  
Landrace. ZWRM 50. 100-400 seed. Dark green striped skin color, red flesh. F1 characteristic.
- PI 593360. *Citrullus lanatus* (Thunb.) Matsum. & Nakai  
Landrace. ZWRM 51. 100-400 seed. Fruit oblong, light green skin color, red flesh. F1 characteristic.

The following were donated by Todd Wehner, North Carolina State University, Department of Horticultural Science, P.O. Box 7609, Raleigh, North Carolina 27695-7609, United States; Bill Rhodes, Clemson University, Dept. of Horticulture, E-1417 & AS Building, Clemson, South Carolina 29634-0375, United States; James D. McCreight, USDA, ARS, Agricultural Research Station, 1636 E. Alisal Street, Salinas, California 93905, United States; Depei Lin, Western China Group Seed Co., Changji, Xinjiang, China; Xingping Zhang, Clemson University, Department of Horticulture, E-1417 & AS Building, Clemson, South Carolina 29634-0375, United States. Received 02/21/1995.

- PI 593361. *Citrullus lanatus* (Thunb.) Matsum. & Nakai  
Landrace. ZWRM 77; Zhongyau No. 6. 100-400 dark brown seed. Dark green skin color, red flesh.
- PI 593362. *Citrullus lanatus* (Thunb.) Matsum. & Nakai  
Landrace. ZWRM 78; Zhongyau No. 6. 25-50 light brown seed. Dark green skin color, red flesh.
- PI 593363. *Citrullus lanatus* (Thunb.) Matsum. & Nakai  
Landrace. ZWRM 79; Sulian No. 1. 25-50 medium-small, black seed.
- PI 593364. *Citrullus lanatus* (Thunb.) Matsum. & Nakai  
Landrace. ZWRM 80; Three Dan No. 4. 100-400 medium-small, tan seed. Dark



green skin color, red flesh.

- PI 593365. *Citrullus lanatus* (Thunb.) Matsum. & Nakai  
Landrace. ZWRM 81; Xinchenhong. 25-50 medium-small, brown seed. Fruit oblong, light green skin color, red flesh.
- PI 593366. *Citrullus lanatus* (Thunb.) Matsum. & Nakai  
Landrace. ZWRM 82; Kalatawuzi. 25-50 large, dark brown seed. Light green skin color, red flesh.
- PI 593367. *Citrullus lanatus* (Thunb.) Matsum. & Nakai  
Landrace. ZWRM 83; Du No. 3. 25-50 medium-small, dark brown seed. Fruit round, medium striped skin color, red flesh.
- PI 593368. *Citrullus lanatus* (Thunb.) Matsum. & Nakai  
Landrace. ZWRM 84; Yixuan. 25-50 medium small, black seed. Fruit round fruit, light green skin color, red flesh. Best quality.
- PI 593369. *Citrullus lanatus* (Thunb.) Matsum. & Nakai  
Landrace. ZWRM 85; Jizaogua (Chicken Feed). Less than 25 large, dark brown seed.
- PI 593370. *Citrullus lanatus* (Thunb.) Matsum. & Nakai  
Landrace. ZWRM 86; Changhui. 25-50 small, white with tan seed. Fruit long fruit, light green skin color, red flesh. Pollen parent of the most famous F1 hybrid (Xinchen F1).
- PI 593371. *Citrullus lanatus* (Thunb.) Matsum. & Nakai  
Landrace. ZWRM 87; Raketauuzi. 25-50 medium-small, dark brown seed. Flesh red.
- PI 593372. *Citrullus lanatus* (Thunb.) Matsum. & Nakai  
Landrace. ZWRM 88; Kalaxiaboke. 25-50 medium-small, tan seed. Flesh red.
- PI 593373. *Citrullus lanatus* (Thunb.) Matsum. & Nakai  
Landrace. ZWRM 89; Mapimazi. 25-50 medium-small, black seed. Fruit round, light green skin color, red flesh.
- PI 593374. *Citrullus lanatus* (Thunb.) Matsum. & Nakai  
Landrace. ZWRM 90; Akekewuziwai. 25-50 black seed.
- PI 593375. *Citrullus lanatus* (Thunb.) Matsum. & Nakai  
Landrace. ZWRM 91; Dahongzianchong. Less than 25 medium-small, brown with black seed. Red flesh.
- PI 593376. *Citrullus lanatus* (Thunb.) Matsum. & Nakai  
Landrace. ZWRM 92; Fuyang. 25-50 medium-small, brown seed. Light green skin color, red flesh.
- PI 593377. *Citrullus lanatus* (Thunb.) Matsum. & Nakai  
Landrace. ZWRM 93; Meiliquinfeng. 25-50 medium-small, brown seed. Light green skin color, red flesh. Tough rind.
- PI 593378. *Citrullus lanatus* (Thunb.) Matsum. & Nakai  
Landrace. ZWRM 94; Hetaowen. 25-50 medium-small, tan seed. Light green

skin color, red flesh.

- PI 593379. *Citrullus lanatus* (Thunb.) Matsum. & Nakai  
Landrace. ZWRM 95; Xianxiaogua. 25-50 small, black seed. Light green  
skin color, red flesh.
- PI 593380. *Citrullus lanatus* (Thunb.) Matsum. & Nakai  
Landrace. ZWRM 96; Jinlu. 25-50 medium-small, brown seed. Fruit round,  
medium striped skin color, red flesh.
- PI 593381. *Citrullus lanatus* (Thunb.) Matsum. & Nakai  
Landrace. ZWRM 97; Xiaozihulu. 25-50 medium-small, tan seed. Fruit  
oblong, light green skin color, red flesh.
- PI 593382. *Citrullus lanatus* (Thunb.) Matsum. & Nakai  
Landrace. ZWRM 98; Changmeihong. Less than 25 medium-small, brown seed.  
Fruit round, light green skin color, red flesh.
- PI 593383. *Citrullus lanatus* (Thunb.) Matsum. & Nakai  
Landrace. ZWRM 99; Zaohua. 100-400 medium-small, tan with black tip  
seed. Fruit round, medium striped skin color, red flesh.
- PI 593384. *Citrullus lanatus* (Thunb.) Matsum. & Nakai  
Landrace. ZWRM 100; Dhogyu No. 1. 100-400 medium-small, tan with black  
tip seed. Fruit oblong, medium striped skin color, red flesh. F1  
characteristic.
- PI 593385. *Citrullus lanatus* (Thunb.) Matsum. & Nakai  
Landrace. ZWRM 101; Zhengza No. 5. 100-400 medium-small, tan with black  
tip seed. Fruit round, medium striped skin color, red flesh.
- PI 593386. *Citrullus lanatus* (Thunb.) Matsum. & Nakai  
Landrace. ZWRM 102; Jinhuabao F1. Less than 400 medium-small, tan with  
black tip seed. Fruit oblong, medium striped skin color, red flesh.
- PI 593387. *Citrullus lanatus* (Thunb.) Matsum. & Nakai  
Landrace. ZWRM 103; Xinyiu No. 2. Less than 400 medium-small, brown  
seed. Fruit oblong, medium striped skin color, red flesh.
- PI 593388. *Citrullus lanatus* (Thunb.) Matsum. & Nakai  
Landrace. ZWRM 104; Hongyou No. 9. Less than 400 medium-small, brown  
seed. Fruit round, medium striped skin color, red flesh.
- PI 593389. *Citrullus lanatus* (Thunb.) Matsum. & Nakai  
Landrace. ZWRM 105; Hongyou No. 11. Less than 400 medium-small, light  
brown seed. Fruit oblong, medium striped skin color, red flesh.
- PI 593390. *Citrullus lanatus* (Thunb.) Matsum. & Nakai  
Landrace. ZWRM 111; Xiaoqinpi. 100-400 medium-small, brown seed. Light  
green skin color, red flesh.

The following were donated by Todd Wehner, North Carolina State University,  
Department of Horticultural Science, P.O. Box 7609, Raleigh, North Carolina  
27695-7609, United States; Bill Rhodes, Clemson University, Dept. of

Horticulture, E-1417 & AS Building, Clemson, South Carolina 29634-0375, United States; James D. McCreight, USDA, ARS, Agricultural Research Station, 1636 E. Alisal Street, Salinas, California 93905, United States; Weihong Gu, Shanghai Horticultural Institute, Shanghai Academy of Agricultural Sciences, Shanghai, China; Xingping Zhang, Clemson University, Department of Horticulture, E-1417 & AS Building, Clemson, South Carolina 29634-0375, United States. Received 02/21/1995.

**PI 593391. *Luffa aegyptiaca* Miller**

Landrace. ZWRM 6; Chang Shi Gua. 50-100 medium-small, black seed.

The following were donated by Todd Wehner, North Carolina State University, Department of Horticultural Science, P.O. Box 7609, Raleigh, North Carolina 27695-7609, United States; Bill Rhodes, Clemson University, Dept. of Horticulture, E-1417 & AS Building, Clemson, South Carolina 29634-0375, United States; James D. McCreight, USDA, ARS, Agricultural Research Station, 1636 E. Alisal Street, Salinas, California 93905, United States; Zhouggou Qi, Shanghai, China; Xingping Zhang, Clemson University, Department of Horticulture, E-1417 & AS Building, Clemson, South Carolina 29634-0375, United States. Received 02/21/1995.

**PI 593392. *Luffa aegyptiaca* Miller**

Landrace. ZWRM 7. 100-400 black seed. Local luffa grown in Shanghai area. Received in foil laminated envelope.

The following were donated by Todd Wehner, North Carolina State University, Department of Horticultural Science, P.O. Box 7609, Raleigh, North Carolina 27695-7609, United States; Bill Rhodes, Clemson University, Dept. of Horticulture, E-1417 & AS Building, Clemson, South Carolina 29634-0375, United States; James D. McCreight, USDA, ARS, Agricultural Research Station, 1636 E. Alisal Street, Salinas, California 93905, United States; Xingping Zhang, Clemson University, Department of Horticulture, E-1417 & AS Building, Clemson, South Carolina 29634-0375, United States; Guolian Zhang. Received 02/21/1995.

**PI 593393. *Luffa aegyptiaca* Miller**

Landrace. ZWRM 12. 50-100 seed. Local variety used as vegetable.

The following were donated by Todd Wehner, North Carolina State University, Department of Horticultural Science, P.O. Box 7609, Raleigh, North Carolina 27695-7609, United States; Bill Rhodes, Clemson University, Dept. of Horticulture, E-1417 & AS Building, Clemson, South Carolina 29634-0375, United States; James D. McCreight, USDA, ARS, Agricultural Research Station, 1636 E. Alisal Street, Salinas, California 93905, United States; Ming Wang, Northwestern Agricultural University, Department of Horticulture, Yangling, Shaanxi, China; Xingping Zhang, Clemson University, Department of Horticulture, E-1417 & AS Building, Clemson, South Carolina 29634-0375, United States. Received 02/21/1995.

**PI 593394. *Luffa aegyptiaca* Miller**

Landrace. ZWRM 44; Early Luffa. 100-400 black seed. Vegetable and sponge.

**PI 593395. *Luffa aegyptiaca* Miller**

Landrace. ZWRM 45; Shaanxi Luffa. 100-400 black seed. Vegetable and sponge.

The following were donated by Todd Wehner, North Carolina State University, Department of Horticultural Science, P.O. Box 7609, Raleigh, North Carolina 27695-7609, United States; Bill Rhodes, Clemson University, Dept. of Horticulture, E-1417 & AS Building, Clemson, South Carolina 29634-0375, United States; James D. McCreight, USDA, ARS, Agricultural Research Station, 1636 E. Alisal Street, Salinas, California 93905, United States; Xingping Zhang, Clemson University, Department of Horticulture, E-1417 & AS Building, Clemson, South Carolina 29634-0375, United States; Chinese Academy of Agricultural Science, Vegetable and Floral Research Institute, Beijing, Beijing, China. Received 02/21/1995.

**PI 593396. *Luffa acutangula* (L.) Roxb.**

Landrace. ZWRM 133; Leng Si Gua. 25-50 seed.

**PI 593397. *Luffa aegyptiaca* Miller**

Landrace. ZWRM 134; Pang Si Gua. 25-50 seed.

**PI 593398. *Luffa acutangula* (L.) Roxb.**

Landrace. ZWRM 135; Ba Leng Gua. 25-50 seed.

**PI 593399. *Luffa aegyptiaca* Miller**

Landrace. ZWRM 136; Xiang Si Gua. 25-50 seed.

**PI 593400. *Luffa acutangula* (L.) Roxb.**

Landrace. ZWRM 137; Shi Ting Da Qing Pi. 25-50 seed.

**PI 593401. *Luffa aegyptiaca* Miller**

Landrace. ZWRM 138; Qing Pi Chang Si Gua. 25-50 seed.

**PI 593402. *Luffa aegyptiaca* Miller**

Landrace. ZWRM 139; Chang Sha Bai Si Gua. 25-50 seed.

**PI 593403. *Luffa acutangula* (L.) Roxb.**

Landrace. ZWRM 140; Dong Wan Shuang Qing. 25-50 seed.

**PI 593404. *Luffa aegyptiaca* Miller**

Landrace. ZWRM 141; Quan Zhou Chang Tiao Gua. 25-50 seed.

**PI 593405. *Luffa aegyptiaca* Miller**

Landrace. ZWRM 142; Chang Sha Rou Si Gua. 25-50 seed.

The following were collected by Todd Wehner, North Carolina State University, Department of Horticultural Science, P.O. Box 7609, Raleigh, North Carolina 27695-7609, United States; Bill Rhodes, Clemson University, Dept. of Horticulture, E-1417 & AS Building, Clemson, South Carolina 29634-0375, United States; James D. McCreight, USDA, ARS, Agricultural Research Station, 1636 E. Alisal Street, Salinas, California 93905, United States; Xingping Zhang, Clemson University, Department of Horticulture, E-1417 & AS Building,

Clemson, South Carolina 29634-0375, United States. Received 02/21/1995.

**PI 593406. *Momordica charantia* L.**

Landrace. ZWRM 19. Collected 07/15/1994 in Shanghai, China. Shanghai. Vegetable market. Less than 25 medium-small, tan seed. One fruit, long shape, 8.25" long, 1.5" diameter, yellow-orange skin color.

The following were donated by Todd Wehner, North Carolina State University, Department of Horticultural Science, P.O. Box 7609, Raleigh, North Carolina 27695-7609, United States; Bill Rhodes, Clemson University, Dept. of Horticulture, E-1417 & AS Building, Clemson, South Carolina 29634-0375, United States; James D. McCreight, USDA, ARS, Agricultural Research Station, 1636 E. Alisal Street, Salinas, California 93905, United States; Xingping Zhang, Clemson University, Department of Horticulture, E-1417 & AS Building, Clemson, South Carolina 29634-0375, United States; Chinese Academy of Agricultural Science, Vegetable and Floral Research Institute, Beijing, Beijing, China. Received 02/21/1995.

**PI 593407. *Momordica charantia* L.**

Landrace. ZWRM 132. 50-100 seed.

The following were developed by USDA Forage-Crop Field Station, Redfield, South Dakota, United States. Donated by Agricultural Research Service -- USDA, Beltsville Agricultural Research Center, Beltsville, Maryland 20705, United States. Received 1961.

**PI 593408. *Melilotus suaveolens* Ledeb.**

Cultivar. "REDFIELD"; "REDFIELD YELLOW"; NSL 5485. Pedigree - From PI 40937 as documented by Kirk and Davidson (1928). Received by the USDA from China in 1915 as *Melilotus albus*, and later found to be *Melilotus suaveolens*. Late maturing, developed in South Dakota for use on the northern Great Plains. Said to be susceptible to disease organisms which occur in the humid sections of the United States.

The following were developed by Barbara L. Rose, University of California, Department of Botany, Davis, California 95616, United States; W. Meyer, Pure-Seed Testing, Inc., P.O. Box 449, Hubbard, Oregon 97032, United States; R.H. Bailey, R.H. Bailey Seed Inc., 2700 19th Street, S.E. No. 1, Salem, Oregon 97302, United States; C.R. Funk, Hubbard Seed and Supply Company, P.O. Box 310, Hubbard, Oregon 97032, United States; K.J. McVeigh, Willamette Valley Plant Breeders, Inc., Brownsville, Oregon, United States. Donated by Rutgers University, New Jersey Agriculture Experiment Station, New Brunswick, New Jersey 08903, United States. Received 1977.

**PI 593409. *Poa pratensis* L.**

Cultivar. "BRUNSWICK"; Plant Patent 3223; NJE P-57; NSL 95682. CV-15; Plant Patent 3223. Pedigree - Selected from an old lawn on the Cook College Campus in New Brunswick, NJ in spring 1963. High degree of apomictic reproduction. Leafy, turf-type, medium green color, medium texture and moderately slow rate of vertical growth. Exceptionally aggressive, attractive, uniform, relatively weed-free, persistent. Excellent resistance to stripe smut disease. Moderately good resistance

to leaf spot and crown rot disease. Moderately susceptible to powdery mildew and leaf rust. Adapted to most regions where Kentucky bluegrass is suited.

The following were developed by C. R. Funk, Rutgers University, Cook College, Dept. of Soils and Crops, New Brunswick, New Jersey 08903, United States; G. Pepin, International Seeds, Inc., P. O. Box 168, Halsey, Oregon 97348, United States; R.J. Peterson, R.J. Peterson Enterprises Inc., P.O. Box 312, Forest Grove, Oregon 97116, United States; A.M. Radko, United States Golf Association, Green Section, Highland Park, New Jersey 08904, United States; R.E. Engel, Rutgers University, New Brunswick, New Jersey 08903, United States. Donated by Rutgers University, New Jersey Agriculture Experiment Station, New Brunswick, New Jersey 08903, United States. Received 1977.

**PI 593410. *Poa pratensis* L.**

Cultivar. "BONNIEBLUE"; Plant Patent 3152; NJE P-106; NSL 95683. CV-10; Plant Patent 3152. Pedigree - Highly apomictic first generation hybrid developed by crossing Bellevue and Pennstar Kentucky bluegrasses. Chromosome number approximately 94. Moderately low-growing, leafy, turf-type bluegrass with good density and vigor, medium texture, and attractive moderately dark green color. Good resistance to leaf spot and crown rot disease caused by *Helminthosporium vagans* and stripe smut (*Ustilago striiformis*). Moderate resistance to leaf rust (*Puccinia paeonemoralis*) and snowmold (*Typhula utoana*). Recommended for use in lawns, parks, athletic fields and golf courses. Adapted to areas where summer stress conditions not severe.

The following were developed by G.W. Pepin, Pickseed West, Inc., P.O. Box 888, Tangent, Oregon, United States; R.J. Peterson, Peterson Enterprises, Inc., Suite 410, Colonial Office Plaza, 1049 S.W. Baseline, Hillsboro, Oregon 97123, United States; C.R. Funk, Hubbard Seed and Supply Company, P.O. Box 310, Hubbard, Oregon 97032, United States. Donated by Rutgers University, New Jersey Agriculture Experiment Station, New Brunswick, New Jersey 08903, United States. Received 1977.

**PI 593411. *Poa pratensis* L.**

Cultivar. "MAJESTIC"; Plant Patent 3239; NJE P-84; NSL 95685. CV-11; Plant Patent 3239. Pedigree - Bellevue/Belturf. Moderately low-growing, leafy, turf-type bluegrass with rather prostrate leaf blades. Medium texture and dark green color. Maintains good winter color in protected areas. Good resistance to leaf spot and crown rot disease caused by *Helminthosporium vagans*. Moderately good resistance to stripe smut (*Ustilago striiformis*), leaf rust (*Puccinia paeonemoralis*) and snow mold (*Typhula utoana*). Adapted to areas where Kentucky bluegrass is grown.

The following were developed by Virgil D. Meier, O.M. Scott & Sons Company, Turfgrass Res. and Develop., Marysville, Ohio 43041, United States; C. R. Funk, Rutgers University, Cook College, Dept. of Soils and Crops, New Brunswick, New Jersey 08903, United States; J.A. Long, O.M. Scott & Sons Company, Turf Product Development, New Jersey, United States; P.E. Dade, O.M. Scott & Sons Company, Seed Res. and Production, New Jersey, United

States. Donated by O.M. Scott & Sons Company, Marysville, Ohio 43040, United States. Received 1977.

**PI 593412. *Poa pratensis* L.**

Cultivar. "BRISTOL"; Plant Patent 3782; 2-2006; NSL 93266. CV-27; Plant Patent 3782. Pedigree - Bellevue/Anheuser Dwarf. Moderately low growing, leafy, turf-type with medium texture and dark green color throughout growing season. Maintains good winter color. Dense vigorous turf that persists under stress conditions. Good resistance to powdery mildew, leaf spot and crown rot disease, stripe smut, Fusarium blight and stripe rust. Adapted to regions suited to Kentucky bluegrass.

The following were developed by Sunseeds, Inc., United States. Received 1973.

**PI 593413. *Lactuca sativa* L.**

Cultivar. "PICOVERDE"; NSL 83500. PVP 7300016. Early, large headed Great Lakes type developed for late spring harvest. Head large, lush, green, slightly flattened with an attractive butt. Outstanding carton-packed shipping lettuce.

The following were developed by Asgrow Seed Company, United States. Received 1973.

**PI 593414. *Lactuca sativa* L.**

Cultivar. "GREAT LAKES 659-700"; NSL 83501. PVP 7300044. Head size medium, dark green. Butt core medium, appearance medium smooth. Solidity excellent. Outer frame leaves large and heavily frilled. Cap leaves heavy and tight, giving good protection against adverse weather conditions. Tipburn tolerance excellent.

The following were developed by Ferry-Morse Seed Company, United States. Received 1973.

**PI 593415. *Lactuca sativa* L.**

Cultivar. "MONTEMAR"; NSL 83502. PVP 7100092. Season medium, early. Head size large. Color medium dark. Butt core large, Appearance smooth. Solidity good. Leaves irregularly serrated margins, rugose. Resistance downy mildew, tipburn. Shows less puffiness under warmer conditions in the Salinas area.

**PI 593416. *Lactuca sativa* L.**

Cultivar. "SUPER 59"; NSL 83503. PVP 7100095. Season medium, early. Head size medium, color dark. Butt core medium, appearance good. Solidity good. Resistance to tipburn. Selected for uniformity. Slightly larger head and less frill than Mesa 659.

**PI 593417. *Lactuca sativa* L.**

Cultivar. "VANMAX"; NSL 83504. PVP 7100096. Season medium, late. Head size large, color dull olive green. Butt core medium, appearance smooth. Solidity good. Resistance to tipburn. Earlier, more uniform, larger head size and greater weight than Vanguard.

The following were developed by Asgrow Seed Company, United States. Received 1974.

**PI 593418. *Lactuca sativa* L.**

Cultivar. "OASIS"; NSL 84960. PVP 7300070.

**PI 593419. *Lactuca sativa* L.**

Cultivar. "TEMPE"; NSL 84961. PVP 7300069.

The following were developed by Moran Seeds, Inc., United States. Donated by Moran Seeds, Inc.. Received 1974.

**PI 593420. *Lactuca sativa* L.**

Cultivar. "CALMARIA"; NSL 86532. PVP 7400013.

The following were developed by Harnish-Brinker Seed, United States. Received 1974.

**PI 593421. *Lactuca sativa* L.**

Cultivar. "WINTERHAVEN"; NSL 86581. PVP 7400015.

The following were developed by Moran Seeds, Inc., United States. Donated by Moran Seeds, Inc.. Received 1974.

**PI 593422. *Lactuca sativa* L.**

Cultivar. "CAL K-60"; NSL 86582. PVP 7400014.

**PI 593423. *Lactuca sativa* L.**

Cultivar. "CABRILLO"; NSL 86583. PVP 7400071.

The following were developed by Asgrow Seed Company, United States; W.L. Green, University of California, Agronomy and Range Science, Davis, California 95616-8515, United States. Donated by Asgrow Seed Company, United States. Received 1974.

**PI 593424. *Lactuca sativa* L.**

Cultivar. "CITATION"; NSL 86667. PVP 7400095.

The following were developed by B.C. Seeds, Inc., United States. Received 1975.

**PI 593425. *Lactuca sativa* L.**

Cultivar. "RED COACH 74"; NSL 90080. PVP 7400010.

The following were developed by Quali-Sel, Inc., United States. Received 1975.

**PI 593426. *Lactuca sativa* L.**



Cultivar. "EXCELL"; NSL 90532. PVP 7500041.

**PI 593427. *Lactuca sativa* L.**

Cultivar. "RED COACH 74A"; NSL 92332. PVP 7400024.

**PI 593428. *Lactuca sativa* L.**

Cultivar. "DOMINGOS 41"; NSL 92333. PVP 7400019.

**PI 593429. *Lactuca sativa* L.**

Cultivar. "DOMINGOS 43"; NSL 92505. PVP 7600003.

The following were developed by Moran Seeds, Inc., United States. Donated by Moran Seeds, Inc.. Received 1976.

**PI 593430. *Lactuca sativa* L.**

Cultivar. "MORANGOLD"; NSL 92600. PVP 7600039.

The following were developed by Victor Heintzberger, Bruce Church Company, 1020 Merrill Street, Salinas, California 93912, United States. Received 1977.

**PI 593431. *Lactuca sativa* L.**

Cultivar. "DOMINGOS 42"; NSL 92631. PVP 7600008.

The following were developed by Sunseeds, Inc., United States. Received 1977.

**PI 593432. *Lactuca sativa* L.**

Cultivar. "CHAPARRAL"; NSL 95166. PVP 7600052.

**PI 593433. *Lactuca sativa* L.**

Cultivar. "MESAVERDE"; NSL 95168. PVP 7600055.

**PI 593434. *Lactuca sativa* L.**

Cultivar. "GUSTAVERDE"; NSL 95262. PVP 7600054.

**PI 593435. *Lactuca sativa* L.**

Cultivar. "COSTAVERDE"; NSL 95263. PVP 7600053.

The following were developed by FMC Corporation, Agricultural Chemical Division, P.O. Box 3091, Modesto, California 95353, United States. Received 1977.

**PI 593436. *Lactuca sativa* L.**

Cultivar. "VANAGARA"; NSL 95691. PVP 7600032.

The following were developed by Royal Sluis B.V., Netherlands. Received 1987.

**PI 593437. *Lactuca sativa* L.**

Cultivar. "CORSICA"; NSL 217405. PVP 8700181.

The following were collected by Robert J. Metzger, USDA, ARS, Oregon State University, Dept. of Crop Science, Corvallis, Oregon 97331, United States; Hoffman. Donated by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 11/17/1993.

**PI 593438. *Elytrigia repens* (L.) Desv. ex Nevski**  
Wild. MH-114-1085; R-7-36--45; W6 13943. Collected in Turkey. Elevation 1700 m. Edge of wheat field 56km northwest of Eleskirt, Erzurum Province.

The following were donated by C. E. Townsend, USDA, ARS, Crops Research Laboratory, 1701 Center Avenue, Fort Collins, Colorado 80526, United States. Received 1979.

**PI 593439. *Astragalus cicer* L.**  
Breeding. C-8; NSL 103823. GP-26.

**PI 593440. *Astragalus cicer* L.**  
Breeding. C-9; NSL 103824. GP-27.

The following were donated by P.Y.P. Tai, USDA-ARS, Sugarcane Field Station, Star Route Box 8, Canal Point, Florida 33438, United States. Received 02/27/1996.

**PI 593441. *Saccharum spontaneum* L.**  
Wild. IND 81-122. Collected in India.

**PI 593442. *Saccharum spontaneum* L.**  
Wild. IND 82-241. Collected in India.

**PI 593443. *Saccharum spontaneum* L.**  
Wild. CANE 9226; US 4625. Collected in Kenya.

The following were developed by P.Y.P. Tai, USDA-ARS, Sugarcane Field Station, Star Route Box 8, Canal Point, Florida 33438, United States. Received 07/06/1939.

**PI 593444. *Saccharum spontaneum* L.**  
Wild. CANE 9228; US 4633. Collected in Uganda.

The following were donated by P.Y.P. Tai, USDA-ARS, Sugarcane Field Station, Star Route Box 8, Canal Point, Florida 33438, United States. Received 02/27/1996.

**PI 593445. *Saccharum spontaneum* L.**  
Wild. US 78-504. Collected in North-West Frontier, Pakistan. Swat River.

**PI 593446. *Saccharum spontaneum* L.**  
Wild. US 78-508. Collected in North-West Frontier, Pakistan. Swat River.

**PI 593447. *Saccharum spontaneum* L.**

Wild. US 78-509. Collected in North-West Frontier, Pakistan. Swat River.

**PI 593448. *Saccharum spontaneum* L.**

Wild. US 78-510. Collected in North-West Frontier, Pakistan. Swat River.

**PI 593449. *Saccharum spontaneum* L.**

Wild. US 78-515. Collected in North-West Frontier, Pakistan.

**PI 593450. *Saccharum spontaneum* L.**

Wild. US 78-518. Collected in North-West Frontier, Pakistan. Swat River.

**PI 593451. *Saccharum spontaneum* L.**

Wild. US 78-519. Collected in North-West Frontier, Pakistan. Swat River.

**PI 593452. *Saccharum spontaneum* L.**

Wild. US 78-522. Collected in North-West Frontier, Pakistan. Swat River.

**PI 593453. *Saccharum spontaneum* L.**

Wild. US 78-523. Collected in North-West Frontier, Pakistan. Swat River.

**PI 593454. *Saccharum spontaneum* L.**

Wild. US 78-526. Collected in North-West Frontier, Pakistan. Swat River.

The following were developed by A. Duda & Sons, Inc., United States. Received 02/28/1996.

**PI 593455. *Raphanus sativus* L.**

Cultivar. "KRASNA". PVP 9600111.

The following were developed by DeKalb Genetics Corporation, United States. Received 02/28/1996.

**PI 593456. *Zea mays* L. *ssp. mays***

Breeding. FBLLWX. PVP 9600112.

**PI 593457. *Zea mays* L. *ssp. mays***

Breeding. MBZAWX. PVP 9600113.

The following were developed by Asgrow Seed Company, United States. Received 02/28/1996.

**PI 593458. *Allium cepa* L.**

Cultivar. "ENCINO". PVP 9600114.

The following were developed by Northrup King Company, United States. Received 02/28/1996.

**PI 593459. *Zea mays* L. *ssp. mays***

Breeding. "942". PVP 9600116.

**PI 593460. *Zea mays* L. *ssp. mays***

Breeding. 991. PVP 9600117.

**PI 593461. *Zea mays* L. ssp. *mays***

Breeding. 993. PVP 9600118.

**PI 593462. *Zea mays* L. ssp. *mays***

Breeding. 2011. PVP 9600119. Dent type.

The following were developed by R.L. Cooper, USDA-ARS, Ohio State University, 1680 Madison, Wooster, Ohio 44691-4096, United States; Ohio Agricultural Research & Development Center, Ohio, United States; A.J. Calip-DuBois, Ohio State University, Ohio Agricultural Res. and Develop. Ctr., Dept. of Horticulture and Crop Science, Columbus, Ohio 43210, United States; Ron Fioritto, Ohio State University, Ohio Agricultural Research & Development Center, Dept. of Horticulture & Crop Science, Wooster, Ohio 44691, United States; S.K. St. Martin, Ohio State University, Dept. of Horticulture and Crop Science, 2021 Coffey Road, Columbus, Ohio 43210, United States; A.F. Schmitthenner, Ohio State University, Dept. of Plant Pathology, Columbus, Ohio 43210, United States; R.J. Martin, USDA, ARS, Ohio State University, Dept. of Food Science and Technology, Columbus, Ohio 43210, United States. Received 01/21/1997.

**PI 593463. *Glycine max* (L.) Merr.**

Cultivar. Pureline. "General"; HS90-3653. CV-365; PVP 9600121. Pedigree - Voris 311 x Resnik. Indeterminate cultivar of maturity group III. Flowers purple, pubescence light tawny, and pods tan. Seedcoats dull yellow, hila black, and peroxidase activity high. Resistant to races 1 to 9 of *Phytophthora sojae*, the causal agent of phytophthora rot. High tolerance to compatible races of *P. sojae*.

The following were developed by New Zealand Agriseeds, Ltd., New Zealand. Received 02/28/1996.

**PI 593464. *Lolium perenne* L.**

Cultivar. "DOBSON". PVP 9600122.

**PI 593465. *Lolium perenne* L.**

Cultivar. "VEDETTE". PVP 9600123.

The following were developed by DeKalb Genetics Corporation, United States. Received 02/28/1996.

**PI 593466. *Zea mays* L. ssp. *mays***

Cultivar. "3IIH6WX". PVP 9600124.

The following were developed by University of Nebraska-Lincoln, Lincoln, Nebraska, United States. Received 02/28/1996.

**PI 593467. *Buchloe dactyloides* (Nutt.) Engelm.**

Cultivar. "CODY". PVP 9600125.

The following were developed by Crites Moscow Growers, Inc., Moscow, Idaho, United States. Received 02/28/1996.

**PI 593468. *Pisum sativum* L.**  
Cultivar. "CRYSTAL". PVP 9600126.

The following were developed by Asgrow Seed Company, United States. Received 02/28/1996.

**PI 593469. *Pisum sativum* L.**  
Cultivar. "DARIEN". PVP 9600127. Garden type.

**PI 593470. *Phaseolus vulgaris* L.**  
Cultivar. "CYGNUS". PVP 9600128.

**PI 593471. *Phaseolus vulgaris* L.**  
Cultivar. "FOCUS". PVP 9600129.

**PI 593472. *Phaseolus vulgaris* L.**  
Cultivar. "VISION". PVP 9600130.

The following were developed by Vilmorin S.A., France. Received 02/28/1996.

**PI 593473. *Phaseolus vulgaris* L.**  
Cultivar. "FINEL". PVP 9600133.

The following were donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States. Received 01/06/1994.

**PI 593474. *Capsicum annuum* L.**  
Cultivated. 10059; Chimayo.

**PI 593475. *Capsicum annuum* L.**  
Cultivated. 10061; Espanola #1.

The following were donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States; Gabor Csillery, Vegetable Crops Research Institute, Budapest Station, 1775 Budapest, Pf. 95, Budapest, Hungary. Received 01/06/1994.

**PI 593476. *Capsicum annuum* L.**  
Cultivated. 10113; Taranyi.

**PI 593477. *Capsicum annuum* L.**  
Cultivated. 10117; Puski.

The following were donated by Paul W. Bosland, New Mexico State University,

Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States. Received 01/06/1994.

**PI 593478. *Capsicum annuum* L.**

Cultivated. 10132; GRC-GGB-4535; PT1014.

**PI 593479. *Capsicum annuum* L.**

Cultivated. 10138; GRC-GGB-4527; PT 513.

The following were donated by Ken Owens, Petoseed Company, Inc., Woodland Research Station, 37437 State Highway 16, Woodland, California 95695, United States; Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States. Received 01/06/1994.

**PI 593480. *Capsicum annuum* L.**

Cultivated. 10187; Mayorka.

The following were donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States. Received 01/06/1994.

**PI 593481. *Capsicum annuum* L.**

Cultivated. 10194; IHR-309.

The following were donated by Redwood City Seed Company, P.O. Box 361, Redwood City, California 94064, United States; Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States. Received 01/06/1994.

**PI 593482. *Capsicum annuum* L.**

Cultivated. 10200; Feherozon Sweet.

**PI 593483. *Capsicum annuum* L.**

Cultivated. 10202; Takanotsume.

The following were donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States; Javier Salinas, C.P.A.E. Bajio, Km. 6 Carreterra Celaya Sn. Miguel de Allende, A.P.D.O. Postal No. 112, Celaya, Guanajuato, Mexico. Received 01/06/1994.

**PI 593484. *Capsicum annuum* L.**

Cultivated. 10204; BG38.

**PI 593485. *Capsicum annuum* L.**

Cultivated. 10210; BG635.

**PI 593486. *Capsicum annuum* L.**

Cultivated. 10232; BG998.

- PI 593487. *Capsicum annuum* L.  
Cultivated. 10236; BG1002.
- PI 593488. *Capsicum annuum* L.  
Cultivated. 10239; BG1506.
- PI 593489. *Capsicum annuum* L.  
Cultivated. 10240; BG1507.
- PI 593490. *Capsicum annuum* L.  
Cultivated. 10242; BG1512.
- PI 593491. *Capsicum annuum* L.  
Cultivated. 10243; BG1513.
- PI 593492. *Capsicum annuum* L.  
Cultivated. 10244; BG1514.
- PI 593493. *Capsicum annuum* L.  
Cultivated. 10258; BG1617.
- PI 593494. *Capsicum annuum* L.  
Cultivated. 10262; BG1629.
- PI 593495. *Capsicum annuum* L.  
Cultivated. 10263; BG1638.
- PI 593496. *Capsicum annuum* L.  
Cultivated. 10264; BG1642.
- PI 593497. *Capsicum annuum* L.  
Cultivated. 10271; BG1661.
- PI 593498. *Capsicum annuum* L.  
Cultivated. 10272; BG1662.
- PI 593499. *Capsicum annuum* L.  
Cultivated. 10274; BG1669.
- PI 593500. *Capsicum annuum* L.  
Cultivated. 10277; BG1800.

The following were collected by Javier Salinas, C.P.A.E. Bajio, Km. 6 Carreterra Celaya Sn. Miguel de Allende, A.P.D.O. Postal No. 112, Celaya, Guanajuato, Mexico. Donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States. Received 12/18/1992.

- PI 593501. *Capsicum annuum* L.  
Cultivated. 10278; BG1675; Grif 11492. Collected in Mexico.

The following were donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New

Mexico 88003, United States; Javier Salinas, C.P.A.E. Bajio, Km. 6 Carreterra Celaya Sn. Miguel de Allende, A.P.D.O. Postal No. 112, Celaya, Guanajuato, Mexico. Received 01/06/1994.

PI 593502. *Capsicum annuum* L.  
Cultivated. 10284; BG1647.

PI 593503. *Capsicum annuum* L.  
Cultivated. 10288; BG1795.

PI 593504. *Capsicum annuum* L.  
Cultivated. 10289; BG1798.

PI 593505. *Capsicum annuum* L.  
Cultivated. 10290; BG1799.

PI 593506. *Capsicum annuum* L.  
Cultivated. 10291; BG1801.

PI 593507. *Capsicum annuum* L.  
Cultivated. 10303; BG1852.

PI 593508. *Capsicum annuum* L.  
Cultivated. 10307; BG2529.

PI 593509. *Capsicum annuum* L.  
Cultivated. 10321; BG2728.

PI 593510. *Capsicum annuum* L.  
Cultivated. 10323; BG2732.

PI 593511. *Capsicum annuum* L.  
Cultivated. 10325; BG2736.

PI 593512. *Capsicum annuum* L.  
Cultivated. 10327; BG2747.

PI 593513. *Capsicum annuum* L.  
Cultivated. 10334; BG2786.

The following were collected by Javier Salinas, C.P.A.E. Bajio, Km. 6 Carreterra Celaya Sn. Miguel de Allende, A.P.D.O. Postal No. 112, Celaya, Guanajuato, Mexico. Donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States. Received 12/18/1992.

PI 593514. *Capsicum annuum* L.  
Cultivated. 10336; BG2796; Grif 9408. Collected in Mexico.

PI 593515. *Capsicum annuum* L.  
Cultivated. 10338; BG2797; Grif 9074. Collected in Mexico.

PI 593516. *Capsicum annuum* L.  
Cultivated. 10342; BG2802; Grif 9409. Collected in Mexico.



The following were donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States; Javier Salinas, C.P.A.E. Bajio, Km. 6 Carreterra Celaya Sn. Miguel de Allende, A.P.D.O. Postal No. 112, Celaya, Guanajuato, Mexico. Received 01/06/1994.

PI 593517. *Capsicum annuum* L.  
Cultivated. 10353; BG3189.

PI 593518. *Capsicum annuum* L.  
Cultivated. 10358; BG3212.

PI 593519. *Capsicum annuum* L.  
Cultivated. 10362; BG3228.

PI 593520. *Capsicum annuum* L.  
Cultivated. 10364; BG3230.

PI 593521. *Capsicum annuum* L.  
Cultivated. 10366; BG3241.

PI 593522. *Capsicum annuum* L.  
Cultivated. 10367; BG3241.

PI 593523. *Capsicum annuum* L.  
Cultivated. 10372; BG3291.

PI 593524. *Capsicum annuum* L.  
Cultivated. 10373; BG3295.

PI 593525. *Capsicum annuum* L.  
Cultivated. 10387; BG3317.

PI 593526. *Capsicum annuum* L.  
Cultivated. 10388; BG3317.

PI 593527. *Capsicum annuum* L.  
Cultivated. 10389; BG3318.

PI 593528. *Capsicum annuum* L.  
Cultivated. 10392; BG3326.

PI 593529. *Capsicum annuum* L.  
Cultivated. 10398; BG3428.

PI 593530. *Capsicum annuum* L.  
Cultivated. 10399; BG3431.

PI 593531. *Capsicum annuum* L.  
Cultivated. 10403; BG3435.

PI 593532. *Capsicum annuum* L.  
Cultivated. 10411; BG3451.

**PI 593533. *Capsicum annuum* L.**

Cultivated. 10431; BG3577.

**PI 593534. *Capsicum annuum* L.**

Cultivated. 10442; Pabellon Pasilla.

The following were donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States. Received 01/06/1994.

**PI 593535. *Capsicum annuum* L.**

Cultivated. 10447; Chorro #2.

**PI 593536. *Capsicum annuum* L.**

Cultivated. 10448; Chorro #3.

**PI 593537. *Capsicum annuum* L.**

Cultivated. 10449; Chorro #16.

The following were donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States; Javier Salinas, C.P.A.E. Bajio, Km. 6 Carreterra Celaya Sn. Miguel de Allende, A.P.D.O. Postal No. 112, Celaya, Guanajuato, Mexico. Received 01/06/1994.

**PI 593538. *Capsicum annuum* L.**

Cultivated. 10477; Esmeralda Ancho.

**PI 593539. *Capsicum annuum* L.**

Cultivated. 10478; Navojoa Piquin.

**PI 593540. *Capsicum annuum* L.**

Cultivated. 10481; Real Mirasol.

The following were donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States. Received 01/06/1994.

**PI 593541. *Capsicum annuum* L.**

Cultivated. 10484; Cascabel.

The following were donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States; Javier Salinas, C.P.A.E. Bajio, Km. 6 Carreterra Celaya Sn. Miguel de Allende, A.P.D.O. Postal No. 112, Celaya, Guanajuato, Mexico. Received 01/06/1994.

**PI 593542. *Capsicum annuum* L.**

Cultivated. 10499; BG3466.

The following were donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States; Everardo Zamora, Sonora University, Hermosillo, Sonora, Mexico. Received 01/06/1994.

**PI 593543. *Capsicum annuum* L.**  
Cultivated. 10545; Chiletepin.

**PI 593544. *Capsicum annuum* L.**  
Cultivated. 10547; Chiletepin.

**PI 593545. *Capsicum annuum* L.**  
Cultivated. 10550; GN84170-6.

**PI 593546. *Capsicum annuum* L.**  
Cultivated. 10553; GN84170-9.

**PI 593547. *Capsicum annuum* L.**  
Cultivated. 10554; GN84170-14.

The following were donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States; Gabor Csillery, Vegetable Crops Research Institute, Budapest Station, 1775 Budapest, Pf. 95, Budapest, Hungary. Received 01/06/1994.

**PI 593548. *Capsicum annuum* L.**  
Cultivated. 10560; Syn. Cecei.

**PI 593549. *Capsicum annuum* L.**  
Cultivated. 10564; Harosi Zold.

**PI 593550. *Capsicum annuum* L.**  
Cultivated. 10565; Feherozon.

**PI 593551. *Capsicum annuum* L.**  
Cultivated. 10566; Feherozon Super.

**PI 593552. *Capsicum annuum* L.**  
Cultivated. 10567; Feherozon Fal.

**PI 593553. *Capsicum annuum* L.**  
Cultivated. 10568; Tizenegues.

**PI 593554. *Capsicum annuum* L.**  
Cultivated. 10571; Budai Csipos Hajtatasi.

The following were donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States; Everardo Zamora, Sonora University, Hermosillo, Sonora, Mexico. Received 01/06/1994.

**PI 593555. *Capsicum annuum* L.**  
Cultivated. 10575; GN84170-18.

The following were donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States; Gabor Csillery, Vegetable Crops Research Institute, Budapest Station, 1775 Budapest, Pf. 95, Budapest, Hungary. Received 01/06/1994.

**PI 593556. *Capsicum annuum* L.**  
Cultivated. 10577; Greygo.

The following were donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States; Everardo Zamora, Sonora University, Hermosillo, Sonora, Mexico. Received 01/06/1994.

**PI 593557. *Capsicum annuum* L.**  
Cultivated. 10590; GN84170-20.

The following were donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States; Enio Aguilar, 23 Av. 30-36, Zona 5, Guatemala City, Guatemala. Received 01/06/1994.

**PI 593558. *Capsicum annuum* L.**  
Cultivated. 10591; #490.

The following were donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States. Received 01/06/1994.

**PI 593559. *Capsicum annuum* L.**  
Cultivated. 10604.

**PI 593560. *Capsicum annuum* L.**  
Cultivated. 10605; Passavinho.

The following were donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States; Ron Hooks, New Mexico State University, Agricultural Science Center, Los Lunas, New Mexico 88003, United States. Received 01/06/1994.

**PI 593561. *Capsicum annuum* L.**  
Cultivated. 10606; Rio Grande.

The following were donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New

Mexico 88003, United States. Received 12/18/1992.

**PI 593562. *Capsicum annuum* L.**

Cultivated. 10634; 132; Grif 9187. Collected in Colombia.

The following were donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States; Javier Salinas, C.P.A.E. Bajio, Km. 6 Carreterra Celaya Sn. Miguel de Allende, A.P.D.O. Postal No. 112, Celaya, Guanajuato, Mexico. Received 01/06/1994.

**PI 593563. *Capsicum annuum* L.**

Cultivated. 10635; BG1834.

The following were collected by Javier Salinas, C.P.A.E. Bajio, Km. 6 Carreterra Celaya Sn. Miguel de Allende, A.P.D.O. Postal No. 112, Celaya, Guanajuato, Mexico. Donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States. Received 12/18/1992.

**PI 593564. *Capsicum annuum* L.**

Cultivated. 10641; BG1635; Grif 9439. Collected in Mexico.

The following were donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States; George W. Park Seed Company, Inc., Cokesbury Road, Greenwood, South Carolina 29646-0001, United States. Received 01/06/1994.

**PI 593565. *Capsicum annuum* L.**

Cultivated. 10644; Candlelight.

The following were donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States; H.W. Alfrey Seed, P.O. Box 415, Knoxville, Tennessee, United States. Received 01/06/1994.

**PI 593566. *Capsicum annuum* L.**

Cultivated. 10647; Peter Pepper.

The following were donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States; Javier Salinas, C.P.A.E. Bajio, Km. 6 Carreterra Celaya Sn. Miguel de Allende, A.P.D.O. Postal No. 112, Celaya, Guanajuato, Mexico. Received 01/06/1994.

**PI 593567. *Capsicum annuum* L.**

Cultivated. 10655; BG1875.

**PI 593568. *Capsicum annuum* L.**

Cultivated. 10656; BG2747.

**PI 593569. *Capsicum annuum* L.**

Cultivated. 10660; BG3308.

The following were collected by Javier Salinas, C.P.A.E. Bajio, Km. 6 Carreterra Celaya Sn. Miguel de Allende, A.P.D.O. Postal No. 112, Celaya, Guanajuato, Mexico. Donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States. Received 12/18/1992.

**PI 593570. *Capsicum annuum* L.**

Cultivated. 10661; BG3415; Grif 9438. Collected in Mexico.

The following were collected by P.G. Smith, University of California, Department of Vegetable Crops, Davis, California 95616, United States. Donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States; A. A. Cook, University of Florida, Florida, United States. Received 01/01/1980.

**PI 593571. *Capsicum annuum* L.**

Cultivated. YOLO Y. Collected in California, United States.

The following were donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States. Received 01/06/1994.

**PI 593572. *Capsicum annuum* L.**

Cultivated. 10687; Embrapa 431.

**PI 593573. *Capsicum annuum* L.**

Cultivated. 10688; Embrapa 148.

The following were donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States; Everardo Zamora, Sonora University, Hermosillo, Sonora, Mexico. Received 01/06/1994.

**PI 593574. *Capsicum annuum* L.**

Cultivated. 10696; GN84170-12.

**PI 593575. *Capsicum annuum* L.**

Cultivated. 10705; GN84170-15.

**PI 593576. *Capsicum annuum* L.**

Cultivated. 10708; GN84170-16.

**PI 593577. *Capsicum annuum* L.**

Cultivated. 10709; GN84170-14.

**PI 593578. *Capsicum annuum* L.**  
Cultivated. 10710; GN84170-15.

**PI 593579. *Capsicum annuum* L.**  
Cultivated. 10711; GN84170-19.

The following were donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States. Received 01/06/1994.

**PI 593580. *Capsicum annuum* L.**  
Cultivated. 10718; Sanam.

**PI 593581. *Capsicum annuum* L.**  
Cultivated. 10726; Ghotki.

The following were donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States; D. E. Marshall, USDA, ARS, Agricultural Engineering Department, Michigan State University, East Lansing, Michigan, United States. Received 01/06/1994.

**PI 593582. *Capsicum annuum* L.**  
Cultivated. 10738.

**PI 593583. *Capsicum annuum* L.**  
Cultivated. 10739; DM #1.

**PI 593584. *Capsicum annuum* L.**  
Cultivated. 10746; DM #6.

**PI 593585. *Capsicum annuum* L.**  
Cultivated. 10749; DM #T.

The following were donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States; Everardo Zamora, Sonora University, Hermosillo, Sonora, Mexico. Received 01/06/1994.

**PI 593586. *Capsicum annuum* L.**  
Cultivated. 10750; Chiletépin.

The following were donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States; M.M. Gonzalez, Sector Publico Agro. Y De Alimentacion, Inst. De Ciencia Y Tecnologia Agricolas, Avenida Reforma 8-60, Zona 9 Edificio, Guatemala; Enio Aguilar, 23 Av. 30-36, Zona 5, Guatemala City, Guatemala, Guatemala. Received 01/06/1994.

**PI 593587. *Capsicum annuum* L.**  
Cultivated. 10756; #640.

**PI 593588. *Capsicum annuum* L.**  
Cultivated. 10758; #1146.

The following were donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States; Everardo Zamora, Sonora University, Hermosillo, Sonora, Mexico. Received 01/06/1994.

**PI 593589. *Capsicum annuum* L.**  
Cultivated. 10759; GN84170-17.

**PI 593590. *Capsicum annuum* L.**  
Cultivated. 10775; GN84170-19.

The following were donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States; D. E. Marshall, USDA, ARS, Agricultural Engineering Department, Michigan State University, East Lansing, Michigan, United States. Received 01/06/1994.

**PI 593591. *Capsicum annuum* L.**  
Cultivated. 10779; DM#F.

The following were donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States; Everardo Zamora, Sonora University, Hermosillo, Sonora, Mexico. Received 01/06/1994.

**PI 593592. *Capsicum annuum* L.**  
Cultivated. 10820; Especias Aviles.

The following were donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States. Received 01/06/1994.

**PI 593593. *Capsicum annuum* L.**  
Cultivated. 10853; Chiletépin.

**PI 593594. *Capsicum annuum* L.**  
Cultivated. 10854; Chiletépin.

**PI 593595. *Capsicum annuum* L.**  
Cultivated. 10857; BG-1.

**PI 593596. *Capsicum annuum* L.**  
Cultivated. 10859; Indonesian Selection.

**PI 593597. *Capsicum annuum* L.**  
Cultivated. 10860; S20-1.



PI 593598. *Capsicum annuum* L.  
Cultivated. 10885; Venezuela.

PI 593599. *Capsicum annuum* L.  
Cultivated. 10934; Perla.

PI 593600. *Capsicum annuum* L.  
Cultivated. 10937; Zlata.

PI 593601. *Capsicum annuum* L.  
Cultivated. 10948; Hosszutaltos.

The following were donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States; P.G. Smith, University of California, Department of Vegetable Crops, Davis, California 95616, United States. Received 01/06/1994.

PI 593602. *Capsicum annuum* L.  
Cultivated. 10965; SA396.

The following were donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States. Received 01/06/1994.

PI 593603. *Capsicum annuum* L.  
Cultivated. 10966; BG25.

PI 593604. *Capsicum annuum* L.  
Cultivated. 10978; Tachi-Yatsubusa.

PI 593605. *Capsicum baccatum* L.  
Cultivated. 20042; BG26.

PI 593606. *Capsicum baccatum* L.  
Cultivated. 20051; CATIE7414.

The following were donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States; P.G. Smith, University of California, Department of Vegetable Crops, Davis, California 95616, United States. Received 01/06/1994.

PI 593607. *Capsicum chinense* Jacq.  
Cultivated. 30006; SA246.

PI 593608. *Capsicum chinense* Jacq.  
Cultivated. 30052; ACC#1634.

The following were donated by Michael Dessert, Dessert's Cal-Seed Inc., P. O. Box 3485, El Centro, California 92244-3485, United States; Paul W. Bosland,

New Mexico State University, Department of Agronomy & Horticulture, Box 30003  
- Dept. 3Q, Las Cruces, New Mexico 88003, United States. Received 01/06/1994.

**PI 593609. *Capsicum chinense* Jacq.**  
Cultivated. 30053.

The following were donated by Paul W. Bosland, New Mexico State University,  
Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New  
Mexico 88003, United States; D. DeWitt, P. O. Box 4980, Albuquerque, New  
Mexico 87196, United States. Received 01/06/1994.

**PI 593610. *Capsicum chinense* Jacq.**  
Cultivated. 30056.

**PI 593611. *Capsicum chinense* Jacq.**  
Cultivated. 30057.

The following were donated by Paul W. Bosland, New Mexico State University,  
Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New  
Mexico 88003, United States. Received 01/06/1994.

**PI 593612. *Capsicum chinense* Jacq.**  
Cultivated. 30062; CATIE 5473.

The following were donated by Paul W. Bosland, New Mexico State University,  
Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New  
Mexico 88003, United States; D. DeWitt, P. O. Box 4980, Albuquerque, New  
Mexico 87196, United States. Received 01/06/1994.

**PI 593613. *Capsicum frutescens* L.**  
Cultivated. 40019; Bahama Hot.

The following were donated by Paul W. Bosland, New Mexico State University,  
Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New  
Mexico 88003, United States; East West Seed Company Limited, P.O. Box 3, Bang  
Bua Thong, Nonthaburi, Thailand. Received 01/06/1994.

**PI 593614. *Capsicum frutescens* L.**  
Cultivated. 40033; Siling Labuyo.

The following were donated by Paul W. Bosland, New Mexico State University,  
Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New  
Mexico 88003, United States; Javier Salinas, C.P.A.E. Bajio, Km. 6 Carreterra  
Celaya Sn. Miguel de Allende, A.P.D.O. Postal No. 112, Celaya, Guanajuato,  
Mexico. Received 01/06/1994.

**PI 593615. *Capsicum frutescens* L.**  
Cultivated. 40034; BG3324.

The following were donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States; Enio Aguilar, 23 Av. 30-36, Zona 5, Guatemala City, Guatemala, Guatemala. Received 01/06/1994.

PI 593616. *Capsicum pubescens* Ruiz Lopez & Pavon  
Cultivated. 80018; #501.

PI 593617. *Capsicum pubescens* Ruiz Lopez & Pavon  
Cultivated. 80020; #1168.

PI 593618. *Capsicum pubescens* Ruiz Lopez & Pavon  
Cultivated. 80035; Chile de caballo.

PI 593619. *Capsicum pubescens* Ruiz Lopez & Pavon  
Cultivated. 80036; Chile de caballo.

PI 593620. *Capsicum pubescens* Ruiz Lopez & Pavon  
Cultivated. 80037; Chile de caballo.

PI 593621. *Capsicum pubescens* Ruiz Lopez & Pavon  
Cultivated. 80038; Chile de caballo.

PI 593622. *Capsicum pubescens* Ruiz Lopez & Pavon  
Cultivated. 80039; Chile de caballo.

PI 593623. *Capsicum pubescens* Ruiz Lopez & Pavon  
Cultivated. 80040; Chile de caballo.

PI 593624. *Capsicum pubescens* Ruiz Lopez & Pavon  
Cultivated. 80041; Chile de caballo.

PI 593625. *Capsicum pubescens* Ruiz Lopez & Pavon  
Cultivated. 80042; Chile de caballo.

PI 593626. *Capsicum pubescens* Ruiz Lopez & Pavon  
Cultivated. 80043; Chile de caballo.

PI 593627. *Capsicum pubescens* Ruiz Lopez & Pavon  
Cultivated. 80044; Chile de caballo.

PI 593628. *Capsicum pubescens* Ruiz Lopez & Pavon  
Cultivated. 80045; Chile de caballo.

PI 593629. *Capsicum pubescens* Ruiz Lopez & Pavon  
Cultivated. 80046; Chile de caballo.

PI 593630. *Capsicum pubescens* Ruiz Lopez & Pavon  
Cultivated. 80047; Chile de caballo.

PI 593631. *Capsicum pubescens* Ruiz Lopez & Pavon  
Cultivated. 80048; Chile de caballo.

PI 593632. *Capsicum pubescens* Ruiz Lopez & Pavon  
Cultivated. 80049; Chile de caballo.

- PI 593633. *Capsicum pubescens* Ruiz Lopez & Pavon  
Cultivated. 80050; Chile de caballo.
- PI 593634. *Capsicum pubescens* Ruiz Lopez & Pavon  
Cultivated. 80051; Chile de caballo.
- PI 593635. *Capsicum pubescens* Ruiz Lopez & Pavon  
Cultivated. 80052; Chile de caballo.
- PI 593636. *Capsicum pubescens* Ruiz Lopez & Pavon  
Cultivated. 80053; Chile de caballo.
- PI 593637. *Capsicum pubescens* Ruiz Lopez & Pavon  
Cultivated. 80054; Chile de caballo.
- PI 593638. *Capsicum pubescens* Ruiz Lopez & Pavon  
Cultivated. 80055; Chile de caballo.
- PI 593639. *Capsicum pubescens* Ruiz Lopez & Pavon  
Cultivated. 80056; Chile de caballo.
- PI 593640. *Capsicum pubescens* Ruiz Lopez & Pavon  
Cultivated. 80057; Chile de caballo.

The following were donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States; M.M. Gonzalez, Sector Publico Agro. Y De Alimentacion, Inst. De Ciencia Y Tecnologia Agricolas, Avenida Reforma 8-60, Zona 9 Edificio, Guatemala. Received 01/06/1994.

- PI 593641. *Capsicum pubescens* Ruiz Lopez & Pavon  
Cultivated. Col #641; 80071.

The following were donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States; M.M. Gonzales, Sector Publico Agro. Y De Alimentacion, Inst. De Ciencia Y Tecnologia Agricolas, Avenida Reforma 8-60, Zona 9, Edificio, Guatemala. Received 01/06/1994.

- PI 593642. *Capsicum pubescens* Ruiz Lopez & Pavon  
Cultivated. Col #801; 80072.

The following were donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States; M.M. Gonzalez, Sector Publico Agro. Y De Alimentacion, Inst. De Ciencia Y Tecnologia Agricolas, Avenida Reforma 8-60, Zona 9 Edificio, Guatemala. Received 01/06/1994.

- PI 593643. *Capsicum pubescens* Ruiz Lopez & Pavon  
Cultivated. Col #1167; 80073.

**PI 593644. *Capsicum pubescens* Ruiz Lopez & Pavon**  
Cultivated. Col #1168; 80074.

The following were developed by P. Stephen Baenziger, University of Nebraska, Department of Agronomy, 330 Keim Hall, Lincoln, Nebraska 68583-0915, United States. Received 02/28/1996.

**PI 593645. *Triticum aestivum* L., nom. cons.**  
Breeding. Pureline. NE90524; NSGC 6123. Pedigree - Brule field sel. #5/5/Bezostaya 1/3/Centurk 78//Arthur/Centurk 78/4/Cody. Hard red winter wheat. Moderately tall, long coleoptile with average straw strength. Average size kernels and good test weight characteristics. Maturity medium. Moderately resistant to stem rust (contains Sr6) and moderately susceptible to leaf rust. Susceptible to wheat streak mosaic virus, wheat soilborne mosaic virus, Hessian fly, and Russian wheat aphid. Overall milling and baking quality average for Nebraska released cultivars.

**PI 593646. *Triticum aestivum* L., nom. cons.**  
Breeding. Pureline. NE91651; NSGC 6124. Pedigree - NE82671//Centurk78\*2/Lovrin 13. Hard red winter wheat. Medium tall with a short coleoptile, good winter survival, and average straw strength. Moderately resistant to stem rust (contains Sr17, which is no longer effective, and other unnamed genes), moderately susceptible to leaf rust and barley yellow dwarf virus, and is susceptible to soilborne mosaic virus and Septoria spp. Performs well under dryland conditions in the western Great Plains, but has insufficient disease resistance to be grown in higher rainfall areas where diseases are more prevalent. Overall milling and baking quality average for Nebraska released cultivars.

The following were developed by J.P. Ross, USDA, ARS, North Carolina State University, Dept. of Plant Pathology, Raleigh, North Carolina 27695, United States. Donated by North Carolina State University, North Carolina Agr. Exp. Sta., Raleigh, North Carolina, United States. Received 07/06/1993.

**PI 593647. *Glycine max* (L.) Merr.**  
Breeding. NCBPMR-3. GP-58. Pedigree - Forrest//Forrest/Semmes. Released 1986. Resistant to bean pod mottle virus (BPMV).

**PI 593648. *Glycine max* (L.) Merr.**  
Breeding. NCP83-47. GP-63. Pedigree - R71-626/PI 200510//Essex. Released 1986. Resistant to seed infection by Phomopsis.

The following were collected by J.L. Stulb, New Orleans, Louisiana, United States. Donated by USDA, ARS, Alabama Agr. Exp. Sta., Alabama, United States. Received 1963.

**PI 593649. *Gossypium hirsutum* L.**  
Cultivated. WILD MEXICAN JACK JONES; NSL 28672. Collected 1951 in Mexico . Interior of Mexico. Root-knot nematode resistant.

The following were developed by S. D. Stratton, FFR Cooperative, 4112 East State Road #225, West Lafayette, Indiana 47906, United States. Received 02/16/1996.

**PI 593650. *Medicago sativa* L. ssp. *sativa***

Cultivar. Population. "MULTISTAR". CV-193. Pedigree - 146-clone synthetic. Germplasm sources include 5% *M. falcata*, 5% Ladak, 26% *M. varia*, 4% Turkistan, 53% Flemish, 7% Chilean. Fall dormancy group 3. Flower color 95% purple, 5% white, trace cream, yellow and white. Highly resistant to anthracnose (Race 1), bacterial wilt, fusarium wilt, and phytophthora root rot. Resistant to verticillium wilt and stem nematode. Approx. 54% of plants express the multifoliate trait in the autumn regrowth.

The following were developed by Gordon M. Prine, University of Florida, Department of Agronomy, 304 Newell Hall, Gainesville, Florida 32611, United States. Donated by University of Florida, Florida Agr. Exp. Sta., Florida, United States. Received 1989.

**PI 593651. *Lolium multiflorum* Lam.**

Cultivar. Population. "SURREY"; NSL 246798. CV-180; PVP 8900300. Pedigree - Selection from Marshall ryegrass. Late-maturing, diploid ryegrass. Highly resistant to crown rust. Resistant to helminthosporium leaf spot. Adapted to Florida and the southeastern U.S. Yields equal to or exceed Marshall. Grows well in northern portions of ryegrass belt expressing good cold tolerance. Principal use for forage as a cool-season pasture plant grown on both summer perennial grass pastures and prepared seed beds. Can be used in lawns and for ground cover in parks, recreational areas and highway right-of-way.

The following were collected by J.S. Peterson, USDA, SCS, National PMC, Bldg. 509, BARC-East, Beltsville, Maryland 20705, United States. Developed by P. Leipzig; Dale C. Darris, Plant Materials Center, USDA-SCS, 3415 NE Granger Avenue, Corvallis, Oregon 97330, United States. Received 01/08/1997.

**PI 593652. *Elymus glaucus* ssp. *jepsonii* (J. B. Davy) Gould**

Cultivar. Population. "ELKTON"; CO-256; 9019690; T-19690; W6 17729. Collected 09/01/1979 in Oregon, United States. Latitude 43 deg. 29' N. Longitude 123 deg. 29' W. Elevation 121 m. Native stand near Highway 138 approximately 11.5 miles northwest of Sutherlin, Douglas County, Oregon. Sec. 24, T 24S, R 7W. Major land resource area: A2. Pedigree - Ecotype originating from a wild stand. Not intentionally bred or hybridized, but selected in comparison to 128 populations from OR, WA and other states, in a nonreplicated study, and 4 years in solid stands (swards) at several sites in WA and OR. Cool season perennial bunchgrass. Selected for agronomic performance, earlier phenological development (spring recovery and maturity) and uniformity. Good vigor, seed yield (mean 514 lbs/ac, range 380-623), and stand longevity compared to Arlington and other populations. Matures seed 7-14 days earlier and initiates growth 15-30 days sooner in spring than Arlington. Foliage grass green and lacks glaucous appearance. Mean culm height 118 cm (range 95-140). Seed weight 140,000 seeds/lb, average of 3 lots. Stems intermediate in

coarseness, often bent at base. Lower, younger sheaths are purple tinged at base, pubescent. Leaf blades nearly glabrous, flat, lax, and width 6-14 mm. Spikes erect, length 8-20 cm. Lemmas glabrous to scabrid-pubescent.

The following were donated by C.E. Caviness, Arkansas Agr. Exp. Sta., University of Arkansas, 115 Plant Science Building, Fayetteville, Arkansas 72701, United States. Received 1992.

**PI 593653. *Glycine max* (L.) Merr.**  
Cultivated. Inbred. "Crowley"; SY 920001.

The following were donated by R.L. Cooper, USDA-ARS, Ohio State University, 1680 Madison, Wooster, Ohio 44691-4096, United States. Received 1995.

**PI 593654. *Glycine max* (L.) Merr.**  
Cultivar. Pureline. "Stressland"; SY 9500001.

The following were developed by Berlin D. Nelson, North Dakota State University, Dept. of Plant Pathology, Fargo, North Dakota 58105, United States; T.C. Helms, North Dakota State University, Crop & Weed Science Department, 333 Walster Hall, Fargo, North Dakota 58105-5051, United States; K.C. Chang, North Dakota State University, Dept. of Food and Nutrition, Fargo, North Dakota 58105, United States. Received 03/04/1995.

**PI 593655. *Glycine max* (L.) Merr.**  
Cultivar. "Danatto"; ND91-2330. CV-353; PVP 9600241. Pedigree - Natto King 86 x unknown. Small seeded, developed for the natto specialty food market. Flower purple, grey pubescence, tan pod color, shiny seed coat, yellow hilum, yellow seed coat, and indeterminate growth habit. Mid-maturity group O. Susceptible to lodging and is not iron efficient on high pH soils.

The following were developed by G.L.C. Musa, Northwest Agricultural Research Center, (CIANO-INIFAP-SAGAR), Yaqui Valley Agric. Exp. Stn., Ciudad Obregon, Sonora CP 85000, Mexico; Sergio Munoz-Valenzuela, Northwest Agricultural Research Center, (CIANO-INIFAP-SAGAR), N.E. Borlaug KM 12, Ciudad Obregon, Sonora, Mexico; F. Ochoa-Burgos, Northwest Agricultural Research Center, (CIANO-INIFAP-SAGAR), Apartado Postal 515, Ciudad Obregon, Sonora, Mexico. Received 02/07/1996.

**PI 593656. *Sesamum indicum* L.**  
Cultivar. "RIO YAQUI 93". CV-7. Pedigree - Single plant selection from Texas 77. Begins flowering about 52 d after planting and reaches physiological maturity at 105 d. Mature plant average height 149cm. Height of first capsules 70cm. Seed white stained and averaging 3.0mm long and 1.9mm wide. Seed weight averages 2.8g 1000-1 and test weight 59.6kg HL-1. Seed has average of 451g kg-1 oil, 215g kg-1 protein and 89g kg-1 carbohydrates. Fatty acid balance of oil 369g kg-1 oleic acid, 456g kg-1 linoleic acid, 103g kg-1 palmitic acid, 73g kg-1 stearic acid, with an iodine number of 114g.

The following were developed by A.W. Johnson, Pee Dee Research and Education Center, Clemson University, Florence, South Carolina 29501-9603, United States; South Carolina Agricultural Experiment Station, South Carolina, United States. Received 02/12/1996.

**PI 593657. *Nicotiana tabacum* L.**

Cultivar. "CU 263". CV-112; PVP 9700016. Pedigree - SC 72/TI 1112//2\* Speight G-28. First insect resistant tobacco cultivar released in the U.S. Moderate resistance to tobacco budworm (*Heliothis virescens*). Resistance is a type of antibiosis, and budworm larval growth and survival are reduced. When budworm damage is visually rated, there is approx. 50% less damage than on NC 2326 or NC 95. Days to flower averages 68 after transplanting. Normally topped at height of 105 cm, and produces an average of 19.5 leaves per plant of medium length and width. Good yield and quality characteristics. Cured leaf predominantly orange in color, medium bodied, and smooth to medium textured. Met all standards for chemical content, smoke flavor, filling value, and usability for a tobacco cultivar.

The following were developed by John M. Clarke, Agriculture and Agri-Food Canada, Semiarid Prairie Agricultural Res. Centre, Box 1030, Swift Current, Saskatchewan S9H 3X2, Canada; R. M. DePauw, Agriculture and Agri-Food Canada, Semiarid Prairie Agricultural Res. Centre, Box 1030, Swift Current, Saskatchewan S9H 3X2, Canada; T. N. McCaig, Agriculture Canada, Swift Current Research Station, Swift Current, Saskatchewan S9H 3X2, Canada; J. G. McLeod, Agriculture Canada, Swift Current Research Station, P. O. Box 1030, Swift Current, Saskatchewan S9H 3X2, Canada; R.E. Knox, Agriculture Canada, Research Station, Box 1030, Swift Current, Saskatchewan S9H 3X2, Canada; M.R. Fernandez, Agriculture Canada, Research Station, Swift Current, Saskatchewan, Canada. Received 02/13/1996.

**PI 593658. *Triticum aestivum* L., nom. cons.**

Cultivar. Pureline. "AC BARRIE"; 8405BK3C; BW661. CV-830. Pedigree - Neepawa/Columbus//BW90. Hard red spring wheat, adapted to the Canadian prairies. Combines high grain yield potential with high protein concentration. Resistance to prevalent races of leaf rust, stem rust, loose smut, and common bunt. Has conventional height and strong straw. Quality suitable for making a variety of leaven products. Hard kernel, high flour yield and strong gluten.

**PI 593659. *Triticum aestivum* L., nom. cons.**

Cultivar. Pureline. "AC KARMA"; 8628 VC2E; HY395. CV-831. Pedigree - HY320\*5/BW553//HY358. White spring wheat, adapted to the Canadian Prairies. Combines high grain yield with resistance to common bunt and loose smut in a semidwarf, photo-insensitive background. Resistance to prevalent races of leaf rust and stem rust. Kernels medium hard that have high flour yield and produce medium strong gluten.

The following were developed by Robert T. Lewellen, USDA, ARS, U.S. Agricultural Research Station, 1639 E. Alisal St., Salinas, California 93905, United States. Received 02/12/1996.



**PI 593660. *Beta vulgaris* L.**

Breeding. C79-1; R479(Sp). GP-171. Pedigree - C37/Rz (Holly source). Near isoline of C37. Resistant to rhizomania (BNYVV). Resistance segregates. C37, the recurrent parent, is multigerm, self-sterile with resistance to bolting, curly top, and virus yellows.

**PI 593661. *Beta vulgaris* L.**

Breeding. C79-2; R424. GP-172. Pedigree - C37/WB41 (B. maritima accession from Denmark). Near isoline of C37. Resistant to rhizomania (BNYVV). Resistance segregates. C37, the recurrent parent, is multigerm, self-sterile with resistance to bolting, curly top, and virus yellows.

**PI 593662. *Beta vulgaris* L.**

Breeding. C79-3; R425. GP-173. Pedigree - C37/WB42 (B. maritima accession from Denmark). Near isoline of C37. Resistant to rhizomania (BNYVV). Resistance segregates. C37, the recurrent parent, is multigerm, self-sterile with resistance to bolting, curly top, and virus yellows.

**PI 593663. *Beta vulgaris* L.**

Breeding. C79-4; R428. GP-174. Pedigree - C37/PI 206407 (a sugarbeet accession from Turkey. However, the only plant with resistance had chard-like traits). Near isoline of C37. Resistant to rhizomania (BNYVV). Resistance segregates. C37, the recurrent parent, is multigerm, self-sterile with resistance to bolting, curly top, and virus yellows.

**PI 593664. *Beta vulgaris* L.**

Breeding. C79-5; R432. GP-175. Pedigree - C37/Rhizomania resistant from a weed beet line from Italy. Near isoline of C37. Resistant to rhizomania (BNYVV). Resistance segregates. C37, the recurrent parent, is multigerm, self-sterile with resistance to bolting, curly top, and virus yellows.

**PI 593665. *Beta vulgaris* L.**

Breeding. C79-6; R434. GP-176. Pedigree - C37/Rhizomania resistant R05 (sugarbeet line from Italy). Near isoline of C37. Resistant to rhizomania (BNYVV). Resistance segregates. C37, the recurrent parent, is multigerm, self-sterile with resistance to bolting, curly top, and virus yellows.

**PI 593666. *Beta vulgaris* L.**

Breeding. C79-7; R435. GP-177. Pedigree - C37/Rhizomania resistant Rima, a SES commercial hybrid with male sterile cytoplasm. Near isoline of C37. Resistant to rhizomania (BNYVV). Resistance segregates. C37, the recurrent parent, is ultigerm, self-sterile with resistance to bolting, curly top, and virus yellows.

**PI 593667. *Beta vulgaris* L.**

Breeding. C79-8; R436; R436R2. GP-178. Pedigree - C37/C50. C50 = R22 = sugarbeet line Y54 x 59 B. maritima accessions. Near isoline of C37. Resistant to rhizomania (BNYVV). Resistance segregates. C37, the recurrent parent, is multigerm, self-sterile with resistance to bolting, curly top, and virus yellows.

**PI 593668. *Beta vulgaris* L.**

Breeding. C79-9; R437R2. GP-179. Pedigree - C37/Rhizomania resistant WB151 (B. maritima accession from Denmark). Near isoline of C37. Resistant to rhizomania (BNYVV). Resistance segregates. C37, the recurrent parent, is multigerm, self-sterile with resistance to bolting, curly top, and virus yellows.

**PI 593669. Beta vulgaris L.**

Breeding. C79-10; R441. GP-180. Pedigree - C37/Rhizomania resistance WB169 (B. maritima from Po River Valley, Italy). Near isoline of C37. Resistant to rhizomania (BNYVV). Resistance segregates. C37, the recurrent parent, is multigerm, self-sterile with resistance to bolting, curly top, and virus yellows.

**PI 593670. Beta vulgaris L.**

Breeding. C79-11; R442. GP-181. Pedigree - C37/Rhizomania resistant WB258 (B. maritima from Po River Valley, Italy). Near isoline of C37. Resistant to rhizomania (BNYVV). Resistance segregates. C37, the recurrent parent, is multigerm, self-sterile with resistance to bolting, curly top, and virus yellows.

**PI 593671. Beta vulgaris L.**

Breeding. C78; R578. GP-182. Pedigree - Near-isoline of C46/2 with resistance to rhizomania. Multigerm, self-sterile, open-pollinated line with resistance to rhizomania (Rz), curly top, erwinia, and bolting. Moderate resistance or tolerance to virus yellows, powdery mildew. Similar to C78/2.

**PI 593672. Beta vulgaris L.**

Breeding. C80; R480-#. GP-183. Pedigree - Near-isoline of C54 with resistance to rhizomania. Multigerm, self-sterile, open pollinated line with resistance to rhizomania. Developed by compositing selected half-sibs from progeny tests for CA and per se performance for sugar yield. Similar to C80NB.

**PI 593673. Beta vulgaris L.**

Breeding. C80NB; R480NB. Pedigree - Near-isoline of C54 with resistance to rhizomania selected by mass selection for resistance to rhizomania, bolting, virus yellows, and Erwinia. Multigerm, self-sterile, open pollinated line with combined resistance to rhizomania, bolting, and Erwinia. Moderate resistance or tolerance to powdery mildew and virus yellows.

**PI 593674. Beta vulgaris L.**

Breeding. C80-45; R480-45(Iso). Pedigree - Increase of one half-sib family. Multigerm, self-sterile, open pollinated line with resistance to rhizomania. Increased from one half-sib family selected for CA and per se performance for sugar yield and combined disease resistance. Similar to C80.

**PI 593675. Beta vulgaris L.**

Breeding. C82; R482NB. GP-184. Pedigree - Near-isoline of C31 with resistance to rhizomania. Multigerm, self-sterile, open pollinated line with resistance to rhizomania, bolting, and virus yellows. Reselection and recombination of lines similar to C76-31 and C76-89.

**PI 593676. *Beta vulgaris* L.**

Breeding. C608; N457. Pedigree - BC3 F2(C918\*4 x B883) where B883 is source of BCN resistance and C918 is rhizomania resistant population. Multigerm, self-fertile population that segregates for hypocotyl color and genetic ms. Segregates for resistance to rhizomania (BNYVV) and cyst nematode. Beet cyst nematode (BCN) resistance traces to *Beta procumbens*. Source of combined resistance from which to develop homozygous BCN resistant breeding lines.

**PI 593677. *Beta vulgaris* L.**

Breeding. C609; N461. Pedigree - BC3F2(C918\*4 x B883) where B883 is source of BCN resistance and C918 is rhizomania resistant population. Multigerm, self-fertile population that segregates for hypocotyl color and genetic ms. Segregates for resistance to rhizomania (BNYVV) and beet cyst nematode (BCN). BCN resistance traces to *Beta procumbens*. Source of combined resistance to select homozygous BCN resistant breeding lines.

The following were developed by E.L. Turcotte, USDA-ARS, Maricopa Agricultural Research Station, 37860 W. Smith-Enke Road, Maricopa, Arizona 85239, United States; Richard Percy, USDA, ARS, Maricopa Agricultural Research Ctr., 37860 W. Smith-Enke Rd., Maricopa, Arizona 85339, United States. Received 02/22/1996.

**PI 593678. *Gossypium barbadense* L.**

Breeding. P70. GP-629. Pedigree - 6508-39-1-16 / 6807-26-10-3. Agronomically elite line. In 18 tests conducted over 2 years, averages 1160 kg ha<sup>-1</sup> of fiber. Fiber properties averaged 35.0 mm for 2.5% staple length, 45.0% for fiber uniformity, 30.7 g tex<sup>-1</sup> for T1 fiber strength, and 3.54 for micronaire. In 15 tests conducted over 2 years, averaged 88.5 cm in height.

**PI 593679. *Gossypium barbadense* L.**

Breeding. P71. GP-630. Pedigree - 7301-5-4-1 / 7306-21-2-2. In 18 tests conducted over 2 years, averaged 1049 kg ha<sup>-1</sup> in fiber yield. Fiber properties averaged 35 mm for 2.5% staple length, 48% for fiber length uniformity, 34.8 g tex<sup>-1</sup> for T1 fiber strength, and 3.57 for micronaire. Fiber whiter than typical for American Pima cottons, having a reflectance of 73.7 Rd. In 18 tests conducted over 2 years, averaged 102 cm in height.

**PI 593680. *Gossypium barbadense* L.**

Breeding. P72. GP-631. Pedigree - 6614-91-1-1 / 7402-126-1-1. In 8 tests conducted over 8 locations, averaged 1098 kg ha<sup>-1</sup> in fiber yield. Fiber properties averaged 35 mm for 2.5% staple length, 50% for fiber length uniformity, 35.3 g tex<sup>-1</sup> for T1 fiber strength, and 3.54 for micronaire. Fiber whiter than typical for American Pima cotton, having a reflectance of 75.0 Rd. Plant height averaged 87.9 cm over 8 tests at 8 locations.

**PI 593681. *Gossypium barbadense* L.**

Breeding. P73. GP-632. Pedigree - 6614-91-1-1 / 7301-5-4-5. In 45 tests conducted over 5 years, averaged 1192 kg ha<sup>-1</sup> in fiber yield. Fiber properties averaged 34.5 mm for 2.5% staple length, 49% for fiber length uniformity, 34.7 g tex<sup>-1</sup> for T1 fiber strength, and 4.09 for micronaire. Plant height averaged 94.4 cm over 45 tests and 5 years.

**PI 593682. *Gossypium barbadense* L.**

Breeding. P74. GP-633. Pedigree - 7402-126-1-1 / 7406-109-7-6. In 26 tests conducted over 3 years, averaged 1090 kg ha<sup>-1</sup> in fiber yield. Fiber properties averaged 34.8 mm for 2.5% staple length, 48% for fiber length uniformity, 33.7 g tex<sup>-1</sup> for T1 fiber strength, and 4.28 for micronaire. Plant height averaged 94 cm in 26 tests conducted over 3 years.

**PI 593683. *Gossypium barbadense* L.**

Breeding. P75. GP-634. Pedigree - 7202-72-11-10 / 7301-5-4-5. In 26 tests conducted over 3 years, averaged 1212 kg ha<sup>-1</sup> in fiber yield. Fiber properties averaged 34.5 mm for 2.5 % staple length, 49% for fiber length uniformity, 32.7 g tex<sup>-1</sup> for T1 fiber strength, and 4.21 for micronaire. Plant height averaged 94 cm in 26 tests over 3 years. Although a good yield performing line at higher elevations, lacks the heat tolerance required for superior performance in the low elevation desert locations of the Southwest.

**PI 593684. *Gossypium barbadense* L.**

Breeding. P76. GP-635. Pedigree - 7404-531-506-506 / 7202-50-5-7-1. In 26 tests conducted over 3 years, averaged 1236 kg ha<sup>-1</sup> in fiber yield. Fiber properties averaged 34.8 mm for 2.5% staple length, 48% for fiber length uniformity, 33.3 g tex<sup>-1</sup> for T1 fiber strength, and 4.34 for micronaire. Plant height average 85.5 cm.

**PI 593685. *Gossypium barbadense* L.**

Breeding. P77. GP-636. Pedigree - 7501-36-6-8 / 7607-4-7-3. In 21 tests conducted over 3 years, averaged 1316 kg ha<sup>-1</sup> in fiber yield. Fiber properties averaged 33.8 mm for 2.5% staple length, 48% for fiber length uniformity, 31.4 g tex<sup>-1</sup> for T1 fiber strength and 4.26 for micronaire. Plant height averaged 78.7 cm in 14 tests over 3 years. Short statured and early maturing in comparisons with the industry standard PS-7.

**PI 593686. *Gossypium barbadense* L.**

Breeding. P78. GP-637. Pedigree - 7503-58-1-2 / 7607-4-7-3. Averaged 1484 kg ha<sup>-1</sup> fiber yield in 2 tests in one year. Fiber properties averaged 35 mm for 2.5% staple length, 49% for fiber length uniformity, 31.6 g tex<sup>-1</sup> for T1 fiber strength, and 4.44 for micronaire. Plant height averaged 137 cm. Fiber strength and micronaire are not acceptable under current industry standards for ELS fiber.

**PI 593687. *Gossypium barbadense* L.**

Breeding. P79. GP-638. Pedigree - 7202-50-2-7-3 / 7406-109-7-6. In 8 tests at 8 locations, averaged 1202 kg ha<sup>-1</sup> fiber yield. Fiber properties averaged 33.3 mm for 2.5% staple length, 49% for fiber length uniformity, 29.6 g tex<sup>-1</sup> for T1 fiber strength, and 4.40 for micronaire. Plant height averaged 76.2 cm in 8 tests and 8 locations. Fiber strength and micronaire are not acceptable under current industry standards for ELS fiber.

The following were developed by Rollin G. Sears, Kansas State University, Department of Agronomy, Throckmorton Hall, Manhattan, Kansas 66506-5501, United States; John Moffatt, AgriPro Biosciences, P.O. Box 30, Berthoud,

Colorado 80513, United States; T.J. Martin, Kansas State University, Agric. Research Center-Hays, 1232 240th Avenue, Hays, Kansas 67601, United States; T.S. Cox, USDA, ARS, Plant Science and Entomology Research, Department of Agronomy, Manhattan, Kansas 66506-5501, United States; M.D. Witt, Kansas State University, Southwest Res. & Ext. Center, Garden City, Kansas, United States; W.F. Heer, Kansas State University, Kansas Agric. Exp. Station, Dept. of Agronomy, Manhattan, Kansas, United States; S.P. Curran, Kansas State University, Dept. of Grain Science & Industry, Manhattan, Kansas 66506, United States; R.K. Bequette, Kansas State University, Dept. of Grain Science & Industry, Manhattan, Kansas, United States; O.K. Chung, USDA-ARS, U.S. Grain Marketing Research Lab, Hard Winter Wheat Quality Lab, Manhattan, Kansas, United States; J.H. Long, Kansas State University Southeast Agric. Res. Center, Box 316, Parsons, Kansas 67357, United States. Received 02/23/1996.

**PI 593688. *Triticum aestivum* L., nom. cons.**

Cultivar. Pureline. "JAGGER"; KS84063-9-39-3. CV-836. Pedigree - KS82W418/Stephens. Awne, hard red winter wheat. At maturity has buckskin spike color, characterized by brown stripe running the length of the outside edge of both glume and lemmas. Medium short semidwarf, approx. 86 cm in height under average Kansas conditions. Resistant to stem rust, leaf rust, soil borne mosaic virus, spindle streak mosaic virus, tan spot, and speckled leaf blotch. Moderately resistant to glume blotch, bacterial streak and Wheat Streak Mosaic Virus. Moderately susceptible to Powdery Mildew. Susceptible to Hessian fly, green bugs and Russian Wheat aphids. At maturity has upright to moderately nodding spikes. Represents an approximate 15% yield improvement over Karl 92.

The following were developed by David A. Van Sanford, University of Kentucky, Department of Agronomy, Ag. Sci. Ctr. N-106K, Lexington, Kentucky 40546-0091, United States; C.R. Tutt, University of Kentucky, Kentucky Agric. Exp. Station, Princeton, Kentucky, United States; C.S. Swanson, University of Kentucky, Kentucky Agric. Exp. Station, Lexington, Kentucky, United States; W.L. Pearce, Kentucky Agric. Exp. Station, Lexington, Kentucky, United States; L.J. Tomes, Kentucky Agric. Exp. Sta., Dept. of Agronomy, University of Kentucky, Lexington, Kentucky 40546-0091, United States; D.E. Hershman, Kentucky Agric. Exp. Sta., Dept. of Plant Pathology, Univ. of Kentucky, Lexington, Kentucky 40546-0091, United States. Received 02/26/1996.

**PI 593689. *Triticum aestivum* L., nom. cons.**

Cultivar. Pureline. "FOSTER"; KY85C-31-6. CV-835; PVP 9700119. Pedigree - Coker 65-20/Arthur/4/Chul \*8CC//VA 68-22-7/Abe/3/VA 72-54-14/Tyler//Suwon 92/Arthur//Arthur/VA 70-52-2. White-chaffed, awnletted soft red winter wheat with long spikes, medium size kernels, midseason maturity, intermediate height, and moderate winterhardiness. Excellent yield potential, test weight and milling and baking quality. Resistant to powdery mildew (*Erysiphe graminis*), and Septoria leaf blotch (*Septoria tritici*), glume blotch (*Phaeosphaeria nodorum* Hedjaroude), and leaf rust (*Puccinia recondita*). Moderately susceptible to barley yellow dwarf virus and susceptible to Hessian fly (*Mayetiola destructor*).

The following were developed by Farman Jodari, Louisiana State University,

Rice Research Station, P.O. Box 1429, Crowley, Louisiana 70527, United States ; Don Groth, Rice Research Station, Louisiana State University, Agric. Exp. Station, P.O. Box 1429, Crowley, Louisiana 70429-1429, United States; Steve D. Linscombe, Rice Research Station, Louisiana Agricultural Experimental Sta., P.O. Box 1429, Crowley, Louisiana 70527, United States; P.K. Bollich, Rice Research Station, P.O. Box 1429, Crowley, Louisiana 70527-1429, United States; L.M. White, Rice Research Station, P.O. Box 1429, Crowley, Louisiana 70527-1429, United States; R.T. Dunand, Rice Research Station, P.O. Box 1429, Crowley, Louisiana 70527-1429, United States; D.E. Sanders, Louisiana Cooperative Extension Service, P.O. Box 25100, Baton Rouge, Louisiana 70894-5100, United States. Received 02/26/1996.

**PI 593690. *Oryza sativa* L.**

Cultivar. Pureline. "LAFITTE". CV-102. Pedigree - Mercury//Mercury/Koshihikari. Short-stature (99 cm) medium-grain. Moderately resistant to blast (*Pyricularia grisea*) and sheath blight (*Rhizoctonia solani*). Good seedling vigor, cold tolerance, ratoon potential, and very good milling quality (average 66-70; % whole grain-total grain after milling). Very early in maturity, averaging 85 days from emergence to 50% heading.

The following were developed by Robert T. Lewellen, USDA, ARS, U.S. Agricultural Research Station, 1639 E. Alisal St., Salinas, California 93905, United States. Received 02/26/1996.

**PI 593691. *Beta vulgaris* L.**

Breeding. C913-70; 3913-70. Pedigree - Inc. S1 line from popn-913. Popn-913 is similar to C918. Multigerm, green hypocotyl (rr), self-fertile (Sf), line that segregates for resistance to rhizomania (BNYVV). Resistant to bolting and Erwinia. Moderate resistance to virus yellows, curly top, and powdery mildew. Narrowly based. Selected from S1 progeny test and experimental hybrids for resistance to diseases, %S, and sugar yield combining ability.

**PI 593692. *Beta vulgaris* L.**

Breeding. CR09; R409. Pedigree - BC1F2(CTR, Rz\*2 x CR) where CTR, Rz = curly top, rhizomania resistant line and CR = Cercospora leaf spot resistant line R05 from Italy. Multigerm line that segregates for genetic ms (Aa), self-fertility (Sf), hypocotyl color, and resistance to rhizomania (Rz). Combines resistance to Cercospora and rhizomania in a line with adaptation to the western USA. Derived from Italian sugarbeet line R05. R05 was an accession into the Salinas breeding program from E. Biancardi's CR program at Rovigo, Italy.

**PI 593693. *Beta vulgaris* L.**

Breeding. CR10; R410. Pedigree - BC1F2(CTR, Rz\*2 x CR) where CTR, Rz = curly top, rhizomania resistant line and CR = Cercospora leaf spot resistant line R06 from Italy. Multigerm line that segregates for genetic ms (Aa), self-fertility (Sf), hypocotyl color (mostly green, rr), and resistance to rhizomania (Rz). Combines resistance to Cercospora leaf spot and rhizomania in a line with adaptation to the western USA. Derived from Italian sugarbeet line R06. R06 was a green hypocotyl, CR, moderately rhizomania resistant accession from E. Biancardi's CR program, Rovigo, Italy.

**PI 593694. *Beta vulgaris* L.**

Breeding. C51; R522(Sp). Pedigree - Recombination of improved lines of C50. C50 = sugarbeet x *Beta maritima* accessions. Improved version of C50 released in 1988. Developed and tested as line R22. Four to six cycles of mass selection were made for beet and root conformation and yield and resistance to rhizomania and virus yellows. Eight sublines were reselected for resistance to rhizomania and for % sucrose and were recombined to form a single improved population.

**PI 593695. *Beta vulgaris* L.**

Breeding. C78/2; R578 (Sp). Pedigree - Rz near-isoline of C46/2 and is an improved line similar to C78. Advanced multigerm, self-sterile breeding line that combines multiple disease resistance and high productivity for sugar yield combining ability. Segregates for resistance to rhizomania (Rz) and has moderate resistance or tolerance to bolting, curly top, virus yellows, Erwinia, powdery mildew, and downy mildew.

**PI 593696. *Beta vulgaris* L.**

Breeding. C76-43-14; R476-43-14(Iso). Pedigree - Increase of full-sib family C31-43 x R76. Increase of a selected full-sib family from crosses between C31-43 and R76. R76 is a Rz near-isoline of C31/6. Multigerm and self-sterile and segregates for Rz. Combines multiple disease resistance and factors for productivity.

**PI 593697. *Beta vulgaris* L.**

Breeding. C76-43-15; R476-43-15(Iso). Pedigree - Increase of full-sib family C31-43 x R76. Sister line to C76-43-14.

**PI 593698. *Beta vulgaris* L.**

Breeding. C76-89-5; R476-89-5(Iso). Pedigree - Increase of full-sib family C31-89 x R76. Increase of a selected full-sib family from crosses between C31-89 and R76. R76 is a Rz near-isoline of C31/6. Multigerm and self-sterile and segregates for Rz. Combines multiple disease resistance and factors for productivity.

**PI 593699. *Beta vulgaris* L.**

Breeding. C76-89-18; R576-89-18(Sp 9). Pedigree - Increase of full-sib family C31-89 x R76. Sister line to C76-89-5. Susceptible to rhizomania. Moderately resistant to virus yellows (BYV & BWYV). Has good GCA for sugar yield.

**PI 593700. *Beta vulgaris* L.**

Breeding. C890; 3890. Pedigree - BC2F2(C790mmaa\*3 x 9876) where 9876 was a monogerm source of resistance to rhizomania (Rz). Monogerm, self-fertile population similar to C790 that segregates for genetic male sterility and resistance to rhizomania (Rz). Should be useful as a source population for developing monogerm, O-type, rhizomania resistant breeding and parental lines with good sugar yield combining ability.

**PI 593701. *Beta vulgaris* L.**

Breeding. C890-1; 5890(Sp). Pedigree - Near-isoline of C790 that segregates for the Rz (Holly) source of resistance. Synthesized from selected S1 lines. The similar lines C890-1 through C890-10/11 are

populations that segregate for resistance to rhizomania (BNYVV). The common background is self-fertile, monogerm, O-type population C790. The C890-# lines segregate for monogerm, O-type, and genetic male sterility and have broad genetic variability. Each 890-# line is a source of resistance to BNYVV that was derived from a different and unique source. The allelism among these sources of resistance is not known.

**PI 593702. *Beta vulgaris* L.**

Breeding. C890-2/3; 5812(Iso). Pedigree - Backcrosses into C790 of the factor(s) for resistance to rhizomania from WB41 and WB42 (*Beta maritima* accessions from Denmark). F2BC3[C790\*2 x (C37\*2 x WB41, WB42)]. The similar lines C890-1 through C890-10/11 are populations that segregate for resistance to rhizomania (BNYVV). The common background is self-fertile, monogerm, O-type population C790. The C890-# lines segregate for monogerm, O-type, and genetic male sterility and have broad genetic variability. Each 890-# line is a source of resistance to BNYVV that was derived from a different and unique source. The allelism among these sources of resistance is not known.

**PI 593703. *Beta vulgaris* L.**

Breeding. C890-4; 5814(Iso). Pedigree - Backcrosses into C790 of the factor for resistance to rhizomania from PI206407 (resistance from a chard-like plant within Turkish sugarbeet accession). BC6F2[C790\*2 x (C37\*5 x PI206407)]. The similar lines C890-1 through C890-10/11 are populations that segregate for resistance to rhizomania (BNYVV). The common background is self-fertile, monogerm, O-type population C790. The C890-# lines segregate for monogerm, O-type, and genetic male sterility and have broad genetic variability. Each 890-# line is a source of resistance to BNYVV that was derived from a different and unique source. The allelism among these sources of resistance is not known.

**PI 593704. *Beta vulgaris* L.**

Breeding. C890-5; 5815(Iso). Pedigree - Backcrosses into C790 of the factor for resistance to rhizomania from R04, an Italian weed beet accession. BC3F2[C790\*2 x (C37\*2 x R04)]. The similar lines C890-1 through C890-10/11 are populations that segregate for resistance to rhizomania (BNYVV). The common background is self-fertile, monogerm, O-type population C790. The C890-# lines segregate for monogerm, O-type, and genetic male sterility and have broad genetic variability. Each 890-# line is a source of resistance to BNYVV that was derived from a different and unique source. The allelism among these sources of resistance is not known.

**PI 593705. *Beta vulgaris* L.**

Breeding. C890-6/7; 5817(Iso). Pedigree - Backcrosses into C790 of the factor for resistance to rhizomania from Rima's and R04, an Italian sugarbeet line. BC1F2[C790 x (Rima-CMS, R04 x C37)]. The similar lines C890-1 through C890-10/11 are populations that segregate for resistance to rhizomania (BNYVV). The common background is self-fertile, monogerm, O-type population C790. The C890-# lines segregate for monogerm, O-type, and genetic male sterility and have broad genetic variability. Each 890-# line is a source of resistance to BNYVV that was derived from a different and unique source. The allelism among these sources of resistance is not known.



**PI 593706. *Beta vulgaris* L.**

Breeding. C890-8; 5818(Iso). Pedigree - Backcrosses into C790 of the factor(s) for resistance to rhizomania from C50, a composite cross between C54 and *B. maritima* accessions. BC3F2{C790\*2 x [C37 x (C54 x *B. maritima*)]}. The similar lines C890-1 through C890-10/11 are populations that segregate for resistance to rhizomania (BNYVV). The common background is self-fertile, monogerm, O-type population C790. The C890-# lines segregate for monogerm, O-type, and genetic male sterility and have broad genetic variability. Each 890-# line is a source of resistance to BNYVV that was derived from a different and unique source. The allelism among these sources of resistance is not known.

**PI 593707. *Beta vulgaris* L.**

Breeding. C890-9; 5819(Iso). Pedigree - Backcrosses into C790 of the factor for resistance to rhizomania from WB 151, *Beta maritima* from Denmark. BC5F2[C790\*2 x (C37\*4 x WB151)]. The similar lines C890-1 through C890-10/11 are populations that segregate for resistance to rhizomania (BNYVV). The common background is self-fertile, monogerm, O-type population C790. The C890-# lines segregate for monogerm, O-type, and genetic male sterility and have broad genetic variability. Each 890-# line is a source of resistance to BNYVV that was derived from a different and unique source. The allelism among these sources of resistance is not known.

**PI 593708. *Beta vulgaris* L.**

Breeding. C890-10/11; 5820(Iso). Pedigree - Backcrosses into C790 of the factor(s) for resistance to rhizomania from WB 169 and WB 258, *Beta maritima* lines from Po Valley, Italy. BC4F2[C790 x (C37\*4 x WB169, WB258)]. The similar lines C890-1 through C890-10/11 are populations that segregate for resistance to rhizomania (BNYVV). The common background is self-fertile, monogerm, O-type population C790. The C890-# lines segregate for monogerm, O-type, and genetic male sterility and have broad genetic variability. Each 890-# line is a source of resistance to BNYVV that was derived from a different and unique source. The allelism among these sources of resistance is not known.

The following were collected by Nigel Maxted, Univ. of Southampton - Dept. of Biology, Med. & Biological Science Building, Bassett Crescent East, Southampton, England SO9 3TU, United Kingdom. Donated by Laszlo Holly, Int. Center for Agricultural Research in the Dry Areas, Germplasm Resources Unit, P.O. Box 5466, Aleppo, Syria. Received 10/17/1990.

**PI 593709. *Cicer reticulatum* Ladiz.**

Wild. 5667; ILWC 242; W6 6161; W6 10154. Collected 1988 in Turkey. 15km N Urfa, W Urfa-Nilvan road, Urfa Province.

The following were collected by Nigel Maxted, Univ. of Southampton - Dept. of Biology, Med. & Biological Science Building, Bassett Crescent East, Southampton, England SO9 3TU, United Kingdom; W. Mughlaby. Donated by Laszlo Holly, Int. Center for Agricultural Research in the Dry Areas, Germplasm Resources Unit, P.O. Box 5466, Aleppo, Syria. Received 10/17/1990.

**PI 593710. *Cicer judaicum* Boiss.**

Wild. 2974; ILWC 47; W6 6155. Collected 05/1986 in Syria.  
Banias-Lattakia, Banias Province.

**PI 593711. *Cicer judaicum* Boiss.**

Wild. 1938; ILWC 48; W6 6156. Collected 05/1986 in Syria.  
Banias-Lattakia, Banias Province.

The following were donated by Laszlo Holly, Int. Center for Agricultural Research in the Dry Areas, Germplasm Resources Unit, P.O. Box 5466, Aleppo, Syria. Received 04/03/1992.

**PI 593712. *Cicer judaicum* Boiss.**

Cultivated. BMV 23-9; ILWC 207; W6 10155.

**PI 593713. *Cicer judaicum* Boiss.**

Cultivated. BMV 26-1; ILWC 208; W6 10156.

**PI 593714. *Cicer judaicum* Boiss.**

Cultivated. LR-126; ILWC 210; W6 10157.

**PI 593715. *Cicer judaicum* Boiss.**

Cultivated. LR-135; ILWC 211; W6 10158.

**PI 593716. *Cicer pinnatifidum* Jaub. & Spach**

Cultivated. 5119-1; 5119; ILWC 236; W6 10159.

The following were collected by Laszlo Holly, Int. Center for Agricultural Research in the Dry Areas, Germplasm Resources Unit, P.O. Box 5466, Aleppo, Syria. Donated by Int. Center for Agricultural Research in the Dry Areas, P.O. Box 5466, Aleppo, Syria. Received 07/15/1992.

**PI 593717. *Cicer judaicum* Boiss.**

Wild. LH-241; ILWC 41; W6 10525. Collected in Syria.

The following were donated by R.P.S. Pundir, Int. Crops Res. Inst. for the Semi-Arid Tropics, Genetic Resources Program, Patancheru, Andhra Pradesh 502 324, India. Received 12/31/1991.

**PI 593718. *Cicer microphyllum* Benth.**

Wild. ICCW 55; NC 61034; W6 14184. Collected in India. Kashmir.

**PI 593719. *Cicer microphyllum* Benth.**

Wild. ICCW 57; A 1462; W6 14186. Collected in India. Kashmir.

The following were donated by Niagara Parks Commission, School of Horticulture, Niagara Falls, Ontario, Canada. Received 05/24/1985.

**PI 593720. *Agastache foeniculum* (Pursh) Kuntze**

Cultivated. Index Seminum 70; Ames 4372.

The following were donated by Dorothy Barringer, Wildflowers from Nature's Way, RR 1, Woodburn, Iowa 50276, United States. Received 10/28/1985.

**PI 593721. *Stachys tenuifolia* Willd.**  
Wild. Ames 4719.

The following were donated by Clifford Jantz, 4115 East Garden Ave., Des Moines, Iowa 50317, United States; Richard W. Pohl, Iowa State University, Botany Department, Bessey Hall, Ames, Iowa 50011, United States. Received 03/06/1986.

**PI 593722. *Agastache rugosa* (Fischer & C. Meyer) Kuntze**  
Cultivated. Ames 4992.

The following were donated by Michigan State University, W. J. Beal Botanical Garden, 412 Olds Hall, East Lansing, Michigan 48824-1047, United States. Received 03/24/1986.

**PI 593723. *Agastache rugosa* (Fischer & C. Meyer) Kuntze**  
Cultivated. Index Seminum 311; Ames 5018.

The following were collected by Calvin R. Sperling, USDA, ARS, Natl. Germplasm Resources Laboratory, Room 402, Building 003, BARC-West, Beltsville, Maryland 20705-2350, United States; H.H. Gecit, Ankara University, Ankara, Ankara, Turkey; D. Eser, Ankara University, Ankara, Ankara, Turkey. Received 10/24/1986.

**PI 593724. *Thymus kotschyanus* Boiss. & Hohen. var. *kotschyanus***  
Wild. H 6802; Ames 7471. Collected 07/24/1985 in Turkey. Latitude 39 deg. 11' N. Longitude 43 deg. 21' E. Elevation 1850 m. Van Province. 2 km north of Ag Station (north of Kockopru). Collected on an ungrazed slope. Common low subshrub, woody at base. Flowers white. Leaves fragrant.

The following were donated by Jack Alexander, Arnold Arboretum, Jamaica Plain, Massachusetts, United States. Received 12/17/1986.

**PI 593725. *Elsholtzia stauntoni* Benth.**  
Cultivated. Mint Bush; Ames 7571. Late flowering.

The following were donated by Jardin Botanique de Montreal, 4101 Rue Sherbrooke Est, Montreal, Quebec H1X 2B2, Canada. Received 03/02/1987.

**PI 593726. *Agastache rugosa* (Fischer & C. Meyer) Kuntze**  
Cultivated. Index Seminum 601; Ames 7722.

The following were collected by Jardin Botanique de Montreal, 4101 Rue Sherbrooke Est, Montreal, Quebec H1X 2B2, Canada. Donated by George Ayers, Michigan State University, Department of Entomology, East Lansing, Michigan

48824, United States. Received 05/18/1988.

**PI 593727. *Agastache rugosa* (Fischer & C. Meyer) Kuntze**  
Cultivated. Ames 8411. Collected in Quebec, Canada. Pedigree -  
Population originated at the Montreal Botanical Garden.

The following were donated by Index Seminum of the Medical Bot. Garden, Brno, South Moravia, Czech Republic. Received 10/05/1988.

**PI 593728. *Hyssopus officinalis* L.**  
Cultivated. Index Seminum 473; Ames 9984.

The following were donated by Boleslaw Jablonski, Instytut Sadownictwa i Kwiaciarnictwa, ul. Kazimierska nr 2, Pulawy, Poland. Received 03/21/1989.

**PI 593729. *Agastache foeniculum* (Pursh) Kuntze**  
Cultivated. Ames 10206.

**PI 593730. *Agastache rugosa* (Fischer & C. Meyer) Kuntze**  
Cultivated. Ames 10207.

The following were collected by E. Sajvarova, Botanical Garden, University of Saarlandes, Saarbrücken, Germany. Donated by Botanical Institute, Czechoslovak Academy of Science, Pruhonice, Czech Republic. Received 03/16/1990.

**PI 593731. *Origanum vulgare* L.**  
Wild. Index Seminum 341; Ames 13184. Collected in North Moravia, Czech Republic. Elevation 500 m. Šumperk - surroundings of the Travná village.

The following were donated by Botanical Gardens, Agricultural University, Generaal Foulkesweg 37, Wageningen, Netherlands. Received 01/25/1991.

**PI 593732. *Agastache rugosa* (Fischer & C. Meyer) Kuntze**  
Cultivated. Index Seminum 116 87BG33501; Ames 14598.

The following were donated by Gert Fortgens, Research Station for Horticulture, P.O. Box 118, Boskoop, South Holland 2770 AC, Netherlands. Received 03/07/1991.

**PI 593733. *Agastache rugosa* (Fischer & C. Meyer) Kuntze**  
Cultivated. Ames 14943.

The following were donated by Gert Fortgens, Boomteelt Praktijkonderzoek, Research Station for Nursery Stock, Postbus 118, Boskoop, South Holland 2770 AC, Netherlands. Received 11/18/1991.

**PI 593734. *Agastache rugosa* (Fischer & C. Meyer) Kuntze**  
Wild. Ames 18057; Wild Korea. Collected 11/18/1991 in Korea. Pedigree -

Population originally was from a wild Korean collection.

The following were donated by University of Turku, Botanical Garden, Turku, Turku ja Pori SF 20500, Finland. Received 04/22/1992.

**PI 593735. *Agastache rugosa*** (Fischer & C. Meyer) Kuntze  
Cultivated. Index Seminum 266; Ames 19077.

**PI 593736. *Agastache rugosa*** (Fischer & C. Meyer) Kuntze  
Cultivated. Index Seminum 267; Ames 19078.

The following were donated by Boleslaw Jablonski, Instytut Sadownictwa i Kwiaciarnictwa, 24-100 Pulawy ul. Kazimierska nr 2, Pulawy, Poland. Received 01/12/1992.

**PI 593737. *Agastache foeniculum*** (Pursh) Kuntze  
Cultivated. Ames 20121.

The following were collected by Geza Kosa, A Magyar Tudományos Akadémia Ökológiai és Botanikai Kutatóintézetének, Botanikus D D D D D D C Dtanikus Kertj, Vacratot, Hungary. Donated by A Magyar Tudományos Akadémia Ökológiai és Botanikai Kutatóintézetének, Botanikus D D D D D D C Dtanikus Kertj, Vacratot, Hungary. Received 06/21/1994.

**PI 593738. *Origanum vulgare*** L.  
Wild. Index Seminum 335; Ames 22109. Collected 1993 in Yunnan, China. Elevation 2100 m. Collected on Hsi-Shan near Kunming, Yunnan Province. Bush and montane meadows at the clearings of *Pinus armandii*-*Keteleeria evelyniana* forest on limestone.

The following were collected by Mark P. Widrechner, USDA, ARS, Iowa State University, Regional Plant Introduction Station, Ames, Iowa 50011, United States. Received 09/21/1994.

**PI 593739. *Agastache foeniculum*** (Pursh) Kuntze  
Wild. Population. Ames 22165. Collected 09/18/1994 in South Dakota, United States. Latitude 43 deg. 49' N. Longitude 103 deg. 28' W. Elevation 1567 m. South side of Needles Highway about 0.8 km west of road to Camp Remington. South Dakota, Custer County, Iron Mountain Quad, T3S R5E SW 1/4 NW 1/4 Sec. 1. Edge of pine woods with *Rosa*, *Monarda*, *Betula*, and *Symphoricarpos*.

The following were developed by Reed Barker, USDA, ARS, Forage Seed & Cereal Research, 3450 S.W. Campus Way, OSU, Corvallis, Oregon 97331-7102, United States; R.E. Welty, USDA, ARS, National Forage Seed Production Research Center, 3450 SW Campus Way, Corvallis, Oregon 97331-7102, United States. Received 02/27/1996.

**PI 593740. *Festuca arundinacea*** Schreber  
Breeding. Population. ORTFRR-T94. GP-2. Pedigree - 20 plants selected

from 6 turf-type cultivars. Two cycles of recurrent selections by inoculating twice on seedlings in a greenhouse and polycrossing selected plants in the field. Resistance to stem rust (*Puccinia graminis* subsp. *graminicola*).

**PI 593741. *Festuca arundinacea* Schreber**

Breeding. Population. ORTFRR-F94. GP-3. Pedigree - Fourteen plants selected from 3 forage-type cultivars. Two cycles of recurrent selections by inoculating twice on seedlings in a greenhouse and polycrossing selected plants in the field. Resistance to stem rust (*Puccinia graminis* subsp. *graminicola*).

The following were developed by Stephen Griffith, USDA-ARS, Oregon State University, National Forage Seed Prod. Res. Center, 3450 S.W. Campus Way, Corvallis, Oregon 97331, United States; Gary Banowetz, USDA-ARS, National Forage Seed Production Research Center, 3450 SW Campus Way, Corvallis, Oregon 97331, United States; Reed Barker, USDA, ARS, Forage Seed & Cereal Research, 3450 S.W. Campus Way, OSU, Corvallis, Oregon 97331-7102, United States; G.W. Mueller-Warrant, USDA, ARS, National Forage Seed Production Research Center, 3450 SW Campus Way, Corvallis, Oregon 97331-7102, United States; M.L. Roush, Oregon State University, Forest Sci. Dept., Corvallis, Oregon 97331, United States; B.D. Maxwell, Montana State University, Dept. of Plant & Soil Sci., Bozeman, Montana 59717, United States; S.R. Radosevich, Oregon State University, Forest Sci. Dept., Corvallis, Oregon 97331, United States. Received 02/27/1996.

**PI 593742. *Lolium multiflorum* Lam.**

Breeding. Population. ORARHR-G93. GP-72. Pedigree - Plants from a wheat production field near Salem, OR were crossed with several plants each from Gulf and Marshall, followed by three backcrosses to plants from Gulf and Marshall as the maternal recurrent parents. Populations had survived several treatments of diclofop-methyl to control annual grasses. Source plants were crossed and backcrossed three times to plants from the cultivars Gulf and Marshall to incorporate tolerance to the herbicide into common genetic backgrounds.

**PI 593743. *Lolium multiflorum* Lam.**

Breeding. Population. ORARHR-M93. GP-73. Pedigree - Plants from a wheat production field near Salem, OR were crossed with several plants each from Gulf and Marshall, followed by three backcrosses to plants from Gulf and Marshall as the maternal recurrent parents. Population had survived several treatments of diclofop-methyl to control annual grasses. Source plants were crossed and backcrossed three times to plants from the cultivars Gulf and Marshall to incorporate tolerance to the herbicide into common genetic backgrounds.

The following were donated by Manee Nikornpun, Chiang Mai University, Thailand. Received 12/10/1992.

**PI 593744. *Solanum melongena* L.**

Uncertain. 51A; Grif 1280.

**PI 593745. *Solanum melongena* L.**

Uncertain. 51B; Grif 1281.

PI 593746. *Solanum melongena* L.  
Uncertain. 54; Grif 1284.

PI 593747. *Solanum melongena* L.  
Uncertain. 55; Grif 1285.

PI 593748. *Solanum melongena* L.  
Uncertain. 56A; Grif 1286.

PI 593749. *Solanum melongena* L.  
Uncertain. 56B; Grif 1287.

PI 593750. *Solanum melongena* L.  
Uncertain. 57A; Grif 1288.

PI 593751. *Solanum melongena* L.  
Uncertain. 57B; Grif 1289.

PI 593752. *Solanum melongena* L.  
Uncertain. 58B; Grif 1291.

PI 593753. *Solanum melongena* L.  
Uncertain. 61A; Grif 1292.

PI 593754. *Solanum melongena* L.  
Uncertain. 61C; Grif 1293.

PI 593755. *Solanum melongena* L.  
Uncertain. 65/1-0; Grif 1298.

PI 593756. *Solanum melongena* L.  
Uncertain. 65/2A; Grif 1299.

PI 593757. *Solanum melongena* L.  
Uncertain. 66M; Grif 1302.

PI 593758. *Solanum melongena* L.  
Uncertain. 67; Grif 1304.

PI 593759. *Solanum melongena* L.  
Uncertain. 69A; Grif 1307.

PI 593760. *Solanum melongena* L.  
Uncertain. 70I; Grif 1310.

PI 593761. *Solanum melongena* L.  
Uncertain. 71G; Grif 1314.

PI 593762. *Solanum melongena* L.  
Uncertain. 72; Grif 1315.

PI 593763. *Solanum melongena* L.  
Uncertain. 74; Grif 1316.

- PI 593764. *Solanum melongena* L.  
Uncertain. 77; Grif 1319.
- PI 593765. *Solanum melongena* L.  
Uncertain. 78; Grif 1320.
- PI 593766. *Solanum melongena* L.  
Uncertain. 80; Grif 1321.
- PI 593767. *Solanum melongena* L.  
Uncertain. 82; Grif 1323.
- PI 593768. *Solanum melongena* L.  
Uncertain. 86; Grif 1327.
- PI 593769. *Solanum melongena* L.  
Uncertain. 87; Grif 1328.
- PI 593770. *Solanum melongena* L.  
Uncertain. 88; Grif 1329.
- PI 593771. *Solanum melongena* L.  
Uncertain. 89; Grif 1330.
- PI 593772. *Solanum melongena* L.  
Uncertain. 92; Grif 1332.
- PI 593773. *Solanum melongena* L.  
Uncertain. 94; Grif 1333.
- PI 593774. *Solanum melongena* L.  
Uncertain. 97A; Grif 1336.
- PI 593775. *Solanum melongena* L.  
Uncertain. 97B; Grif 1337.
- PI 593776. *Solanum melongena* L.  
Uncertain. 101; Grif 1340.
- PI 593777. *Solanum melongena* L.  
Uncertain. 102; Grif 1341.
- PI 593778. *Solanum melongena* L.  
Uncertain. 107; Grif 1344.
- PI 593779. *Solanum melongena* L.  
Uncertain. 110; Grif 1347.
- PI 593780. *Solanum melongena* L.  
Uncertain. 111; Grif 1348.
- PI 593781. *Solanum melongena* L.  
Uncertain. 112; Grif 1349.



PI 593782. *Solanum melongena* L.  
Uncertain. 113; Grif 1350.

PI 593783. *Solanum melongena* L.  
Uncertain. 114; Grif 1351.

PI 593784. *Solanum melongena* L.  
Uncertain. 115; Grif 1352.

PI 593785. *Solanum melongena* L.  
Uncertain. 117; Grif 1354.

PI 593786. *Solanum melongena* L.  
Uncertain. 118; Grif 1355.

PI 593787. *Solanum melongena* L.  
Uncertain. 119; Grif 1356.

PI 593789. *Solanum melongena* L.  
Uncertain. 121; Grif 1358.

PI 593790. *Solanum melongena* L.  
Uncertain. 122; Grif 1359.

PI 593791. *Solanum melongena* L.  
Uncertain. 123; Grif 1360.

PI 593792. *Solanum melongena* L.  
Uncertain. 124; Grif 1361.

PI 593793. *Solanum melongena* L.  
Uncertain. 125; Grif 1362.

PI 593794. *Solanum melongena* L.  
Uncertain. 126; Grif 1363.

PI 593795. *Solanum melongena* L.  
Uncertain. 127; Grif 1364.

PI 593796. *Solanum melongena* L.  
Uncertain. 129; Grif 1366.

PI 593797. *Solanum melongena* L.  
Uncertain. 132; Grif 1369.

PI 593798. *Solanum melongena* L.  
Uncertain. 142; Grif 1376.

PI 593799. *Solanum melongena* L.  
Uncertain. 145; Grif 1379.

PI 593800. *Solanum melongena* L.  
Uncertain. 147; Grif 1381.

PI 593801. *Solanum melongena* L.

Uncertain. 156; Grif 1387.

PI 593802. *Solanum melongena* L.  
Uncertain. 160; Grif 1391.

PI 593803. *Solanum melongena* L.  
Uncertain. 162; Grif 1393.

PI 593804. *Solanum melongena* L.  
Uncertain. 169; Grif 1398.

PI 593805. *Solanum melongena* L.  
Uncertain. 170; Grif 1399.

PI 593806. *Solanum melongena* L.  
Uncertain. 171; Grif 1400.

PI 593807. *Solanum melongena* L.  
Uncertain. 180; Grif 1407.

PI 593808. *Solanum melongena* L.  
Uncertain. 181; Grif 1408.

PI 593809. *Solanum melongena* L.  
Uncertain. 187; Grif 1413.

PI 593810. *Solanum melongena* L.  
Uncertain. 189; Grif 1414.

PI 593811. *Solanum melongena* L.  
Uncertain. 190; Grif 1415.

PI 593812. *Solanum melongena* L.  
Uncertain. 192; Grif 1416.

PI 593813. *Solanum melongena* L.  
Uncertain. 193; Grif 1417.

PI 593814. *Solanum melongena* L.  
Uncertain. 194; Grif 1418.

PI 593815. *Solanum melongena* L.  
Uncertain. 195; Grif 1419.

PI 593816. *Solanum melongena* L.  
Uncertain. 196; Grif 1420.

PI 593817. *Solanum melongena* L.  
Uncertain. 197; Grif 1421.

PI 593818. *Solanum melongena* L.  
Uncertain. 198; Grif 1422.

PI 593819. *Solanum melongena* L.  
Uncertain. 199; Grif 1423.

PI 593820. *Solanum melongena* L.  
Uncertain. 200; Grif 1424.

PI 593821. *Solanum melongena* L.  
Uncertain. 201; Grif 1425.

PI 593822. *Solanum melongena* L.  
Uncertain. 203; Grif 1427.

PI 593823. *Solanum melongena* L.  
Uncertain. 212; Grif 1436.

PI 593824. *Solanum melongena* L.  
Uncertain. 213; Grif 1437.

PI 593825. *Solanum melongena* L.  
Uncertain. 215; Grif 1438.

PI 593826. *Solanum melongena* L.  
Uncertain. 216; Grif 1439.

PI 593827. *Solanum melongena* L.  
Uncertain. 217; Grif 1440.

PI 593828. *Solanum melongena* L.  
Uncertain. 218; Grif 1441.

PI 593829. *Solanum melongena* L.  
Uncertain. 221; Grif 1444.

PI 593830. *Solanum melongena* L.  
Uncertain. 224; Grif 1448.

PI 593831. *Solanum melongena* L.  
Uncertain. 225; Grif 1449.

PI 593832. *Solanum melongena* L.  
Uncertain. 226; Grif 1450.

PI 593833. *Solanum melongena* L.  
Uncertain. 228; Grif 1452.

PI 593834. *Solanum melongena* L.  
Uncertain. 229; Grif 1453.

PI 593835. *Solanum melongena* L.  
Uncertain. 230; Grif 1454.

PI 593836. *Solanum melongena* L.  
Uncertain. 231; Grif 1455.

PI 593837. *Solanum melongena* L.  
Uncertain. 232; Grif 1456.

PI 593838. *Solanum melongena* L.  
Uncertain. 233; Grif 1457.

PI 593839. *Solanum melongena* L.  
Uncertain. 234; Grif 1458.

PI 593840. *Solanum melongena* L.  
Uncertain. 236; Grif 1460.

PI 593841. *Solanum melongena* L.  
Uncertain. 237; Grif 1461.

PI 593842. *Solanum melongena* L.  
Uncertain. 238; Grif 1462.

PI 593843. *Solanum melongena* L.  
Uncertain. 239; Grif 1463.

PI 593844. *Solanum melongena* L.  
Uncertain. 240; Grif 1464.

PI 593845. *Solanum melongena* L.  
Uncertain. 241; Grif 1465.

PI 593846. *Solanum melongena* L.  
Uncertain. 242; Grif 1466.

PI 593847. *Solanum melongena* L.  
Uncertain. 244; Grif 1468.

PI 593848. *Solanum melongena* L.  
Uncertain. 253; Grif 1476.

PI 593849. *Solanum melongena* L.  
Uncertain. 256; Grif 1478.

PI 593850. *Solanum melongena* L.  
Uncertain. 258; Grif 1480.

PI 593851. *Solanum melongena* L.  
Uncertain. 259; Grif 1481.

PI 593852. *Solanum melongena* L.  
Uncertain. 260; Grif 1482.

PI 593853. *Solanum melongena* L.  
Uncertain. 262; Grif 1484.

PI 593854. *Solanum melongena* L.  
Uncertain. 264; Grif 1486.

PI 593855. *Solanum melongena* L.  
Uncertain. 265; Grif 1487.

PI 593856. *Solanum melongena* L.

Uncertain. 266; Grif 1488.

PI 593857. *Solanum melongena* L.  
Uncertain. 272; Grif 1493.

PI 593858. *Solanum melongena* L.  
Uncertain. 273; Grif 1494.

PI 593859. *Solanum melongena* L.  
Uncertain. 274; Grif 1495.

PI 593860. *Solanum melongena* L.  
Uncertain. 275; Grif 1496.

PI 593861. *Solanum melongena* L.  
Uncertain. 276; Grif 1497.

PI 593862. *Solanum melongena* L.  
Uncertain. 277; Grif 1498.

PI 593863. *Solanum melongena* L.  
Uncertain. 278; Grif 1499.

PI 593864. *Solanum melongena* L.  
Uncertain. 279; Grif 1500.

PI 593865. *Solanum melongena* L.  
Uncertain. 280; Grif 1501.

PI 593866. *Solanum melongena* L.  
Uncertain. 281; Grif 1502.

PI 593867. *Solanum melongena* L.  
Uncertain. 282; Grif 1503.

PI 593868. *Solanum melongena* L.  
Uncertain. 283; Grif 1504.

PI 593869. *Solanum melongena* L.  
Uncertain. 284; Grif 1505.

PI 593870. *Solanum melongena* L.  
Uncertain. 285; Grif 1506.

PI 593871. *Solanum melongena* L.  
Uncertain. 286; Grif 1507.

PI 593872. *Solanum melongena* L.  
Uncertain. 287; Grif 1508.

PI 593873. *Solanum melongena* L.  
Uncertain. 288; Grif 1509.

PI 593874. *Solanum melongena* L.  
Uncertain. 289; Grif 1510.

- PI 593875. *Solanum melongena* L.  
Uncertain. 290; Grif 1511.
- PI 593876. *Solanum melongena* L.  
Uncertain. 292; Grif 1512.
- PI 593877. *Solanum melongena* L.  
Uncertain. 300; Grif 1514.
- PI 593878. *Solanum melongena* L.  
Uncertain. 301; Grif 1515.
- PI 593879. *Solanum melongena* L.  
Uncertain. 302; Grif 1516.
- PI 593880. *Solanum melongena* L.  
Uncertain. 308; Grif 1522.
- PI 593881. *Solanum melongena* L.  
Uncertain. 309; Grif 1523.
- PI 593882. *Solanum melongena* L.  
Uncertain. 310; Grif 1524.
- PI 593883. *Solanum melongena* L.  
Uncertain. 311; Grif 1525.
- PI 593884. *Solanum melongena* L.  
Uncertain. 313; Grif 1527.
- PI 593885. *Solanum melongena* L.  
Uncertain. 314; Grif 1528.
- PI 593886. *Solanum melongena* L.  
Uncertain. 315; Grif 1529.

The following were developed by Jerry F. Miller, USDA, ARS, Northern Crops Research Laboratory, P.O. Box 5677, Fargo, North Dakota 58105, United States; Leonard Franci, North Dakota State University, Dept of Plant Pathology, Fargo, North Dakota 58105, United States; Elias M. Elias, North Dakota State University, Dept of Plant Sciences, P.O. Box 5051, Fargo, North Dakota 58104-5051, United States. Received 03/04/1996.

- PI 593887. *Triticum turgidum* L.  
Cultivar. Pureline. "MUNICH". CV-829; PVP 9600153. Pedigree - D8030/D8016. High yielding, average test weight (768.3 kg m<sup>-3</sup>), stiff strawed, and daylength-sensitive. Medium height and maturity. Spikes long, awned, oblong, mid-dense and erect. Kernels amber color and mid-sized (36.7 mg). Adapted to upper midwest and recommended to the Langdon, ND area. Strong gluten and 143 g kg<sup>-1</sup> semolina protein. Resistant to stem rust (*Puccinia graminia*) and leaf rust (*P. recondita*). Moderate resistance to tan spot (*Pyrenophora tritici-repentis*) and Fusarium head blight (*Gibberella zeae*).

The following were developed by Phyllis Richardson, Vista - Land O'Lake Inc., RR 2, Webster City, Iowa 50595, United States; Robert R. Kalton, Peterson Seed Company, Inc., P.O. Box 346, Savage, Minnesota 55378, United States. Received 1996.

**PI 593888. *Dactylis glomerata* L.**

Cultivar. "DUKE"; Exp. No. DS8. CV-14; PVP 9600180. Pedigree - Narrow based, 7-clone synthetic derived from the following germplasm: PI 315425 (3 clones), PI 325302 (2 clones), and Jackson (2 clones). These two PI's were introduced from Russia in the late 1960's. Unique variety in that it combines medium maturity, a high level of winter hardiness and rust and leaf blight resistance, improved forage quality and equal forage and seed yielding ability with proper management compared with the preponderance of early-maturing (blooming) varieties and the few medium or late maturing varieties available in the USA. Averages 4-6 days later than Benchmark, Justus, Potomac in Iowa and 10-12 days later in Oregon and survives much better than these varieties under severe winter kill conditions. Resistance very good to stem rust (*Puccinia graminis*), crown rust (*P. coronata*), leaf rust (*P. rubigo-vera*), leaf streak (*Scolecotrichum graminis*) and scald (*Rhynchosporium orthosporium*).

The following were developed by Gilbert Stallknecht, Montana State University, Central Agric. Research Center, HC 90, Box 20, Moccasin, Montana 59462, United States; Wendell Morrill, Montana State University, Dept. of Entomology, Bozeman, Montana 59717, United States; G.D. Kushnak, Montana State University, Western Triangle Agric. Research Center, P.O. Box 1474, Conrad, Montana 59425, United States; Phil L. Bruckner, Montana State University, Dept of Plant, Soil & Environmental Sciences, Leon Johnson Hall, Bozeman, Montana 59717-0312, United States; E.A. Hockett, USDA, ARS, Montana State University, Plant and Soil Science Department, Bozeman, Montana 59717, United States; G.R. Carlson, Montana State University, Northern Agric. Research Center, Havre, Montana 59501, United States; J.L. Eckhoff, Montana State University, Eastern Agric. Research Center, Sidney, Montana 59270, United States; D.W. Wichman, Montana State University, Central Agric. Research Center, Moccasin, Montana 59462, United States; H.F. Bowman, Montana State University, Dept. of Plant, Soil & Environmental Sciences, Bozeman, Montana 59717, United States; R.N. Stougaard, Northwestern Agric. Res. Ctr., Kalispell, Montana 59901, United States; J.E. Berg, Montana State University, Dept. of Plant, Soil & Environmental Sciences, Bozeman, Montana 59717, United States; K.A. Tilley, Kansas State University, Dept. of Grain Science & Industry, Manhattan, Kansas 66506, United States. Received 03/07/1996.

**PI 593889. *Triticum aestivum* L., nom. cons.**

Cultivar. Pureline. "RAMPART"; MT592042. CV-845. Pedigree - Lew/Tiber//Redwin. Solid-stemmed, medium-maturity hard red winter with tolerance to feeding and cutting damage of the wheat stem sawfly (*Cephus cinctus*). Medium yield potential, intermediate height, and intermediate lodging resistance. Winterhardiness marginal for Montana. Red chaff and resistant to prevalent races of *Puccinia graminis*, but susceptible to *Diuraphis noxia* and *Tilletia controversa*. Coleoptile length very long. Grain volume weight, protein content, and milling and baking characteristics acceptable for high-quality bread flour production.

The following were developed by Gilbert Stallknecht, Montana State University, Central Agric. Research Center, HC 90, Box 20, Moccasin, Montana 59462, United States; G.D. Kushnak, Montana State University, Western Triangle Agric. Research Center, P.O. Box 1474, Conrad, Montana 59425, United States; Phil L. Bruckner, Montana State University, Dept of Plant, Soil & Environmental Sciences, Leon Johnson Hall, Bozeman, Montana 59717-0312, United States; G.A. Taylor, Montana State University, Dept. of Plant, Soil & Environmental Sciences, Bozeman, Montana, United States; Don V. McVey, USDA, ARS, University of Minnesota, Cereal Rust Laboratory, St. Paul, Minnesota 55105, United States; G.R. Carlson, Montana State University, Northern Agric. Research Center, Havre, Montana 59501, United States; J.L. Eckhoff, Montana State University, Eastern Agric. Research Center, Sidney, Montana 59270, United States; D.W. Wichman, Montana State University, Central Agric. Research Center, Moccasin, Montana 59462, United States; H.F. Bowman, Montana State University, Dept. of Plant, Soil & Environmental Sciences, Bozeman, Montana 59717, United States; R.N. Stougaard, Northwestern Agric. Res. Ctr., Kalispell, Montana 59901, United States; J.E. Berg, Montana State University, Dept. of Plant, Soil & Environmental Sciences, Bozeman, Montana 59717, United States; K.A. Tilley, Kansas State University, Dept. of Grain Science & Industry, Manhattan, Kansas 66506, United States. Received 03/07/1996.

**PI 593890. *Triticum aestivum* L., nom. cons.**

Cultivar. Pureline. "MCGUIRE"; MT88046. CV-847. Pedigree - Plainsman V//Froid/Bezastaya/3/HP344/Froid. Medium-yielding hard red winter with early maturity, intermediate grain volume weight, height, and winterhardiness, and good lodging resistance. Red chaff and resistant to prevalent races of *Puccinia graminis*. Susceptible to *Diuraphis noxia*, *Cephus cinctus*, and *Tilletia controversa*. Protein content exceptional, averaging nearly a full percentage point higher than high protein cultivars in Montana. Exceptional dough mixing characteristics and loaf volume.

The following were developed by Gilbert Stallknecht, Montana State University, Central Agric. Research Center, HC 90, Box 20, Moccasin, Montana 59462, United States; Wendell Morrill, Montana State University, Dept. of Entomology, Bozeman, Montana 59717, United States; G.D. Kushnak, Montana State University, Western Triangle Agric. Research Center, P.O. Box 1474, Conrad, Montana 59425, United States; Phil L. Bruckner, Montana State University, Dept of Plant, Soil & Environmental Sciences, Leon Johnson Hall, Bozeman, Montana 59717-0312, United States; E.A. Hockett, USDA, ARS, Montana State University, Plant and Soil Science Department, Bozeman, Montana 59717, United States; G.A. Taylor, Montana State University, Dept. of Plant, Soil & Environmental Sciences, Bozeman, Montana, United States; G.R. Carlson, Montana State University, Northern Agric. Research Center, Havre, Montana 59501, United States; J.L. Eckhoff, Montana State University, Eastern Agric. Research Center, Sidney, Montana 59270, United States; D.W. Wichman, Montana State University, Central Agric. Research Center, Moccasin, Montana 59462, United States; H.F. Bowman, Montana State University, Dept. of Plant, Soil & Environmental Sciences, Bozeman, Montana 59717, United States; R.N. Stougaard, Northwestern Agric. Res. Ctr., Kalispell, Montana 59901, United States; J.E. Berg, Montana State University, Dept. of Plant, Soil & Environmental Sciences, Bozeman, Montana 59717, United States; K.A. Tilley,



Kansas State University, Dept. of Grain Science & Industry, Manhattan, Kansas 66506, United States. Received 03/07/1996.

**PI 593891. *Triticum aestivum* L., nom. cons.**

Cultivar. Pureline. "VANGUARD"; MTSF2238. CV-850. Pedigree - Lew/Tiber//Redwin. Solid-stemmed, medium-maturity hard red winter wheat with tolerance to feeding and cutting damage of the wheat stem sawfly (*Cephus cinctus*). Medium to low yield potential, intermediate height, and moderately weak straw strength. Winterhardiness marginal for Montana. White straw and chaff. Susceptible to prevalent races of *Puccinia graminis*, *Diuraphis noxia*, and *Tilletia controversa*. Coleoptile length long. Grain volume weight, protein content, and milling and baking characteristics acceptable for high-quality bread flour production. Heterogeneous for height and several morphological traits, containing up to 5% tall variants, 7.5% hollow-stemmed plants, 0.1% awnless plants, and 0.1% red-chaffed plants.

The following were developed by Charles N. Bollich, USDA-ARS, Rice Research, RT. 7, Box 999, Beaumont, Texas 77706, United States; Anna McClung, USDA, ARS, Rice Research Station, Route 7, Box 999, Beaumont, Texas 77713, United States; M.A. Marchetti, USDA-ARS, Rice Research Station, Texas A&M Experiment Station, Beaumont, Texas 77713, United States; B.D. Webb, USDA, ARS, Texas A&M Univ. Agric. Res. and Ext. Center, Rt. 7, Box 999, Beaumont, Texas 77713-8530, United States. Received 03/11/1996.

**PI 593892. *Oryza sativa* L.**

Cultivar. Pureline. "JEFFERSON". CV-103. Pedigree - Rosemont/B82-761. Long-grain having three major genes for resistance to blast (*Pyricularia grisea*) and good partial resistance to sheath blight (*Rhizoctonia solani*). Matures in about 125 d and has good ratoon crop yield. Main crop yield and milling quality excellent. Possesses conventional U.S. long-grain cooking quality and grain dimensions.

Unknown source. Received 03/08/1996.

**PI 593893. *Humulus lupulus* L.**

Cultivar. "ULTRA"; USDA 21484. CV-24. Pedigree - Tetraploid German aroma hop Hallertau mittelfruh (USDA Acc. Nr. 21397) / diploid male hop USDA 21237M, an open-pollinated seedling of Saazer (USDA Nr. 21077). Genetic composition 4/6 Hallertau mittelfruh, 1/6 Saazer, and 1/6 unknown. Released 03/1995. Triploid ( $2n=3x=30$ ) female European-type. Midseason aroma resembling Hallertau mittelfruh in quality and aroma profile, but with significantly higher yield potential. Well adapted to commercial hop growing areas of Oregon and Washington. Moderately resistant to hop downy mildew and free of all major hop viruses. Vegetatively propagated.

The following were developed by J.M. Green, Int. Crops Res. Inst. for the Semi-Arid Tropics, Hyderabad, India; K.C. Jain, Int. Crops Res. Inst. for the Semi-Arid Tropics, Genetic Enhancement, Patancheru, Andhra Pradesh 502 324, India; L.J. Reddy, Int. Crops Res. Inst. for the Semi-Arid Tropics, Legumes Program, Asia Center (IAC), Patancheru P.O., Andhra Pradesh 502 324, India; K.B. Saxena, Int. Crops Res. Inst. for the Semi-Arid Tropics, Legumes

Program, Patancheru, Andhra Pradesh 502 324, India; A. Rao, Int. Crops Res. Inst. for the Semi-Arid Tropics, Patancheru P.O., Andhra Pradesh 502324, India; Y.L. Nene, Int. Crops Res. Inst. for the Semi-Arid Tropics, Patancheru, Andhra Pradesh 502 324, India; R.V. Kumar, Int. Crops Res. Inst. for the Semi-Arid Tropics, Patancheru P.O., Andhra Pradesh 502 324, India; D. Sharma, Int. Crops Res. Inst. for the Semi-Arid Tropics, Patancheru P.O., Andhra Pradesh 502 324, India; Umaid Singh, Int. Crops Res. Inst. for the Semi-Arid Tropics, Asia Center, Patancheru P.O., Andhra Pradesh 502 324, India; D.G. Faris, Int. Crops Res. Inst. for the Semi-Arid Tropics, Asia Center, Patancheru P.O., Andhra Pradesh 502 324, India. Received 03/01/1996.

**PI 593894. *Cajanus cajan* (L.) Millsp.**

Cultivar. ICPL 87162; HPL 24. GP-166. Pedigree - ICPX 75560 (Baigani / *C. scarabaeoides*)F5 - 37x-9x-5x. Medium-duration with 32% dhal protein. Growth habit intermediate. Plant height about 150cm and green stem. Flowers in about 112 days and matures in 169 days after sowing (18 deg. N, 78 deg. E). Flowers yellow with purple streaks. Pods green with maroon streaks. Seeds dark gray with 100-seed mass of 6.9g. Resistant to sterility mosaic disease. Susceptible to wilt (*Fusarium udum*) disease.

The following were developed by Fred R. Miller, Texas A & M University, Department of Soil & Crop Science, College Station, Texas 77843-2474, United States. Received 10/31/1995.

**PI 593895. *Sorghum bicolor* (L.) Moench**

Breeding. A3TAM428. Pedigree - SC110-9-P1-1-2-P1-BK.

**PI 593896. *Sorghum bicolor* (L.) Moench**

Breeding. B3TAM428. Pedigree - SC110-9-P1-1-2-P1-BK.

**PI 593897. *Sorghum bicolor* (L.) Moench**

Breeding. A3TX432. Pedigree - (SC599-6-sel\*SC110-9-sel)-F8 selection.

**PI 593898. *Sorghum bicolor* (L.) Moench**

Breeding. B3TX432. Pedigree - (SC599-6-sel\*SC110-9-sel)-F8 selection.

**PI 593899. *Sorghum bicolor* (L.) Moench**

Breeding. A3Tx433. Pedigree - (Tx414\*SC108-6-6-2-E2)-15-1-2-11-x-x.

**PI 593900. *Sorghum bicolor* (L.) Moench**

Breeding. B3TX433. Pedigree - (Tx414\*SC108-6-6-2-E2)-15-1-2-11-x-x.

**PI 593901. *Sorghum bicolor* (L.) Moench**

Breeding. A3Tx434. Pedigree - (Tx414\*SC108-6-6-2-E2)-15-2-3-6-3-6-1-x-x.

**PI 593902. *Sorghum bicolor* (L.) Moench**

Breeding. B3TX434. Pedigree - (Tx414\*SC108-6-6-2-E2)-15-2-3-6-3-6-1-x-x.

**PI 593903. *Sorghum bicolor* (L.) Moench**

Breeding. A3Tx435. Pedigree - (Tx2816\*Tx430)-1-4-7-4-BK-x-x.

**PI 593904. *Sorghum bicolor* (L.) Moench**

Breeding. B3TX435. Pedigree - (Tx2816\*Tx430)-1-4-7-4-BK-x-x.

**PI 593905. *Sorghum bicolor* (L.) Moench**  
 Breeding. A3Tx436. Pedigree -  
 ((SC120-6-sel\*Tx7000)\*Tx7000)-10-4-6-1-1-1-BK.

**PI 593906. *Sorghum bicolor* (L.) Moench**  
 Breeding. B3TX436. Pedigree -  
 ((SC120-6-sel\*Tx7000)\*Tx7000)-10-4-6-1-1-1-BK.

**PI 593907. *Sorghum bicolor* (L.) Moench**  
 Breeding. A3Tx2737. Pedigree -  
 [TAM2554\*[Tx2536\*(Tx7000\*SA7536-1)F3]]-3-2-5-BK.

**PI 593908. *Sorghum bicolor* (L.) Moench**  
 Breeding. B3Tx2737. Pedigree -  
 [TAM2554\*[TX2536\*(Tx7000\*SA7536-1)F3]]-3-2-5-BK.

**PI 593909. *Sorghum bicolor* (L.) Moench**  
 Breeding. A3Tx2817. Pedigree - SC170-6-5-1-E2-x-x-x (partially converted  
 PI276837).

**PI 593910. *Sorghum bicolor* (L.) Moench**  
 Breeding. B3TX2817. Pedigree - SC170-6-5-1-E2-x-x-x (partially converted  
 PI276837).

**PI 593911. *Sorghum bicolor* (L.) Moench**  
 Breeding. A3SC103-12E. Pedigree - IS2403 BC3, F3 selection, and inbred  
 5+ generations. Selection from TAES-USDA Sorghum conversion program.

**PI 593912. *Sorghum bicolor* (L.) Moench**  
 Breeding. B3SC103-12E. Pedigree - IS2403 BC3, F3 selection, and inbred  
 5+ generations.

**PI 593913. *Sorghum bicolor* (L.) Moench**  
 Breeding. A3SC326-6. Pedigree - IS3758 BC1, F3 selection, and inbred 5+  
 generations. Selection from TAES-USDA Sorghum conversion program.

**PI 593914. *Sorghum bicolor* (L.) Moench**  
 Breeding. B3SC326-6. Pedigree - IS3758 BC1, F3 selection, and inbred 5+  
 generations.

**PI 593915. *Sorghum bicolor* (L.) Moench**  
 Breeding. A3SC599-6-9188. Pedigree - IS17459 (Rio) BC1, F3 selection,  
 and inbred 5+ generations (early maturity selection). Selection from  
 TAES-USDA Sorghum conversion program.

**PI 593916. *Sorghum bicolor* (L.) Moench**  
 Breeding. B3SC599-6-9188. Pedigree - IS17459 (Rio) BC1, F3 selection,  
 and inbred 5+ generations (early maturity selection).

**PI 593917. *Sorghum bicolor* (L.) Moench**  
 Breeding. A3SC599-11E. Pedigree - IS17459 (Rio) BC3, F2 selection, and  
 inbred 5+ generations (medium maturity selection). Selection from  
 TAES-USDA Sorghum conversion program.

**PI 593918. *Sorghum bicolor* (L.) Moench**

Breeding. B3SC599-11E. Pedigree - IS17459 (Rio) BC3, F2 selection, and inbred 5+ generations (medium maturity selection).

The following were collected by Karen A. Williams, USDA, ARS, Natl. Germplasm Resources Laboratory, Building 003, Room 400, BARC-West, Beltsville, Maryland 20705-2350, United States; David E. Williams, International Plant Genetic Resources Institute, Regional Office - Americas, CIAT, International Center for Tropical Agriculture, Cali, Colombia; Cesar Tapia Bastidas, Dept. Nacional de Recursos Fitogenteticos Y Biotecnologia, Instituto Nacional Autonomo de Investigaciones Agropecuarias, Estacion Experimental Sta. Catalina, Panamericana Sur km.17, Quito, Ecuador. Received 11/17/1995.

**PI 593919. *Capsicum annuum* L.**

Landrace. WWT-1322; Ucho. Collected 10/23/1995 in Ecuador. Latitude 0 deg. 2' 35'' N. Longitude 77 deg. 12' 4'' W. Elevation 475 m. Prov. Sucumbios, Canton Cascales, Parr. Dorado de Cascales, Loc. Shyris (comunidad Quichua). Small, 1.2m high. Leaves dark green and glossy. Flowers yellowish white. Fruits conical, 2.5 cm long, red when ripe.

**PI 593920. *Capsicum annuum* L.**

Landrace. WWT-1323; Ucho. Collected 10/23/1995 in Ecuador. Latitude 0 deg. 2' 35'' N. Longitude 77 deg. 12' 4'' W. Elevation 475 m. Prov. Sucumbios, Canton Cascales, Parr. Dorado de Cascales, Loc. Shyris (comunidad Quicha). 1.5m tall. Fruits conical-cylindrical 2.5 cm long, orange-red when ripe.

**PI 593921. *Capsicum chinense* Jacq.**

Landrace. WWT-1324; Ucho. Collected 10/23/1995 in Ecuador. Latitude 0 deg. 2' 35'' N. Longitude 77 deg. 12' 4'' W. Elevation 475 m. Prov. Sucumbios, Canton Cascales, Parr. Dorado de Cascales, Loc. Shyris (comunidad Quichua). 1.2m tall. Leaves wrinkled, dark green. Flowers yellowish white with purple anthers. Fruits wrinkled, ribbed, oblong conical to 6 cm long, purple-green turning bright red when ripe.

**PI 593922. *Capsicum chinense* Jacq.**

Landrace. WWT-1325; Atunucho. Collected 10/23/1995 in Ecuador. Latitude 0 deg. 2' 35'' N. Longitude 77 deg. 12' 4'' W. Elevation 475 m. Prov. Sucumbios, Canton Cascales, Parr. Dorado de Cascales, Loc. Shyris (comunidad Quichua). To 1.5m tall. Leaves wrinkled. Flowers yellowish white, purple anthers. Fruits elongate-conical, yellowish green, fall before turning red.

**PI 593923. *Capsicum chinense* Jacq.**

Landrace. WWT-1326; Aji. Collected 10/23/1995 in Ecuador. Latitude 0 deg. 4' 58'' N. Longitude 76 deg. 53' 57'' W. Elevation 445 m. Prov. Sucumbios, Canton Lago Agrio, Parroquia, Localidad Lago Agrio, Solar de un taller mecanico. To 1.6m tall. Leaves dark green, crinkled. Fruits globose with broad ribs, 1.5 cm long, 2 cm diameter, dark red when ripe. Flowers yellowish white, anthers white.

**PI 593924. *Capsicum* sp.**

Landrace. WWT-1336; Aji bravo; Imili uchu. Collected 10/16/1995 in Ecuador. Latitude 1 deg. 2' 19'' S. Longitude 67 deg. 34' 57'' W. Elevation 470 m. Prov. Napo, Canton Tena, Parroquia Misahualli,

Localidad Pusuno, house on river bank of Rio Napo. 1.6m tall. Flowers yellow-white, anthers purple. Fruits erect, elongate conical, erect, orange-red when ripe, 3 cm long. Very piquant.

**PI 593925. *Capsicum* sp.**

Landrace. WWT-1337; Nuasca uchu. Collected 10/26/1995 in Ecuador. Latitude 1 deg. 2' 19'' S. Longitude 67 deg. 34' 57'' W. Elevation 470 m. Prov. Napo, Canton Tena, Parr. Misahualli, Localidad Pusuno, house on river bank of Rio Napo. 1.6m tall. Leaves wrinkled. Flowers yellowish white, purple anthers. Fruits pendant, elongate conical, 8 cm long, compressed at base, slightly flattened or triangular in x-section, shiny dark red when ripe. Piquant.

**PI 593926. *Capsicum chinense* Jacq.**

Landrace. WWT-1338; Puca ucho; Aji rojo. Collected 10/26/1995 in Ecuador. Latitude 1 deg. 2' 19'' S. Longitude 67 deg. 34' 57'' W. Elevation 470 m. Prov. Napo, Canton Tena, Parroq. Misahualli, Localidad Pusuno, house on river bank of Rio Napo. 1.6m tall. Wrinkled leaves. Flowers yellow-white, anthers purple. Fruits 1 per node, pendant, dark purple turning red when ripe, boxy conical, 3-4 cm long, triangular in x-section. Piquant.

**PI 593927. *Capsicum* sp.**

Landrace. WWT-1339; Suni uchu; Aji largo. Collected 10/26/1995 in Ecuador. Latitude 1 deg. 2' 19'' S. Longitude 67 deg. 34' 57'' W. Elevation 470 m. Prov. Napo, Canton Tena, Parroq. Misahualli, Localidad Pusuno, house on river bank of Rio Napo. 1.5m tall. Leaves dark green, smooth. Flowers yellow-white, anthers purple. Fruits pendant, triangular in x-section, compressed at base, curved, 5 cm long, dark red when ripe. Piquant.

**PI 593928. *Capsicum* sp.**

Landrace. WWT-1341; Boton uchu; Aji boton. Collected 10/26/1995 in Ecuador. Latitude 1 deg. 2' 19'' S. Longitude 67 deg. 34' 57'' W. Elevation 470 m. Prov. Napo, Canton Tena, Parroq. Misahualli, Localidad Pusuno, house on river bank of Rio Napo. 1.5m tall. Leaves wrinkled. Flowers yellow-white, purple stamens. Fruits pendant, blunt conical or heart shaped, 1.5 cm long, 1 cm diameter at base, orange-red when ripe. Piquant.

**PI 593929. *Capsicum annuum* L.**

Landrace. WWT-1353; Aji pimientito. Collected 10/31/1995 in Ecuador. Latitude 3 deg. 37' 49'' S. Longitude 78 deg. 35' 23'' W. Elevation 885 m. Prov. Zamora Chinchipe, Canton El Pangui, Parroquia El Pangui, Loc. El Pangui. Grown in dooryard garden. Large rambling shrub, 1.5m tall. Flowers yellowish, purple anthers. Fruits pendant, heart-shaped with wrinkled ends, inserted style, 4-7cm long, 4cm diameter, orange-red when ripe, mildly piquant.

**PI 593930. *Capsicum pubescens* Ruiz Lopez & Pavon**

Cultivar. WWT-1371-A; Aji picante. Collected 11/03/1995 in Ecuador. Latitude 3 deg. 41' 49'' S. Longitude 79 deg. 41' 12'' W. Elevation 1060 m. Provincia El Oro, Canton Pinas, Parroquia Pinas, Localidad Pinas. Locally grown. Purchased in market. Fruits oblong conical, 5-7cm long, 4cm wide, constricted at base, red when ripe. Piquant. Seeds black.

**PI 593931. *Capsicum* sp.**

Cultivar. WWT-1371-B; Aji picante. Collected 11/03/1995 in Ecuador. Latitude 3 deg. 41' 49'' S. Longitude 79 deg. 41' 12'' W. Elevation 1060 m. Provincia El Oro, Canton Pinas, Parroquia Pinas, Localidad Pinas. Pinas market. Fruits oblong, conical, some constriction at base. More wrinkled than 1371-A. Red when ripe. Piquant. Seeds white. Found mixed with *Capsicum pubescens* (WWT 1371-A). Similar looking fruits.

**PI 593932. *Capsicum* sp.**

Cultivar. WWT-1372; Aji picante. Collected 11/05/1995 in Ecuador. Latitude 3 deg. 41' 49'' S. Longitude 79 deg. 41' 12'' W. Elevation 1060 m. Provincia El Oro, Canton Pinas, Parroquia Pinas, Localidad Pinas. Locally grown. Purchased in market. Fruits fusiform, 9-10cm long, 2-3cm wide, red when ripe.

**PI 593933. *Capsicum chinense* Jacq.**

Cultivar. WWT-1381; Aji de boton. Collected 11/04/1995 in Ecuador. Latitude 1 deg. 3' 6'' S. Longitude 80 deg. 27' 4'' W. Elevation 15 m. Provincia Manabi, Canton Portoviejo, Parroquia Portoviejo, Localidad Portoviejo. Locally grown. Purchased in market. Fruits heart shaped, 3cm long, 2cm wide with 3-4 broad ribs. Orange-yellow when ripe. Moderately piquant.

The following were donated by David Spooner, University of Wisconsin, Department of Horticulture, 1575 Linden Drive, Madison, Wisconsin 53706, United States; Agricultural Research Station, Legume Research Program, Rampur, Nepal. Received 05/11/1995.

**PI 593934. *Glycine max* (L.) Merr.**

Cultivated. Inbred. White (seti); SY 9501001.

**PI 593935. *Glycine max* (L.) Merr.**

Cultivated. Inbred. PK 327; SY 9501002.

**PI 593936. *Glycine max* (L.) Merr.**

Cultivated. Inbred. Hardy; SY 9501003.

The following were donated by Zhongtang Liu, Hejiang Agricultural Institute, No. 83 Anqing Road, Jiamusi, Heilongjiang 154007, China. Received 05/11/1995.

**PI 593937. *Glycine max* (L.) Merr.**

Cultivated. Inbred. Hei he No. 54; SY 9502001.

**PI 593938. *Glycine max* (L.) Merr.**

Cultivated. Inbred. He feng No. 34; SY 9502002.

**PI 593939. *Glycine max* (L.) Merr.**

Cultivated. Inbred. He feng No. 35; SY 9502003.

**PI 593940. *Glycine max* (L.) Merr.**

Cultivated. Inbred. He feng 7791; SY 9502004.

- PI 593941. *Glycine max* (L.) Merr.**  
Cultivated. Inbred. He feng 8719; SY 9502005.
- PI 593942. *Glycine max* (L.) Merr.**  
Cultivated. Inbred. He feng 9388; SY 9502006.
- PI 593943. *Glycine max* (L.) Merr.**  
Cultivated. Inbred. He feng 88851; SY 9502007.

The following were donated by Guang Yu Sun, Soybean Investigations, Land Reclamation and Ag. Sci., 156 Anaing Stree, Jiamusi, Heilongjiang 154007, China. Received 05/11/1995.

- PI 593944. *Glycine max* (L.) Merr.**  
Cultivated. Inbred. Ken nong No. 7; SY 9503001.
- PI 593945. *Glycine max* (L.) Merr.**  
Cultivated. Inbred. Ken nong No. 4; SY 9503002.
- PI 593946. *Glycine max* (L.) Merr.**  
Cultivated. Inbred. Ken feng No. 3; SY 9503003.
- PI 593947. *Glycine max* (L.) Merr.**  
Cultivated. Inbred. He feng No. 25; SY 9503004.
- PI 593948. *Glycine max* (L.) Merr.**  
Cultivated. Inbred. Ken 83-2921; SY 9503005.
- PI 593949. *Glycine max* (L.) Merr.**  
Cultivated. Inbred. Ken 83-2922; SY 9503006.
- PI 593950. *Glycine max* (L.) Merr.**  
Cultivated. Inbred. Ken 84-4009; SY 9503007.
- PI 593951. *Glycine max* (L.) Merr.**  
Cultivated. Inbred. JH-1; SY 9503008.

The following were donated by Guo Hua Hu, Hong Xinglong Research Institue, Agricultural Center, Heilongjiang Academy of Agricultural Reclamation Sciences, Youyi County, Heilongjiang 155811, China. Received 05/11/1995.

- PI 593952. *Glycine max* (L.) Merr.**  
Cultivated. Inbred. He feng No. 35; SY 9504001.
- PI 593953. *Glycine max* (L.) Merr.**  
Cultivated. Inbred. Sui nong No. 10; SY 9504002.

The following were donated by Weiguang Du, Soybean Institute, Heilongjiang Acad. of Ag. Sci., No. 368 Xuefu Road, Harbin, Heilongjiang 150086, China. Received 05/11/1995.

- PI 593954. *Glycine max* (L.) Merr.**

Cultivated. Inbred. Hei nong No. 37; SY 9505001.

The following were donated by Rui Zhong Zhang, Soybean Research Insitute, Northeast Agricultural Univ., Harbin, Heilongjiang 150030, China. Received 05/11/1995.

- PI 593955. **Glycine max** (L.) Merr.  
Cultivated. Inbred. NEAC No. 187; SY 9506001.
- PI 593956. **Glycine max** (L.) Merr.  
Cultivated. Inbred. NEAC No. 190; SY 9506002.
- PI 593957. **Glycine max** (L.) Merr.  
Cultivated. Inbred. NEAC No. 593; SY 9506003.

The following were donated by Jincheng Luo, Soybean Institute, Jilin Academy of Ag. Science, Gongzhuling, Jilin 136100, China. Received 05/11/1995.

- PI 593958. **Glycine max** (L.) Merr.  
Cultivated. Inbred. GD 3229; Jilin No. 30; SY 9507001.
- PI 593959. **Glycine max** (L.) Merr.  
Cultivated. Inbred. Jilin No. 31; SY 9507002.
- PI 593960. **Glycine max** (L.) Merr.  
Cultivated. Inbred. Jilin No. 32; SY 9507003.
- PI 593961. **Glycine max** (L.) Merr.  
Cultivated. Inbred. GD 369; SY 9507004.
- PI 593962. **Glycine max** (L.) Merr.  
Cultivated. Inbred. GD 1596; SY 9507005.
- PI 593963. **Glycine max** (L.) Merr.  
Cultivated. Inbred. GD 2828; SY 9507006.
- PI 593964. **Glycine max** (L.) Merr.  
Cultivated. Inbred. GD 3009; SY 9507007.
- PI 593965. **Glycine max** (L.) Merr.  
Cultivated. Inbred. GD 3016; SY 9507008.
- PI 593966. **Glycine max** (L.) Merr.  
Cultivated. Inbred. GD 3106; SY 9507009.
- PI 593967. **Glycine max** (L.) Merr.  
Cultivated. Inbred. GD 3184; SY 9507010.
- PI 593968. **Glycine max** (L.) Merr.  
Cultivated. Inbred. GD 3245; SY 9507012.
- PI 593969. **Glycine max** (L.) Merr.  
Cultivated. Inbred. GD 3325; SY 9507013.



The following were donated by Kazue Shirai, Hokkaido Prefectural Genetic Resources, 363-2, Minami-Takinokawa, Takikawa, Hokkaido 073, Japan. Received 08/30/1995.

- PI 593970. *Glycine max* (L.) Merr.  
Cultivated. Inbred. Oosodeno mai; SY 9512001.
- PI 593971. *Glycine max* (L.) Merr.  
Cultivated. Inbred. Kariyutaka; SY 9512002.
- PI 593972. *Glycine max* (L.) Merr.  
Cultivated. Inbred. Suzumaru; SY 9512003.
- PI 593973. *Glycine max* (L.) Merr.  
Cultivated. Inbred. Toyokomachi; SY 9512004.
- PI 593974. *Glycine max* (L.) Merr.  
Cultivated. Inbred. Toyomusume; SY 9512005.
- PI 593975. *Glycine max* (L.) Merr.  
Cultivated. Inbred. Tsurumusume; SY 9512006.
- PI 593976. *Glycine max* (L.) Merr.  
Cultivated. Inbred. Gokuwase chishima; SY 9512007.
- PI 593977. *Glycine max* (L.) Merr.  
Cultivated. Inbred. Rankoshi; SY 9512008.
- PI 593978. *Glycine max* (L.) Merr.  
Cultivated. Inbred. Sakamotowase; SY 9512009.
- PI 593979. *Glycine max* (L.) Merr.  
Cultivated. Inbred. Wasekosode; SY 9512010.
- PI 593980. *Glycine max* (L.) Merr.  
Cultivated. Inbred. Wasetsurunoko; SY 9512011.
- PI 593981. *Glycine max* (L.) Merr.  
Cultivated. Inbred. Karafuto 1; SY 9512012.
- PI 593982. *Glycine max* (L.) Merr.  
Cultivated. Inbred. SY 9512013.
- PI 593983. *Glycine soja* Siebold & Zucc.  
Cultivated. Inbred. SY 9512014. Wild line received with *G. max* donations.

Unknown source. Received 12/15/1995.

- PI 593984. *Glycine max* (L.) Merr.  
Cultivated. Inbred. SY 9514001.

Unknown source. Received 12/15/1995.

**PI 593985. Glycine max** (L.) Merr.  
Cultivated. Inbred. SY 9514002.

Unknown source. Received 12/15/1995.

**PI 593986. Glycine max** (L.) Merr.  
Cultivated. Inbred. SY 9514003.

Unknown source. Received 12/15/1995.

**PI 593987. Glycine max** (L.) Merr.  
Cultivated. Inbred. SY 9514004.

Unknown source. Received 12/15/1995.

**PI 593988. Glycine max** (L.) Merr.  
Cultivated. Inbred. SY 9514005.

Unknown source. Received 12/15/1995.

**PI 593989. Glycine max** (L.) Merr.  
Cultivated. Inbred. SY 9514006.

Unknown source. Received 12/15/1995.

**PI 593990. Glycine max** (L.) Merr.  
Cultivated. Inbred. SY 9514007.

Unknown source. Received 12/15/1995.

**PI 593991. Glycine max** (L.) Merr.  
Cultivated. Inbred. 4266; Kwangheukdaedu; SY 9514008.

Unknown source. Received 12/15/1995.

**PI 593992. Glycine max** (L.) Merr.  
Cultivated. Inbred. SY 9514009.

Unknown source. Received 12/15/1995.

**PI 593993. Glycine max** (L.) Merr.  
Cultivated. Inbred. SY 9514010.

Unknown source. Received 12/15/1995.

**PI 593994. Glycine max** (L.) Merr.  
Cultivated. Inbred. SY 9514011.

Unknown source. Received 12/15/1995.

**PI 593995. Glycine max** (L.) Merr.  
Cultivated. Inbred. SY 9514012.

Unknown source. Received 12/15/1995.

**PI 593996. Glycine max** (L.) Merr.  
Cultivated. Inbred. Baemkong; SY 9514013.

Unknown source. Received 12/15/1995.

**PI 593997. Glycine max** (L.) Merr.  
Cultivated. Inbred. SY 9514014.

Unknown source. Received 12/15/1995.

**PI 593998. Glycine max** (L.) Merr.  
Cultivated. Inbred. SY 9514015.

Unknown source. Received 12/15/1995.

**PI 593999. Glycine max** (L.) Merr.  
Cultivated. Inbred. SY 9514016.

Unknown source. Received 12/15/1995.

**PI 594000. Glycine max** (L.) Merr.  
Cultivated. Inbred. SY 9514017.

Unknown source. Received 12/15/1995.

**PI 594001. Glycine max** (L.) Merr.  
Cultivated. Inbred. SY 9514018.

Unknown source. Received 12/15/1995.

**PI 594002. Glycine max** (L.) Merr.  
Cultivated. Inbred. SY 9514019.

Unknown source. Received 12/15/1995.

**PI 594003. Glycine max** (L.) Merr.  
Cultivated. Inbred. SY 9514020.

Unknown source. Received 12/15/1995.

**PI 594004. Glycine max** (L.) Merr.  
Cultivated. Inbred. SY 9514021.

Unknown source. Received 12/15/1995.

**PI 594005. Glycine max** (L.) Merr.  
Cultivated. Inbred. SY 9514022.

Unknown source. Received 12/15/1995.

**PI 594006. Glycine max** (L.) Merr.  
Cultivated. Inbred. Junjeri-1; SY 9514023.

Unknown source. Received 12/15/1995.

**PI 594007. Glycine max** (L.) Merr.  
Cultivated. Inbred. Junjeri-2; SY 9514024.

Unknown source. Received 12/15/1995.

**PI 594008. Glycine max** (L.) Merr.  
Cultivated. Inbred. Junjeri-3; SY 9514025.

Unknown source. Received 12/15/1995.

**PI 594009. Glycine max** (L.) Merr.  
Cultivated. Inbred. 4286; Daemadaedu; SY 9514026.

Unknown source. Received 12/15/1995.

**PI 594010. Glycine max** (L.) Merr.  
Cultivated. Inbred. 4287; Jekpaunmokdaedu; SY 9514027.

Unknown source. Received 12/15/1995.

**PI 594011. Glycine max** (L.) Merr.  
Cultivated. Inbred. 4291; Josaeng Heukchensuk; SY 9514028.

Unknown source. Received 12/15/1995.

**PI 594012. Glycine max** (L.) Merr.  
Cultivated. Inbred. 4292; Heuksatangdu; SY 9514029.

Unknown source. Received 12/15/1995.

**PI 594013. Glycine max** (L.) Merr.  
Cultivated. Inbred. 4299; Heukdaedusolib; SY 9514030.

Unknown source. Received 12/15/1995.

**PI 594014. Glycine max** (L.) Merr.  
Cultivated. Inbred. 4300; Semogtae; SY 9514031.

Unknown source. Received 12/15/1995.

**PI 594015. Glycine max** (L.) Merr.  
Cultivated. Inbred. 4307; Labdudu; SY 9514032.

Unknown source. Received 12/15/1995.

**PI 594016. Glycine max** (L.) Merr.  
Cultivated. Inbred. 4315; Keundaedu; SY 9514033.

Unknown source. Received 12/15/1995.

**PI 594017. Glycine max** (L.) Merr.  
Cultivated. Inbred. 4316; Chasolib; SY 9514034.

Unknown source. Received 12/15/1995.

**PI 594018. Glycine max** (L.) Merr.  
Cultivated. Inbred. 4336; Jangdancha; SY 9514035.

Unknown source. Received 12/15/1995.

**PI 594019. Glycine max** (L.) Merr.  
Cultivated. Inbred. 4337; Hamandaedu; SY 9514036.

Unknown source. Received 12/15/1995.

**PI 594020. Glycine max** (L.) Merr.  
Cultivated. Inbred. Milyang 28; Samnamkong; SY 9514037.

Unknown source. Received 12/15/1995.

**PI 594021. Glycine max** (L.) Merr.

Cultivated. Inbred. Milyang 31; Keun-olkong; SY 9514038.

Unknown source. Received 12/15/1995.

**PI 594022. Glycine max (L.) Merr.**

Cultivated. Inbred. Milyang 41; Duyoukong; SY 9514039.

Unknown source. Received 12/15/1995.

**PI 594023. Glycine max (L.) Merr.**

Cultivated. Inbred. SY 9514040.

The following were developed by Kay H. Asay, USDA, ARS, Forage & Range Research Unit, Utah State University - UMC 6300, Logan, Utah 84322-6300, United States; N. Jerry Chatterton, USDA, ARS, Utah State University, Forage and Range Research Lab., Logan, Utah 84322-6300, United States; Richard Wang, USDA-ARS, Forage & Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States; D.A. Johnson, USDA, ARS, Forage and Range Research, Utah State University, Logan, Utah 84322-6300, United States; Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States; W.H. Horton, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States; S.A. Young, Utah State University, Plants, Soils, and Biometerorology Department, Logan, Utah 84322-4820, United States. Received 04/08/1996.

**PI 594024. Agropyron hybrid**

Cultivar. "CD-II"; Hycrest-2. CV-24; PVP 9600240. Pedigree - Selected from Hycrest, which is a hybrid between induced tetraploid Agropyron cristatum and natural tetraploid Agropyron desertorum. Improved derivative of Hycrest. Selected for improved leafiness, vegetative vigor, and growth under cold temperatures. Excellent winter hardiness and resistance to drought, and noted for excellent stand-establishment vigor on harsh range sites. Produces significantly more forage under cold temperatures than Hycrest, and seedling vigor on a field site near Logan, Utah was significantly better than Hycrest. Produces abundant forage during the spring and early summer and recommended for semiarid range sites in the Intermountain Region and Great Plains receiving from 20 to 45cm annual precipitation at altitudes up to 2,200m.

The following were developed by Pioneer Hi-Bred International, Inc., United States. Received 04/16/1996.

**PI 594025. Zea mays L. ssp. mays**

Cultivar. "PHNG2". PVP 9600198.

**PI 594026. Zea mays L. ssp. mays**

Cultivar. "PH89B". PVP 9600199.

**PI 594027. Zea mays L. ssp. mays**

Cultivar. "PH56C". PVP 9600200.

**PI 594028. *Zea mays* L. ssp. *mays***  
Cultivar. "PH42B". PVP 9600201.

**PI 594029. *Zea mays* L. ssp. *mays***  
Cultivar. "PH38B". PVP 9600202.

**PI 594030. *Zea mays* L. ssp. *mays***  
Cultivar. "PH37C". PVP 9600203.

**PI 594031. *Zea mays* L. ssp. *mays***  
Cultivar. "PH24E". PVP 9600204.

The following were developed by Del Monte Corporation, California, United States. Received 04/16/1996.

**PI 594032. *Capsicum annuum* L.**  
Cultivar. "DMX 58-218". PVP 9600205.

**PI 594033. *Capsicum annuum* L.**  
Cultivar. "DMX 58-214". PVP 9600206.

The following were developed by Cargill, Inc., United States. Received 04/16/1996.

**PI 594034. *Brassica napus* L.**  
Cultivar. "YA307". PVP 9600207.

**PI 594035. *Brassica napus* L.**  
Cultivar. "93GS34-179". PVP 9600208.

The following were developed by J.G. Boswell, P.O. Box 787, Corcoran, California 93212-0787, United States. Received 04/16/1996.

**PI 594036. *Gossypium hirsutum* L.**  
Cultivar. "EL DORADO ACALA". PVP 9600209.

The following were developed by E.F. Burlingham & Sons, 1936 19th Avenue, P.O. Box 217, Forest Grove, Oregon 97116, United States. Received 04/16/1996.

**PI 594037. *Lolium perenne* L.**  
Cultivar. "DIVINE". PVP 9600211.

**PI 594038. *Lolium perenne* L.**  
Cultivar. "EXCEL". PVP 9600212.

**PI 594039. *Lolium perenne* L.**  
Cultivar. "WIZARD". PVP 9600213.

The following were developed by Pure-Seed Testing, Inc., United States.

Received 04/16/1996.

**PI 594040. *Festuca rubra* L.**

Cultivar. "FLYER II". PVP 9600214.

The following were developed by W-L Research, Inc, 7625 Brown Bridge Road, Highland, Maryland 20777, United States. Received 04/16/1996.

**PI 594041. *Medicago sativa* L.**

Cultivar. "WL 326 GZ". PVP 9600215.

The following were developed by Peterson Seed Company, Inc., P.O. Box 346, Savage, Minnesota 55378, United States. Received 04/16/1996.

**PI 594042. *Cichorium intybus* L.**

Cultivar. "INIA LE LACERTA". PVP 9600216.

The following were developed by AgriPro Biosciences, Inc., 806 North 2nd St., P.O. Box 30, Berthoud, Colorado 80513, United States. Received 04/16/1996.

**PI 594043. *Triticum aestivum* L., nom. cons.**

Cultivar. Pureline. "GUNNER"; N92-2031. PVP 9600217. Pedigree - Selection from an F2 composite of at least 49 single crosses, primarily between Canadian CWRS types and US hard red spring types. Hard red spring, tall semidwarf variety adapted to the northern Hard Red Spring Wheat Region. Average yield potential, with exceptionally high test weights and high grain protein content.

The following were developed by AgriPro Seeds, R.R. #2, Box 411, Brookston, Indiana 47923, United States. Received 04/16/1996.

**PI 594044. *Triticum aestivum* L., nom. cons.**

Cultivar. Pureline. "MASON"; 91D-2308. PVP 9600218. Pedigree - Cardinal/C78318//Coker 9323. Soft red winter, high yielding, strong strawed, medium height variety with early maturity. Resistance to the most prevalent races of leaf rust and stem rust in its area of adaptation. Moderate resistance to Septoria leaf and glume blotches and moderate resistance to spindle streak and soilborn mosaic viruses.

The following were developed by Arnel Hallauer, Iowa State University, Department of Agronomy, Ames, Iowa 50011, United States; K.R. Lamkey, USDA, ARS, Field Crops Res. Unit, Ames, Iowa 50011, United States; P.R. White, Iowa State University, Dept. of Agronomy, Ames, Iowa 50011, United States. Received 04/10/1996.

**PI 594045. *Zea mays* L. ssp. *mays***

Cultivar. Inbred. B102; (B85 x H992)-336; Ames 22787. PL-281. Pedigree - [(B85 x H99) x H99]-336-1-2-1-1-1-1-1. Released 04/08/1996. Good resistance to 1st-generation European corn borer (*Ostrinia nubilalis*) and early infection by grey leaf spot (*Cercospora zeae-maydis*). Good





Nebraska, Department of Agronomy, Urbana, Illinois 61801, United States; Blaine E. Johnson, University of Nebraska, Department of Agronomy, 326 Keim Hall, Lincoln, Nebraska 68583-0915, United States; Jeffrey Posch, Asgrow Seed Company, Rt. 2, Box 105, Gibbon, Nebraska 68840, United States. Received 04/15/1996.

**PI 594050. *Zea mays* L. *ssp. mays***

Breeding. Inbred. N501. PL-239. Pedigree - Inbred from Nebraska S synthetic following twelve cycles of recurrent selection for grain yield and tolerance to sub-optimal temperatures. Yellow dent inbred with a red cob. Developed from synthetic undergoing recurrent selection using a combination of full-sib and S1 selection. Selection of full-sibs based upon grain yield; S1 selection based upon tolerance to sub-optimal temperatures in the field during germination and seedling growth. Adapted to central and southern Nebraska.

**PI 594051. *Zea mays* L. *ssp. mays***

Breeding. Inbred. N502. PL-240. Pedigree - Inbred from Nebraska S synthetic following twelve cycles of recurrent selection for grain yield and tolerance to sub-optimal temperatures. Yellow dent inbred with a red cob. Developed from synthetic undergoing recurrent selection using a combination of full-sib and S1 selection. Selection of full-sibs based upon grain yield; S1 selection based upon tolerance to sub-optimal temperatures in the field during germination and seedling growth. Adapted to central and southern Nebraska.

**PI 594052. *Zea mays* L. *ssp. mays***

Breeding. Inbred. N503. PL-241. Pedigree - Inbred from Nebraska S synthetic following twelve cycles of recurrent selection for grain yield and tolerance to sub-optimal temperatures. Yellow dent inbred with a red cob. Developed from synthetic undergoing recurrent selection using a combination of full-sib and S1 selection. Selection of full-sibs based upon grain yield; S1 selection based upon tolerance to sub-optimal temperatures in the field during germination and seedling growth. Adapted to central and southern Nebraska.

**PI 594053. *Zea mays* L. *ssp. mays***

Breeding. Inbred. N504. PL-242. Pedigree - Inbred from Nebraska S synthetic following twelve cycles of recurrent selection for grain yield and tolerance to sub-optimal temperatures. Yellow dent inbred with a red cob. Developed from synthetic undergoing recurrent selection using a combination of full-sib and S1 selection. Selection of full-sibs based upon grain yield; S1 selection based upon tolerance to sub-optimal temperatures in the field during germination and seedling growth. Adapted to central and southern Nebraska.

**PI 594054. *Zea mays* L. *ssp. mays***

Breeding. Inbred. N505. PL-243. Pedigree - Inbred from Nebraska S synthetic following twelve cycles of recurrent selection for grain yield and tolerance to sub-optimal temperatures. Yellow dent inbred with a red cob. Developed from synthetic undergoing recurrent selection using a combination of full-sib and S1 selection. Selection of full-sibs based upon grain yield; S1 selection based upon tolerance to sub-optimal temperatures in the field during germination and seedling growth. Adapted to central and southern Nebraska.

**PI 594055. *Zea mays* L. *ssp. mays***

Breeding. Inbred. N506. PL-244. Pedigree - Inbred from Nebraska S synthetic following twelve cycles of recurrent selection for grain yield and tolerance to sub-optimal temperatures. Yellow dent inbred with a red cob. Developed from synthetic undergoing recurrent selection using a combination of full-sib and S1 selection. Selection of full-sibs based upon grain yield; S1 selection based upon tolerance to sub-optimal temperatures in the field during germination and seedling growth. Adapted to central and southern Nebraska.

**PI 594056. *Zea mays* L. *ssp. mays***

Breeding. Inbred. N507. PL-245. Pedigree - Inbred from Nebraska S synthetic following twelve cycles of recurrent selection for grain yield and tolerance to sub-optimal temperatures. Yellow dent with a red cob. Developed from synthetic undergoing recurrent selection using a combination of full-sib and S1 selection. Selection of full-sibs based upon grain yield; S1 selection based upon tolerance to sub-optimal temperatures in the field during germination and seedling growth. Adapted to central and southern Nebraska.

**PI 594057. *Zea mays* L. *ssp. mays***

Breeding. Inbred. N508. PL-246. Pedigree - Inbred from Nebraska S synthetic following twelve cycles of recurrent selection for grain yield and tolerance to sub-optimal temperatures. Yellow dent inbred with a red cob. Developed from synthetic undergoing recurrent selection using a combination of full-sib and S1 selection. Selection of full-sibs based upon grain yield; S1 selection based upon tolerance to sub-optimal temperatures in the field during germination and seedling growth. Adapted to central and southern Nebraska.

**PI 594058. *Zea mays* L. *ssp. mays***

Breeding. Inbred. N509. PL-247. Pedigree - Inbred from Nebraska S synthetic following twelve cycles of recurrent selection for grain yield and tolerance to sub-optimal temperatures. Yellow dent inbred with a red cob. Developed from synthetic undergoing recurrent selection using a combination of full-sib and S1 selection. Selection of full-sibs based upon grain yield; S1 selection based upon tolerance to sub-optimal temperatures in the field during germination and seedling growth. Adapted to central and southern Nebraska.

**PI 594059. *Zea mays* L. *ssp. mays***

Breeding. Inbred. N510. PL-248. Pedigree - Inbred from Nebraska S synthetic following twelve cycles of recurrent selection for grain yield and tolerance to sub-optimal temperatures. Yellow dent inbred with a red cob. Developed from synthetic undergoing recurrent selection using a combination of full-sib and S1 selection. Selection of full-sibs based upon grain yield; S1 selection based upon tolerance to sub-optimal temperatures in the field during germination and seedling growth. Adapted to central and southern Nebraska.

**PI 594060. *Zea mays* L. *ssp. mays***

Breeding. Inbred. N511. PL-249. Pedigree - Inbred from Nebraska S synthetic following twelve cycles of recurrent selection for grain yield and tolerance to sub-optimal temperatures. Yellow dent inbred with a red

cob. Developed from synthetic undergoing recurrent selection using a combination of full-sib and S1 selection. Selection of full-sibs based upon grain yield; S1 selection based upon tolerance to sub-optimal temperatures in the field during germination and seedling growth. Adapted to central and southern Nebraska.

**PI 594061. *Zea mays* L. *ssp. mays***

Breeding. Inbred. N512. PL-250. Pedigree - Inbred from Nebraska S synthetic following twelve cycles of recurrent selection for grain yield and tolerance to sub-optimal temperatures. Yellow dent inbred with a red cob. Developed from synthetic undergoing recurrent selection using a combination of full-sib and S1 selection. Selection of full-sibs based upon grain yield; S1 selection based upon tolerance to sub-optimal temperatures in the field during germination and seedling growth. Adapted to central and southern Nebraska.

**PI 594062. *Zea mays* L. *ssp. mays***

Breeding. Inbred. N513. PL-251. Pedigree - Inbred from Nebraska S synthetic following twelve cycles of recurrent selection for grain yield and tolerance to sub-optimal temperatures. Yellow dent inbred with a red cob. Developed from synthetic undergoing recurrent selection using a combination of full-sib and S1 selection. Selection of full-sibs based upon grain yield; S1 selection based upon tolerance to sub-optimal temperatures in the field during germination and seedling growth. Adapted to central and southern Nebraska.

**PI 594063. *Zea mays* L. *ssp. mays***

Breeding. Inbred. N514. PL-252. Pedigree - Inbred from Nebraska S synthetic following twelve cycles of recurrent selection for grain yield and tolerance to sub-optimal temperatures. Yellow dent inbred with a red cob. Developed from synthetic undergoing recurrent selection using a combination of full-sib and S1 selection. Selection of full-sibs based upon grain yield; S1 selection based upon tolerance to sub-optimal temperatures in the field during germination and seedling growth. Adapted to central and southern Nebraska.

**PI 594064. *Zea mays* L. *ssp. mays***

Breeding. Inbred. N515. PL-253. Pedigree - Inbred from Nebraska S synthetic following twelve cycles of recurrent selection for grain yield and tolerance to sub-optimal temperatures. Yellow dent inbred with a red cob. Developed from synthetic undergoing recurrent selection using a combination of full-sib and S1 selection. Selection of full-sibs based upon grain yield; S1 selection based upon tolerance to sub-optimal temperatures in the field during germination and seedling growth. Adapted to central and southern Nebraska.

**PI 594065. *Zea mays* L. *ssp. mays***

Breeding. Inbred. N516. PL-254. Pedigree - Inbred from Nebraska S synthetic following multiple cycles of recurrent selection to sub-optimal temperatures using growth chamber evaluations and seedling tolerance to post-emergence freeze. Yellow dent inbred with a red cob. Developed from a synthetic undergoing recurrent full-sib selection for tolerance to sub-optimal temperatures using growth chamber evaluations. Population also subjected to selection of surviving seedlings following exposure to post-emergence freezes in field nursery in three separate

cycles of selection. Developed from a surviving plant following third freeze event. Adapted to central and southern Nebraska.

**PI 594066. *Zea mays* L. *ssp. mays***

Breeding. Inbred. N517. PL-255. Pedigree - Inbred from Nebraska S synthetic following multiple cycles of recurrent selection to sub-optimal temperatures using growth chamber evaluations and seedling tolerance to post-emergence freeze. Yellow dent inbred with a red cob. Developed from a synthetic undergoing recurrent full-sib selection for tolerance to sub-optimal temperatures using growth chamber evaluations. Population also subjected to selection of surviving seedlings following exposure to post-emergence freezes in field nursery in three separate cycles of selection. Developed from a surviving plant following third freeze event. Adapted to central and southern Nebraska.

**PI 594067. *Zea mays* L. *ssp. mays***

Breeding. Inbred. N518. PL-256. Pedigree - Inbred from Nebraska S synthetic following multiple cycles of recurrent selection to sub-optimal temperatures using growth chamber evaluations and seedling tolerance to post-emergence freeze. Yellow dent inbred with a red cob. Developed from a synthetic undergoing recurrent full-sib selection for tolerance to sub-optimal temperatures using growth chamber evaluations. Population also subjected to selection of surviving seedlings following exposure to post-emergence freezes in field nursery in three separate cycles of selection. Developed from a surviving plant following third freeze event. Adapted to central and southern Nebraska.

**PI 594068. *Zea mays* L. *ssp. mays***

Breeding. Inbred. N519. PL-257. Pedigree - Inbred from Nebraska S synthetic following multiple cycles of recurrent selection to sub-optimal temperatures using growth chamber evaluations and seedling tolerance to post-emergence freeze. Yellow dent inbred with a red cob. Developed from a synthetic undergoing recurrent full-sib selection for tolerance to sub-optimal temperatures using growth chamber evaluations. Population also subjected to selection of surviving seedlings following exposure to post-emergence freezes in field nursery in three separate cycles of selection. Developed from a surviving plant following third freeze event. Adapted to central and southern Nebraska.

**PI 594069. *Zea mays* L. *ssp. mays***

Breeding. Inbred. N520. PL-258. Pedigree - Inbred from Nebraska S synthetic following multiple cycles of recurrent selection to sub-optimal temperatures using growth chamber evaluations and seedling tolerance to post-emergence freeze. Yellow dent inbred with a red cob. Developed from a synthetic undergoing recurrent full-sib selection for tolerance to sub-optimal temperatures using growth chamber evaluations. Population also subjected to selection of surviving seedlings following exposure to post-emergence freezes in field nursery in three separate cycles of selection. Developed from a surviving plant following third freeze event. Adapted to central and southern Nebraska.

**PI 594070. *Zea mays* L. *ssp. mays***

Breeding. Inbred. N521. PL-259. Pedigree - Inbred from Nebraska S synthetic following multiple cycles of recurrent selection to sub-optimal temperatures using growth chamber evaluations and seedling

tolerance to post-emergence freeze. Yellow dent inbred with a red cob. Developed from a synthetic undergoing recurrent full-sib selection for tolerance to sub-optimal temperatures using growth chamber evaluations. Population also subjected to selection of surviving seedlings following exposure to post-emergence freezes in field nursery in three separate cycles of selection. Developed from a surviving plant following third freeze event. Adapted to central and southern Nebraska.

**PI 594071. *Zea mays* L. *ssp. mays***

Breeding. Inbred. N523. PL-260. Pedigree - Inbred from Nebraska S synthetic following multiple cycles of recurrent selection to sub-optimal temperatures using growth chamber evaluations and seedling tolerance to post-emergence freeze. Yellow dent inbred with a red cob. Developed from a synthetic undergoing recurrent full-sib selection for tolerance to sub-optimal temperatures using growth chamber evaluations. Population also subjected to selection of surviving seedlings following exposure to post-emergence freezes in field nursery in three separate cycles of selection. Developed from a surviving plant following third freeze event. Adapted to central and southern Nebraska.

**PI 594072. *Zea mays* L. *ssp. mays***

Breeding. Inbred. N524. PL-261. Pedigree - Inbred from Nebraska S synthetic following multiple cycles of recurrent selection to sub-optimal temperatures using growth chamber evaluations and seedling tolerance to post-emergence freeze. Yellow dent inbred with a red cob. Developed from a synthetic undergoing recurrent full-sib selection for tolerance to sub-optimal temperatures using growth chamber evaluations. Population also subjected to selection of surviving seedlings following exposure to post-emergence freezes in field nursery in three separate cycles of selection. Developed from a surviving plant following third freeze event. Adapted to central and southern Nebraska.

**PI 594073. *Zea mays* L. *ssp. mays***

Breeding. Inbred. N525. PL-262. Pedigree - Inbred from Nebraska S synthetic following multiple cycles of recurrent selection to sub-optimal temperatures using growth chamber evaluations and seedling tolerance to post-emergence freeze. Yellow dent inbred with a red cob. Developed from a synthetic undergoing recurrent full-sib selection for tolerance to sub-optimal temperatures using growth chamber evaluations. Population also subjected to selection of surviving seedlings following exposure to post-emergence freezes in field nursery in three separate cycles of selection. Developed from a surviving plant following third freeze event. Adapted to central and southern Nebraska.

**PI 594074. *Zea mays* L. *ssp. mays***

Breeding. Inbred. N526. PL-263. Pedigree - Inbred from Nebraska S synthetic following multiple cycles of recurrent selection to sub-optimal temperatures using growth chamber evaluations and seedling tolerance to post-emergence freeze. Yellow dent inbred with a red cob. Developed from a synthetic undergoing recurrent full-sib selection for tolerance to sub-optimal temperatures using growth chamber evaluations. Population also subjected to selection of surviving seedlings following exposure to post-emergence freezes in field nursery in three separate cycles of selection. Developed from a surviving plant following third freeze event. Adapted to central and southern Nebraska.

**PI 594075. *Zea mays* L. *ssp. mays***

Breeding. Inbred. N528. PL-264. Pedigree - Inbred from Nebraska B synthetic following twelve cycles of full-sib recurrent selection to sub-optimal temperatures using growth chamber evaluations. Yellow dent inbred with a red cob. Developed from a synthetic undergoing recurrent full-sib selection for tolerance to sub-optimal temperatures using growth chamber evaluations. Adapted to central and southern Nebraska.

**PI 594076. *Zea mays* L. *ssp. mays***

Breeding. Inbred. N529. PL-265. Pedigree - Inbred from Nebraska B synthetic following twelve cycles of full-sib recurrent selection to sub-optimal temperatures using growth chamber evaluations. Yellow dent inbred with a red cob. Developed from a synthetic undergoing recurrent full-sib selection for tolerance to sub-optimal temperatures using growth chamber evaluations. Adapted to central and southern Nebraska.

**PI 594077. *Zea mays* L. *ssp. mays***

Breeding. Inbred. N530. PL-266. Pedigree - Inbred from Nebraska B synthetic following twelve cycles of full-sib recurrent selection to sub-optimal temperatures using growth chamber evaluations. Yellow dent inbred with a red cob. Developed from a synthetic undergoing recurrent full-sib selection for tolerance to sub-optimal temperatures using growth chamber evaluations. Adapted to central and southern Nebraska.

**PI 594078. *Zea mays* L. *ssp. mays***

Breeding. Inbred. N532. PL-267. Pedigree - Inbred from Nebraska B synthetic following twelve cycles of full-sib recurrent selection to sub-optimal temperatures using growth chamber evaluations. Yellow dent inbred with a red cob. Developed from a synthetic undergoing recurrent full-sib selection for tolerance to sub-optimal temperatures using growth chamber evaluations. Adapted to central and southern Nebraska.

**PI 594079. *Zea mays* L. *ssp. mays***

Breeding. Inbred. N533. PL-268. Pedigree - Inbred from Nebraska B synthetic following twelve cycles of full-sib recurrent selection to sub-optimal temperatures using growth chamber evaluations. Yellow dent inbred with a red cob. Developed from a synthetic undergoing recurrent full-sib selection for tolerance to sub-optimal temperatures using growth chamber evaluations. Adapted to central and southern Nebraska.

**PI 594080. *Zea mays* L. *ssp. mays***

Breeding. Inbred. N534. PL-269. Pedigree - Inbred from Nebraska B synthetic following twelve cycles of full-sib recurrent selection to sub-optimal temperatures using growth chamber evaluations. Yellow dent inbred with a red cob. developed from a synthetic undergoing recurrent full-sib selection for tolerance to sub-optimal temperatures using growth chamber evaluations. Adapted to central and southern Nebraska.

**PI 594081. *Zea mays* L. *ssp. mays***

Breeding. Inbred. N535. PL-270. Pedigree - Inbred from Nebraska B synthetic following twelve cycles of full-sib recurrent selection to sub-optimal temperatures using growth chamber evaluations. Yellow dent inbred with a red cob. Developed from a synthetic undergoing recurrent full-sib selection for tolerance to sub-optimal temperatures using

growth chamber evaluations. Adapted to central and southern Nebraska.

**PI 594082. *Zea mays* L. *ssp. mays***

Breeding. Inbred. N536. PL-271. Pedigree - Inbred from Nebraska S synthetic following multiple cycles of recurrent selection to sub-optimal temperatures using growth chamber evaluations and seedling tolerance to post-emergence freeze. Yellow dent inbred with a red cob. Developed from a synthetic undergoing recurrent full-sib selection for tolerance to sub-optimal temperatures using growth chamber evaluations. Populations also subjected to selection of surviving seedlings following exposure to post-emergence freezes in field nursery in three separate cycles of selection. S2 progenitor exhibited 100 percent germination in growth chamber under sub-optimal temperatures. Adapted to central and southern Nebraska.

**PI 594083. *Zea mays* L. *ssp. mays***

Breeding. Inbred. N537. PL-272. Pedigree - Inbred from Nebraska S synthetic following multiple cycles of recurrent selection to sub-optimal temperatures using growth chamber evaluations and seedling tolerance to post-emergence freeze. Yellow dent inbred with a red cob. Developed from a synthetic undergoing recurrent full-sib selection for tolerance to sub-optimal temperatures using growth chamber evaluations. Populations also subjected to selection of surviving seedlings following exposure to post-emergence freezes in field nursery in three separate cycles of selection. S2 progenitor exhibited 100 percent germination in growth chamber under sub-optimal temperatures. Adapted to central and southern Nebraska.

**PI 594084. *Zea mays* L. *ssp. mays***

Breeding. Inbred. N538. PL-273. Pedigree - Inbred from Nebraska S synthetic following multiple cycles of recurrent selection to sub-optimal temperatures using growth chamber evaluations and seedling tolerance to post-emergence freeze. Yellow dent inbred with a red cob. Developed from a synthetic undergoing recurrent full-sib selection for tolerance to sub-optimal temperatures using growth chamber evaluations. Populations also subjected to selection of surviving seedlings following exposure to post-emergence freezes in field nursery in three separate cycles of selection. S2 progenitor exhibited 100 percent germination in growth chamber under sub-optimal temperatures. Adapted to central and southern Nebraska.

**PI 594085. *Zea mays* L. *ssp. mays***

Breeding. Inbred. N539. PL-274. Pedigree - Inbred from Nebraska S synthetic following multiple cycles of recurrent selection to sub-optimal temperatures using growth chamber evaluations and seedling tolerance to post-emergence freeze. Yellow dent inbred with a red cob. Developed from a synthetic undergoing recurrent full-sib selection for tolerance to sub-optimal temperatures using growth chamber evaluations. Populations also subjected to selection of surviving seedlings following exposure to post-emergence freezes in field nursery in three separate cycles of selection. S2 progenitor exhibited 100 percent germination in growth chamber under sub-optimal temperatures. Adapted to central and southern Nebraska.

**PI 594086. *Zea mays* L. *ssp. mays***



Breeding. Inbred. N540. PL-275. Pedigree - Inbred from Nebraska S synthetic following multiple cycles of recurrent selection to sub-optimal temperatures using growth chamber evaluations and seedling tolerance to post-emergence freeze. Yellow dent inbred with a red cob. Developed from a synthetic undergoing recurrent full-sib selection for tolerance to sub-optimal temperatures using growth chamber evaluations. Populations also subjected to selection of surviving seedlings following exposure to post-emergence freezes in field nursery in three separate cycles of selection. S2 progneitor exhibited 100 percent germination in growth chamber under sub-optimal temperatures. Adapted to central and southern Nebraska.

**PI 594087. *Zea mays* L. *ssp. mays***

Breeding. Inbred. N541. PL-276. Pedigree - Inbred from Nebraska S synthetic following multiple cycles of recurrent selection to sub-optimal temperatures using growth chamber evaluations and seedling tolerance to post-emergence freeze. Yellow dent inbred with a red cob. Developed from a synthetic undergoing recurrent full-sib selection for tolerance to sub-optimal temperatures using growth chamber evaluations. Populations also subjected to selection of surviving seedlings following exposure to post-emergence freezes in field nursery in three separate cycles of selection. S2 progenitor exhibited 100 percent germination in growth chamber under sub-optimal temperatures. Adapted to central and southern Nebraska.

**PI 594088. *Zea mays* L. *ssp. mays***

Breeding. Inbred. N542. PL-277. Pedigree - Inbred from Nebraska S synthetic following multiple cycles of recurrent selection to sub-optimal temperatures using growth chamber evaluations and seedling tolerance to post-emergence freeze. Yellow dent inbred with a red cob. Developed from a synthetic undergoing recurrent full-sib selection for tolerance to sub-optimal temperatures using growth chamber evaluations. Populations also subjected to selection of surviving seedlings following exposure to post-emergence freezes in field nursery in three separate cycles of selection. S2 progenitor exhibited 100 percent germination in growth chamber under sub-optimal temperatures. Adapted to central and southern Nebraska.

**PI 594089. *Zea mays* L. *ssp. mays***

Breeding. Inbred. N543. PL-278. Pedigree - Inbred from Nebraska S synthetic following multiple cycles of recurrent selection to sub-optimal temperatures using growth chamber evaluations and seedling tolerance to post-emergence freeze. Yellow dent inbred with a red cob. Developed from a synthetic undergoing recurrent full-sib selection for tolerance to sub-optimal temperatures using growth chamber evaluations. Populations also subjected to selection of surviving seedlings following exposure to post-emergence freezes in field nursery in three separate cycles of selection. S2 progenitor exhibited 100 percent germination in growth chamber under sub-optimal temperatures. Adapted to central and southern Nebraska.

**PI 594090. *Zea mays* L. *ssp. mays***

Breeding. Inbred. N544. PL-279. Pedigree - Inbred from Nebraska S synthetic following multiple cycles of recurrent selection to sub-optimal temperatures using growth chamber evaluations and seedling

tolerance to post-emergence freeze. Yellow dent inbred with a red cob. Developed from a synthetic undergoing recurrent full-sib selection for tolerance to sub-optimal temperatures using growth chamber evaluations. Populations also subjected to selection of surviving seedlings following exposure to post-emergence freezes in field nursery in three separate cycles of selection. S2 progenitor exhibited 100 percent germination in growth chamber under sub-optimal temperatures. Adapted to central and southern Nebraska.

**PI 594091. *Zea mays* L. ssp. *mays***

Breeding. Inbred. N545. PL-280. Pedigree - Inbred from Nebraska S synthetic following multiple cycles of recurrent selection to sub-optimal temperatures using growth chamber evaluations and seedling tolerance to post-emergence freeze. Yellow dent inbred with a red cob. Developed from a synthetic undergoing recurrent full-sib selection for tolerance to sub-optimal temperatures using growth chamber evaluations. Populations also subjected to selection of surviving seedlings following exposure to post-emergence freezes in field nursery in three separate cycles of selection. S2 progenitor exhibited 100 percent germination in growth chamber under sub-optimal temperatures. Adapted to central and southern Nebraska.

The following were donated by National Clonal Germplasm Repository, W.R. Poage Pecan Field Station, 701 Woodson Road, Brownwood, Texas 76801, United States. Received 08/29/1984.

**PI 594092. *Malus micromalus* Makino**

Uncertain. GMAL 273.

**PI 594093. *Malus micromalus* Makino**

Uncertain. GMAL 275.

The following were donated by Bruce J. Parlman, USDA, ARS, Natl. Germplasm Resources Laboratory, Building 465, BARC-East, Beltsville, Maryland 20705-2350, United States; Hortus Botanicus Nationalis, Laboratorium Dendroflorae, Salaspils, Latvia. Received 06/19/1984.

**PI 594094. *Malus sieboldii* (Regel) Rehder**

Uncertain. GMAL 365.

The following were donated by USDA, ARS, U.S. National Arboretum, National Germplasm Repository, Washington, District of Columbia 20002, United States. Received 01/16/1986.

**PI 594095. *Malus orientalis* Uglitzk.**

Wild. GMAL 1461. Collected 1985 in Unknown. USSR. Pedigree - Wild.

The following were donated by National Clonal Germplasm Repository, W.R. Poage Pecan Field Station, 701 Woodson Road, Brownwood, Texas 76801, United States. Received 03/07/1986.

**PI 594096. *Malus micromalus* Makino**

Uncertain. GMAL 1497.

The following were donated by Norman F. Weeden, Cornell University, New York State Agric. Exp. Station, Department of Horticultural Sciences, Geneva, New York 14456-0462, United States; Cheng Suozhan, Chinese Academy of Agric. Sciences, Institute of Pomology, China. Received 12/1986.

**PI 594097. *Malus kansuensis* (Batalin) C. Schneider**

Uncertain. GMAL 1875. Collected in China.

The following were collected by Norman F. Weeden, Cornell University, New York State Agric. Exp. Station, Department of Horticultural Sciences, Geneva, New York 14456-0462, United States; Cheng Suozhan, Chinese Academy of Agric. Sciences, Institute of Pomology, China. Received 12/1986.

**PI 594098. *Malus hupehensis* (Pampan.) Rehder**

Uncertain. GMAL 1878. Collected in China.

**PI 594099. *Malus asiatica* Nakai**

Uncertain. GMAL 1879. Collected in China.

The following were donated by Norman F. Weeden, Cornell University, New York State Agric. Exp. Station, Department of Horticultural Sciences, Geneva, New York 14456-0462, United States; Cheng Suozhan, Chinese Academy of Agric. Sciences, Institute of Pomology, China. Received 12/1986.

**PI 594100. *Malus spectabilis* (Aiton) Borkh.**

Uncertain. GMAL 1880. Collected in China.

The following were collected by Calvin R. Sperling, USDA, ARS, Natl. Germplasm Resources Laboratory, Room 402, Building 003, BARC-West, Beltsville, Maryland 20705-2350, United States; D. Eser; H.H. Gecit. Donated by USDA, ARS, U.S. National Arboretum, National Germplasm Repository, Washington, District of Columbia 20002, United States. Received 10/15/1986.

**PI 594101. *Malus orientalis* Uglitzk.**

Uncertain. GMAL 1885. Collected 07/18/1985 in Turkey. Latitude 37 deg. 34' N. Longitude 43 deg. 37' E. Elevation 1760 m. Turkey - Hakkari Province: Village of Durankaya, 21 kilom. from Hakkari on road to Beytussebap. Pedigree - Wild. Small tree, extensively cultivated along fields and roads in village. Said to be taken from wild trees and planted. Wild trees occur commonly in area. Fruit green (few reddish) when mature. Good eating, but wormy.

The following were donated by Bruce J. Parlman, USDA, ARS, Natl. Germplasm Resources Laboratory, Building 465, BARC-East, Beltsville, Maryland 20705-2350, United States; Hortus Botanicus Fominianus Universitatis Kioviensis, Universitatis Kioviensis, Rue De Komintern, Kiev, Kiev 252032, Ukraine. Received 07/11/1986.

**PI 594102. *Malus prunifolia* (Willd.) Borkh.**  
Uncertain. GMAL 1890.

The following were donated by T. Sanada, Fruit Tree Research Station, Fourth Lab. of Fruit Breeding, Yatabe, Tsukuba, Ibaraki, Japan. Received 03/30/1987.

**PI 594103. *Malus prunifolia* (Willd.) Borkh.**  
Uncertain. GMAL 2175; Inuringo.

The following were donated by V. Vitkovskij, N.I. Vavilov All-Union Scientific, Institute of Plant Industry, 44 Herzen Str., Leningrad, Russian Federation. Received 05/01/1987.

**PI 594104. *Malus sieversii* var. *turkmenorum* (Juz. & Popov) Ponomar.**  
Uncertain. GMAL 2251.

The following were collected by Norman F. Weeden, Cornell University, New York State Agric. Exp. Station, Department of Horticultural Sciences, Geneva, New York 14456-0462, United States. Received 11/01/1988.

**PI 594105. *Malus fusca* (Raf.) C. Schneider**  
Wild. GMAL 3089. Collected 11/20/1988 in Washington, United States. In groves in swampy ground on both sides of road. Trees large, ca. 200cm. dbh. Fruit reddish, elongated.

The following were donated by Zhen Long Yan, Beijing Botanical Garden, Institute of Botany, Academia Sinica, Beijing, China. Received 10/02/1989.

**PI 594106. *Malus pumila* Miller**  
Uncertain. GMAL 3223.

**PI 594107. *Malus asiatica* Nakai**  
Uncertain. GMAL 3226.

The following were donated by A.I. Campbell, Long Ashton Research Station, Long Ashton, Bristol, England B518 9AF, United Kingdom. Received 03/31/1987.

**PI 594108. *Malus domestica* Borkh.**  
Uncertain. GMAL 2223; Medaille d'Or.

The following were developed by The Morton Arboretum, Lisle, Illinois 60532, United States. Donated by Jeff Crosby, Purdue University, Dept. of Botany & Plant Pathology, Lilly Hall of Life Sciences, West Lafayette, Indiana 47909, United States. Received 09/18/1987.

**PI 594109. *Malus prunifolia* (Willd.) Borkh.**  
Uncertain. GMAL 2457; Microcarpa. Pedigree - Formerly identified by Morton Arboretum as 782-26. Fruit size 0.6". Resistant to Venturia

inaequalis.

The following were donated by Jeff Crosby, Purdue University, Dept. of Botany & Plant Pathology, Lilly Hall of Life Sciences, West Lafayette, Indiana 47909, United States. Received 09/18/1987.

**PI 594110. *Malus baccata* (L.) Borkh.**

Uncertain. GMAL 2460; Jackii. Pedigree - Dg-R27T1 and 2 resembles the specific description given by Rehder in 1940. Introd. in 1905 by J.G. Jack. Fruit size 0.4". Resistant to *Venturia inaequalis*. Flower single, white, 35 mm dia. Fruit glossy, bright red, one of most attractive, long stems. Tree vigorous, upright habit.

The following were developed by Purdue University, Indiana Agr. Exp. Station, West Lafayette, Indiana 47907, United States. Donated by Rutgers Fruit Research Center, Cream Ridge, New Jersey 08514, United States. Received 08/29/1988.

**PI 594111. *Malus domestica* Borkh.**

Uncertain. GMAL 2875; Redfree. Fruit medium size, glossy with 90% bright red color. Smooth waxy, russet-free skin. Light flesh crisp and juicy, excellent flavor. Tree bears annually. Immune to scab and cedar-apple rust. Moderately resistant to fire blight and mildew. Ripens five days before Paulared, six weeks before Red Delicious. Uneven ripening, may require two pickings.

The following were collected by T.R. Dudley, U.S. National Arboretum, USDA, ARS, 3501 New York Avenue, N.E., Washington, District of Columbia 20002, United States. Donated by Rob Nicholson, The Arnold Arboretum of Harvard Univ., The Arborway, Jamaica Plain, Massachusetts 02130, United States. Received 03/22/1989.

**PI 594112. *Malus halliana* Koehne**

Wild. GMAL 3143. Collected 1980 in China. Latitude 32 deg. N. Longitude 110 deg. E. Shennongia Forest District, northwestern part of Hubei Province, bounded on the west by Sichuan Province and on the south by the confluence of the Juichong and Dangyang Rivers. Complex topography of steep mountainous terrain with rich and varied flora (including relict families, genera and species).

The following were donated by Zhen Long Yan, Beijing Botanical Garden, Institute of Botany, Academia Sinica, Beijing, China. Received 10/02/1989.

**PI 594113. *Malus honanensis* Rehder**

Uncertain. GMAL 3238.

The following were collected by A. Guerrero. Donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States. Received 01/03/1995.

**PI 594114. *Capsicum annuum* L.**

Landrace. 10370; BG3278. Collected in Zacatecas, Mexico. Mulato type.

The following were collected by Salvador Montes. Donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States. Received 01/03/1995.

**PI 594115. *Capsicum annuum* L.**

Landrace. 10424; BG3535. Collected in Mexico.

The following were collected by Javier Salinas, C.P.A.E. Bajio, Km. 6 Carreterra Celaya Sn. Miguel de Allende, A.P.D.O. Postal No. 112, Celaya, Guanajuato, Mexico. Donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States. Received 01/03/1995.

**PI 594116. *Capsicum annuum* L.**

Cultivar. 10446; Ancho la California. Collected in Mexico. Ancho type.

The following were collected by L. Perez. Donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States. Received 01/03/1995.

**PI 594117. *Capsicum annuum* L.**

Landrace. 10416; BG3467. Collected in Veracruz, Mexico.  
Jalapeno/candelaria type.

The following were donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States. Received 01/03/1995.

**PI 594118. *Capsicum annuum* L.**

Cultivar. 10156; Djuljunska Shipka.

**PI 594119. *Capsicum annuum* L.**

Uncertain. 10205; BG39. Collected in Mexico.

The following were collected by Jose Laborde, Guanajuato 117, Celaya, Guanajuato GTO 38040, Mexico. Donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States. Received 01/03/1995.

**PI 594120. *Capsicum annuum* L.**

Landrace. 10208; BG116. Collected in Mexico.

**PI 594121. *Capsicum annuum* L.**

Landrace. 10245; BG1515. Collected in Mexico.

**PI 594122. *Capsicum annuum* L.**

Landrace. 10268; BG1649. Collected in Nayarit, Mexico.

**PI 594123. *Capsicum annuum* L.**

Landrace. 10273; BG1668. Collected in Mexico. Verticillium wilt susceptible.

**PI 594124. *Capsicum annuum* L.**

Landrace. 10276; BG1671. Collected in Mexico. De arbol type.

**PI 594125. *Capsicum annuum* L.**

Wild. 10295; BG1813. Collected in Tamaulipas, Mexico. Chiltepin type.

**PI 594126. *Capsicum annuum* L.**

Uncertain. 10270; BG1817. Collected in Tamaulipas, Mexico. Piquin type.

The following were collected by V. Zamudio. Donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States. Received 01/03/1995.

**PI 594127. *Capsicum annuum* L.**

Landrace. 10315; BG2604. Collected in Puebla, Mexico.

The following were collected by Jose Laborde, Guanajuato 117, Celaya, Guanajuato GTO 38040, Mexico. Donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States. Received 01/03/1995.

**PI 594128. *Capsicum annuum* L.**

Landrace. 10318; BG2724. Collected in Nayarit, Mexico.

**PI 594129. *Capsicum annuum* L.**

Landrace. 10322; BG2729. Collected in Nayarit, Mexico.

**PI 594130. *Capsicum annuum* L.**

Landrace. 10331; BG2764. Collected in Nayarit, Mexico.

**PI 594131. *Capsicum annuum* L.**

Uncertain. 10335; BG2794. Collected in Nayarit, Mexico.

**PI 594132. *Capsicum annuum* L.**

Uncertain. 10380; BG3302. Collected in Michoacan, Mexico.

**PI 594133. *Capsicum annuum* L.**

Wild. 10390; BG3323. Collected in Mexico. Chiltepin type.

The following were collected by M.M. Gonzalez, Sector Publico Agro. Y De Alimentacion, Inst. De Ciencia Y Tecnologia Agricolas, Avenida Reforma 8-60, Zona 9 Edificio, Guatemala. Donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States. Received 01/03/1995.

**PI 594134. *Capsicum annuum* L.**

Wild. 10757; 994. Collected in Guatemala. Chiltepin type.

The following were collected by T. W. Box, College of Natural Resources, Utah State Univeristy, Logan, Utah, United States. Donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States. Received 01/03/1995.

**PI 594135. *Capsicum annuum* L.**

Wild. 10983. Collected in Texas, United States. Chiltepin type.

The following were donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States. Received 01/03/1995.

**PI 594136. *Capsicum baccatum* L.**

Wild. 20013; V11-256-1. Collected in Hungary.

The following were collected by Vavilov Research Institute, Far Eastern Experiment Station, Vavilov Road, House #9, Vladivostok, Russian Federation. Donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States. Received 01/03/1995.

**PI 594137. *Capsicum baccatum* L.**

Landrace. 20024; Aji Blanco. Collected in Russian Federation.

**PI 594138. *Capsicum baccatum* L.**

Landrace. 20025; Aji Blanco. Collected in Russian Federation.

The following were collected by J. Gerlach. Donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States. Received 01/03/1995.

**PI 594139. *Capsicum chinense* Jacq.**

Landrace. 30034; Red Habanero. Collected in Belize. Habanero type.

The following were collected by P.G. Smith, University of California, Department of Vegetable Crops, Davis, California 95616, United States. Donated by Paul W. Bosland, New Mexico State University, Department of Agronomy & Horticulture, Box 30003 - Dept. 3Q, Las Cruces, New Mexico 88003, United States. Received 01/03/1995.

**PI 594140. *Capsicum frutescens* L.**

Wild. 40007; SA 308. Collected in Bolivia.

**PI 594141. *Capsicum eximium* Hunz.**

Wild. 90002; SA 272. Collected in Bolivia.

Unknown source. Received 05/01/1996.



**PI 594142. Glycine max** (L.) Merr.

Cultivated. Pureline. "T331H"; A95-1779-4; SY 9601001. Developed in United States.

The following were donated by T.E. Carter, USDA, ARS, North Carolina State University, 3127 Ligon Street Box 7631, Raleigh, North Carolina 27695-7631, United States; S. Miyazaki, Natl. Inst. of Agrobiological Resources, Kannondai, Tsukuba, Ibaraki, Japan. Received 05/01/1996.

**PI 594143. Glycine max** (L.) Merr.

Cultivated. Pureline. 33076; NIAR 00033076; Aki Sengoku; SY 9602001.

**PI 594144. Glycine max** (L.) Merr.

Cultivated. Pureline. 33205; NIAR 00033205; Akishirome; SY 9602002.

**PI 594145. Glycine max** (L.) Merr.

Cultivated. Pureline. 33095; NIAR 00033095; Akiyoshi; SY 9602003.

**PI 594146. Glycine max** (L.) Merr.

Cultivated. Pureline. 30955; NIAR 00030955; Ani; SY 9602004.

**PI 594147. Glycine max** (L.) Merr.

Cultivated. Pureline. 33099; NIAR 00033099; Aso Aogari; SY 9602005.

**PI 594148. Glycine max** (L.) Merr.

Cultivated. Pureline. 33069; NIAR 00033069; Aso Masari; SY 9602006.

**PI 594149. Glycine max** (L.) Merr.

Cultivated. Pureline. 33172; NIAR 00033172; Aso Musume; SY 9602007.

**PI 594150. Glycine max** (L.) Merr.

Cultivated. Pureline. 31522; NIAR 00031522; Aze Minori; SY 9602008.

**PI 594151. Glycine max** (L.) Merr.

Cultivated. Pureline. 31753; NIAR 00031753; Bon Minori; SY 9602009.

**PI 594152. Glycine max** (L.) Merr.

Cultivated. Pureline. 32766; NIAR 00032766; Cha Sengoku 81; SY 9602010.

**PI 594153. Glycine max** (L.) Merr.

Cultivated. Pureline. 33171; NIAR 00033171; Chizuka Ibaraki 1\*; SY 9602011.

**PI 594154. Glycine max** (L.) Merr.

Cultivated. Pureline. 30669; NIAR 00030669; Chougetsu; SY 9602012.

**PI 594155. Glycine max** (L.) Merr.

Cultivated. Pureline. 31482; NIAR 00031482; Choutan; SY 9602013.

**PI 594156. Glycine max** (L.) Merr.

Cultivated. Pureline. 30540; NIAR 00030540; Chusei Hadaka; SY 9602014.

**PI 594157. Glycine max** (L.) Merr.

Cultivated. Pureline. 32675; NIAR 00032675; Chuu Teppou; SY 9602015.

- PI 594158. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 54756; NIAR 00054756; Chuusei Hikarikoru; SY 9602016.
- PI 594159. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 30949; NIAR 00030949; Daruma Masari; SY 9602017.
- PI 594160. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 31360; NIAR 00031360; Dewa Musume; SY 9602018.
- PI 594161. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 32237; NIAR 00032237; Enrei; SY 9602019.
- PI 594162. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 33018; NIAR 00033018; Fuji Musume; SY 9602020.
- PI 594163. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 32542; NIAR 00032542; Fuji Otome; SY 9602021.
- PI 594164. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 32235; NIAR 00032235; Fujimijiro; SY 9602022.
- PI 594165. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 32540; NIAR 00032540; Fukumejiro; SY 9602023.
- PI 594166. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 30628; NIAR 00030628; Fukunagaha; SY 9602024.
- PI 594167. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 31361; NIAR 00031361; Fukushirome (Touhoku 41); SY 9602025.
- PI 594168. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 33204; NIAR 00033204; Fukuyutaka; SY 9602026.
- PI 594169. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 31463; NIAR 00031463; Fusanari; SY 9602027.
- PI 594170. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 30957; NIAR 00030957; Geden Shirazu; SY 9602028.
- PI 594171. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 30958; NIAR 00030958; Geden Shirazu 1; SY 9602029.
- PI 594172. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 33154; NIAR 00033154; Gogaku; SY 9602030.
- PI 594173. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 32078; NIAR 00032078; Hanayome Ibaraki 1; SY 9602031.
- PI 594174. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 31196; NIAR 00031196; Hato Goroshi 12; SY 9602032.

- PI 594175. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 30952; NIAR 00030952; Hatsukari; SY 9602033.
- PI 594176. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 32983; NIAR 00032983; Higo Musume; SY 9602034.
- PI 594177. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 74536; NIAR 00074536; Himeshirazu; SY 9602035.
- PI 594178. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 30636; NIAR 00030636; Himeyutaka; SY 9602036.
- PI 594179. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 30486; NIAR 00030486; Hokkai Hadaka; SY 9602037.
- PI 594180. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 30484; NIAR 00030484; Hon Iku 65; SY 9602038.
- PI 594181. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 33073; NIAR 00033073; Hougyoku; SY 9602039.
- PI 594182. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 32131; NIAR 00032131; Houjaku; SY 9602040.
- PI 594183. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 30499; NIAR 00030499; Hourai; SY 9602041.
- PI 594184. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 74159; NIAR 00074159; Hourei; SY 9602042.
- PI 594185. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 33173; NIAR 00033173; Hyuuga; SY 9602043.
- PI 594186. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 30992; NIAR 00030992; Iwate 1\*; SY 9602044.
- PI 594187. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 31239; NIAR 00031239; Iwate 2; SY 9602045.
- PI 594188. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 30990; NIAR 00030990; Iwate Yagi 1; SY 9602046.
- PI 594189. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 32868; NIAR 00032868; Iyo Daizu; SY 9602047.
- PI 594190. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 30511; NIAR 00030511; Karafuto 1; SY 9602048.
- PI 594191. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 31533; NIAR 00031533; Kariha Takiya; SY 9602049.
- PI 594192. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 30478; NIAR 00030478; Karikachi; SY 9602050.
- PI 594193. *Glycine max* (L.) Merr.

- Cultivated. Pureline. 31329; NIAR 00031329; Karumai; SY 9602051.
- PI 594194. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. 31763; NIAR 00031763; Kimusume Ibaraki 1; SY 9602052.
- PI 594195. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. 30703; NIAR 00030703; Kingen; SY 9602053.
- PI 594196. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. Kinshu (Spec.); SY 9602054.
- PI 594197. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. 30554; NIAR 00030554; Kitahomare; SY 9602055.
- PI 594198. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. 30637; NIAR 00030637; Kitakomachi; SY 9602056.
- PI 594199. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. 30482; NIAR 00030482; Kitami Nagaha; SY 9602057.
- PI 594200. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. 30497; NIAR 00030497; Kitami Shiro; SY 9602058.
- PI 594201. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. 30530; NIAR 00030530; Kitamusume; SY 9602059.
- PI 594202. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. 31234; NIAR 00031234; Kizukuri Zairai; SY 9602060.
- PI 594203. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. 33016; NIAR 00033016; Kogane Daizu; SY 9602061.
- PI 594204. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. 30513; NIAR 00030513; Kogane Jiro; SY 9602062.
- PI 594205. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. 31766; NIAR 00031766; Kokeshi Jiro; SY 9602063.
- PI 594206. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. 33673; NIAR 00033673; Kokuiku 44; SY 9602064.
- PI 594207. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. 30627; NIAR 00030627; Komamusume; SY 9602065.
- PI 594208. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. 74956; NIAR 00074956; Kosuzu; SY 9602066.
- PI 594209. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. 31458; NIAR 00031458; Kou 103\*; SY 9602067.
- PI 594210. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. 30657; NIAR 00030657; Koushurei 235; SY 9602068.
- PI 594211. *Glycine max* (L.) Merr.**

Cultivated. Pureline. 30737; NIAR 00030737; Kuma; SY 9602069.

PI 594212. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 32346; NIAR 00032346; Kuro Daizu; SY 9602070.

PI 594213. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 33127; NIAR 00033127; Kuro Sengoku; SY 9602071.

PI 594214. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 33565; NIAR 00033565; Mansoukin; SY 9602072.

PI 594215. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 32977; NIAR 00032977; Matsuura; SY 9602073.

PI 594216. *Glycine max* (L.) Merr.  
Cultivated. Pureline. Mikawashima (Spec.); SY 9602074.

PI 594217. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 30449; NIAR 00030449; Misao; SY 9602075.

PI 594218. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 32231; NIAR 00032231; Misuzu Daizu; SY 9602076.

PI 594219. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 32673; NIAR 00032673; Miyagi Oojiro; SY 9602077.

PI 594220. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 31029; NIAR 00031029; Miyagi Shirome; SY 9602078.

PI 594221. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 31762; NIAR 00031762; Miyashiro\*; SY 9602079.

PI 594222. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 30979; NIAR 00030979; Mutsu Mejiro; SY 9602080.

PI 594223. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 30981; NIAR 00030981; Mutsu Shiratama; SY 9602081.

PI 594224. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 30485; NIAR 00030485; Nagaha Jiro; SY 9602082.

PI 594225. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 32048; NIAR 00032048; Nagano 1; SY 9602083.

PI 594226. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 32649; NIAR 00032649; Nakasennari; SY 9602084.

PI 594227. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 31357; NIAR 00031357; Nanbu Shirome; SY 9602085.

PI 594228. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 31208; NIAR 00031208; Nangun Takedate; SY 9602086.

PI 594229. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 32232; NIAR 00032232; Nasu Shirome; SY 9602087.

- PI 594230. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 32623; NIAR 00032623; Nattou Kotsubu; SY 9602088.
- PI 594231. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 30818; NIAR 00030818; Nema Shirazu; SY 9602089.
- PI 594232. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 31461; NIAR 00031461; Nezumi Saya; SY 9602090.
- PI 594233. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 32278; NIAR 00032278; Nourin 1\*; SY 9602091.
- PI 594234. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 32020; NIAR 00032020; Nourin 2; SY 9602092.
- PI 594235. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 32020; NIAR 00032020; Nourin 2&; SY 9602093.
- PI 594236. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 32279; NIAR 00032279; Nourin 3\*; SY 9602094.
- PI 594237. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 30947; NIAR 00030947; Nourin 4; SY 9602095.
- PI 594238. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 30947; NIAR 00030947; Nourin 4&; SY 9602096.
- PI 594239. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 30948; NIAR 00030948; Nourin 5\*; SY 9602097.
- PI 594240. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 32184; NIAR 00032184; Ogura Daizu; SY 9602098.
- PI 594241. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 33041; NIAR 00033041; Oka Daizu; SY 9602099.
- PI 594242. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 31754; NIAR 00031754; Oku Mejiro; SY 9602100.
- PI 594243. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 31212; NIAR 00031212; Oku Shirome; SY 9602101.
- PI 594244. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 30515; NIAR 00030515; Okuhara 1+; SY 9602102.
- PI 594245. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 30515; NIAR 00030515; Okuhara 1-B; SY 9602103.
- PI 594246. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 31771; NIAR 00031771; Oni Hadaka Sai 1; SY 9602104.
- PI 594247. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 30936; NIAR 00030936; Oodate 1 (Take 16)\*; SY 9602105.

- PI 594248. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 33044; NIAR 00033044; Ooita Aki Daizu 2; SY 9602106.
- PI 594249. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 31058; NIAR 00031058; Oojiro 1; SY 9602107.
- PI 594250. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 76831; NIAR 00076831; Ootsuru; SY 9602108.
- PI 594251. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 30517; NIAR 00030517; Ooyachi 2; SY 9602109.
- PI 594252. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 33153; NIAR 00033153; Orihime; SY 9602110.
- PI 594253. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 30492; NIAR 00030492; Oshima Shirome; SY 9602111.
- PI 594254. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 33564; NIAR 00033564; Ouhoushu; SY 9602112.
- PI 594255. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 30926; NIAR 00030926; Ouu 13; SY 9602113.
- PI 594256. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 30819; NIAR 00030819; Raiden; SY 9602114.
- PI 594257. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 31149; NIAR 00031149; Raikou; SY 9602115.
- PI 594258. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 30917; NIAR 00030917; Rikuu 27; SY 9602116.
- PI 594259. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 31503; NIAR 00031503; Sado Mame; SY 9602117.
- PI 594260. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 33017; NIAR 00033017; Sayohime; SY 9602118.
- PI 594261. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 31342; NIAR 00031342; Shika 4; SY 9602119.
- PI 594262. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 31451; NIAR 00031451; Shin 1; SY 9602120.
- PI 594263. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 31452; NIAR 00031452; Shin 3; SY 9602121.
- PI 594264. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 31750; NIAR 00031750; Shin Mejiro; SY 9602122.
- PI 594265. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 30643; NIAR 00030643; Shinroku; SY 9602123.

- PI 594266. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 32943; NIAR 00032943; Shiro Daizu 3; SY 9602124.
- PI 594267. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 32299; NIAR 00032299; Shiro Hachikoku 2; SY 9602125.
- PI 594268. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 31220; NIAR 00031220; Shiro Higo; SY 9602126.
- PI 594269. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 32543; NIAR 00032543; Shiro Sennari; SY 9602127.
- PI 594270. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 30489; NIAR 00030489; Shiro Tsuru No Ko; SY 9602128.
- PI 594271. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 31172; NIAR 00031172; Shirobana 1; SY 9602129.
- PI 594272. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 31138; NIAR 00031138; Shiroge 9; SY 9602130.
- PI 594273. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 31768; NIAR 00031768; Shirohana Sai 1; SY 9602131.
- PI 594274. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 32236; NIAR 00032236; Shiromeyutaka; SY 9602132.
- PI 594275. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 30465; NIAR 00030465; Shirosaya; SY 9602133.
- PI 594276. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 33031; NIAR 00033031; Shirosaya 1; SY 9602134.
- PI 594277. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 30693; NIAR 00030693; Shirosota; SY 9602135.
- PI 594278. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 32234; NIAR 00032234; Shirotae; SY 9602136.
- PI 594279. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 30479; NIAR 00030479; Shisei; SY 9602137.
- PI 594280. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 32250; NIAR 00032250; Shoufuku; SY 9602138.
- PI 594281. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 32389; NIAR 00032389; Souga Zairai; SY 9602139.
- PI 594282. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 30638; NIAR 00030638; Suzuhime; SY 9602140.
- PI 594283. *Glycine max* (L.) Merr.



Cultivated. Pureline. 74953; NIAR 00074953; Suzukari; SY 9602141.

**PI 594284. *Glycine max* (L.) Merr.**

Cultivated. Pureline. 74285; NIAR 00074285; Suzumaru; SY 9602142.

**PI 594285. *Glycine max* (L.) Merr.**

Cultivated. Pureline. 74952; NIAR 00074952; Suzuyutaka; SY 9602143.

**PI 594286. *Glycine max* (L.) Merr.**

Cultivated. Pureline. 74955; NIAR 00074955; Tachikogane; SY 9602144.

**PI 594287. *Glycine max* (L.) Merr.**

Cultivated. Pureline. 74158; NIAR 00074158; Tachinagaha; SY 9602145.

**PI 594288. *Glycine max* (L.) Merr.**

Cultivated. Pureline. 31752; NIAR 00031752; Tachi Suzunari; SY 9602146.

**PI 594289. *Glycine max* (L.) Merr.**

Cultivated. Pureline. 74954; NIAR 00074954; Tachiyutaka; SY 9602147.

**PI 594290. *Glycine max* (L.) Merr.**

Cultivated. Pureline. 31554; NIAR 00031554; Takiya; SY 9602148.

**PI 594291. *Glycine max* (L.) Merr.**

Cultivated. Pureline. 32233; NIAR 00032233; Tamahikari; SY 9602149.

**PI 594292. *Glycine max* (L.) Merr.**

Cultivated. Pureline. 32650; NIAR 00032650; Tamahomare; SY 9602150.

**PI 594293. *Glycine max* (L.) Merr.**

Cultivated. Pureline. 31749; NIAR 00031749; Tamamusume; SY 9602151.

**PI 594294. *Glycine max* (L.) Merr.**

Cultivated. Pureline. 30999; NIAR 00030999; Tamatsukuri; SY 9602152.

**PI 594295. *Glycine max* (L.) Merr.**

Cultivated. Pureline. 32674; NIAR 00032674; Tanrei; SY 9602153.

**PI 594296. *Glycine max* (L.) Merr.**

Cultivated. Pureline. 30638; NIAR 00030638; Tokachi Kuro; SY 9602154.

**PI 594297. *Glycine max* (L.) Merr.**

Cultivated. Pureline. 30516; NIAR 00030516; Tokachi Nagaha; SY 9602155.

**PI 594298. *Glycine max* (L.) Merr.**

Cultivated. Pureline. 30480; NIAR 00030480; Tokachi Shiro; SY 9602156.

**PI 594299. *Glycine max* (L.) Merr.**

Cultivated. Pureline. 30532; NIAR 00030532; Toshi Dai 7910; SY 9602157.

**PI 594300. *Glycine max* (L.) Merr.**

Cultivated. Pureline. 58916; NIAR 00058916; Toyokomachi; SY 9602158.

**PI 594301. *Glycine max* (L.) Merr.**

Cultivated. Pureline. 30641; NIAR 00030641; Toyomusume; SY 9602159.

- PI 594302. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 33217; NIAR 00033217; Toyoshirome; SY 9602160.
- PI 594303. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 30640; NIAR 00030640; Toyosuzu; SY 9602161.
- PI 594304. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 74264; NIAR 00074264; Tsurukogane; SY 9602162.
- PI 594305. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 31815; NIAR 00031815; Tsurumame; SY 9602163.
- PI 594306. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 30490; NIAR 00030490; Tsurunoko; SY 9602164.
- PI 594307. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 34535; NIAR 00034535; Tsurusengoku; SY 9602165.
- PI 594308. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 30950; NIAR 00030950; Ugo Daizu; SY 9602166.
- PI 594309. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 32005; NIAR 00032005; Wase Hadaka; SY 9602167.
- PI 594310. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 30498; NIAR 00030498; Wase Kogane; SY 9602168.
- PI 594311. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 31472; NIAR 00031472; Wase Oiran; SY 9602169.
- PI 594312. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 30951; NIAR 00030951; Wase Shiroke; SY 9602170.
- PI 594313. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 30982; NIAR 00030982; Wase Shirome; SY 9602171.
- PI 594314. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 74957; NIAR 00074957; Wase Suzunari; SY 9602172.
- PI 594315. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 30989; NIAR 00030989; Yama Shiratama; SY 9602173.
- PI 594316. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 31318; NIAR 00031318; Yore; SY 9602174.
- PI 594317. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 30840; NIAR 00030840; Yougetsu; SY 9602175.
- PI 594318. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 30839; NIAR 00030839; Yougetsu 1; SY 9602176.
- PI 594319. *Glycine max* (L.) Merr.  
Cultivated. Pureline. 30629; NIAR 00030629; Yuuhime; SY 9602177.

**PI 594320. *Glycine max* (L.) Merr.**

Cultivated. Pureline. 30630; NIAR 00030630; Yuuzuru; SY 9602178.

The following were developed by Harry C. Minor, University of Missouri-Columbia, Department of Agronomy, 214 Waters Hall, Columbia, Missouri 65211, United States; William Stegmeier, Fort Hays Experiment Station, 1232 240th Avenue, Hays, Kansas 67601, United States; Charlie L. Rife, Kansas State University, Department of Agronomy, 2004 Throckmorton Plant Science Center, Manhattan, Kansas 66506-5501, United States; Dick L. Auld, Texas Tech University, Department of Plant and Soil Sciences, P.O. Box 4122, Lubbock, Texas 79409-2122, United States; David D. Baltensperger, University of Nebraska, Panhandle Res. & Ext. Center, 4502 Avenue I, Scottsbluff, Nebraska 69361-4939, United States; Duane L. Johnson, Colorado State University, Dept. of Agronomy, Fort Collins, Colorado 80523, United States; W.F. Heer, Kansas State University, Kansas Agric. Exp. Station, Dept. of Agronomy, Manhattan, Kansas, United States; H.D. Sunderman, Northwest Res.-Ext. Center, Kansas State Univ., Hutchinson, Kansas 67501, United States; J.P. Salgado, Kansas State University, Dept. of Agronomy, Manhattan, Kansas 66506, United States. Received 04/19/1996.

**PI 594321. *Brassica napus* L.**

Breeding. Pureline. KS3579. GP-5. Pedigree - WRER12 / Jet Neuf. Winter rapeseed with significantly improved winter survival for conditions of the Great Plains. During the 1993-94 growing season, averaged 88% winter survival compared with 30% for Ceres. During 1994-95, averaged 90% winter survival compared with 81% for Ceres. Tested throughout the Great Plains and has either been the best surviving line or has not been significantly different. Seed has low erucic acid and high glucosinolate contents. Average 10cm shorter, 6 days earlier to 50% bloom date, 85% of the yield, and 1% less oil content compared with Ceres.

The following were developed by Jim Myers, University of Idaho, Research & Extension Center, 3793 North, 3600 East, Kimberly, Idaho 83341, United States; M.W. Lancaster, University of Idaho, Kimberly Res. and Ext. Ctr., 3793 North 3600 East, Kimberly, Idaho 83341, United States; K. Stewart-Williams, University of Idaho, Kimberly Res. and Ext. Ctr., 3793 North 3600 East, Kimberly, Idaho 83341, United States; J.J. Kolar, University of Idaho, Kimberly Res. and Ext. Ctr., 3793 North 3600 East, Kimberly, Idaho 83341, United States; R.E. Hayes, University of Idaho, Kimberly Res. and Ext. Ctr., 3793 North 3600 East, Kimberly, Idaho 83341, United States. Received 04/18/1996.

**PI 594322. *Phaseolus vulgaris* L.**

Cultivar. Pureline. "UI 228"; KO-228. CV-135. Pedigree - AR8-5/D-80. Growth habit type IIIA, 43cm average plant height. Semi-erect plant keeps pods mostly off ground. Seed large, dark red, 30gm 100 seed-1. Excellent processing quality. Resistance to BCMV is bc-ubc-ubc-12bc-12. Resistant to Beet Curly Top Virus, but susceptible to rust. Moderately susceptible to air pollution (ozone). 88 days to maturity where check (NW63) matures in 92 d. Flowers white and green pods that develop light rose blush with maturity.

**PI 594323. *Phaseolus vulgaris* L.**

Cultivar. Pureline. "UI 239"; 52039. CV-137. Pedigree - NW63/2/UI36/Viva . Growth habit type IIIA, 37cm average plant height. Seed size 29.2gm 100 seed-1. Good processing quality. Resistance to BCMV is bc-ubc-ubc-12bc-12. Resistant to Beet Curly Top Virus. Susceptible to rust, common blight and air pollution (ozone). 90 days to maturity where check (NW63) matures in 92 d. Flowers white and pods green that develop light rose blush with maturity.

**PI 594324. Phaseolus vulgaris L.**

Cultivar. Pureline. "UI 911"; 83B11. CV-136. Pedigree - Midnight/07055. Growth habit type II, 36cm average plant height with 40cm vine. Seed size 18.8gm 100 seed-1. I gene resistance to BCMV. Moderately resistant to Beet Curly Top Virus. Resistant to midwest rust strains, escapes white mold infection and is moderately susceptible to common blight. Also moderately resistant to Northwest root rot complex. 93 days to maturity where check Midnight matures in 100 d. Flowers, stems, and pods purple at maturity.

The following were developed by Jim Beaver, University of Puerto Rico, Mayaguez Camp, Department of Agronomy & Soils, P. O. Box 5000, Mayaguez, Puerto Rico; James R. Steadman, University of Nebraska, Department of Plant Pathology, 406 Plant Science Hall, Lincoln, Nebraska 68583, United States; Matt Silbernagel, USDA, ARS, Vegetable Crop Production, IAREC, P.O. Box 30, Prosser, Washington 99350, United States; G.F. Freytag, USDA-ARS, National Seed Storage Laboratory, 1111 South Mason Street, Fort Collins, Colorado 80521-4500, United States; Phil Miklas, USDA, ARS, Irrigated Agric. Research & Extension Ctr., 24106 North Bunn Road, Prosser, Washington 99350, United States. Received 04/24/1996.

**PI 594325. Phaseolus vulgaris L.**

Breeding. Pureline. TARS-VR-1s. GP-173. Pedigree - BAT338//IVT 7233/IVT 7214/3/TARS-253A/4/L-227-1. Bean common mosaic virus (BCMV) resistant navy bean. Combines dominant and recessive bc-3 resistance genes to BCMV with high yield potential, semi-upright, short-vine to long-vine growth habits (Types 2a and 2b), and resistance to bean rust (*Uromyces appendiculatus*). Yield potential, plant architecture (growth habit), seed quality, and rust resistance superior to the moderate yield potential, prostrate Type III growth habit, elongated and flattened kidney-shaped seed, and rust susceptibility of the white-seeded dry bean lines TARS-IM-1 and TARM-IM-2 released in 1986 with the same bc-3-protected I gene resistance to BCMV.

**PI 594326. Phaseolus vulgaris L.**

Breeding. Pureline. TARS-VR-7s. GP-174. Pedigree - BAT338//IVT 7233/IVT 7214/3/TARS-144B/4/L-227-1. Bean common mosaic virus (BCMV) resistant navy bean. Combines dominant and recessive bc-3 resistance genes to BCMV with high yield potential, semi-upright, short-vine to long-vine growth habits (Types 2a and 2b), and resistance to bean rust (*Uromyces appendiculatus*). Yield potential, plant architecture (growth habit), seed quality, and rust resistance superior to the moderate yield potential, prostrate Type III growth habit, elongated and flattened kidney-shaped seed, and rust susceptibility of the white-seeded dry bean lines TARS-IM-1 and TARM-IM-2 released in 1986 with the same bc-3-protected I gene resistance to BCMV.

**PI 594327. *Phaseolus vulgaris* L.**

Breeding. Pureline. TARS-VR-8s. GP-175. Pedigree - BAT338//IVT 7233/IVT 7214/3/L-227-1/4/L-227-1. Bean common mosaic virus (BCMV) resistant navy bean. Combines dominant and recessive bc-3 resistance genes to BCMV with high yield potential, semi-upright, short-vine to long-vine growth habits (Types 2a and 2b), and resistance to bean rust (*Uromyces appendiculatus*). Yield potential, plant architecture (growth habit), seed quality, and rust resistance superior to the moderate yield potential, prostrate Type III growth habit, elongated and flattened kidney-shaped seed, and rust susceptibility of the white-seeded dry bean lines TARS-IM-1 and TARM-IM-2 released in 1986 with the same bc-3-protected I gene resistance to BCMV.

The following were developed by K. B. Singh, Int. Center For Agricultural Research in the Dry Areas, P.O. Box 5466, Aleppo, Syria; M. C. Saxena, Int. Center for Agricultural Research in the Dry Areas, P.O. Box 5466, Aleppo, Syria; R.S. Malhotra, Int. Center for Agricultural Research in the Dry Areas, P.O. Box 5466, Aleppo, Syria. Received 05/08/1996.

**PI 594328. *Cicer arietinum* L.**

Breeding. FLIP91-178C. GP-168. Pedigree - ILC136/FLIP84-18C//FLIP84-78C. Late flowering and maturity. Plant height 34 cm. Growth habit semi-erect. Compound leaves. 100 seed weight, 40 g. Seed color beige, shape rams-head, surface owl, seed protein content 18.5%. Resistant to fusarium wilt (*Fusarium oxysporum* f.sp. *ciceri*), ascochyta blight (*Ascochyta rabiei*), and tolerant to cold. Susceptible to leaf miner (*Liriomyza cicerina*), bruchids (*Callosobruchus chinensis*), and cyst nematode (*Heterodera ciceri*). Resistant to iron deficiency and pod dehiscence.

**PI 594329. *Cicer arietinum* L.**

Breeding. FLIP93-53C. GP-169. Pedigree - UC27/FLIP84-78C. Early flowering and maturity. Plant height > 50 cm. Growth habit, semi-erect. Compound leaves. 100 seed weight, 33 g. Seed color beige, shape rams-head, surface owl, seed protein content 19.6%. Resistant to fusarium wilt (*Fusarium oxysporum* f.sp. *ciceri*), ascochyta blight (*Ascochyta rabiei*), and tolerant to cold. Susceptible to leaf miner (*Liriomyza cicerina*), bruchids (*Callosobruchus chinensis*), and cyst nematode (*Heterodera ciceri*). Resistant to iron deficiency and pod dehiscence.

**PI 594330. *Cicer arietinum* L.**

Breeding. FLIP93-98C. GP-170. Pedigree - UC27/FLIP84-78C. Early flowering and maturity. Plant height > 50 cm. Growth habit semi-erect. Compound leaves. 100 seed weight, 36 g. Seed color beige, shape rams-head, surface owl, seed protein content 19.8%. Resistant to fusarium wilt (*Fusarium oxysporum* f.sp. *ciceri*), ascochyta blight (*Ascochyta rabiei*), and tolerant to cold. Susceptible to leaf miner (*Liriomyza cicerina*), bruchids (*Callosobruchus chinensis*), and cyst nematode (*Heterodera ciceri*). Resistant to iron deficiency and pod dehiscence.

The following were developed by K. B. Singh, Int. Center For Agricultural Research in the Dry Areas, P.O. Box 5466, Aleppo, Syria; M. C. Saxena, Int. Center for Agricultural Research in the Dry Areas, P.O. Box 5466, Aleppo, Syria; S. Weigand, Int. Center for Agricultural Research in the Dry Areas, Germplasm Program, P.O. Box 5466, Aleppo, Syria. Received 05/08/1996.

**PI 594331. *Cicer echinospermum* P. Davis**

Breeding. Population. ILWC 39. GP-171. Collected in Turkey. 20km east of Siverek, Diyarbakir. Pedigree - Wild collected accession from Turkey. Flowering and maturity late. Plant height 4.5cm. Growth habit prostrate. Compound leaves with pink flowers. 100-seed weight 11.4g. Seed color dark brown, shape angular with spiny seed coat. Seed protein content 19.1%. Resistant to fusarium wilt (*Fusarium oxysporum*), leaf miner (*Liriomyza cicerina*), and bruchids (*Callosobruchus chinensis*). Susceptible to ascochyta blight (*Ascochyta rabiei*) and cyst nematode (*Heterodera ciceri*). Tolerant to cold. Susceptible to pod dehiscence.

**PI 594332. *Cicer echinospermum* P. Davis**

Breeding. Pureline. ILWC 181. GP-172. Collected in Turkey. South-east near Diyarbakir. Pedigree - Wild collected accession from Turkey. Flowering and maturity late. Plant height 6.5cm. Growth habit prostrate. Compound leaves with pink flowers. 100-seed weight 12.8g. Seed color dark brown, shape angular with spiny seed coat. Seed protein content 19%. Resistant to fusarium wilt (*Fusarium oxysporum*) and bruchids (*Callosobruchus chinensis*). Susceptible to ascochyta blight (*Ascochyta rabiei*), leaf miner (*Liriomyza cicerina*) and cyst nematode (*Heterodera ciceri*). Tolerant to cold. Susceptible to pod dehiscence.

The following were developed by New York State Agricultural Experiment Station, New York, United States. Donated by Bruce I. Reisch, Cornell University, New York State Agric. Exp. Station, Department of Horticultural Sciences, Geneva, New York 14456-0462, United States. Received 03/1985.

**PI 594333. *Vitis* hybrid**

Uncertain. GVIT 27; Suffolk Red. Pedigree - Fredonia / Russian Seedless 136 (Black Monukka) Crossed in 1935. Selected in 1941. Cluster medium-large, long cylindrical, loose to scraggly when no ringing or gibberellin treatment applied. Berry size medium, round, skin bright red, attractive. Flesh melting, meaty, sweet, quality very good. Seedless, ripens early, before Delaware. Vine not sufficiently hardy for colder areas.

The following were developed by Francois Baco. Donated by Bruce I. Reisch, Cornell University, New York State Agric. Exp. Station, Department of Horticultural Sciences, Geneva, New York 14456-0462, United States. Received 03/1985.

**PI 594334. *Vitis* hybrid**

Uncertain. GVIT 41; Baco No. 1. Collected in France. Cross made in 1902 by Francois Baco. Seedling no. 23-24 Named Baco no. 1 in 1910. Pedigree - Folle Blanche (*V. vinifera*) / *V. riparia*. Crossed in 1902. Introduced to the United States in 1951. Fruit cluster very small, cylindrical, compact. Berry small round, skin jet black, flesh soft. Ripens early.

Vine rampant, canes long. Leaves resemble *V. riparia*. Very good resistance to downy mildew, somewhat susceptible to powdery mildew. Buds out and blossoms very early. Must be pruned long to be productive. Growth cycle short. Best adapted to region of short growing season. Useful for arbortype plantings. Wine highly colored, heavy, bitter, requires long age to improve.

The following were donated by Bruce I. Reisch, Cornell University, New York State Agric. Exp. Station, Department of Horticultural Sciences, Geneva, New York 14456-0462, United States. Received 03/1985.

**PI 594335. *Vitis* hybrid**

Uncertain. GVIT 79; Teleki 5C. Pedigree - *V. berlandieri* / *V. riparia*. Female. Hungarian rootstock.

**PI 594336. *Vitis* hybrid**

Uncertain. GVIT 357; Seibel 29. Collected in France.

**PI 594337. *Vitis* hybrid**

Uncertain. GVIT 470; Einset Seedless.

**PI 594338. *Vitis* sp.**

Uncertain. GVIT 661; Dog Ridge.

**PI 594339. *Vitis* hybrid**

Uncertain. GVIT 860; Viognier.

The following were donated by USDA, ARS, University of California, National Germplasm Repository, Davis, California 95616, United States. Received 04/25/1988.

**PI 594340. *Vitis* hybrid**

Uncertain. GVIT 1068; Seibel 14664. Collected in France.

**PI 594341. *Vitis* hybrid**

Uncertain. GVIT 1069; Seibel 4986. Collected in France.

The following were donated by Bruce I. Reisch, Cornell University, New York State Agric. Exp. Station, Department of Horticultural Sciences, Geneva, New York 14456-0462, United States. Received 02/01/1989.

**PI 594342. *Vitis* hybrid**

Uncertain. GVIT 1216; Early Red. Collected in China.

**PI 594343. *Vitis* hybrid**

Uncertain. GVIT 1217; Red Banana. Collected in China.

The following were donated by Charles Putensen, 1906 350th Street, Spencer, Iowa 51301-7456, United States. Received 11/28/1989.

**PI 594344. *Vitis riparia* Michaux**

Uncertain. GVIT 1324; Zumbrunnen.

The following were donated by R. Eibach, Bundesforschungsanstalt fur Rebenzuchtun, 6741 Siebeldingen uber Landau/Pfalz, Geilweilerhof, Germany. Received 03/27/1990.

**PI 594345. Vitis hybrid**

Uncertain. GVIT 1379; Stepnyak.

**PI 594346. Vitis hybrid**

Uncertain. GVIT 1380; Karmrajat.

The following were donated by Herb C. Barrett, USDA, ARS, US Horticultural Research Laboratory, 2120 Camden Road, Orlando, Florida 32803, United States. Received 01/10/1992.

**PI 594347. Vitis hybrid**

Uncertain. GVIT 1442; Russian Seedless.

The following were donated by David Cain, Sun World, 16350 Driver Road, P.O. Box 80298, Bakersfield, California 93380-0298, United States. Received 01/16/1992.

**PI 594348. Vitis sp.**

Uncertain. GVIT 1467; C-166-043. Collected in China.

Unknown source. Received 02/02/1994.

**PI 594349. Vitis hybrid**

Uncertain. GVIT 1541.

The following were donated by Clay Weeks, USDA, ARS, National Germplasm Repository, University of California, Davis, California 95616, United States. Received 03/13/1995.

**PI 594350. Prunus cerasus L.**

Uncertain. DPRU 23; GPRU 59.

**PI 594351. Prunus cerasus L.**

Uncertain. DPRU 29; GPRU 60.

The following were developed by Genecorp, Inc., United States. Received 05/08/1996.

**PI 594352. Glycine max (L.) Merr.**

Cultivar. "HT551STS". PVP 9600219.

**PI 594353. Glycine max (L.) Merr.**

Cultivar. "FFR439". PVP 9600220.



The following were developed by Pioneer Hi-Bred International, Inc., United States. Received 05/08/1996.

**PI 594354. *Sorghum bicolor* (L.) Moench**  
Cultivar. "PHWIABQE". PVP 9600221.

**PI 594355. *Sorghum bicolor* (L.) Moench**  
Cultivar. "PHBICGQF". PVP 9600222.

The following were developed by Pure-Seed Testing, Inc., P.O. Box 449, Hubbard, Oregon 97032, United States. Received 05/08/1996.

**PI 594356. *Dactylis glomerata* L.**  
Cultivar. "PST-850". PVP 9600223.

The following were developed by Cebeco Zaden B.V., Netherlands. Received 05/08/1996.

**PI 594357. *Pisum sativum* L.**  
Cultivar. "ASTINA". PVP 9600224.

**PI 594358. *Pisum sativum* L.**  
Cultivar. "DELTA". PVP 9600225.

**PI 594359. *Pisum sativum* L.**  
Cultivar. "SWING". PVP 9600226.

**PI 594360. *Pisum sativum* L.**  
Cultivar. "ESPACE". PVP 9600227.

The following were developed by Lofts Seed, Inc., United States. Received 05/08/1996.

**PI 594361. *Poa pratensis* L.**  
Cultivar. "PRINCETON P-105". PVP 9600228.

The following were developed by Ferry-Morse Seed Company, United States. Received 05/08/1996.

**PI 594362. *Phaseolus vulgaris* L.**  
Cultivar. "RHAPSODY". PVP 9600229.

**PI 594363. *Phaseolus vulgaris* L.**  
Cultivar. "VALD'OR". PVP 9600230.

The following were developed by Svalof Weibull AB, Sweden. Received 05/08/1996.

**PI 594364. *Pisum sativum* L.**  
Cultivar. "CARNEVAL". PVP 9600231.

**PI 594365. *Pisum sativum* L.**  
Cultivar. "GRANDE". PVP 9600232.

**PI 594366. *Pisum sativum* L.**  
Cultivar. "HIGHLIGHT". PVP 9600233.

**PI 594367. *Pisum sativum* L.**  
Cultivar. "MAJORET". PVP 9600234.

The following were developed by USDA, NRCS, Big Flats Plant Materials Center, Box 360, RD #1, Rt. 352, Corning, New York 14830-0360, United States. Donated by Paul Salon, USDA, NRCS, Big Flats Plant Materials Center, Box 360A, Corning, New York 14830, United States. Received 05/15/1996.

**PI 594368. *Cephalanthus occidentalis* L.**  
Breeding. 9051750. Pedigree - Composite of seed collected from native stands. 9026820 Crawford Co., PA; 9026824 Mason Co., WV; 9028215 Wayne Co., NY; 9028620 Crawford Co., PA; and 9028621 Crawford Co., PA. For use in wetland situations, tolerant of periodic flooding. To be used on impoundment sites subject to fluctuating water levels, for food and cover for wildlife. Adapted to fine and coarse soils. Very tolerant of flooding. Area of adaptation New Brunswick to Florida, west to southern Minnesota, Arizona, and central California.

**PI 594369. *Cephalanthus occidentalis* L.**  
Breeding. 9051765. Pedigree - Self pollination of accession 9028621 collected from native stand in Crawford Co., PA. For use in wetland situations, tolerant of periodic flooding. To be used on impoundment sites subject to fluctuating water levels, for food and cover for wildlife. Adapted to fine and coarse soils. Very tolerant to flooding. Area of adaptation New Brunswick to Florida, west to southern Minnesota, Arizona, and central California.

**PI 594370. *Populus hybrid***  
Cultivated. "SPIKE"; 9051487. Pedigree - *Populus deltoides* x *P. nigra*. (*P. deltoides* parent originated from seed grown from a U.S. Provenance trial grown in Belgium #S4-231, the origin is unknown. The *P. nigra* parent is from Wagenigen, Holland). Leaves delto rhomboid, apex finely acuminate, base straight or broadly cuneate on the long shoot of mature trees, upper surface yellowish-green, leaf margin coarsely serrate. Trunk long, straight, and cylindrical, crown relatively narrow and open with ascending slender branches. For use as windbreak and screens for farmstead. For biomass and fuel wood production. Adapted to sandy loam soils, and clay loam. Area of adaptation New Hampshire, to northern Florida, central Texas and West to Kansas.

**PI 594371. *Castanea pumila* (L.) Miller**  
Cultivated. 9051770. Pedigree - Synthetic of accessions 9002902 collected in Floyd Co., VA, 9002905 and 9002906 collected in Mercer Co., WV, and 2102068 collected in Bland Co., VA. For use as wildlife food and cover, and component of mitigation plantings for wildlife on a variety

of disturbed sites. Adapted to sandy loam or clay soils. Area of adaptation Georgia to Texas and north to New Jersey, Pennsylvania, Ohio, Indiana, Illinois, Missouri and most of Arkansas.

The following were developed by Robert E. Allan, USDA-ARS, Dept. of Crop & Soil Science, 209 Johnson Hall, Pullman, Washington 99164, United States. Received 05/15/1996.

**PI 594372. *Triticum aestivum* L., nom. cons.**

Breeding. Pureline. WA 7752; ARS 969; NSGC 6132. Pedigree - Tres/Madsen//Tres. Soft white winter wheat (club type). Semidwarf with awned compact spikes, midseason maturity, white straw and chaff. Kernels white, soft, short to mid-long, humped, germ small. Moderate resistance to strawbreaker foot rot, leaf rust, powdery mildew, and partial tolerance to Cephalosporium stripe. Contains HMW glutenin subunits of null (Glu 1A), 6 (Glu 1B), and 2+12 (Glu 1D). Club wheat milling, flour and baking quality rates satisfactory to excellent.

The following were developed by Seed Research of Oregon Inc.. Received 05/08/1996.

**PI 594373. *Festuca ovina* var. *glauca* (Lam.) Koch**  
Cultivar. "SR 3200". PVP 9500302.

The following were donated by Phil Lindgren, Seed Research of Oregon, Inc., P.O. Box 1416, Corvallis, Oregon 97333, United States. Received 02/14/1996.

**PI 594374. *Agrostis canina* L.**  
Cultivar. "SR 7200"; W6 17689. PVP 9500303.

The following were developed by John Bodger & Sons Company, United States. Received 05/08/1996.

**PI 594375. *Catharanthus roseus* (L.) G. Don**  
Cultivar. "HEAT WAVE GRAPE". PVP 9600235.

**PI 594376. *Catharanthus roseus* (L.) G. Don**  
Cultivar. "HEAT WAVE ORCHID". PVP 9600236.

**PI 594377. *Catharanthus roseus* (L.) G. Don**  
Cultivar. "HEAT WAVE PEPPERMINT". PVP 9600237.

**PI 594378. *Catharanthus roseus* (L.) G. Don**  
Cultivar. "HEAT WAVE PINK". PVP 9600238.

The following were developed by Campbell Soup Company, United States. Received 05/08/1996.

**PI 594379. *Capsicum annuum* L.**  
Cultivar. "V 10443". PVP 9600239. Jalapeno.

The following were developed by Gordon Patterson, Hershey Foods, Technical Center, P.O. Box 805, Hershey, Pennsylvania 17033-0805, United States; James Sutton, Mycogen Corp., United States. Received 05/08/1996.

**PI 594380. *Arachis hypogaea* L.**

Cultivar. "FLAVOR RUNNER 458". PVP 9600242.

The following were developed by Asgrow Seed Company, United States. Received 05/08/1996.

**PI 594381. *Glycine max* (L.) Merr.**

Cultivar. "A2247". PVP 9600244.

**PI 594382. *Glycine max* (L.) Merr.**

Cultivar. "A2833". PVP 9600245.

**PI 594383. *Glycine max* (L.) Merr.**

Cultivar. "A3244". PVP 9600246.

**PI 594384. *Glycine max* (L.) Merr.**

Cultivar. "A3404". PVP 9600247.

**PI 594385. *Glycine max* (L.) Merr.**

Cultivar. "A3704". PVP 9600248.

**PI 594386. *Glycine max* (L.) Merr.**

Cultivar. "A5848". PVP 9600249.

**PI 594387. *Glycine max* (L.) Merr.**

Cultivar. "A5944". PVP 9600250.

The following were developed by Idaho Seed Bean Company, Inc., Idaho, United States. Received 05/08/1996.

**PI 594388. *Phaseolus vulgaris* L.**

Cultivar. "ASPEN". PVP 9600251.

The following were developed by Asgrow Seed Company, United States. Received 05/08/1996.

**PI 594389. *Phaseolus vulgaris* L.**

Cultivar. "CARLO". PVP 9600252.

**PI 594390. *Phaseolus vulgaris* L.**

Cultivar. "NICELO". PVP 9600253.

**PI 594391. *Phaseolus vulgaris* L.**

Cultivar. "ZODIAC". PVP 9600254.

The following were donated by Randall L. Nelson, USDA-ARS, 1101 West Peabody Drive, Room 180 EASB, Urbana, Illinois 61801, United States; Ruzhen Chang, Chinese Academy of Agricultural Sciences, Institute of Crop Germplasm Resources, Beijing, China. Received 05/10/1996.

**PI 594392. *Glycine max* (L.) Merr.**

Cultivated. Pureline. ZDD 11414; Wu he qi tou huang; SY 9605032.

**PI 594393. *Glycine max* (L.) Merr.**

Cultivated. Pureline. ZDD 11417; Shui niu pi; SY 9605033.

**PI 594394. *Glycine max* (L.) Merr.**

Cultivated. Pureline. ZDD 11425; 1012 Yuan huang; SY 9605034.

**PI 594395. *Glycine max* (L.) Merr.**

Cultivated. Pureline. ZDD 11458; Lu zhuang da hei dou; SY 9605035.

The following were developed by G.W. Pepin, Pickseed West, Inc., P.O. Box 888, Tangent, Oregon, United States; C.R. Funk, Hubbard Seed and Supply Company, P.O. Box 310, Hubbard, Oregon 97032, United States; R.E. Engel, Rutgers University, New Brunswick, New Jersey 08903, United States; W.K. Dickson, New Jersey Agr. Exp. Sta., Cook College, Rutgers University, Plant Science Department, New Brunswick, New Jersey 08903, United States. Donated by International Seeds Inc., P.O. Box 168, Halsey, Oregon 97348, United States. Received 1979.

**PI 594396. *Poa trivialis* L.**

Cultivar. "SABRE". CV-18; PVP 7700104. Pedigree - Derived from 10 clones selected from close-cut lawns, tennis courts and golf course putting greens from in northeastern U.S. Produces denser turf with slower rate of vertical growth and darker green color than other roughstalk bluegrass. Rapid germination, good seedling vigor, excellent winterhardiness, tolerance of cool shade and wet soil, ability to grow at low temperatures and the lack of heat and drought tolerance characteristic of the species.

The following were donated by Randall L. Nelson, USDA-ARS, 1101 West Peabody Drive, Room 180 EASB, Urbana, Illinois 61801, United States; Ruzhen Chang, Chinese Academy of Agricultural Sciences, Institute of Crop Germplasm Resources, Beijing, China. Received 05/10/1996.

**PI 594397. *Glycine max* (L.) Merr.**

Cultivated. Pureline. ZDD 20047; 87-74; SY 9605424.

**PI 594398. *Glycine max* (L.) Merr.**

Cultivated. Pureline. ZDD 20049; 87-32; SY 9605425.

**PI 594399. *Glycine max* (L.) Merr.**

Cultivated. Pureline. ZDD 20051; 85-23-9; SY 9605426.

**PI 594400. *Glycine max* (L.) Merr.**

Cultivated. Pureline. ZDD 20053; 87-10; SY 9605427.

- PI 594401. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 20056; 88-35; SY 9605428.
- PI 594402. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 20058; 87-72-1; SY 9605429.
- PI 594403. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 20060; 85-125-1; SY 9605430.
- PI 594404. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 20062; 85-57; SY 9605431.
- PI 594405. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 20064; 86-36; SY 9605432.
- PI 594406. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 20067; 25-1; SY 9605433.
- PI 594407. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 20069; 32-25; SY 9605434.
- PI 594408. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 20074; He yin yi hao; SY 9605435.
- PI 594409. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 20076; 86-8-39; SY 9605436.
- PI 594410. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 20078; Liu yue zha; SY 9605437.
- PI 594411. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 20080; Wan dou yuan; SY 9605438.
- PI 594412. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 20084; Shi dian huang dou; SY 9605439.
- PI 594413. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 20088; Ba yue bai; SY 9605440.
- PI 594414. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 20100; Xiao li dou; SY 9605441.
- PI 594415. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 20130; Jiu yue xiao dou; SY 9605442.
- PI 594416. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 20137; Tang chi xiao huang dou; SY 9605443.
- PI 594417. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 20148; Tou tuo da dou; SY 9605444.
- PI 594418. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 20150; Ye xi xiao li huang; SY 9605445.
- PI 594419. **Glycine max** (L.) Merr.

Cultivated. Pureline. ZDD 20160; Cha zhuang huang dou; SY 9605446.

**PI 594420. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 20166; Niu mao huang; SY 9605447.

**PI 594421. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 20177; Da du huang dou; SY 9605448.

**PI 594422. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 20185; Yang guang huang dou; SY 9605449.

**PI 594423. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 20193; Dong yuan dou; SY 9605450.

**PI 594424. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 20196; Ai jiao huang; SY 9605451.

**PI 594425. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 20201; Xiao cao huang dou; SY 9605452.

**PI 594426. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 20221; Tie jiao huang; SY 9605453.

**PI 594427. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 20228; Ba yue mang; SY 9605454.

**PI 594428. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 20243; Bai hua qing; SY 9605455.

**PI 594429. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 20246; Feng wo qing; SY 9605456.

**PI 594430. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 20284; Guang qian qing dou; SY 9605457.

**PI 594431. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 20289; Chang pu qing dou; SY 9605458.

**PI 594432. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 20299; Zheng nong wan qing dou; SY 9605459.

**PI 594433. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 20344; Hua yan quan dou; SY 9605460.

**PI 594434. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 12387; Xiao bai mao zao; SY 9605036.

**PI 594435. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 12400; Shi yue huang; SY 9605037.

**PI 594436. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 12423; Jiang se dou; SY 9605038.

**PI 594437. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 12846; Wan yuan ba yue dou; SY 9605039.

- PI 594438. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 12847; Tong jiang huang dou; SY 9605040.
- PI 594439. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 12856; Guang han liu yue huang; SY 9605041.
- PI 594440. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 12865; Chong qing qi yue huang; SY 9605042.
- PI 594441. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 12872; Qiong lai huang mao zi; SY 9605043.
- PI 594442. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 12887; Han yuan hong hua chi dou zi; SY 9605044.
- PI 594443. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 12893; Wan yuan tian kan dou; SY 9605045.
- PI 594444. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 12894; Shi fang ba jiao qi yue huang; SY 9605046.
- PI 594445. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 12902; Han yuan qian jin qing pi dou; SY 9605047.
- PI 594446. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 12903; Mei shan lu pi dou; SY 9605048.
- PI 594447. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 12906; Shi fang ba jiao cha dou; SY 9605049.
- PI 594448. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 12907; Guang han hei dou; SY 9605050.
- PI 594449. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 12917; Han yuan shuang xi you dou zi; SY 9605051.
- PI 594450. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 12921; Wen chuan qing pi dou; SY 9605052.
- PI 594451. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 12998; Liu yue bao; SY 9605484.
- PI 594452. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 13012; Huang dou; SY 9605485.
- PI 594453. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 13029; Liu yue huang; SY 9605486.
- PI 594454. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 13036; Da huang dou; SY 9605487.



- PI 594455. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 13047; Bao ji mu dou; SY 9605488.
- PI 594456. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 13055; Xiao jin huang; SY 9605489.
- PI 594457. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 13078; Liu yue zao; SY 9605490.
- PI 594458. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 13079; Huang ke zi; SY 9605491.
- PI 594459. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 13085; Zao dou zi; SY 9605492.
- PI 594460. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 13102; Liu yue huang; SY 9605493.
- PI 594461. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 13108; Da bai shui dou; SY 9605494.
- PI 594462. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 13110; He dong huang dou; SY 9605495.
- PI 594463. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 13120; Ba jiao qi yue huang; SY 9605496.
- PI 594464. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 13131; Chun huang dou -2; SY 9605497.
- PI 594465. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 13154; Zao ji mu rou dou; SY 9605498.
- PI 594466. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 13172; Hua qiao hei dou; SY 9605499.
- PI 594467. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 13194; Zi pi dou; SY 9605500.
- PI 594468. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 13422; Chi dou zi; SY 9605053.
- PI 594469. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 13462; Huang ke zi; SY 9605054.
- PI 594470. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 13487; Zao dou zi; SY 9605055.
- PI 594471. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 13526; Da bai dou; SY 9605056.
- PI 594472. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 13569; He shao xiao huang ke; SY 9605057.

- PI 594473. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 13570; Da huang ke; SY 9605058.
- PI 594474. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 13571; Huang ke dou; SY 9605059.
- PI 594475. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 13573; Ping chuan huang dou-3; SY 9605060.
- PI 594476. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 13582; Xiao bai mao zao; SY 9605061.
- PI 594477. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 13595; Qing pi dou; SY 9605062.
- PI 594478. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 13598; Zao huang dou -2; SY 9605063.
- PI 594479. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 13599; Lu lan zi -1; SY 9605064.
- PI 594480. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 13600; Lu dou; SY 9605065.
- PI 594481. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 13601; Zao huang dou -2; SY 9605066.
- PI 594482. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 13602; Qing pi dou -1; SY 9605067.
- PI 594483. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 13605; Qing pi dou; SY 9605068.
- PI 594484. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 13607; Lu lan zi -1; SY 9605069.
- PI 594485. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 13615; Lu dou; SY 9605070.
- PI 594486. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 13618; Lu lan zi -2; SY 9605071.
- PI 594487. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 13622; Lu huang dou; SY 9605072.
- PI 594488. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 13624; Qing pi dou; SY 9605073.
- PI 594489. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 13639; Xiao bai shui dou -1; SY 9605074.
- PI 594490. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 13644; Chuan xin lu; SY 9605075.
- PI 594491. *Glycine max* (L.) Merr.**

Cultivated. Pureline. ZDD 13645; Qing pi dou; SY 9605076.

**PI 594492. Glycine max** (L.) Merr.

Cultivated. Pureline. ZDD 13656; Qing pi dou; SY 9605077.

**PI 594493. Glycine max** (L.) Merr.

Cultivated. Pureline. ZDD 13661; Wa wu luowu; SY 9605078.

**PI 594494. Glycine max** (L.) Merr.

Cultivated. Pureline. ZDD 13668; Ping chuan lu dou; SY 9605079.

**PI 594495. Glycine max** (L.) Merr.

Cultivated. Pureline. ZDD 13669; He shao huang dou -2; SY 9605080.

**PI 594496. Glycine max** (L.) Merr.

Cultivated. Pureline. ZDD 13703; Xiao hei dou; SY 9605081.

**PI 594497. Glycine max** (L.) Merr.

Cultivated. Pureline. ZDD 13722; Za se huang dou -3; SY 9605082.

**PI 594498. Glycine max** (L.) Merr.

Cultivated. Pureline. ZDD 13724; Hei se zao dou zi; SY 9605083.

**PI 594499. Glycine max** (L.) Merr.

Cultivated. Pureline. ZDD 13727; Luo ma aluo; SY 9605084.

**PI 594500. Glycine max** (L.) Merr.

Cultivated. Pureline. ZDD 13737; Hei dou; SY 9605085.

**PI 594501. Glycine max** (L.) Merr.

Cultivated. Pureline. ZDD 13739; Hei dou zi; SY 9605086.

**PI 594502. Glycine max** (L.) Merr.

Cultivated. Pureline. ZDD 13741; Gao shan hei dou; SY 9605087.

**PI 594503. Glycine max** (L.) Merr.

Cultivated. Pureline. ZDD 13743; Mu gu hei chi huang dou; SY 9605088.

**PI 594504. Glycine max** (L.) Merr.

Cultivated. Pureline. ZDD 13750; Zong dou; SY 9605089.

**PI 594505. Glycine max** (L.) Merr.

Cultivated. Pureline. ZDD 13763; Niu mao huang dou-1; SY 9605090.

**PI 594506. Glycine max** (L.) Merr.

Cultivated. Pureline. ZDD 13777; Jiang se dou; SY 9605091.

**PI 594507. Glycine max** (L.) Merr.

Cultivated. Pureline. ZDD 13778; Jiang se dou; SY 9605092.

**PI 594508. Glycine max** (L.) Merr.

Cultivated. Pureline. ZDD 13784; Jiang se dou; SY 9605093.

**PI 594509. Glycine max** (L.) Merr.

Cultivated. Pureline. ZDD 13795; Zong se zao dou zi; SY 9605094.

- PI 594510. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 13796; Huang dou-2; SY 9605095.
- PI 594511. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 13813; Wei cheng he dou; SY 9605096.
- PI 594512. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 13815; Bian zi jiang se dou; SY 9605097.
- PI 594513. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 13823; Hua mei dou; SY 9605098.
- PI 594514. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 13824; Hua lian dou; SY 9605099.
- PI 594515. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 13825; Hua lian dou; SY 9605100.
- PI 594516. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 13826; Hua lian dou; SY 9605101.
- PI 594517. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 6385; San ming bai dou; SY 9605001.
- PI 594518. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 6387; Jiang le huang dou; SY 9605002.
- PI 594519. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 6396; Long yan huang dou; SY 9605003.
- PI 594520. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 6399; Jian yang da huang dou; SY 9605004.
- PI 594521. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 6402; Shao wu hong hua dou; SY 9605005.
- PI 594522. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 6405; Shun chang huang pi jia dou; SY 9605006.
- PI 594523. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 6409; Pu cheng ma dou; SY 9605007.
- PI 594524. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 6411; San ming ai jiao qing; SY 9605008.
- PI 594525. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 6415; Jiang le da qing dou; SY 9605009.
- PI 594526. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 6416; Jian ning qing dou; SY 9605010.
- PI 594527. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 6428; Chang ting wu chang qing dou; SY 9605011.

- PI 594528. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 6430; Long yan ai jiao dou; SY 9605012.
- PI 594529. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 6431; Long yan yi gong bao; SY 9605013.
- PI 594530. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 6432; Long yan qing pi bai hua dou; SY 9605014.
- PI 594531. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 6433; Pu tian lu xie; SY 9605015.
- PI 594532. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 6435; Shun chang qing pi dou; SY 9605016.
- PI 594533. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 6436; Zheng he qing dou; SY 9605017.
- PI 594534. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 6445; Zhang ping chi ren wu; SY 9605018.
- PI 594535. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 6447; Zhou ning lao shu mu; SY 9605019.
- PI 594536. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 14185; Sha xian huang pi xiao dou; SY 9605102.
- PI 594537. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 14186; Jian ning xiao huang dou; SY 9605103.
- PI 594538. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 14187; Min hou bai sha wan dou; SY 9605104.
- PI 594539. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 14189; Shun chang yi gong bao; SY 9605105.
- PI 594540. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 14190; Bai qiu 1 hao; SY 9605106.
- PI 594541. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 14191; Ming qiu 3 hao; SY 9605107.
- PI 594542. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 14196; Ming xi ai jiao hong hua dou; SY 9605108.
- PI 594543. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 14197; Sha xian cheng jiang lou qing; SY 9605109.
- PI 594544. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 14201; Bai sha qing pi dou; SY 9605110.
- PI 594545. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 14202; Xia pu da dou; SY 9605111.

- PI 594546. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 14211; Long jiang hei dou; SY 9605112.
- PI 594547. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 6463; Shang rao xiao huang zhu; SY 9605020.
- PI 594548. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 6480; Heng feng gui zi dou; SY 9605021.
- PI 594549. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 14273; Ba yue huang; SY 9605113.
- PI 594550. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 14277; Jiu yue huang; SY 9605114.
- PI 594551. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 14281; Bai mao dou; SY 9605115.
- PI 594552. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 14287; Ba yue bao tian dou; SY 9605116.
- PI 594553. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 14301; Xi dou zi; SY 9605117.
- PI 594554. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 14304; Huang pi tian dou; SY 9605118.
- PI 594555. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 14315; Chou yi wo; SY 9605119.
- PI 594556. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 14319; Su mao zuang; SY 9605120.
- PI 594557. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 14328; Lao shu dou; SY 9605121.
- PI 594558. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 14329; Ba yue huang; SY 9605122.
- PI 594559. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 14330; Da li huang dou; SY 9605123.
- PI 594560. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 14368; Xia shui huang; SY 9605124.
- PI 594561. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 14369; Xia shui huang; SY 9605125.
- PI 594562. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 14370; Qing pi dou; SY 9605126.
- PI 594563. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 14386; Ai jiao tian dou; SY 9605127.

- PI 594564. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 14410; Du gu dou; SY 9605128.
- PI 594565. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 14411; Gao gan tian dou; SY 9605129.
- PI 594566. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 14423; Ji an huang dou; SY 9605130.
- PI 594567. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 14425; Sui dao huang; SY 9605131.
- PI 594568. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 14426; Ba yue huang; SY 9605132.
- PI 594569. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 14427; Shi cheng da huang dou; SY 9605133.
- PI 594570. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 14428; Xiao huang dou; SY 9605134.
- PI 594571. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 14432; Wu ju dou; SY 9605135.
- PI 594572. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 14433; Luo han dou; SY 9605136.
- PI 594573. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 14435; Lu pi dou; SY 9605137.
- PI 594574. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 14447; Qing pi tian dou; SY 9605138.
- PI 594575. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 14454; Qi du qing pi dou; SY 9605139.
- PI 594576. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 14476; Cha dou; SY 9605140.
- PI 594577. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 14605; Yue yang huang dou; SY 9605141.
- PI 594578. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 14609; Li xian bai huang dou; SY 9605142.
- PI 594579. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 14610; Zhong he tian cheng dou; SY 9605143.
- PI 594580. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 14611; Chang de xiao huang dou; SY 9605144.
- PI 594581. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 14613; Jiang ba liu yue huang; SY 9605145.
- PI 594582. *Glycine max* (L.) Merr.

- Cultivated. Pureline. ZDD 14615; Shi men da bai li; SY 9605146.
- PI 594583. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 14616; Shi men xiao bai li; SY 9605147.
- PI 594584. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 14625; An hua yun yi zao; SY 9605148.
- PI 594585. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 14628; An hua chi huang dou (bing); SY 9605149.
- PI 594586. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 14631; Bao jing niu mao huang (jia); SY 9605150.
- PI 594587. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 14637; Yong shun da bai li; SY 9605151.
- PI 594588. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 14644; Long shan mao ping huang dou; SY 9605152.
- PI 594589. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 14648; Qian yang huang dou; SY 9605153.
- PI 594590. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 14657; Cheng bu jiu yue dou; SY 9605154.
- PI 594591. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 14662; Sui ning ba yue huang (jia); SY 9605155.
- PI 594592. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 14665; Shi yue xiao huang dou; SY 9605156.
- PI 594593. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 14666; Zhen shang huang dou; SY 9605157.
- PI 594594. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 14682; Da tong huang dou; SY 9605158.
- PI 594595. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 14684; Ba yue da huang dou (jia); SY 9605159.
- PI 594596. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 14705; Feng huang chi qing pi dou; SY 9605160.
- PI 594597. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 14718; Ning yuan ba yue huang; SY 9605161.
- PI 594598. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 14719; Shi yue qing dou; SY 9605162.
- PI 594599. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 14722; Chang de chun hei dou; SY 9605163.



- PI 594600. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 14723; Shi men hei huang dou; SY 9605164.
- PI 594601. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 14741; Tao jiang hong dou; SY 9605165.
- PI 594602. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 14742; Bao jing cha huang dou; SY 9605166.
- PI 594603. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 14745; Long shan cha huang dou; SY 9605167.
- PI 594604. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 6569; Niu mao dou; SY 9605461.
- PI 594605. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 6584; Qi yue dou; SY 9605462.
- PI 594606. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 6585; Feng ding dou; SY 9605463.
- PI 594607. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 6592; Huang ke dou; SY 9605464.
- PI 594608. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 6594; Bie huang dou; SY 9605465.
- PI 594609. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 6601; Ba yue huang; SY 9605466.
- PI 594610. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 6604; Bai dou; SY 9605467.
- PI 594611. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 6606; Xiao huang dou; SY 9605468.
- PI 594612. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 6612; Hei ke bai dou; SY 9605469.
- PI 594613. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 6617; Hua mu wan dou; SY 9605470.
- PI 594614. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 6621; Ba yue huang; SY 9605471.
- PI 594615. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 6627; Liu yue zao; SY 9605472.
- PI 594616. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 6637; Liu yue zao; SY 9605473.
- PI 594617. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 6646; Qi chuan dou; SY 9605474.
- PI 594618. *Glycine max* (L.) Merr.

- Cultivated. Pureline. ZDD 6651; Qi yue dou; SY 9605475.
- PI 594619. Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 6653; Sheng lian zao; SY 9605476.
- PI 594620. Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 6655; Da bai shui dou; SY 9605477.
- PI 594621. Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 6672; Da lu dou; SY 9605478.
- PI 594622. Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 6687; Da hei dou; SY 9605479.
- PI 594623. Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 6693; Da hei dou; SY 9605480.
- PI 594624. Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 6720; Zong zi dou; SY 9605481.
- PI 594625. Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 6731; Leng sha dou; SY 9605482.
- PI 594626. Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 15701; Liu yue huang -1; SY 9605168.
- PI 594627. Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 15792; Xia kou bai shui dou -1; SY 9605169.
- PI 594628. Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 15797; Lu pi dou -1; SY 9605170.
- PI 594629. Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 15801; Xiao hua lian; SY 9605171.
- PI 594630. Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 15839; Xiao huang pi dou; SY 9605172.
- PI 594631. Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 15855; Xiao li dou; SY 9605173.
- PI 594632. Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 15861; Yan he huang dou; SY 9605174.
- PI 594633. Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 15862; Yan he huang dou -1; SY 9605175.
- PI 594634. Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 15872; Qing huang za dou -5; SY 9605176.
- PI 594635. Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 15873; Qing huang za dou -6; SY 9605177.
- PI 594636. Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 15874; Qing huang za dou -12; SY 9605178.

- PI 594637. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 15886; Huang ke dou -8; SY 9605179.
- PI 594638. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 15891; Huang ke dou -13; SY 9605180.
- PI 594639. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 15911; Mi mi dou -6; SY 9605181.
- PI 594640. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 15914; Mi mi dou -9; SY 9605182.
- PI 594641. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 15915; Mi mi dou -10; SY 9605183.
- PI 594642. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 15920; Mi mi dou -15; SY 9605184.
- PI 594643. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 15926; Ba yue huang -4; SY 9605185.
- PI 594644. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 15937; Qi yue dou; SY 9605186.
- PI 594645. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 15955; Liu yue zao dou -2; SY 9605187.
- PI 594646. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 15959; Wu zui zao dou -1; SY 9605188.
- PI 594647. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 15961; Wu zui zao dou -3; SY 9605189.
- PI 594648. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 15964; Wu zui zao dou -6; SY 9605190.
- PI 594649. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 15969; Wu zui zao dou -11; SY 9605191.
- PI 594650. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 15970; Wu zui zao dou -12; SY 9605192.
- PI 594651. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 15972; Wu zui zao dou -14; SY 9605193.
- PI 594652. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 15979; Xi huang zao dou -2; SY 9605194.
- PI 594653. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 15991; Mi dou -2; SY 9605195.
- PI 594654. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 15993; Liu yue dou; SY 9605196.

- PI 594655. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 15995; Liu yue dou -2; SY 9605197.
- PI 594656. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 16000; Liu yue dou -2; SY 9605198.
- PI 594657. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 16001; Liu yue dou -3; SY 9605199.
- PI 594658. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 16002; Liu yue ba; SY 9605200.
- PI 594659. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 16003; Liu yue ba -1; SY 9605201.
- PI 594660. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 16005; Liu yue dou -1; SY 9605202.
- PI 594661. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 16007; Liu yue dou -3; SY 9605203.
- PI 594662. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 16010; Liu yue dou -6; SY 9605204.
- PI 594663. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 16013; Bai shui dou -2; SY 9605205.
- PI 594664. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 16016; E shui zao -2; SY 9605206.
- PI 594665. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 16033; Liu yue mang -3; SY 9605207.
- PI 594666. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 16035; Liu yue mang -5; SY 9605208.
- PI 594667. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 16046; Jiang kou huang dou -4; SY 9605209.
- PI 594668. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 16048; Huang dou zi; SY 9605210.
- PI 594669. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 16052; Liu yue mang; SY 9605211.
- PI 594670. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 16055; Huang dou -2; SY 9605212.
- PI 594671. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 16064; Liu yue mang -2; SY 9605213.
- PI 594672. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 16065; Liu yue mang -3; SY 9605214.
- PI 594673. *Glycine max* (L.) Merr.

Cultivated. Pureline. ZDD 16071; Jiang kou qing pi dou -8; SY 9605215.

**PI 594674. Glycine max (L.) Merr.**

Cultivated. Pureline. ZDD 16073; Qing pi dou; SY 9605216.

**PI 594675. Glycine max (L.) Merr.**

Cultivated. Pureline. ZDD 16075; Huang dou -1; SY 9605217.

**PI 594676. Glycine max (L.) Merr.**

Cultivated. Pureline. ZDD 16078; Huang dou -4; SY 9605218.

**PI 594677. Glycine max (L.) Merr.**

Cultivated. Pureline. ZDD 16081; Huang dou -7; SY 9605219.

**PI 594678. Glycine max (L.) Merr.**

Cultivated. Pureline. ZDD 16092; Huang dou -1; SY 9605220.

**PI 594679. Glycine max (L.) Merr.**

Cultivated. Pureline. ZDD 16094; Huang dou -3; SY 9605221.

**PI 594680. Glycine max (L.) Merr.**

Cultivated. Pureline. ZDD 16110; Huang dou -2; SY 9605222.

**PI 594681. Glycine max (L.) Merr.**

Cultivated. Pureline. ZDD 16111; Huang dou; SY 9605223.

**PI 594682. Glycine max (L.) Merr.**

Cultivated. Pureline. ZDD 16129; Liu yue ba; SY 9605224.

**PI 594683. Glycine max (L.) Merr.**

Cultivated. Pureline. ZDD 16138; Liu yue ba -10; SY 9605225.

**PI 594684. Glycine max (L.) Merr.**

Cultivated. Pureline. ZDD 16139; Liu yue ba -11; SY 9605226.

**PI 594685. Glycine max (L.) Merr.**

Cultivated. Pureline. ZDD 16162; Zao huang dou -1; SY 9605227.

**PI 594686. Glycine max (L.) Merr.**

Cultivated. Pureline. ZDD 16182; Zao huang dou; SY 9605228.

**PI 594687. Glycine max (L.) Merr.**

Cultivated. Pureline. ZDD 16217; Liu yue dou; SY 9605229.

**PI 594688. Glycine max (L.) Merr.**

Cultivated. Pureline. ZDD 16272; Liu yue huang -1; SY 9605230.

**PI 594689. Glycine max (L.) Merr.**

Cultivated. Pureline. ZDD 16277; Za dou -1; SY 9605231.

**PI 594690. Glycine max (L.) Merr.**

Cultivated. Pureline. ZDD 16278; Za dou -2; SY 9605232.

**PI 594691. Glycine max (L.) Merr.**

Cultivated. Pureline. ZDD 16308; Niu mao dou -10; SY 9605233.

- PI 594692. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 16314; Zao dou zi -3; SY 9605234.
- PI 594693. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 16316; Zao dou zi -5; SY 9605235.
- PI 594694. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 16321; Bai shui dou -4; SY 9605236.
- PI 594695. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 16351; Niu mao dou -4; SY 9605237.
- PI 594696. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 16363; Hua mian dou; SY 9605238.
- PI 594697. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 16367; Xing shan bai shui dou; SY 9605239.
- PI 594698. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 16368; Huang dou -13; SY 9605240.
- PI 594699. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 16406; Huang dou -1; SY 9605241.
- PI 594700. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 16466; Qing huang za dou -7; SY 9605242.
- PI 594701. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 16468; Qing huang za dou -10; SY 9605243.
- PI 594702. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 16489; Liu yue bao -6; SY 9605244.
- PI 594703. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 16499; Qing pi dou -1; SY 9605245.
- PI 594704. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 16500; Qing pi dou -2; SY 9605246.
- PI 594705. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 16501; Qing pi dou -3; SY 9605247.
- PI 594706. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 16511; Qing pi dou; SY 9605248.
- PI 594707. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 16583; Da hei dou; SY 9605249.
- PI 594708. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 16592; Liu yue bao -8; SY 9605250.
- PI 594709. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 16598; Hei dou -2; SY 9605251.

- PI 594710. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 16625; Zong zi dou; SY 9605252.
- PI 594711. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 16642; Qing huang za dou -3; SY 9605253.
- PI 594712. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 16646; Liu yue dou -17; SY 9605254.
- PI 594713. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 16649; Huang dou -12; SY 9605255.
- PI 594714. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 6732; Ni ba dou; SY 9605483.
- PI 594715. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 6755; Da ke huang; SY 9605022.
- PI 594716. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 6760; Guang dou; SY 9605023.
- PI 594717. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 6763; Liu cheng shi yue huang; SY 9605024.
- PI 594718. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 6766; Si yue huang; SY 9605025.
- PI 594719. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 6773; Bai zhi dou; SY 9605026.
- PI 594720. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 6779; Dou gu; SY 9605027.
- PI 594721. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 6782; Bei shan ba yue dou; SY 9605028.
- PI 594722. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 6795; Qing si liang dou; SY 9605029.
- PI 594723. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 6802; He xian hei dou; SY 9605030.
- PI 594724. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 6808; Tian ji dou; SY 9605031.
- PI 594725. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17009; Quan zhou xiao huang dou; SY 9605256.
- PI 594726. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17011; Ban jin dou; SY 9605257.
- PI 594727. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17022; 77-27; SY 9605258.
- PI 594728. *Glycine max* (L.) Merr.

Cultivated. Pureline. ZDD 17023; 4469; SY 9605259.

**PI 594729. Glycine max** (L.) Merr.

Cultivated. Pureline. ZDD 17027; Ji wo dou; SY 9605260.

**PI 594730. Glycine max** (L.) Merr.

Cultivated. Pureline. ZDD 17029; Ba yue qing; SY 9605261.

**PI 594731. Glycine max** (L.) Merr.

Cultivated. Pureline. ZDD 17032; Shi yue huang; SY 9605262.

**PI 594732. Glycine max** (L.) Merr.

Cultivated. Pureline. ZDD 17035; Huan jiang gao gan huang dou; SY 9605263.

**PI 594733. Glycine max** (L.) Merr.

Cultivated. Pureline. ZDD 17040; Huan jiang bai jia huang dou; SY 9605264.

**PI 594734. Glycine max** (L.) Merr.

Cultivated. Pureline. ZDD 17057; Ba ma zhong huang dou; SY 9605265.

**PI 594735. Glycine max** (L.) Merr.

Cultivated. Pureline. ZDD 17060; Du an di su huang dou; SY 9605266.

**PI 594736. Glycine max** (L.) Merr.

Cultivated. Pureline. ZDD 17065; Gun long dou; SY 9605267.

**PI 594737. Glycine max** (L.) Merr.

Cultivated. Pureline. ZDD 17066; Zhong tuan huang dou; SY 9605268.

**PI 594738. Glycine max** (L.) Merr.

Cultivated. Pureline. ZDD 17075; Long lin long huo huang dou; SY 9605269.

**PI 594739. Glycine max** (L.) Merr.

Cultivated. Pureline. ZDD 17076; Jin zhong shan da huang dou; SY 9605270.

**PI 594740. Glycine max** (L.) Merr.

Cultivated. Pureline. ZDD 17078; Le ye lu hua dou; SY 9605271.

**PI 594741. Glycine max** (L.) Merr.

Cultivated. Pureline. ZDD 17091; Tian yang huang dou; SY 9605272.

**PI 594742. Glycine max** (L.) Merr.

Cultivated. Pureline. ZDD 17093; Hua huang dou; SY 9605273.

**PI 594743. Glycine max** (L.) Merr.

Cultivated. Pureline. ZDD 17095; Teng huang dou; SY 9605274.

**PI 594744. Glycine max** (L.) Merr.

Cultivated. Pureline. ZDD 17096; Na zhen huang huang dou; SY 9605275.

**PI 594745. Glycine max** (L.) Merr.

Cultivated. Pureline. ZDD 17104; Shi yue huang; SY 9605276.



- PI 594746. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17105; Da gao chan; SY 9605277.
- PI 594747. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17107; Shang lin zao shu feng wo dou; SY 9605278.
- PI 594748. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17109; Tian deng ben di zhong; SY 9605279.
- PI 594749. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17119; Fu sui ben di dou; SY 9605280.
- PI 594750. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17134; Long zhou ben di wan huang dou; SY 9605281.
- PI 594751. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17138; Long zhou dong feng dou; SY 9605282.
- PI 594752. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17143; Ning ming hai yuan ben di huan; SY 9605283.
- PI 594753. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17150; Hei qi da dou; SY 9605284.
- PI 594754. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17152; Ji wo dou; SY 9605285.
- PI 594755. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17167; Liu yue huang dou; SY 9605286.
- PI 594756. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17175; Bai peng qing pi dou; SY 9605287.
- PI 594757. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17176; Lin xi wan huang dou; SY 9605288.
- PI 594758. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17183; Xiao ke qing; SY 9605289.
- PI 594759. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17185; Miao huang ba yue qing; SY 9605290.
- PI 594760. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17189; Gou jiao huang dou; SY 9605291.
- PI 594761. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17190; Ding an qing pi dou; SY 9605292.
- PI 594762. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17192; Tian yang qing dou; SY 9605293.
- PI 594763. *Glycine max* (L.) Merr.

- Cultivated. Pureline. ZDD 17202; De bao qing; SY 9605294.
- PI 594764. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 17211; Bai se xuan 3-2; SY 9605295.
- PI 594765. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 17218; Hei huang dou; SY 9605296.
- PI 594766. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 17221; Tian hei dou; SY 9605297.
- PI 594767. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 17231; Zhao ping hei dou; SY 9605298.
- PI 594768. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 17245; Wu ming hei ke huang dou; SY 9605299.
- PI 594769. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 17246; Luo wei qing dou; SY 9605300.
- PI 594770. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 17249; Fu sui chang ping hei dou; SY 9605301.
- PI 594771. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 17266; Ning ming ai jiao hei dou; SY 9605302.
- PI 594772. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 17270; Pu bei tai wei da hei dou; SY 9605303.
- PI 594773. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 17278; Fu sui qu li dou; SY 9605304.
- PI 594774. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 17280; Bao gong dou; SY 9605305.
- PI 594775. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 17284; Xi huang dou; SY 9605306.
- PI 594776. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 17296; Bai ri dou; SY 9605307.
- PI 594777. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 17306; Liu yue huang; SY 9605308.
- PI 594778. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 17307; Zao dou zi; SY 9605309.
- PI 594779. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 17310; Zao bai dou; SY 9605310.
- PI 594780. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 17317; Zao bai dou; SY 9605311.
- PI 594781. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 17321; Er bai dou; SY 9605312.

- PI 594782. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17323; Xiao li dou; SY 9605313.
- PI 594783. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17326; Huang dou; SY 9605314.
- PI 594784. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17327; Xiao li huang dou; SY 9605315.
- PI 594785. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17330; Ben di huang dou; SY 9605316.
- PI 594786. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17331; Xiao huang dou; SY 9605317.
- PI 594787. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17333; Huang dou; SY 9605318.
- PI 594788. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17335; Da zao dou; SY 9605319.
- PI 594789. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17336; Za huang dou; SY 9605320.
- PI 594790. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17338; Hua lian dou; SY 9605321.
- PI 594791. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17341; Hua pi dou; SY 9605322.
- PI 594792. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17342; Xiao lu dou; SY 9605323.
- PI 594793. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17345; Da gun bai dou; SY 9605324.
- PI 594794. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17346; Xiao bai dou; SY 9605325.
- PI 594795. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17347; Yao ren bai dou; SY 9605326.
- PI 594796. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17359; Xi bai dou; SY 9605327.
- PI 594797. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17360; Da huang dou; SY 9605328.
- PI 594798. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17363; Huang dou; SY 9605329.
- PI 594799. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17364; Huang dou; SY 9605330.

- PI 594800. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 17365; Tuo liang huang dou; SY 9605331.
- PI 594801. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 17367; Er huang zao dou; SY 9605332.
- PI 594802. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 17368; Da huang zao dou; SY 9605333.
- PI 594803. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 17375; Huang dou; SY 9605334.
- PI 594804. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 17382; Xi bai dou; SY 9605335.
- PI 594805. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 17386; Huang pi dou; SY 9605336.
- PI 594806. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 17389; Gao jiao huang dou; SY 9605337.
- PI 594807. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 17392; Huang dou; SY 9605338.
- PI 594808. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 17395; Xiao bai mao dou; SY 9605339.
- PI 594809. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 17396; Bai mao dou; SY 9605340.
- PI 594810. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 17397; Xiao huang mao dou; SY 9605341.
- PI 594811. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 17399; Huang dou; SY 9605342.
- PI 594812. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 17400; Huang pi dou; SY 9605343.
- PI 594813. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 17401; Huang pi dou; SY 9605344.
- PI 594814. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 17403; Da huang dou; SY 9605345.
- PI 594815. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 17404; Xiao huang dou; SY 9605346.
- PI 594816. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 17405; Da huang dou; SY 9605347.
- PI 594817. **Glycine max** (L.) Merr.  
Cultivated. Pureline. ZDD 17411; Liu yue huang; SY 9605348.
- PI 594818. **Glycine max** (L.) Merr.

Cultivated. Pureline. ZDD 17412; Bai mao zi qi yue huang; SY 9605349.

PI 594819. *Glycine max* (L.) Merr.

Cultivated. Pureline. ZDD 17413; Qi yue huang; SY 9605350.

PI 594820. *Glycine max* (L.) Merr.

Cultivated. Pureline. ZDD 17414; Jiu yue huang; SY 9605351.

PI 594821. *Glycine max* (L.) Merr.

Cultivated. Pureline. ZDD 17416; Xi la dou; SY 9605352.

PI 594822. *Glycine max* (L.) Merr.

Cultivated. Pureline. ZDD 17418; Xi huang dou; SY 9605353.

PI 594823. *Glycine max* (L.) Merr.

Cultivated. Pureline. ZDD 17420; Bai huang dou; SY 9605354.

PI 594824. *Glycine max* (L.) Merr.

Cultivated. Pureline. ZDD 17425; Huang dou; SY 9605355.

PI 594825. *Glycine max* (L.) Merr.

Cultivated. Pureline. ZDD 17426; Huang dou; SY 9605356.

PI 594826. *Glycine max* (L.) Merr.

Cultivated. Pureline. ZDD 17428; Xiao bai dou; SY 9605357.

PI 594827. *Glycine max* (L.) Merr.

Cultivated. Pureline. ZDD 17430; Bai dou zi; SY 9605358.

PI 594828. *Glycine max* (L.) Merr.

Cultivated. Pureline. ZDD 17431; Lu huang dou; SY 9605359.

PI 594829. *Glycine max* (L.) Merr.

Cultivated. Pureline. ZDD 17437; Lu dou; SY 9605360.

PI 594830. *Glycine max* (L.) Merr.

Cultivated. Pureline. ZDD 17442; Lu huang dou; SY 9605361.

PI 594831. *Glycine max* (L.) Merr.

Cultivated. Pureline. ZDD 17445; Lu huang dou; SY 9605362.

PI 594832. *Glycine max* (L.) Merr.

Cultivated. Pureline. ZDD 17446; Lu dou; SY 9605363.

PI 594833. *Glycine max* (L.) Merr.

Cultivated. Pureline. ZDD 17447; Cai yuan dou; SY 9605364.

PI 594834. *Glycine max* (L.) Merr.

Cultivated. Pureline. ZDD 17450; Wu yue bai dou; SY 9605365.

PI 594835. *Glycine max* (L.) Merr.

Cultivated. Pureline. ZDD 17453; Da bai dou; SY 9605366.

PI 594836. *Glycine max* (L.) Merr.

Cultivated. Pureline. ZDD 17459; Lu huang dou; SY 9605367.

- PI 594837. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17460; Xi bai dou; SY 9605368.
- PI 594838. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17465; Xi lu dou; SY 9605369.
- PI 594839. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17467; Huang dou; SY 9605370.
- PI 594840. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17471; Xiao huang dou; SY 9605371.
- PI 594841. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17475; Xiao bai mao dou; SY 9605372.
- PI 594842. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17476; Qing pi huang dou; SY 9605373.
- PI 594843. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17485; Xiao lu dou; SY 9605374.
- PI 594844. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17489; Mian dian lu huang dou; SY 9605375.
- PI 594845. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17534; Xiao hei dou; SY 9605376.
- PI 594846. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17537; Hei dou; SY 9605377.
- PI 594847. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17541; Xiao hei dou; SY 9605378.
- PI 594848. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17543; Xiao hei dou; SY 9605379.
- PI 594849. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17544; Xiao hei dou; SY 9605380.
- PI 594850. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17547; Jiu yue huang; SY 9605381.
- PI 594851. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17549; Zao hei dou; SY 9605382.
- PI 594852. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17552; Chun duo luo zi se dou; SY 9605383.
- PI 594853. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17553; Song zi dou; SY 9605384.
- PI 594854. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17554; Song zi dou; SY 9605385.

- PI 594855. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17555; Song zi dou; SY 9605386.
- PI 594856. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17559; Cha huang dou; SY 9605387.
- PI 594857. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17560; Huang pi dou; SY 9605388.
- PI 594858. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17562; Huang pi dou zi; SY 9605389.
- PI 594859. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17565; Zao huang dou; SY 9605390.
- PI 594860. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17566; Da zong dou; SY 9605391.
- PI 594861. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17569; Da lu dou; SY 9605392.
- PI 594862. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17572; Cha huang dou; SY 9605393.
- PI 594863. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17573; Da zong pi dou; SY 9605394.
- PI 594864. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17575; Yang yan dou; SY 9605395.
- PI 594865. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17577; Er bai dou; SY 9605396.
- PI 594866. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17578; Zong se dou; SY 9605397.
- PI 594867. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17581; Lu huang dou; SY 9605398.
- PI 594868. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17582; Huang dou; SY 9605399.
- PI 594869. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17584; Huo shao dou; SY 9605400.
- PI 594870. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17586; Ben di huang dou; SY 9605401.
- PI 594871. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17592; Hou zi dou; SY 9605402.
- PI 594872. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17593; Bao shan da dou; SY 9605403.
- PI 594873. *Glycine max* (L.) Merr.

- Cultivated. Pureline. ZDD 17595; Hu pi huang dou; SY 9605404.
- PI 594874. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17596; Hu pi huang dou; SY 9605405.
- PI 594875. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17597; Hu pi dou; SY 9605406.
- PI 594876. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17601; Hu pi dou; SY 9605407.
- PI 594877. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17602; Fu pi dou; SY 9605408.
- PI 594878. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17603; Xiao hong dou; SY 9605409.
- PI 594879. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17607; Huo shao dou; SY 9605410.
- PI 594880. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17610; Song zi dou; SY 9605411.
- PI 594881. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17611; Yang yan dou; SY 9605412.
- PI 594882. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17613; Hei da dou; SY 9605413.
- PI 594883. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17615; De hong xuan 8; SY 9605414.
- PI 594884. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17619; He pi huang dou; SY 9605415.
- PI 594885. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17621; Song zi dou; SY 9605416.
- PI 594886. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17623; Zao huang dou; SY 9605417.
- PI 594887. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17627; Yang yan dou; SY 9605418.
- PI 594888. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17628; Lu dou; SY 9605419.
- PI 594889. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17629; Yang dou; SY 9605420.
- PI 594890. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17633; Wu yun dou; SY 9605421.
- PI 594891. *Glycine max* (L.) Merr.  
Cultivated. Pureline. ZDD 17634; Da dou; SY 9605422.



**PI 594892. Glycine max** (L.) Merr.

Cultivated. Pureline. ZDD 17635; Huang dou; SY 9605423.

Unknown source. Received 05/10/1996.

**PI 594893. Glycine max** (L.) Merr.

Cultivated. Pureline. "T285H"; A93-217; SY 9601002. Developed in United States.

Unknown source. Received 05/10/1996.

**PI 594894. Glycine max** (L.) Merr.

Cultivated. Pureline. A95-B66-1; SY 9601003. Developed in United States.

Unknown source. Received 05/10/1996.

**PI 594895. Glycine max** (L.) Merr.

Cultivated. Pureline. "T328H"; A95-1450-50; SY 9601004. Developed in United States.

The following were developed by Reid Palmer, USDA, ARS, Iowa State University, Department of Agronomy, Ames, Iowa 50011, United States. Received 05/10/1996.

**PI 594896. Glycine max** (L.) Merr.

Cultivated. Pureline. "T329H"; A95-1451-19; SY 9601005.

**PI 594897. Glycine max** (L.) Merr.

Cultivated. Pureline. "T330H"; A95-1452-4; SY 9601006.

The following were donated by R.L. Cooper, USDA-ARS, Ohio State University, 1680 Madison, Wooster, Ohio 44691-4096, United States; Cheng Xu, Department of Science & Technology, Ministry of Agriculture, Beijing, China. Received 05/10/1996.

**PI 594898. Glycine max** (L.) Merr.

Cultivated. Pureline. ZDD 756; SY 9604001.

**PI 594899. Glycine max** (L.) Merr.

Cultivated. Pureline. ZDD 929; SY 9604002.

**PI 594900. Glycine max** (L.) Merr.

Cultivated. Pureline. ZDD 3733; SY 9604003.

**PI 594901. Glycine max** (L.) Merr.

Cultivated. Pureline. ZDD 3879; SY 9604004.

**PI 594902. Glycine max** (L.) Merr.

Cultivated. Pureline. ZDD 4403; SY 9604005.

- PI 594903. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 4568; SY 9604006.
- PI 594904. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 5827; SY 9604007.
- PI 594905. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 5842; SY 9604008.
- PI 594906. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 5852; SY 9604009.
- PI 594907. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. ZDD 5893; SY 9604010.

Unknown source. Received 06/1995.

- PI 594908. *Glycine max* (L.) Merr.**  
Cultivated. Pureline. SY 9603001.

The following were developed by G.L.C. Musa, Northwest Agricultural Research Center, (CIANO-INIFAP-SAGAR), Yaqui Valley Agric. Exp. Stn., Ciudad Obregon, Sonora CP 85000, Mexico; Sergio Munoz-Valenzuela, Northwest Agricultural Research Center, (CIANO-INIFAP-SAGAR), N.E. Borlaug KM 12, Ciudad Obregon, Sonora, Mexico; F. Ochoa-Burgos, Northwest Agricultural Research Center, (CIANO-INIFAP-SAGAR), Apartado Postal 515, Ciudad Obregon, Sonora, Mexico. Received 04/29/1996.

- PI 594909. *Sesamum indicum* L.**  
Breeding. RIO MAYO 93. CV-8. Pedigree - Teras 77/Iguala 296. Begins flowering about 50 d after planting and reaches physiological maturity at 100 d. Mature plant height average 140 cm. Height of first capsules 65 cm. Seed white, averaging 3.1 mm long and 1.9 mm wide, weight averages 3.0 g 1000-1 and test weight 60.5 kg hL-1, average of 458 g kg-1 oil, 249 g kg-1 protein, and 76 g kg-1 carbohydrates. Fatty acid content of oil fraction averages 427 g kg-1 oleic acid, 436 g kg-1 linoleic acid, 95 g kg-1 palmitic acid, 42 g kg-1 stearic acid, and iodine number of 111.6.

The following were developed by Lee Panella, USDA, ARS, Colorado State University, Sugarbeet Research, Crops Research Lab., Fort Collins, Colorado 80536-2083, United States; Earl G. Ruppel, USDA-ARS, Crops Research Laboratory, 1701 Center Avenue, Fort Collins, Colorado 80526, United States. Received 05/02/1996.

- PI 594910. *Beta vulgaris* L.**  
Breeding. FC 721; 931005HO. GP-185. Pedigree - Genetic male-sterile plants from a synthetic (5% F3 of (SL202MM x (US201 x CTRMM)) x SL122-Omm, 27% of C817, and 16% of SP5832-0; all crossed to FC701 (52%) / C718 (male parent). Diploid, monogerm, O-type (maintainer line) resistant to root and crown rot (R. solani AG-2-2). Relatively

homogenous, easy bolting, moderately tolerant to curly top virus. Moderate resistance to *Cercospora* leaf spot (*Cercospora beticola*). Segregates for green hypocotyl (39%). O-type (maintainer line) of its CMS equivalent, FC721CMS, which is the BC10 with C718CMS as the nonrecurrent parent.

**PI 594911. *Beta vulgaris* L.**

Breeding. FC 721 CMS; 931005H01. GP-186. Pedigree - BC10 of FC721 with C718CMS as the nonrecurrent parent. Cytoplasmic-genetic male sterile equivalent of FC721. Diploid, monogerm, O-type (cms) resistant to root and crown rot (*R. solani* AG-2-2). Relatively homogenous, easy bolting, moderately tolerant to the curly top virus. Moderate resistance to *Cercospora* leaf spot (*Cercospora beticola*). Segregates for green hypocotyl (39%).

The following were developed by Jim Dobson, Georgia Mountain Exp. Station, P.O. Box 925, Blairsville, Georgia 30512, United States; Ronny R. Duncan, University of Georgia, Georgia Agricultural Exp. Station, Department of Agronomy, Griffin, Georgia 30223-1797, United States; Wayne W. Hanna, USDA, ARS, Coastal Plains Experiment Station, P.O. Box 748, Tifton, Georgia 31793, United States; D.S. Thompson, Georgia Mountain Exp. Station, Route 1, Box 1005, Blairsville, Georgia 30512, United States. Received 05/02/1996.

**PI 594912. *Eremochloa ophiuroides* (Munro) Hackel**

Cultivar. "TifBlair"; TC312. CV-184; PVP 9600255. Pedigree - Common centipedegrass seed was recurrently irradiated with 12 Kr Cobalt 60 gamma radiation for 3 generations beginning in 1977. In each generation 1500 plants were spaced on 0.3m centers in isolation and allowed to interpollinate. Quality, color, and greenup characteristics similar to common centipedegrass under favorable growing conditions. Grows more rapidly, more vigorous, and better quality than common centipedegrass. Growth reduced 5% on a soil with pH 4.3 compared to pH 5.2, while growth of common centipedegrass reduced 35% on the same soils. Produces more stolons that grow faster and more leaves than common centipedegrass. First seed-propagated commercial centipedegrass cultivar with a known pedigree.

The following were developed by Joseph H. Bouton, University of Georgia, Department of Crop & Soil Sciences, 3111 Plant Sciences Building, Athens, Georgia 30602, United States; R.N. Gates, USDA, ARS, Coastal Plain Exp. Sta., Tifton, Georgia 31793, United States; P.R. Utley, Coastal Plain Exp. Sta., Animal Sci. Dept., Tifton, Georgia 31793, United States; D.T. Wood, University of Georgia, Dept. of Crop and Soil Sciences, Athens, Georgia 30602, United States. Received 05/06/1996.

**PI 594913. *Medicago sativa* L. ssp. *sativa***

Cultivar. "ABT 805"; GA-FL77-S2. CV-194. Pedigree - Synthetic variety with 90 parent clones selected from Florida 77-S. Intended for use in the Southeastern region of the United States for grazing, hay, silage, and dehy production. Tested in Georgia and California. After intensive grazing, showed plant survival equal to Alfagraze. Fall dormancy similar to Moapa 69. Flower color of Syn 1 approximately 86% purple and 14% variegated. High resistance to *Fusarium* wilt and Southern root-knot

nematode. Resistance to Phytophthora root rot and spotted alfalfa aphid. Moderate resistance to anthracnose (race 1), bacterial wilt, Verticillium wilt, and stem nematode.

**PI 594914. *Medicago sativa* L. ssp. *sativa***

Cultivar. "AmeriGraze 702"; GA-MX. CV-195. Pedigree - Synthetic variety with 150 parent clones selected from Florida 77-S, GA-APGC and GA-CMGC. Intended for use in the Southeastern region of the United States for grazing, hay, silage, and dehy production. Tested in Georgia and California. After intensive grazing, showed plant survival equal to Alfagraze. Fall dormancy similar to Mesilla. Flower color of the Syn 1 is approximately 94% purple and 6% variegated. High resistance to Fusarium wilt. Resistance to anthracnose (race 1), Phytophthora root rot, Southern root-knot nematode. Moderate resistance to bacterial wilt, Verticillium wilt, stem nematode, and spotted alfalfa aphid.

The following were developed by Michael McConkey, Edible Landscaping, P.O. Box 77, Afton, Virginia 22920, United States. Donated by Ahmed Zahoor, Plant Introduction and Genetic Resources, Pakistan Agriculture Research Center, P.O. Box 1031, Islamabad, Pakistan. Received 02/03/1986.

**PI 594915. *Morus alba* L.**

Cultivated. PAKISTAN; C 17385; DMOR 0015. Fruit large to 7.5cm long, sweet, flavorful, shippable. Tree productive. Adaptability range not fully determined. Grown successfully in Virginia, Oregon, and California. U.S. quarantine requirements met at Edible Landscaping. Introduced in 1986.

The following were donated by Arkansas Agr. Exp. Sta., Arkansas, United States. Received 1971.

**PI 594916. *Lupinus albus* L.**

Cultivar. "HOPE". CV-4.

The following were developed by Herbert W. Ohm, Purdue University, Agronomy Department, 1150 Lilly Hall, West Lafayette, Indiana 47907-1150, United States; Keith Perry, Purdue University, Department of Botany and Plant Pathology, 1155 Lilly Hall of Life Sciences, West Lafayette, Indiana 47907-1155, United States; H.C. Sharma, Purdue University, Dept. of Agronomy, West Lafayette, Indiana 47906, United States. Received 05/07/1996.

**PI 594917. *Triticum aestivum* L., nom. cons.**

Breeding. Pureline. P29. GP-541. Pedigree - Abe/Thinopyrum intermedium//Compton/3/P81401A1-43/4/Caldwell. A chromosome substitution line, resistant to barley yellow dwarf viruses (BYDV) strains P-PAV and MAV conditioned by a gene(s) on a chromosome from Thinopyrum intermedium that replaced chromosome 7D. Substitution determined by chromosome pairing and RFLP analyses. Similar to commercial wheat cultivars in yield. In a replicated trial, grain yield was 3551 kg ha<sup>-1</sup> compared to 3591 kg ha<sup>-1</sup> of Caldwell check, indicating no yield disadvantage of the alien chromosome substitution. Cold tolerance similar to Caldwell, awnless, 9 cm taller and 5 d later than Caldwell. Resistant to Puccinia

recondita, susceptible to Erysiphe graminis common in Indiana, and susceptible to Hessian fly biotype L.

The following were developed by Solomon Kibite, Agriculture Canada, Research Station, Bag Service 5000, Lacombe, Alberta T0C 1S0, Canada. Received 03/21/1996.

**PI 594918. Avena sativa L.**

Cultivar. Pureline. "AC MUSTANG"; OT766. CV-340. Pedigree - Cascade/Fraser. Dual purpose (grain/silage) spring oat with high grain yield, good lodging resistance and desirable agronomic features. Yields about 5.7% more than Cascade, and about 9.7% more than Dumont. Medium-late maturing and ripens about 1 d earlier than Dumont. High test weight and kernel weight, and higher percentage of plump kernels than Cascade and Dumont. Averages about 3 cm taller than Cascade and equal to Cascade and better than Dumont in lodging resistance. Resistant to Victoria blight, moderately resistant to smut. Moderately susceptible to barley yellow dwarf virus, and susceptible to crown rust and stem rust.

The following were developed by C.R. Funk, New Jersey Agricultural Experiment Station, Rutgers University, Cook College, New Brunswick, New Jersey 08903, United States; J.M. Johnson-Cicalese, University of Nebraska-Lincoln, 377 Plant Science, Lincoln, Nebraska 68583-0724, United States; R.F. Bara, New Jersey Agr. Exp. Sta., Rutgers University, Cook College, New Brunswick, New Jersey 08903, United States; W.K. Dickson, New Jersey Agr. Exp. Sta., Cook College, Rutgers University, Plant Science Department, New Brunswick, New Jersey 08903, United States; V.G. Lehman, Lofts Seed, Inc., P.O. Box 146, Bound Brook, New Jersey 08805, United States; Richard H. Hurley, Lofts Seed, Inc., 347 Elizabeth Avenue, Suite 101, Somerset, New Jersey 08873, United States; Dirk A. Smith, New Jersey Agricultural Experiment Station, Plant Science Dept., Cook College, Rutgers Univ., New Brunswick, New Jersey 08903, United States. Received 05/24/1996.

**PI 594919. Poa pratensis L.**

Cultivar. Apomictic. "EAGLETON"; Eagleton 1425. CV-50; PVP 9600277. Pedigree - Single, highly apomictic plant selected from the grounds of Woodland, home of the Eagleton Institute, Douglas College Campus, Rutgers University, New Brunswick, NJ. Leafy, turf-type with attractive medium-green color, medium-fine leaves, and moderately slow rate of vertical growth. Produces dependable, aggressive, persistent turf of medium high density with good summer performance. Good resistance to stripe smut (Ustilago striiformis) and dollar spot (Sclerotinia homoeocarpa). Moderate resistance to leaf spot and melting-out (Drechslera poae).

The following were developed by R.S. Albrechtsen, Utah Agr. Exp. Sta., Utah State University, Dept. of Plant Science, Logan, Utah 84322-4820, United States; David Hole, Utah State University, Plants, Soils, & Biometeorology Dept., UMC 4820 AGSCI 334, Logan, Utah 84322-4820, United States; S.A. Young, Utah State University, Plants, Soils, and Biometeorology Department, Logan, Utah 84322-4820, United States; S.M. Clawson, Utah State University, Dept. of Plants, Soils, and Biometeorology, Logan, Utah 84322-4820, United

States. Received 05/28/1996.

**PI 594920. *Triticum aestivum* L., nom. cons.**

Cultivar. Pureline. "UTAH-100"; UT1650-150. CV-844. Pedigree - Weston/Ark//Manning. Awned, bronzed chaffed, fusiform, mid-dense, and inclined spike characteristics. White coleoptile, and semi-erect juvenile growth. Average heading date 4 d later than Manning. Average height 4.8 cm taller than Manning and 4.3 cm shorter than Weston. Plants green at boot growth stage and flag leaf recurved. Kernel ovate, rounded creases, with mid-wide, deep seed crease, and med-sized brush length. Resistant to dwarf bunt *Tilletia controversa*.

The following were developed by Don F. Salmon, Alberta Agriculture, Field Crops Section, 5718-56 Avenue, Lacombe, Alberta T0C 1S0, Canada; R.R. Duggan, Alberta Agriculture Field Crops Res., Cereal Breeding Program, Postal Bag 47, Lacombe, Alberta T0C 1S0, Canada; Jim Helm, Alberta Agriculture, Field Crop Development Centre, 5030 50 Street, Lacombe, Alberta T4L 1W8, Canada; Manuel Cortez, Alberta Agriculture, Food and Rural Development, Field Crop Development Centre, Lacombe, Alberta T4L 1W8, Canada; Patricia E. Jedel, Alberta Agriculture, Field Crop Development Centre, 5050-50 Street, Lacombe, Alberta T4L 1W8, Canada. Received 05/24/1996.

**PI 594921. *X Triticosecale* sp.**

Cultivar. Pureline. "PRONGHORN"; T124. CV-16. Pedigree - Juanillo 90 sel./3/M2A\* 2/Bgl//Panda"R"203. Spring habit, awned, and standard height. Purple coleoptile, and erect juvenile growth habit. Leaves medium green, medium wide, and medium long with glabrous sheaths and blades. Flag leaf medium green, medium wide, and medium long with upright attitude. Kernels amber color, soft, medium wide and medium long. Good combination of high yield, early maturity, and good resistance to leaf rust, bunt, loose smut, and powdery mildew. Well adapted to black and brown soils of Saskatchewan, and to the brown and the irrigation areas of Alberta. Susceptible to sprouting and has shown heterogenous reaction to stem rust.

The following were developed by Vincent R. Pantalone, USDA-ARS, North Carolina State University, 3127 Ligon Street, Raleigh, North Carolina 27607, United States; T.E. Carter, USDA, ARS, North Carolina State University, 3127 Ligon Street Box 7631, Raleigh, North Carolina 27695-7631, United States; Joe W. Burton, USDA-ARS, North Carolina State University, Department of Crop Science, Raleigh, North Carolina 27695-7631, United States; Cecilia Bianchi-Hall, USDA, ARS, North Carolina State University, Dept. of Crop Science, Raleigh, North Carolina 27695-7620, United States; E.B. Huie, USDA, ARS, North Carolina State Univ., Dept. of Crop Science, Raleigh, North Carolina 27695-7631, United States; F.S. Farmer, USDA, ARS, North Carolina State University, Dept. of Crop Sci., Raleigh, North Carolina 27695-7631, United States. Received 05/13/1996.

**PI 594922. *Glycine max* (L.) Merr.**

Cultivar. Pureline. "Graham". CV-352; PVP 9700001. Pedigree - N77-114 x Pixie. Maturity group V with high yield. Flowers purple, gray pubescence, determinate growth habit. Yellow seed, buff hila (but exhibits a range in color depending upon environment), average seed

weight of 15.9 g/100 seed. Resistance to soybean mosaic virus, and to frog eye leaf spot. Susceptible to meloidigyne incognita, meloidigyne arenaria, heterodera glycines, sudden death syndrome, and stem canker. First public cultivar with midwestern x southern pedigree in maturity group V.

The following were developed by A.K. Singh, Int. Crops Res. Inst. for the Semi-Arid Tropics, Patancheru, Andhra Pradesh 502 324, India; S.N. Nigam, Int. Crops Res. Inst. for the Semi-Arid Tropics, Legumes Program, Patancheru, Andhra Pradesh 502 324, India; L.J. Reddy, Int. Crops Res. Inst. for the Semi-Arid Tropics, Legumes Program, Asia Center (IAC), Patancheru P.O., Andhra Pradesh 502 324, India; P. Subrahmanyam, SADC/ICRISAT, Groundnut Project, Lilongwe, Malawi; A.G.S. Reddy, Int. Crops Res. Inst. for the Semi-Arid Tropics, Asia Center, Patancheru, Andhra Pradesh 502324, India; D. McDonald, Int. Crops Res. Inst. for the Semi-Arid Tropics, Patancheru, Andhra Pradesh 502 324, India; J. P. Moss, Int. Crops Res. Inst. for the Semi-Arid Tropics, Patancheru, Andhra Pradesh, India. Received 06/14/1996.

**PI 594923. *Arachis hypogaea* L.**

Breeding. Pureline. ICGV 87165; CS 9. GP-78. Pedigree - A interspecific derivative of PI 261942 (*A. hypogaea* subsp. *fastigiata* var. *fastigiata*) x *A. cardenasii*. Virginia bunch type with alternate branching and no flowers on main stem. Leaves small, elliptic, green. 8-12 primary branches and 14-25 secondary branches. Matures in about 117 days during the rainy season in India. Slightly reticulated pods with moderate ridges and beaks. Pods two to one-seeded with average meat content of 60%. Seeds red, with 100-seed weight of 41g and contain 46% oil (at 5% moisture) and 22% protein. Resistant to rust (*Puccinia arachidis*) and late leaf spot (*Phaeosariopsis personata*) and moderately resistant to bacterial wilt (*Pseudomonas solanaceum*) and tobacco caterpillar (*Spodoptera litura*).

The following were collected by Shirley A. Graham, Kent State University, Dept. of Biological Sciences, Kent, Ohio 44242-0001, United States. Donated by S. Graham, Kent State University, Dept. Biological Science, Kent, Ohio 44141-0001, United States. Received 04/11/1988.

**PI 594924. *Cuphea ramosissima* Pohl ex Koehne**

Wild. Graham 938; Ames 8336. Collected in Minas Gerais, Brazil. Elevation 600 m. 12 km S of Medina, MG on BR116. In a seep on a granitic bald dome.

**PI 594925. *Cuphea aequipetala* Cav.**

Wild. S. Graham 1005; Ames 9977. Collected 10/11/1988 in Puebla, Mexico. Elevation 2300 m. 2 km SW of Puebla-Veracruz border on Acultcingo-Azumbilla road. Margins of low oak woods. Plants spreading, prostrate to decumbent.

The following were collected by Steven J. Knapp, Oregon State University, Department of Crop & Soil Science, Crop Science Building, Corvallis, Oregon 97331, United States. Received 01/12/1989.

**PI 594926. *Cuphea toluicana* Peyr.**

Wild. 8228621; TL029; Ames 10145. Collected 08/22/1986 in Mexico.  
Elevation 2366 m. Up cobblestone road that turns off from the road to  
Tenancingo off Hwy 13.

**PI 594927. *Cuphea toluicana* Peyr.**

Wild. 8248639; TL044; Ames 10159. Collected 08/24/1986 in Mexico.  
Elevation 2109 m. Roadside, 30 km west of Patzcuaro on Hwy 14.

The following were collected by S. Graham, Kent State University, Dept.  
Biological Science, Kent, Ohio 44141-0001, United States. Received  
09/25/1989.

**PI 594928. *Cuphea decandra* Aiton f.**

Wild. Graham 1015; Ames 10734. Collected in Baja Verapaz, Guatemala.  
Elevation 850 m. 27 km NW junction of Ruta al Atlantico at El Rancho and  
Salama Road, near Los Leones. Dept. Baja Verapaz.

The following were developed by Oregon State University, Oregon Agriculture  
Experiment Station, Corvallis, Oregon 97331, United States. Donated by Steven  
J. Knapp, Oregon State University, Department of Crop & Soil Science, Crop  
Science Building, Corvallis, Oregon 97331, United States. Received  
05/22/1990.

**PI 594929. *Cuphea wrightii* A. Gray var. *wrightii***

Breeding. WR007; Ames 13777.

The following were developed by Jardin Botanique de l'Universite et de la  
Ville, Institut de Sciences Naturelles, Faculte des Sciences, Besancon, Doubs  
F-25000, France. Donated by Myra Manoah, Ministry of Agriculture, The Volcani  
Center, The Israel Gene Bank for Agricultural Crops, Bet Dagan, Israel.  
Received 03/01/1991.

**PI 594930. *Cuphea lanceolata* Aiton f.**

Cultivated. Israel Gene Bank 44-938; Ames 14947.

The following were developed by Botanischer Garten der Universitat Leipzig,  
Linnestrasse 1, Leipzig, Germany. Donated by Myra Manoah, Ministry of  
Agriculture, The Volcani Center, The Israel Gene Bank for Agricultural Crops,  
Bet Dagan, Israel. Received 03/01/1991.

**PI 594931. *Cuphea lanceolata* Aiton f.**

Cultivated. Israel Gene Bank 48-628; Ames 14951.

The following were collected by William W. Roath, USDA, ARS, Iowa State  
University, Regional Plant Introduction Station, Ames, Iowa 50011, United  
States; G. Pedralli, EMBRAPA-CENARGEN, Brasilia, Brazil. Donated by Centro  
Nacional de Recursos Geneticos, Empresa Brasileira de Pesquisa, Agropecuaria,  
Brasilia, Federal District, Brazil. Received 05/06/1991.



**PI 594932. *Cuphea carthagenensis* (Jacq.) J. F. Macbr.**

Wild. GP-WWR 003153; BRA 003069; Ames 15463. Collected 11/19/1989 in Rio Grande do Sul, Brazil. Latitude 29 deg. 53' S. Longitude 50 deg. 16' W. Elevation 380 m. Osorio. Along road, near and below communications tower above Osorio. Steep roadside cut, red sands to gravels.

The following were donated by William W. Roath, USDA, ARS, Iowa State University, Regional Plant Introduction Station, Ames, Iowa 50011, United States; Holub Garden & Greenhouses, R.R. 2, Ames, Iowa, United States. Received 05/01/1991.

**PI 594933. *Cuphea hyssopifolia* Kunth**

Cultivated. Ames 15634. Note that this accession may be protected.

The following were collected by William W. Roath, USDA, ARS, Iowa State University, Regional Plant Introduction Station, Ames, Iowa 50011, United States; Mark P. Widrlechner, USDA, ARS, Iowa State University, Regional Plant Introduction Station, Ames, Iowa 50011, United States; Alvaro Campos, Universidad Nacional Autonoma de Mexico, Department of Botany, Mexico City, Federal District, Mexico; Roger G. Fuentes-Granados, North Central Regional Plant Intro. Stn., ISU, Ames, IA 50011. Received 10/19/1993.

**PI 594934. *Cuphea lanceolata* Aiton f.**

Wild. RWCF 1; Ames 21527. Collected 09/29/1993 in Nuevo Leon, Mexico. Latitude 25 deg. 21' N. Longitude 100 deg. 10' W. Elevation 950 m. Roadside, 2.2 km above entrance to Cola de Caballo (Horsetail Falls). Near La Nogalera. Ditch with limestone. Assoc. with *Bidens*, *Gaillardia*, *Verbena*, *Acacia*. Most plants immature. Photo 1/1-3. Greenbugs noted.

**PI 594935. *Cuphea lanceolata* Aiton f.**

Wild. RWCF 7; Ames 21528. Collected 10/01/1993 in Tamaulipas, Mexico. Latitude 23 deg. 38' N. Longitude 99 deg. 12' W. Elevation 880 m. Rocky roadside area N facing slope. 15 km SW Ciudad Victoria inters. Mex. hwy 101 & 85 toward Juanave. Near Ciudad Victoria. In limestone rocks. Assoc. with *Verbena*, *Desmodium*, *Euphorbia*, *Opuntia*. Plants small, scattered, < 50 plants. Photo 1/28-30.

**PI 594936. *Cuphea lanceolata* Aiton f.**

Wild. RWCF 13; Ames 21529. Collected 10/02/1993 in Tamaulipas, Mexico. Latitude 22 deg. 53' N. Longitude 99 deg. 27' W. Elevation 425 m. Ca. 1.5 km W Nicolas Bravo, 4.6 km W bridge over Rio Ocampo on hwy from Tula to Ocampo, on flood plain of Rio Ocampo. Near Nicolas Bravo. Sandy loam alluvial soil. Assoc. with *Celtis*, *Euphorbia*, *Acacia*, *Melampodium*. Plant very small, 3 plants. Photo 2/14016.

**PI 594937. *Cuphea lanceolata* Aiton f.**

Wild. RWCF 16; Ames 21530. Collected 10/02/1993 in San Luis Potosi, Mexico. Latitude 22 deg. 29' N. Longitude 99 deg. 33' W. Elevation 1310 m. Roadside area, rich meadow. 9mi NE Ciudad del Maiz, near School, near El Porvenir. Black clay soils. Assoc. with *Sanvitalia angustifolia*, *Zinnia peruviana*, *Melampodium*, *Lantana*. Plants very large. Photo 2/19-22.

**PI 594938. *Cuphea lanceolata* Aiton f.**

Wild. RWCF 17; Ames 21531. Collected 10/02/1993 in San Luis Potosi, Mexico. Latitude 22 deg. 4' N. Longitude 99 deg. 38' W. Elevation 1350 m. Roadside area E side of road. S edge of Martinez on road from Ciudad del Maiz to Cardenas. Near Martinez. Rocky clay loam to sandy loams. Assoc. with *Sanvitalia*, *Zinnia peruviana*, *Tagetes*, *Acacia*. Plants moderate to large. Photo 2/23-25.

**PI 594939. *Cuphea lanceolata* Aiton f.**

Wild. RWCF 21; Ames 21532. Collected 10/03/1993 in San Luis Potosi, Mexico. Latitude 21 deg. 59' N. Longitude 100 deg. 40' W. Elevation 2200 m. Moist rocky draw. 8.8 km S Villa Zaragoza on road to La Salitrera. Near Villa Zaragoza. Clay soils. Assoc. with *Tagetes*, *Sanvitalia*, *Bidens*, *Zinnia*, *Salvia*, *Opuntia*. Plants large. Photo 3/507.

**PI 594940. *Cuphea lanceolata* Aiton f.**

Wild. RWCF 24; Ames 21533. Collected 10/04/1993 in San Luis Potosi, Mexico. Latitude 23 deg. 37' N. Longitude 100 deg. 28' W. Elevation 1720 m. In diverse meadow, 5.9 km SE of inter road to Guadalcázar & Mex hwy 57. Near Guadalcázar. Black loam soils. Assoc. with *Bouteloua*, *Melampodium*, *Ratibida*, *Sanvitalia angustifolia*. Plants very large. Photo 3/15-18.

**PI 594941. *Cuphea lanceolata* Aiton f.**

Wild. RWCF 25; Ames 21534. Collected 10/04/1993 in San Luis Potosi, Mexico. Latitude 23 deg. 35' N. Longitude 100 deg. 35' W. Elevation 1500 m. Grassy swale, Km 66 on Mex hwy 57 NE San Luis Potosi. 6 km NE San Lorenzo. Near San Lorenzo. Clay soils. Assoc. with *Cucurbita*, *Andropogon*, *Setaria*, *Crotalaria*. Plants large. High seed yield. Photo 3/19-22.

**PI 594942. *Cuphea lanceolata* Aiton f.**

Wild. RWCF 26; Ames 21535. Collected 10/04/1993 in San Luis Potosi, Mexico. Latitude 22 deg. 25' N. Longitude 100 deg. 44' W. Elevation 1800 m. Grassy roadside. Ca. 5 km NE Ventura on Mex hwy 57. Near Ventura. Shallow clay soil. Assoc. with *Tagetes*, *Sanvitalia procumbens*, *Bidens*, and *Dalea*. Plants large. Photo 3/23-26.

**PI 594943. *Cuphea lanceolata* Aiton f.**

Wild. RWCF 38; Ames 21539. Collected 10/07/1993 in Queretaro, Mexico. Latitude 20 deg. 20' N. Longitude 99 deg. 56' W. Elevation 2180 m. Roadside area, 200 m SE RR tracks E Mex hwy 57 on hwy 45, SE San Juan del Rio. Near San Juan del Rio. Pasture with scattered shrubs. Assoc. with *Eryngium*, *Bidens*, *Sanvitalia procumbens*, *Tagetes*. Plants large. Photo 4/27-30.

**PI 594944. *Cuphea lanceolata* Aiton f.**

Wild. RWCF 39; Ames 21540. Collected 10/07/1993 in Hidalgo, Mexico. Latitude 20 deg. 21' N. Longitude 99 deg. 39' W. Elevation 2170 m. Roadside ditch, Inters. Mex hwy 45 and road to Huichapan. Near Huichapan. Moist, along edge of corn field, clay soils. Assoc. with *Sonchus*, *Cosmos*, *Tithonia*, mixed grasses. Plants very large. Photo 4/31-32.

**PI 594945. *Cuphea lanceolata* Aiton f.**

Wild. RWCF 43; Ames 21541. Collected 10/09/1993 in Guanajuato, Mexico. Latitude 21 deg. 6' N. Longitude 101 deg. 26' W. Elevation 2150 m. 5.8 km ENE Comanjilla on road to Arperos. Near Comanjilla. Scrubby pasture among rocks. Assoc. with *Cuphea wrightii*, *Ipomoea*, *Opuntia*, *Tagetes*, misc. grasses. Plants large. Petals lighter purple than normal. Photo 5/8-10.

**PI 594946. *Cuphea lanceolata* Aiton f.**

Wild. RWCF 45; Ames 21542. Collected 10/09/1993 in Guanajuato, Mexico. Latitude 21 deg. 16' N. Longitude 101 deg. 40' W. Elevation 2280 m. Roadside area, 16.1 km N inters. bypass to Lagos de Morena and road from Leon to San Felipe. Near Leon. Steep among rocks. Assoc. with *Salvia*, *Tagetes*, shrubby composite tree, *Ipomoea*, *Verbena*, *Lopezia*. Plants large. Photo 5/13-15.

**PI 594947. *Cuphea lanceolata* Aiton f.**

Wild. RWCF 49; Ames 21543. Collected 10/11/1993 in Aguascalientes, Mexico. Latitude 21 deg. 42' N. Longitude 102 deg. 16' W. Elevation 1850 m. Roadside area, 0.2 to 1.9 km E RR crossing on rd to Cerro de Los Gallos. Near Cerro de Los Gallos. Clay soils. Assoc. *Tagetes*, *Opuntia*, *Acacia*, misc. grasses. Plants large, scattered. Photo 53/4-36. Very long glutinous trichomes on flowers and leaves. Infected with true bugs (eating seeds).

**PI 594948. *Cuphea lanceolata* Aiton f.**

Wild. RWCF 51; Ames 21544. Collected 10/11/1993 in Jalisco, Mexico. Latitude 21 deg. 46' N. Longitude 101 deg. 56' W. Elevation 2050 m. Roadside area, 42.2 km E Aguascalientes Mex hwy 70 just W of road to La Punta. Near La Punta. Grassy, gravelly clay soil. Assoc. with *Bidens*, *Euphorbia*, *Tagetes*, *Eryngium*, and misc. grasses. Plants large. Photo 6/4-6.

**PI 594949. *Cuphea lanceolata* Aiton f.**

Wild. RWCF 52; Ames 21545. Collected 10/12/1993 in Jalisco, Mexico. Latitude 22 deg. 39' N. Longitude 103 deg. 58' W. Elevation 1560 m. Roadside area, 10.5 km NW Pemex Stn. E side of Huejuquilla near Arroyos del Agua. Near Huejuquilla. Rocky clay soil. Assoc. with *Bidens*, *Sanvitalia*, *Salvia*, *Zinnia peruviana*. Plants large. Photo 6/7-9.

The following were collected by William W. Roath, USDA, ARS, Iowa State University, Regional Plant Introduction Station, Ames, Iowa 50011, United States; Mark P. Widrlechner, USDA, ARS, Iowa State University, Regional Plant Introduction Station, Ames, Iowa 50011, United States; Alvaro Campos, Universidad Nacional Autonoma de Mexico, Department of Botany, Mexico City, Federal District, Mexico; Roger G. Fuentes-Granados, North Central Regional Plant Intro. Stn., ISU, Ames, IA 50011. Donated by William W. Roath, USDA, ARS, Iowa State University, Regional Plant Introduction Station, Ames, Iowa 50011, United States; Mark P. Widrlechner, USDA, ARS, Iowa State University, Regional Plant Introduction Station, Ames, Iowa 50011, United States; Alvaro Campos, Universidad Nacional Autonoma de Mexico, Department of Botany, Mexico City, Federal District, Mexico. Received 10/19/1993.

**PI 594950. *Cuphea lanceolata* Aiton f.**

Wild. RWCF 57; Ames 21546. Collected 10/12/1993 in Zacatecas, Mexico.

Latitude 22 deg. 41' N. Longitude 103 deg. 41' W. Elevation 2060 m.  
Roadside, 19.3 km SW Valparaiso. Near Valparaiso. Eroded, dry. Assoc.  
with Lantana, Acacia, Opuntia, Dodonea. Plants moderate. Photo 6/20-21.

The following were collected by Roger Fuentes-Granados, Iowa State University, Department of Agronomy, Room 2101 Agronomy, Ames, Iowa 50011, United States; William W. Roath, USDA, ARS, Iowa State University, Regional Plant Introduction Station, Ames, Iowa 50011, United States; Mark P. Widrechner, USDA, ARS, Iowa State University, Regional Plant Introduction Station, Ames, Iowa 50011, United States; Alvaro Campos, Universidad Nacional Autonoma de Mexico, Department of Botany, Mexico City, Federal District, Mexico. Donated by William W. Roath, USDA, ARS, Iowa State University, Regional Plant Introduction Station, Ames, Iowa 50011, United States; Mark P. Widrechner, USDA, ARS, Iowa State University, Regional Plant Introduction Station, Ames, Iowa 50011, United States; Alvaro Campos, Universidad Nacional Autonoma de Mexico, Department of Botany, Mexico City, Federal District, Mexico. Received 10/19/1993.

**PI 594951. *Cuphea wrightii* A. Gray var. *wrightii***

Wild. RWCF 28; Ames 21547. Collected 10/06/1993 in Guanajuato, Mexico. Latitude 20 deg. 53' N. Longitude 100 deg. 51' W. Elevation 2050 m. Road edge, ca. 0.8 km SW inters. road to Guanajuato from Presa Allende. Unimproved road. Extends to below collection site for Ames 21537. Near Canada de La Virgen. Rocky. Assoc. with Gomphrena, Tagetes, Acacia, Zinnia peruviana. Plants moderate, scattered. Photo 4/14-16.

**PI 594952. *Cuphea wrightii* A. Gray var. *wrightii***

Wild. RWCF 32; Ames 21548. Collected 10/06/1993 in Guanajuato, Mexico. Latitude 20 deg. 51' N. Longitude 100 deg. 31' W. Elevation 2180 m. Ca. 200 m W Guanajuato-Queretaro border on hwy fm San Miguel Allende to Queretaro. Near Hda. Las Mojas. Limestone outcropping. Assoc. with Ipomoea, Eupatorium, Tagetes, *Cuphea aequipetala*. Plants moderate. Photo 4/23.

**PI 594953. *Cuphea wrightii* A. Gray var. *wrightii***

Wild. RWCF 34; Ames 21549. Collected 10/06/1993 in Queretaro, Mexico. Latitude 20 deg. 22' N. Longitude 100 deg. 5' W. Elevation 2010 m. Roadside, 3 km S Galindo on road to Amealco. Near Galindo. In rocks, rocky sandy soil. Assoc. with Gomphrena, Salvia, Opuntia, Sanvitalia procumbens. Plants moderate.

**PI 594954. *Cuphea wrightii* var. *alba* S. Graham**

Wild. RWCF 35; Ames 21550. Collected 10/06/1993 in Queretaro, Mexico. Latitude 20 deg. 22' N. Longitude 100 deg. 5' W. Elevation 2010 m. Roadside, 3 km S Galindo on road to Amealco. Near Galindo. In rocks, rocky sandy soil. Assoc. with Sanvitalia procumbens, Opuntia, under Acacia. Plants large. Lower petals white.

**PI 594955. *Cuphea wrightii* A. Gray var. *wrightii***

Wild. RWCF 42; Ames 21551. Collected 10/09/1993 in Guanajuato, Mexico. Latitude 21 deg. 6' N. Longitude 101 deg. 26' W. Elevation 2120 m. Ca. 5 km ENE Comanjilla on road to Arperos. Near Comanjilla. Scrubby pasture in rocks. Assoc. with Zinnia peruviana, Eryngium, Tagetes, Acacia. Plants large, scattered. Photo 5/6-7.

**PI 594956. *Cuphea wrightii* A. Gray var. *wrightii***

Wild. RWC 56; Ames 21552. Collected 10/12/1993 in Zacatecas, Mexico. Latitude 22 deg. 41' N. Longitude 103 deg. 41' W. Elevation 2060 m. Roadside, 19.3 km SW Valparaiso. Near Valparaiso. Eroded, dry. Assoc. with Lantana, Acacia, Opuntia, Dodonea. Plants moderate.

The following were developed by Bereich Botanik und Arboretum des Museums für Naturkunde, der Humboldt Univ. zu Berlin, 1195 Berlin, Spathstr. 80/81, Berlin, Germany. Donated by Myra Manoah, Ministry of Agriculture, The Volcani Center, The Israel Gene Bank for Agricultural Crops, Bet Dagan, Israel. Received 06/27/1994.

**PI 594957. *Cuphea lanceolata* Aiton f.**

Cultivated. Israel Gene Bank #56-591; Ames 22117.

The following were donated by Jardin Botanique, Nancy, France; Myra Manoah, Ministry of Agriculture, The Volcani Center, The Israel Gene Bank for Agricultural Crops, Bet Dagan, Israel. Received 09/01/1994.

**PI 594958. *Cuphea lanceolata* Aiton f.**

Cultivar. 855; Ames 22236.

**PI 594959. *Cuphea procumbens* Cav.**

Cultivar. 856; Ames 22237.

The following were developed by USDA, ARS Forage and Pasture, Building 005, BARC-West, Beltsville, Maryland 20705, United States. Donated by Austin Campbell, USDA, ARS, BA, Bldg. 001, Room 339, BARC-West, Beltsville, Maryland 20705, United States. Received 03/15/1987.

**PI 594960. *Cuphea lanceolata* Aiton f.**

Cultivated. LANA01; Ames 22286. Non-sticky lanceolata. Glandular trichomes not present.

The following were donated by Oliver W. Norvell, Carnegie Institute of Washington, Stanford, California, United States. Received 04/22/1952.

**PI 594961. *Capsicum frutescens* L.**

1SCA. Collected in Guatemala. Selection from PI 200729.

The following were collected by Dan Parfitt, University of California, Department of Pomology, Davis, California 95616, United States; George A. White, USDA, ARS, National Germplasm Repository, University of California, Davis, California 95616, United States. Developed by Gregory M. Levin, Turkmenian Experimental Station, Plant Genetic Resources, Laboratory of Subtropical Fruits, Garrygala, Turkmenistan. Received 09/08/1995.

**PI 594962. *Punica granatum* L.**

Cultivated. "SVERKHRANNIY". Collected 09/08/1995 in Turkmenistan.

Turkmenistan Experimental Station of Plant Genetic Resources, Garrygala.  
Pedigree - Sel. by G.M. Levin (Kara-kala Experimental Station, VIR).  
Sweet, soft seeded type. Ripens in August. Name means super early.

The following were collected by Dan Parfitt, University of California, Department of Pomology, Davis, California 95616, United States; George A. White, USDA, ARS, National Germplasm Repository, University of California, Davis, California 95616, United States. Developed by A.D. Strebkova, Kara-kala Experimental Station, VIR, Turkmenistan; O.F. Mizgiriyova, Kara-kala Experimental Station, VIR, Turkmenistan; N. Zaktrager, Kara-kala Experimental Station, VIR, Turkmenistan. Received 09/08/1995.

**PI 594963. *Punica granatum* L.**

Cultivated. "MOLLA-NEPES". Collected 09/08/1995 in Turkmenistan. Turkmenistan Experimental Station of Plant Genetic Resources, Garrygala. Pedigree - Sel. by O.F. Mizgiriyova, N.I. Zaktrager, and A.D. Strebkova (Kara-kala Experimental Station, VIR). Sweet-sour, soft seeded type. Ripens in October.

**PI 594964. *Punica granatum* L.**

Cultivated. "PARFIANKA". Collected 09/08/1995 in Turkmenistan. Turkmenistan Experimental Station of Plant Genetic Resources, Garrygala. Pedigree - Sel. by O.F. Mizgiriyova, N.I. Zaktrager, and A.D. Strebkova (Kara-kala Experimental Station, VIR). Sweet-acid, soft seeded type. Ripens in October.

The following were collected by Dan Parfitt, University of California, Department of Pomology, Davis, California 95616, United States; George A. White, USDA, ARS, National Germplasm Repository, University of California, Davis, California 95616, United States. Received 09/08/1995.

**PI 594965. *Punica granatum* L.**

Cultivated. "WHITE FLOWER". Developed in Albania. Collected 09/08/1995 in Turkmenistan. Turkmenistan Experimental Station of Plant Genetic Resources, Garrygala. Flowers white. Ripens in October.

The following were collected by Dan Parfitt, University of California, Department of Pomology, Davis, California 95616, United States; George A. White, USDA, ARS, National Germplasm Repository, University of California, Davis, California 95616, United States. Developed by A.D. Strebkova, Kara-kala Experimental Station, VIR, Turkmenistan. Received 09/08/1995.

**PI 594966. *Punica granatum* L.**

Cultivated. "DOTCH LEGRELLEY". Collected 09/08/1995 in Turkmenistan. Turkmenistan Experimental Station of Plant Genetic Resources, Garrygala. Pedigree - Sel. by A.D. Strebkova (Kara-kala Experimental Station, VIR). Flowers double, red-white.

The following were collected by Dan Parfitt, University of California, Department of Pomology, Davis, California 95616, United States; George A. White, USDA, ARS, National Germplasm Repository, University of California,

**PI 594967. *Punica granatum* L.**

Cultivated. "HYRDANAR X GOULOSHA". Collected 09/08/1995 in Turkmenistan. Turkmenistan Experimental Station of Plant Genetic Resources, Garrygala. Pedigree - Mutant of American dwarf Chico X Goulosha (Azerbaijan). Semi-dwarf decorative type. Plants 1-1.5m tall. Fruits average sized. Ripens in October.

**PI 594968. *Punica granatum* L.**

Cultivated. "HYRDANAR X KIRMIZY-AKBUH". Collected 09/08/1995 in Turkmenistan. Turkmenistan Experimental Station of Plant Genetic Resources, Garrygala. Pedigree - Cross between mutant of American dwarf Chico X Kirmizy-kabuh (parents from Baku, Azerbaijan). Characteristics similar to PI 594967.

The following were developed by S.N. Nigam, Int. Crops Res. Inst. for the Semi-Arid Tropics, Legumes Program, Patancheru, Andhra Pradesh 502 324, India ; A.G.S. Reddy, Int. Crops Res. Inst. for the Semi-Arid Tropics, Asia Center, Patancheru, Andhra Pradesh 502324, India; H.D. Upadhyaya, Int. Crops Res. Inst. for the Semi-Arid Tropics, Genetic Enhancement Division, ICRISAT Asia Center, Patancheru, Andhra Pradesh 502 324, India; M.J.V. Rao, ICI Limited, Agricultural Research Station, Begur, Karnataka, India; N.S. Reddy, Int. Crops Res. Inst. for the Semi-Arid Tropics, Genetic Enhancement Division, ICRISAT Asia Center, Patancheru, Andhra Pradesh 502324, India; N. Yellaiah, Int. Crops Res. Inst. for the Semi-Arid Tropics, Patancheru P.O., Andhra Pradesh 502 324, India. Received 06/20/1996.

**PI 594969. *Arachis hypogaea* L.**

Breeding. ICGV 86155. GP-79. Pedigree - ICGS 30/(TMV 10/Chico F6)-F2-P23-B1-B1-B1-B1. Spanish type with fresh seed dormancy. Growth habit erect with sequential branching, and elliptical light green leaves. Pods mainly two-seed, medium size with slight to moderate beak, moderate to deep constriction and slight reticulation. Seeds with red colored testae. Seed weight 39g 100 seed-1.

**PI 594970. *Arachis hypogaea* L.**

Breeding. ICGV 86156. GP-80. Pedigree - ICGS 30/(TMV 10/Chico F6)-F2-P26-B1-B1-B1-B1. Spanish type with fresh seed dormancy. Growth habit erect with sequential branching, and elliptical light green leaves. Pods mainly two-seeded, medium to large in size with slight beak, moderate constriction, and slight reticulation. Seeds with tan colored testae. Seed weight 51-53g 100g seed-1.

**PI 594971. *Arachis hypogaea* L.**

Breeding. ICGV 86158. GP-81. Pedigree - ICGS 30/(TMV 10/Chico F6)-F2-P32-B1-B1-B1-B1. Spanish type with fresh seed dormancy. Growth habit erect with sequential branching, and elliptical light green leaves. Pods mainly two-seeded, medium size with slight to moderate beak, moderate to deep constriction and slight reticulation. Seed with red colored testae. Seed weight 51-53g 100 seed-1.

**PI 594972. *Arachis hypogaea* L.**

Breeding. ICGV 87378. GP-82. Pedigree - Mass selection from germplasm

line Kanto No. 40 (also known as ICG 7261 and EC 123074). Spanish type with fresh seed dormancy. Growth habit erect with sequential branching, and elliptical light green leaves. Pods mainly two-seeded, medium to large in size with slight to moderate beak, moderate constriction and slight reticulation. Seeds with tan colored testae. Seed weight 51-53g 100 seed-1.

**PI 594973. *Arachis hypogaea* L.**

Breeding. ICGV 87921. GP-83. Pedigree - ICGS 21//TMV 2/Chico-F2-P30-B3-B2-B1-B2-B1. Spanish type with fresh seed dormancy. Growth habit erect with sequential branching, and elliptical light green leaves. Pods mainly two-seeded, medium to large in size with slight to moderate beak, moderate constriction and slight reticulation. Seeds with tan colored testae. Seed weight 51-53g 100 seed-1.

The following were donated by USDA, SCS, Georgia Agr. Exp. Station, Georgia, United States. Received 1965.

**PI 594974. *Lupinus bicolor* Lindley**

Uncertain. W6 7125; NSL 22657; AM-2.

The following were donated by USDA, ARS, Idaho Agr. Exp. Sta., Idaho, United States. Received 1965.

**PI 594975. *Astragalus cicer* L.**

Uncertain. W6 7090; NSL 34748; CICAR. Collected in Sweden.

The following were donated by Beltsville USDA, ARS, Beltsville, Maryland, United States. Received 1970.

**PI 594976. *Guizotia abyssinica* (L. f.) Cass.**

Uncertain. W6 3448; NSL 73276; PI 243914XPI 248882-894 (BLEND). Collected in India.

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

**PI 594977. *Dactylis glomerata* L.**

Wild. ABY-BC 5456.82; W6 9067. Collected in France. Latitude 43 deg. 52' N. Longitude 5 deg. 23' E. Elevation 300 m. Apt.

**PI 594978. *Dactylis glomerata* L.**

Wild. ABY-BC 5457.82; W6 9068. Collected in France. Latitude 43 deg. 51' N. Longitude 5 deg. 35' E. Elevation 500 m. Cereste.

**PI 594979. *Dactylis glomerata* L.**

Wild. ABY-BC 5462.81; W6 9069. Collected in France. Latitude 44 deg. 28' N. Longitude 6 deg. 13' E. Espinasses.

**PI 594980. *Dactylis glomerata* L.**

Wild. ABY-BC 5469.66; W6 9070. Collected in France. Latitude 44 deg.



33' N. Longitude 6 deg. 5' E. Elevation 950 m. Gap.

**PI 594981. *Dactylis glomerata* L.**

Wild. ABY-BC 5482.80; W6 9072. Collected in Italy. Latitude 44 deg. 21' N. Longitude 9 deg. 13' E. Elevation 90 m. Rapallo.

**PI 594982. *Dactylis glomerata* L.**

Wild. ABY-BC 5487.66; W6 9074. Collected in Italy. Latitude 43 deg. 36' N. Longitude 12 deg. 13' E. Elevation 1044 m. Trabaria, Bocca (Pass).

**PI 594983. *Dactylis glomerata* L.**

Wild. ABY-BC 5653.67; W6 9075. Collected in Spain. Latitude 42 deg. 29' N. Longitude 8 deg. 44' W. Elevation 244 m. Meis.

**PI 594984. *Dactylis glomerata* L.**

Wild. ABY-BC 5666.67; W6 9076. Collected in Spain. Latitude 42 deg. 49' N. Longitude 6 deg. 30' W. Elevation 610 m. Paramo Del Sil.

**PI 594985. *Dactylis glomerata* L.**

Wild. ABY-BC 5668.67; W6 9077. Collected in Spain. Latitude 43 deg. 2' N. Longitude 5 deg. 47' W. Elevation 853 m. Pajares.

**PI 594986. *Dactylis glomerata* L.**

Wild. ABY-BC 5670.67; W6 9078. Collected in Spain. Latitude 43 deg. 21' N. Longitude 5 deg. 8' W. Elevation 122 m. Cangas De Onis.

**PI 594987. *Dactylis glomerata* L.**

Wild. ABY-BC 6529.72; W6 9080.

**PI 594988. *Dactylis glomerata* L.**

Wild. ABY-BC 6905.80; W6 9081. Collected in Spain. Latitude 42 deg. 15' N. Longitude 8 deg. 13' W. Elevation 400 m. Melon.

**PI 594989. *Dactylis glomerata* L.**

Wild. ABY-BC 6908.79; W6 9082. Collected in Spain. Latitude 42 deg. 15' N. Longitude 8 deg. 13' W. Elevation 450 m. Melon.

**PI 594990. *Dactylis glomerata* L.**

Wild. ABY-BC 6909.80; W6 9083. Collected in Spain. Latitude 42 deg. 26' N. Longitude 8 deg. 8' W. Elevation 420 m. Boboras.

**PI 594991. *Dactylis glomerata* L.**

Wild. ABY-BC 6912.79; W6 9084. Collected in Spain. Latitude 42 deg. 28' N. Longitude 8 deg. 16' W. Elevation 650 m. Beariz.

**PI 594992. *Dactylis glomerata* L.**

Wild. ABY-BC 6916.80; W6 9086. Collected in Spain. Latitude 42 deg. 32' N. Longitude 8 deg. 19' W. Elevation 690 m. Vilapouca.

**PI 594993. *Dactylis glomerata* L.**

Wild. ABY-BC 6918.80; W6 9087. Collected in Spain. Latitude 42 deg. 40' N. Longitude 8 deg. 6' W. Elevation 640 m. Lalin.

**PI 594994. *Dactylis glomerata* L.**

Wild. ABY-BC 6920.80; W6 9088. Collected in Spain. Latitude 42 deg. 32'

- N. Longitude 8 deg. 6' W. Elevation 680 m. Irijo.
- PI 594995. *Dactylis glomerata* L.**  
Wild. ABY-BC 6957.80; W6 9109. Collected in Spain. Latitude 42 deg. 42'  
N. Longitude 7 deg. 46' W. Elevation 480 m. Taboada.
- PI 594996. *Dactylis glomerata* L.**  
Wild. ABY-BC 6958.79; W6 9110. Collected in Spain. Latitude 42 deg. 36'  
N. Longitude 7 deg. 46' W. Elevation 680 m. Chantada.
- PI 594997. *Dactylis glomerata* L.**  
Wild. ABY-BC 6962.80; W6 9111. Collected in Spain. Latitude 42 deg. 21'  
N. Longitude 7 deg. 48' W. Elevation 550 m. Pereiro De Aguiar.
- PI 594998. *Dactylis glomerata* L.**  
Wild. ABY-BC 6963.79; W6 9112. Collected in Spain. Latitude 42 deg. 31'  
N. Longitude 7 deg. 37' W. Elevation 550 m. Panton.
- PI 594999. *Dactylis glomerata* L.**  
Wild. ABY-BC 6965.80; W6 9113. Collected in Spain. Latitude 42 deg. 28'  
N. Longitude 7 deg. 15' W. Elevation 420 m. Quiroga.
- PI 595000. *Dactylis glomerata* L.**  
Wild. ABY-BC 6967.79; W6 9114. Collected in Spain. Latitude 42 deg. 20'  
N. Longitude 7 deg. 15' W. Elevation 950 m. Puebla De Trives.
- PI 595001. *Dactylis glomerata* L.**  
Wild. ABY-BC 6969.80; W6 9116. Collected in Spain. Latitude 42 deg. 34'  
N. Longitude 7 deg. 23' W. Elevation 570 m. Puebla Del Brollon.
- PI 595002. *Dactylis glomerata* L.**  
Wild. ABY-BC 6976.79; W6 9117. Collected in Spain. Latitude 42 deg. 1'  
N. Longitude 7 deg. 59' W. Elevation 940 m. Bande.
- PI 595003. *Dactylis glomerata* L.**  
Wild. ABY-BC 6978.80; W6 9118. Collected in Spain. Latitude 42 deg. 15'  
N. Longitude 7 deg. 49' W. Elevation 650 m. Taboadela.
- PI 595004. *Dactylis glomerata* L.**  
Wild. ABY-BC 7003.80; W6 9119. Collected in Spain. Latitude 42 deg. 28'  
N. Longitude 8 deg. 16' W. Elevation 650 m. Beariz.
- PI 595005. *Dactylis glomerata* L.**  
Wild. ABY-BC 7006.80; W6 9120. Collected in Spain. Latitude 42 deg. 23'  
N. Longitude 8 deg. 15' W. Elevation 600 m. Avion.
- PI 595006. *Dactylis glomerata* L.**  
Wild. ABY-BC 7007.80; W6 9121. Collected in Spain. Latitude 42 deg. 23'  
N. Longitude 8 deg. 15' W. Elevation 600 m. Avion.
- PI 595007. *Dactylis glomerata* L.**  
Wild. ABY-BC 7008.80; W6 9122. Collected in Spain. Latitude 42 deg. 15'  
N. Longitude 8 deg. 13' W. Elevation 400 m. Melon.
- PI 595008. *Dactylis glomerata* L.**

Wild. ABY-BC 7010.79; W6 9123. Collected in Spain. Latitude 43 deg. 21' N. Longitude 7 deg. 29' W. Elevation 550 m. Abadin.

**PI 595009. *Dactylis glomerata* L.**

Wild. ABY-BC 7045.80; W6 9125. Collected in Wales, United Kingdom. Latitude 52 deg. 29' N. Longitude 4 deg. 3' W. Elevation 15 m. Borth.

**PI 595010. *Dactylis glomerata* L.**

Wild. ABY-BC 7046.80; W6 9126. Collected in Wales, United Kingdom. Latitude 52 deg. 25' N. Longitude 3 deg. 55' W. Elevation 150 m. Goginan.

**PI 595011. *Dactylis glomerata* L.**

Wild. ABY-BC 7047.80; W6 9127. Collected in Wales, United Kingdom. Latitude 52 deg. 25' N. Longitude 4 deg. 5' W. Elevation 270 m. Aberystwyth.

**PI 595012. *Dactylis glomerata* L.**

Wild. ABY-BC 7050.81; W6 9129. Collected in Wales, United Kingdom. Latitude 52 deg. 25' N. Longitude 3 deg. 50' W. Elevation 400 m. Ponterwyd.

**PI 595013. *Dactylis glomerata* L.**

Wild. ABY-BC 7051.81; W6 9130. Collected in Wales, United Kingdom. Latitude 52 deg. 25' N. Longitude 3 deg. 55' W. Goginan.

**PI 595014. *Dactylis glomerata* L.**

Wild. ABY-BC 6944.79; W6 9148. Collected in Spain. Latitude 42 deg. 56' N. Longitude 7 deg. 25' W. Elevation 520 m. Corgo.

**PI 595015. *Dactylis glomerata* L.**

Wild. ABY-BC 6946.80; W6 9149. Collected in Spain. Latitude 43 deg. 5' N. Longitude 7 deg. 15' W. Elevation 680 m. Fontao.

**PI 595016. *Dactylis glomerata* L.**

Wild. ABY-BC 6964.79; W6 9151. Collected in Spain. Latitude 42 deg. 31' N. Longitude 7 deg. 37' W. Elevation 550 m. Panton.

**PI 595017. *Festuca arundinacea* Schreber**

Wild. ABY-BN 759.71; W6 9172. Collected in Italy. Latitude 44 deg. 5' N. Longitude 7 deg. 48' E. Elevation 1250 m. Mendatica.

**PI 595018. *Festuca pratensis* Hudson**

Wild. ABY-BF 951.73; W6 9196. Collected in Switzerland. Latitude 46 deg. 35' N. Longitude 6 deg. 56' E. Elevation 860 m. Semsales.

**PI 595019. *Festuca pratensis* Hudson**

Wild. ABY-BF 982.78; W6 9198.

**PI 595020. *Festuca pratensis* Hudson**

Wild. ABY-BF 1057.75; W6 9199. Collected in Italy. Latitude 44 deg. 12' N. Longitude 8 deg. 2' E. Elevation 1380 m. Caressio.

**PI 595021. *Festuca pratensis* Hudson**

Wild. ABY-BF 1068.78; W6 9200. Collected in Italy. Latitude 44 deg. 9'

N. Longitude 7 deg. 34' E. Elevation 1300 m. Colle Di Tende.

**PI 595022. *Festuca pratensis* Hudson**

Wild. ABY-BF 1075.75; W6 9201. Collected in Italy. Latitude 44 deg. 12' N. Longitude 7 deg. 34' E. Elevation 950 m. Limone Piemonte.

**PI 595023. *Festuca pratensis* Hudson**

Wild. ABY-BF 1084.75; W6 9202. Collected in Belgium. Latitude 51 deg. 2' N. Longitude 4 deg. 10' E. Elevation 10 m. Baasrode.

**PI 595024. *Festuca pratensis* Hudson**

Wild. ABY-BF 1086.75; W6 9203. Collected in Belgium. Latitude 49 deg. 53' N. Longitude 5 deg. 33' E. Elevation 480 m. Juseret.

**PI 595025. *Festuca pratensis* Hudson**

Wild. ABY-BF 1099.76; W6 9204. Collected in Italy. Latitude 45 deg. 52' N. Longitude 9 deg. 53' E. Elevation 420 m. Ponte Nossa.

**PI 595026. *Festuca pratensis* Hudson**

Wild. ABY-BF 1199.81; W6 9205. Collected in England, United Kingdom. Latitude 51 deg. 14' N. Longitude 2 deg. 49' W. Wedmore.

**PI 595027. *Festuca pratensis* Hudson**

Wild. ABY-BF 1201.81; W6 9207. Collected in Romania. Latitude 46 deg. 11' N. Longitude 25 deg. 56' E. Elevation 400 m. Tusnad.

**PI 595028. *Festuca pratensis* Hudson**

Wild. ABY-BF 1202.81; W6 9208. Collected in Romania. Latitude 47 deg. 50' N. Longitude 26 deg. 3' E. Elevation 410 m. Dornesti.

**PI 595029. *Festuca pratensis* Hudson**

Wild. ABY-BF 1203.81; W6 9209. Collected in Romania. Latitude 47 deg. 37' N. Longitude 26 deg. 18' E. Elevation 350 m. Suceava.

**PI 595030. *Festuca pratensis* Hudson**

Wild. ABY-BF 1205.81; W6 9211. Collected in Romania. Latitude 47 deg. 37' N. Longitude 26 deg. 18' E. Elevation 300 m. Suceava.

**PI 595031. *Festuca pratensis* Hudson**

Wild. ABY-BF 1208.81; W6 9212. Collected in Romania. Latitude 47 deg. 56' N. Longitude 23 deg. 53' E. Elevation 450 m. Sighet.

**PI 595032. *Festuca pratensis* Hudson**

Wild. ABY-BF 1209.81; W6 9213. Collected in Romania. Latitude 47 deg. 56' N. Longitude 23 deg. 53' E. Sighet.

**PI 595033. *Festuca pratensis* Hudson**

Wild. ABY-BF 1210.81; W6 9214. Collected in Romania. Latitude 45 deg. 51' N. Longitude 25 deg. 48' E. Elevation 600 m. Sfintu Gheorghe.

**PI 595034. *Festuca pratensis* Hudson**

Wild. ABY-BF 1211.82; W6 9215. Collected in Romania. Latitude 45 deg. 20' N. Longitude 25 deg. 33' E. Elevation 1575 m. Sinaia.

**PI 595035. *Festuca pratensis* Hudson**

Wild. ABY-BF 1224.82; W6 9216. Collected in Norway. Latitude 58 deg. 17' N. Longitude 6 deg. 40' E. Elevation 75 m. Flekkefjord.

**PI 595036. *Festuca pratensis* Hudson**

Wild. ABY-BF 1228.82; W6 9220. Collected in Norway. Latitude 59 deg. 48' N. Longitude 5 deg. 11' E. Elevation 20 m. Bremnes.

**PI 595037. *Festuca pratensis* Hudson**

Wild. ABY-BF 1231.82; W6 9222. Collected in Norway. Latitude 61 deg. 8' N. Longitude 8 deg. 33' E. Elevation 525 m. Grindaheim.

**PI 595038. *Festuca pratensis* Hudson**

Wild. ABY-BF 1233.82; W6 9223. Collected in Norway. Latitude 61 deg. 52' N. Longitude 9 deg. 10' E. Elevation 500 m. Vagamo.

**PI 595039. *Festuca pratensis* Hudson**

Wild. ABY-BF 1235.82; W6 9224. Collected in Norway. Latitude 61 deg. 19' N. Longitude 9 deg. 51' E. Elevation 825 m. Svatsum.

**PI 595040. *Festuca pratensis* Hudson**

Wild. ABY-BF 1237.82; W6 9226. Collected in Norway. Latitude 61 deg. 30' N. Longitude 10 deg. 12' E. Elevation 325 m. Ringebu.

**PI 595041. *Festuca pratensis* Hudson**

Wild. ABY-BF 1241.82; W6 9227. Collected in Norway. Latitude 60 deg. 50' N. Longitude 9 deg. 33' E. Elevation 880 m. Bagn.

**PI 595042. *Festuca pratensis* ssp. *apennina* (De Notaris) Hegi**

Wild. ABY-BF 1064.D76; W6 9232. Collected in Italy. Latitude 44 deg. 9' N. Longitude 7 deg. 34' E. Elevation 1340 m. Colle Di Tende.

**PI 595043. *Lolium perenne* L.**

Wild. ABY-BA 9792.81; W6 9306. Collected in Wales, United Kingdom. Latitude 52 deg. 23' N. Longitude 3 deg. 51' W. Elevation 300 m. Devil's Bridge.

**PI 595044. *Lolium perenne* L.**

Wild. ABY-BA 9798.82; W6 9311. Collected in Wales, United Kingdom. Latitude 51 deg. 57' N. Longitude 3 deg. 53' W. Elevation 100 m. Llangadog.

**PI 595045. *Lolium perenne* L.**

Wild. ABY-BA 9800.80; W6 9312. Collected in Wales, United Kingdom. Latitude 51 deg. 57' N. Longitude 3 deg. 34' W. Elevation 250 m. Sennybridge.

**PI 595046. *Lolium perenne* L.**

Wild. ABY-BA 9802.80; W6 9313. Collected in Wales, United Kingdom. Latitude 51 deg. 57' N. Longitude 3 deg. 34' W. Elevation 250 m. Sennybridge.

**PI 595047. *Lolium perenne* L.**

Wild. ABY-BA 9803.80; W6 9314. Collected in Wales, United Kingdom. Latitude 51 deg. 46' N. Longitude 3 deg. 38' W. Elevation 350 m. Glynneath.

- PI 595048. *Festuca fenas* Lagasca**  
Wild. ABY-BN 1221.86; FRA001; W6 9180. Collected in France.
- PI 595049. *Festuca ovina* L.**  
Wild. ABY-BL 2652.83; W6 9190. Collected in Wales, United Kingdom.  
Latitude 52 deg. 25' N. Longitude 3 deg. 50' W. Elevation 442 m.  
Ponterwyd.
- PI 595050. *Festuca ovina* L.**  
Wild. ABY-BL 2653.83; W6 9191. Collected in Wales, United Kingdom.  
Latitude 52 deg. 25' N. Longitude 3 deg. 50' W. Elevation 351 m.  
Ponterwyd.
- PI 595051. *Festuca ovina* L.**  
Wild. ABY-BL 2678.83OP; W6 9192. Collected in Wales, United Kingdom.  
Latitude 53 deg. 19' N. Longitude 3 deg. 49' W. Elevation 150 m.  
Llandudno.
- PI 595052. *Festuca ovina* L.**  
Wild. ABY-BL 2684.83OP; W6 9193. Collected in England, United Kingdom.  
Latitude 53 deg. 21' N. Longitude 1 deg. 46' W. Elevation 340 m.  
Castleton.
- PI 595053. *Festuca pratensis* Hudson**  
Wild. ABY-BF 1226.82; W6 9218. Collected in Norway. Latitude 58 deg.  
53' N. Longitude 5 deg. 36' E. Elevation 25 m. Sola.
- PI 595054. *Festuca pratensis* ssp. *apennina* (De Notaris) Hegi**  
Wild. ABY-BF 1066.D76; W6 9234. Collected in Italy. Latitude 44 deg. 9'  
N. Longitude 7 deg. 34' E. Elevation 1320 m. Colle Di Tende.
- PI 595055. *Festuca pratensis* ssp. *apennina* (De Notaris) Hegi**  
Wild. ABY-BF 1079.E76; W6 9237. Collected in Italy. Latitude 44 deg.  
33' N. Longitude 9 deg. 27' E. Elevation 1560 m. S. Stefano D'Aveto.
- PI 595056. *Festuca rubra* L.**  
Wild. ABY-BL 2666.83; W6 9239. Collected in Norway. Latitude 60 deg.  
50' N. Longitude 9 deg. 33' E. Elevation 880 m. Bagn.
- PI 595057. *Festuca rubra* L.**  
Wild. ABY-BL 2668.83; W6 9241. Collected in Ireland. Latitude 51 deg.  
36' N. Longitude 8 deg. 32' W. Elevation 50 m. Insale, Old Head of.
- PI 595058. *Festuca arundinacea* Schreber**  
Wild. ABY-BN 272.70; FAO 8351; W6 9171. Collected in Tunisia. Bou  
Ficha.
- PI 595059. *Festuca ovina* L.**  
Wild. ABY-BL 2643.83; W6 9183. Collected in Wales, United Kingdom.  
Latitude 52 deg. 25' N. Longitude 3 deg. 50' W. Elevation 427 m.  
Ponterwyd.
- PI 595060. *Festuca ovina* L.**  
Wild. ABY-BL 2644.83; W6 9184. Collected in Wales, United Kingdom.

Latitude 52 deg. 25' N. Longitude 3 deg. 50' W. Elevation 475 m.  
Ponterwyd.

**PI 595061. *Festuca ovina* L.**

Wild. ABY-BL 2645.83; W6 9185. Collected in Wales, United Kingdom.  
Latitude 52 deg. 25' N. Longitude 3 deg. 50' W. Elevation 834 m.  
Ponterwyd.

**PI 595062. *Festuca ovina* L.**

Wild. ABY-BL 2648.83; W6 9187. Collected in Wales, United Kingdom.  
Latitude 52 deg. 25' N. Longitude 3 deg. 50' W. Elevation 460 m.  
Ponterwyd.

**PI 595063. *Festuca ovina* L.**

Wild. ABY-BL 2650.83; W6 9188. Collected in Wales, United Kingdom.  
Latitude 52 deg. 25' N. Longitude 3 deg. 50' W. Elevation 381 m.  
Ponterwyd.

**PI 595064. *Dactylis glomerata* L.**

Wild. ABY-BC 5449.81; W6 9065. Collected in France. Latitude 44 deg.  
15' N. Longitude 2 deg. 50' E. Elevation 975 m. Viarouges.

**PI 595065. *Dactylis glomerata* L.**

Wild. ABY-BC 5401.81; W6 9060. Collected in France. Latitude 44 deg.  
21' N. Longitude 2 deg. 34' E. Elevation 700 m. Rodez.

**PI 595066. *Dactylis glomerata* L.**

Wild. ABY-BC 5403.81; W6 9061. Collected in France. Latitude 44 deg.  
21' N. Longitude 2 deg. 34' E. Elevation 750 m. Rodez.

**PI 595067. *Dactylis glomerata* L.**

Wild. ABY-BC 5445.81; W6 9062. Collected in France. Latitude 44 deg.  
41' N. Longitude 2 deg. 50' E. Elevation 1040 m. Laguiole.

**PI 595068. *Dactylis glomerata* L.**

Wild. ABY-BC 5447.81; W6 9063. Collected in France. Latitude 24 deg.  
42' N. Longitude 24 deg. 42' E. Elevation 800 m. Pont-De-Salars.

**PI 595069. *Lolium multiflorum* Lam.**

Wild. ABY-BB 1670.78; W6 9254. Collected in Italy. Latitude 44 deg. 39'  
N. Longitude 7 deg. 29' E. Elevation 350 m. Saluzzo.

**PI 595070. *Festuca arundinacea* Schreber**

Wild. ABY-BN 764.71; W6 9173. Collected in Italy. Latitude 44 deg. 2'  
N. Longitude 7 deg. 52' E. Elevation 1387 m. Rezzo.

**PI 595071. *Festuca arundinacea* Schreber**

Wild. ABY-BN 767.71; W6 9174. Collected in Italy. Latitude 46 deg. 29'  
N. Longitude 10 deg. 17' E. Elevation 1250 m. Bormio.

**PI 595072. *Festuca arundinacea* Schreber**

Wild. ABY-BN 1179.82; W6 9178. Collected in Romania. Latitude 47 deg.  
12' N. Longitude 27 deg. 0' E. Elevation 150 m. Tirgu Frumos.

**PI 595073. *Festuca pratensis* ssp. *apennina* (De Notaris) Hegi**

Wild. ABY-BF 1070.B76; W6 9235. Collected in Italy. Latitude 44 deg. 9' N. Longitude 7 deg. 34' E. Elevation 1160 m. Colle Di Tende.

**PI 595074. *Festuca pratensis* ssp. *apennina* (De Notaris) Hegi**  
Wild. ABY-BF 1078.D76; W6 9236. Collected in Italy. Latitude 44 deg. 33' N. Longitude 9 deg. 27' E. Elevation 1600 m. S. Stefano D'Aveto.

**PI 595075. *Lolium multiflorum* Lam.**  
Wild. ABY-BB 1274.69; W6 9244. Collected in Italy. Latitude 45 deg. 19' N. Longitude 9 deg. 30' E. Elevation 83 m. Lodi.

**PI 595076. *Lolium multiflorum* Lam.**  
Wild. ABY-BB 1658.78; W6 9248. Collected in Italy. Latitude 45 deg. 11' N. Longitude 7 deg. 43' E. Leini.

**PI 595077. *Agrostis* sp.**  
Wild. ABY-BR 1245.82; W6 9053. Collected in England, United Kingdom. Latitude 53 deg. 39' N. Longitude 3 deg. 1' W. Elevation 5 m. Southport.

**PI 595078. *Agrostis* sp.**  
Wild. ABY-BR 1249.82; W6 9054. Collected in Wales, United Kingdom. Latitude 53 deg. 16' N. Longitude 3 deg. 54' W. Penmaenmawr.

**PI 595079. *Cynosurus cristatus* L.**  
Wild. ABY-BG 525.81; W6 9056. Collected in Wales, United Kingdom. Latitude 52 deg. 25' N. Longitude 3 deg. 50' W. Elevation 152 m. Ponterwyd.

**PI 595080. *Cynosurus cristatus* L.**  
Wild. ABY-BG 526.81; W6 9057. Collected in Wales, United Kingdom. Latitude 52 deg. 25' N. Longitude 3 deg. 50' W. Elevation 137 m. Ponterwyd.

The following were developed by William Schapaugh, Kansas State University, Department of Agronomy, Throckmorton Hall, Manhattan, Kansas 66506, United States. Received 06/27/1996.

**PI 595081. *Glycine max* (L.) Merr.**  
Cultivar. "KS4895". PVP 9600287.

The following were donated by Stebbins Genetic Collection, Davis, California, United States. Received 1970.

**PI 595082. *Dactylis glomerata* L.**  
Genetic. NSL 80047; TRIODE. Collected in Sweden.

**PI 595083. *Dactylis glomerata* L.**  
Genetic. NSL 80045; TANDUS II. Collected in Sweden.

The following were developed by James E. Irvine, Texas A&M University System, Agricultural Experiment Station, Soil & Crop Sciences Department, Weslaco, Texas 78596-8399, United States; Benjamin L. Legendre, USDA, ARS, U.S.



Sugarcane Field Laboratory, P.O. Box 470, Houma, Louisiana 70361, United States; Jimmie D. Miller, USDA, ARS, Sugarcane Field Station, Star Route Box 8, Canal Point, Florida 33438, United States. Received 09/01/1995.

**PI 595084. *Saccharum hybrid***

Cultivar. "TCP 87-3388"; M00885; Q 35738. CV-104. Pedigree - CP 70-321 / unknown male. Earliest to mature, choice for beginning Texas sugarcane harvest season in mid-September. Yields equal to dominant variety, CP 70-321. Resistant to sugarcane smut, sugarcane mosaic virus (strain H), and sugarcane rust. Reaction to ratoon stunting disease unknown. Occasionally shows symptoms of yellow leaf syndrome, a disorder of unknown etiology. More frequently attacked by borers than CP 70-321.

The following were developed by Mark E. Sorrells, Cornell University, Dept. of Plant Breeding & Biometry, 252 Emerson Hall, Ithaca, New York 14853-1902, United States. Received 07/01/1996.

**PI 595085. *Triticum aestivum* L., nom. cons.**

Cultivar. Pureline. "NY BATAVIA"; NY73116-4W. PVP 9500249. Pedigree - NY6298-14 x Frederick. Soft white winter wheat. At booting flag leaf erect and straight, stems waxy bloom and yellow green, leaves yellow-green. At maturity stems hollow white. Spikes mid-dense, fusiform, awnletted, avg. length 8-9 cm. Glumes white, long, wide, shoulder oblique, beak acute. Kernels soft white, ovate, cheeks rounded, brush medium, crease narrow and mid-deep. Seed length avg. 6.8 mm, width 3.5 mm, avg. 36 g/1000 kernels. Moderate resistance to loose smut, leaf rust, and powdery mildew. Susceptible to stem rust. Partial resistance to wheat spindle streak mosaic virus.

The following were developed by Lofts Seed, Inc., United States. Received 07/03/1996.

**PI 595086. *Agrostis stolonifera* L.**

Cultivar. "LOFTS L-93". PVP 9600256.

The following were developed by Northrup King Company, United States. Received 07/03/1996.

**PI 595087. *Glycine max* (L.) Merr.**

Cultivar. "S00-55". PVP 9600257.

The following were developed by New Zealand Pastoral Agriculture Research Institute Ltd, New Zealand. Received 07/03/1996.

**PI 595088. *Trifolium repens* L.**

Cultivar. "GRASSLANDS DEMAND". PVP 9600258.

**PI 595089. *Trifolium repens* L.**

Cultivar. "GRASSLANDS SUSTAIN". PVP 9600259.

The following were developed by NDSU Research Foundation, North Dakota, United States. Received 07/03/1996.

**PI 595090. *Triticum aestivum* L., nom. cons.**

Cultivar. "TRENTON". PVP 9600261. Hard red spring wheat.

The following were developed by Progeny Advanced Genetics, Inc., Salinas, California, United States. Received 07/03/1996.

**PI 595091. *Lactuca sativa* L.**

Cultivar. "SAVANNAH GREEN". PVP 9600262.

The following were developed by Rogers Seed Company, United States. Received 07/03/1996.

**PI 595092. *Pisum sativum* L.**

Cultivar. "<SP18 SP770-1-18>". PVP 9600263.

**PI 595093. *Pisum sativum* L.**

Cultivar. "<SP6 SP770-1-6>". PVP 9600264.

The following were developed by Agripro Seeds, Inc., United States. Received 07/03/1996.

**PI 595094. *Triticum durum* Desf.**

Cultivar. "DRESSLER". PVP 9600265.

The following were developed by Terrance P. Riordan, Nebraska Agricultural Experiment Station, University of Nebraska, 377 Plant Science, Lincoln, Nebraska 68583-0724, United States; Jeff Klingenberg, P.O. Box 60578, Phoenix, Arizona 85082, United States; P. G. Johnson, University of Nebraska-Lincoln, Dept. of Horticulture, 377 Plant Sciences, Lincoln, Nebraska 68583-0724, United States. Received 07/03/1996.

**PI 595095. *Buchloe dactyloides* (Nutt.) Engelm.**

Cultivar. "TATANKA"; NTG-1. CV-190; PVP 9600266. Pedigree - First and second generation maternal half-sib family generated from a back-cross of males on NE84-315. Turf-type buffalograss with improved quality, density, and leaf spot resistance, compared to other seeded buffalograss varieties when grown in central and northern portions of the U.S. Reduced vertical growth rate and produces female flowers that form close to the ground. Goes dormant earlier than southern adapted buffalograsses, but greens up earlier in spring. Smaller burs than other varieties. When not mowed, will produce inflorescences above turf canopy in ratio of approx. one female to one male.

The following were developed by Asgrow Seed Company, United States. Received 07/03/1996.

**PI 595096. *Lactuca sativa* L.**

Cultivar. "FLORENCE". PVP 9600267.

The following were developed by Jacklin Seed Company, United States. Received 07/03/1996.

**PI 595097. *Poa pratensis* L.**

Cultivar. "CALIBER". PVP 9600275.

The following were developed by Virginia Agricultural Experiment Station, Blacksburg, Virginia, United States. Received 07/03/1996.

**PI 595098. *Triticum aestivum* L., nom. cons.**

Cultivar. "FEATHERSTONE 520". PVP 9600276.

The following were developed by Dan Phillips, University of Georgia, Department of Plant Pathology, Georgia Experiment Station, Experiment, Georgia 30223, United States; Richard S. Hussey, University of Georgia, College of Agric. and Envirn. Sciences, Department of Plant Pathology, Athens, Georgia 30602-7274, United States; H. Roger Boerma, University of Georgia, Department of Crop & Soil Science, 3111 Plant Sciences Building, Athens, Georgia 30602-7272, United States; S.L. Finnerty, University of Georgia, Dept. of Plant Pathology, Athens, Georgia 30602, United States; Bruce M. Luzzi, University of Guelph, Dept. of Crop Science, Guelph, Ontario N1G 2W1, Canada; John P. Tamulonis, University of Georgia, Dept. of Crop and Soil Sciences, Athens, Georgia, United States. Received 06/25/1996.

**PI 595099. *Glycine max* (L.) Merr.**

Breeding. Pureline. G93-9223. GP-181. Pedigree - F4 derived line from cross G83-559 x (G80-1515(2) x PI 230977). High resistance to Javanese root-knot nematode (*Meloidogyne javanica*) (Mj). Similar level of resistance to Mj as PI 230977, but higher seed yield. PI 230977 has highest level of resistance to Mj identified in soybean. Resistant to southern (M. incognita) and peanut (M. arenaria) root-knot nematodes, race 3 and race 14 of SCN, and bacterial pustule (*Xanthomonas campestris* pv. *glycines*). Maturity Group VII, matures about same day as Bryan and 6 d earlier than PI 230977. 5 cm shorter and similar lodging resistance as Bryan. Flowers white, tawny pubescence, tan pod walls, determinate growth habit. Yellow seed coat and black hilum.

The following were developed by Walter Graves, 7665 Volclay Drive, San Diego, California 92119-1219, United States. Received 06/28/1996.

**PI 595100. *Trifolium alexandrinum* L.**

Cultivar. Pureline. "SAIDI". Pedigree - Considered an Egyptian landrace that may have evolved in irrigated agriculture zone of Egypt since later half of first millennium A.D. Seeds obtained in 1994 from Dr. Ahmed Rammah, Field Crops Research Institute, Gamaa, Egypt, and multiplied at UC-Riverside under isolation conditions. Berseem clover, somewhat decumbent rather than erect winter annual landrace, evolved under irrigated agriculture in Egypt perhaps over last 1000 years. Commonly referred to as intermediate berseem clover type between multicut and

unicut types, since it has both basal and stem branching and can be cut two to three times during winter-spring growing season. In Egypt, where this type of berseem is commonly used, is considered a droughty type due to unusually long tap root characteristic. Considered very nutritious for livestock and commonly grown in Upper Nile River above Cairo. Growth habit lower than other berseem types, has peculiar glaucous appearance enabling one to distinguish it from other types. Due to somewhat decumbent nature, is often sown with erect plant types such as barley and/or wheat. Seed color predominantly yellow, approx. 400,000 seeds/kg.

The following were developed by J. Katznelson, Volcani Institute of Agricultural Res., Regional Experiment Station, Neve-Ya'Ar, Haifa, Israel; Walter Graves, 7665 Volclay Drive, San Diego, California 92119-1219, United States. Received 06/28/1996.

**PI 595101. *Trifolium alexandrinum* L.**

Cultivar. Pureline. "TAVOR"; Tabor. Pedigree - Derived from Egyptian berseem landrace named Fahl, obtained in 1994 from the Hazera Ltd. Company, Haifa, Israel. Multiplied at UC-Riverside under isolation conditions. Development accredited to Dr. J. Katznelson, Volcani Agricultural Research Center, Bet Dagan, Israel. Upright winter annual developed in Israel. Commonly referred to as unicut berseem clover type, since is only stem branching and won't regrow after cutting. In Egypt, where this type of berseem is commonly used, seed is broadcast in fall, irrigated once and allowed to mature for animal forage, usually donkeys. Sown on land needed for cropping in spring following late spring cutting. May be sown with barley or wheat and often precedes cotton or summer vegetables. Coarse plant, thick, hollow stems, long internodes, very low leaf/stem ratio. Hay quality can be poor. Flowers in spring much earlier than other types of berseem clovers. Susceptible to Ascochyta. Poor winter hardiness. Can attain heights up to 80 cm in 100 d of growth. Seed color predominantly yellow, small percentage with purple pigmentation, weight approx. 400,000 seeds/kg.

The following were collected by C. J. DeMooy, Colorado State University, Colorado Agricultural Experiment Station, Department of Agronomy, Fort Collins, Colorado, United States. Donated by A. E. Hall, University of California, Department of Botany & Plant, Sciences, Riverside, California 92521, United States. Received 02/01/1995.

**PI 595102. *Vigna unguiculata* (L.) Walp. *ssp. unguiculata***

Cultivated. BOTS 70; UCR 853. Collected 09/01/1987 in Botswana.

**PI 595103. *Vigna unguiculata* (L.) Walp. *ssp. unguiculata***

Cultivated. BOTS 279A; UCR 1079. Collected 09/01/1987 in Botswana.

**PI 595104. *Vigna unguiculata* (L.) Walp. *ssp. unguiculata***

Cultivated. BOTS 514E; UCR 1319. Collected 09/01/1987 in Botswana. Photosensitive, purple mottling.

The following were developed by Coastal Seeds, Inc., United States. Received 07/15/1996.

**PI 595105. *Lactuca sativa* L.**  
Cultivar. "COWBOY". PVP 9600278.

**PI 595106. *Lactuca sativa* L.**  
Cultivar. "WRANGLER". PVP 9600279.

The following were developed by Louisiana Agricultural Experiment Station,  
Louisiana, United States. Received 07/15/1996.

**PI 595107. *Gossypium hirsutum* L.**  
Cultivar. "H1560". PVP 9600280.

The following were developed by FFR Cooperative, United States. Received  
07/15/1996.

**PI 595108. *Glycine max* (L.) Merr.**  
Cultivar. "FFR474". PVP 9600281.

**PI 595109. *Glycine max* (L.) Merr.**  
Cultivar. "FFR514". PVP 9600282.

The following were developed by J. G. Boswell Company Cottonseed Breeding,  
United States. Received 07/15/1996.

**PI 595110. *Gossypium hirsutum* L.**  
Cultivar. "ZOI". PVP 9600283.

**PI 595111. *Gossypium hirsutum* L.**  
Cultivar. "DRIMA". PVP 9600284.

The following were developed by Brownfield Seed and Delinting Co., Inc.,  
United States. Received 07/15/1996.

**PI 595112. *Gossypium hirsutum* L.**  
Cultivar. "APACHE". PVP 9600285.

The following were developed by Ferry-Morse Seed Company, United States.  
Received 07/15/1996.

**PI 595113. *Capsicum annuum* L.**  
Cultivar. "GUSTO". PVP 9600286.

The following were collected by D. Elliott. Donated by B. B. Billingsley,  
USDA, SCS, Plant Material Center, Route 3, Box 215A, Coffeeville, Mississippi  
38922, United States. Received 04/24/1992.

**PI 595114. *Bromus catharticus* M. Vahl**  
Wild. 9054981; W6 10413. Collected 06/19/1989 in Alabama, United States.

Escambia County.

The following were collected by Mike Materne, USDA, SCS, P. O. Box 16030, University Station, Baton Rouge, Louisiana 70893, United States. Donated by B. B. Billingsley, USDA, SCS, Plant Material Center, Route 3, Box 215A, Coffeeville, Mississippi 38922, United States. Received 04/24/1992.

**PI 595115. *Bromus catharticus* M. Vahl**

Wild. 9054997; W6 10416. Collected 05/15/1989 in Louisiana, United States. Lafource County.

The following were collected by James Wolfe, USDA, SCS, Suite 1321, Federal Building, 100 West Capitol Street, Jackson, Mississippi 39269, United States. Donated by B. B. Billingsley, USDA, SCS, Plant Material Center, Route 3, Box 215A, Coffeeville, Mississippi 38922, United States. Received 04/24/1992.

**PI 595116. *Bromus catharticus* M. Vahl**

Wild. 9054954; W6 10419. Collected 05/09/1988 in Mississippi, United States. Washington County.

The following were collected by W.J. Kerr. Donated by B. B. Billingsley, USDA, SCS, Plant Material Center, Route 3, Box 215A, Coffeeville, Mississippi 38922, United States. Received 04/24/1992.

**PI 595117. *Bromus catharticus* M. Vahl**

Wild. 9054961; W6 10421. Collected 05/19/1989 in Mississippi, United States. Jefferson Davis County.

The following were collected by W.J. Kerr; Hutchins. Donated by B. B. Billingsley, USDA, SCS, Plant Material Center, Route 3, Box 215A, Coffeeville, Mississippi 38922, United States. Received 04/24/1992.

**PI 595118. *Bromus catharticus* M. Vahl**

Wild. 9054962; W6 10422. Collected 05/13/1989 in Mississippi, United States. Copiah County.

The following were collected by D.E. Manzanares. Donated by B. B. Billingsley, USDA, SCS, Plant Material Center, Route 3, Box 215A, Coffeeville, Mississippi 38922, United States. Received 04/24/1992.

**PI 595119. *Bromus catharticus* M. Vahl**

Wild. 9054963; W6 10424. Collected 1992 in New Mexico, United States.

The following were collected by M.D. Conkling. Donated by B. B. Billingsley, USDA, SCS, Plant Material Center, Route 3, Box 215A, Coffeeville, Mississippi 38922, United States. Received 04/24/1992.

**PI 595120. *Bromus catharticus* M. Vahl**

Wild. 9054971; W6 10426. Collected 05/30/1989 in Oklahoma, United States

Kiowa County.

The following were collected by G. Hardee. Donated by B. B. Billingsley, USDA, SCS, Plant Material Center, Route 3, Box 215A, Coffeeville, Mississippi 38922, United States. Received 04/24/1992.

**PI 595121. *Bromus catharticus* M. Vahl**

Wild. 9054974; W6 10427. Collected 06/07/1989 in South Carolina, United States. Latitude 34 deg. 6' 55'' N. Longitude 80 deg. 56' 18'' W. Sand filled road shoulder on Brickyard Road, .5 miles from US Hwy 1, SCS State Office, Richland County, Columbia.

**PI 595122. *Bromus catharticus* M. Vahl**

Wild. 9054975; W6 10428. Collected 06/08/1989 in South Carolina, United States. Latitude 33 deg. 42' 26'' N. Longitude 80 deg. 47' 2'' W. Behind county office bldg., near farm supply bldg., SCS State Office, Calhoun County, Columbia.

The following were collected by J., Jr. Jackson. Donated by B. B. Billingsley, USDA, SCS, Plant Material Center, Route 3, Box 215A, Coffeeville, Mississippi 38922, United States. Received 04/24/1992.

**PI 595123. *Bromus catharticus* M. Vahl**

Wild. 9054948; W6 10431. Collected 03/08/1989 in Texas, United States. Roadside of Junction US 281 & State Hwy 141, Jim Wells County.

The following were collected by S. Ellison. Donated by B. B. Billingsley, USDA, SCS, Plant Material Center, Route 3, Box 215A, Coffeeville, Mississippi 38922, United States. Received 04/24/1992.

**PI 595124. *Bromus catharticus* M. Vahl**

Wild. 9054969; W6 10434. Collected 05/01/1989 in Texas, United States. Erath County.

The following were collected by G. Rainwater. Donated by B. B. Billingsley, USDA, SCS, Plant Material Center, Route 3, Box 215A, Coffeeville, Mississippi 38922, United States. Received 04/24/1992.

**PI 595125. *Bromus catharticus* M. Vahl**

Wild. 9054977; W6 10435. Collected 05/20/1989 in Texas, United States. Guadalupe County.

The following were collected by R. Martinez, University of Cordoba, Cordoba, Argentina. Donated by B. B. Billingsley, USDA, SCS, Plant Material Center, Route 3, Box 215A, Coffeeville, Mississippi 38922, United States. Received 04/24/1992.

**PI 595126. *Bromus catharticus* M. Vahl**

Wild. 9054980; W6 10436. Collected 04/28/1989 in Texas, United States. Caldwell County.

The following were collected by A. Neisler. Donated by B. B. Billingsley, USDA, SCS, Plant Material Center, Route 3, Box 215A, Coffeeville, Mississippi 38922, United States. Received 04/24/1992.

**PI 595127. *Bromus catharticus* M. Vahl**

Wild. 9054986; W6 10437. Collected 04/25/1989 in Texas, United States. Hunt County.

The following were collected by A. Boozer. Donated by B. B. Billingsley, USDA, SCS, Plant Material Center, Route 3, Box 215A, Coffeeville, Mississippi 38922, United States. Received 04/24/1992.

**PI 595128. *Bromus catharticus* M. Vahl**

Wild. 9054989; W6 10438. Collected 04/12/1989 in Texas, United States. Wilson County. Coffeeville PMC selection.

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

**PI 595129. *Elymus caninus* (L.) L.**

Wild. X93001; W6 12920. Collected 08/06/1993 in Xinjiang, China. Latitude 44 deg. 11' N. Longitude 86 deg. 54' E. Elevation 532 m. Hutubi Stud and Dairy Farm, Xinjiang.

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

**PI 595130. *Festuca ovina* L.**

Wild. X93015; W6 12933. Collected 08/07/1993 in Xinjiang, China. Latitude 43 deg. 53' N. Longitude 86 deg. 22' E. Elevation 1550 m. Steep ungrazed slope above road, 77km southwest of Hutubi and 39km south of Dafeng, Xinjiang. Disturbed site, very large stand of *Leymus angustus* associated with *Koeleria* and *Stipa* species.

**PI 595131. *Stipa capillata* L.**

Wild. X93016; W6 12934. Collected 08/07/1993 in Xinjiang, China. Latitude 43 deg. 53' N. Longitude 86 deg. 22' E. Elevation 1550 m. Steep ungrazed slope above road, 77km southwest of Hutubi and 39km south of Dafeng, Xinjiang. Disturbed site, very large stand of *Leymus angustus* associated with *Koeleria* and *Stipa* species.



- PI 595132. *Elymus mutabilis* ssp. *praecaespitosus* (Nevski) Tzvelev**  
Wild. X93019; W6 12937. Collected 08/07/1993 in Xinjiang, China.  
Latitude 43 deg. 52' N. Longitude 86 deg. 21' E. Elevation 1600 m.  
Diverse natural pasture used for hay cutting, gently rolling hills, 44km southwest of Dafeng, Xinjiang.
- PI 595133. *Psathyrostachys juncea* (Fischer) Nevski**  
Wild. X93021; W6 12939. Collected 08/07/1993 in Xinjiang, China.  
Latitude 43 deg. 52' N. Longitude 86 deg. 21' E. Elevation 1600 m.  
Diverse natural pasture used for hay cutting, gently rolling hills, 44km southwest of Dafeng, Xinjiang.
- PI 595134. *Elytrigia repens* (L.) Desv. ex Nevski**  
Wild. X93028; W6 12946. Collected 08/07/1993 in Xinjiang, China.  
Latitude 43 deg. 50' N. Longitude 86 deg. 16' E. Elevation 1665 m. Town of Lao Ba Wan Zi, 100km from Hutubi, 43km southwest of Dafeng, Xinjiang.  
Natural pasture at base of Tien Shan Mountains, used for hay cutting, close to border of *Pinus Tianshanica*.
- PI 595135. *Psathyrostachys juncea* (Fischer) Nevski**  
Wild. X93031; W6 12949. Collected 08/07/1993 in Xinjiang, China.  
Latitude 43 deg. 51' N. Longitude 86 deg. 19' E. Elevation 1632 m. Dry sidehill 46km from Dafeng, Xinjiang. *Psathyrostachys juncea* dominant species.
- PI 595136. *Elytrigia repens* (L.) Desv. ex Nevski**  
Wild. X93035; W6 12953. Collected 08/08/1993 in Xinjiang, China.  
Latitude 43 deg. 56' N. Longitude 86 deg. 26' E. Elevation 1040 m. Along river drainage, 31km southwest of Dafeng, Xinjiang. Plant diversity immense.
- PI 595137. *Achnatherum splendens* (Trin.) Nevski**  
Wild. X93041; W6 12959. Collected 08/08/1993 in Xinjiang, China.  
Latitude 43 deg. 56' N. Longitude 86 deg. 26' E. Elevation 1040 m. Along river drainage, 31km southwest of Dafeng, Xinjiang. Plant diversity immense.
- PI 595138. *Psathyrostachys juncea* (Fischer) Nevski**  
Wild. X93044; W6 12962. Collected 08/08/1993 in Xinjiang, China.  
Latitude 43 deg. 49' N. Longitude 86 deg. 21' E. Elevation 1510 m. 45km southwest of Dafeng, Xinjiang. Plants located on sidehill associated with *Medicago lupulina* (very robust but immature).
- PI 595139. *Elytrigia elongata* (Host) Nevski**  
Wild. X93047; W6 12965. Collected 08/08/1993 in Xinjiang, China.  
Latitude 43 deg. 49' N. Longitude 86 deg. 21' E. Elevation 1510 m. 45km southwest of Dafeng, Xinjiang. Plants located on sidehill associated with *Medicago lupulina* (very robust but immature).
- PI 595140. *Festuca ovina* L.**  
Wild. X93051; W6 12969. Collected 08/08/1993 in Xinjiang, China.  
Latitude 43 deg. 49' N. Longitude 86 deg. 21' E. Elevation 1510 m. 45km southwest of Dafeng, Xinjiang. Plants located on sidehill associated with *Medicago lupulina* (very robust but immature).

- PI 595141. *Elytrigia repens* (L.) Desv. ex Nevski**  
 Wild. X93060; W6 12977. Collected 08/10/1993 in Xinjiang, China.  
 Latitude 44 deg. 6' N. Longitude 86 deg. 2' E. Elevation 900 m. Roadside ditch, 44km from Shihezi and 31km from Shihezi Rd. on way to Zinichuan Stud Farm, Xinjiang.
- PI 595142. *Psathyrostachys juncea* (Fischer) Nevski**  
 Wild. X93064; W6 12980. Collected 08/10/1993 in Xinjiang, China.  
 Latitude 44 deg. 0' N. Longitude 85 deg. 52' E. Elevation 1120 m.  
 Zinichuan Stud Farm, Xinjiang. Site characterized by fenced pasture that is only grazed during winter. Fenced since 1979. Areas outside fence heavily grazed. *Artemisia bolensis* observed but immature.
- PI 595143. *Leymus karelinii* (Turcz.) Tzvelev**  
 Wild. X93065; W6 12981. Collected 08/10/1993 in Xinjiang, China.  
 Latitude 44 deg. 0' N. Longitude 85 deg. 52' E. Elevation 1120 m.  
 Zinichuan Stud Farm, Xinjiang. Site characterized by fenced pasture that is only grazed during winter. Fenced since 1979. Areas outside fence heavily grazed. *Artemisia bolensis* observed but immature.
- PI 595144. *Achnatherum splendens* (Trin.) Nevski**  
 Wild. X93066; W6 12982. Collected 08/10/1993 in Xinjiang, China.  
 Latitude 44 deg. 0' N. Longitude 85 deg. 52' E. Elevation 1120 m.  
 Zinichuan Stud Farm, Xinjiang. Site characterized by fenced pasture that is only grazed in winter. Fenced since 1979. Areas outside fence heavily grazed. *Artemisia bolensis* observed but immature.
- PI 595145. *Festuca ovina* L.**  
 Wild. X93067; W6 12983. Collected 08/10/1993 in Xinjiang, China.  
 Latitude 44 deg. 0' N. Longitude 85 deg. 52' E. Elevation 1120 m.  
 Zinichuan Stud Farm, Xinjiang. Site characterized by fenced pasture that is only grazed in winter. Fenced since 1979. Areas outside fence heavily grazed. *Artemisia bolensis* observed but immature.
- PI 595146. *Festuca ovina* L.**  
 Wild. X93081; W6 12997. Collected 08/11/1993 in Xinjiang, China.  
 Latitude 44 deg. 9' N. Longitude 84 deg. 38' E. Elevation 1620 m.  
 Natural pasture at base of Tien Shan Mountains, approx 65km south of Usu, Xinjiang.
- PI 595147. *Elytrigia repens* (L.) Desv. ex Nevski**  
 Wild. X93086; W6 13002. Collected 08/11/1993 in Xinjiang, China.  
 Latitude 44 deg. 9' N. Longitude 84 deg. 38' E. Elevation 1620 m.  
 Natural pasture at base of Tien Shan Mountains, approx. 65km south of Usu, Xinjiang.
- PI 595148. *Leymus angustus* (Trin.) Pilger**  
 Wild. X93102; W6 13013. Collected 08/11/1993 in Xinjiang, China.  
 Latitude 44 deg. 11' N. Longitude 84 deg. 33' E. Elevation 1240 m. Along ditchway that follows road in solid stands, Xinjiang. Fertility good.
- PI 595149. *Elymus sibiricus* L.**  
 Wild. X93100; W6 13016. Collected 08/11/1993 in Xinjiang, China.  
 Latitude 44 deg. 10' N. Longitude 84 deg. 34' E. Elevation 1500 m.  
 Natural pasture just before Chanjing Farm, Xinjiang.

- PI 595150. *Achnatherum splendens* (Trin.) Nevski**  
Wild. X93108; W6 13021. Collected 08/12/1993 in Xinjiang, China.  
Latitude 44 deg. 34' N. Longitude 83 deg. 55' E. Elevation 385 m. Gultu Farm, Xinjiang. Farm characterized by being very dry with high accumulation of salt due to excessive irrigation. Dominant species *Achnatherum splendens*. Some very large stands of *Leymus secalinus* growing in very harsh conditions.
- PI 595151. *Elymus dahuricus* Turcz. ex Griseb. ssp. *dahuricus***  
Wild. X93110; W6 13023. Collected 08/12/1993 in Xinjiang, China.  
Latitude 44 deg. 34' N. Longitude 83 deg. 55' E. Elevation 385 m. Gultu Farm, Xinjiang. Farm characterized by being very dry with high accumulation of salt due to excessive irrigation. Dominant species *Achnatherum splendens*. Some very large stands of *Leymus secalinus* growing in very harsh conditions.
- PI 595152. *Psathyrostachys juncea* (Fischer) Nevski**  
Wild. X93114; W6 13027. Collected 08/14/1993 in Xinjiang, China.  
Latitude 44 deg. 37' N. Longitude 81 deg. 43' E. Elevation 1200 m. Drainage ditch along road to Salimu Lake from Bole, Xinjiang.
- PI 595153. *Alopecurus pratensis* L.**  
Wild. X93126; W6 13039. Collected 08/14/1993 in Xinjiang, China.  
Latitude 44 deg. 31' N. Longitude 81 deg. 8' E. Elevation 2065 m. South side of Salimu Lake, about 3km from main road, Xinjiang. Most productive site to date.
- PI 595154. *Festuca ovina* L.**  
Wild. X93130; W6 13042. Collected 08/14/1993 in Xinjiang, China.  
Latitude 44 deg. 31' N. Longitude 81 deg. 8' E. Elevation 2065 m. South side of Salimu Lake, about 3km from main road, Xinjiang. Most productive site to date.
- PI 595155. *Psathyrostachys juncea* (Fischer) Nevski**  
Wild. X93140; W6 13049. Collected 08/14/1993 in Xinjiang, China.  
Latitude 44 deg. 48' N. Longitude 81 deg. 10' E. Elevation 1700 m. About 10km lower on road to Wenchuan County than previous site from Lake Salimu, Xinjiang. Heavily grazed and very rocky however, grass diversity good.
- PI 595156. *Elymus sibiricus* L.**  
Wild. X93144; W6 13053. Collected 08/15/1993 in Xinjiang, China.  
Latitude 45 deg. 2' N. Longitude 81 deg. 7' E. Elevation 1300 m. Gravel soil along irrigation ditch, Xinjiang.
- PI 595157. *Elytrigia repens* (L.) Desv. ex Nevski**  
Wild. X93152; W6 13061. Collected 08/15/1993 in Xinjiang, China.  
Latitude 45 deg. 2' N. Longitude 81 deg. 7' E. Elevation 1300 m. Gravel soil along irrigation ditch, Xinjiang.
- PI 595158. *Festuca ovina* L.**  
Wild. X93154; W6 13063. Collected 08/15/1993 in Xinjiang, China.  
Latitude 45 deg. 3' N. Longitude 81 deg. 5' E. Elevation 1400 m. Heavily grazed rocky hill (memorial monument present), Xinjiang.

- PI 595159. *Leymus angustus* (Trin.) Pilger**  
Wild. X93155; W6 13064. Collected 08/15/1993 in Xinjiang, China.  
Latitude 45 deg. 3' N. Longitude 81 deg. 5' E. Elevation 1400 m. Heavily grazed rocky hill (memorial monument present), Xinjiang.
- PI 595160. *Festuca ovina* L.**  
Wild. X93156; W6 13065. Collected 08/15/1993 in Xinjiang, China.  
Latitude 45 deg. 10' N. Longitude 81 deg. 33' E. Elevation 1400 m.  
Heavily grazed hill on edge of restricted sites near the Kazakhstan border, Xinjiang.
- PI 595161. *Achnatherum splendens* (Trin.) Nevski**  
Wild. X93157; W6 13066. Collected 08/15/1993 in Xinjiang, China.  
Latitude 45 deg. 10' N. Longitude 81 deg. 33' E. Elevation 1400 m.  
Heavily grazed hill on edge of restricted sites near the Kazakhstan border.
- PI 595162. *Elymus sibiricus* L.**  
Wild. X93169; W6 13075. Collected 08/18/1993 in Xinjiang, China.  
Latitude 44 deg. 7' N. Longitude 87 deg. 58' E. Elevation 1680 m. Uncut, non-irrigation mountain pasture. Bottom of slope at Y in road 4km from main road to Tien Shi Lake (Heavenly Lake) on left side of road going east, Xinjiang.
- PI 595163. *Elymus gmelinii* (Ledeb.) Tzvelev**  
Wild. X93171; W6 13077. Collected 08/18/1993 in Xinjiang, China.  
Latitude 44 deg. 7' N. Longitude 87 deg. 58' E. Elevation 1680 m. Uncut, non-irrigated mountain pasture. Bottom of slope at Y in road 4km from main road to Tien Shi Lake (Heavenly Lake) on left side of road going east, Xinjiang.
- PI 595164. *Pseudoroegneria strigosa* ssp. *aegilopoides* (Drobov) A. Love**  
Wild. X93173; W6 13079. Collected 08/18/1993 in Xinjiang, China.  
Latitude 44 deg. 7' N. Longitude 87 deg. 58' E. Elevation 1680 m. Uncut, non-irrigated mountain pasture. Bottom of slope at Y in road 4km from main road to Tien Shi Lake (Heavenly Lake) on left side of road going east, Xinjiang.
- PI 595165. *Psathyrostachys juncea* (Fischer) Nevski**  
Wild. X93174; W6 13080. Collected 08/18/1993 in Xinjiang, China.  
Latitude 44 deg. 7' N. Longitude 87 deg. 58' E. Elevation 1680 m. Uncut, non-irrigated mountain pasture. Bottom of slope at Y in road 4km from main road to Tien Shi Lake (Heavenly Lake) on left side of road going east, Xinjiang.
- PI 595166. *Dactylis glomerata* L.**  
Wild. X93179; W6 13085. Collected 08/18/1993 in Xinjiang, China.  
Latitude 44 deg. 7' N. Longitude 87 deg. 58' E. Elevation 1680 m. Uncut, non-irrigated mountain pastsure. Bottom of slope at Y in road 4km from main road to Tien Shi Lake (Heavenly Lake) on left side of road going east, Xinjiang.
- PI 595167. *Festuca ovina* L.**  
Wild. X93180; W6 13086. Collected 08/18/1993 in Xinjiang, China.

Latitude 44 deg. 7' N. Longitude 87 deg. 58' E. Elevation 1670 m. Uncut, non-irrigated mountain pasture. Bottom of slope along road 2km from main road to Tien Shi Lake (Heavenly Lake) on left side of road going east, Xinjiang. Dominant species *Stipa capillata*.

**PI 595168. *Psathyrostachys juncea* (Fischer) Nevski**  
Wild. X93182; W6 13088. Collected 08/18/1993 in Xinjiang, China.  
Latitude 44 deg. 7' N. Longitude 87 deg. 58' E. Elevation 1670 m. Uncut, non-irrigated mountain pasture. Bottom of slope along road 2km from main road to Tien Shi Lake (Heavenly Lake) on left side of road going east, Xinjiang.

**PI 595169. *Elymus sibiricus* L.**  
Wild. X93185; W6 13091. Collected 08/20/1993 in Xinjiang, China.  
Latitude 43 deg. 46' N. Longitude 89 deg. 27' E. Elevation 1300 m. Silty clay, 48km south of Chitai, very dry rolling foot hills used for winter pastures, Xinjiang.

**PI 595170. *Festuca ovina* L.**  
Wild. X93192; W6 13098. Collected 08/20/1993 in Xinjiang, China.  
Latitude 43 deg. 46' N. Longitude 89 deg. 27' E. Elevation 1300 m. Silty clay, 48km south of Chitai, very dry rolling foot hills used for winter pastures, Xinjiang.

**PI 595171. *Elytrigia repens* (L.) Desv. ex Nevski**  
Wild. X93202; W6 13107. Collected 08/20/1993 in Xinjiang, China.  
Latitude 43 deg. 44' N. Longitude 89 deg. 27' E. Elevation 1400 m. Silty clay, 53km south of Chitai, very dry rolling foot hills used for winter pastures, Xinjiang. Dominate species *Medicago varia*. Winter pasture associated with *Artemisia boraleensis*, *Kochia postrata*, and *Festuca ovina*.

**PI 595172. *Pseudoroegneria strigosa* ssp. *aegilopoides* (Drobov) A. Love**  
Wild. X93204; W6 13109. Collected 08/21/1993 in Xinjiang, China.  
Latitude 43 deg. 41' N. Longitude 89 deg. 18' E. Elevation 1870 m. Loam soil, middle pasture, 44km south of Jimsar, east sloping steep hillside pasture near Chuan Zi Jie village,, Xinjiang. Diversity immense.

**PI 595173. *Dactylis glomerata* L.**  
Wild. X93208; W6 13113. Collected 08/21/1993 in Xinjiang, China.  
Latitude 43 deg. 41' N. Longitude 89 deg. 18' E. Elevation 1870 m. Loam soil, middle pasture, 44km south of Jimsar, east sloping steep hillside pasture near Chuan Zi Jie Village, Xinjiang. Diversity immense.

**PI 595174. *Elymus sibiricus* L.**  
Wild. X93218; W6 13123. Collected 08/21/1993 in Xinjiang, China.  
Latitude 43 deg. 41' N. Longitude 89 deg. 18' E. Elevation 1870 m. Loam soil, middle pasture, 44km south of Jimsar, east sloping steep hillside pasture near Chuan Zi Jie Village, Xinjiang. Diversity immense.

**PI 595175. *Leymus angustus* (Trin.) Pilger**  
Wild. X93226; W6 13130. Collected 08/24/1993 in Xinjiang, China.  
Latitude 43 deg. 48' N. Longitude 87 deg. 51' E. Elevation 1600 m. High winter pasture at Tu Juan south of Xiejago Stud Farm, 90km S & E of Urumqi, lowland seepage, upper sites very dry. Bottom lands clay loam, side hills gravelly. Dominant species include *Artemisa boraleensis*, *Stipa*

capillata, Festuca ovina.

**PI 595176. Elytrigia repens (L.) Desv. ex Nevski**

Wild. X93228; W6 13132. Collected 08/24/1993 in Xinjiang, China. Latitude 43 deg. 48' N. Longitude 87 deg. 51' E. Elevation 1600 m. High winter pasture at Tu Juan south of Xiejago Stud Farm, 90km S & E of Urumqi, lowland seepage, upper sites very dry. Bottom lands clay loam, side hills gravely. Dominant species Artemisa boralensis, Stipa capillata, Festuca ovina.

**PI 595177. Psathyrostachys juncea (Fischer) Nevski**

Wild. X93233; W6 13137. Collected 08/24/1993 in Xinjiang, China. Latitude 43 deg. 48' N. Longitude 87 deg. 51' E. Elevation 1600 m. High winter pasture at Tu Juan south of Xiejago Stud Farm, 90km S & E of Urumqi, lowland seepage, upper sites very dry. Bottom lands clay loam, side hills gravely. Dominant species include Artemisa boralensis, Stipa capillata, Festuca ovina.

**PI 595178. Festuca ovina L.**

Wild. X93235; W6 13139. Collected 08/24/1993 in Xinjiang, China. Latitude 43 deg. 48' N. Longitude 87 deg. 51' E. Elevation 1600 m. High winter pasture at Tu Juan south of xiejago Stud Farm, 90km S & E of Urumqi, lowland seepage, upper sites very dry. Bottom lands clay loam, side hills gravely. Dominant species Artemisa boralensis, Stipa capillata, Festuca ovina.

**PI 595179. Achnatherum inebrians (Hance) Keng**

Wild. X93240; W6 13144. Collected 08/24/1993 in Xinjiang, China. Latitude 43 deg. 48' N. Longitude 87 deg. 51' E. Elevation 1600 m. High winter pasture at Tu Juan south of Xiejago Stud Farm, 90km S & E of Urumqi, lowland seepage, upper sites very dry. Bottom lands clay loam, side hills gravely. Dominant species include Artemisa boralensis, Stipa capillata, Festuca ovina.

**PI 595180. Elymus sibiricus L.**

Wild. X93241; W6 13145. Collected 08/24/1993 in Xinjiang, China. Latitude 43 deg. 48' N. Longitude 87 deg. 51' E. Elevation 1600 m. High winter pasture at Tu Juan south of Xiejago Stud Farm, 90km S & E of Urumqi, lowland seepage, upper sites very dry. Bottom lands clay loam, side hills gravely. Dominant species include Artemisa boralensis, Stipa capillata, Festuca ovina.

**PI 595181. Achnatherum inebrians (Hance) Keng**

Wild. X93248; W6 13152. Collected 08/24/1993 in Xinjiang, China. Latitude 43 deg. 49' N. Longitude 87 deg. 52' E. Elevation 1500 m. Lowland bench above river, silty clay soil, gentle slope, heavily grazed pasture at Tu Juan south of Xiejago Stud Farm, 60km south and east of Urumqi, Xinjiang. Dominate species Achnatherum splendens and A. inebrians.

**PI 595182. Elymus sibiricus L.**

Wild. X93254; W6 13158. Collected 08/24/1993 in Xinjiang, China. Latitude 43 deg. 51' N. Longitude 87 deg. 52' E. Elevation 1250 m. 54km south and east of Urumqi, along margins of wheat fields on the Gango Stud Farm, Xinjiang.

**PI 595183. *Leymus angustus* (Trin.) Pilger**

Wild. X93256; W6 13160. Collected 08/24/1993 in Xinjiang, China.  
Latitude 43 deg. 50' N. Longitude 87 deg. 55' E. Elevation 1750 m. West exposure slope in foothill mountains, gravelly soil, 50km south and east of Urumqi, Xinjiang. Large stand of legumes dominated by *Onobrychis* and *Medicago varia*.

**PI 595184. *Psathyrostachys juncea* (Fischer) Nevski**

Wild. X93257; W6 13161. Collected 08/26/1993 in Xinjiang, China.  
Latitude 43 deg. 51' N. Longitude 87 deg. 56' E. Elevation 1470 m. Silty loam soil, very dry lowland, margin of dryland wheat field, 50km south and east of Urumqi, Xinjiang.

The following were collected by Kay H. Asay, USDA, ARS, Forage & Range Research Unit, Utah State University - UMC 6300, Logan, Utah 84322-6300, United States. Donated by Thomas A. Jones, USDA-ARS, Forage and Range Research, Utah State University, Logan, Utah 84322-6300, United States. Received 12/09/1993.

**PI 595185. *Elymus lanceolatus* (Scribner & J. G. Smith) Gould *ssp. lanceolatus***

Wild. A8 rip.; Acc:515; W6 14634. Collected in Idaho, United States. Soda Springs, Caribou County.

**PI 595186. *Elymus lanceolatus* (Scribner & J. G. Smith) Gould *ssp. lanceolatus***

Wild. A10 rip.; Acc:517; W6 14635. Collected in Idaho, United States. 8m north Rexburg, Fremont County.

The following were collected by Dave Stout, Washington State University, Regional Plant Introduction Station, Johnson Hall, Room 61, Pullman, Washington 99164-6402, United States; A. M. Davis, USDA, ARS, Regional Plant Introduction Station, 59 Johnson Hall, Pullman, Washington 99164-6402, United States. Donated by Thomas A. Jones, USDA-ARS, Forage and Range Research, Utah State University, Logan, Utah 84322-6300, United States. Received 12/09/1993.

**PI 595187. *Elymus wawawaiensis* ined.**

Wild. D&S 107; Acc:257; W6 14637. Collected in Washington, United States . Steptoe Canyon, south Colton, Whitman County.

**PI 595188. *Elymus wawawaiensis* ined.**

Wild. D&S 112; Acc:260; W6 14638. Collected in Washington, United States . 2m north highway 12 on Howell Road, Garfield County.

**PI 595189. *Elymus wawawaiensis* ined.**

Wild. D&S 114 (mix 1); Acc:262; W6 14639. Collected in Washington, United States. 1m south Asotin on highway 129, Asotin County. Originally mixed with *Pseudoroegneria spicata*.

**PI 595190. *Elymus wawawaiensis* ined.**

Wild. D&S 124; Acc:269; W6 14640. Collected in Washington, United States . Northwest Colton on Wawawai Road, Whitman.

The following were collected by Kay H. Asay, USDA, ARS, Forage & Range Research Unit, Utah State University - UMC 6300, Logan, Utah 84322-6300, United States. Donated by Thomas A. Jones, USDA-ARS, Forage and Range Research, Utah State University, Logan, Utah 84322-6300, United States. Received 12/09/1993.

**PI 595191. *Pseudoroegneria spicata* (Pursh) A. Love**

Wild. K46; Acc:222; W6 14648. Collected in Washington, United States. 3m southeast Wawawai Park on Wawawai Road, Whitman County.

The following were collected by Dave Stout, Washington State University, Regional Plant Introduction Station, Johnson Hall, Room 61, Pullman, Washington 99164-6402, United States; A. M. Davis, USDA, ARS, Regional Plant Introduction Station, 59 Johnson Hall, Pullman, Washington 99164-6402, United States. Donated by Thomas A. Jones, USDA-ARS, Forage and Range Research, Utah State University, Logan, Utah 84322-6300, United States. Received 12/09/1993.

**PI 595192. *Pseudoroegneria spicata* (Pursh) A. Love**

Wild. D&S 120; Acc:265; W6 14650. Collected in Washington, United States . Northwest Colton on Wawawai Road, Whitman County.

**PI 595193. *Pseudoroegneria spicata* (Pursh) A. Love**

Wild. D&S 134; Acc:275; W6 14651. Collected in Washington, United States . Southwest Colfax at Union Flat and Almota Roads, Whitman County.

The following were collected by Stan Kitchen, USDA-ARS, Shrub Science Laboratory, 735 North 500 East, Provo, Utah 84601, United States. Donated by Thomas A. Jones, USDA-ARS, Forage and Range Research, Utah State University, Logan, Utah 84322-6300, United States. Received 12/09/1993.

**PI 595194. *Pseudoroegneria spicata* (Pursh) A. Love**

Wild. B56; Acc:698; W6 14653. Collected in Montana, United States. 0.5m west Lolo on highway 12, Missoula County.

**PI 595195. *Pseudoroegneria spicata* (Pursh) A. Love**

Wild. B57; Acc:699; W6 14654. Collected in Idaho, United States. 5m south Salmon on highway 93, Lemhi County.

**PI 595196. *Pseudoroegneria spicata* (Pursh) A. Love**

Wild. B101; Acc:702; W6 14657. Collected in Montana, United States. 7m south Darby on highway 93, Ravalli County.

The following were donated by J.M.J. de Wet, Oklahoma State University, Department of Botany and Plant Pathology, Stillwater, Oklahoma, United States Received 1968.

**PI 595197. *Cynodon aethiopicus* W. Clayton & Harlan**

Wild. A9226. Collected 1968 in Ethiopia. Debre Zeit. Coastal plain to highlands, absent in dry regions. Inflorescence shape rather like true *C. plectostachyus* but smaller and usually pigmented dark red. Spikelets



much more like *C. dactylon*, but rhizomes wanting and growth habit quite distinctive.

The following were developed by Robert Dunn, Montana State University, Department of Plant & Soil Science, Bozeman, Montana 59717-0002, United States; Gilbert Stallknecht, Montana State University, Central Agric. Research Center, HC 90, Box 20, Moccasin, Montana 59462, United States; Raymond L. Ditterline, Montana State University, Department of Plant and Soil Science, Bozeman, Montana 59717-0312, United States; J.G. Scheetz, National Plant Materials Center, National Resources Conservation Service, Route 1, Box 1189, Bridger, Minnesota 59014-9718, United States; David M. Wichman, Central Agricultural Research Center, HC90-Box 20, Moccasin, Montana 59462, United States; J.L. Eckhoff, Montana State University, Eastern Agric. Research Center, Sidney, Montana 59270, United States; Leon E. Welty, Montana State University, Northwestern Agric. Research Center, Kalispell, Montana, United States; H.F. Bowman, Montana State University, Dept. of Plant, Soil & Environmental Sciences, Bozeman, Montana 59717, United States; David Sands, Montana State University, Department of Plant Pathology, Bozeman, Montana 59717, United States; M. Majerus, USDA-NRCS Plant Materials Ctr., Bridger, Montana 59014, United States. Received 07/11/1996.

**PI 595198. *Eragrostis tef* (Zuccagni) Trotter**

Cultivar. Pureline. "BRIDGER"; MT 88-220. CV-189. Pedigree - Single plant selection from land race PI 494366. Subsequent generations handled as bulk composites. Intended for grain production. Very early maturing compared to other teff lines, producing mature seed 2-6 weeks earlier than other teff lines. Stems short, weak, and prone to lodging. Panicle very lax, flexible, greenish-gray, and medium length (30-40 cm). Seed color brown. Leaves thin and plant not particularly leafy.

The following were developed by Chris Clark, Louisiana State University, Department of Plant Pathology, & Crop Physiology, Baton Rouge, Louisiana 70803-1720, United States; Don LaBonte, Louisiana State University, Department of Horticulture, Julian C. Miller Hall, Baton Rouge, Louisiana 70803, United States; W.A. Mulkey, Sweet Potato Research Station, P.O. Box 120, Chase, Louisiana 71324, United States; L.H. Rolston, Louisiana State University, Department of Entomology, Baton Rouge, Louisiana 70803, United States; J.M. Cannon, Louisiana Cooperative Extension Service, Louisiana, United States; P.W. Wilson, Louisiana State University, Department of Horticulture, Baton Rouge, Louisiana 70803, United States. Received 06/1996.

**PI 595199. *Ipomoea batatas* (L.) Lam. var. *batatas***

Cultivar. "DARBY"; L87-59. Pedigree - Originated in 1987 as a seedling from a polycross nursery. Female lineage L83-523 and W-151. Characteristics similar to Beauregard but with potential for earlier and improved production in sandy soils. Purple stemmed vines that begin fading gradually, ≈20cm from apex, to green with purple mottling. Canopy biomass similar to Centennial and covers soils surface completely. Skin dark rose at harvest, fades slightly in storage, and becomes smoother. Cortex 3-4mm in depth, sometimes light yellow, and flesh uniformly orange. Intermediate resistance for soil rot (*Streptomyces ipomoeae*). Resistant to fusarium wilt or stem rot (*Fusarium oxysporum*). Susceptible to southern root-knot nematode (*Meloidogyne incognita*) and reniform

nematode (*Rotylenchulus reniformis*). Resistant to development of internal cork, fusarium root rot (*Fusarium solani*), bacterial root rot (*Erwinia chrysanthemi*), Rhizopus soft rot (*Rhizopus stolonifer*). Incidence of circular spot (*Sclerotium rolfsii*) low. Plants straight, sturdy, well suited for mechanical harvesting and planting.

The following were developed by Graves Gillaspie, USDA, ARS, University of Georgia, Plant Genetic Resources Conservation Unit, Griffin, Georgia 30223-1797, United States; JoAnn Wright, USDA, ARS, University of Georgia, Plant Genetic Resources Conservation Unit, Griffin, Georgia 30223-1797, United States. Received 07/19/1996.

**PI 595200. *Citrullus lanatus* (Thunb.) Matsum. & Nakai**

Breeding. WM-1. Pedigree - Selection from PI 189316 (origin Zaire). Watermelon breeding line resistant to watermelon mosaic virus 2 (WMV). Resistant to infection by the FC-1656 strain of WMV prevalent in Florida and demonstrates resistance in the greenhouse to the prevalent isolates of the virus from Arizona, California, Israel, Italy, and New York. In addition, plants that do become infected demonstrate milder symptoms than those produced in more susceptible lines.

**PI 595201. *Citrullus lanatus* (Thunb.) Matsum. & Nakai**

Breeding. WM-2. Pedigree - Selection from PI 189317 (origin Zaire). Watermelon breeding line resistant to mosaic virus 2 (WMV). Resistant to infection by the FC-1656 strain of WMV prevalent in Florida and demonstrates resistance in the greenhouse to the prevalent isolates of the virus from Arizona, California, Israel, Italy and New York. In addition, plants that do become infected demonstrate milder symptoms than those produced in more susceptible lines.

**PI 595202. *Citrullus lanatus* (Thunb.) Matsum. & Nakai**

Breeding. WM-3. Pedigree - Selection from PI 248178 (origin Zaire). Watermelon breeding line resistant to mosaic virus 2 (WMV). Resistant to infection by the FC-1656 strain of WMV prevalent in Florida and demonstrates resistance in the greenhouse to the prevalent isolates of the virus from Arizona, California, Israel, Italy and New York. In addition, plants that do become infected demonstrate milder symptoms than those produced in more susceptible lines.

The following were developed by Graves Gillaspie, USDA, ARS, University of Georgia, Plant Genetic Resources Conservation Unit, Griffin, Georgia 30223-1797, United States; JoAnn Wright, USDA, ARS, University of Georgia, Plant Genetic Resources Conservation Unit, Griffin, Georgia 30223-1797, United States. Donated by Joe Norton, Auburn University, Department of Horticulture, Auburn, Alabama 36849, United States. Received 12/18/1990.

**PI 595203. *Citrullus lanatus* (Thunb.) Matsum. & Nakai**

Breeding. WM-4; Grif 9459. Pedigree - Selection from Egun (origin Nigeria). Egusi type melon with WMV2 disease resistance. Resistant to infection by the FC-1656 strain of WMV prevalent in Florida and demonstrates resistance in the greenhouse to the prevalent isolates of the virus from Arizona, California, Israel, Italy and New York. In addition, plants that do become infected demonstrate milder symptoms

than those produced in more susceptible lines. Seed tan.

The following were developed by David J. Andrews, University of Nebraska, Department of Agronomy, Lincoln, Nebraska 68503, United States; S.C. Gupta, Int. Crops Res. Inst. for the Semi-Arid Tropics, Western and Central Africa Region, IITA Office, Sabo Bakin Zuwo Road, Kano, Kano, Nigeria; F.R. Muza, University of Florida, Department of Pathology, P.O. Box 110680, Gainesville, Florida 32611-0680, United States. Received 07/24/1996.

**PI 595204. Eleusine coracana (L.) Gaertner**

Genetic. Inbred. INFM 95001. GS-1. Pedigree - From a single male sterile plant found in M2 progeny derived from SDFM 63 (=IE3318 from Zimbabwe). Male sterile and fertile plants segregate in 1:1 ratio. At flowering, male sterile heads are easily detected as exerted and anthers are fewer in number, about one-fifth normal size and light cream color instead of creamy yellow. At grain maturity, open-pollinated male sterile heads exhibit incomplete seed set. Threshing percentage of fertile plants normal (74.4%), but lower in (13.9%) male sterile plants. Individual grain mass heavier (3.54mg) in male sterile plants than fertile plants (3.02mg). Mean plant height 1.29m, and time to 75% heading 94 days. Productive tillers per plant 6.35. Grains round and white. Seed dormancy present for 3-4 weeks after harvest.

The following were developed by J.M. Lasa, Aula Dei Experimental Station CSIC, Associated Laboratory for Agronomy and Environment, Dept. of Genetics and Plant Production, Zaragoza-50080, Spain; P. Gracia, Estacion Experimental de Aula Dei, CSIC, Avda. Montanana 177, P.O. Box 202, Spain; E. Igartua, Aula Dei Experimental Station CSIC, Associated Laboratory of Agronomy and Environment, Dept. of Genetics and Plant Production, Zaragoza-50080, Spain; C. Perez-Pena, Aula Dei Experimental Station CSIC, Associated Laboratory for Agronomy and Environment, P.O. Box 202, Zaragoza-50080, Spain. Received 09/24/1996.

**PI 595205. Sorghum bicolor (L.) Moench**

Breeding. Population. AD9B(MS1)C2. GP-401. Pedigree - Composite population derived from NP12B(S1)C2. Segregates for ms3 genetic male sterility. Selected for grain production and good agronomic characters under limited irrigation. Early-medium maturity. Endosperm yellow. Three-dwarf height. Seed size small (22.9g per 1000 seed). Shows improved grain yield compared with source population.

**PI 595206. Sorghum bicolor (L.) Moench**

Breeding. Population. AD11B(MS1)C2. GP-402. Pedigree - Composite population derived from RP2B(S1)C3(ECB). Segregates for ms3 genetic male sterility. Selected for grain production and good agronomic characters under limited irrigation. Maturity medium. three-dwarf height. Seed size medium (27.4g per 1000 seed). Shows improved grain yield compared with source population.

**PI 595207. Sorghum bicolor (L.) Moench**

Breeding. Population. AD12R(MS1)C2. GP-403. Pedigree - Composite population derived from NP21R(M)C4. Segregates for ms3 genetic male sterility. Selected for grain production and good agronomic characters

under limited irrigation. Maturity medium. Two/three dwarf height. Plants vigorous, large panicles. Seed size medium-large (29.4g per 1000 seed). Shows improved grain yield compared with source population.

**PI 595208. *Sorghum bicolor* (L.) Moench**

Breeding. Population. AD13R(MS1)C2. GP-404. Pedigree - Composite population derived from RP1R. Segregates for ms3 genetic male sterility. Selected for grain production and good agronomic characters under limited irrigation. Maturity early. Three-dwarf height. Seed size medium (27.7g per 1000 seed). Shows potential for deriving lines for short season areas.

The following were developed by Chocolate Bayou Company, United States.  
Received 1978.

**PI 595209. *Oryza sativa* L.**

Cultivar. Pureline. "CB 744". PVP 7700040.

The following were developed by Alexandria Seed Co., Inc., United States.  
Received 1979.

**PI 595210. *Oryza sativa* L.**

Cultivar. Pureline. "BELLEVUE". PVP 7800076.

**PI 595211. *Oryza sativa* L.**

Cultivar. Pureline. "MELROSE". PVP 7605004.

The following were developed by R.J. Jacquinet, Greenbush Seed and Supply, United States; S.M. Jacquinet, Greenbush Seed and Supply, United States.  
Received 1978.

**PI 595212. *Triticum aestivum* L., nom. cons.**

Cultivar. Pureline. "GB 2148". PVP 7600025. Released 1975.

The following were developed by North American Plant Breeders, Inc., United States. Received 1978.

**PI 595213. *Triticum aestivum* L., nom. cons.**

Cultivar. Pureline. "HUTCH". PVP 7700095. Pedigree - II-18889/Trapper//Baca.

The following were developed by Douglass W. King Company, United States.  
Received 1978.

**PI 595214. *Triticum aestivum* L., nom. cons.**

Cultivar. Pureline. "DK-33S". PVP 7800003.

**PI 595215. *Triticum aestivum* L., nom. cons.**

Cultivar. Pureline. "DK-49S". PVP 7800004.

The following were developed by Seed Research, Inc., United States. Received 1979.

**PI 595216. *Triticum aestivum* L., nom. cons.**  
Cultivar. Pureline. "5422". PVP 7700105.

The following were collected by A. M., Jr. Andreasen, 4487 Lafayette Street, Marianna, Florida 32446-3412, United States. Donated by Ken H. Quesenberry, University of Florida, Department of Agronomy, 304 Newell Hall, Gainesville, Florida 32611-0500, United States. Received 07/03/1996.

**PI 595217. *Trifolium carolinianum* Michaux**  
Wild. Caroliana clover. Collected 05/01/1996 in Florida, United States. Latitude 31 deg. N. Longitude 86 deg. W. Elevation 30 m. 12 miles WSW of Marianna on Leland Rd. Upright, bunch type. Flower cream to pink.

The following were developed by FMC Corporation, Agricultural Chemical Division, P.O. Box 3091, Modesto, California 95353, United States. Received 1974.

**PI 595218. *Citrullus lanatus* (Thunb.) Matsum. & Nakai**  
Cultivar. "CHARLESTON 76". PVP 7200146.

The following were developed by University Patents, Inc., United States. Received 1979.

**PI 595219. *Citrullus lanatus* (Thunb.) Matsum. & Nakai**  
Cultivar. "VICS VALENTINE". PVP 7800090.

The following were developed by Asgrow Seed Company, United States. Received 1978.

**PI 595220. *Solanum melongena* L.**  
Cultivar. "GATOR". PVP 7600001.

The following were developed by Ring Around Products, Inc., United States. Received 1978.

**PI 595221. *Sorghum x drummondii* (Nees ex Steudel) Millsp. & Chase**  
Cultivar. "EXCEL S235". PVP 7300012.

The following were developed by Jeff Pedersen, USDA, ARS, University of Nebraska, East Campus, 344 Keim Hall, Room 329, Lincoln, Nebraska 68583-0937, United States; J.J. Toy, USDA-ARS, Univ. of Nebraska-Lincoln, Dept. of Agronomy, Lincoln, Nebraska 68583-0937, United States. Received 07/30/1996.

**PI 595222. *Sorghum bicolor* (L.) Moench**  
Genetic. A3N149. GS-3. Pedigree - Rox Orange\*BC4/A3Tx398. Forage sorghum

line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595223. *Sorghum bicolor* (L.) Moench**

Genetic. A3N150. GS-4. Pedigree - Brawley\*BC4/A3Tx398. Forage sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595224. *Sorghum bicolor* (L.) Moench**

Genetic. A3N151. GS-5. Pedigree - Dale\*BC4/A3Tx398. Forage sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595225. *Sorghum bicolor* (L.) Moench**

Genetic. A3N152. GS-6. Pedigree - Kansas Collier\*BC4/A3Tx398. Forage sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595226. *Sorghum bicolor* (L.) Moench**

Genetic. A3N153. GS-7. Pedigree - Wray\*BC4/A3Tx398. Forage sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595227. *Sorghum bicolor* (L.) Moench**

Genetic. A3N154. GS-8. Pedigree - Sugar Drip\*BC4/A3T398. Forage sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595228. *Sorghum bicolor* (L.) Moench**

Genetic. A3N155. GS-9. Pedigree - Waconia-L\*BC4/A3Tx398. Forage sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595229. *Sorghum bicolor* (L.) Moench**

Genetic. A3N156. GS-10. Pedigree - N98(short selection)\*BC4/A3Tx398. Forage sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, Ne. Sterility in other environments has not been confirmed.

**PI 595230. *Sorghum bicolor* (L.) Moench**

Genetic. A3N157. GS-11. Pedigree - N98(tall selection)\*BC4/A3Tx398. Forage sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595231. *Sorghum bicolor* (L.) Moench**

Genetic. A3N158. GS-12. Pedigree - N99\*BC4/A3Tx398. Forage sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely

male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595232. *Sorghum bicolor* (L.) Moench**

Genetic. A3N159. GS-13. Pedigree - N100\*BC4/A3Tx398. Forage sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595233. *Sorghum bicolor* (L.) Moench**

Genetic. A3N160. GS-14. Pedigree - EL-ES\*BC4/A3Tx398. Forage sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595234. *Sorghum bicolor* (L.) Moench**

Genetic. A3N161. GS-15. Pedigree - Ellis\*BC4/A3Tx398. Forage sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595235. *Sorghum bicolor* (L.) Moench**

Genetic. A3N162. GS-16. Pedigree - Fremont\*BC4/A3Tx398. Forage sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595236. *Sorghum bicolor* (L.) Moench**

Genetic. A3N163. GS-17. Pedigree - Atlas\*BC4/A3Tx398. Forage sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595237. *Sorghum bicolor* (L.) Moench**

Genetic. A3N164. GS-18. Pedigree - Early Hegari-Sart\*BC4/A3Tx398. Forage sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595238. *Sorghum bicolor* (L.) Moench**

Genetic. A3N165. GS-19. Pedigree - Red X\*BC4/A3Tx398. Forage sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595239. *Sorghum bicolor* (L.) Moench**

Genetic. A3N166. GS-20. Pedigree - Blue Ribbon\*BC4/A3Tx398. Forage sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595240. *Sorghum bicolor* (L.) Moench**

Genetic. A3N167. GS-21. Pedigree - Colman\*BC4/A3Tx398. Forage sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other

environments has not been confirmed.

**PI 595241. *Sorghum bicolor* (L.) Moench**

Genetic. A3N168. GS-22. Pedigree - Hastings\*BC4/A3Tx398. Forage sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595242. *Sorghum bicolor* (L.) Moench**

Genetic. A3N169. GS-23. Pedigree - E-35-1\*BC4/A3Tx430. Forage sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595243. *Sorghum bicolor* (L.) Moench**

Genetic. A3N170. GS-24. Pedigree - IS2729\*BC5/A3Tx430. Forage sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595244. *Sorghum bicolor* (L.) Moench**

Genetic. A3N171. GS-25. Pedigree - KS5\*BC4/A3Tx398. Forage sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595245. *Sorghum bicolor* (L.) Moench**

Genetic. A3N172. GS-26. Pedigree - N108\*BC4/A3Tx398. Forage sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595246. *Sorghum bicolor* (L.) Moench**

Genetic. A3N173. GS-27. Pedigree - N109\*BC4/A3Tx398. Forage sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595247. *Sorghum bicolor* (L.) Moench**

Genetic. A3N174. GS-28. Pedigree - N110\*BC4/A3Tx398. Forage sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595248. *Sorghum bicolor* (L.) Moench**

Genetic. A3N175. GS-29. Pedigree - N111\*BC4/A3Tx398. Forage sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595249. *Sorghum bicolor* (L.) Moench**

Genetic. A3N176. GS-30. Pedigree - Early Sumac\*BC4/A3Tx398. Forage sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.



**PI 595250. *Sorghum bicolor* (L.) Moench**

Genetic. A3N177. GS-31. Pedigree - Spanish Broomcorn\*BC4/A3Tx398. Forage sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

The following were developed by Jeff Pedersen, USDA, ARS, University of Nebraska, East Campus, 344 Keim Hall, Room 329, Lincoln, Nebraska 68583-0937, United States; B.E. Johnson, University of Nebraska, Dept. of Agronomy, Lincoln, Nebraska 68583-0915, United States; J.J. Toy, USDA-ARS, Univ. of Nebraska-Lincoln, Dept. of Agronomy, Lincoln, Nebraska 68583-0937, United States. Received 07/30/1996.

**PI 595251. *Sorghum bicolor* (L.) Moench**

Genetic. N221ms3ms3. GS-32. Pedigree - BKS57\*BC4/Tx398ms3ms3. Elite inbred line with ms3. Closely resembles the recurrent parent and plants homozygous recessive for ms3 are completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595252. *Sorghum bicolor* (L.) Moench**

Genetic. N222ms3ms3. GS-33. Pedigree - BKS82\*BC4/Tx398ms3ms3. Elite inbred line with ms3. Closely resembles the recurrent parent and plants homozygous recessive for ms3 are completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595253. *Sorghum bicolor* (L.) Moench**

Genetic. N223ms3ms3. GS-34. Pedigree - BN32\*BC4/Tx398ms3ms3. Elite inbred line with ms3. Closely resembles the recurrent parent and plants homozygous recessive for ms3 are completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595254. *Sorghum bicolor* (L.) Moench**

Genetic. N224ms3ms3. GS-35. Pedigree - BTx3042\*BC4/Tx398ms3ms3. Elite inbred line with ms3. Closely resembles the recurrent parent and plants homozygous recessive for ms3 are completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595255. *Sorghum bicolor* (L.) Moench**

Genetic. N225ms3ms3. GS-36. Pedigree - BTx623\*BC4/Tx398ms3ms3. Elite inbred line with ms3. Closely resembles the recurrent parent and plants homozygous recessive for ms3 are completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595256. *Sorghum bicolor* (L.) Moench**

Genetic. N226ms3ms3. GS-37. Pedigree - BTx630\*Tx398ms3ms3. Elite inbred line with ms3. Closely resembles the recurrent parent and plants homozygous recessive for ms3 are completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595257. *Sorghum bicolor* (L.) Moench**

Genetic. N227ms3ms3. GS-38. Pedigree - BWheatland\*BC4/Tx398ms3ms3. Elite inbred line with ms3. Closely resembles the recurrent parent and plants homozygous recessive for ms3 are completely male-sterile in Lincoln, NE

and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595258. *Sorghum bicolor* (L.) Moench**

Genetic. N228ms3ms3. GS-39. Pedigree - SC110-9\*Tx398ms3ms3. SC110-9 is a sister line to TAM428. Elite inbred line with ms3. Closely resembles the recurrent parent and plants homozygous recessive for ms3 are completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595259. *Sorghum bicolor* (L.) Moench**

Genetic. N229ms3ms3. GS-40. Pedigree - RTx2737\*BC4/Tx398ms3ms3. Elite inbred line with ms3. Closely resembles the recurrent parent and plants homozygous recessive for ms3 are completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595260. *Sorghum bicolor* (L.) Moench**

Genetic. N230ms3ms3. GS-41. Pedigree - BTx631\*BC4/Tx398ms3ms3. Elite inbred line with ms3. Closely resembles the recurrent parent and plants homozygous recessive for ms3 are completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595261. *Sorghum bicolor* (L.) Moench**

Genetic. N231ms3ms3. GS-42. Pedigree - BOK11\*BC4/Tx398ms3ms3. Elite inbred line with ms3. Closely resembles the recurrent parent and plants homozygous recessive for ms3 are completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595262. *Sorghum bicolor* (L.) Moench**

Genetic. N232ms3ms3. GS-43. Pedigree - BMA4\*BC4/Tx398ms3ms3. Elite inbred line with ms3. Closely resembles the recurrent parent and plants homozygous recessive for ms3 are completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595263. *Sorghum bicolor* (L.) Moench**

Genetic. N233ms3ms3. GS-44. Pedigree - BSD106\*BC4/Tx398ms3ms3. Elite inbred line with ms3. Closely resembles the recurrent parent and plants homozygous recessive for ms3 are completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595264. *Sorghum bicolor* (L.) Moench**

Genetic. N234ms3ms3. GS-45. Pedigree - BPTN\*BC4/Tx398ms3ms3. Elite inbred line with ms3. Closely resembles the recurrent parent and plants homozygous recessive for ms3 are completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595265. *Sorghum bicolor* (L.) Moench**

Genetic. N235ms3ms3. GS-46. Pedigree - BN122\*BC4/Tx398ms3ms3. Elite inbred line with ms3. Closely resembles the recurrent parent and plants homozygous recessive for ms3 are completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595266. *Sorghum bicolor* (L.) Moench**

Genetic. N236ms3ms3. GS-47. Pedigree - RTx435\*BC4/Tx398ms3ms3. Elite inbred line with ms3. Closely resembles the recurrent parent and plants homozygous recessive for ms3 are completely male-sterile in Lincoln, NE

and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595267. *Sorghum bicolor* (L.) Moench**

Genetic. N237ms3ms3. GS-48. Pedigree - RTx2741\*BC4/Tx430ms3ms3. Elite inbred line with ms3. Closely resembles the recurrent parent and plants homozygous recessive for ms3 are completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595268. *Sorghum bicolor* (L.) Moench**

Genetic. N238ms3ms3. GS-49. Pedigree - IS7013\*BC4/Tx430ms3ms3. Elite inbred line with ms3. Closely resembles the recurrent parent and plants homozygous recessive for ms3 are completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595269. *Sorghum bicolor* (L.) Moench**

Genetic. N239ms3ms3. GS-50. Pedigree - BKS24\*BC4/Tx398ms3ms3. Elite inbred line with ms3. Closely resembles the recurrent parent and plants homozygous recessive for ms3 are completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595270. *Sorghum bicolor* (L.) Moench**

Genetic. N240ms3ms3. GS-51. Pedigree - BKS56\*BC4/Tx398ms3ms3. Elite inbred line with ms3. Closely resembles the recurrent parent and plants homozygous recessive for ms3 are completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595271. *Sorghum bicolor* (L.) Moench**

Genetic. N241ms3ms3. GS-52. Pedigree - BTx2752\*BC4/Tx398ms3ms3. Elite inbred line with ms3. Closely resembles the recurrent parent and plants homozygous recessive for ms3 are completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595272. *Sorghum bicolor* (L.) Moench**

Genetic. A2N178. GS-53. Pedigree - BN122\*BC6/A2Tx398. Elite sorghum line in A2 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595273. *Sorghum bicolor* (L.) Moench**

Genetic. A3N179. GS-54. Pedigree - BN122\*BC6/A3Tx398. Elite sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595274. *Sorghum bicolor* (L.) Moench**

Genetic. A4N180. GS-55. Pedigree - BN122\*BC6/A4Tx398. Elite sorghum line in A4 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595275. *Sorghum bicolor* (L.) Moench**

Genetic. A2N181. GS-56. Pedigree - BKS57\*BC7/A2Tx398. Elite sorghum line in A2 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

- PI 595276. *Sorghum bicolor* (L.) Moench**  
Genetic. A3N182. GS-57. Pedigree - BKS57\*BC7/A3Tx430. Elite sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.
- PI 595277. *Sorghum bicolor* (L.) Moench**  
Genetic. A4N183. GS-58. Pedigree - BKS57\*BC7/A4Tx398. Elite sorghum line in A4 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.
- PI 595278. *Sorghum bicolor* (L.) Moench**  
Genetic. A2N184. GS-59. Pedigree - BTx3042\*BC7/A2Tx398. Elite sorghum line in A2 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.
- PI 595279. *Sorghum bicolor* (L.) Moench**  
Genetic. A3N185. GS-60. Pedigree - BTx3042\*BC7/A3Tx430. Elite sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.
- PI 595280. *Sorghum bicolor* (L.) Moench**  
Genetic. A4N186. GS-61. Pedigree - BTx3042\*BC7/A4Tx398. Elite sorghum line in A4 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.
- PI 595281. *Sorghum bicolor* (L.) Moench**  
Genetic. A2N187. GS-62. Pedigree - BWheatland\*BC7/A2Tx398. Elite sorghum line in A2 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.
- PI 595282. *Sorghum bicolor* (L.) Moench**  
Genetic. A3N188. GS-63. Pedigree - BWheatland\*BC7/A3Tx430. Elite sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.
- PI 595283. *Sorghum bicolor* (L.) Moench**  
Genetic. A4N189. GS-64. Pedigree - BWheatland\*BC7/A4Tx398. Elite sorghum line in A4 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.
- PI 595284. *Sorghum bicolor* (L.) Moench**  
Genetic. A2N190. GS-65. Pedigree - BN38\*BC7/A2Tx398. Elite sorghum line in A2 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

- PI 595285. *Sorghum bicolor* (L.) Moench**  
Genetic. A3N191. GS-66. Pedigree - BN38\*BC7/A3Tx430. Elite sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.
- PI 595286. *Sorghum bicolor* (L.) Moench**  
Genetic. A2N192. GS-67. Pedigree - BTx623\*BC7/A2Tx398. Elite sorghum line in A2 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, Ne. Sterility in other environments has not been confirmed.
- PI 595287. *Sorghum bicolor* (L.) Moench**  
Genetic. A3N193. GS-68. Pedigree - BTx623\*BC7/A3Tx430. Elite sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.
- PI 595288. *Sorghum bicolor* (L.) Moench**  
Genetic. A3N194. GS-69. Pedigree - BN37\*BC7/A3Tx430. Elite sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.
- PI 595289. *Sorghum bicolor* (L.) Moench**  
Genetic. A3N195. GS-70. Pedigree - BN101\*BC6/A3Tx398. Elite sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.
- PI 595290. *Sorghum bicolor* (L.) Moench**  
Genetic. A3N196. GS-71. Pedigree - BN102\*BC6/A3Tx398. Elite sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, Ne. Sterility in other environments has not been confirmed.
- PI 595291. *Sorghum bicolor* (L.) Moench**  
Genetic. A3N197. GS-72. Pedigree - BN103\*BC6/A3Tx398. Elite sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, Ne. Sterility in other environments has not been confirmed.
- PI 595292. *Sorghum bicolor* (L.) Moench**  
Genetic. A3N198. GS-73. Pedigree - BRedlan\*BC7/A3Tx398. Elite sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.
- PI 595293. *Sorghum bicolor* (L.) Moench**  
Genetic. A3N199. GS-74. Pedigree - BTx631\*BC7/A3Tx430. Elite sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.
- PI 595294. *Sorghum bicolor* (L.) Moench**

Genetic. A3N200. GS-75. Pedigree - BTx2752\*BC7/A3Tx430. Elite sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595295. *Sorghum bicolor* (L.) Moench**

Genetic. A3N201. GS-76. Pedigree - R(1)N55\*BC5/A3Tx398. Elite sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595296. *Sorghum bicolor* (L.) Moench**

Genetic. A3N202. GS-77. Pedigree - R(1)N58\*BC5/A3Tx398. Elite sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595297. *Sorghum bicolor* (L.) Moench**

Genetic. A3N203. GS-78. Pedigree - R(1)N64\*BC5/A3Tx398. Elite sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595298. *Sorghum bicolor* (L.) Moench**

Genetic. A3N204. GS-79. Pedigree - R(1)N68\*BC5/A3Tx398. Elite sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595299. *Sorghum bicolor* (L.) Moench**

Genetic. A3N205. GS-80. Pedigree - R(1)N70\*BC5/A3Tx398. Elite sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595300. *Sorghum bicolor* (L.) Moench**

Genetic. A3N206. GS-81. Pedigree - R(1)N71\*BC5/A3Tx398. Elite sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595301. *Sorghum bicolor* (L.) Moench**

Genetic. A3N207. GS-82. Pedigree - R(1)N72\*BC5/A3Tx398. Elite sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595302. *Sorghum bicolor* (L.) Moench**

Genetic. A3N208. GS-83. Pedigree - R(1)N97\*BC6/A3Tx398. Elite sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595303. *Sorghum bicolor* (L.) Moench**

Genetic. A3N209. GS-84. Pedigree - R(1)IA28\*BC8/A3Tx398. Elite sorghum

line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595304. *Sorghum bicolor* (L.) Moench**

Genetic. A3N210. GS-85. Pedigree - R(1)OKY10\*BC7/A3Tx398. Elite Sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595305. *Sorghum bicolor* (L.) Moench**

Genetic. A3N211. GS-86. Pedigree - R(1)OKY11\*BC6/A3Tx398. Elite sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595306. *Sorghum bicolor* (L.) Moench**

Genetic. A2N212. GS-87. Pedigree - R(1)SC110-9\*BC7/A2Tx398. Elite sorghum line in A2 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595307. *Sorghum bicolor* (L.) Moench**

Genetic. A3N213. GS-88. Pedigree - R(1)SC110-9\*BC7/A3Tx398. Elite sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595308. *Sorghum bicolor* (L.) Moench**

Genetic. A3N214. GS-89. Pedigree - R(1)Tx415\*BC7/A3Tx430. Elite sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595309. *Sorghum bicolor* (L.) Moench**

Genetic. A3N215. GS-90. Pedigree - R(1)Tx432\*BC7/A3Tx430. Elite sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595310. *Sorghum bicolor* (L.) Moench**

Genetic. A2N216. GS-91. Pedigree - R(1)Tx435\*BC8/A2Tx398. Elite sorghum line in A2 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595311. *Sorghum bicolor* (L.) Moench**

Genetic. A3N217. GS-92. Pedigree - R(1)Tx435\*BC8/A3Tx398. Elite sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595312. *Sorghum bicolor* (L.) Moench**

Genetic. A3N218. GS-93. Pedigree - R(1)Tx2536\*BC7/A3Tx430. Elite sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and

completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595313. *Sorghum bicolor* (L.) Moench**

Genetic. A3N219. GS-94. Pedigree - R(1)Tx2737\*BC8/A3Tx398. Elite sorghum line in A3 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

**PI 595314. *Sorghum bicolor* (L.) Moench**

Genetic. A2N220. GS-95. Pedigree - R(1)Tx2808\*BC4/A2Tx398. Elite sorghum line in A2 cytoplasm. Closely resembles the recurrent parent and completely male-sterile in Lincoln, NE and Mead, NE. Sterility in other environments has not been confirmed.

The following were collected by David Brenner, Iowa State University, Regional Plant Introduction Station, Room G208, Agronomy Building, Ames, Iowa 50011, United States. Received 02/06/1995.

**PI 595315. *Chenopodium berlandieri* Moq.**

Wild. DB 948; Ames 22284. Collected 08/09/1994 in Iowa, United States. Latitude 41 deg. 58' N. Longitude 93 deg. 54' W. Elevation 260 m. East side of the Des Moines River, at the route E57 bridge. The earlier maturing plants of the population. They are 1-2 M tall and have red stripes on the stems.

**PI 595316. *Chenopodium berlandieri* Moq.**

Wild. DB 9410; Ames 22285. Collected 09/11/1994 in Iowa, United States. Latitude 41 deg. 58' N. Longitude 93 deg. 54' W. Elevation 260 m. East side of the Des Moines River, at the route E57 Bridge. The later maturing plants of the population. These late plants were more common than the early plants. They are 1-2 M tall and have red stripes on the stems.

The following were collected by Paul Brenner, c/o E.H. Brenner, 3325 R Street, N.W., Washington, District of Columbia 20007, United States. Received 10/14/1995.

**PI 595317. *Amaranthus powellii* S. Watson**

Wild. Ames 22709. Collected 10/01/1995 in California, United States. Latitude 33 deg. 18' N. Longitude 117 deg. W. Elevation 180 m. San Diego County. Keys Canyon Channel, east of Rt. 15. Utricles non-circumcissile.

The following were collected by David Brenner, Iowa State University, Regional Plant Introduction Station, Room G208, Agronomy Building, Ames, Iowa 50011, United States. Received 12/01/1995.

**PI 595318. *Amaranthus hybrid***

Wild. DB 954; Ames 22715. Collected 11/04/1995 in California, United States. Latitude 37 deg. 11' N. Longitude 122 deg. W. Elevation 197 m. Santa Clara County. North-west side of Lexington Reservoir, east of Rt.



17. In associated with coclebur (*Xanthium*) in periodically inundated areas within the reservoir basin near the level of the over-flow. Pedigree - *Amaranthus* hybrid involving *A. albus* and *A. californicus*. The hybrid determination was by a hand-lense look at the flowers at the time of collection. Stems thin, plants to 30cm tall.

**PI 595319. *Amaranthus californicus* (Moq.) S. Watson**

Wild. DB 955; Ames 22716. Collected 12/04/1995 in California, United States. Latitude 37 deg. 11' N. Longitude 122 deg. W. Elevation 197 m. Santa Clara County. North-west side of Lexington Reservoir, east of Rt. 17. In associated with coclebur (*Xanthium*) in periodically inundated areas within the reservoir basin near the level of the over-flow. Plants prostrate, stems fleshy, dead at the time of collection.

**PI 595320. *Amaranthus powellii* S. Watson**

Wild. DB 956; Ames 22717. Collected 11/04/1995 in California, United States. Latitude 37 deg. 11' N. Longitude 122 deg. W. Elevation 197 m. Santa Clara County. North-west side of Lexington Reservoir, east of Rt. 17. In associated with coclebur (*Xanthium*) in periodically inundated areas within the reservoir basin near the level of the over-flow. Utricles circumscissile. Plants erect to 40cm tall.

The following were collected by Doug Johnson, USDA-ARS, Utah State University, Forage & Range Research Unit, Logan, Utah 84322-6300, United States; Melvin D. Rumbaugh, USDA-ARS, Utah State University, Forage & Range Research Lab, Logan, Utah 84322-6300, United States. Received 01/21/1992.

**PI 595321. *Melilotus albus* Medikus**

Wild. X91006; Ames 18513; W6 9582. Collected 08/23/1991 in Xinjiang, China. Latitude 41 deg. 49' N. Longitude 85 deg. 30' E. Elevation 870 m. Shanghu Village, 20 km W of Korla, Xinjiang, Peoples Republic of China. Small statured sweetclover, 1.0 m tall, white flowered.

**PI 595322. *Melilotus albus* Medikus**

Wild. X910019; Ames 18514; W6 9583. Collected 08/26/1991 in Xinjiang, China. Latitude 39 deg. 23' N. Longitude 75 deg. 51' E. Elevation 1300 m. Growing in margin of irrigated alfalfa field. Zamin Village Shufu County, 18 km W of Kashgar, Xinjiang, Peoples Republic of China. 2.0 m tall, white flowered, coarse stemmed.

**PI 595323. *Melilotus albus* Medikus**

Wild. X910023; Ames 18515; W6 9584. Collected 08/26/1991 in Xinjiang, China. Latitude 39 deg. 23' N. Longitude 75 deg. 51' E. Elevation 1300 m. Wukeshake Village, Shufu County, 12 km SW of Kashgar, Xinjiang, Peoples Republic of China. 1.5 m tall, white flowered. Seed shattered.

**PI 595324. *Melilotus albus* Medikus**

Wild. X910031; Ames 18516; W6 9585. Collected 08/27/1991 in Xinjiang, China. Latitude 38 deg. 26' N. Longitude 77 deg. 16' E. Elevation 1463 m. Plants on border dyke of irrigated alfalfa field. Mixie Village, Shache County, 4 km N of Shache, Xinjiang, Peoples Republic of China. 1.5 m tall, white flowered.

**PI 595325. *Melilotus albus* Medikus**

Wild. X910043; Ames 18517; W6 9586. Collected 08/29/1991 in Xinjiang, China. Latitude 37 deg. 7' N. Longitude 79 deg. 45' E. Elevation 1585 m. Bageqi Town, Kasipi Village, 15 km W of Hotien County, Xinjiang, Peoples Republic of China. Contaminant in alfalfa seed.

**PI 595326. *Melilotus albus* Medikus**

Wild. X910061; Ames 18518; W6 9587. Collected 09/02/1991 in Xinjiang, China. Latitude 41 deg. 16' N. Longitude 80 deg. 14' E. Elevation 1080 m. Grassland Station, Wensu County, 12 km N of Askus, Xinjiang, Peoples Republic of China. 1.5 m tall, white flowered. Contamination in field of *Medicago sativa*.

**PI 595327. *Melilotus albus* Medikus**

Wild. X910074; Ames 18519; W6 9588. Collected 09/04/1991 in Xinjiang, China. Latitude 43 deg. 18' N. Longitude 86 deg. 40' E. Elevation 1189 m. Found in abandoned non-irrigated field. No. 24 farm, 40 km NE of Yanqi County, between Korla and Urumqi, Xinjiang, Peoples Republic of China. 1.0 m tall.

**PI 595328. *Melilotus officinalis* Lam.**

Wild. X910008; Ames 18520; W6 9589. Collected 08/23/1991 in Xinjiang, China. Latitude 41 deg. 49' N. Longitude 85 deg. 30' E. Elevation 870 m. Shanghu Village, 20 km W of Korla, Xinjiang, Peoples Republic of China. 0.5 m tall, yellow flowers. Later in maturity than associated *Melilotus alba*. Seed immature.

**PI 595329. *Melilotus officinalis* Lam.**

Wild. X910020; Ames 18521; W6 9590. Collected 08/26/1991 in Xinjiang, China. Latitude 39 deg. 23' N. Longitude 75 deg. 51' E. Elevation 1300 m. Along field margin. Zamin Village, Shufu County, 18 km W of Kashgar, Xinjiang, Peoples of Republic of China. Small plants, 0.5 m tall, yellow flowered, fine stemmed.

**PI 595330. *Melilotus officinalis* Lam.**

Wild. X910044; Ames 18522; W6 9591. Collected 08/29/1991 in Xinjiang, China. Latitude 37 deg. 7' N. Longitude 79 deg. 45' E. Elevation 1585 m. Bageqi Town, Kasipi Village, 15 km W of Hotien County, Xinjiang, Peoples Republic of China.

**PI 595331. *Melilotus officinalis* Lam.**

Wild. X910057; Ames 18523; W6 9592. Collected 08/30/1991 in Xinjiang, China. Latitude 36 deg. 17' N. Longitude 79 deg. 56' E. Elevation 2700 m. South of Pixa Village, Hotien Prefecture, Xinjiang, Peoples Republic of China. 2.5 m tall, yellow flowered. Contaminant in *Medicago sativa* field. Seed immature.

**PI 595332. *Melilotus officinalis* Lam.**

Wild. X910068; Ames 18524; W6 9593. Collected 09/02/1991 in Xinjiang, China. Latitude 41 deg. 14' N. Longitude 80 deg. 14' E. Elevation 1080 m. Kekeya Shelterbelt forest, 8 km N of Aksu, Xinjiang, Peoples Republic of China. Small statured, yellow flowered.

**PI 595333. *Melilotus officinalis* Lam.**

Wild. X910075; Ames 18525; W6 9594. Collected 09/04/1991 in Xinjiang, China. Latitude 43 deg. 18' N. Longitude 86 deg. 40' E. Elevation 1189

m. No. 24 farm, 40 km NE of Yanqi County between Korla and Urumqi, Xinjiang, Peoples Republic of China. 0.5 to 1.0 m tall, yellow flowers.

**PI 595334. *Melilotus dentatus* (Waldst. & Kit.) Pers.**

Wild. X910008; Ames 23022; Separation from Ames 18520; W6 9589; DB 951. Collected 08/23/1991 in Xinjiang, China. Latitude 41 deg. 49' N. Longitude 85 deg. 30' E. Elevation 870 m. Shanghu village, 20 km W of Korla, Xinjiang, Peoples Republic of China. Pedigree - Separation from Ames 18520. Plants with dentate leaflets and small yellow flowers.

**PI 595335. *Melilotus officinalis* Lam.**

Wild. X910057; Ames 23023; Separation from Ames 18523; W6 9592; DB 952. Collected 08/23/1991 in Xinjiang, China. Latitude 36 deg. 17' N. Longitude 79 deg. 56' E. Elevation 2700 m. South of Pixa Village, Hotien Prefecture, Xinjiang, Peoples Republic of China. Pedigree - Separation from Ames 18523. Biennial plants with yellow flowers.

The following were developed by DeKalb Genetics Corporation, United States. Received 08/06/1996.

**PI 595336. *Zea mays* L. *ssp. mays***

Cultivar. "01CSI2". PVP 9600289.

**PI 595337. *Zea mays* L. *ssp. mays***

Cultivar. "01DFA3". PVP 9600290.

**PI 595338. *Zea mays* L. *ssp. mays***

Cultivar. "01DIB2". PVP 9600291.

**PI 595339. *Zea mays* L. *ssp. mays***

Cultivar. "01IBH10". PVP 9600292.

**PI 595340. *Zea mays* L. *ssp. mays***

Cultivar. "01IZB2". PVP 9600293.

**PI 595341. *Zea mays* L. *ssp. mays***

Cultivar. "2FADBSR". PVP 9600294.

**PI 595342. *Zea mays* L. *ssp. mays***

Cultivar. "F298W". PVP 9600295.

**PI 595343. *Zea mays* L. *ssp. mays***

Cultivar. "SNBM". PVP 9600296.

**PI 595344. *Zea mays* L. *ssp. mays***

Cultivar. "FBPL". PVP 9600297.

**PI 595345. *Zea mays* L. *ssp. mays***

Cultivar. "WKBC5". PVP 9600298.

**PI 595346. *Zea mays* L. *ssp. mays***

Cultivar. "WQCD10". PVP 9600299.

The following were developed by Seed Research of Oregon, Inc., Oregon, United States. Received 08/06/1996.

**PI 595347. *Lolium perenne* L.**  
Cultivar. "SR 4010". PVP 9600300.

**PI 595348. *Festuca arundinacea* Schreber**  
Cultivar. "SR 8210". PVP 9600301.

The following were developed by Olsen-Fennell Seeds, Inc., United States. Received 08/06/1996.

**PI 595349. *Lolium perenne* L.**  
Cultivar. "IMAGINE". PVP 9600306.

The following were developed by DeKalb Genetics Corporation, United States. Received 08/06/1996.

**PI 595350. *Glycine max* (L.) Merr.**  
Cultivar. "CX025". PVP 9600307.

**PI 595351. *Glycine max* (L.) Merr.**  
Cultivar. "CX197". PVP 9600308.

**PI 595352. *Glycine max* (L.) Merr.**  
Cultivar. "CX229". PVP 9600309.

**PI 595353. *Glycine max* (L.) Merr.**  
Cultivar. "CX297". PVP 9600310.

**PI 595354. *Glycine max* (L.) Merr.**  
Cultivar. "CX375". PVP 9600311.

**PI 595355. *Glycine max* (L.) Merr.**  
Cultivar. "CX280c". PVP 9600312.

**PI 595356. *Glycine max* (L.) Merr.**  
Cultivar. "CX450c". PVP 9600313.

**PI 595357. *Glycine max* (L.) Merr.**  
Cultivar. "CX494". PVP 9600314.

**PI 595358. *Glycine max* (L.) Merr.**  
Cultivar. "CX510c". PVP 9600315.

The following were developed by Pickseed West, Inc., United States. Received 08/06/1996.

**PI 595359. *Festuca arundinacea* Schreber**  
Cultivar. "CROSSFIRE II". PVP 9600316.

The following were developed by Western Rice Research, United States.  
Received 08/06/1996.

**PI 595360. *Oryza sativa* L.**  
Cultivar. "MILLROSE". PVP 9600317.

**PI 595361. *Oryza sativa* L.**  
Cultivar. "SURPASS". PVP 9600318.

The following were developed by University of Missouri, Missouri, United States. Received 08/06/1996.

**PI 595362. *Glycine max* (L.) Merr.**  
Cultivar. "MAGELLAN". PVP 9600319.

The following were developed by David A. Sleper, University of Missouri, Department of Agronomy, 201 Waters Hall, Columbia, Missouri 65211, United States; P.A. Owen, Missouri Agr. Exp. Sta., University of Missouri, Columbia, Missouri 65211, United States; Kerry M. Clark, University of Missouri-Columbia, Research Support Service, 3600 E. New Haven Road, Columbia, Missouri 65211, United States; Mike E. Schmidt, Southern Illinois University, Department of Plant and Soil Sciences, MC 4415, Carbondale, Illinois 62901-4415, United States. Received 08/06/1996.

**PI 595363. *Glycine max* (L.) Merr.**  
Cultivar. Pureline. "Mustang". CV-354; PVP 9600320. Pedigree - Fayette x Pyramid. Resistance to soybean cyst nematode (*Heterodera glycines*) race 3 and moderate resistance to races 1 and 14. Relative maturity 4.3. Pubescence grey, flower white, pods tan at maturity, seeds yellow with buff hila. Low lodging (1.3), low seed shattering (1), and average height 38 inches.

The following were developed by Hollar Seeds, Inc., United States. Received 08/06/1996.

**PI 595364. *Cucurbita pepo* L.**  
Cultivar. "HSR 1878". PVP 9600321.

The following were developed by Wayne W. Hanna, USDA, ARS, Coastal Plains Experiment Station, P.O. Box 748, Tifton, Georgia 31793, United States; R.N. Carrow, University of Georgia, Dept. of Crop and Soil Sciences, Georgia Agric. Res. Stn., Griffin, Georgia 30223-1797, United States; A.J. Powell, University of Kentucky, Dept. of Agronomy, Lexington, Kentucky 40546, United States. Received 07/15/1996.

**PI 595365. *Cynodon hybrid***  
Cultivar. "TIFT 94"; MI40. CV-29. Pedigree - One of 66 finer-textured mutants induced with 8000 rads of Cobalt 60 gamma radiation in Midiron in February of 1983. Performed well or superior in three experiments at Tifton, GA and one experiment in each Griffin, GA, Oklahoma, Kentucky, and Florida. Superior quality to Midiron in tests mowed 3x per week at

12.5 or 25 mm. Quality equal to Tifway 2, similar to Tifgreen in two tests mowed at 6 mm and one test mowed at 25 mm. Only entry showing no mole cricket damage in two tests at Tifton, GA in 1993.

The following were donated by Shawn Kaeppler, University of Wisconsin, College of Agriculture, Agronomy Department, Madison, Wisconsin 53706, United States. Received 07/24/1996.

**PI 595366. *Zea mays* L. ssp. *mays***

Breeding. Inbred. N209. PL-286. Developed in United States. Pedigree - Developed by self pollination directly from NSS1(6). NSS1(6) is first replication of Nebraska Stiff Stalk Synthetic which had undergone six cycles of per se selection when selfing was initiated. Medium-short S5 line with prolific tendency. Ears medium to large, deep, soft kernels, 16 to 18 kernel rows. Requires approximately 1460 heat units for flowering. Selection based on yield potential in hybrid combination and general plant health. Anthers green, silks colorless, cob pink.

**PI 595367. *Zea mays* L. ssp. *mays***

Breeding. Inbred. N215. PL-287. Developed in United States. Pedigree - Developed by self pollination directly from NB(S)RF1(5). Population represents fifth cycle of reciprocal full-sib selection in Nebraska B Synthetic with Nebraska Stiff Stalk Synthetic as opposing tester population. Medium-tall, S6 line with some prolific tendency. Medium height, requires approximately 1500 heat units for pollen shed. Kernels light yellow, cobs light pink, 14 kernel rows. Anthers green, silks colorless. Selection based on yield potential in hybrid combination, standability, and general plant health.

**PI 595368. *Zea mays* L. ssp. *mays***

Breeding. Population. NBS(8); Nebraska B Synthetic. Developed in United States. Pedigree - Improved version of Nebraska B Synthetic synthesized by Dr. J. H. Lonnquist in 1946. Corn-belt dent population released on its potential for producing full season maize inbred lines with good yield and standability. Populations result of eight cycles of recurrent selection in a replicated recurrent selection program initiated by Dr. W. A. Compton in 1969. Composite of three replicates. Improved by S1 per se selection based on index of yield, upright plants, and plants without dropped ears. Intermediate in height, prolific, and ears with yellow grain on primarily red cobs.

**PI 595369. *Zea mays* L. ssp. *mays***

Breeding. Population. NB(S)RF(8); Nebraska B Synthetic. Developed in United States. Pedigree - Improved version of Nebraska B Synthetic synthesized by Dr. J. H. Lonnquist in 1946. Corn-belt dent population released based on potential for producing full season maize inbred lines with good yield and standability. Population is result of eight cycles of recurrent selection in replicated recurrent selection program initiated by Dr. W. A. Compton in 1969. Composite of three replicates. Improved by reciprocal full-sib selection based on index of yield, upright plants, and plants without dropped ears. Opposing population in recurrent selection program was NS(B)RF. Intermediate in height, prolific, and ears with yellow grain on primarily red cobs.

**PI 595370. *Zea mays* L. ssp. *mays***

Breeding. Population. NS(B)RF(8); Nebraska Stiff Stalk Synthetic. Developed in United States. Pedigree - Improved version of Iowa Stiff Stalk Synthetic originally synthesized by G. F. Sprague. Corn-belt dent population released based on potential for producing full season maize inbred lines with good yield and standability. Population is result of eight cycles of recurrent selection in replicated recurrent selection program initiated by Dr. W. A. Compton in 1969. Composite of three replicates. Improved by reciprocal full-sib selection based on index of yield, upright plants, and plants without dropped ears. Opposing population in recurrent selection program was NB(S)RF. Intermediate in height, prolific, and ears with yellow grain on primarily red cobs.

**PI 595371. *Zea mays* L. ssp. *mays***

Breeding. Population. NSS(8); Nebraska Stiff Stalk Synthetic. Developed in United States. Pedigree - Improved version of Iowa Stiff Stalk Synthetic originally synthesized by G. F. Sprague. Corn-belt dent population released based on potential for producing full season maize inbred lines with good yield and standability. Population is result of eight cycles of recurrent selection in replicated recurrent selection program initiated by Dr. W. A. Compton in 1969. Composite of three replicates. Improved by S1 per se selection based on index of yield, upright plants, and plants without dropped ears. Intermediate in height, prolific, and ears with yellow grain on primarily red cobs.

**PI 595372. *Zea mays* L. ssp. *mays***

Breeding. Population. ALAQUAT. Developed in United States. Pedigree - Broad based synthetic containing germplasm from "Alaska to the Equator". Population sent to Dr. Compton by Dr. Lonnquist while at CIMMYT. Yield potential relatively good, plants above average stalk quality compared to other exotic materials. Grain vitreous, exceptional quality; possibilities may exist for utilization of material in production of food grade genotypes. Plant and ear heights tall but not extreme. Colored and colorless cobs found in population as well as variety of endosperm and aleurone pigmentation types. Average maturity 115 days. Undergone 18 cycles of mass selection for adaptation. Adaptive traits include flowering date, plant height, and plant health.

**PI 595373. *Zea mays* L. ssp. *mays***

Breeding. Population. CB\*RUMANIAN. Developed in United States. Pedigree - Synthesized by intermating 12 U.S. inbred lines and 5 Romanian populations. Inbred lines included B41, H49, H90, N21, H28, N102, N117, N122, N136, N140, N147, and an unreleased Nebraska Stiff Stalk line 703026-3-2. Populations included ICAR-54 Dent, Romanese DE Studina Flint, Cincantin, Local Craciunel, and Local Cluj. Good yield, ears generally of corn-belt dent phenotype. Plant and ear heights consistent with corn-belt populations. Stalk quality excellent to fair. Cob predominantly red. Average maturity 114 days. Rapid dry-down characteristic in population. Undergone 17 cycles of mass selection for adaptation. Adaptive traits include flowering date, plant height, and plant health.

**PI 595374. *Zea mays* L. ssp. *mays***

Breeding. Population. KRUG\*TABLANCILLO. Developed in United States. Pedigree - Synthesized by intermating Krug variety with different

sources of maize from Tablacillo race of Mexico. Yield low to moderate due to short ear lengths and low kernel row numbers. Plants tall, ears high. Root lodging common due to plant height, although stalk quality good for exotic population. Colored and colorless cobs, yellow kernels common but white and purple kernels present. Average maturity 112 days. Undergone 28 cycles of mass selection for adaptation. Adaptive traits include flowering date, plant height, and plant health.

**PI 595375. *Zea mays* L. ssp. *mays***

Breeding. Population. EXOTIC COMPOSITE. Developed in United States. Pedigree - Synthesized by intermating 11 populations of cornbelt by exotic germplasm. Populations included CB\*Mexican(C2), CB\*Caribe(C2), CB\*Brazilian(C2), CB\*Cuzco(C2), CB\*Early Tropical(C2), Gaspe\*Columbian(C5), Krug\*Tablacillo(C10), Kenya Composite, Bangkok population, Conico, Latente, and CB\*Peruvian. CB is abbreviation for Cornbelt Composite which contains five open-pollinated varieties Hayes Golden, Barber Reid, Krug, Lancaster, and Golden Republic. CB constituted less than one-half of original Exot. Yield very good relative to other populations of this type. Many ears have kernels of outstanding quality. Plant height medium tall to tall, ear placement medium to high. Good stalk strength and plant health. Cobs primarily red, kernels yellow although some color variation exists. Inbreeding within has produced several attractive lines of average height and normal flowering. Lines yield well in hybrid combination. Average maturity approximately 114 days. Improved by 13 cycles of modified ear-to-row half-sib family selection. Lines don't fall into any specific heterotic group as expected based on genetic diversity.

**PI 595376. *Zea mays* L. ssp. *mays***

Breeding. Population. HAYS GOLDEN\*44. Developed in United States. Pedigree - Formed by crossing version of Hays Golden, improved by 13 cycles of modified ear-to-row half-sib family selection, to Mo44. Cross to improve standability, with resulting population one-half Mo44 and one-half Hays Golden. Improved by 2 cycles of modified ear-to-row half-sib family selection. Population contains largely Reid or Midland germplasm placing it in Stiff Stalk heterotic group. Mo44 combines well with Stiff Stalk and non-Stiff Stalk genotypes. Average maturity 114 days. Yield good, standability improved by cross to Mo44 relative to immediate Hays Golden progenitor. Plant height tall, ear placement high, but traits not as pronounced as in other Hays Golden populations. Cob red, kernels yellow.

**PI 595377. *Zea mays* L. ssp. *mays***

Breeding. Population. NEBRASKA ROOTWORM SYNTHETIC. Developed in United States. Pedigree - Developed by intermating 12 inbred lines and 2 Mexican populations with large roots or good root regrowth after damage. Inbreds included N8A, N8B, N28, N38A, N124, A251, A625, B57, B69, Mo22, SD10, CI21E. Two populations were Corn Belt\*Zapalote and Zapalote Syn17. Improved by approximately 8 cycles of mass selection for maturity and plant appearance. Further improved by two cycles of reciprocal full-sib selection with Nebraska Drought Synthetic as opposing population. Average maturity 110 to 112 days. Contains largely Reid germplasm, although lines selfed from it perform equally well when crossed to either heterotic pattern. Yield moderate. Ears medium, cobs red, and grain yellow. Plant and ear heights medium to medium tall. Stalk



strength variable due to susceptibility of some plants to common stalk rots. General health good. Most plants dark green. No data on root strength gathered but one line selfed from population is exceptional with respect to this characteristic. Based on genetic material used to form the population, root strength expected to be good.

**PI 595378. *Zea mays* L. ssp. *mays***

Breeding. Population. NEBRASKA DROUGHT SYNTHETIC. Developed in United States. Pedigree - Formed by intermating N7A, N28, and Pioneer hybrids 3709, 3720, 3505, 3575, 3388, and 3184. Germplasm chosen based on reports of stress tolerance. Population random mated for four generations, improved by 2 cycles of reciprocal full-sib selection with Nebraska Rootworm Synthetic. Average maturity 108 to 110 days. Since large proportion was hybrids, lines not expected to conform to one heterotic pattern. Yield good. Plant and ear heights medium. Stalk strength good. Little stalk rot observed and European corn borer damage less severe in this population relative to others grown in similar trials. Plant health very good with good staygreen late in season. No data on drought tolerance. Several lines selfed from this population show excellent root strength.

The following were developed by T.S. Cox, USDA, ARS, Plant Science and Entomology Research, Department of Agronomy, Manhattan, Kansas 66506-5501, United States. Received 07/29/1996.

**PI 595379. *Triticum aestivum* L., nom. cons.**

Breeding. Pureline. KS95WGRC33. Pedigree - KS93U69\*2/TA2397. Hard red winter wheat resistant to Septoria leaf blotch (*Septoria tritici*) and Stagonospora leaf blotch (*Stagonospora nodorum*). Represents unique source of resistance in hexaploid wheat to Septoria and Stagonospora leaf blotches. Also carries gene Lr41 for resistance to leaf rust (*Puccinia recondita*) from TA2460 via KS93U69. In seedling tests, segregated for resistance to cultures of wheat curl mite (*Eriophyes tulipae*) to which TAM107 is susceptible. Similar to TAM107 in days to heading, plant height, and general phenotype.

The following were developed by Soon Jai Park, Agriculture Canada, Harrow Research Station, Harrow, Ontario NOR 1G0, Canada; J. C. Tu, Agriculture and Agri-food Canada, Greenhouse and Processing Crops Research Centre, Harrow, Ontario NOR160, Canada. Received 07/31/1996.

**PI 595380. *Phaseolus vulgaris* L.**

Cultivar. Pureline. "AC HENSALL"; HR43-1582. CV-141. Pedigree - OAC Rico/4/W1541-1503 F2/3/W1336-F2//OAC Seaforth/I667. Medium early maturing in southwestern Ontario with improved disease resistance and yield potential. Yielded 2678 kg ha<sup>-1</sup>, 106.4% of Envoy, 116.9% of Mitchell, 109.5% of Midland, and 105.8% and 101.9% of OAC Cygnus and Central which were about 2d and 3d later in maturity. Matures about 93 d from seeding, adapted in southwestern Ontario, from 42 to 43 N lat., with 2600 or more crop heat units. Weighs 18.4 g 100 sd<sup>-1</sup>, slightly smaller seed mass than check cultivars (20.16 g) but larger seed than Midland which weighs 16.2 g 100 sd<sup>-1</sup>. Good appearance, flavour, texture of canned bean in organoleptic test, and cooking and canning quality

with firm texture. Resistant to BCMV races 1, 15, and NL-8 strain by carrying 'I' and 'bc-3' genes. Resistant to alpha and delta races of bean anthracnose (*Colletotrichum lindemuthianum*) by carrying 'Are' gene. Hypocotyl green, indeterminate growth habit with short vine. Flowers white, pods light tan at maturity.

The following were developed by J.C. Gutierrez, Instituto Nacional de Investigaciones Agrarias, Junta de Andalucia, Consejeria de Agricultura, Alcala Del Rio, Sevilla, Spain. Received 06/14/1996.

**PI 595381. *Gossypium hirsutum* L.**

Cultivar. Pureline. "VICTORIA". CV-110. Pedigree - Stroman 254 / Coker 602 BR. Long season cultivar. Plant shape spreading, height 100-130 cm. Leaves smooth, large bolls, and high seed index. Average fiber characteristics (HVI instruments): length 1.16 inn, strength 28.6 g/tex, Mic 4.2, uniformity 81.1%, elongation 5.6%, lint 37.9%. Highly tolerant to sweetpotato whitefly (*Bemisia tabaci*).

**PI 595382. *Gossypium hirsutum* L.**

Cultivar. "MARIA DEL MAR". CV-111. Pedigree - Stroman 254 / Coker 602 BR. Intermediate maturity. Growth habit cylindrical, height 100-130 cm. Leaves smooth, large bolls, and high seed index (11g). Average fiber characteristics (HVI instrument): length 1.15 in., strength 29.9 g/tex, Mic 4.1, uniformity 81.3%, elongation 5.8%, lint 37.8%. Tolerant to sweetpotato whitefly (*Bemisia tabaci*).

The following were developed by Garst Seed Company, United States. Received 08/16/1996.

**PI 595383. *Zea mays* L. ssp. *mays***

Cultivar. "ZS01101". PVP 9600268.

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

**PI 595384. *Dactylis glomerata* L.**

Wild. ABY-BC 5486.80; W6 9073. Collected in Italy. Latitude 42 deg. 34' N. Longitude 12 deg. 39' E. Elevation 400 m. Terni.

The following were developed by William D. Branch, University of Georgia, Coastal Plain Experiment Station, Department of Agronomy, Tifton, Georgia 31793-0748, United States. Received 08/30/1996.

**PI 595385. *Arachis hypogaea* L. var. *hypogaea***

Genetic. Pureline. Georgia Non-Nod; GA T-2400. GS-6. Pedigree - [(PI 341879 x PI 109839) x (PI 371965 x F439-16-10-3)], F5. Growth habit spreading runner, medium maturity, and long narrow pods. Testa color pink. Approximate weight 42 g 100 seed -1.

The following were donated by John D. Miller, USDA, ARS, Coastal Plain

Experiment Station, Agronomy Dept., Tifton, Georgia 31793, United States.  
Received 1979.

**PI 595386. *Securigera varia* (L.) Lassen**

Breeding. VIRGINIA SYNTHETIC A; NSL 103801. GP-29. Pedigree - Synthetic tracing to five sources: Chemung, Emerald, Penngift, Maryland Hay, and Maryland Pasture. Forty-seven superior clones were selected in acid soil trials, seed was bulked from all clones. Selected for tolerance of acid soil. Might be useful for revegetating acid mine spoils. Plants variable within this germplasm pool, including erect and prostrate plants with narrow or wide leaves and coarse or fine stems.

The following were developed by Fred V. Grau, Pennsylvania State University, Agricultural Experiment Station, University Park, Pennsylvania, United States . Donated by Pennsylvania State University, Pennsylvania Agr. Exp. Sta., Pennsylvania, United States. Received 1961.

**PI 595387. *Securigera varia* (L.) Lassen**

Cultivar. "PENNGIFT"; NSL 4856. CV-2. Pedigree - Originated between 1905 and 1910 from volunteer plants in a field seeded to imported alfalfa, in Berks County Pennsylvania. Released 1954. Stems fine and narrow leaves. Flowers purple to pink. Used as an erosion resistant ground cover.

The following were donated by Bernard P. Goplan, Agriculture Canada, Saskatoon Research Station, 107 Science Crescent, Saskatoon, Saskatchewan S7N 0X2, Canada. Received 1982.

**PI 595388. *Melilotus officinalis* Lam.**

Cultivar. "NORGOLD"; SL-608; NSL 164709. CV-35. Pedigree - Low coumarin character from *M. dentatus* through *M. albus* to *M. officinalis*. Recurrent backcrosses with the varieties Erector and Yukon were used to get agronomic performance. Released 01/29/1981. A low coumarin cultivar adapted for western Canada.

The following were developed by B. P. Goplen, Research Station, Agriculture Canada, 107 Science Cresc., Saskatoon. Donated by Bernard P. Goplan, Agriculture Canada, Saskatoon Research Station, 107 Science Crescent, Saskatoon, Saskatchewan S7N 0X2, Canada. Received 1983.

**PI 595389. *Melilotus officinalis* Lam.**

Cultivar. "YUKON"; SL-578 (BREEDER 79-75000); NSL 183537. CV-42. Pedigree - A strain of Madrid sweetclover naturalized in western Canada. Base population of Madrid was introduced in to Canada in 1950 by the Neufield Seed Company. Released 02/27/1970. Winter-hardy with outstanding seedling vigor.

The following were donated by Illinois Crop Improvement Assoc., Illinois, United States. Received 1962.

**PI 595390. *Melilotus albus* Medikus**

Cultivar. "GRUNDY COUNTY"; NSL 20097; GRUNDY. Pedigree - Developed in

Grundy County, Illinois. Procured from a local dealer. Good for seed production because the seeds ripen all at once. Seed maturity 10 to 14 days before wild types, not as tall as the wild types. Erect with a single upright stem, seldom more than 4 feet tall. In leafyness the plants compare favorably with wild type plants. Because the stems are thin, the hay is not coarse.

The following were developed by J.B. Park, Ohio Agricultural Experiment Station, Department of Agronomy, Columbus, Ohio, United States. Donated by Beltsville USDA, ARS, Beltsville, Maryland, United States. Received 1976.

**PI 595391. *Melilotus albus* Medikus**

Cultivar. "EVERGREEN"; FC 36062; NSL 30285. CV-3. Pedigree - One-hundred-ninty-seven roadside and field plants were selected in the years 1924, 1926, and 1928. They were grown in plant-to-row progeny tests. Pollination was partially controlled by removing undesirable rows or plants. Twenty strains were selected in 1928. From all the available material, 11 mass selections of similar growth and maturity were made and then increased. Considerable roguing was done in 1932. Some strains were distributed to farmers in 1933. In the spring of 1935 seven mass sel. High hay yields. First year's growth tall, upright and somewhat coarse. Second year's growth tall, coarse, and 3 to 4 weeks later in maturity than common wild-type plants. The blooming period long. Seed harvesting difficult because seed shatters. High temperatures and drought can result in in low seed yield or seed failures. Well adapted in the corn belt to the eastern edge of the Great Plains.

The following were developed by H. Schoth, USDA-ARS, Plant Industry Station, Horticultural Crops Research Branch, Crops Research Division, Beltsville, Maryland 20705-2350, United States. Donated by Agricultural Research Service -- USDA, Beltsville Agricultural Research Center, Beltsville, Maryland 20705, United States. Received 1978.

**PI 595392. *Melilotus albus* Medikus**

Cultivar. "WILLAMETTE"; "WILLAMETTE WHITE"; FC 33203; NSL 5478. Pedigree - A strain of the common white type, selected in Oregon for disease resistance. Resistant to Sclerotinia stem rot and crown rot. Selected in western Oregon for use there. Maturity and plant type similar to common white.

The following were donated by Agricultural Research Service -- USDA, Beltsville Agricultural Research Center, Beltsville, Maryland 20705, United States. Received 1961.

**PI 595393. *Melilotus officinalis* Lam.**

Cultivar. "GOLDTOP"; FC 36256; NSL 5483. CV-4. Pedigree - A combination of two strains A46 and S65 both derived from R10377 which was obtained from the Northern Caucasus of Russia in 1936. This breeding project was maintained as a cooperative project between the Departments of Agronomy and Genetics, Wisconsin Agricultural Experiment Station and the Forage and Range Section, A.R.S., U. S. Department of Agriculture. Released 1956. Excellent seedling vigor and later maturing than other varieties

of this species. Two weeks later in coming into flower than the variety Madrid.

**PI 595394. *Melilotus officinalis* Lam.**

Cultivar. "MADRID"; "MADRID YELLOW"; FC 36257; NSL 5484. CV-2. Pedigree - Originated as an introduction through the USDA Division of Plant Introduction, from the Madrid Botanical Garden, in 1910. The original seeds were accessioned as PI 27474. Released 1926. Exceptional early seedling vigor. Seed production heavy, and early enough to escape the hazard of summer drought in the Great Plains.

The following were developed by H.D. Hughes, Iowa State University, Farm Crops Subsection, Ames, Iowa 50011, United States. Donated by Agricultural Research Service -- USDA, Beltsville Agricultural Research Center, Beltsville, Maryland 20705, United States. Received 1961.

**PI 595395. *Melilotus suaveolens* Ledeb.**

Cultivar. "GOLDEN ANNUAL"; FC 32578; NSL 5486. Pedigree - Obtained from Mongolia, China through the USDA, Division of Forage Crops. Selected for early flowering and for vigor by Dr. S.N. Smith and Prof. H.D. Hughes in Iowa. Descended from a single plant. Released 1939. An annual variety with a growth form similar to the variety Hubam. Annual is dominant to biennial in crosses.

The following were developed by B. P. Goplen, Research Station, Agriculture Canada, 107 Science Cresc., Saskatoon. Donated by Agriculture Canada, Saskatchewan Research Station, Saskatoon, Saskatchewan, Canada. Received 1970.

**PI 595396. *Melilotus albus* Medikus**

Cultivar. "POLARA"; SL-577 (BREEDER 79-75000); NSL 77599. CV-41. Pedigree - The low coumarin gene cu was incorporated into the well-adapted cultivar Arctic. Three backcrosses were employed using honeybees and large plant populations. A total of 302 progenies were established in replicated tests, and 20% of the progenies were rogued prior to flowering. Released 1970. A low coumarin cultivar of sweetclover. Will not cause hemorrhaging or "sweetclover disease" in farm livestock. Adapted to Western Canada. Seed and forage yields approximately 10% less than the cultivar Arctic.

The following were donated by D.R. Dewey, USDA-ARS, Forage and Range Research Laboratory, Utah State University, UMC-63, Logan, Utah 84322, United States; Ren Jiz-Hou, Gansu Grassland Ecological Institute, Utah State University, Lanzhou, Gansu, China. Received 01/27/1991.

**PI 595397. *Melilotus officinalis* Lam.**

Uncertain. D-2767; Yellow-flowered one-seeded sweet-scented; Ames 18509.

The following were donated by L.T. Colon, CPRO-DLO, Droevendaalsesteeg 1, Wageningen, Netherlands. Received 11/09/1995.

- PI 595398. *Solanum microdontum* Bitter  
Breeding. MCD 127; Q 35905.
- PI 595399. *Solanum microdontum* Bitter  
Breeding. MCD 176; Q 35906.
- PI 595400. *Solanum microdontum* Bitter  
Breeding. MCD 231; Q 35907.
- PI 595401. *Solanum microdontum* Bitter  
Breeding. MCD 234; Q 35908.

The following were donated by Bons Dorozhkin, Siberian Research Inst. of Agriculture, Omsk, Russian Federation. Received 03/15/1991.

- PI 595402. *Solanum tuberosum* L.  
Cultivar. "BERLICHING"; Q 28389.
- PI 595403. *Solanum tuberosum* L.  
Cultivar. "POLIOT"; Q 28376.
- PI 595404. *Solanum tuberosum* L.  
Cultivar. "PREOBSKII"; Q 28378.
- PI 595405. *Solanum tuberosum* L.  
Cultivar. "SEDOV"; Q 28379.
- PI 595406. *Solanum tuberosum* L.  
Cultivar. "SYR-9"; Q 28380.

The following were donated by Nelson Estrada, PROINPA, Casilla Postal 4285, Cochabamba, Bolivia. Received 03/11/1994.

- PI 595407. *Solanum* sp.  
Cultivar. "386056.17"; BE-6048; Q 32913.
- PI 595408. *Solanum* sp.  
Cultivar. "389349.1"; BE-6048; Q 32914.
- PI 595409. *Solanum* sp.  
Cultivar. "575045"; BE-6048; Q 32916.
- PI 595410. *Solanum* sp.  
Cultivar. "720049"; BE-6048; Q 32917.
- PI 595411. *Solanum* sp.  
Cultivar. "84-34-2"; BE-6048; Q 32919.
- PI 595412. *Solanum* sp.  
Cultivar. "84-75-16"; BE-6048; Q 32920.
- PI 595413. *Solanum* sp.  
Cultivar. "86F-302-8"; BE-6048; Q 32922.

**PI 595414. *Solanum* sp.**

Cultivar. "90-245-21"; BE-6048; Q 32924.

**PI 595415. *Solanum* sp.**

Cultivar. "CH'ASKA"; BE-6048; Q 32925.

The following were donated by V. A. Dragavtsev, N. I. Vavilov All-Russian Scientific Research, Institute of Plant Genetic Resources, 44 Bolshaya Morskaya Street, St. Petersburg, Leningrad 190000, Russian Federation. Received 04/02/1993.

**PI 595416. *Solanum* sp.**

Cultivar. "ISTRINSKY-1ST"; CIS 10; BE-4620; Q 30449.

**PI 595417. *Solanum* sp.**

Cultivar. "LUGOVSKOY-2ND"; CIS 11; BE-4620; Q 30450.

**PI 595418. *Solanum* sp.**

Cultivar. "VOLZHANIN-2ND"; CIS 9; BE-4620; Q 30448.

The following were donated by Kazuyoshi Hosaka, Experimental Farm, Kobe University, 1348 Uzurano, Kasai, Hyogo, Japan. Received 06/07/1994.

**PI 595419. *Solanum phureja* Juz. & Buk.**

Cultivar. "PHU 253"; BE-7106; Q 34943.

The following were donated by Sandra Goodfellow, Scottish Agricultural Science Agency, East Craigs, Edinburgh, United Kingdom. Received 04/26/1995.

**PI 595420. *Solanum tuberosum* L.**

Cultivar. "Aura"; Clone 4; BE-7487; Q 35718.

The following were donated by Harald Hildrun, Gartnerhallens Eliteplantestasjon, Sauherad, Akkerhaugen, Norway. Received 10/11/1995.

**PI 595421. *Solanum tuberosum* L.**

Cultivar. "Beate"; B123; B124; BE-7673; Q 35787.

The following were donated by Konrad Schuler, Institute for Plant Genetics, IPK, Genbank-Aussenstelle Nord, 0-2551, Gross Lusewitz, Germany. Received 04/25/1994.

**PI 595422. *Solanum tuberosum* L.**

Cultivar. "FABRICIA"; 1533; BE-7040; Q 34843.

**PI 595423. *Solanum tuberosum* L.**

Cultivar. "LERCHE"; 15202; BE-7040; Q 34842; CERCILE.

The following were donated by Ralph Marx, Lapland, Sweden. Received 11/09/1983.

**PI 595424. *Solanum tuberosum* L.**

Cultivar. "MANDEL POTATO"; C 12702; Q 24008.

The following were donated by M.F.W. Jansen Klomp, RZ Research BV, Breeding Station ROPTA-ZPC, P.O. Box 2, Metslawier, Netherlands. Received 11/21/1995.

**PI 595425. *Solanum tuberosum* L.**

Cultivar. "Marijke"; AL 180 MS 301; BE-7708; Q 35880.

The following were donated by Konrad Schuler, Institute for Plant Genetics, IPK, Genbank-Aussenstelle Nord, 0-2551, Gross Lusewitz, Germany. Received 04/25/1994.

**PI 595426. *Solanum tuberosum* L.**

Cultivar. "MARYKE"; BE-7040; Q 34839.

The following were collected by R. Ross, USDA, ARS, Inter-Regional Potato Intro. Station, Peninsula Experiment Station, Sturgeon Bay, Wisconsin 52435, United States. Received 12/08/1983.

**PI 595427. *Solanum tuberosum* L.**

Cultivar. "MEX-CES 63"; C 12914; Q 24055. Collected 12/08/1983 in Mexico.

The following were donated by Hubert G. Zandstra, International Potato Center, Apartado 5969, Lima, Lima, Peru. Received 12/12/1985.

**PI 595428. *Solanum* sp.**

Cultivar. "PAPA 1"; Q 25881.

The following were donated by John Meyer, P.O. Box 146, Kellnersville, Wisconsin 54215, United States. Received 02/09/1993.

**PI 595429. *Solanum tuberosum* L.**

Cultivar. "Red Potato"; BE-4474; Q 29670. Red-orange color may be caused by yellow flesh showing through the thin red skin of the tuber.

The following were donated by V. A. Dragavtsev, N. I. Vavilov All-Russian Scientific Research, Institute of Plant Genetic Resources, 44 Bolshaya Morskaya Street, St. Petersburg, Leningrad 190000, Russian Federation. Received 04/02/1993.

**PI 595430. *Solanum* sp.**

Cultivar. "RESURS-2ND"; CIS 7; BE-4620; Q 30446.

The following were donated by Hilu Omer, Sorghum & Millet Research, Agric.



Res. Corporation, P.O. Box 126, Wad Medani, Sudan. Received 05/18/1954.

**PI 595431. *Sorghum bicolor* (L.) Moench**  
Cultivated. IS 2314; Q2-2-90; SU 70; SHEMSHEN WH.

The following were donated by Solana GmbH, Kielortalle 9, Hamburg, Germany.  
Received 12/18/1995.

**PI 595432. *Solanum tuberosum* L.**  
Cultivar. "Ilona"; 204 24.11; Q 35972.

The following were developed by Dale Sechler, University of Missouri, Department of Agronomy, Columbia, Missouri 65211, United States; J. M. Poehlman, University of Missouri-Columbia, 205 Curtis Hall, Department of Agronomy, Columbia, Missouri 65211, United States; Calvin O. Qualset, University of California, Genetic Resources Conservation Program, University Extension Building, Room 133, Davis, California 95616-8539, United States; John Heaton, Genetic Resources Conservation Program, University of California, Davis, California 95616, United States. Received 07/15/1996.

**PI 595433. *Avena sativa* L.**  
Cultivar. Pureline. "BATES 89"; UC 89; MO O-6072; NSGC 6133. Pedigree - Pettis/Florida 500. Released 1996. Adapted to irrigated and rainfed production in the Central Valley of California and similar regions. May differ slightly in maturity and other characteristics based on a side-by-side comparison with Bates. During the time of evaluation and year-to-year increase in California, Bates 89 may have diverged from Bates.

The following were donated by Solana GmbH, Kielortalle 9, Hamburg, Germany.  
Received 12/18/1995.

**PI 595434. *Solanum tuberosum* L.**  
Cultivar. "Rosara"; 212 24.11; Q 35974.

**PI 595435. *Solanum tuberosum* L.**  
Cultivar. "Satina"; 310 24.11; Q 35975. PVP 9600092.

The following were donated by Puerto Rico Agricultural Experiment Station, University of Puerto Rico, Mayaguez, Puerto Rico. Received 1961.

**PI 595436. *Cucurbita moschata* (Duchesne) Poiret**  
Cultivar. NSL 6677; FORTUNA.

The following were donated by Gino Aguirre, PROINPA, Programa de Investigacion de la Papa, Casilla 405, Cochabamba, Bolivia. Received 07/27/1993.

**PI 595437. *Solanum x ajanhuiri* Juz. & Buk.**  
Cultivar. "AJAHUIRI"; BOT 3180; BE-4832; Q 30929.

- PI 595438. *Solanum x juzepczukii* Buk.**  
Cultivar. "AZUL LUK'I"; BOT 2184; BE-4832; Q 30936.
- PI 595439. *Solanum stenotomum* ssp. *goniocalyx* (Juz. & Buk.) Hawkes**  
Cultivar. "CH'ASKA ZAPALLO"; BOT 2791; BE-4832; Q 30920.
- PI 595440. *Solanum x juzepczukii* Buk.**  
Cultivar. "LARAN KAISALLA"; BOT 2207; BE-4832; Q 30937.
- PI 595441. *Solanum x juzepczukii* Buk.**  
Cultivar. "LIK'I"; BOT 2861; BE-4832; Q 30939.
- PI 595442. *Solanum x ajanhuiri* Juz. & Buk.**  
Cultivar. "LUNKU AJAHUIRI"; BOT 3164; BE-4832; Q 30928.
- PI 595443. *Solanum stenotomum* Juz. & Buk.**  
Cultivar. "PEPINO"; BOT 2775; BE-4832; Q 30922.
- PI 595444. *Solanum stenotomum* Juz. & Buk.**  
Cultivar. "QOYLLU"; BOT 2694; BE-4832; Q 30921.
- PI 595445. *Solanum x juzepczukii* Buk.**  
Cultivar. "SISU LARGO"; BOT 3140; BE-4832; Q 30940.
- PI 595446. *Solanum stenotomum* Juz. & Buk.**  
Cultivar. "WAWA CHARA PEPINO"; BOT 2942; BE-4832; Q 30925.
- PI 595447. *Solanum x juzepczukii* Buk.**  
Cultivar. "WILA LUK'I"; BOT 1705; BE-4832; Q 30935.

The following were donated by John Bamberg, USDA, ARS, Potato Introduction Station, Peninsula Experiment Station, Sturgeon Bay, Wisconsin 54235, United States. Received 03/16/1995.

- PI 595448. *Solanum neovalenzuelae* L. E. Lopez**  
Wild. CCC 5247; Q 29416; Q 35720. Collected in Santander, Colombia.  
Elevation 3650 m. Municipality of Bucaramanga. On the road to Berlin,  
10 km along the road to Vetas, 200 m below the road. In a wet forest.  
Received as *Solanum ineovalenzuelae*.

The following were collected by Andres Contreras, Universidad Austral de Chile, Inst. Produccion y Sanidad Vegetal, Casilla 567, Valdivia, Chile. Received 12/19/1991.

- PI 595449. *Solanum tuberosum* L.**  
Wild. CON 888; BE-3768; Q 28785. Collected 1989 in Los Lagos, Chile.  
Elevation 0 m. Chiloé. Recta chacao, 18 km Ancud.
- PI 595450. *Solanum tuberosum* L.**  
Wild. CON 892; BE-3768; Q 28788. Collected 1989 in Los Lagos, Chile.  
Elevation 0 m. Chiloé. Recta chacao, 18 km Ancud.

- PI 595451. *Solanum tuberosum* L.**  
Wild. CON 893; BE-3768; Q 28789. Collected 1989 in Los Lagos, Chile.  
Elevation 0 m. Chiloe. Isla Caucahue, Morros Lobos.
- PI 595452. *Solanum tuberosum* L.**  
Wild. CON 894; BE-3768; Q 28790. Collected 1989 in Los Lagos, Chile.  
Elevation 0 m. Chiloe. Isla Caucahue, Morros Lobos.
- PI 595453. *Solanum tuberosum* L.**  
Wild. CON 898; BE-3768; Q 28791. Collected 1989 in Los Lagos, Chile.  
Elevation 0 m. Chiloe. Isla Caucahue, Morros Lobos.
- PI 595454. *Solanum tuberosum* L.**  
Wild. CON 900; BE-3768; Q 28793. Collected 1989 in Los Lagos, Chile.  
Elevation 0 m. Chiloe. San Antonio de Chadmo.
- PI 595455. *Solanum tuberosum* L.**  
Wild. CON 901; BE-3768; Q 28796. Collected 1989 in Los Lagos, Chile.  
Elevation 0 m. Chiloe. San Antonio de Chadmo.
- PI 595456. *Solanum tuberosum* L.**  
Wild. CON 903; BE-3768; Q 28794. Collected 1989 in Los Lagos, Chile.  
Elevation 0 m. Chiloe. San Antonio de Chadmo.
- PI 595457. *Solanum tuberosum* L.**  
Wild. CON 923; BE-3768; Q 28801. Collected 1989 in Los Lagos, Chile.  
Elevation 0 m. Chiloe. Caulin Bajo, Ancud.
- PI 595458. *Solanum tuberosum* L.**  
Wild. CON 925; BE-3768; Q 28802. Collected 1989 in Los Lagos, Chile.  
Elevation 0 m. Chiloe. Isla Metalqui.
- PI 595459. *Solanum tuberosum* L.**  
Wild. CON 928; BE-3768; Q 28803. Collected 1989 in Los Lagos, Chile.  
Elevation 0 m. Chiloe. Isla Metalqui.
- PI 595460. *Solanum tuberosum* L.**  
Wild. CON 929; BE-3768; Q 28804. Collected 1989 in Los Lagos, Chile.  
Elevation 0 m. Chiloe. Ancud.
- PI 595461. *Solanum tuberosum* L.**  
Wild. CON 931; BE-3768; Q 28805. Collected 1989 in Los Lagos, Chile.  
Elevation 0 m. Chiloe. Ancud.

The following were collected by Luis E. Lopez, Carrera 15 # 14-57, Edificio Lucerne Ap. 303, Armenia Diundio, Colombia. Received 02/15/1995.

- PI 595462. *Solanum phureja* Juz. & Buk.**  
Wild. LOP 5001; BE-7405; Q 35584. Collected in Quindio, Colombia.  
Elevation 1850 m. Municipality of Pijao. Vereda La Quiebra, the farms of Luis Angel Gomez and Tomas Lopez.

The following were donated by Aaron Rodriguez-Contreras, Universidad de

Guadalajara, Instituto de Botanica, Las Agujas, Nextipac, Zapopan, Jalisco, Mexico. Received 09/14/1993.

**PI 595463. *Solanum pinnatisectum* Dunal**

Wild. ROD 2495; BE-4893; Q 32539. Collected 08/09/1993 in Queretaro, Mexico. Latitude 20 deg. 34' N. Longitude 100 deg. 19' W. Elevation 2000 m. Municipality of Queretaro, road Queretaro-Mexico city, just at the junction to El Rosario; E side of Monin Indian monument. Mesquite-grassland with *Opuntia* sp *Karwinskia* sp., *Myrilocactus* sp. and *Prosopis* sp. Found also along cornfield.

The following were collected by Aaron Rodriguez, University of Wisconsin, Department of Horticulture, 1575 Linden Drive, Madison, Wisconsin 53706-1590, United States. Donated by Aaron Rodriguez-Contreras, Universidad de Guadalajara, Instituto de Botanica, Las Agujas, Nextipac, Zapopan, Jalisco, Mexico. Received 09/14/1993.

**PI 595464. *Solanum bulbocastanum* Dunal ssp. *bulbocastanum***

Wild. ROD 2509; BE-4893; Q 32540. Collected 08/12/1993 in Oaxaca, Mexico. Latitude 17 deg. 6' N. Longitude 96 deg. 42' W. Elevation 1830 m. Municipality of San Felipe del Agua; foot-hills of San Felipe mountains, 500 m N of the town. Oak forest. Along old road. Plants 1 m tall. Corolla stellate, creamy white. Fruit globose.

**PI 595465. *Solanum cardiophyllum* Lindley ssp. *cardiophyllum***

Wild. ROD 2529; BE-4893; Q 32544. Collected 08/15/1993 in Puebla, Mexico. Latitude 18 deg. 0' N. Longitude 97 deg. 42' W. Elevation 1930 m. San Antonio del Rio, municipality of San Miguel Ixitlan; on the Huajuanpan de Leon-Tehuacan road. In cornfields, near by a small stream and *Taxodium mucronatum* and *Ipomoea* sp. Plants 40 cm tall. Corolla stellate, creamy white.

**PI 595466. *Solanum cardiophyllum* Lindley ssp. *cardiophyllum***

Wild. ROD 2533; BE-4893; Q 32545. Collected 08/15/1993 in Puebla, Mexico. Elevation 2050 m. Santiago Acatepec, municipality of Caltepec; on the side of the road from Huajuanpan de Leon to Tehuacan. Cornfields. Plants 30 cm tall. Corolla stellate, creamy white. Fruit globose.

**PI 595467. *Solanum cardiophyllum* ssp. *lanceolatum* (Berthel.) Bitter**

Wild. ROD 2538; BE-4893; Q 32547. Collected 08/16/1993 in Puebla, Mexico. Latitude 18 deg. 35' N. Longitude 97 deg. 23' W. Elevation 2110 m. Km 19 from Tehuacan on the road to Orizaba, just at the intersection to Cd. Serdan. In cornfield, growing under *Mimosa* sp.

**PI 595468. *Solanum cardiophyllum* Lindley ssp. *cardiophyllum***

Wild. ROD 2541; BE-4893; Q 32548. Collected 08/16/1993 in Puebla, Mexico. Latitude 18 deg. 40' N. Longitude 97 deg. 22' W. Elevation 2150 m. Canada de Rojas; road from Tehuacan to Orizaba. In cornfields. Plants 30 cm tall. Corolla stellate, creamy white.

**PI 595469. *Solanum tuberosum* L.**

Wild. ROD 2543; BE-4893; Q 32549. Collected 08/16/1993 in Puebla, Mexico. Latitude 18 deg. 40' N. Longitude 97 deg. 22' W. Elevation 2150 m. Canada de Rojas; road from Tehuacan to Orizaba. On the side of the

Highway. Tubers purple.

- PI 595470. *Solanum cardiophyllum* Lindley ssp. *cardiophyllum***  
Wild. ROD 2544; BE-4893; Q 32550. Collected 08/17/1993 in Puebla, Mexico  
. Latitude 18 deg. 32' N. Longitude 97 deg. 24' W. Elevation 1820 m.  
Road from Tehuacan to Orizaba, junction to San Vicente. Along cornfield;  
slope with rocky soil and Agave sp., Cnidoscolus sp. and Opuntia sp.  
Plants 40 cm tall. Fruits globose.
- PI 595471. *Solanum bulbocastanum* Dunal ssp. *bulbocastanum***  
Wild. ROD 2546; BE-4893; Q 32551. Collected 08/19/1993 in Mexico, Mexico  
. Elevation 2400 m. Municipality of Texcoco; Tetzcuitzingo mountain  
right next to San Nicolas Tlamaca. Disturbed oak forest. Plants 30 cm  
tall. Corolla stellate, creamy white.
- PI 595472. *Solanum stoloniferum* Schldl. & Bouche ssp. *stoloniferum***  
Wild. ROD 2547; BE-4893; Q 32552. Collected 08/19/1993 in Mexico, Mexico  
. Elevation 2400 m. Municipality of Texcoco; Tetzcuitzingo mountain  
right next to San Nicolas Tlamaca. Disturbed oak forest. Plants 40 cm  
tall. Corolla rotate and long acumens, white.
- PI 595473. *Solanum bulbocastanum* ssp. *dolichophyllum* (Bitter) Hawkes**  
Wild. ROD 2548; BE-4893; Q 32553. Collected 08/20/1993 in Morelos,  
Mexico. Latitude 19 deg. 0' N. Longitude 99 deg. 9' W. Elevation 2225 m.  
La Pera, highway from Mexico city to Cuernavaca. Along the highway and  
among volcanic rocks with Agave sp. and crasulaceas. Plants 50 cm tall.  
Corolla stellate, creamy white.
- PI 595474. *Solanum polyadenium* Greenman**  
Wild. ROD 2552; BE-4893; Q 32554. Collected 08/22/1993 in Hidalgo,  
Mexico. Latitude 19 deg. 51' N. Longitude 99 deg. 19' W. Elevation 2311  
m. Highway from Mexico city to Queretaro city, near the junction towards  
Tula. Mesquite-grassland with Prosopis leavigata, Acacia sp. and Opuntia  
sp. Plants 60 cm tall, malodorous. Corolla rotate-stellate, white.  
Fruit ovoid, light green, striped with broad bands of darker green.
- PI 595475. *Solanum bulbocastanum* Dunal ssp. *bulbocastanum***  
Wild. ROD 2555; BE-4893; Q 32555. Collected 08/22/1993 in Hidalgo,  
Mexico. Latitude 19 deg. 51' N. Longitude 99 deg. 19' W. Elevation 2311  
m. Highway from Mexico city to Queretaro city, near the junction towards  
Tula. Mesquite-grassland with Prosopis leavigata, Acacia sp. and Opuntia  
sp. Plants 40 cm tall. Corolla stellate, white.
- PI 595476. *Solanum cardiophyllum* Lindley ssp. *cardiophyllum***  
Wild. ROD 2557; BE-4893; Q 32556. Collected 08/22/1993 in Hidalgo,  
Mexico. Latitude 19 deg. 51' N. Longitude 99 deg. 19' W. Elevation 2311  
m. Highway from Mexico city to Queretaro city, near the junction towards  
Tula. Mesquite-grassland with Prosopis leavigata, Acacia sp. and Opuntia  
sp. Plants 30 cm tall.
- PI 595477. *Solanum cardiophyllum* Lindley ssp. *cardiophyllum***  
Wild. ROD 2560; BE-4893; Q 32558. Collected 08/22/1993 in Queretaro,  
Mexico. Latitude 20 deg. 17' N. Longitude 99 deg. 54' W. Elevation 2174  
m. Highway from Mexico city to Queretaro city, just on the  
Queretaro-Mexico states border. Mesquite-grassland with Opuntia sp. and

Acacia sp. Corolla stellate, cream colored.

**PI 595478. *Solanum sambucinum* Rydb.**

Wild. ROD 2563; BE-4893; Q 32559. Collected 08/23/1993 in Queretaro, Mexico. Latitude 20 deg. 48' N. Longitude 100 deg. 26' W. Elevation 2050 m. Foot hills of "El Buey" mountains of Queretaro-San Luis Potosi and Mexico city-San Luis Potosi roads junction. Mesquite-grassland with Myrtilocactus sp., Opuntia sp., Acacia sp., and Karwinskia sp. Growing along cornfields. Corolla stellate, white.

**PI 595479. *Solanum cardiophyllum* ssp. *ehrenbergii* Bitter**

Wild. ROD 2566; BE-4893; Q 32562. Collected 08/24/1993 in San Luis Potosi, Mexico. Latitude 21 deg. 53' N. Longitude 101 deg. 24' W. Elevation 2240 m. Villa de Arriaga, road from San Luis Potosi to Ojuelos. Mesquite-grassland. Plants 15 cm tall. Corolla stellate, creamy white.

**PI 595480. *Solanum cardiophyllum* ssp. *ehrenbergii* Bitter**

Wild. ROD 2567; BE-4893; Q 32563. Collected 08/24/1993 in Zacatecas, Mexico. Latitude 21 deg. 52' N. Longitude 101 deg. 34' W. Elevation 2212 m. About 1 km N of Ojuelos. Mesquite-grassland. Growing along cornfield. Plants 30 cm tall. Corolla stellate, white, lobes lightly tinged with lavender.

**PI 595481. *Solanum polytrichon* Rydb.**

Wild. ROD 2569; BE-4893; Q 32564. Collected 08/24/1993 in Jalisco, Mexico. Latitude 21 deg. 37' N. Longitude 101 deg. 38' W. Elevation 2192 m. Matanzas, municipality of Ojuelos; near by the cementery. Mesquite-grassland. Under Opuntia sp.

**PI 595482. *Solanum cardiophyllum* ssp. *ehrenbergii* Bitter**

Wild. ROD 2570; BE-4893; Q 32565. Collected 08/24/1993 in Jalisco, Mexico. Latitude 21 deg. 37' N. Longitude 101 deg. 38' W. Elevation 2192 m. Matanzas, municipality of Ojuelos; near by the cementery. Mesquite-grassland. Growing along cornfield.

The following were donated by Aaron Rodriguez-Contreras, Universidad de Guadalajara, Instituto de Botanica, Las Agujas, Nextipac, Zapopan, Jalisco, Mexico. Received 09/14/1993.

**PI 595483. *Solanum pinnatisectum* Dunal**

Wild. ROD 2572; BE-4893; Q 32567. Collected 08/25/1993 in Jalisco, Mexico. Latitude 21 deg. 14' N. Longitude 101 deg. 47' W. Elevation 2000 m. Km 27 from Lagos de Moreno towards Leon, ca. of junction to Las Cruces, municipality of Lagos de Moreno. Cornfield, among mesquite-grassland. Under Acacia sp.

The following were collected by Aaron Rodriguez, University of Wisconsin, Department of Horticulture, 1575 Linden Drive, Madison, Wisconsin 53706-1590, United States. Donated by Aaron Rodriguez-Contreras, Universidad de Guadalajara, Instituto de Botanica, Las Agujas, Nextipac, Zapopan, Jalisco, Mexico. Received 09/14/1993.

**PI 595484. *Solanum pinnatisectum* Dunal**

Wild. ROD 2574; BE-4893; Q 32569. Collected 08/25/1993 in Jalisco, Mexico. Latitude 21 deg. 17' N. Longitude 101 deg. 51' W. Elevation 2050 m. La Aurora, road from Lagos de Moreno towards Aguascalientes, municipality of Lagos de Moreno. Cornfield, among mesquite-grassland. Plants 40 cm tall.

**PI 595485. *Solanum brachistotrichum* (Bitter) Rydb.**

Wild. ROD 2576; BE-4893; Q 32570. Collected 08/25/1993 in Jalisco, Mexico. Latitude 21 deg. 17' N. Longitude 101 deg. 51' W. Elevation 2050 m. La Aurora, road from Lagos de Moreno towards Aguascalientes, municipality of Logos de Moreno. Cornfield, among mesquite-grassland. Plants 50 cm tall. Corolla stellate, white with lobes purple.

**PI 595486. *Solanum cardiophyllum* ssp. *ehrenbergii* Bitter**

Wild. ROD 2579; BE-4893; Q 32571. Collected 08/26/1993 in Jalisco, Mexico. Latitude 21 deg. 0' N. Longitude 102 deg. 37' W. Elevation 1819 m. Municipality of Valle de Guadalupe, near town and along the road. Along rock fence. Plants 80 cm tall. Corolla stellate, white.

**PI 595487. *Solanum tuberosum* L.**

Wild. ROD 2583; BE-4893; Q 32574. Collected 08/30/1993 in Jalisco, Mexico. Elevation 1500 m. Experimental fields around the College of Agriculture, University of Guadalajara, municipality of Zapopan. Escpae from cultivation.

**PI 595488. *Solanum cardiophyllum* ssp. *ehrenbergii* Bitter**

Wild. ROD 2584; BE-4893; Q 32575. Collected 08/30/1993 in Jalisco, Mexico. Elevation 1500 m. Experimental fields around the College of Agriculture, University of Guadalajara, municipality of Zapopan. Growing under Agave sp. Plants 50 cm tall.

**PI 595489. *Solanum cardiophyllum* Lindley**

Wild. ROD 2585; BE-4893; Q 32576. Collected 08/30/1993 in Jalisco, Mexico. Elevation 1450 m. Bosque Escuela, La Primavera, ca. 3 km NW of Cuxpala, ca. 10 km SSE of Tala, municipality of Tala. By streamside with Phoebe psychotrioides, Lysiloma acapulcense and Salix humboldtiana. Pedigree - *Solanum cardiophyllum* X *Solanum bulbocastanum*. Plants 60 cm tall. Corolla stellate, creamy white.

The following were collected by David Spooner, University of Wisconsin, Department of Horticulture, 1575 Linden Drive, Madison, Wisconsin 53706, United States; Andres Contreras, Universidad Austral de Chile, Inst. Produccion y Sanidad Vegetal, Casilla 567, Valdivia, Chile. Donated by Andres Contreras, Universidad Austral de Chile, Inst. Produccion y Sanidad Vegetal, Casilla 567, Valdivia, Chile. Received 12/19/1991.

**PI 595490. *Solanum tuberosum* L.**

Wild. SC 4410; CON 883; Azultardia; BE-3768; Q 28783. Collected 02/25/1989 in Los Lagos, Chile. Latitude 41 deg. 52' S. Longitude 73 deg. 36' W. Elevation 5 m. Chiloe. Sector Recta chacao, in field of Rosalia Segovia, ca. 10 km WSW of chacao on road to Ancud. Flowers purple. Fruit green, round, smooth. Tubers named Azultardia.

**PI 595491. *Solanum tuberosum* L.**

Wild. SC 4421; CON 908; Colorada; BE-3768; Q 28795. Collected 02/26/1989 in Los Lagos, Chile. Latitude 43 deg. 6' S. Longitude 73 deg. 43' W. Elevation 2 m. Chiloe. In Yaldad, just W of Quellon in backyard garden of Clarisa Colivoro. Tubers named Colorada.

**PI 595492. *Solanum tuberosum* L.**

Wild. SC 4425; CON 912; Guadacho; BE-3768; Q 28797. Collected 02/26/1989 in Los Lagos, Chile. Latitude 43 deg. 6' S. Longitude 73 deg. 43' W. Elevation 2 m. Chiloe. In Yaldad, just W of Quellon, in backyard garden of Clarisa Colivoro. Tubers named Guadacho.

**PI 595493. *Solanum tuberosum* L.**

Wild. SC 4426; CON 913; Mantequilla Colorado; BE-3768; Q 28798. Collected 02/26/1989 in Los Lagos, Chile. Latitude 43 deg. 6' S. Longitude 73 deg. 43' W. Elevation 2 m. Chiloe. In Yaldad, just W of Quellon, in backyard garden of Clarisa Colivoro. Tubers named Mantequilla Colorado.

**PI 595494. *Solanum tuberosum* L.**

Wild. SC 4427; CON 814; Gualatito; BE-3768; Q 28799. Collected 02/26/1989 in Los Lagos, Chile. Latitude 43 deg. 6' S. Longitude 73 deg. 43' W. Elevation 2 m. Chiloe. In Yaldad, just W of Quellon, in backyard garden of Clarisa Colivoro. Tubers named Gualatito.

The following were collected by Raul Castillo, Instituto Nacional de Investigaciones Agropecuarias, Departamento de Recursos, Fitogeneticos, Estacion Experimental, Quito, Ecuador; David Spooner, University of Wisconsin, Department of Horticulture, 1575 Linden Drive, Madison, Wisconsin 53706, United States; Luis E. Lopez, Carrera 15 # 14-57, Edificio Lucerne Ap. 303, Armenia Diundio, Colombia. Donated by Raul Castillo, Instituto Nacional de Investigaciones Agropecuarias, Departamento de Recursos, Fitogeneticos, Estacion Experimental, Quito, Ecuador. Received 01/24/1992.

**PI 595495. *Solanum tuquerrense* Hawkes**

Wild. SCLp 5003; BE-3810; Q 28913. Collected 04/17/1991 in Imbabura, Ecuador. Latitude 0 deg. 20' N. Longitude 78 deg. 20' W. Elevation 3870 m. Otavalo. 7.4 km north of toll booth station at Parque Nacional Cotacachi-Cayapas, north of Lake Cuicocha, on west side of dirt road at base of cliff. In disturbed soil by primitive campsite, in organic soil. Corolla blue, rotate. No fruits present. Leaves shining. Tubers abundant.

The following were collected by Ronald Van den Berg, Wageningen Agricultural University, Department of Plant Taxonomy, P.O. Box 8010, 6700 ED, Wageningen, Netherlands; David Spooner, University of Wisconsin, Department of Horticulture, 1575 Linden Drive, Madison, Wisconsin 53706, United States; William Garcia Fernandez, PROINPA (Programa de Investigacion de la Papa), IBTA (Instituto de Boliviano Tecnologia Agropecuaria), Calle Man Cespced 923, Cochabamba, Bolivia; Maria Luisa Ugarte, PROINPA (Programa de Investigacion de la Papa), IBTA (Instituto de Boliviano Tecnologia Agropecuaria), Calle Man Cespced 923, Cochabamba, Bolivia. Donated by William Garcia Fernandez, PROINPA (Programa de Investigacion de la Papa), IBTA (Instituto de Boliviano



Tecnologia Agropecuaria), Calle Man Cesped 923, Cochabamba, Bolivia. Received 04/21/1993.

**PI 595496. *Solanum tuberosum* ssp. *andigena* Hawkes**

Wild. SFVU 6727; BE-4652; Q 30483. Collected 03/16/1993 in Cochabamba, Bolivia. Latitude 16 deg. 52' S. Longitude 67 deg. 8' W. Elevation 2450 m. Inquisivi: Sita, a small community S of Licoma, 1:250,000-scale map SE 19-4. growing in a corn field, common. Flowers gone, but said by owner of field to have blue corollas. Fruits abundant, round. Tubers deep in the ground on long stolons.

**PI 595497. *Solanum tuberosum* ssp. *andigena* Hawkes**

Wild. SFVU 6747; BE-4652; Q 30490. Collected 03/24/1993 in La Paz, Bolivia. Latitude 15 deg. 32' S. Longitude 69 deg. 1' W. Elevation 3585 m. Camacho: from ca 20 km N of Escoma, go east at Cruce de Kariguani, then east ca 7 km to Canchi Tamampayu, 1:250,000-scale map SD 19-14. growing in backyard garden. Stems wilted, flowers and fruits gone. Tubers at end of long stolons, deep in the ground, with skin and flesh white, speckled with pink.

**PI 595498. *Solanum tuberosum* ssp. *andigena* Hawkes**

Wild. SFVU 6749; BE-4652; Q 30492. Collected 03/25/1993 in La Paz, Bolivia. Latitude 15 deg. 27' S. Longitude 68 deg. 59' W. Elevation 3361 m. Camacho: growing by town square of Moko Moko, a small town between Italaque and Chuma, in backyard garden of Yasick Fernandez, 1:250,000-scale map SD 19-15. growing in backyard garden where it is said by the owner to be a persistent and common weed, flowering and fruiting in January and February. Stems wilted to the ground. Tubers at the end of long stolons, deep in the ground. Tubers with purple-brown skin and flesh.

**PI 595499. *Solanum tuberosum* ssp. *andigena* Hawkes**

Wild. SFVU 6750; BE-4652; Q 30493. Collected 03/26/1993 in La Paz, Bolivia. Latitude 15 deg. 10' S. Longitude 69 deg. 2' W. Elevation 3120 m. Saavedra: 3 km uphill towards Chari from Charazani, in Comunidad Lunlay, 1:250,000-scale map SD 19-14. growing in cornfield. Stems wilted to the ground. Tubers at the end of long stolons, deep in the ground.

**PI 595500. *Solanum tuberosum* ssp. *andigena* Hawkes**

Wild. SFVU 6751; BE-4652; Q 30494. Collected 03/26/1993 in La Paz, Bolivia. Latitude 15 deg. 10' S. Longitude 69 deg. 2' W. Elevation 3350 m. Saavedra: 6 km uphill from Charazani towards Chari, in a small community, 1:250,000-scale map SD 19-14. growing in backyard garden. Plants young, without flowers or fruits. Tubers at the end of long stolons, deep in the ground, skin and flesh white with pink flecks.

**PI 595501. *Solanum brevicaulle* Bitter**

Wild. SFVU 6765; BE-4652; Q 30495. Collected 04/01/1993 in La Paz, Bolivia. Latitude 15 deg. 55' S. Longitude 68 deg. 39' W. Elevation 4124 m. Omasuyos: 7 km N of Huarisata on road to Sorata, just above the small Indian village of Occo Hualata, 1:250,000-scale map SD 19-15. growing in organic and stony soil among rocks. Note: type locality of *S. achacasense* Card. (*S. achacachense* may be a good species, but we have trouble distinguishing these two now). Plants old and wilted. Flowers

and fruits gone. Small tubers collected.

**PI 595502. *Solanum candolleanum* Berthault**

Wild. SFVU 6768; BE-4652; Q 30496. Collected 04/02/1993 in La Paz, Bolivia. Latitude 15 deg. 44' S. Longitude 68 deg. 38' W. Elevation 3690 m. Larecacha: 17 km N of town square of Sorata on road to Tacacoma, 1:250,000-scale map SD 19-15. growing in organic soil by side of road in shade of trees. Plants young, without flowers or fruits. 2 young tubers collected.

**PI 595503. *Solanum candolleanum* Berthault**

Wild. SFVU 6769; BE-4652; Q 30497. Collected 04/02/1993 in La Paz, Bolivia. Latitude 15 deg. 44' S. Longitude 68 deg. 38' W. Elevation 3860 m. Larecacha: 17 km N of town square of Sorata on road to Tacacoma, 1:250,000-scale map SD 19-15. growing in pockets of organic soil in crevices of cliff face. Plants young, no flowers or fruits yet present. Young tubers collected.

The following were collected by A. Rivera Pena, Inst. Nacional de Inv. Agr. (INIA), Apartado Postal No. 487, Edo De Mexico, Toluca, Mexico; J.P. Hjerting, Kobenhavns Universitet, Botanisk Have, Oster Farimagsgade 2B, Copenhagen, Denmark; R. Ross, USDA, ARS, Inter-Regional Potato Intro. Station, Peninsula Experiment Station, Sturgeon Bay, Wisconsin 52435, United States; T. Richard Tarn, Agriculture Canada, Research Center & Agric-Food, 850 Lincoln Road, Fredericton, New Brunswick E3B 4Z7, Canada; J. Gomez. Donated by A. Rivera Pena, Inst. Nacional de Inv. Agr. (INIA), Apartado Postal No. 487, Edo De Mexico, Toluca, Mexico. Received 12/08/1983.

**PI 595504. *Solanum polytrichon* Rydb.**

Wild. TRHRG 116; C 12914; Q 24036. Collected 09/23/1983 in Zacatecas, Mexico. Elevation 2150 m. Along Zacatecas Highway #54, 27 km east of Valparaiso towards Fresnillo. Ungrazed hillside, well-drained soil at top of slope. Opuntia, Acacia and many composites.

The following were donated by Roel Hoekstra, Institute of Crop Sci. & Plant Breeding, Federal Research Center of Agriculture, Bundesallee 50, Braunschweig, Germany. Received 04/12/1995.

**PI 595505. *Solanum microdontum* Bitter**

Wild. EBS 2879; BGRC 18568; Q 35921. Collected in Bolivia.

**PI 595506. *Solanum microdontum* Bitter**

Wild. HOF 1976; BGRC 18570; Q 35922. Collected in Argentina.

**PI 595507. *Solanum berthaultii* Hawkes**

Wild. EBS 1271 X 1218; BGRC 18548; Q 35923. Collected in Bolivia.

The following were collected by J.P. Hjerting, Kobenhavns Universitet, Botanisk Have, Oster Farimagsgade 2B, Copenhagen, Denmark; E. Petersen, Kleif, Arskag-sstrono, Eyjafjarsysla, Iceland; K. Rahn, Landbrugets Kartoffelfond, Foraedlingsstationen, Vandel, Denmark. Donated by Roel Hoekstra, Institute of Crop Sci. & Plant Breeding, Federal Research Center of

Agriculture, Bundesallee 50, Braunschweig, Germany. Received 04/12/1995.

**PI 595508. *Solanum microdontum* Bitter**

Wild. HPR 293; BGRC 18302; Q 35924. Collected 02/20/1956 in Salta, Argentina. Elevation 1500 m. Capital. Capital Quebrada de San Lorenzo.

The following were donated by Roel Hoekstra, Institute of Crop Sci. & Plant Breeding, Federal Research Center of Agriculture, Bundesallee 50, Braunschweig, Germany. Received 04/12/1995.

**PI 595509. *Solanum microdontum* Bitter**

Wild. EBS 1091; BGRC 24981; Q 35925.

The following were collected by W. Hondelmann, Gene Bank, Institut Pflanzenbau FAL, Braunschweig, Germany; D. Astley, IBPGR, Rome, Italy; A. Moreira, Bolivia. Donated by Roel Hoekstra, Institute of Crop Sci. & Plant Breeding, Federal Research Center of Agriculture, Bundesallee 50, Braunschweig, Germany. Received 04/12/1995.

**PI 595510. *Solanum microdontum* Bitter**

Wild. HAM 175; BGRC 27352; Q 35926. Collected 03/27/1980 in Tarija, Bolivia. Latitude 21 deg. 24' S. Longitude 64 deg. 28' W. Elevation 2350 m. Cercado. 54 km from Tarija to Entre Rios.

**PI 595511. *Solanum microdontum* Bitter**

Wild. HAM 176; BGRC 27353; Q 35927. Collected 03/27/1980 in Tarija, Bolivia. Latitude 21 deg. 24' S. Longitude 64 deg. 26' W. Elevation 2200 m. Cercado. 56 km from Tarija to Entre Rios.

**PI 595512. *Solanum x sucrense* Hawkes**

Wild. HAM 197; BGRC 27370; Q 35928. Collected 04/01/1980 in Potosi, Bolivia. Latitude 19 deg. 33' S. Longitude 65 deg. 42' W. Elevation 3600 m. Frias. 5 km from Potosi on road to Betanzos.

The following were donated by Stepan Kiru, N.I. Vavilov Institute of Plant Industry, Department of Tuber Crops, 44 Herzen Street, St. Petersburg, Russian Federation. Received 07/27/1995.

**PI 595513. *Solanum brachycarpum* (Correll) Correll**

Wild. CPC 2292; VIR 2830; Q 35952. Collected in Mexico.

**PI 595514. *Solanum phureja* Juz. & Buk.**

Wild. VIR 17648; Q 35963; Q 35953.

The following were developed by Stepan Kiru, N.I. Vavilov Institute of Plant Industry, Department of Tuber Crops, 44 Herzen Street, St. Petersburg, Russian Federation. Received 07/27/1995.

**PI 595515. *Solanum tuberosum* L.**

Breeding. "VIR 1-59K"; Q 35955. Pedigree - {[Sapitta x (Komeras x Atzimba)]/Zipinska] / Wzena} / Granata> / Desiree.

- PI 595516. *Solanum tuberosum* L.**  
Breeding. "VIR N 294"; Q 35956. Pedigree - S. mga/Gatchinski/Umbra/Fausta.
- PI 595517. *Solanum tuberosum* L.**  
Breeding. "VIR N 159"; Q 35957. Pedigree - (S. ver/Omega)/Adretta.
- PI 595518. *Solanum tuberosum* L.**  
Breeding. "VIR N 114"; Q 35958. Pedigree - S. mcd/Atzimba/Earlaine.
- PI 595519. *Solanum tuberosum* L.**  
Breeding. "VIR N 12"; Q 35959. Pedigree - S. plt/Anoka/Runo.
- PI 595520. *Solanum tuberosum* L.**  
Breeding. "VIR N 274"; Q 35960. Pedigree - S. mcd/(MCF 50140/5)/Boon/Desire.
- PI 595521. *Solanum tuberosum* L.**  
Breeding. "VIR N 73"; Q 35961. Pedigree - S. ber/S. adg.
- PI 595522. *Solanum tuberosum* L.**  
Breeding. "VIR N 102"; Q 35962. Pedigree - S. vrn/(MPJ 50140/5).
- PI 595523. *Solanum tuberosum* L.**  
Breeding. "VIR N 336"; Q 35963. Pedigree - S. grl/Hanibal/Hanibal.
- PI 595524. *Solanum tuberosum* L.**  
Breeding. "VIR N 416"; Q 35964. Pedigree - S. ber/Taiga.

The following were collected by J.P. Hjerting, Kobenhavns Universitet, Botanisk Have, Oster Farimagsgade 2B, Copenhagen, Denmark. Donated by Max W. Martin, University of Wisconsin, Potato Introduction Station, 4312 Hwy 42, Sturgeon Bay, Wisconsin 54235, United States. Received 01/03/1992.

- PI 595525. *Solanum oxycarpum* Schiede**  
Wild. HJT 7344; BE-3783; Q 28836. Collected 10/10/1991 in Puebla, Mexico . Elevation 2500 m. 21 km along road from Coxcatlan towards Zoqutlan turning off from the Tehuacan to Oaxaca road.
- PI 595526. *Solanum verrucosum* Schldl.**  
Wild. HJT 7396; BE-3783; Q 28846. Collected 10/22/1991 in Nuevo Leon, Mexico. Elevation 3280 m. Cerro Potosi, road up to microhonda station, about 20 km along road. Pine woods.

The following were developed by S.K. Vasal, International Maize & Wheat Improvement Center, Lisboa-27, Apdo. Post 6-641, Mexico, Federal District 06600, Mexico; Ganesan Srinivasan, International Maize & Wheat Improvement Center, Lisboa 27, Apdo. Postal 6-641, Mexico City, Mexico 06600, Mexico; N. Vergara, International Maize & Wheat Improvement Center, Lisboa 27, Apdo. Postal 6-641, Mexico, Mexico 06600, Mexico; B.S. Dhillon, Department of Plant Breeding, Punjab Agricultural University, Ludhiana, Punjab, India; S.H. Zhang, International Maize & Wheat Improvement Center, Apdo. Postal 6-641,

Lisboa 27, Mexico City, Federal District 06600, Mexico; S.D. McLean, International Maize & Wheat Improvement Center, Apdo. Postal 6-641, Lisboa 27, Mexico City, Federal District 06600, Mexico. Received 07/22/1996.

**PI 595527. *Zea mays* L. *ssp. mays***

Breeding. Inbred. CML 3; CL-02103. PL-194. Pedigree - Pop.21C5  
FS84-2-1-B-3-B. Lowland tropical white maize inbred line with good general combining ability. Grain yield 1 and standability 1.5 (1 = good, 5 = poor). Days to 50% silk 63. Grain texture dent. Plant height 143 cm. Ear rot 1.9, Puccinia polysora 1.3, and Bipolaris maydis 1.6 (1 = resistant, 5 = susceptible).

**PI 595528. *Zea mays* L. *ssp. mays***

Breeding. Inbred. CML 6; CL-02106. PL-195. Pedigree - Pop.21C5  
FS218-2-3-B-##-6-1-1-BB. Lowland tropical white maize inbred line with good general combining ability. Grain yield 2 and standability 2.0 (1 = good, 5 = poor). Days to 50% silk 65. Grain texture dent. Plant height 183 cm. Ear rot 1.9, Puccinia polysora 2.4, and Bipolaris maydis 2.1 (1 = resistant, 5 = susceptible).

**PI 595529. *Zea mays* L. *ssp. mays***

Breeding. Inbred. CML 8; CL-02108. PL-196. Pedigree - Pop.21C5  
FS218-2-3-B-####. Lowland tropical white maize inbred line with good general combining ability. Grain yield 2 and standability 1.0 (1 = good, 5 = poor). Days to 50% silk 67. Grain texture dent. Plant height 171 cm. Ear rot 1.8, Puccinia polysora 2.1, and Bipolaris maydis 1.9 (1 = resistant, 5 = susceptible).

**PI 595530. *Zea mays* L. *ssp. mays***

Breeding. Inbred. CML 9; CL-02109. PL-197. Pedigree - Pop.21C5  
FS219-3-1-B-####. Lowland tropical white maize inbred line with good general combining ability. Grain yield 2 and standability 1.0 (1 = good, 5 = poor). Days to 50% silk 68. Grain texture semi-dent. Plant height 147 cm. Ear rot 1.9, Puccinia polysora 1.5, and Bipolaris maydis 2.2 (1 = resistant, 5 = susceptible).

**PI 595531. *Zea mays* L. *ssp. mays***

Breeding. Inbred. CML 17; CL-02203. PL-198. Pedigree - Pop.22 TSR (S2 bulk)-40-2-1-2-B. Lowland tropical white maize inbred line with good general combining ability. Grain yield 3 and standability 1.5 (1 = good, 5 = poor). Days to 50% silk 69. Grain texture flint. Plant height 163 cm. Ear rot 2.8, Puccinia polysora 2.8, and Bipolaris maydis 1.9 (1 = resistant, 5 = susceptible).

**PI 595532. *Zea mays* L. *ssp. mays***

Breeding. Inbred. CML 22; CL-02501. PL-199. Pedigree - Pop.25  
FS31-1-2-1-3-1-B-##. Lowland tropical white maize inbred line with good general combining ability. Grain yield 2 and standability 1.5 (1 = good, 5 = poor). Days to 50% silk 61. Grain texture flint. Plant height 162 cm. Ear rot 1.7, Puccinia polysora 2.0, and Bipolaris maydis 2.4 (1 = resistant, 5 = susceptible).

**PI 595533. *Zea mays* L. *ssp. mays***

Breeding. Inbred. CML 36; CL-03201. PL-200. Pedigree - Pop.32C4  
FS20-3-4-B-#-B-####. Lowland tropical white maize inbred line with good

general combining ability. Grain yield 3 and standability 2.0 (1 = good, 5 = poor). Days to 50% silk 65. Grain texture flint. Plant height 174 cm. Ear rot 1.9, Puccinia polysora 2.3, and Bipolaris maydis 2.7 (1 = resistant, 5 = susceptible).

**PI 595534. *Zea mays* L. *ssp. mays***

Breeding. Inbred. CML 38; CL-03203. PL-201. Pedigree - Pop.32C4 FS142-1-1-B-###. Lowland tropical white maize inbred line with good general combining ability. Grain yield 2 and standability 2.5 (1 = good, 5 = poor). Days to 50% silk 60. Grain texture flint. Plant height 162 cm. Ear rot 2.7, Puccinia polysora 2.0, and Bipolaris maydis 2.8 (1 = resistant, 5 = susceptible).

**PI 595535. *Zea mays* L. *ssp. mays***

Breeding. Inbred. CML 43; CL-04302. PL-202. Pedigree - Ac.7843-16-1-2-B-1-B. Lowland tropical white maize inbred line with good general combining ability. Grain yield 2 and standability 2.0 (1 = good, 5 = poor). Days to 50% silk 63. Grain texture dent. Plant height 150 cm. Ear rot 2.5, Puccinia polysora 2.0, and Bipolaris maydis 2.0 (1 = resistant, 5 = susceptible).

**PI 595536. *Zea mays* L. *ssp. mays***

Breeding. Inbred. CML 46; CL-04305. PL-203. Pedigree - Ac.7843-32-2-B-###. Lowland tropical white maize inbred line with good general combining ability. Grain yield 3 and standability 1.5 (1 = good, 5 = poor). Days to 50% silk 63. Grain texture dent. Plant height 162 cm. Ear rot 1.5, Puccinia polysora 3.3, and Bipolaris maydis 3.3 (1 = resistant, 5 = susceptible).

**PI 595537. *Zea mays* L. *ssp. mays***

Breeding. Inbred. CML 48; CL-07301. PL-204. Pedigree - Porillo 8073-11-1-1-###. Lowland tropical white maize inbred line with good general combining ability. Grain yield 3 and standability 1.5 (1 = good, 5 = poor). Days to 50% silk 64. Grain texture dent. Plant height 171 cm. Ear rot 1.6, Puccinia polysora 3.0, and Bipolaris maydis 2.5 (1 = resistant, 5 = susceptible).

**PI 595538. *Zea mays* L. *ssp. mays***

Breeding. Inbred. CML 49; CL-07302. PL-205. Pedigree - Sta. Rosa 8073-6-1-1-###. Lowland tropical white maize inbred line with good general combining ability. Grain yield 3 and standability 1.5 (1 = good, 5 = poor). Days to 50% silk 62. Grain texture dent. Plant height 170 cm. Ear rot 1.4, Puccinia polysora 2.0, and Bipolaris maydis 2.2 (1 = resistant, 5 = susceptible).

**PI 595539. *Zea mays* L. *ssp. mays***

Breeding. Inbred. CML 54; CL-P2401. PL-206. Pedigree - Pool 24C20 HS94-1-4-B-1-3-1-1-B. Lowland tropical white maize inbred line with good general combining ability. Grain yield 3 and standability 3.0 (1 = good, 5 = poor). Days to 50% silk 64. Grain texture semi-dent. Plant height 162 cm. Ear rot 2.5, Puccinia polysora 2.3, and Bipolaris maydis 2.4 (1 = resistant, 5 = susceptible).

**PI 595540. *Zea mays* L. *ssp. mays***

Breeding. Inbred. CML 55; CL-P2402. PL-207. Pedigree - Pool 24 TSR

19-3-B-####. Lowland tropical white maize inbred line with good general combining ability. Grain yield 1 and standability 1.0 (1 = good, 5 = poor). Days to 50% silk 64. Grain texture semi-flint. Plant height 162 cm. Ear rot 2.2, Puccinia polysora 1.8, and Bipolaris maydis 1.9 (1 = resistant, 5 = susceptible).

**PI 595541. *Zea mays* L. ssp. *mays***

Breeding. Inbred. CML 247; CL-P2404. PL-208. Pedigree - (Pool 24 FS119\*FS54)-6-4-1-1-BB-f. Lowland tropical white maize inbred line with good general combining ability. Grain yield 1 and standability 2.5 (1 = good, 5 = poor). Days to 50% silk 65. Grain texture semi-dent. Plant height 168 cm. Ear rot 1.7, Puccinia polysora 1.8, and Bipolaris maydis 1.4 (1 = resistant, 5 = susceptible).

**PI 595542. *Zea mays* L. ssp. *mays***

Breeding. Inbred. CML 254; CL-02119. PL-209. Pedigree - Tux.Seq.C6-149-2-BBB-##-1-BB-f. Lowland tropical white maize inbred line with good general combining ability. Grain yield 1 and standability 2.5 (1 = good, 5 = poor). Days to 50% silk 62. Grain texture semi-dent. Plant height 193 cm. Ear rot 1.5, Puccinia polysora 2.7, and Bipolaris maydis 1.5 (1 = resistant, 5 = susceptible).

**PI 595543. *Zea mays* L. ssp. *mays***

Breeding. Inbred. CML 263; CL-02128. PL-210. Pedigree - (Pop.21 FS241\*FS219)-2-1-2-1-BB-f. Lowland tropical white maize inbred line with good general combining ability. Grain yield 3 and standability 2.0 (1 = good, 5 = poor). Days to 50% silk 66. Grain texture semi-dent. Plant height 162 cm. Ear rot 1.8, Puccinia polysora 3.2, and Bipolaris maydis 2.1 (1 = resistant, 5 = susceptible).

**PI 595544. *Zea mays* L. ssp. *mays***

Breeding. Inbred. CML 264; CL-02129. PL-211. Pedigree - Pop.21C5 FS219-3-1-B-##-8-1-3-BB. Lowland tropical white maize inbred line with good general combining ability. Grain yield 3 and standability 2.5 (1 = good, 5 = poor). Days to 50% silk 67. Grain texture flint. Plant height 162 cm. Ear rot 2.2, Puccinia polysora 3.0, and Bipolaris maydis 2.0 (1 = resistant, 5 = susceptible).

**PI 595545. *Zea mays* L. ssp. *mays***

Breeding. Inbred. CML 267; CL-02205. PL-212. Pedigree - Pop.22 TSR-4-3-1-3-1-BB-f. Lowland tropical white maize inbred line with good general combining ability. Grain yield 3 and standability 4.0 (1 = good, 5 = poor). Days to 50% silk 64. Grain texture dent. Plant height 195 cm. Ear rot 1.8, Puccinia polysora 3.8, and Bipolaris maydis 2.0 (1 = resistant, 5 = susceptible).

**PI 595546. *Zea mays* L. ssp. *mays***

Breeding. Inbred. CML 268; CL-02301. PL-213. Pedigree - Pop.231STC1 FS45-1-1-1-2-3-BB-f. Lowland tropical white maize inbred line with good general combining ability. Grain yield 3 and standability 3.0 (1 = good, 5 = poor). Days to 50% silk 67. Grain texture flint. Plant height 205 cm. Ear rot 2.7, Puccinia polysora 2.8, and Bipolaris maydis 1.6 (1 = resistant, 5 = susceptible).

**PI 595547. *Zea mays* L. ssp. *mays***

Breeding. Inbred. CML 271; CL-02904. PL-214. Pedigree - Pop.291STC1 FS25-6-4-1-#-BBB-f. Lowland tropical white maize inbred line with good general combining ability. Grain yield 3 and standability 3.5 (1 = good, 5 = poor). Days to 50% silk 63. Grain texture dent. Plant height 198 cm. Ear rot 1.5, Puccinia polysora 3.8, and Bipolaris maydis 1.8 (1 = resistant, 5 = susceptible).

**PI 595548. *Zea mays* L. *ssp. mays***

Breeding. Inbred. CML 273; CL-04307. PL-215. Pedigree - (Ac.7643\*Pop.43 FS7)-2-3-2-1-BB-f. Lowland tropical white maize inbred line with good general combining ability. Grain yield 1 and standability 2.0 (1 = good, 5 = poor). Days to 50% silk 63. Grain texture dent. Plant height 195 cm. Ear rot 1.5, Puccinia polysora 2.2, and Bipolaris maydis 1.8 (1 = resistant, 5 = susceptible).

**PI 595549. *Zea mays* L. *ssp. mays***

Breeding. Inbred. CML 274; CL-04308. PL-216. Pedigree - (Ac.7643\*Pop.43 FS7)-2-3-4-3-BB-f. Lowland tropical white maize inbred line with good general combining ability. Grain yield 1 and standability 2.0 (1 = good, 5 = poor). Days to 50% silk 65. Grain texture dent. Plant height 190 cm. Ear rot 2.0, Puccinia polysora 2.2, and Bipolaris maydis 1.4 (1 = resistant, 5 = susceptible).

**PI 595550. *Zea mays* L. *ssp. mays***

Breeding. Inbred. CML 277; CL-04311. PL-217. Pedigree - Ferke 8243-51-1-1-B-##-1-BB-#. Lowland tropical white maize inbred line with good general combining ability. Grain yield 2 and standability 2.5 (1 = good, 5 = poor). Days to 50% silk 62. Grain texture semi-flint. Plant height 183 cm. Ear rot 1.7, Puccinia polysora 2.3, and Bipolaris maydis 2.0 (1 = resistant, 5 = susceptible).

The following were developed by S.K. Vasal, International Maize & Wheat Improvement Center, Lisboa-27, Apdo. Post 6-641, Mexico, Federal District 06600, Mexico; Ganesan Srinivasan, International Maize & Wheat Improvement Center, Lisboa 27, Apdo. Postal 6-641, Mexico City, Mexico 06600, Mexico; N. Vergara, International Maize & Wheat Improvement Center, Lisboa 27, Apdo. Postal 6-641, Mexico, Mexico 06600, Mexico; B.S. Dhillon, Department of Plant Breeding, Punjab Agricultural University, Ludhiana, Punjab, India; S.H. Zhang, International Maize & Wheat Improvement Center, Apdo. Postal 6-641, Lisboa 27, Mexico City, Federal District 06600, Mexico; S.D. McLean, International Maize & Wheat Improvement Center, Apdo. Postal 6-641, Lisboa 27, Mexico City, Federal District 06600, Mexico; F. San Vicente, International Maize & Wheat Improvement Center, Apdo. Postal 6-641, Lisboa 27, Mexico City, Federal District 06600, Mexico; Sai K. Ramanujam, International Maize & Wheat Improvement Center, Apdo. Postal 6-641, Lisboa 27, Mexico City, Federal District 06600, Mexico. Received 07/22/1996.

**PI 595551. *Zea mays* L. *ssp. mays***

Breeding. Inbred. CML 19; CL-02402. PL-218. Pedigree - Pop.24 C5FS26-1-3-4-2-B-3-1-##. Lowland tropical yellow maize inbred line with good general combining ability. Grain yield 2 and standability 2.0 (1 = good, 5 = poor). Days to 50% silk 68. Grain texture semi-dent. Plant height 174 cm. Ear rot 2.4, Puccinia polysora 1.5, and Bipolaris maydis 3.0 (1 = resistant, 5 = susceptible).



**PI 595552. *Zea mays* L. *ssp. mays***

Breeding. Inbred. CML 20; CL-02403. PL-219. Pedigree - Pop.24  
C5FS34-2-3-B-####. Lowland tropical yellow maize inbred line with good general combining ability. Grain yield 2 and standability 2.0 (1 = good, 5 = poor). Days to 50% silk 66. Grain texture dent. Plant height 153 cm. Ear rot 2.2, Puccinia polysora 1.7, and Bipolaris maydis 2.1 (1 = resistant, 5 = susceptible).

**PI 595553. *Zea mays* L. *ssp. mays***

Breeding. Inbred. CML 25; CL-02601. PL-220. Pedigree - Pop.26  
C5FS37-1-4-B-f-B. Lowland tropical yellow maize inbred line with good general combining ability. Grain yield 2 and standability 2.0 (1 = good, 5 = poor). Days to 50% silk 62. Grain texture flint. Plant height 152 cm. Ear rot 2.1, Puccinia polysora 2.1, and Bipolaris maydis 2.1 (1 = resistant, 5 = susceptible).

**PI 595554. *Zea mays* L. *ssp. mays***

Breeding. Inbred. CML 27; CL-02701. PL-221. Pedigree - Pop.27  
C5FS1-1-3-B-####. Lowland tropical yellow maize inbred line with good general combining ability. Grain yield 2 and standability 1.5 (1 = good, 5 = poor). Days to 50% silk 64. Grain texture semi-dent. Plant height 165 cm. Ear rot 2.2, Puccinia polysora 1.6, and Bipolaris maydis 2.5 (1 = resistant, 5 = susceptible).

**PI 595555. *Zea mays* L. *ssp. mays***

Breeding. Inbred. CML 28; CL-02702. PL-222. Pedigree - Pop.27  
C5FS35-8-3-B-####-B. Lowland tropical yellow maize inbred line with good general combining ability. Grain yield 2 and standability 1.5 (1 = good, 5 = poor). Days to 50% silk 64. Grain texture flint. Plant height 160 cm. Ear rot 2.5, Puccinia polysora 3.0, and Bipolaris maydis 2.5 (1 = resistant, 5 = susceptible).

**PI 595556. *Zea mays* L. *ssp. mays***

Breeding. Inbred. CML 29; CL-02703. PL-223. Pedigree - Pop.27  
C5FS71-3-1-B-f-B. Lowland tropical yellow maize inbred line with good general combining ability. Grain yield 2 and standability 2.0 (1 = good, 5 = poor). Days to 50% silk 65. Grain texture flint. Plant height 154 cm. Ear rot 2.0, Puccinia polysora 1.7, and Bipolaris maydis 1.8 (1 = resistant, 5 = susceptible).

**PI 595557. *Zea mays* L. *ssp. mays***

Breeding. Inbred. CML 31; CL-02705. PL-224. Pedigree - Pop.27  
C5FS117-1-4-B-####. Lowland tropical yellow maize inbred line with good general combining ability. Grain yield 2 and standability 2.0 (1 = good, 5 = poor). Days to 50% silk 65. Grain texture flint. Plant height 175 cm. Ear rot 3.3, Puccinia polysora 1.7, and Bipolaris maydis 2.3 (1 = resistant, 5 = susceptible).

**PI 595558. *Zea mays* L. *ssp. mays***

Breeding. Inbred. CML 32; CL-02801. PL-225. Pedigree - Pop.28 TSR (S2 bulk)-11-2-4-B-1-##. Lowland tropical yellow maize inbred line with good general combining ability. Grain yield 1 and standability 1.0 (1 = good, 5 = poor). Days to 50% silk 62. Grain texture semi-dent. Plant height 143 cm. Ear rot 2.6, Puccinia polysora 2.3, and Bipolaris maydis 2.6 (1

= resistant, 5 = susceptible).

**PI 595559. *Zea mays* L. *ssp. mays***

Breeding. Inbred. CML 33; CL-2802. PL-226. Pedigree - Pop.28 TSR (S2 bulk)-21-3-1-3-1-####. Lowland tropical yellow maize inbred line with good general combining ability. Grain yield 1 and standability 1.0 (1 = good, 5 = poor). Days to 50% silk 61. Grain texture flint. Plant height 153 cm. Ear rot 2.1, Puccinia polysora 1.5, and Bipolaris maydis 2.0 (1 = resistant, 5 = susceptible).

**PI 595560. *Zea mays* L. *ssp. mays***

Breeding. Inbred. CML 40; CL-03601. PL-227. Pedigree - Pop.36 C5FS144-2-2-B-####. Lowland tropical yellow maize inbred line with good general combining ability. Grain yield 1 and standability 2.5 (1 = good, 5 = poor). Days to 50% silk 65. Grain texture semi-dent. Plant height 188 cm. Ear rot 1.7, Puccinia polysora 2.4, and Bipolaris maydis 2.7 (1 = resistant, 5 = susceptible).

**PI 595561. *Zea mays* L. *ssp. mays***

Breeding. Inbred. CML 52; CL-07902. PL-228. Pedigree - Sta.Rosa 8079-22-2-2-##. Lowland tropical yellow maize inbred line with good general combining ability. Grain yield 3 and standability 1.5 (1 = good, 5 = poor). Days to 50% silk 68. Grain texture flint. Plant height 158 cm. Ear rot 1.5, Puccinia polysora 2.5, and Bipolaris maydis 2.5 (1 = resistant, 5 = susceptible).

**PI 595562. *Zea mays* L. *ssp. mays***

Breeding. Inbred. CML 282; CL-P2201. PL-229. Pedigree - (Pool 22 x Pool 22)-2-2-3-1-BB-####. Lowland tropical yellow maize inbred line with good general combining ability. Grain yield 2 and standability 3.0 (1 = good, 5 = poor). Days to 50% silk 59. Grain texture semi-dent. Plant height 177 cm. Ear rot 1.5, Puccinia polysora 4.8, and Bipolaris maydis 2.0 (1 = resistant, 5 = susceptible).

**PI 595563. *Zea mays* L. *ssp. mays***

Breeding. Inbred. CML 283; CL-P2202. PL-230. Pedigree - (Pool 22 x Pop.26)-2-2-2-1-BB-####. Lowland tropical yellow maize inbred line with good general combining ability. Grain yield 3 and standability 3.0 (1 = good, 5 = poor). Days to 50% silk 63. Grain texture dent. Plant height 160 cm. Ear rot 1.7, Puccinia polysora 3.5, and Bipolaris maydis 2.0 (1 = resistant, 5 = susceptible).

**PI 595564. *Zea mays* L. *ssp. mays***

Breeding. Inbred. CML 285; CL-02405. PL-231. Pedigree - Pop.24C5FS34-2-3-B-f-2#-BBB-##. Lowland tropical yellow maize inbred line with good general combining ability. Grain yield 1 and standability 3.0 (1 = good, 5 = poor). Days to 50% silk 61. Grain texture dent. Plant height 175 cm. Ear rot 1.5, Puccinia polysora 3.5, and Bipolaris maydis 2.0 (1 = resistant, 5 = susceptible).

**PI 595565. *Zea mays* L. *ssp. mays***

Breeding. Inbred. CML 287; CL-02407. PL-232. Pedigree - (Pop.24 x Pop.27)-4-1-B-1-1-BB-####. Lowland tropical yellow maize inbred line with good general combining ability. Grain yield 2 and standability 2.5 (1 = good, 5 = poor). Days to 50% silk 61. Grain texture flint. Plant height

200 cm. Ear rot 1.5, Puccinia polysora 4.7, and Bipolaris maydis 2.0 (1 = resistant, 5 = susceptible).

**PI 595566. *Zea mays* L. ssp. *mays***

Breeding. Inbred. CML 297; CL-00308. PL-233. Pedigree - Syn.Amarillo TSR-23-3-1-1-1-BB-##. Lowland tropical yellow maize inbred line with good general combining ability. Grain yield 2 and standability 3.0 (1 = good, 5 = poor). Days to 50% silk 67. Grain texture semi-dent. Plant height 177 cm. Ear rot 1.5, Puccinia polysora 1.7, and Bipolaris maydis 2.0 (1 = resistant, 5 = susceptible).

**PI 595567. *Zea mays* L. ssp. *mays***

Breeding. Inbred. CML 298; CL-00310. PL-234. Pedigree - Syn.Amarillo TSR-7-4-2-2-1-BB-##. Lowland tropical yellow maize inbred line with good general combining ability. Grain yield 2 and standability 3.0 (1 = good, 5 = poor). Days to 50% silk 62. Grain texture semi-flint. Plant height 155 cm. Ear rot 1.7, Puccinia polysora 2.3, and Bipolaris maydis 1.5 (1 = resistant, 5 = susceptible).

**PI 595568. *Zea mays* L. ssp. *mays***

Breeding. Inbred. CML 299; CL-00312. PL-235. Pedigree - Syn.Amarillo TSR-76-1-2-2-2-BB-##. Lowland tropical yellow maize inbred line with good general combining ability. Grain yield 2 and standability 3.0 (1 = good, 5 = poor). Days to 50% silk 60. Grain texture flint. Plant height 202 cm. Ear rot 1.5, Puccinia polysora 3.7, and Bipolaris maydis 1.7 (1 = resistant, 5 = susceptible).

**PI 595569. *Zea mays* L. ssp. *mays***

Breeding. Inbred. CML 300; CL-00314. PL-236. Pedigree - Syn.Amarillo TSR-76-1-2-3-1-BB-####. Lowland tropical yellow maize inbred line with good general combining ability. Grain yield 2 and standability 2.5 (1 = good, 5 = poor). Days to 50% silk 58. Grain texture flint. Plant height 182 cm. Ear rot 1.0, Puccinia polysora 3.5, and Bipolaris maydis 2.0 (1 = resistant, 5 = susceptible).

**PI 595570. *Zea mays* L. ssp. *mays***

Breeding. Inbred. CML 303; CL-00320. PL-237. Pedigree - Syn.Amarillo TSR-23-3-2-4-3-BB-####. Lowland tropical yellow maize inbred line with good general combining ability. Grain yield 2 and standability 3.0 (1 = good, 5 = poor). Days to 50% silk 64. Grain texture flint. Plant height 173 cm. Ear rot 2.3, Puccinia polysora 2.2, and Bipolaris maydis 2.0 (1 = resistant, 5 = susceptible).

**PI 595571. *Zea mays* L. ssp. *mays***

Breeding. Inbred. CML 305; CL-00302. PL-238. Pedigree - Syn.Amarillo TSR-23-2-2-1-3-BB-####. Lowland tropical yellow maize inbred line with good general combining ability. Grain yield 3 and standability 2.0 (1 = good, 5 = poor). Days to 50% silk 63. Grain texture dent. Plant height 182 cm. Ear rot 1.5, Puccinia polysora 2.8, and Bipolaris maydis 2.0 (1 = resistant, 5 = susceptible).

The following were developed by Asgrow Seed Company, United States. Received 1974.

**PI 595572. *Pisum sativum* L.**  
Cultivar. "JUNEAU". PVP 7400054.

The following were developed by Morrison Brothers Seed Co., United States.  
Received 1975.

**PI 595573. *Pisum sativum* L.**  
Cultivar. "LEO". PVP 7400053.

The following were developed by Crites Moscow Growers, Inc., Moscow, Idaho,  
United States. Received 1978.

**PI 595574. *Pisum sativum* L.**  
Cultivar. "REBEL". PVP 7700047.

The following were developed by A.G. Gustafson, United States. Received 1978.

**PI 595575. *Pisum sativum* L.**  
Cultivar. "GYPSY". PVP 7700011.

The following were developed by W. Atlee Burpee Company, United States.  
Received 1978.

**PI 595576. *Lactuca sativa* L.**  
Cultivar. "ROYAL OAK LEAF". PVP 7800009. Passport data not available for  
"Royal Oak Leaf".

The following were developed by Cornell University, New York Agr. Exp. Sta.,  
Ithaca, New York, United States. Received 1978.

**PI 595577. *Medicago sativa* L. ssp. *sativa***  
Cultivar. "MULTILEAF". PVP 7300100.

The following were developed by Victor Heintzberger, Bruce Church Company,  
1020 Merrill Street, Salinas, California 93912, United States. Received 1978.

**PI 595578. *Lactuca sativa* L.**  
Cultivar. "WINTER SUPREME". PVP 7800014. Passport data not available for  
"Winter Supreme".

The following were developed by A.G. Gustafson, United States. Received 1978.

**PI 595579. *Pisum sativum* L.**  
Cultivar. "GRANADA". PVP 7800017.

The following were developed by Cannery Seed Corporation, Lewisville, Idaho,  
United States. Received 1978.

**PI 595580. *Pisum sativum* L.**

Cultivar. "NO. 6060 FREEZER". PVP 7600016.

The following were developed by W. Brotherton Seed Company, Inc., United States. Received 1978.

**PI 595581. *Pisum sativum* L.**

Cultivar. "AVON". PVP 7800036.

**PI 595582. *Pisum sativum* L.**

Cultivar. "QUINCY". PVP 7800037.

The following were developed by Quali-Sel, Inc., United States. Received 1978.

**PI 595583. *Lactuca sativa* L.**

Cultivar. "GILA". PVP 7600014.

**PI 595584. *Lactuca sativa* L.**

Cultivar. "BLANCO". PVP 7800062.

The following were developed by Asgrow Seed Company, United States. Received 1978.

**PI 595585. *Pisum sativum* L.**

Cultivar. "ANDES". PVP 7800044.

The following were developed by W. Brotherton Seed Company, Inc., United States. Received 1978.

**PI 595586. *Pisum sativum* L.**

Cultivar. "GRANT". PVP 7800039.

**PI 595587. *Pisum sativum* L.**

Cultivar. "SUSSEX". PVP 7800038.

The following were developed by Zwaan and de Wiljes Ltd., Netherlands. Received 1978.

**PI 595588. *Poa compressa* L.**

Cultivar. "HARMONY". PVP 7700107.

The following were developed by James B. Moutray, ABI Alfalfa, 2316 259th Street, Ames, Iowa 50011, United States; J.R. Thomas. Donated by Rudy-Patrick Seed Company, Ames, Iowa, United States. Received 1972.

**PI 595589. *Medicago sativa* L. ssp. *sativa***

Cultivar. "ANCHOR"; REG NO 59. CV-59; PVP 7200039. Pedigree - 9-clone

synthetic derived from Apex (1), Alfa (1), Saranac (1), DuPuits (3), and Alfa with 2 cycles of recurrent selection for bacterial wilt resistance (3). Flemish-type cultivar. Similar to Vernal in winterhardiness. Flowers mostly light to dark purple with very few variegated. Adapted to Central and Northern Corn Belt, Northeastern U.S., and eastern Canada. Higher yielding than Vernal and rapid recovery after cutting. Resistant to bacterial wilt and downy mildew. Moderately resistant to pea aphid. More tolerant to potato leafhopper yellowing than DuPuits or Apex.

The following were developed by Ferry-Morse Seed Company, United States. Received 1979.

**PI 595590. *Lactuca sativa* L.**  
Cultivar. "CALSWEET". PVP 7800089.

The following were developed by Asgrow Seed Company, United States. Received 1979.

**PI 595591. *Pisum sativum* L.**  
Cultivar. "DANTE". PVP 7800094.

The following were developed by M.S. Offutt, University of Arkansas, Fayetteville, Arkansas 72701, United States. Donated by Arkansas Agr. Exp. Sta., Arkansas, United States. Received 1971.

**PI 595592. *Medicago sativa* L. ssp. *sativa***  
Cultivar. "VICTORIA". CV-53; PVP 7200070. Pedigree - 9-clone synthetic derived from Can. Ma 5110 (2), Can. Sc 3513 (2), Can. Sc Ma 531 (1), Neb. A 224 Syn. 3 (1), Rhizoma (2), and an unknown origin (1). Similar in forage yields to Buffalo, Cody, and Vernal. Similar to Vernal in winter dormancy. Variable flower color. Low crowns with much-branched taproot and tendency to spread by means of rhizomes. Semi-decumbent growth habit. Adapted to the Central U.S. from eastern Kansas to western Tennessee. Moderately resistant to common leafspot, downy mildew, Phytophthora root rot, bacterial wilt, potato leafhoppers, and thrips. Resistant to spotted alfalfa aphid.

The following were developed by Zwaan and de Wiljes Ltd., Netherlands. Received 1979.

**PI 595593. *Poa pratensis* L.**  
Cultivar. "WELCOME". PVP 7700063.

The following were developed by Zelder B.V., Netherlands. Received 1979.

**PI 595594. *Festuca rubra* ssp. *fallax* (Thuill.) Nyman**  
Cultivar. "AGRAM". PVP 7700032.

The following were developed by Joseph Harris Company, Inc., Moreton Farm,

Rochester, New York 14624, United States. Received 1979.

**PI 595595. *Lactuca sativa* L.**  
Cultivar. "DEEP RED". PVP 7800086.

The following were developed by Quali-Sel, Inc., United States. Received 1979.

**PI 595596. *Lactuca sativa* L.**  
Cultivar. "AMARAL 400". PVP 7800083.

The following were developed by Willamette Seed Company, United States. Received 08/12/1996.

**PI 595597. *Lolium perenne* L.**  
Cultivar. "VIVID". PVP 9600330.

The following were developed by Pioneer Hi-Bred International, Inc., United States. Received 08/13/1996.

**PI 595598. *Medicago sativa* L.**  
Cultivar. "SUPERBA". PVP 9600331.

**PI 595599. *Medicago sativa* L.**  
Cultivar. "5681". PVP 9600332.

The following were developed by Rogers Seed Company, United States. Received 08/14/1996.

**PI 595600. *Phaseolus vulgaris* L.**  
Cultivar. "CAJUN". PVP 9600334.

The following were developed by Pioneer Hi-Bred International, Inc., United States. Received 08/13/1996.

**PI 595601. *Medicago sativa* L.**  
Cultivar. "5939". PVP 9600333.

The following were developed by Rogers Seed Company, United States. Received 08/14/1996.

**PI 595602. *Phaseolus vulgaris* L.**  
Cultivar. "MONET". PVP 9600335.

**PI 595603. *Phaseolus vulgaris* L.**  
Cultivar. "PRAIRIE". PVP 9600336.

**PI 595604. *Phaseolus vulgaris* L.**  
Cultivar. "REMINGTON". PVP 9600337.

**PI 595605. *Phaseolus vulgaris* L.**  
Cultivar. "WINCHESTER". PVP 9600338.

The following were developed by Arnel Hallauer, Iowa State University, Department of Agronomy, Ames, Iowa 50011, United States; Kendall R. Lamkey, USDA-ARS, Iowa State University, 1555 Agronomy, Ames, Iowa 50011, United States. Received 08/26/1996.

**PI 595606. *Zea mays* L. *ssp. mays***

Breeding. Population. BS11(MER)C5. GP-329. Pedigree - Developed by five cycles of modified ear-to-row selection. 17% higher yielding than BS11C0. Grain moisture 5%, root lodging 55%, stalk lodging 47%, plant height 2%, ear height 7%, and growing degrees to silk emergence 3%, were all reduced in comparison to BS11C0.

**PI 595607. *Zea mays* L. *ssp. mays***

Breeding. Population. BS11(FS)C5. GP-330. Pedigree - Developed by five cycles of intrapopulation full-sib selection. 4% higher yielding than BS11C0. Grain moisture 6%, root lodging 72%, stalk lodging 54%, plant height 13%, ear height 24%, and growing degrees to silk emergence 5%, were all reduced in comparison to BS11C0.

**PI 595608. *Zea mays* L. *ssp. mays***

Breeding. Population. BS11(HI)C5. GP-331. Pedigree - Developed by five cycles of half-sib selection using inbred tester B79. 5% higher yielding than BS11C0. Grain moisture 3%, root lodging 84%, stalk lodging 45%, plant height 9%, ear height 16%, and growing degrees to silk emergence 5%, were all reduced in comparison to BS11C0.

**PI 595609. *Zea mays* L. *ssp. mays***

Breeding. Population. BS11(S2)C5. GP-332. Pedigree - Developed by five cycles of S2 recurrent selection. 19% higher yielding than BS11C0. Grain moisture 6%, root lodging 59%, stalk lodging 41%, plant height 7%, ear height 13%, and growing degrees to silk emergence 7%, were all reduced in comparison to BS11C0.

**PI 595610. *Zea mays* L. *ssp. mays***

Breeding. Population. BS11(30-S1)C5. GP-333. Pedigree - Developed by five cycles of S1 recurrent selection. 12% higher yielding than BS11C0. Grain moisture 5%, root lodging 51%, stalk lodging 23%, plant height 7%, ear height 13%, and growing degrees to silk emergence 5%, were all reduced in comparison to BS11C0.

**PI 595611. *Zea mays* L. *ssp. mays***

Breeding. Population. BS11(S1)C5; BS11(20-S1)C5. GP-334. Pedigree - Developed by five cycles of S1 recurrent selection. Very desirable agronomics. 11% higher yielding than BS11C0. Grain moisture 7%, root lodging 90%, stalk lodging 54%, plant height 15%, ear height 25%, and growing degrees to silk emergence 8%, were all reduced in comparison to BS11C0.

**PI 595612. *Zea mays* L. *ssp. mays***

Breeding. Population. BS11(10-S1)C5. GP-335. Pedigree - Developed by



five cycles of S1 recurrent selection. In comparison with BS11C0, increased grain yield 12%, lower grain moisture at harvest 9%, increased resistance to stalk lodging 31%, and earlier silk emergence 3%.

**PI 595613. *Zea mays* L. ssp. *mays***

Breeding. Population. BS11(5-S1)C5. GP-336. Pedigree - Developed by five cycles of S1 recurrent selection. 16% lower yielding and grain moisture 1% greater than BS11C0. Root lodging 48%, stalk lodging 12%, plant height 6%, ear height 15%, and growing degrees to silk emergence 3%, were all reduced in comparison to BS11C0.

The following were developed by Garst Seed Company, United States. Received 08/16/1996.

**PI 595614. *Zea mays* L. ssp. *mays***

Cultivar. "ZS01131". PVP 9600269.

**PI 595615. *Zea mays* L. ssp. *mays***

Cultivar. "ZS01228". PVP 9600270.

**PI 595616. *Zea mays* L. ssp. *mays***

Cultivar. "ZS01250". PVP 9600271.

**PI 595617. *Zea mays* L. ssp. *mays***

Cultivar. "ZS01279". PVP 9600272.

**PI 595618. *Zea mays* L. ssp. *mays***

Cultivar. "ZS01459". PVP 9600273.

The following were developed by AgraTech Seeds Inc.. Received 08/02/1996.

**PI 595619. *Arachis hypogaea* L.**

Cultivar. "AT 108". PVP 9600322.

The following were developed by Progeny Advanced Genetics, Inc., Salinas, California, United States. Received 08/05/1996.

**PI 595620. *Lactuca sativa* L.**

Cultivar. "KING HENRY". PVP 9600323.

The following were developed by SEEDCO Corporation. Received 08/05/1996.

**PI 595621. *Gossypium hirsutum* L.**

Cultivar. "9148". PVP 9600324.

The following were developed by Hartz Seed Company, United States. Received 08/06/1996.

**PI 595622. *Glycine max* (L.) Merr.**

Cultivar. "H616". PVP 9600325.

The following were developed by DEKALB Genetics Corporation, United States.  
Received 08/05/1996.

**PI 595623. *Zea mays* L. ssp. *mays***  
Cultivar. "PHEI4SR". PVP 9600326.

**PI 595624. *Zea mays* L. ssp. *mays***  
Cultivar. "83IBI3SR". PVP 9600327.

**PI 595625. *Zea mays* L. ssp. *mays***  
Cultivar. "91BMA2SR". PVP 9600328.

The following were developed by University of Maryland, College Park,  
Maryland, United States. Received 08/08/1996.

**PI 595626. *Glycine max* (L.) Merr.**  
Cultivar. "Wicomico". PVP 9600329.

The following were developed by Seed Research of Oregon, Inc., Oregon, United  
States. Received 08/19/1996.

**PI 595627. *Lolium perenne* L.**  
Cultivar. "SR 4400". PVP 9600339.

The following were developed by Pratum Co-op Warehouse, United States.  
Received 08/19/1996.

**PI 595628. *Lolium perenne* L.**  
Cultivar. "ACADEMY". PVP 9600340.

The following were developed by USDA, NRCS, Aberdeen Plant Materials Center,  
Aberdeen, Idaho, United States. Received 08/20/1996.

**PI 595629. *Elymus lanceolatus* (Scribner & J. G. Smith) Gould ssp.  
*lanceolatus***  
Cultivar. "BANNOCK". PVP 9600341.

The following were developed by Jenks Seed Connection, United States.  
Received 08/22/1996.

**PI 595630. *Festuca arundinacea* Schreber**  
Cultivar. "JUBILEE". PVP 9600343.

**PI 595631. *Festuca arundinacea* Schreber**  
Cultivar. "MORGAN". PVP 9600344.

The following were developed by Pickseed West, Inc., United States. Received

07/30/1996.

**PI 595632. *Festuca arundinacea* Schreber**  
Cultivar. "EMPRESS". PVP 9600345.

The following were developed by Olsen-Fennell Seeds, Inc., United States.  
Received 08/16/1996.

**PI 595633. *Festuca arundinacea* Schreber**  
Cultivar. "PYRAMID". PVP 9600346.

The following were developed by New Mexico State University, Agricultural  
Experiment Station, Las Cruces, New Mexico 88003, United States. Received  
08/27/1996.

**PI 595634. *Allium cepa* L.**  
Cultivar. "NUMEX CENTRIC". PVP 9600347.

**PI 595635. *Allium cepa* L.**  
Cultivar. "NUMEX CRISPY". PVP 9600348.

**PI 595636. *Allium cepa* L.**  
Cultivar. "NUMEX DULCE". PVP 9600349.

**PI 595637. *Allium cepa* L.**  
Cultivar. "NUMEX LUNA". PVP 9600350.

**PI 595638. *Allium cepa* L.**  
Cultivar. "NUMEX MESA". PVP 9600351.

**PI 595639. *Allium cepa* L.**  
Cultivar. "NUMEX VADO". PVP 9600352.

The following were developed by Northrup King Company, United States.  
Received 08/23/1996.

**PI 595640. *Glycine max* (L.) Merr.**  
Cultivar. "S 48-14". PVP 9600353.

**PI 595641. *Glycine max* (L.) Merr.**  
Cultivar. "S 51-00". PVP 9600354.

**PI 595642. *Glycine max* (L.) Merr.**  
Cultivar. "S 62-62". PVP 9600355.

**PI 595643. *Glycine max* (L.) Merr.**  
Cultivar. "S 65-50". PVP 9600356.

**PI 595644. *Glycine max* (L.) Merr.**  
Cultivar. "S 67-70". PVP 9600357.

The following were developed by Gina Rowan, University of Georgia, Miller Plant Science Building Rm. 3111, Athens, Georgia 30602, United States; Dan Phillips, University of Georgia, Department of Plant Pathology, Georgia Experiment Station, Experiment, Georgia 30223, United States; Richard S. Hussey, University of Georgia, College of Agric. and Environ. Sciences, Department of Plant Pathology, Athens, Georgia 30602-7274, United States; H. Roger Boerma, University of Georgia, Department of Crop & Soil Science, 3111 Plant Sciences Building, Athens, Georgia 30602-7272, United States; E. Dale Wood, University of Georgia, Dept. of Crop & Soil Sciences, Athens, Georgia 30602, United States; S.L. Finnerty, University of Georgia, Dept. of Plant Pathology, Athens, Georgia 30602, United States. Received 08/27/1996.

**PI 595645. *Glycine max* (L.) Merr.**

Cultivar. Pureline. "Benning"; G88-3266. CV-367; PVP 9600358. Pedigree - Hutcheson x Coker 6738. Maturity group VII (relative maturity 1.8). Growth habit determinate. Flowers purple, tawny pubescence, and tan pod walls. Seeds yellow with shiny seed coat and brown hila of varying intensity. Resistant to southern biotype of stem canker (*Diaporthe phaseolorum*) and bacterial pustule (*Xanthomonas campestris* pv. *glycines*). Resistance to southern (*Meloidogyne incognita*), peanut (*M. arenaria*), and javanese (*M. javanese*) root-knot nematodes. Moderately resistant to prevalent races of frogeye leaf spot (*Cercospora sojina*) and is resistant to Race 3 of soybean cyst nematode (*Heterodera glycines*).

The following were developed by John M. Clarke, Agriculture and Agri-Food Canada, Semiarid Prairie Agricultural Res. Centre, Box 1030, Swift Current, Saskatchewan S9H 3X2, Canada. Received 08/30/1996.

**PI 595646. *Triticum durum* Desf.**

Genetic. Pureline. 8871-AN-I. Pedigree - D8193/Bidi 17. Near-isogenic durum wheat. Photoperiod insensitive.

**PI 595647. *Triticum durum* Desf.**

Genetic. Pureline. 8871-AN-S. Pedigree - D8193/Bidi 17. Near-isogenic durum wheat. Photoperiod sensitive.

**PI 595648. *Triticum durum* Desf.**

Genetic. Pureline. 8974-HA4-S. Pedigree - Westbred 881/Wascana. Near-isogenic durum wheat. Photoperiod sensitive.

**PI 595649. *Triticum durum* Desf.**

Genetic. Pureline. 8974-HA4-I. Pedigree - Westbred 881/Wascana. Near-isogenic durum wheat. Photoperiod insensitive.

**PI 595650. *Triticum durum* Desf.**

Genetic. Pureline. 8976-AY-I. Pedigree - Westbred 881/DT 618. Near-isogenic durum wheat. Photoperiod insensitive.

**PI 595651. *Triticum durum* Desf.**

Genetic. Pureline. 8976-AY-S. Pedigree - Westbred 881/DT 618. Near-isogenic durum wheat. Photoperiod sensitive.

**PI 595652. *Triticum durum* Desf.**

Genetic. Pureline. 8980-AG2-S. Pedigree - Kyle/Westbred 881.  
Near-isogenic durum wheat. Photoperiod sensitive.

**PI 595653. *Triticum durum* Desf.**  
Genetic. Pureline. 8980-AG2-I. Pedigree - Kyle/Westbred 881.  
Near-isogenic durum wheat. Photoperiod insensitive.

**PI 595654. *Triticum durum* Desf.**  
Genetic. Pureline. 8981-GM2-I. Pedigree - Kyle/Westbred 881.  
Near-isogenic durum wheat. Photoperiod insensitive.

**PI 595655. *Triticum durum* Desf.**  
Genetic. Pureline. 8981-GM2-S. Pedigree - Kyle/Westbred 881.  
Near-isogenic durum wheat. Photoperiod sensitive.

**PI 595656. *Triticum durum* Desf.**  
Genetic. Pureline. 8982-CJ5-I. Pedigree - Kyle/Westbred 881.  
Near-isogenic durum wheat. Photoperiod insensitive.

**PI 595657. *Triticum durum* Desf.**  
Genetic. Pureline. 8982-CJ5-S. Pedigree - Kyle/Westbred 881.  
Near-isogenic durum wheat. Photoperiod sensitive.

**PI 595658. *Triticum durum* Desf.**  
Genetic. Pureline. 8982-TX-S. Pedigree - Kyle/Westbred 881.  
Near-isogenic durum wheat. Photoperiod sensitive.

**PI 595659. *Triticum durum* Desf.**  
Genetic. Pureline. 8982-TX-I. Pedigree - Kyle/Westbred 881.  
Near-isogenic durum wheat. Photoperiod insensitive.

**PI 595660. *Triticum aestivum* L., nom. cons.**  
Genetic. Pureline. 8644-057-S. Pedigree - BW 536/85407. Near-isogenic  
common wheat. Photoperiod sensitive.

**PI 595661. *Triticum aestivum* L., nom. cons.**  
Genetic. Pureline. 8644-057-I. Pedigree - BW 536/85407. Near-isogenic  
common wheat. Photoperiod insensitive.

**PI 595662. *Triticum aestivum* L., nom. cons.**  
Genetic. Pureline. 8902-BK3-I. Pedigree - ND643/BW 621//BW 591.  
Near-isogenic common wheat. Photoperiod insensitive.

**PI 595663. *Triticum aestivum* L., nom. cons.**  
Genetic. Pureline. 8902-BK3-S. Pedigree - ND643/BW 621//BW 591.  
Near-isogenic common wheat. Photoperiod sensitive.

**PI 595664. *Triticum aestivum* L., nom. cons.**  
Genetic. Pureline. 8908-CU2-I. Pedigree - 93349/BW 123//BW 131.  
Near-isogenic common wheat. Photoperiod insensitive.

**PI 595665. *Triticum aestivum* L., nom. cons.**  
Genetic. Pureline. 8908-CU2-S. Pedigree - 93349/BW 123//BW 131.  
Near-isogenic common wheat. Photoperiod sensitive.

- PI 595666. *Triticum aestivum* L., nom. cons.**  
Genetic. Pureline. 8916-CG09-S. Pedigree - HY 377/8021V2//L8474D1.  
Near-isogenic common wheat. Photoperiod sensitive.
- PI 595667. *Triticum aestivum* L., nom. cons.**  
Genetic. Pureline. 8916-CG09-I. Pedigree - HY 377/8021V2//L8474D1.  
Near-isogenic common wheat. Photoperiod insensitive.
- PI 595668. *Triticum aestivum* L., nom. cons.**  
Genetic. Pureline. 8917-AG-S. Pedigree - HY 377/L8474D1//8021V2.  
Near-isogenic common wheat. Photoperiod sensitive.
- PI 595669. *Triticum aestivum* L., nom. cons.**  
Genetic. Pureline. 8917-AG-I. Pedigree - HY 377/L8474D1//8021V2.  
Near-isogenic common wheat. Photoperiod insensitive.
- PI 595670. *Triticum aestivum* L., nom. cons.**  
Genetic. Pureline. 8918-DP08-S. Pedigree - HY 358/7915QX76B2//Norseman.  
Near-isogenic common wheat. Photoperiod sensitive.
- PI 595671. *Triticum aestivum* L., nom. cons.**  
Genetic. Pureline. 8918-DP08-I. Pedigree - HY 358/7915QX76B2//Norseman.  
Near-isogenic common wheat. Photoperiod insensitive.

The following were developed by B. Glaz, USDA, ARS, Sugarcane Field Station, Canal Point, Florida 33438, United States; P.Y.P. Tai, USDA-ARS, Sugarcane Field Station, Star Route Box 8, Canal Point, Florida 33438, United States; Christopher W. Deren, University of Florida, Institute of Food and Agriculture, EREC Box 8003, Belle Glade, Florida 33430, United States; Jimmie D. Miller, USDA, ARS, Sugarcane Field Station, Star Route Box 8, Canal Point, Florida 33438, United States; J.M. Shine, Jr., Florida Sugar Cane League, Inc., Clewiston, Florida 33440, United States; Jack C. Comstock, USDA-ARS, Sugarcane Field Station, Star Route Box 8, Canal Point, Florida 33438, United States. Received 09/05/1996.

**PI 595672. *Saccharum* hybrid**

Cultivar. "CP 88-1762". CV-105. Pedigree - Polycross with CP 80-1743 as the female parent. Equalled sugar production of checks on organic soils and slightly higher on sand soils. Resistance for commercial production in Florida to sugarcane mosaic virus, leaf scald (*Xanthomonas albilineans*), eye spot (*Bipolaris sacchari*), smut (*Ustilago scitaminea*), rust (*Puccinia melanocephala*), and ratoon stunting disease (*Clavibacter xyli* susp. *xyli*). Fiber content 11.48% compared to 10.37% for CP 70-1133 and 10.04% for CP 72-1210.

**PI 595673. *Saccharum* hybrid**

Cultivar. "CP 88-1508". CV-106. Pedigree - CP 81-1238 / CP 78-1610. On organic soils, slightly higher sucrose content and cane yield than best check. On sand soils, sucrose content slightly less but cane yield significantly greater than check. Resistance for commercial production in Florida to sugarcane mosaic virus, leaf scald (*Xanthomonas albilineans*), eye spot (*Bipolaris sacchari*), smut (*Ustilago scitaminea*), rust (*Puccinia melanocephala*), and ratoon stunting disease (*Clavibacter xyli* subsp. *xyli*). Some susceptibility to dry top rot (*Ligniera*

vasculorum). Fiber content 10.64% compared to 10.37% for CP 70-1133 and 10.04% for CP 72-1210.

The following were developed by Sakata Seed Corporation, Japan. Received 09/04/1996.

**PI 595674. *Brassica oleracea* L.**

Cultivar. "SA-5". Pedigree - Male parent of Triathlon (PI 591572).

The following were developed by University of Georgia Research Foundation, Inc., Georgia, United States. Received 08/29/1996.

**PI 595675. *Triticum aestivum* L., nom. cons.**

Cultivar. "522W". PVP 9600359.

The following were developed by Resource Seeds, Inc., United States. Received 08/30/1996.

**PI 595676. *X Triticosecale* sp.**

Cultivar. "498". PVP 9600361.

The following were developed by Pure-Seed Testing, Inc., P.O. Box 449, Hubbard, Oregon 97032, United States. Received 09/03/1996.

**PI 595677. *Lolium perenne* L.**

Cultivar. "MANHATTAN III". PVP 9600362.

The following were developed by Ohio Agricultural Research & Development Center, Ohio, United States. Received 09/04/1996.

**PI 595678. *Triticum aestivum* L., nom. cons.**

Cultivar. "HOPEWELL". PVP 9600363. Soft red winter wheat.

The following were developed by Pure Seed Testing, Inc., United States; Melodee L. Fraser, Pure Seed Testing, Inc., 606 N. Main Street, P.O. Box 176, Rolesville, North Carolina 27571, United States. Received 02/28/1997.

**PI 595679. *Festuca arundinacea* Schreber**

Cultivar. Population. "TAR HEEL"; PST-R5DNB; PST-R5DR. PVP 9600364.

Pedigree - Selected from progenies of five clones selected from a tall fescue screening program. Medium-maturing, dark green, low-growing, tall fescue capable of producing dense turf. Good winter color and early spring green-up in NC. Excellent heat tolerance and high tolerance to brown patch disease. Moderate tolerance to stem rust. Susceptible to gray leaf spot (*Pyricularia grisea*).

The following were developed by Terral Seed, Inc.. Received 09/03/1996.

PI 595680. *Triticum aestivum* L., nom. cons.  
Cultivar. "TERRAL TV8825". PVP 9600365. Soft red winter wheat.

The following were developed by Willamette Valley Plant Breeders, Inc.,  
United States. Received 09/03/1996.

PI 595681. *Trifolium pratense* L.  
Cultivar. "REDGOLD". PVP 9600366.

The following were developed by Agriprogress Inc., Canada. Received  
09/04/1996.

PI 595682. *Pisum sativum* L.  
Cultivar. "PROFI". PVP 9600367.

The following were developed by Pioneer Hi-Bred International, Inc., United  
States. Received 08/30/1996.

PI 595683. *Glycine max* (L.) Merr.  
Cultivar. "9243". PVP 9600368.

PI 595684. *Glycine max* (L.) Merr.  
Cultivar. "9306". PVP 9600369.

PI 595685. *Glycine max* (L.) Merr.  
Cultivar. "9333". PVP 9600370.

PI 595686. *Glycine max* (L.) Merr.  
Cultivar. "9344". PVP 9600371.

PI 595687. *Glycine max* (L.) Merr.  
Cultivar. "9363". PVP 9600372.

PI 595688. *Glycine max* (L.) Merr.  
Cultivar. "9364". PVP 9600373.

PI 595689. *Glycine max* (L.) Merr.  
Cultivar. "9421". PVP 9600374.

PI 595690. *Glycine max* (L.) Merr.  
Cultivar. "9482". PVP 9600375.

PI 595691. *Glycine max* (L.) Merr.  
Cultivar. "9552". PVP 9600376.

PI 595692. *Glycine max* (L.) Merr.  
Cultivar. "9594". PVP 9600377.

PI 595693. *Glycine max* (L.) Merr.  
Cultivar. "9631". PVP 9600378.

PI 595694. *Glycine max* (L.) Merr.



Cultivar. "9671". PVP 9600379.

**PI 595695. *Glycine max* (L.) Merr.**  
Cultivar. "9182". PVP 9600380.

**PI 595696. *Glycine max* (L.) Merr.**  
Cultivar. "9322". PVP 9600381.

**PI 595697. *Glycine max* (L.) Merr.**  
Cultivar. "9233". PVP 9600382.

**PI 595698. *Glycine max* (L.) Merr.**  
Cultivar. "9396". PVP 9600383.

The following were developed by Gary C. Peterson, Texas A&M University, Agricultural Res. & Extension Center, Route 3, Box 219, Lubbock, Texas 79401-7957, United States; Pablo Madera-Torres, USDA/ARS, Tropical Agriculture Research Station, P. O. Box 70, Mayaguez, Puerto Rico; Jeff Dahlberg, USDA, ARS, Tropical Agric. Research Station, P.O. Box 70, Mayaguez, Puerto Rico; Fred R. Miller, Texas A & M University, Department of Soil & Crop Science, College Station, Texas 77843-2474, United States; Darrell T. Rosenow, Texas Agriculture Exp. Stn., Route 3, Box 219, Farm and Market Road 1294, Lubbock, Texas 79401-9757, United States; Antonio Sotomayor-Rios, USDA, ARS, National Germplasm Repository, Tropical Agric. Research Station, Mayaguez, Puerto Rico; L.E. Clark, Texas Agr. Exp. Sta., P.O. Box 1658, Vernon, Texas 76384-1658, United States; A. Quiles-Belen, USDA, ARS, Tropical Agricultural Research Station, Box 70, Mayaguez, Puerto Rico; A. J. Hamburger, Tropical Agricultural Experiment Station, 11708 Hwy. 70 South, Vernon, Texas 76385-1658, United States; C. A. Woodfin, Tropical Agricultural Experiment Station, Route 3, Box 219, Lubbock, Texas 79401-9757, United States. Received 02/21/1996.

**PI 595699. *Sorghum bicolor* (L.) Moench**  
Breeding. Pureline. IS 1029C; SC 929; IC 3443; PI 246704 (preconverted). GP-405. Pedigree - Photoperiod insensitive conversion of IS 1029 selected from the World Sorghum Collection. Early maturing, combine-height enhanced. Tested for fertility reactions in A1 cytoplasm and found to be a restorer line. A unique Durra (race)-Cernuum (Working Group 49).

**PI 595700. *Sorghum bicolor* (L.) Moench**  
Breeding. Pureline. IS 1530C; SC 819; AS 6509 N.T.; NSL 54679 (preconverted). GP-406. Pedigree - Photoperiod insensitive conversion of IS 1530 selected from the World Sorghum collection. Early maturing, combine-height enhanced. Tested for fertility reactions in A1 cytoplasm and found to be a partial maintainer line. A unique Durra (race)-Durra (Working Group 41).

**PI 595701. *Sorghum bicolor* (L.) Moench**  
Breeding. Pureline. IS 2377C; SC 821; PI 229835 (preconverted); P3730; Q2/5/38. GP-407. Pedigree - Photoperiod insensitive conversion of IS 2377 selected from the World Sorghum Collection. Early maturing, combine-height enhanced. Tested for fertility reactions in A1 cytoplasm and found to be a maintainer line. A unique Kafir (race)-Caffrorum

(Working Group 22).

**PI 595702. *Sorghum bicolor* (L.) Moench**

Breeding. Pureline. IS 2837C; SC 672; PI 267495 (preconverted); MN 4592; Hoarkdoom 19/59. GP-408. Pedigree - Photoperiod insensitive conversion of IS 2837 selected from the World Sorghum Collection. Early maturing, combine-height enhanced. Tested for fertility reactions in A1 cytoplasm and found to be a maintainer line. A unique Kafir-caudatum (race)-Caffrorum-feterita (Working Group 27).

**PI 595703. *Sorghum bicolor* (L.) Moench**

Breeding. Pureline. IS 4308C; SC 1101; NSL 87138 (preconverted); Jhawa. GP-409. Pedigree - Photoperiod insensitive conversion of IS 4308 selected from the World Sorghum Collection. Early maturing, combine-height enhanced. Tested for fertility reactions in A1 cytoplasm and found to be a partial maintainer line. A unique Durra (race)-Nandyal (Working Group 46(1)).

**PI 595704. *Sorghum bicolor* (L.) Moench**

Breeding. Pureline. IS 4540C; SC 830; NSL 54779 (preconverted); Bedri Jalgaon. GP-410. Pedigree - Photoperiod insensitive conversion of IS 4540 selected from the World Sorghum Collection. Early maturing, combine-height enhanced. Tested for fertility reactions in A1 cytoplasm and found to be a partial restorer line. A unique Durra (race)-Durra (Working Group 41).

**PI 595705. *Sorghum bicolor* (L.) Moench**

Breeding. Pureline. IS 4870C; SC 1089; NSL 55476 (preconverted); Himmatpur S.K.. GP-411. Pedigree - Photoperiod insensitive conversion of IS 4870 selected from the World Sorghum Collection. Early maturing, combine-height enhanced. Tested for fertility reactions in A1 cytoplasm and found to be a maintainer line. Midge resistance. A unique Durra (race)-Durra (Working Group 41).

**PI 595706. *Sorghum bicolor* (L.) Moench**

Breeding. Pureline. IS 4902C; NSL 55485 (preconverted); Piscari Wadibyruk; SC 876. GP-412. Pedigree - Photoperiod insensitive conversion of IS 4902 selected from the World Sorghum Collection. Early maturing, combine-height enhanced. Tested for fertility reactions in A1 cytoplasm and found to be a restorer line. Possible high breeding value. A unique Durra (race)-Durra (Working Group 41).

**PI 595707. *Sorghum bicolor* (L.) Moench**

Breeding. Pureline. IS 5792C; SC 891; NSL 55048 (preconverted); Ranipur. GP-413. Pedigree - Photoperiod insensitive conversion of IS 5792 selected from the World Sorghum Collection. Early maturing, combine-height enhanced. Tested for fertility reactions in A1 cytoplasm and found to be a maintainer line. Possible high breeding value. A unique Durra (race)-Durra (Working Group 41).

**PI 595708. *Sorghum bicolor* (L.) Moench**

Breeding. Pureline. IS 6026C; SC 841; NSL 102170 (preconverted); Ghalal. GP-414. Pedigree - Photoperiod insensitive conversion of IS 6026 selected from the World Sorghum Collection. Early maturing, combine-height enhanced. Tested for fertility reactions in A1 cytoplasm

and found to be a maintainer line. A unique Durra (race)-Dorra (Working Group 41).

**PI 595709. *Sorghum bicolor* (L.) Moench**

Breeding. Pureline. IS 6991C; SC 800; PI 571000 (preconverted); 360 Tarama; NSL 54549. GP-415. Pedigree - Photoperiod insensitive conversion of IS 6991 selected from the World Sorghum Collection. Early maturing, combine-height enhanced. Tested for fertility reactions in A1 cytoplasm and found to be a restorer line. Possible high breeding value. A unique Caudatum (race)-Zerazera (Working Group 39(1)).

**PI 595710. *Sorghum bicolor* (L.) Moench**

Breeding. Pureline. IS 7344C; SC 1117; NSL 51952 (preconverted); BO 50. GP-416. Pedigree - Photoperiod insensitive conversion of IS 7344 selected from the World Sorghum Collection. Early maturing, combine-height enhanced. Tested for fertility reactions in A1 cytoplasm and found to be a restorer line. Disease resistance. A unique Caudatum (race)-Caudatum-nigricans (Working Group 39).

**PI 595711. *Sorghum bicolor* (L.) Moench**

Breeding. Pureline. IS 7380C; SC 1118; NSL 51958 (preconverted); BA 23. GP-417. Pedigree - Photoperiod insensitive conversion of IS 7380 selected from the World Sorghum Collection. Early maturing, combine-height enhanced. Tested for fertility reactions in A1 cytoplasm and found to be a restorer line. Disease resistance. A unique Guinea (race)-Conspicuum (Working Group 3).

**PI 595712. *Sorghum bicolor* (L.) Moench**

Breeding. Pureline. IS 7528C; SC 349; NSL 51969 (preconverted); KO 49. GP-418. Pedigree - Photoperiod insensitive conversion of IS 7528 selected from the World Sorghum Collection. Early maturing, combine-height enhanced. Tested for fertility reactions in A1 cytoplasm and found to be a restorer line. A unique Caudatum (race)-Caudatum (Working Group 33).

**PI 595713. *Sorghum bicolor* (L.) Moench**

Breeding. Pureline. IS 8104C; SC 1222; NSL 54490 (preconverted); A-100. GP-419. Pedigree - Photoperiod insensitive conversion of IS 8104 selected from the World Sorghum Collection. Early maturing, combine-height enhanced. Midge resistance. A unique Caudatum (race)-Zerazera (Working Group 39(1)).

**PI 595714. *Sorghum bicolor* (L.) Moench**

Breeding. Pureline. IS 9290C; SC 1079; PI 571042 (preconverted); Gadam El Hamam; NSL 76303. GP-420. Pedigree - Photoperiod insensitive conversion of IS 9290 selected from the World Sorghum Collection. Early maturing, combine-height enhanced. Tested for fertility reactions in A1 cytoplasm and found to be a restorer line. A unique Caudatum (race)-Caudatum (Working Group 33).

**PI 595715. *Sorghum bicolor* (L.) Moench**

Breeding. Pureline. IS 9738C; SC 1261; PI 571151 (preconverted); Otago; NSL 76690. GP-421. Pedigree - Photoperiod insensitive conversion of IS 9738 selected from the World Sorghum Collection. Early maturing, combine-height enhanced. A unique Caudatum (race)-Zerazera (Working

Group 39(1)).

**PI 595716. *Sorghum bicolor* (L.) Moench**

Breeding. Pureline. IS 9784C; SC 1262; PI 571191 (preconverted); Safra White Nile. GP-422. Pedigree - Photoperiod insensitive conversion of IS 9784 selected from the World Sorghum Collection. Early maturing, combine-height enhanced. A unique Caudatum (race)-Zerazera (Working Group 39(1)).

**PI 595717. *Sorghum bicolor* (L.) Moench**

Breeding. Pureline. IS 9796C; SC 1263; PI 571201 (preconverted); UT24. GP-423. Pedigree - Photoperiod insensitive conversion of IS 9796 selected from the World Sorghum Collection. Early maturing, combine-height enhanced. A unique Caudatum (race)-Zerazera (Working Group 39(1)).

**PI 595718. *Sorghum bicolor* (L.) Moench**

Breeding. Pureline. IS 10759C; SC 1246; NSL 77228 (preconverted); No739 Dua Kerr. GP-424. Pedigree - Photoperiod insensitive conversion of IS 10759 selected from the World Sorghum Collection. Early maturing, combine-height enhanced. Midge resistance. A unique Caudatum-kafir (race)-Caudatum-kafir (Working Group 38).

**PI 595719. *Sorghum bicolor* (L.) Moench**

Breeding. Pureline. IS 11424C; SC 1184; PI 329686 (preconverted); Col. No. R-1. GP-425. Pedigree - Photoperiod insensitive conversion of IS 11424 selected from the World Sorghum Collection. Early maturing, combine-height enhanced. Food quality characteristics. A unique Durra-bicolor (race)-Durra-dochna-subglabrescens.

**PI 595720. *Sorghum bicolor* (L.) Moench**

Breeding. Pureline. IS 11814C; SC 1154; PI 330094 (preconverted); Col. No. R-560. GP-426. Pedigree - Photoperiod insensitive conversion of IS 11814 selected from the World Sorghum Collection. Early maturing, combine-height enhanced. Tested for fertility reactions in A1 cytoplasm and found to be a restorer line. Disease resistance. A unique Durra-bicolor (race)-Durra-dochna (Working Group 45).

**PI 595721. *Sorghum bicolor* (L.) Moench**

Breeding. Pureline. IS 11818C; SC 1156; PI 330098 (preconverted); Col. No. R-564. GP-427. Pedigree - Photoperiod insensitive conversion of IS 11818 selected from the World Sorghum Collection. Early maturing, combine-height enhanced. Tested for fertility reactions in A1 cytoplasm and found to be a restorer line. Disease resistance. A unique Durra-bicolor (race)-Subglabrescens-durra (Working Group 50-41).

**PI 595722. *Sorghum bicolor* (L.) Moench**

Breeding. Pureline. IS 11822C; SC 1157; PI 330102 (preconverted); Col. No. R-568. GP-428. Pedigree - Photoperiod insensitive conversion of IS 11822 selected from the World Sorghum Collection. Early maturing, combine-height enhanced. Tested for fertility reactions in A1 cytoplasm and found to be a restorer line. Disease resistance. A unique Durra-bicolor (race)-Subglabrescens-durra-dochna (Working Group 50-45).

**PI 595723. *Sorghum bicolor* (L.) Moench**

Breeding. Pureline. IS 11971C; SC 1159; PI 330254 (preconverted); Col. No. R-164. GP-429. Pedigree - Photoperiod insensitive conversion of IS 11971 selected from the World Sorghum Collection. Early maturing, combine-height enhanced. Tested for fertility reactions in A1 cytoplasm and found to be a maintainer line. Disease resistance. A unique Durra (race)-Durra (Working Group 41).

**PI 595724. *Sorghum bicolor* (L.) Moench**

Breeding. Pureline. IS 12181C; SC 1040; PI 330897 (preconverted); Col. No. P-620; Machica. GP-430. Pedigree - Photoperiod insensitive conversion of IS 12181 selected from the World Sorghum Collection. Early maturing, combine-height enhanced. Tested for fertility reaction in A1 cytoplasm and found to be a partial-restorer line. Cold tolerance. A unique Durra-bicolor (race) /Subglabrescens-Durra (Working Group 50-41).

**PI 595725. *Sorghum bicolor* (L.) Moench**

Breeding. Pureline. IS 12578C; SC 69; PI 153824 (preconverted); MN 1230; Moriti No. 717. GP-431. Pedigree - Photoperiod insensitive conversion of IS 12578 selected from the World Sorghum Collection. Early maturing, combine-height enhanced. Tested for fertility reactions in A1 cytoplasm and found to be a restorer line. Diversity and eliteness. A unique Caudatum (race)-Nigricans-feterita (Working Group 31).

**PI 595726. *Sorghum bicolor* (L.) Moench**

Breeding. Pureline. IS 12595C; SC 86; PI 154868 (preconverted); MN 1524; Miamba No. 693. GP-432. Pedigree - Photoperiod insensitive conversion of IS 12595 selected from the World Sorghum Collection. Early maturing, combine-height enhanced. Tested for fertility reactions in A1 cytoplasm and found to be a maintainer line. Diversity and eliteness. A unique Durra-caudatum (race)-Durra-nigricans (Working Group 47).

**PI 595727. *Sorghum bicolor* (L.) Moench**

Breeding. Pureline. IS 12596C; SC 87; PI 155329 (preconverted); MN 1562; Mubya. GP-433. Pedigree - Photoperiod insensitive conversion of IS 12596 selected from the World Sorghum Collection. Early maturing, combine-height enhanced. Tested for fertility reactions in A1 cytoplasm and found to be a maintainer line. Diversity and eliteness. A unique Guinea (race)-Conspicuum (Working Group 3).

**PI 595728. *Sorghum bicolor* (L.) Moench**

Breeding. Pureline. IS 12652C; SC 161; PI 276823 (preconverted); SA 2341; Unnamed-R3; 87. GP-434. Pedigree - Photoperiod insensitive conversion of IS 12652 selected from the World Sorghum Collection. Early maturing, combine-height enhanced. Tested for fertility reactions in A1 cytoplasm and found to be a restorer line. Diversity and eliteness. A unique Durra-caudatum (race)-Durra-nigricans-subglabrescens (Working Group 47-50).

**PI 595729. *Sorghum bicolor* (L.) Moench**

Breeding. Pureline. IS 17220C; SC 1083; 62-19. GP-435. Pedigree - Photoperiod insensitive conversion of IS 17220 selected from the World Sorghum Collection. Early maturing, combine-height enhanced. Tested for fertility reactions in A1 cytoplasm and found to be a restorer line. A unique Guinea (race)-Conspicuum (Working Group 3).

- PI 595730. *Sorghum bicolor* (L.) Moench**  
Breeding. Pureline. IS 17221C; SC 1084; 62-24. GP-436. Pedigree - Photoperiod insensitive conversion of IS 17221 selected from the World Sorghum Collection. Early maturing, combine-height enhanced. Tested for fertility reactions in A1 cytoplasm and found to be a restorer line. A unique Guinea (race)-Conspicuum (Working Group 3).
- PI 595731. *Sorghum bicolor* (L.) Moench**  
Breeding. Pureline. IS 17547C; SC 1186; Safra. GP-437. Pedigree - Photoperiod insensitive conversion of IS 17547 selected from the World Sorghum Collection. Early maturing, combine-height enhanced. Tested for fertility reactions in A1 cytoplasm and found to be a partial-restorer line. Food quality characteristics. A unique Kafir (race)-Caffrorum (Working Group 22).
- PI 595732. *Sorghum bicolor* (L.) Moench**  
Breeding. Pureline. IS 23490C; SC 1300; PAB1. GP-438. Pedigree - Photoperiod insensitive conversion of IS 23490 selected from the World Sorghum Collection. Early maturing, combine-height enhanced. A unique Caudatum (race)-Zerazera (Working Group 39(1)).
- PI 595733. *Sorghum bicolor* (L.) Moench**  
Breeding. Pureline. IS 23520C; SC 1305; PAB33; Utedit. GP-439. Pedigree - Photoperiod insensitive conversion of IS 23520 selected from the World Sorghum Collection. Early maturing, combine-height enhanced. A unique Caudatum (race)-Zerazera (Working Group 39(1)).
- PI 595734. *Sorghum bicolor* (L.) Moench**  
Breeding. Pureline. IS 23533C; SC 1307; PAB48; Udogie. GP-440. Pedigree - Photoperiod insensitive conversion of IS 23533 selected from the World Sorghum Collection. Early maturing, combine-height enhanced. A unique Caudatum (race)-Zerazera (Working Group 39(1)).
- PI 595735. *Sorghum bicolor* (L.) Moench**  
Breeding. Pureline. IS 23573C; SC 1313; PAB89; Ganga. GP-441. Pedigree - Photoperiod insensitive conversion of IS 23573 selected from the World Sorghum Collection. Early maturing, combine-height enhanced. A unique Caudatum (race)-Zerazera (Working Group 39(1)).
- PI 595736. *Sorghum bicolor* (L.) Moench**  
Breeding. Pureline. IS 23587C; SC 1314; PAB109; Utedit. GP-442. Pedigree - Photoperiod insensitive conversion of IS 23587 selected from the World Sorghum Collection. Early maturing, combine-height enhanced. A unique Caudatum (race)-Zerazera (Working Group 39(1)).
- PI 595737. *Sorghum bicolor* (L.) Moench**  
Breeding. Pureline. IS 23590C; SC 1316; PAB112; Atwol. GP-443. Pedigree - Photoperiod insensitive conversion of IS 23590 selected from the World Sorghum Collection. Early maturing, combine-height enhanced. A unique Caudatum (race)-Zerazera (Working Group 39(1)).
- PI 595738. *Sorghum bicolor* (L.) Moench**  
Breeding. Pureline. IS 23595C; SC 1317; PAB117; Ganga. GP-444. Pedigree - Photoperiod insensitive conversion of IS 23595 selected from the World Sorghum Collection. Early maturing, combine-height enhanced. A unique

Caudatum (race)-Zerazera (Working Group 39(1)).

**PI 595739. *Sorghum bicolor* (L.) Moench**

Breeding. Pureline. SC 1055C; SC 1055; PI 152967 (preconverted); MN 1056 ; Werakan. GP-445. Pedigree - Photoperiod insensitive conversion of SC 1055 selected from the World Sorghum Collection. Early maturing, combine-height enhanced. Tested for fertility reactions in A1 cytoplasm and found to be a restorer line. Eliteness and downy mildew resistance. A unique Caudatum (race)-Zerazera (Working Group 39(1)).

**PI 595740. *Sorghum bicolor* (L.) Moench**

Breeding. Pureline. SC 1057C; SC 1057; PI 154844 (preconverted); MN 1500 ; Grassl; Iwera #669. GP-446. Pedigree - Photoperiod insensitive conversion of SC 1057 selected from the World Sorghum Collection. Early maturing, combine-height enhanced. Tested for fertility reactions in A1 cytoplasm and found to be a restorer line. Downy mildew resistance. A unique Caudatum (race)-Caudatum-nigricans (Working Group 39).

**PI 595741. *Sorghum bicolor* (L.) Moench**

Breeding. Pureline. SC 1063C; SC 1063; NSL 55215 (preconverted); CE 83-174. GP-447. Pedigree - Photoperiod insensitive conversion of SC 1063 selected from the World Sorghum Collection. Early maturing, combine-height enhanced. Tested for fertility reactions in A1 cytoplasm and found to be a restorer line. A unique Guinea (race)-Roxburghii (Working Group 1).

**PI 595742. *Sorghum bicolor* (L.) Moench**

Breeding. Pureline. SC 1177C; SC 1177; Damon Col. JATS-58; #58 Mashila. GP-448. Pedigree - Photoperiod insensitive conversion of SC 1177 selected from the World Sorghum Collection. Early maturing, combine-height enhanced. Tested for fertility reactions in A1 cytoplasm and found to be a partial-restorer line. Disease resistance. A unique Bicolor (race)-Dochna-membraneceum (Working Group 12-6).

**PI 595743. *Sorghum bicolor* (L.) Moench**

Breeding. Pureline. SC 1201C; SC 1201; OR-1. GP-449. Pedigree - Photoperiod insensitive conversion of SC 1201 selected from the World Sorghum Collection. Early maturing, combine-height enhanced. Potential as a forage. A unique Guinea-caudatum (race)-Guinea-caudatum (Working Group 35).

**PI 595744. *Sorghum bicolor* (L.) Moench**

Breeding. Pureline. SC 1211C; SC 1211; Cacho de Chevo. GP-450. Pedigree - Photoperiod insensitive conversion of SC 1211 selected from the World Sorghum Collection. Early maturing, combine-height enhanced. Potential source of excellent food quality. A unique Kafir-caudatum (race)-Caudatum-kafir (Working group 38).

**PI 595745. *Sorghum bicolor* (L.) Moench**

Breeding. Pureline. SC 1214C; SC 1214; Red Roasting Variety; NSL 51071 (preconverted). GP-451. Pedigree - Photoperiod insensitive conversion of SC 1214 selected from the World Sorghum Collection. Early maturing, combine-height enhanced. Roasting potential and earliness. A unique Guinea-Caudatum (race)-Caudatum-guinea (Working Group 35).

**PI 595746. *Sorghum bicolor* (L.) Moench**

Breeding. Pureline. SC 1287C; SC 1287; M62522. GP-452. Pedigree - Photoperiod insensitive conversion of SC 1287 selected from ICRISAT. Early maturing, combine-height enhanced. A unique Caudatum (race)-Zerazera (Working Group 39(1)).

**PI 595747. *Sorghum bicolor* (L.) Moench**

Breeding. Pureline. SC 1293C; SC 1293; 73-196. GP-453. Pedigree - Photoperiod insensitive conversion of SC 1293 selected from the World Sorghum Collection. Early maturing, combine-height enhanced. A unique Caudatum (race)-Zerazera (Working Group 39(1)).

**PI 595748. *Sorghum bicolor* (L.) Moench**

Breeding. Pureline. SC 1338C; SC 1338; CSM-409. GP-454. Pedigree - Photoperiod insensitive conversion of SC 1338 selected from the World Sorghum Collection. Early maturing, combine-height enhanced. A unique Guinea (race)-Guineense (Working Group 4).

The following were developed by Robert T. Lewellen, USDA, ARS, U.S. Agricultural Research Station, 1639 E. Alisal St., Salinas, California 93905, United States. Received 09/20/1996.

**PI 595749. *Beta vulgaris* L.**

Breeding. Population. C890-6; 6818M. Pedigree - BC2 F2[C790mmaa \*2 x (C37 x R05)]. Segregates for resistance to rhizomania (BNYVV), resistance source an Italian sugarbeet R05. Segregates for monogerm, O-type, and hypocotyl color.

**PI 595750. *Beta vulgaris* L.**

Breeding. Population. C890-7; 6817M. Pedigree - BC2 F2[C790mmaa \*2 x (Rima-CMS x C37)]. Segregates for resistance to rhizomania (BNYVV), resistance source an Italian cutivar 'Rima'. Segregates for monogerm, O-type, and hypocotyl color.

**PI 595751. *Beta vulgaris* L.**

Breeding. Population. C890-10; 6820M. Pedigree - BC2 F2[C790mmaa \*2 x (C37 x WB169)]. Segregates for resistance to rhizomania (BNYVV), resistance source a Beta maritima, accession WB169, from Italy. Segregates for monogerm, O-type, and hypocotyl color.

**PI 595752. *Beta vulgaris* L.**

Breeding. Population. C890-11; 6821M. Pedigree - BC2 F2[C790mmaa \*2 x (C37 x WB258)]. Segregates for resistance to rhizomania (BNYVV), resistance source a Beta maritima, accession WB258, from Italy. Segregates for monogerm, O-type, and hypocotyl color.

The following were developed by J.E. Specht, Nebraska Agr. Exp. Sta., University of Nebraska, Lincoln, Nebraska 68583-0915, United States; G.L. Graef, University of Nebraska, Dept. of Agronomy, Lincoln, Nebraska 68583-0915, United States; L.L. Korte, Nebraska Agr. Exp. Sta., University of Nebraska, Lincoln, Nebraska 68583-0915, United States; D.M. White, Nebraska Agr. Exp. Sta., University of Nebraska, Lincoln, Nebraska 68583-0915, United States. Received 09/24/1996.



**PI 595753. *Glycine max* (L.) Merr.**

Cultivar. Pureline. "ODell". CV-355. Pedigree - Hamilton x Asgrow A3427. Late maturity group III. Flowers purple, pubescence gray, pods tan, seeds yellow with intermediate luster and buff hila. Growth habit indeterminate. Plant height 86cm, moderately bushy canopy. Good lodging resistance. Average seed weight 16.1 g/100 seed, 36% protein, and 19% oil on 13% moisture basis. Good resistance to Sudden Death Syndrome, heterogeneous for resistance to *Phytophthora* root rot. No specific resistance to brown stem rot or soybean cyst nematode.

**PI 595754. *Glycine max* (L.) Merr.**

Cultivar. Pureline. "Nemaha". CV-356. Pedigree - Hamilton x Kenwood. Late maturity group III. Flowers white, pubescence gray, pods tan, seeds dull yellow with buff hila. Growth habit indeterminate. Plant height 86cm, moderately bushy canopy. Good lodging resistance. Average seed weight 16.6 g/100 seeds, 36% protein, and 19% oil on 13% moisture basis. Good resistance to Sudden Death Syndrome. Susceptible to *phytophthora* root rot, brown stem rot, and soybean cyst nematode.

The following were donated by Glenn W. Burton, USDA, ARS, Forage & Turf Research, Georgia Coastal Plain Experiment Station, Tifton, Georgia 31793, United States. Received 1978.

**PI 595755. *Pennisetum glaucum* (L.) R. Br.**

Breeding. TIFT 383. PL-8. Pedigree - Inbred male parent of hybrid Tifleaf 1. Back-crossed selected F2 plants of 239 x Tift 186 to Tift 186. Dwarf inbred, height rarely exceeds 2 meters. Bristles on heads extend about 4 to 8 mm beyond florets. Anthers yellow and pollen shed abundant. Leaves and stems free of hairs and colors (other than green). Resistant to leaf spot (*Pyricularia grisea*).

The following were donated by USDA, NRCS, California Agr. Exp. Station, California, United States. Received 1961.

**PI 595756. *Vicia villosa* ssp. *varia* (Host) Corbiere**

Cultivar. "LANA"; P-13910. CV-1.

The following were developed by Milton E. McDaniel, Texas A&M University, Dept. of Soil & Crops Sciences, College Station, Texas 77843, United States; Mark D. Lazar, Texas A&M University, 6500 Amarillo Boulevard, West, Amarillo, Texas 79106-1796, United States; N.A. Tuleen, Texas Agr. Exp. Sta., Texas A&M University, College Station, Texas 77843, United States; W.D. Worrall, Texas A&M University Agric. Res. & Ext. Ctr., P.O. Box 1658, Vernon, Texas 76385, United States; David S. Marshall, Texas A&M University, Research & Extension Center, 17360 Coit Road, Dallas, Texas 75252-6599, United States; Lloyd R. Nelson, Texas Agricultural Experiment Station, The Texas A&M University System, Agricultural Research and Extension Center, Overton, Texas 75684-0290, United States; Kenneth B. Porter, Texas A&M University, Texas A&M University Agric. Res. & Ext. Ctr., 6500 Amarillo Blvd. West, Amarillo, Texas 79106, United States; L.W. Rooney, Texas A&M University, Texas A&M University Agric. Res. & Ext. Ctr., 17360 Coit Road, Dallas, Texas 75252, United States;

G.L. Peterson, Texas A&M University, Texas Agric. Exp. Station, Amarillo, Texas 79106, United States. Received 10/16/1996.

**PI 595757. *Triticum aestivum* L., nom. cons.**

Cultivar. Pureline. "TAM 110". CV-851. Pedigree - (TAM 105\*4/Amigo)\*5//Largo. Semidwarf hard red winter wheat with brown chaff. Similar to TAM 107, but resistant to biotypes 'E' and 'I' greenbug (*Schizaphus graminum*). Milling and baking quality acceptable in all testing and often superior to TAM 107.

The following were developed by Peggy Thaxton, Texas A&M University, Texas A&M University, Dept. of Soil and Crop Science, College Station, Texas 77843, United States; Kamal M. El-Zik, Texas A&M University, Department of Soil & Crop Sciences, College Station, Texas 77843, United States. Received 10/15/1996.

**PI 595758. *Gossypium hirsutum* L.**

Breeding. Pureline. CABCHUS-2-86. GP-656. Pedigree - CABCS-1-81 x CAHUS-1-81. A reselection from previously released line CABCHUS-1-84. Glanded, normal leaf, normal bract, nectaried, glabrous, early maturing, with B2B3B7 genes for bacterial blight resistance (*Xanthomonas campestris* pv. *malvacearum*). Yield potential higher than Tamcots CAMD-E and CAB-CS, and similar yield to Tamcot CD3H and Tamcot HQ95. Lint percentage higher and fiber quality traits equal to or better than other released Tamcot cultivars. Fiber strength averages 26.5 g/tex and micronaire 4.2 units. Resistance levels to pests equal to other Tamcot cultivars with higher seed-seedling disease resistance (*Pythium ultimum* and *Rhizoctonia solani*).

**PI 595759. *Gossypium hirsutum* L.**

Breeding. Pureline. BLLCABS-3-86. GP-657. Pedigree - BLLEBOS-1-83 x CABCS-1-81. Glanded, normal leaf, normal bract, nectaried, glabrous, early maturing, with B2B3B7 genes for bacterial blight resistance (*Xanthomonas campestris* pv. *malvacearum*). Mean gin turnout 30.4% and mean lint percentage 37.2%. Fiber length averages 1.12 inches. Yield equal to Tamcot CAB-CS. Above-average resistance to seedling disease (*Pythium ultimum* and *Rhizoctonia solani*), phymatotrichum root rot (*Phymatotrichum omnivorum*), and fusarium wilt/root-knot nematode complex (*Fusarium oxysporum* f. sp. *vasinfectum*/Meloidogyne incognita) than other MAR-5 lines.

**PI 595760. *Gossypium hirsutum* L.**

Breeding. Pureline. LBBACABCHUS-1-87. GP-658. Pedigree - LEBOCBS-1-2-84 x CABCHUS-1-84. Glanded, normal leaf, normal bract, nectaried, glabrous, early maturing, with B2B3B7 genes for resistance to bacterial blight (*Xanthomonas campestris* pv. *malvacearum*). Average fiber strength 24.5 g/tex and fiber length 1.09 inches. Resistance to pests equal to previously released MAR germplasm with above-average resistance to fusarium wilt/root-knot nematode complex (*Fusarium oxysporum* f. sp. *vasinfectum*/Meloidogyne incognita).

**PI 595761. *Gossypium hirsutum* L.**

Breeding. Pureline. LBBCHU2GS-1-87. GP-659. Pedigree - LBBCHUS-1-85 x CAHUGS-1-84. Glanded, normal leaf, normal bract, nectaried, glabrous,

early maturing, with B2B3B7 genes for resistance to bacterial blight (*Xanthomonas campestris* pv. *malvacearum*). Higher level of resistance to fusarium wilt/root-knot nematode complex (*Fusarium oxysporum* f. sp. *vasinfectum*/Meloidogyne *incognita*) than other lines. Fiber length averages 1.12 inches, significantly longer than previously released Tamcot cultivars, except Tamcot HQ95.

**PI 595762. *Gossypium hirsutum* L.**

Breeding. Pureline. C5HUG2BES-2-87. GP-660. Pedigree - C4HUGBES-1-84 x CAHUGS-1-84. Glanded, normal leaf, normal bract, nectaried, glabrous, early maturing, with B2B3B7 genes for resistance to bacterial blight (*Xanthomonas campestris* pv. *malvacearum*). Fiber quality similar to Tamcot HQ95. Fiber length averages 1.10 inches, strength 25.0 g/tex, and micronaire 3.7. Higher resistance to verticillium wilt than other MAR-5 lines.

**PI 595763. *Gossypium hirsutum* L.**

Breeding. Pureline. CDP37HPIH-1-1-86. GP-661. Pedigree - Tamcot CD3H X Pora Inta from Argentina. Glanded, normal leaf, normal bract, nectaried, pubescent, with B2B3B6B7 genes for resistance to bacterial blight (*Xanthomonas campestris* pv. *malvacearum*). Lint percentage averages 37.8% and gin turnout 29.2%. Average fiber strength 25.9 g/tex. High yield potential similar to Tamcot HQ95. Higher levels of resistance to verticillium wilt (*Verticillium dahliae*), fusarium wilt/root-knot nematode complex (*Fusarium oxysporum* f. sp. *vasinfectum*/Meloidogyne *incognita*), and phymatotrichum root rot (*Phymatotrichum omnivorum*) than other MAR-5 lines.

**PI 595764. *Gossypium hirsutum* L.**

Breeding. Pureline. LBBCD3H-1-87. GP-662. Pedigree - LEBOBES-1-2-84 x Tamcot CD3H. Glanded, normal leaf, normal bract, nectaried, pubescent, with B2B3B6B7 genes for resistance to bacterial blight (*Xanthomonas campestris* pv. *malvacearum*). High yield potential and early maturity. Fiber length averages 1.12 inches, strength 25.9 g/tex, and micronaire 3.9.

The following were developed by S.C. Anand, University of Missouri, Delta Center, P.O. Box 160, Portageville, Missouri 63873, United States. Received 10/16/1996.

**PI 595765. *Glycine max* (L.) Merr.**

Cultivar. Pureline. "Delsoy 5500"; S88-1854. CV-361; PVP 9700029. Pedigree - Hutcheson x S81-2524. Mid-maturity group V with determinate growth habit. Flowers white, pubescence tawny, and pods tan. Resistant to Race 3 and moderately resistant to Race 14 of soybean cyst nematode, *Heterodera glycines*. Moderately resistant to root-knot nematode, Meloidogyne *incognita*, but susceptible to Meloidogyne *arenaria*. Seed protein 410 kg-1, oil 211g kg-1, seedcoat dull yellow, and hila brown.

The following were collected by James Mac Stewart, University of Arkansas, Agronomy Department, Fayetteville, Arkansas 72701, United States. Donated by F. Douglas Wilson, USDA, ARS, Western Cotton Research Laboratory, 4135 East Broadway Road, Phoenix, Arizona 85040, United States. Received 11/30/1996.

**PI 595766. *Hibiscus reflexus*** Craven & F. D. Wilson, nom. invalidum  
Wild. JMS-17; A82-1264; 263. Collected 09/03/1981 in Western Australia,  
Australia. 4 km NNE of Truscott Air Base (abandoned) on inlet from Van  
Sittart Bay. Sandstone area near heath. Flower pink, petal spot red. 2  
m high. Seeds angular, scaly brown.

The following were collected by P.A. Fryxell, Agricultural Experiment  
Station, State College, New Mexico, United States; L. Craven, CSIRO, Division  
of Plant Industry, General Post Office Box 1600, Canberra, Austr. Capital  
Terr. 2601, Australia. Donated by F. Douglas Wilson, USDA, ARS, Western  
Cotton Research Laboratory, 4135 East Broadway Road, Phoenix, Arizona 85040,  
United States. Received 11/30/1996.

**PI 595767. *Hibiscus aphelus*** Craven & F. D. Wilson, nom. invalidum  
Wild. 133; A84-1343; 268. Collected 05/08/1983 in Western Australia,  
Australia. Middle Spring, 18 km NW of Kununura (by air).

The following were collected by L. Craven, CSIRO, Division of Plant Industry,  
General Post Office Box 1600, Canberra, Austr. Capital Terr. 2601, Australia;  
J.A. Wightman. Donated by F. Douglas Wilson, USDA, ARS, Western Cotton  
Research Laboratory, 4135 East Broadway Road, Phoenix, Arizona 85040, United  
States. Received 11/30/1996.

**PI 595768. *Hibiscus fallax*** Craven & F. D. Wilson, nom. invalidum  
Wild. 1323; A84-1370; 273. Collected 03/25/1984 in Northern Territory,  
Australia. Latitude 12 deg. 19' 0'' S. Longitude 132 deg. 52' 0'' E.  
Arnhem Land, gorge between Twin Falls and Jim Jim Falls.

The following were collected by V.J. Neldner; J. R. Clarkson. Donated by F.  
Douglas Wilson, USDA, ARS, Western Cotton Research Laboratory, 4135 East  
Broadway Road, Phoenix, Arizona 85040, United States. Received 11/30/1996.

**PI 595769. *Hibiscus saponarius*** Craven  
Wild. 8107; A94-1424; 274. Collected 06/03/1989 in Queensland, Australia  
. Cook District. 4.2 km E of King River on the Edward River to Musgrave  
road. Eucalyptus tetradonta, E. hylandii woodland on white sand with a  
grassy ground layer.

The following were collected by Menkhurst. Donated by F. Douglas Wilson,  
USDA, ARS, Western Cotton Research Laboratory, 4135 East Broadway Road,  
Phoenix, Arizona 85040, United States. Received 11/30/1996.

**PI 595770. *Hibiscus squarulosus*** Craven & F. D. Wilson, nom. invalidum  
Wild. 765; A94-1425; 275. Collected 11/18/1989 in Western Australia,  
Australia. Osmond Valley Station.

The following were collected by A. Slee; L. Craven, CSIRO, Division of Plant  
Industry, General Post Office Box 1600, Canberra, Austr. Capital Terr. 2601,  
Australia. Donated by F. Douglas Wilson, USDA, ARS, Western Cotton Research

Laboratory, 4135 East Broadway Road, Phoenix, Arizona 85040, United States.  
Received 11/30/1996.

**PI 595771. *Hibiscus aneutha*** Craven & F. D. Wilson, nom. invalidum  
Wild. 3085; A94-1426; 276. Collected 05/02/1990 in Northern Territory,  
Australia. Kakadu National Park, 0.5 km N of Jim Jim Campground.

The following were collected by Q. Jones, USDA-ARS, Plant Industry Station,  
New Crops Research Branch, Crops Research Division, Beltsville, Maryland  
20705-2350, United States. Donated by F. Douglas Wilson, USDA, ARS, Western  
Cotton Research Laboratory, 4135 East Broadway Road, Phoenix, Arizona 85040,  
United States. Received 11/30/1996.

**PI 595772. *Hibiscus diversifolius*** Jacq.  
Wild. 6949; A75-1144; 113. Collected 02/13/1969 in Kenya. In papyrus  
swamp along Fort Hall road, 31 miles N of Nairobi. Large, much-branched  
shrub to 10 ft. Stems aculeate with broad based spines. Color rusty.  
Flowers to 3 inches across, yellow with purple center.

The following were developed by P. Stephen Baenziger, University of Nebraska,  
Department of Agronomy, 330 Keim Hall, Lincoln, Nebraska 68583-0915, United  
States. Received 11/15/1996.

**PI 595773. *Triticum aestivum*** L., nom. cons.  
Breeding. Pureline. NE86501; NSGC 6137. Pedigree - Colt/Cody. Taller  
wheat, similar in height to Cody and Centura, with moderately strong  
straw. Susceptible to leaf rust, soilborne mosaic virus, and wheat  
streak mosaic virus. Resistant to stem rust (contains genes Sr6, Sr17,  
and Sr24); and moderately resistant to Hessian fly. Maturity medium.

The following were collected by John Bamberg, USDA, ARS, Potato Introduction  
Station, Peninsula Experiment Station, Sturgeon Bay, Wisconsin 54235, United  
States. Received 09/25/1996.

**PI 595774. *Solanum fendleri*** A. Gray  
Wild. BAM 41. Collected 08/16/1996 in New Mexico, United States.  
Elevation 2375 m. Grant Co. Near Truth or Consequences. W of junction  
of Rt 25 and 152 to Iron Creek campground. Near the banks of the creek  
right at both sides of the entrance. Same site as BAM 26. Shade among  
rocks and grass under trees along the creek. Plants flowering and up to  
24 inches tall. Collected 4 natural fruit.

**PI 595775. *Solanum jamesii*** Torrey  
Wild. BAM 42. Collected 08/16/1996 in New Mexico, United States.  
Elevation 2508 m. Sierra Co. Near Truth or Consequences. Emory Pass  
lookout W of Hillsboro on Rt 152 W from Rt 25. At 30 and 210 degree  
compass within 100 ft of the parking lot. Growing in moist gravelly  
soil. Plants small (<6") with no berries and few flowers. Collected  
plants.

**PI 595776. *Solanum fendleri*** A. Gray  
Wild. BAM 43. Collected 08/16/1996 in New Mexico, United States.

Elevation 2508 m. Sierra Co. Near Truth or Consequences. Emory Pass lookout W of Hillsboro on 152 W of 25. At 330 compass within 50 ft of parking lot. Growing in moist humus soil. Some plants over 12" and flowering, but no fruit. Others small. Collected plants.

**PI 595777. *Solanum jamesii* Torrey**

Wild. BAM 44. Collected 08/16/1996 in New Mexico, United States. Elevation 1739 m. Dona Ana Co. Near Las Cruces. N on Rt 70 past Organ to San Augustin Pass overlook. Beside E side of footpath to overlook. Growing beside footpath under brush in dry gravelly/sandy soil. Small plants, no flowers, but one plant collected with 3 immature berries. Collected plants.

**PI 595778. *Solanum jamesii* Torrey**

Wild. BAM 45. Collected 08/16/1996 in Texas, United States. Elevation 1800 m. El Paso Co. Near El Paso. On Transmountain road (Loop 375) E of Rt 10 (about 6 miles S of NM border). Over top of pass to the roadside pulloff where hiking path leads up N facing canyon. About half way up the canyon along path. Growing among rocks in and beside the trail. Small plants up to 6 inches.

**PI 595779. *Solanum fendleri* A. Gray**

Wild. BAM 46. Collected 08/18/1996 in Texas, United States. Elevation 1550 m. Jeff Davis Co. Near Ft. Davis. On Rt 118 between McDonald Observatory and Madera Canyon (L.E. Wood Picnic area). At 2.4 miles S of Madera Canyon where creek crosses the road (flood gauge). Just off SW side of road. Growing among grass and large (2-3 ft) boulders in moist leaf mulch. One group of 5-6 plants in leaf mulch in crotch of tree about 2 ft. above ground. Many plants large to 20" with flowers but no fruit. Some looked stressed (dry?), grazed (rabbits?), chewed by insects and mites. Collected plants.

**PI 595780. *Solanum jamesii* Torrey**

Wild. BAM 47. Collected 08/18/1996 in Texas, United States. Elevation 1550 m. Jeff Davis Co. Near Ft. Davis. On 118 at Madera Canyon (L.E. Wood picnic area). Near Canyon (S) edge of the and across Rt 118 in ditch. Growing in shade in grass under Ponderosas and in rich, moist soil among ivy-like vegetation in ditch. Plants in ditch stressed. Most small (<6") without flowers. Collected plants, one with one immature fruit.

**PI 595781. *Solanum fendleri* A. Gray**

Wild. BAM 48. Collected 08/18/1996 in Texas, United States. Elevation 1550 m. Jeff Davis Co. Near Ft. Davis. On 118 at Madera Canyon (L.E. Wood picnic area). Along canyon edge of park near the fenceline. Growing in shade under Ponderosas and full sun in grass among rocks near fence along canyon edge. Many large plants (to 30"), abundant flowering and many mature and immature fruit. Collected plants, 70 fruit, and bee observed to be working flowers on these plants.

**PI 595782. *Solanum jamesii* Torrey**

Wild. BAM 49. Collected 08/19/1996 in Texas, United States. Elevation 1900 m. Culberson Co. In Guadalupe National Park. Around campsites and picnic area along creek just S of ranger station. In shade around picnic tables and campsites and among grass along W creek banks. In moist dark

humus soil. Abundant. Typically small (<4") but to 12". Rarely flowering. Collected plants.

**PI 595783. *Solanum jamesii* Torrey**

Wild. BAM 50. Collected 08/20/1996 in New Mexico, United States. Elevation 2100 m. San Miguel Co. Near jct of 40 and 285. Ca. 6 miles N of Clines Corners at roadside picnic place on 285 (between 254 and 255 mile markers). About 50 paces N of parking lot only under one juniper. Growing in grass under juniper at the very N edge of a belt of the typical juniper/grass desert habitat for *jamesii*. About 30, mostly large plants to 14". Looking stressed. No flowers or fruits. Collected plants.

**PI 595784. *Solanum jamesii* Torrey**

Wild. BAM 51. Collected 08/20/1996 in New Mexico, United States. Elevation 2098 m. San Miguel Co. Near Santa Fe at Pecos. About 1 mile N of Pecos on 63 at Lisboa Springs Fish Hatchery. In ditch on N side of hatchery entrance and across Rt 63. Growing in shade under trees in ditch and under junipers in needle mulch. This is in a moist canyon with alpine vegetation (e.g. Ponderosas) nearby. Very abundant. Mostly small plants to 9" looking very green and robust. No flowering. Collected plants.

The following were collected by Alfonso Del Rio, University of Wisconsin, Department of Horticulture, 1575 Linden Drive, Madison, Wisconsin 53706, United States; John Bamberg, USDA, ARS, Potato Introduction Station, Peninsula Experiment Station, Sturgeon Bay, Wisconsin 54235, United States; Max W. Martin, University of Wisconsin, Potato Introduction Station, 4312 Hwy 42, Sturgeon Bay, Wisconsin 54235, United States. Received 09/25/1996.

**PI 595785. *Solanum jamesii* Torrey**

Wild. BDM 52. Collected 09/19/1996 in Colorado, United States. Latitude 37 deg. 8' N. Longitude 104 deg. 40' W. Elevation 1950 m. Las Animas Co. Near Trinidad. Off route 12, about 2 miles N on Burro Canyon Road. Just before first bridge over the river. Growing under juniper and pinon pines and around rocks. Small plants to 5 inches, stressed. Collected 1 small plant and 24 tubers.

**PI 595786. *Solanum jamesii* Torrey**

Wild. BDM 53. Collected 09/19/1996 in Colorado, United States. Latitude 37 deg. 8' N. Longitude 104 deg. 40' W. Elevation 1950 m. Las Animas Co. Near Trinidad. About 3.5 miles N on Burro Canyon Road from Rt 12. Just before the cattle crossing. Growing under juniper and pinon pines. Near banks of river. Rare. Small plants to 2-3 inches, stressed. Collected 3 plants and 12 tubers.

**PI 595787. *Solanum jamesii* Torrey**

Wild. BDM 54. Collected 09/21/1996 in Utah, United States. Latitude 37 deg. 42' N. Longitude 109 deg. 40' W. Elevation 1620 m. San Juan Co. Near Blanding. About 9 miles SW of Blanding on Rt 95, then 5 miles N on S Cottonwood Rd, then 4.9 miles up Allen Canyon. Dark sandy soil under cottonwood leaf mulch, in sage stand, less than 50 feet from creek, under large cottonwood trees. In semi-circle of limestone cliffs about 80 feet high. About 200 plants in a 50 foot radius. Plants 2 to 10

inches high, a few flowering. Apparently all tubers. Collected 24 tubers and 17 plants.

**PI 595788. *Solanum jamesii* Torrey**

Wild. BDM 55. Collected 09/22/1996 in New Mexico, United States. Latitude 35 deg. 56' N. Longitude 107 deg. 6' W. Elevation 1950 m. Sandoval Co. Between Torreon and Cuba on Rt 197. At 0.7 miles W of powerline, just over 11 miles W of Cuba. Growing in sandy soil under low hanging juniper branches, below outcrop of large round boulders. Plants mostly old, some completely brown. Tubers mature, apparently tubers. Plants 4 inches to 1 foot and yellowing, no flowers or fruit. Collected 3 plants and 18 tubers.

The following were developed by Darrell M. Wesenberg, USDA, ARS, National Small Grains Germplasm, Research Facility, Aberdeen, Idaho 83210, United States; Idaho Agric. Exp. Station, Aberdeen, Idaho, United States. Received 10/07/1996.

**PI 595789. *Hordeum vulgare* L. ssp. *vulgare***

Breeding. Pureline. 88Ab536-B; NSGC 6134. Pedigree - NE76129/Morex//Morex. Released 12/1995. Six row winter barley with superior malting quality.

The following were developed by Sakata Seed Corporation, Japan. Received 05/10/1996.

**PI 595790. *Brassica oleracea* L.**

Cultivar. "IUF-2". Pedigree - Male parent of SBC4406 (NSL 314976).

**PI 595791. *Brassica oleracea* L.**

Cultivar. "KI-13". Pedigree - Male parent of SBC4407 (PI 591570).

The following were collected by R. Pullen, CSIRO, Division of Plant Industry, Plant Introd. and Seed Exchange Unit, Canberra City, Austr. Capital Terr., Australia; J. Grant, CSIRO, Canberra, Austr. Capital Terr., Australia. Donated by A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia. Received 09/20/1996.

**PI 595792. *Glycine argyrea* Tind.**

Wild. 0513; G 1621; IL 1296; CANB454340. Collected 07/01/1983 in Queensland, Australia. Latitude 25 deg. 55' 0'' S. Longitude 153 deg. 6' 0'' E. Elevation 5 m. 1 km south of Rainbow Beach Village. Chromosome number I.

**PI 595793. *Glycine argyrea* Tind.**

Wild. 0529; G 1632; IL 1297. Collected 07/03/1983 in Queensland, Australia. Latitude 25 deg. 57' 0'' S. Longitude 153 deg. 6' 0'' E. Elevation 80 m. 4 km south of Rainbow Beach on road to Freshwater. Chromosome number I.

**PI 595794. *Glycine argyrea* Tind.**

Wild. G 1679; IL 1298; CANB454312. Collected 07/01/1983 in Queensland,



Australia. Latitude 25 deg. 57' 0'' S. Longitude 153 deg. 6' 0'' E.  
Elevation 80 m. 4 km south of Rainbow Beach, SW of Cooloola sand hills.  
Chromosome number I.

**PI 595795. *Glycine argyrea* Tind.**

Wild. 0779; G 2000; ID#11108; CANB355558; IL 1299. Collected 12/17/1984 in Queensland, Australia. Latitude 25 deg. 58' 0'' S. Longitude 153 deg. 9' 0'' E. Elevation 120 m. Double Island Point Road, 2 km south of Rainbow Beach, near Noosa Head. Chromosome number I.

**PI 595796. *Glycine argyrea* Tind.**

Wild. 0757+; G 2004; ID#11100+; CANB355550; IL 1302. Collected 12/16/1984 in Queensland, Australia. Latitude 26 deg. 1' 0'' S. Longitude 153 deg. 9' 0'' E. Elevation 160 m. Freshwater Ranger Station, along Rainbow Beach Road, near Noosa Head. Chromosome number I.

**PI 595797. *Glycine argyrea* Tind.**

Wild. 0780+; G 2005; IL 1303. Collected 12/17/1984 in Queensland, Australia. Latitude 25 deg. 54' 0'' S. Longitude 153 deg. 6' 0'' E. Elevation 120 m. Rainbow Beach, track between Mikado Motel and Carlo Sandblow, near Noosa Head. Chromosome number I.

**PI 595798. *Glycine argyrea* Tind.**

Wild. 0745; G 2010; ID#11097; CANB355553; IL 1304. Collected 12/15/1984 in Queensland, Australia. Latitude 25 deg. 58' 0'' S. Longitude 153 deg. 10' 0'' E. Elevation 120 m. 4 km SSW of double Island Point, 50 m north of walking track, near Noosa Head. Chromosome number I.

The following were collected by G. Cunningham; P. Milthorpe. Donated by T.E. Carter, USDA, ARS, North Carolina State University, 3127 Ligon Street Box 7631, Raleigh, North Carolina 27695-7631, United States; Jim M. Anderson, North Carolina State Univ., Crop Science Department, Raleigh, North Carolina 27650, United States. Received 09/20/1996.

**PI 595799. *Glycine canescens* F. J. Herm.**

Wild. G 1302; IL 1290; NC 601.18; CANB263751; MpRf457742. Collected 05/01/1977 in New South Wales, Australia. Latitude 32 deg. 18' 0'' S. Longitude 146 deg. 34' 0'' E. Elevation 350 m. 113.6 km north of Condobolin, between Bobadah and Nymagee. Chromosome number I.

**PI 595800. *Glycine canescens* F. J. Herm.**

Wild. G 1351; IL 1291; NC 601.20; CANB339310; MpRf619331. Collected 05/01/1977 in New South Wales, Australia. Latitude 29 deg. 37' 0'' S. Longitude 143 deg. 4' 0'' E. Elevation 97 m. "Urella Downs", property 100 km east of Milparinka. Chromosome number I.

The following were collected by William J. Kenworthy, University of Maryland, Department of Agronomy, H.J. Patterson Hall, College Park, Maryland 20742, United States; A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; J. Grace, CSIRO, Division of Plant Industry, GPO Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; M.J. Doyle, CSIRO, Canberra, Austr. Capital Terr., Australia. Donated by A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box

1600, Canberra, Austr. Capital Terr. 2601, Australia. Received 09/20/1996.

**PI 595801. *Glycine clandestina* Wendl.**

Wild. GBDK 625/1-4; G 2141; IL 0954. Collected 08/09/1985 in Queensland, Australia. Latitude 26 deg. 21' 0'' S. Longitude 150 deg. 5' 0'' E. Elevation 350 m. Juandah Creek, Giligulal. Chromosome number I.

The following were collected by William J. Kenworthy, University of Maryland, Department of Agronomy, H.J. Patterson Hall, College Park, Maryland 20742, United States; J. Grace, CSIRO, Division of Plant Industry, GPO Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; M.J. Doyle, CSIRO, Canberra, Austr. Capital Terr., Australia. Donated by A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia. Received 09/20/1996.

**PI 595802. *Glycine clandestina* Wendl.**

Wild. GBDK 638/9; G 2145; IL 0958. Collected 08/11/1985 in Queensland, Australia. Latitude 24 deg. 59' 0'' S. Longitude 148 deg. 23' 0'' E. Elevation 300 m. Ingelara, 13.6 km west of Wyseby. Chromosome number I.

The following were collected by William J. Kenworthy, University of Maryland, Department of Agronomy, H.J. Patterson Hall, College Park, Maryland 20742, United States; A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; J. Grace, CSIRO, Division of Plant Industry, GPO Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; M.J. Doyle, CSIRO, Canberra, Austr. Capital Terr., Australia. Donated by A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia. Received 09/20/1996.

**PI 595803. *Glycine clandestina* Wendl.**

Wild. GBDK 685/1,2; G 2154; IL 0967. Collected 08/16/1985 in Queensland, Australia. Latitude 24 deg. 50' 0'' S. Longitude 146 deg. 16' 0'' E. Elevation 450 m. Tambo Airport, 7 km Northeast of Tambo. Chromosome number I.

The following were collected by A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; J. Grace, CSIRO, Division of Plant Industry, GPO Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; J. Grant, CSIRO, Canberra, Austr. Capital Terr., Australia. Donated by A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia. Received 09/20/1996.

**PI 595804. *Glycine clandestina* Wendl.**

Wild. GBG 911; G 2364; IL 0997. Collected 10/25/1985 in South Australia, Australia. Latitude 31 deg. 18' 0'' S. Longitude 138 deg. 41' 0'' E. Elevation 430 m. Enorama Creek, 7.5 km north of Oraprania National Park Headquarters. Chromosome number I.

**PI 595805. *Glycine clandestina* Wendl.**

Wild. GBG 912; G 2365; IL 0998. Collected 10/26/1985 in South Australia, Australia. Latitude 31 deg. 7' 0'' S. Longitude 138 deg. 41' 0'' E.

Elevation 550 m. Butlers Creek, 3.3 km south of Blinman. Chromosome number I.

**PI 595806. *Glycine clandestina* Wendl.**

Wild. GBG 913; G 2366; IL 0999. Collected 10/26/1985 in South Australia, Australia. Latitude 31 deg. 4' 0'' S. Longitude 138 deg. 37' 0'' E. Elevation 55 m. Glass's Gorge, 6.2 km northwest of Blinman, 50 m above the road. Chromosome number I.

**PI 595807. *Glycine clandestina* Wendl.**

Wild. GBG 914; G 2367; IL 1000. Collected 10/26/1985 in South Australia, Australia. Latitude 31 deg. 6' 0'' S. Longitude 138 deg. 50' 0'' E. Elevation 500 m. Erengunda Creek, 21 km east of Blinman. Chromosome number 040.

**PI 595808. *Glycine clandestina* Wendl.**

Wild. GBG 915; G 2368; IL 1001. Collected 10/26/1985 in South Australia, Australia. Latitude 30 deg. 58' 0'' S. Longitude 139 deg. 14' 0'' E. Elevation 350 m. Chambers Gorge, 73 km east of Blinman. Chromosome number I.

**PI 595809. *Glycine clandestina* Wendl.**

Wild. GBG 924; G 2376; IL 1009. Collected 10/28/1985 in South Australia, Australia. Latitude 31 deg. 21' 0'' S. Longitude 138 deg. 33' 0'' E. Elevation 300 m. Brachina gorge, 34 km southeast of Parachilna. Chromosome number I.

**PI 595810. *Glycine clandestina* Wendl.**

Wild. GBG 926; G 2378; IL 1011. Collected 10/28/1985 in South Australia, Australia. Latitude 31 deg. 26' 0'' S. Longitude 138 deg. 38' 0'' E. Elevation 550 m. Cadbury Springs, 20 km west of Wilpena Headquarters. Chromosome number I.

**PI 595811. *Glycine clandestina* Wendl.**

Wild. GBG 927; G 2379; IL 1012. Collected 10/28/1985 in South Australia, Australia. Latitude 31 deg. 33' 0'' S. Longitude 138 deg. 35' 0'' E. Elevation 650 m. Wilpena Pond, path 5 to lookout at pond. Chromosome number I.

**PI 595812. *Glycine clandestina* Wendl.**

Wild. GBG 929; G 2381; IL 1014. Collected 10/29/1985 in South Australia, Australia. Latitude 32 deg. 28' 0'' S. Longitude 138 deg. 55' 0'' E. Elevation 200 m. Saltia Creek, 19.9 km east of Port Augusta. Chromosome number I.

**PI 595813. *Glycine clandestina* Wendl.**

Wild. GBG 941; G 2391; IL 1024. Collected 10/31/1985 in South Australia, Australia. Latitude 33 deg. 42' 0'' S. Longitude 138 deg. 6' 0'' E. Elevation 200 m. Telowie Gorge, 10 km east of Port Greville. Chromosome number I.

The following were collected by P. Broue, CSIRO, Division of Plant Industry, Section of Genetic Resources, Canberra City, Austr. Capital Terr., Australia; Theodore Hymowitz, University Illinois, Department of Crop Sciences, Urbana,

Illinois 61801, United States. Donated by A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia. Received 09/20/1996.

**PI 595814. *Glycine cyrtoloba* Tind.**

Wild. 0219; G 1276; IL 1310. Collected 02/17/1977 in Queensland, Australia. Latitude 20 deg. 49' 0'' S. Longitude 149 deg. 17' 0'' E. Elevation 35 m. Brampton Island on Circuit Path to Turtle Bay. Chromosome number I.

The following were collected by R. Pullen, CSIRO, Division of Plant Industry, Plant Introd. and Seed Exchange Unit, Canberra City, Austr. Capital Terr., Australia. Donated by A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia. Received 09/20/1996.

**PI 595815. *Glycine cyrtoloba* Tind.**

Wild. G 2489; IL 1324. Collected 08/22/1986 in Queensland, Australia. Latitude 27 deg. 26' 0'' S. Longitude 153 deg. 33' 0'' E. Elevation 76 m. North Stradbroke Island, near Point Lookout. Chromosome number I.

The following were collected by William J. Kenworthy, University of Maryland, Department of Agronomy, H.J. Patterson Hall, College Park, Maryland 20742, United States; A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; J. Grace, CSIRO, Division of Plant Industry, GPO Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; M.J. Doyle, CSIRO, Canberra, Austr. Capital Terr., Australia. Donated by A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia. Received 09/20/1996.

**PI 595816. *Glycine falcata* Benth.**

Wild. GBDK 661; G 2082; IL 1038. Collected 08/14/1985 in Queensland, Australia. Latitude 23 deg. 5' 0'' S. Longitude 148 deg. 1' 0'' E. Elevation 200 m. Capella Creek, 1 km north of Capella. Chromosome number 040.

**PI 595817. *Glycine falcata* Benth.**

Wild. GBDK 681; G 2087; IL 1041. Collected 08/16/1985 in Queensland, Australia. Latitude 24 deg. 26' 0'' S. Longitude 145 deg. 27' 0'' E. Elevation 270 m. Blackall Airport, 3.2 km southwest of Blackall. Chromosome number 040.

The following were collected by A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; J. Grace, CSIRO, Division of Plant Industry, GPO Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; Theodore Hymowitz, University Illinois, Department of Crop Sciences, Urbana, Illinois 61801, United States. Donated by A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia. Received 09/20/1996.

**PI 595818. *Glycine pindanica* Tind. & Craven**

Wild. 01348; G 2951; IL 1285; CANB 464082; ref#279756; id#0893.

Collected 09/26/1993 in Western Australia, Australia. Latitude 17 deg. 29' 0'' S. Longitude 122 deg. 27' 0'' E. Elevation 200 m. 61.6 km north of Broome PO towards Beagle Bay. Chromosome number I.

The following were collected by J. Grace, CSIRO, Division of Plant Industry, GPO Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; R. Heriot. Donated by T.E. Carter, USDA, ARS, North Carolina State University, 3127 Ligon Street Box 7631, Raleigh, North Carolina 27695-7631, United States; Jim M. Anderson, North Carolina State Univ., Crop Science Department, Raleigh, North Carolina 27650, United States. Received 09/20/1996.

**PI 595819. *Glycine tabacina* (Labill.) Benth.**

Wild. G 1298; IL 1289; NC 601.17. Collected 03/02/1977 in New South Wales, Australia. Latitude 33 deg. 34' 0'' S. Longitude 148 deg. 38' 0'' E. Elevation 274 m. 4.8 km from Canowindra to Eugowra on stock route. Chromosome number I.

The following were collected by J. Grace, CSIRO, Division of Plant Industry, GPO Box 1600, Canberra, Austr. Capital Terr. 2601, Australia. Donated by T.E. Carter, USDA, ARS, North Carolina State University, 3127 Ligon Street Box 7631, Raleigh, North Carolina 27695-7631, United States; Jim M. Anderson, North Carolina State Univ., Crop Science Department, Raleigh, North Carolina 27650, United States. Received 09/20/1996.

**PI 595820. *Glycine tabacina* (Labill.) Benth.**

Wild. G 1159; IL 1292; NC 301.13; ID# 045. Collected 04/11/1976 in New South Wales, Australia. Latitude 31 deg. 27' 0'' S. Longitude 152 deg. 55' 0'' E. Elevation 20 m. Port Macquarie, road to Marineland, on cliff face. Chromosome number (080).

The following were collected by P. Milthorpe. Donated by T.E. Carter, USDA, ARS, North Carolina State University, 3127 Ligon Street Box 7631, Raleigh, North Carolina 27695-7631, United States; Jim M. Anderson, North Carolina State Univ., Crop Science Department, Raleigh, North Carolina 27650, United States. Received 09/20/1996.

**PI 595821. *Glycine tabacina* (Labill.) Benth.**

Wild. G 1257; IL 1293; NC 301.17. Collected 12/01/1976 in New South Wales, Australia. Latitude 33 deg. 29' 0'' S. Longitude 145 deg. 32' 0'' E. Elevation 305 m. Hillston, Milthorpe's property. Chromosome number (080).

The following were collected by P.G. Harrison, Department of Primary Production, Darwin, Northern Territory, Australia. Donated by A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia. Received 09/20/1996.

**PI 595822. *Glycine tomentella* Hayata**

Wild. G 2349; IL 0945. Collected 06/24/1984 in Northern Territory, Australia. Latitude 15 deg. 39' 0'' S. Longitude 130 deg. 29' 0'' E. Elevation 100 m. Timber Creek. Chromosome number I.

The following were donated by A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia. Received 09/20/1996.

**PI 595823. *Glycine tomentella* Hayata**

Wild. G 2437; IL 0946; BGCH 0335. Collected 06/30/1984 in Western Australia, Australia. Latitude 16 deg. 31' 0'' S. Longitude 126 deg. 21' 0'' E. Elevation 280 m. Hann River Campsite. Chromosome number I.

The following were collected by William J. Kenworthy, University of Maryland, Department of Agronomy, H.J. Patterson Hall, College Park, Maryland 20742, United States; A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; J. Grace, CSIRO, Division of Plant Industry, GPO Box 1600, Canberra, Austr. Capital Terr. 2601, Australia; M.J. Doyle, CSIRO, Canberra, Austr. Capital Terr., Australia. Donated by A.D.H. Brown, CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra, Austr. Capital Terr. 2601, Australia. Received 09/20/1996.

**PI 595824. *Glycine tomentella* Hayata**

Wild. GBDK 648/1,3; G 2313; IL 1200. Collected 08/12/1985 in Queensland, Australia. Latitude 24 deg. 38' 0'' S. Longitude 148 deg. 20' 0'' E. Elevation 213 m. Sandy Creek, 40 km west of Rolleston. Chromosome number I.

The following were developed by Garst Seed Company, United States. Received 09/13/1996.

**PI 595825. *Zea mays* L. ssp. *mays***

Cultivar. "ZS01539". PVP 9600274.

The following were developed by Pioneer Hi-Bred International, Inc., United States. Received 08/30/1996.

**PI 595826. *Glycine max* (L.) Merr.**

Cultivar. "9245". PVP 9600384.

**PI 595827. *Glycine max* (L.) Merr.**

Cultivar. "9511". PVP 9600385.

**PI 595828. *Glycine max* (L.) Merr.**

Cultivar. "9282". PVP 9600386.

**PI 595829. *Glycine max* (L.) Merr.**

Cultivar. "9234". PVP 9600387.

**PI 595830. *Glycine max* (L.) Merr.**

Cultivar. "9294". PVP 9600388.

**PI 595831. *Glycine max* (L.) Merr.**

Cultivar. "9395". PVP 9600389.

The following were developed by Progeny Advanced Genetics, Inc., Salinas, California, United States. Received 09/11/1996.

**PI 595832. *Lactuca sativa* L.**  
Cultivar. "CAESAR". PVP 9600390.

The following were developed by Regents of the University of Minnesota, Minnesota, United States. Received 09/16/1996.

**PI 595833. *Poa annua* L.**  
Cultivar. "MN42". PVP 9600392.

**PI 595834. *Poa annua* L.**  
Cultivar. "MN117". PVP 9600393.

**PI 595835. *Poa annua* L.**  
Cultivar. "MN184". PVP 9600394.

**PI 595836. *Poa annua* L.**  
Cultivar. "MN208". PVP 9600395.

**PI 595837. *Poa annua* L.**  
Cultivar. "MN234". PVP 9600396.

The following were developed by Hollar Seeds, Inc., United States. Received 09/19/1996.

**PI 595838. *Cucurbita pepo* L.**  
Cultivar. "SAFFRON PROLIFIC STRAIGHTNECK". PVP 9600397.

The following were developed by Seminis Vegetable Seeds, Inc., United States. Received 09/19/1996.

**PI 595839. *Lactuca sativa* L.**  
Cultivar. "CORDOBA". PVP 9600398.

**PI 595840. *Lactuca sativa* L.**  
Cultivar. "SEVILLE". PVP 9600399.

**PI 595841. *Lactuca sativa* L.**  
Cultivar. "VENICE". PVP 9600400.

The following were developed by Terral Seed, Inc.. Received 09/23/1996.

**PI 595842. *Triticum aestivum* L., nom. cons.**  
Cultivar. "TERRAL TV8555". PVP 9600402.

The following were developed by R.L. Cooper, USDA-ARS, Ohio State University,

1680 Madison, Wooster, Ohio 44691-4096, United States; S.K. St. Martin, Ohio Agr. Exp. Sta., Ohio State University, Department of Agronomy, Wooster, Ohio 44691-4096, United States; A.J. Calip-DuBois, Ohio State University, Ohio Agricultural Res. and Develop. Ctr., Dept. of Horticulture and Crop Science, Columbus, Ohio 43210, United States; Ron Fioritto, Ohio State University, Ohio Agricultural Research & Development Center, Dept. of Horticulture & Crop Science, Wooster, Ohio 44691, United States; A.F. Schmitthenner, Ohio State University, Dept. of Plant Pathology, Columbus, Ohio 43210, United States; R.J. Martin, USDA, ARS, Ohio State University, Dept. of Food Science and Technology, Columbus, Ohio 43210, United States. Received 09/30/1996.

**PI 595843. *Glycine max* (L.) Merr.**

Cultivar. Pureline. "Flint". CV-362; PVP 9600408. Pedigree - GR8836 x Elgin 87. Maturity group II, growth indeterminate. Flowers purple, pubescence tawny, pods brown. Seeds dull yellow, hila black, mean content of 41.1% protein and 20.6% oil, size 16 mg seed-1. Excellent tolerance to *Phytophthora* root rot and carries Rps1-k allele which confers multi race resistance to *Phytophthora sojae*. Moderately susceptible to brown stem rot and susceptible to soybean cyst nematode.

The following were developed by Holden's Foundation Seeds, Inc, United States . Received 10/02/1996.

**PI 595844. *Zea mays* L. ssp. *mays***

Cultivar. "LH179". PVP 9700002.

**PI 595845. *Zea mays* L. ssp. *mays***

Cultivar. "LH236". PVP 9700003.

**PI 595846. *Zea mays* L. ssp. *mays***

Cultivar. "LH281". PVP 9700004.

**PI 595847. *Zea mays* L. ssp. *mays***

Cultivar. "LH290". PVP 9700005.

The following were developed by Mark E. Sorrells, Cornell University, Dept. of Plant Breeding & Biometry, 252 Emerson Hall, Ithaca, New York 14853-1902, United States. Received 10/10/1996.

**PI 595848. *Triticum aestivum* L., nom. cons.**

Cultivar. Pureline. "CAYUGA"; NY262-37-422. PVP 9700007. Pedigree - Geneva/Clark's Cream//Geneva. Soft white winter wheat. At booting flag leaf erect and twisted, stems waxy bloom and yellow-green, leaves yellow-green. At maturity stems hollow white. Spikes mid-dense, tapering, apically awnletted, length avg. 7-8 cm. Glumes white, length medium, wide, shoulder rounded, beak acute. Kernels ovate, cheeks rounded, brush medium, crease shallow and mid-deep. Seed length avg 6.3 mm, width 3.6 mm, 35 g/1000 seed. Resistance to preharvest sprouting. Moderate resistance to loose smut, powdery mildew, and wheat spindle streak mosaic virus. Susceptible to leaf rust and stripe rust.

The following were developed by C.F. Konzak, Washington State University,



Dept. of Agronomy & Soils, Pullman, Washington 99164-6420, United States.  
Received 10/10/1996.

**PI 595849. *Triticum turgidum* L.**  
Cultivar. "MEMDU". PVP 9700008.

The following were developed by F.M. Bourland, University of Arkansas, Dept. of Agronomy, PTSC 115, Fayetteville, Arkansas 72701, United States; Phil Tugwell, University of Arkansas, Entomology Department, Agriculture Building, Fayetteville, Arkansas 72701, United States; R.E. McGowen, Jr., University of Arkansas, Dept. of Agronomy and Plant Sci., Bldg. 115, Fayetteville, Arkansas 72701, United States. Received 10/18/1996.

**PI 595850. *Gossypium hirsutum* L.**  
Breeding. Pureline. ARKOT 8110. GP-663. Pedigree - Tamcot SP21S / PD6520 . Compared to DES 119, higher yields, similar maturity and lint fraction, but less favorable fiber quality. Leaves and stems glabrous. High resistance to tarnished plant bug, *Lygus lineolaris*. As resistant as DES 119 to bollworm (*Helicoverpa zea*) and tobacco budworm (*Heliothis virescens*) complex. Resistant to all U.S. races of *Xanthomonas campestris* pv. *malvacearum*, and as resistant as the resistant check to fusarium wilt (*Fusarium oxysporum* f. sp. *vasinfectum*).

The following were developed by F.M. Bourland, University of Arkansas, Dept. of Agronomy, PTSC 115, Fayetteville, Arkansas 72701, United States; R.E. McGowen, Jr., University of Arkansas, Dept. of Agronomy and Plant Sci., Bldg. 115, Fayetteville, Arkansas 72701, United States; J.T. Johnson, University of Arkansas, Dept. of Agronomy and Plant Sci., Bldg. 115, Fayetteville, Arkansas 72701, United States. Received 10/18/1996.

**PI 595851. *Gossypium hirsutum* L.**  
Breeding. Pureline. ARKOT 8303. GP-664. Pedigree - Miscot 7801 / Miscot 7824. Compared to DES 119, slightly earlier maturing, similar lint fraction and micronaire, and superior fiber length and strength. Leaf pubescence similar to Stoneville 132 and less hirsute than DES 119. Best adapted to silty loam soils of northern Mississippi River delta. As resistant as DES 119 to tarnished plant bug, *Lygus lineolaris*, bollworm (*Helicoverpa zea*), and tobacco budworm (*Heliothis virescens*) complex. Resistant to all U.S. races of *Xanthomonas campestris* pv. *malvacearum*, and as resistant as the resistant check to fusarium wilt (*Fusarium oxysporum* f. sp. *vasinfectum*).

**PI 595852. *Gossypium hirsutum* L.**  
Breeding. Pureline. ARKOT 8102. GP-665. Pedigree - Stoneville 825 / Miscot T8-27. Similar to DES 119 in yield, maturity, lint fraction, and micronaire, but inferior in fiber length, strength, and elongation. Leaf pubescence similar to Stoneville 132 and less hirsute than DES 119. As resistant as DES 119 to tarnished plant bug, *Lygus lineolaris*. Resistant to all U.S. races of *Xanthomonas campestris* pv. *malvacearum*, and as resistant as the resistant check to fusarium wilt (*Fusarium oxysporum* f. sp. *vasinfectum*).

**PI 595853. *Gossypium hirsutum* L.**

Breeding. Pureline. ARKOT 8506. GP-666. Pedigree - Miscot 7803-52 / Miscot T8-27. Compared to DES 119, earlier maturing with similar fiber properties and pubescence, but yielded slightly less with lower lint fraction. As resistant as DES 119 to tarnished plant bug, *Lygus lineolaris*. Resistant to all U.S. races of *Xanthomonas campestris* pv. *malvacearum*, as resistant as the resistant check to fusarium wilt (*Fusarium oxysporum* f.sp. *vasinfectum*).

**PI 595854. *Gossypium hirsutum* L.**

Breeding. Pureline. ARKOT 8514. GP-667. Pedigree - Miscot 7801 / Miscot T8-27. Similar to DES 119 in maturity, lint fraction, fiber length, and leaf pubescence, but slightly lower yield, finer micronaire, and lower fiber strength and elongation. Resistant as DES 119 to tarnished plant bug, *Lygus lineolaris*, bollworm (*Helicoverpa zea*), and tobacco budworm (*Heliothis virescens*) complex. Resistant to all U.S. races of *Xanthomonas campestris* pv. *malvacearum*, and as resistant as the resistant check to fusarium wilt (*Fusarium oxysporum* f.sp. *vasinfectum*).

The following were donated by Universidad De San Carlos De Guatemala, Ciudad Universitaria, Guatemala. Received 03/27/1984.

**PI 595855. *Ipomoea* sp.**

Cultivar. 143; C 13739; Q 24514; CAMOTE MORADO.

**PI 595856. *Ipomoea* sp.**

Cultivar. 441; C 13739; Q 24520; CAMOTE REMOLACHA.

**PI 595857. *Ipomoea* sp.**

Cultivar. 443; C 13739; Q 24521; CAMOTE AMARILLO.

**PI 595858. *Ipomoea* sp.**

Cultivar. Franja B; C 13739; Q 24534; CAMOTE BLANCO.

The following were donated by James W. Moyer, North Carolina State University, Department of Plant Pathology, Box 7616, Raleigh, North Carolina 27695-7616, United States. Received 01/07/1985.

**PI 595859. *Ipomoea batatas* (L.) Lam. var. *batatas***

Uncertain. 406; Q 25346.

**PI 595860. *Ipomoea batatas* (L.) Lam. var. *batatas***

Uncertain. 407; Q 25347.

**PI 595861. *Ipomoea batatas* (L.) Lam. var. *batatas***

Uncertain. 512; Q 25348.

The following were donated by F. Martin, USDA-ARS, Tropical Research Station, P.O. Box 70, Mayaguez, Puerto Rico. Received 04/27/1987.

**PI 595862. *Ipomoea batatas* (L.) Lam. var. *batatas***

Cultivar. "DUNE"; SPV-73; BE-1227; Q 26770. Exceptional clone, white fleshed, not sweet, very dry, very large roots of industrial potential,

starch, feed. Potential as an early variety (10 weeks).

The following were donated by Dan Austin, Florida Atlantic University, Department of Biological Services, Boca Raton, Florida 33431, United States. Received 10/26/1987.

**PI 595863. *Ipomoea batatas* (L.) Lam. var. *batatas***  
Cultivar. "CUBA 6"; BE-1532; Q 26992. Collected in Cuba.

**PI 595864. *Ipomoea batatas* (L.) Lam. var. *batatas***  
Cultivar. "COLECCION BAJO PAPALOAPAN"; BE-1532; Q 26996. Collected in Mexico. Tuxtepec, Oax.

**PI 595865. *Ipomoea batatas* (L.) Lam. var. *batatas***  
Cultivar. "CUBA 9"; BE-1532; Q 26997. Collected in Cuba.

The following were donated by Francisco Vazquez, USDA, ARS, Tropical Agric. Research Station, Box 70, Mayaguez, Puerto Rico. Received 08/08/1988.

**PI 595866. *Ipomoea batatas* (L.) Lam. var. *batatas***  
Uncertain. SPV-52; BE-1925; C21043; Q 27222.

**PI 595867. *Ipomoea batatas* (L.) Lam. var. *batatas***  
Uncertain. SPV-95; BE-1925; C21043; Q 27227.

The following were donated by K. Komaki, Department of Upland Farming, Kyushu National Agric. Experiment Sta., 6644 Yokoichi-cho, Miyakonojo, Miyazaki, Japan. Received 11/15/1989.

**PI 595868. *Ipomoea batatas* (L.) Lam. var. *batatas***  
Cultivar. "BENIHAYATO"; Q 27837.

The following were donated by Gvh Jackson, South Pacific Commision, Plant Protection Service, Private Mail Bag, Suva, Fiji. Received 06/13/1991.

**PI 595869. *Ipomoea batatas* (L.) Lam. var. *batatas***  
Cultivar. "HONIARA"; Q 28457. Scab resistant.

The following were donated by Peter Beetham, ACIAR Sweet Potato Project, Burnley Gardens, Swan Street, Burnley, Australia. Received 10/07/1991.

**PI 595870. *Ipomoea batatas* (L.) Lam. var. *batatas***  
Cultivar. "G113-2B"; U107; BE-3654; Q 28745. Collected in Philippines.

The following were donated by Australian Department of Agriculture, Institute of Plant Sciences, Burnley Gardens, Swan Street, Burnley, Australia. Received 02/09/1993.

**PI 595871. *Ipomoea batatas* (L.) Lam. var. *batatas***

Uncertain. IPS 153; BE-4494; Q 29652.

**PI 595872. *Ipomoea batatas* (L.) Lam. var. *batatas***  
Uncertain. IPS 184; BE-4494; Q 29666.

The following were donated by International Potato Center, Apartado 5969,  
Lima, Lima, Peru. Received 08/10/1994.

**PI 595873. *Ipomoea batatas* (L.) Lam. var. *batatas***  
Cultivar. "Xushu 18"; CIP 440025; BE-7184; Q 35192.

**PI 595874. *Ipomoea batatas* (L.) Lam. var. *batatas***  
Cultivar. "Huarmeyano"; CIP 420020; 4843 USA; RCB IN-262; BE-7445; Q 35646.

**PI 595875. *Ipomoea batatas* (L.) Lam. var. *batatas***  
Cultivar. "Zapallo"; CIP 420027; 4849 USA; DLP 1914; BE-7445; Q 35649.

**PI 595876. *Ipomoea batatas* (L.) Lam. var. *batatas***  
Cultivar. "IITA-TIB 10"; CIP 440032; 4832 USA; TIB 10; BE-7445; Q 35650.

**PI 595877. *Ipomoea batatas* (L.) Lam. var. *batatas***  
Cultivar. "Rusanya-BDI"; CIP 440033; 7008 USA; BE-7445; Q 35651.

**PI 595878. *Ipomoea batatas* (L.) Lam. var. *batatas***  
Cultivar. "Mogamba"; CIP 440034; 4864 USA; MOHC; BE-7445; Q 35652.

**PI 595879. *Ipomoea batatas* (L.) Lam. var. *batatas***  
Cultivar. "LUBY 3074"; CIP 440036; 4800 USA; Luby; BE-7445; Q 35653.

**PI 595880. *Ipomoea batatas* (L.) Lam. var. *batatas***  
Cultivar. "IMBY 3102"; CIP 440037; 4801 USA; IMBY; BE-7445; Q 35654.

**PI 595881. *Ipomoea batatas* (L.) Lam. var. *batatas***  
Cultivar. "IITA-TIS 1487"; CIP 440059; 4835 USA; TIS 1487; BE-7445; Q 35655.

**PI 595882. *Ipomoea batatas* (L.) Lam. var. *batatas***  
Cultivar. "IITA-TIS 2544"; CIP 440063; 4805 USA; TIS 2544; BE-7445; Q 35656.

**PI 595883. *Ipomoea batatas* (L.) Lam. var. *batatas***  
Cultivar. "IITA-TIS 3290"; CIP 440067; 4807 USA; TIS 3290; BE-7445; Q 35657.

**PI 595884. *Ipomoea batatas* (L.) Lam. var. *batatas***  
Cultivar. "IITA-TIS 9162"; CIP 440100; 4874 USA; TIS 9162; BE-7445; Q 35659.

**PI 595885. *Ipomoea batatas* (L.) Lam. var. *batatas***  
Cultivar. "IITA-TIS 9232"; 4875 USA; CIP 440101; TIS 9232; BE-7445; Q 35660.

**PI 595886. *Ipomoea batatas* (L.) Lam. var. *batatas***

Cultivar. "K 51/3251"; CIP 440164; 7027 USA; BE-7445; Q 35663.

**PI 595887. *Ipomoea batatas* (L.) Lam. var. *batatas***

Cultivar. "Tanzania"; CIP 440166; 5114 USA; BE-7445; Q 35665.

**PI 595888. *Ipomoea batatas* (L.) Lam. var. *batatas***

Cultivar. "Wagabolige"; CIP 440167; 5031 USA; BE-7445; Q 35666.

**PI 595889. *Ipomoea batatas* (L.) Lam. var. *batatas***

Cultivar. "No. 29"; CIP 440168; 5032 USA; N 29; BE-7445; Q 35667.

**PI 595890. *Ipomoea batatas* (L.) Lam. var. *batatas***

Cultivar. "KEMB 10"; CIP 440169; 7029 USA; BE-7445; Q 35668.

**PI 595891. *Ipomoea batatas* (L.) Lam. var. *batatas***

Cultivar. "KEMB 37"; CIP 440170; 7031 USA; BE-7445; Q 35669.

The following were developed by Jim Beaver, University of Puerto Rico, Mayaguez Camp, Department of Agronomy & Soils, P. O. Box 5000, Mayaguez, Puerto Rico; Juan C. Rosas, Escuela Agricola Panamericana, El Zamorano, P.O. Box 93, Tegucigalpa, Honduras; O.I. Varela, Escuela Agricola Panamericana, Dept. of Agronomy, Zamorano, Tegucigalpa, Honduras. Received 11/01/1996.

**PI 595892. *Phaseolus vulgaris* L.**

Cultivar. Pureline. "TIO CANELA-75". CV-139. Pedigree - Dor483//Dor391/Pompadour J. Small red bean (race Mesoamerica), early maturity, indeterminate bush, short vine type II growth habit. Well adapted to low to intermediate (<1200 m) altitude bean production regions of Honduras. Resistant to Bean Golden Mosaic virus and heat tolerant. Seeds ovoid, shiny red, 22 g/100 seeds.

The following were developed by Norman L. Taylor, University of Kentucky, Department of Agronomy, N-122 Agric. Sci. Bldg. -N, Lexington, Kentucky 40546-0019, United States. Received 10/25/1996.

**PI 595893. *Trifolium pratense* L.**

Genetic. L38-1784. GS-11. Pedigree - Developed by crossing in isolation 10 plants of each genetic marker: white flower-white seed, crimson flower, no mark leaflet, white stem, sun-red stem, cornucopia leaflet, multiple leaflet (1); rudimentary corolla, long stem, multiple cotyledon (2); split leaflet (3) and long petiole (4). A pool of gene markers for the development of multiple recessive gene marker stocks and other unique combinations useful for genetic investigations.

The following were developed by Ken F. Grafton, North Dakota State University, Plant Sciences Department, P.O. Box 5051 SU Station, Fargo, North Dakota 58105-5051, United States; K.C. Chang, North Dakota State University, Dept. of Food and Nutrition, Fargo, North Dakota 58105, United States; J.R. Venette, North Dakota State University, Dept. of Plant Pathology, Fargo, North Dakota 58105, United States; NDSU Research Foundation, North Dakota, United States. Received 10/24/1996.

**PI 595894. *Phaseolus vulgaris* L.**

Cultivar. Pureline. "MAVERICK". CV-142; PVP 9700082. Pedigree - PX-087 (Fiesta/Black Magic//83B229)/87-049-01 (C081-12034/T295). Adapted to Northern Great Plains Bean Production Region. High yielding. Medium-early maturity (92-95 d after planting) and semi-prostrate (CIAT Type IIIa) indeterminate growth habit. Flowers white. Resistant to prevalent races of Bean Rust (*Uromyces appendiculatus*) in North Dakota. Susceptible to all strains of Bean Common Mosaic Virus. Reaction to White Mold (*Sclerotinia sclerotiorum*) similar to other commercial pinto cultivars. Canning quality very good.

The following were developed by K. W. May, Agriculture Canada, Lethbridge Research Station, P.O. Box 3000, Main, Lethbridge, Alberta T1J 4B1, Canada. Received 10/30/1996.

**PI 595895. *Hordeum vulgare* L. ssp. *vulgare***

Cultivar. Pureline. "AC HARPER"; BT 704. CV-269. Pedigree - 49-125/BT364. Six-rowed, hulled, spring feed barley suitable for growing on Canadian prairies. Good yield potential. Superior resistance to lodging, and resistant to scale. Superior kernel plumpness, protein content, and kernel color.

The following were developed by Melvin Adams, USDA, NRCS, East Texas Plant Materials Center, P.O. Box 13000, Nacogdoches, Texas 75961, United States. Received 07/22/1996.

**PI 595896. *Tripsacum dactyloides* (L.) L.**

Wild. 9043740. Apomictic tetraploid. Average foliage height 147cm and average width 88.0cm. Plant height approx. 2.5m, seed maturity in late June. In clipping studies yielded 16,678 DM lbs./ac. using 45 day clipping interval and 250 lbs. N/ac. DM yield increased to 21,883 lbs./ac. using 60 day clipping interval and 250 lbs. N/ac. Protein 9.3% for 45 day clipping and 7.56% for 60 day interval using 250 lbs. N/ac. Original seed source collected in Jackson Co., Texas.

**PI 595897. *Tripsacum dactyloides* (L.) L.**

Wild. 9043762. Apomictic tetraploid. Average foliage height 137cm, width 111.0cm. Plant height approx. 2m, seed maturity in late June. In clipping studies yielded 15,794 DM lbs./ac. using 45 day clipping interval and 250 lbs. N/ac. DM yield 20,079 lbs./ac. using 60 day clipping interval and 250 lbs. N/ac. Protein 9.33% for 45 day clipping interval and 7.55% for 60 day interval for same N rates. Original seed source collected in Medina Co., Texas.

**PI 595898. *Tripsacum dactyloides* (L.) L.**

Wild. 9043629. Apomictic tetraploid. Average foliage height 119.0cm and width 108.0cm. Plant height approx. 2m, seed maturity in June. In clipping studies yielded 14,778 DM lbs./ac. using 45 day clipping interval at 250 lbs. N/ac. DM yield increased to 17,957 lbs./ac. using 60 day clipping interval at 250 lbs. N/ac. Protein 10.71% for 45 day clipping interval and 8.09% for 60 day clipping interval using 250 lbs. N/ac. Original seed source collected in Nacogdoches Co., Texas.

The following were collected by USDA, NRCS, District Office, Emmitt, Idaho, United States. Developed by Thomas A. Jones, USDA-ARS, Forage and Range Research, Utah State University, Logan, Utah 84322-6300, United States. Received 10/31/1996.

**PI 595899. *Elymus elymoides* (Raf.) Swezey**

Breeding. Population. Acc:1118; SAND HOLLOW; T-45219; Ab-1609; EE-25. Collected in Idaho, United States. Elevation 830 m. Gem County (township 6N, range 1W, section 21). Lolalita loamy coarse sand, slope 35% W facing. Avg. ann. precip. 279 mm. Assoc. species: beardless wheat grass (*Pseudoroegneria spicata* ssp. *inermis*), sandberg bluegrass (*Poa secunda*), and hawksbeard (*Crepis acuminata*). Pedigree - No intentional selection has been practiced on original collection. Adapted on sandy soils throughout Snake River Plain in SW Idaho and in adjacent regions to the S and W in Idaho, Oregon, and Nevada. Intended for restoration and reclamation in this region.

The following were developed by Anna McClung, USDA, ARS, Rice Research Station, Route 7, Box 999, Beaumont, Texas 77713, United States. Received 11/01/1996.

**PI 595900. *Oryza sativa* L.**

Cultivar. Pureline. "DIXIEBELLE"; RU9003092. Pedigree - (Newrex/Bellefont)RU8303181/CB801. Long-grain rice with superior processing quality, an important trait to parboiling, canning, and related industries. Semidwarf plant type, early maturing similar to Lemont. Resistant to lodging. Main crop, ratoon yields, and milling yields similar with current leading U.S. long-grain cultivars. Amylose content 2-3% higher and amylographic viscosity significantly higher than conventional U.S. long-grains.

The following were developed by Darrell M. Wesenberg, USDA, ARS, National Small Grains Germplasm, Research Facility, Aberdeen, Idaho 83210, United States; Idaho Agric. Exp. Station, Aberdeen, Idaho, United States. Received 11/12/1996.

**PI 595901. *Avena nuda* L.**

Breeding. Pureline. 86Ab1616; NSGC 6135. Pedigree - 79Ab3811/S 7884 = 69Ab1011/Corbit//S 7884. S 7884 was developed by the Univ. of Saskatchewan. Well adapted to irrigated and dryland production in southern Idaho.

**PI 595902. *Avena nuda* L.**

Breeding. Pureline. 88Ab3073; NSGC 6136. Pedigree - Pennlo/PI 447276. Well adapted to irrigated production in southern Idaho.

The following were collected by Karen A. Williams, USDA, ARS, Natl. Germplasm Resources Laboratory, Building 003, Room 400, BARC-West, Beltsville, Maryland 20705-2350, United States; Cesar Tapia, INIAP, E.E. Sta. Catalina, Santa Catalina, Pichincha, Ecuador. Received 10/07/1996.

**PI 595903. *Capsicum pubescens* Ruiz Lopez & Pavon**

Landrace. WTS-9; aji rocoto. Collected 08/24/1996 in Carchi, Ecuador. Latitude 0 deg. 50' 2'' N. Longitude 78 deg. 3' 18'' W. Elevation 2490 m. Canton Tulcan, Parroquia Maldonado, Localidad El Laurel. Fruits shiny, deep red like a Red Delicious apple, smooth, 5-6cm. long, 7-8cm. wide, lobate at pedicel, sunken at blossom end, wall 0.75cm. thick. Seeds large, black. Flowers said to be purple. Very piquant.

**PI 595904. *Capsicum pubescens* Ruiz Lopez & Pavon**

Landrace. WTS-13; aji rocoto. Collected 08/25/1996 in Imbabura, Ecuador. Latitude 0 deg. 21' 16'' N. Longitude 78 deg. 30' 46'' W. Elevation 1660 m. Canton Cotacachi, Parroquia Apuela, Localidad Santa Rosa. Fruits blocky, 6cm. long, 4cm wide, shiny red, cordate at pedicel, blossom end sunken, slightly corrugated in cross-section, wall 0.5cm thick. Seeds large and black. Piquant.

**PI 595905. *Capsicum annuum* L.**

Landrace. WTS-14. Collected 08/25/1996 in Imbabura, Ecuador. Latitude 0 deg. 21' 16'' N. Longitude 78 deg. 30' 46'' W. Elevation 1660 m. Canton Cotacachi, Parroquia Apuela, Localidad Santa Rosa. Fruits elongate, 6cm. long, 2cm. wide, shiny red, obtuse at pedicel, blossom end pointed. Seeds white. Flowers said to be white.

The following were collected by Charles E. Simpson, Texas A&M University, P. O. Box 292, Stephenville, Texas 76401, United States; Karen A. Williams, USDA, ARS, Natl. Germplasm Resources Laboratory, Building 003, Room 400, BARC-West, Beltsville, Maryland 20705-2350, United States; Cesar Tapia, INIAP, E.E. Sta. Catalina, Santa Catalina, Pichincha, Ecuador. Received 10/07/1996.

**PI 595906. *Capsicum annuum* L.**

Landrace. WTS-32; aji de boton. Collected 08/28/1996 in Pichincha, Ecuador. Latitude 0 deg. 3' 31'' S. Longitude 79 deg. 26' 40'' W. Elevation 350 m. Canton Santo Domingo de los Colorados, Parroquia La Concordia, Localidad Las Villegas. Store. Fruits 1-1.5cm. long, 0.7cm. wide, bright shiny red, triangular, truncate at pedicel, blossom end pointed. Flowers said to be white.

**PI 595907. *Capsicum frutescens* L.**

Landrace. WTS-36; aji de raton. Collected 08/28/1996 in Pichincha, Ecuador. Latitude 0 deg. 6' 36'' S. Longitude 79 deg. 26' 48'' W. Elevation 360 m. Canton Santo Domingo de los Colorados, Localidad Mocache 1. House. Plants 2m. tall. Flowers greenish-white, anthers purple, flowers one per node. Fruits erect, 2cm. long, 0.5cm. wide, elongate, orange at intermediate stage, red when mature, acute at pedicel, blossom end pointed, very piquant.

**PI 595908. *Capsicum chinense* Jacq.**

Landrace. WTS-98; aji. Collected 09/03/1996 in Morona-Santiago, Ecuador. Latitude 2 deg. 33' 48'' S. Longitude 78 deg. 9' 22'' W. Elevation 850 m. Canton Sucua, Parroquia Huambi, Localidad El Cristal. Farmer's house. Plant height 2m. Leaves crinkly. Flowers greenish, anthers purple, 1-2 per node. Fruits pendant, 3-4cm. long, 2cm. wide, triangular, truncate at pedicel, slight neck, blossom end pointed, orange at intermed. stage,



red at maturity. Piquant.

Unknown source. Received 11/12/1996.

**PI 595909. *Trifolium repens* L.**

Cultivar. Population. "BOHNERT LADINO". Developed in United States. Accession comprised of best representatives of cultivar duplicates identified by Drs. S.L. Greene and G. Pederson (Crop Sci 36(5):1398-1400). Original duplicates G 12581 and NSL 5460 are now stored as separate seed lots under this accession number. For information associated with original duplicates (passport, evaluation etc.) refer to original identifiers in GRIN.

Unknown source. Received 11/12/1996.

**PI 595910. *Trifolium repens* L.**

Cultivar. Population. "FRIES-GRONINGER". Developed in Netherlands. Accession comprised of best representatives of cultivar duplicates identified by Drs. S.L. Greene and G. Pederson (Crop Sci 36(5):1398-1400). Original duplicates G 15238 and NSL 40378 are now stored as separate seed lots under this accession number. For information associated with original duplicates (passport, evaluation etc.) refer to original identifiers in GRIN.

Unknown source. Received 11/12/1996.

**PI 595911. *Trifolium repens* L.**

Cultivar. Population. "GREEN ACRES". Developed in United States. Accession comprised of best representatives of cultivar duplicates identified by Drs. S.L. Greene and G. Pederson (Crop Sci 36(5):1398-1400). Original duplicates G 23188, 24520, NSL 30341 now stored as separate seed lots under this accession number. For information associated with original duplicates (passport, evaluation etc.) refer to original identifiers in GRIN.

Unknown source. Received 11/12/1996.

**PI 595912. *Trifolium repens* L.**

Cultivar. Population. "JYGEVA 4". Developed in Russian Federation. Accession comprised of best representatives of cultivar duplicates identified by Drs. S.L. Greene and G. Pederson (Crop Sci 36(5):1398-1400). Duplicates G 30154, PI 228163, PI 315544 now stored as separate seed lots under this accession number. For information associated with original duplicates (passport, evaluation etc.) refer to original identifiers in GRIN.

Unknown source. Received 11/12/1996.

**PI 595913. *Trifolium repens* L.**

Cultivar. Population. "KENT WILD WHITE". Developed in United Kingdom.

Accession comprised of best representatives of cultivar duplicates identified by Drs. S.L. Greene and G. Pederson (Crop Sci 36(5):1398-1400). Duplicates G 24105, G 24517, NSL 30347 now stored as separate seed lots under this accession number. For information associated with original duplicates (passport, evaluation etc.) refer to original identifiers in GRIN.

Unknown source. Received 11/12/1996.

**PI 595914. *Trifolium repens* L.**

Cultivar. Population. "KERSEY". Developed in United Kingdom. Accession comprised of best representatives of cultivar duplicates identified by Drs. S.L. Greene and G. Pederson (Crop Sci 36(5):1398-1400). Duplicates NSL 30348, PI 291836 now stored as separate seed lots under this accession number. For information associated with original duplicates (passport, evaluation etc.) refer to original identifiers in GRIN.

Unknown source. Received 11/12/1996.

**PI 595915. *Trifolium repens* L.**

Cultivar. Population. "MILKA". Developed in Denmark. Accession comprised of best representatives of cultivar duplicates identified by Drs. S.L. Greene and G. Pederson (Crop Sci 36(5):1398-1400). Duplicates NSL 30350, PI 291830, PI 291831 now stored as separate seed lots under this accession number. For information associated with original duplicates (passport, evaluation etc.) refer to original identifiers in GRIN.

Unknown source. Received 11/12/1996.

**PI 595916. *Trifolium repens* L.**

Cultivar. Population. "NORA". Developed in Sweden. Accession comprised of best representatives of cultivar duplicates identified by Drs. S.L. Greene and G. Pederson (Crop Sci 36(5):1398-1400). Duplicates PI 195484, PI 215678, PI 257275, PI 297321 now stored as separate seed lots under this number. For information associated with original duplicates (passport, evaluation etc.) refer to original identifiers in GRIN.

Unknown source. Received 11/12/1996.

**PI 595917. *Trifolium repens* L.**

Cultivar. Population. "PODKOWA". Developed in Poland. Accession comprised of best representatives of cultivar duplicates identified by Drs. S.L. Greene and G. Pederson (Crop Sci 36(5):1398-1400). Duplicates PI 255185, PI 267068, PI 384021 now stored as separate seed lots under this number. For information associated with original duplicates (passport, evaluation etc.) refer to original identifiers in GRIN.

Unknown source. Received 11/12/1996.

**PI 595918. *Trifolium repens* L.**

Cultivar. Population. "ROBUSTA". Developed in Sweden. Accession comprised of best representatives of cultivar duplicates identified by Drs. S.L. Greene and G. Pederson (Crop Sci 36(5):1398-1400). Duplicates PI 195485, PI 215679 now stored as separate seed lots under this number. For information associated with original duplicates (passport, evaluation etc.) refer to original identifiers in GRIN.

Unknown source. Received 11/12/1996.

**PI 595919. *Trifolium repens* L.**

Cultivar. Population. "S100". Developed in United Kingdom. Accession comprised of best representatives of cultivar duplicates identified by Drs. S.L. Greene and G. Pederson (Crop Sci 36(5):1398-1400). Duplicates PI 291834, NSL 30351 now stored as separate seed lots under this number. For information associated with original duplicates (passport, evaluation etc.) refer to original identifiers in GRIN.

Unknown source. Received 11/12/1996.

**PI 595920. *Trifolium repens* L.**

Cultivar. Population. "S184". Developed in United Kingdom. Accession comprised of best representatives of cultivar duplicates identified by Drs. S.L. Greene and G. Pederson (Crop Sci 36(5):1398-1400). Duplicates PI 291835, NSL 30352 now stored as separate seed lots under this number. For information associated with original duplicates (passport, evaluation etc.) refer to original identifiers in GRIN.

Unknown source. Received 11/12/1996.

**PI 595921. *Trifolium repens* L.**

Cultivar. Population. "STEINACHER". Developed in Germany. Accession comprised of best representatives of cultivar duplicates identified by Drs. S.L. Greene and G. Pederson (Crop Sci 36(5):1398-1400). Duplicates PI 232113, PI 237735 now stored as separate seed lots under this number. For information associated with original duplicates (passport, evaluation etc.) refer to original identifiers in GRIN.

Unknown source. Received 11/12/1996.

**PI 595922. *Trifolium repens* L.**

Cultivar. Population. "TREGOR". Developed in France. Accession comprised of best representatives of cultivar duplicates identified by Drs. S.L. Greene and G. Pederson (Crop Sci 36(5):1398-1400). Duplicates PI 419967, PI 419972 now stored as separate seed lots under this number. For information associated with original duplicates (passport, evaluation etc.) refer to original identifiers in GRIN.

Unknown source. Received 11/12/1996.

**PI 595923. *Trifolium repens* L.**

Cultivar. Population. "VACCARES". Developed in France. Accession comprised of best representatives of cultivar duplicates identified by Drs. S.L. Greene and G. Pederson (Crop Sci 36(5):1398-1400). Duplicates PI 419971, PI 419974 now stored as separate seed lots under this number. For information associated with original duplicates (passport, evaluation etc.) refer to original identifiers in GRIN.

Unknown source. Received 11/12/1996.

**PI 595924. *Trifolium repens* L.**

Wild. Population. NEW HAMPSHIRE SELECTIONS I. Developed in United States. Accession comprised of best representatives of cultivar duplicates identified by Drs. S.L. Greene and G. Pederson (Crop Sci 36(5):1398-1400). Duplicates PI 231784, PI 231785 now stored as separate seed lots under this number. For information associated with original duplicates (passport, evaluation etc.) refer to original identifiers in GRIN. Collected from old meadows in East Conway, NH (Collector's Note).

Unknown source. Received 11/12/1996.

**PI 595925. *Trifolium repens* L.**

Wild. Population. NEW HAMPSHIRE SELECTIONS II. Developed in United States. Accession comprised of best representatives of cultivar duplicates identified by Drs. S.L. Greene and G. Pederson (Crop Sci 36(5):1398-1400). Duplicates PI 231786 through PI 231790 now stored as separate seed lots under this number. For information associated with original duplicates (passport, evaluation etc.) refer to original identifiers in GRIN. Collected from 4-yr stand of large type white clover in Conway, NH (Collector's Note).

The following were developed by T. Scott Abney, Purdue University, Department of Botany and Plt. Path., Lilly Hall of Life Sciences Bldg., West Lafayette, Indiana 47907, United States; James R. Wilcox, USDA, ARS, Purdue University, Department of Agronomy, West Lafayette, Indiana 47907, United States. Received 11/12/1996.

**PI 595926. *Glycine max* (L.) Merr.**

Cultivar. Pureline. "Athow"; C1875. CV-366. Pedigree - A86-301024 x Resnik. Maturity Group III, averages 3 days earlier than Thorne and 1 day earlier than Iroquois in maturity. Has Rps1-K gene that confers resistance to multiple races of *Phytophthora sojae*. Flowers purple, pubescence tawny, pods tan at maturity, seeds dull yellow with black hila, and high peroxidase activity in seed coat. Up to 2% of plants may have brown pods at maturity.

The following were developed by Anna McClung, USDA, ARS, Rice Research Station, Route 7, Box 999, Beaumont, Texas 77713, United States. Received 11/21/1996.

**PI 595927. *Oryza sativa* L.**

Cultivar. Pureline. "JASMINE 85"; RU8803197; IR841-85. Pedigree - IR262/Khao-Dawk-Mali 105. Long-grain, aromatic cultivar. Multi-state tests in the Southern U.S. showed excellent yield potential (7700 kg/ha) and is competitive with other commercial cultivars. Semidwarf plant height 106cm and late maturing, 97 days to heading. Whole milling yield significantly lower than other U.S. long-grains. Low amylose and gelatinization temperature. Resistant to all known U.S. races of *Pyricularia oryzae* and to *Rhizoctonia solani*.

The following were donated by International Potato Center, Apartado 5969, Lima, Lima, Peru. Received 03/20/1995.

**PI 595928. *Ipomoea batatas* (L.) Lam. var. *batatas***

Cultivar. "Rusenya-RWA"; CIP 440171; 7042 USA; BE-7445; Q 35670.

**PI 595929. *Ipomoea batatas* (L.) Lam. var. *batatas***

Cultivar. "CN 1869-13"; CIP 440331; 3815 USA; BE-7445; Q 35671. Pedigree - CN1345-8 (female)/WT 298 (male).

The following were developed by A.M. Townsend, U.S. National Arboretum, USDA, ARS, 3501 New York Avenue, N.E., Washington, District of Columbia 20002, United States. Received 11/20/1996.

**PI 595930. *Acer rubrum* L.**

Cultivar. NA 57772. Pedigree - Selected from seedlings grown from open-pollinated seed collected from trees growing in Cass County near Bena, Minnesota, in the northern part of that state. Produces only male flowers; no fruits. Superior tolerance to the potato leafhopper. Crown strongly columnar filled with dense canopy of large (92mm long x 108mm wide) leaves that show spectacular red autumn color. With its columnar habit, could be used effectively as a tree for windbreak, shelterbelt, or screening purposes. Summer leaf color green. Bark light gray and smooth when young, gradually becoming dark gray and fissured into long scaly ridges. Successfully grown in Alabama, Georgia, Illinois, Iowa, Kansas, Maryland, Maine, Michigan, Minnesota, New Jersey, North Carolina, Ohio, Oregon, and Tennessee. Tolerates extremely cold temperatures represented by USDA Zone 3. Adaptable from USDA Zone 3 through 8, with slower growth occurring in Zones warmer than Zone 5. Tends to grow more rapidly in northern areas. Excellent lawn, street, highway, or park trees. Useful as shade tree for residential properties.

**PI 595931. *Acer rubrum* L.**

Cultivar. NA 55405. Pedigree - Selected from seedlings grown from seed collected in the White Mountains, near Bethel, Maine. Produces only male flowers; no fruits. Excellent tolerance to the potato leafhopper. Highly unusual and desirable crown structure, with lower branches upright, and higher branches flaring outward somewhat, creating a shape ideal for city street or landscape planting. This unique crown form, which looks similar to that of a small, upright American elm, fills a much needed niche for red maples in the nursery industry. Foliage turns to an attractive orange-red in autumn. Summer leaf color green. Bark light gray and smooth when young, gradually becoming dark gray and fissured into long scaly ridges. Leaves average 93mm long x 116mm wide.

Successfully grown in Georgia, Maine, Maryland, Minnesota, Ohio, and Oregon. Adaptable from USDA hardiness Zone 4 through 8. Excellent lawn, street, highway, or park trees. Useful as shade tree for residential properties.

The following were donated by Darryl Hardie, The University of Adelaide, Waite Agricultural Research Institute, Department of Agronomy, Glen Osmond, South Australia 5064, Australia; Stephen L. Clement, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 09/02/1993.

**PI 595932. *Pisum fulvum* Sibth. & Smith**  
Wild. PIG 112; W6 12566. Collected 1992 in Israel.

**PI 595933. *Pisum fulvum* Sibth. & Smith**  
Wild. ATC 113; W6 12554.

**PI 595934. *Pisum fulvum* Sibth. & Smith**  
Wild. ATC 114; W6 12555.

The following were donated by Darryl Hardie, The University of Adelaide, Waite Agricultural Research Institute, Department of Agronomy, Glen Osmond, South Australia 5064, Australia; Stephen L. Clement, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Int. Center for Agricultural Research in the Dry Areas, P.O. Box 5466, Aleppo, Syria. Received 09/02/1993.

**PI 595935. *Pisum fulvum* Sibth. & Smith**  
Wild. IC 63466; W6 12556.

The following were donated by Darryl Hardie, The University of Adelaide, Waite Agricultural Research Institute, Department of Agronomy, Glen Osmond, South Australia 5064, Australia; Stephen L. Clement, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; John Innes Institute, Colney Lane, Norwich, England NR47UH, United Kingdom. Received 09/02/1993.

**PI 595936. *Pisum fulvum* Sibth. & Smith**  
Wild. JI 849; W6 12557.

**PI 595937. *Pisum fulvum* Sibth. & Smith**  
Wild. JI 1006; W6 12558.

**PI 595938. *Pisum fulvum* Sibth. & Smith**  
Wild. JI 1010; NGB 102144; W6 12559.

**PI 595939. *Pisum fulvum* Sibth. & Smith**  
Wild. JI 1011; W6 12560.

**PI 595940. *Pisum fulvum* Sibth. & Smith**  
Wild. JI 1012; NGB 102145; W6 12561.

**PI 595941. *Pisum fulvum* Sibth. & Smith**  
Wild. JI 1796; W6 12562.

The following were donated by Darryl Hardie, The University of Adelaide, Waite Agricultural Research Institute, Department of Agronomy, Glen Osmond, South Australia 5064, Australia; Stephen L. Clement, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 09/02/1993.

**PI 595942. *Pisum fulvum* Sibth. & Smith**  
Wild. JI 2205; WIR 6070; W6 12563. Collected in England, United Kingdom.

The following were donated by Darryl Hardie, The University of Adelaide, Waite Agricultural Research Institute, Department of Agronomy, Glen Osmond, South Australia 5064, Australia; Stephen L. Clement, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; John Innes Institute, Colney Lane, Norwich, England NR47UH, United Kingdom. Received 09/02/1993.

**PI 595943. *Pisum fulvum* Sibth. & Smith**  
Wild. JI 2206; WIR 6071; W6 12564.

The following were donated by Darryl Hardie, The University of Adelaide, Waite Agricultural Research Institute, Department of Agronomy, Glen Osmond, South Australia 5064, Australia; Stephen L. Clement, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 09/02/1993.

**PI 595944. *Pisum fulvum* Sibth. & Smith**  
Wild. PIG 111; W6 12565. Collected 1992 in Israel.

**PI 595945. *Pisum fulvum* Sibth. & Smith**  
Wild. PIG 277; CPI 53306; W6 12567. Collected 1992 in Jordan.

**PI 595946. *Pisum fulvum* Sibth. & Smith**  
Wild. PIG 296; Line 1256; W6 12568. Collected 1992 in Turkey.

**PI 595947. *Pisum fulvum* Sibth. & Smith**  
Wild. SA 1602; VIR 2523; W6 12569.

**PI 595948. *Pisum fulvum* Sibth. & Smith**  
Wild. SA 1607; VIR 3397; W6 12570.

The following were donated by Nordic Gene Bank, Box 1543, S-221 01, Lund, Sweden; Stephen L. Clement, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 1994.

**PI 595949. *Pisum fulvum* Sibth. & Smith**  
Wild. NGB 102147; WW2147; W6 16595.

The following were donated by Nordic Gene Bank, Box 1543, S-261 24, Landskrona, Sweden; Stephen L. Clement, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 1994.

**PI 595950. *Pisum fulvum* Sibth. & Smith**  
Wild. WL 2140 KE CO; W6 16597.

**PI 595951. *Pisum fulvum* Sibth. & Smith**  
Wild. WL 2143 KE CO; W6 16598.

The following were donated by Wojciech K. Swiecicki, Polish Academy of Sciences, Institute of Plant Genetics, ul. Strzeszynska 34, Poznan, Poland; Stephen L. Clement, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 1994.

**PI 595952. *Pisum fulvum* Sibth. & Smith**  
Wild. WT 301; 54-672; W6 16599.

The following were donated by John Innes Institute, Norwick, England, United Kingdom; Stephen L. Clement, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 1994.

**PI 595953. *Pisum fulvum* Sibth. & Smith**  
Wild. JI 1392; NGB 101256; W6 18857.

The following were donated by Fred J. Muehlbauer, USDA, ARS, Washington State University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington 99164-6434, United States. Received 1983.

**PI 595954. *Pisum sativum* L.**  
Cultivar. X78122. GP-23. Pedigree - Derived by using Scout as recurrent parent. Nonrecurrent parent WIS 7105. Resistant to pea seedborne mosaic virus. BC4 PSbMV-resistant line. Wrinkle-seeded freezer. Flowers white. Cotyledons green. Blooms 14th node. Single and double podded.

**PI 595955. *Pisum sativum* L.**  
Cultivar. X78123. GP-24. Pedigree - Derived by using Tracer as recurrent parent. Nonrecurrent parent WIS 7105. Resistant to pea seedborne mosaic virus. BC4 PSbMV-resistant line. Seeds smooth, of a dry edible type. Flowers white. Cotyledons green. Blooms 13th node. Triple pods.

**PI 595956. *Pisum sativum* L.**  
Cultivar. X78124. GP-25. Pedigree - Derived by using Garfield as recurrent parent. Nonrecurrent parent WIS 7105. Resistant to pea seedborne mosaic virus. BC4 PSbMV-resistant line. Large, smooth seeded dry edible type. Flowers white. Cotyledons green. Blooms 14th node. Single or double pods.



**PI 595957. *Pisum sativum* L.**

Cultivar. X78125. GP-26. Pedigree - Derived by using Alaska 4683 as recurrent parent. Nonrecurrent parent WIS 7105. Resistant to pea seedborne mosaic virus. BC4 PSbMV-resistant line. Large, smooth seeded dry edible type. Flowers white. Cotyledons green. Blooms 14th node. Single or double pods.

**PI 595958. *Pisum sativum* L.**

Cultivar. X78126. GP-27. Pedigree - Derived by using Campbells Scotch as recurrent parent. Nonrecurrent parent WIS 7105. Resistant to pea seedborne mosaic virus. BC4 PSbMV-resistant line. Smooth-seeded dry edible type. Flowers white. Cotyledons dark green. Blooms 9th node. Single podded.

**PI 595959. *Pisum sativum* L.**

Cultivar. X78127. GP-28. Pedigree - Derived by using Latah as recurrent parent. Nonrecurrent parent WIS 7105. Resistant to pea seedborne mosaic virus. BC4 PSbMV-resistant line. Smooth-seeded dry edible type. Flowers white. Cotyledons yellow. Blooms 14th node. Single podded.

**PI 595960. *Pisum sativum* L.**

Cultivar. X78128. GP-29. Pedigree - Derived by using common Alaska as recurrent parent. Nonrecurrent parent WIS 7105. Resistant to pea seedborne mosaic virus. BC4 PSbMV-resistant line. Smooth-seeded dry edible type. Flowers white. Cotyledons green. Blooms 9th or 10th node. Single and double podded.

**PI 595961. *Pisum sativum* L.**

Cultivar. X78006. GP-30. Pedigree - Derived by using Dark Skin Perfection as recurrent parent. Nonrecurrent parent WIS 7105. Resistant to pea seedborne mosaic virus. BC3 PSbMV-resistant line. Wrinkle-seeded freezer. Flowers white. Cotyledons green. Blooms 14th node. Single and double podded.

The following were donated by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Fred J. Muehlbauer, USDA, ARS, Washington State University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington 99164-6434, United States. Received 04/06/1987.

**PI 595962. *Cicer arietinum* L.**

Cultivated. 060785-0702D; W6 16910. Collected 07/06/1985 in Turkey. Elevation 560 m. Oluklu village near Kahta, Adiyaman Province. Desi type obtained from within the kabuli type of PI 509173.

**PI 595963. *Cicer arietinum* L.**

Cultivated. 260685-0104D; W6 16911. Collected 06/27/1985 in Turkey. Elevation 640 m. Mersin Province, 14 Km north of Aydinçik on Aydinçik to G lnar road.

**PI 595964. *Cicer arietinum* L.**

Cultivated. 270685-0201D; W6 16912. Collected 06/27/1985 in Turkey. Elevation 920 m. Field, 7km S of Gulnar, Mersin Province. Desi type obtained from within the kabuli type of PI 509122.

- PI 595965. *Cicer arietinum* L.**  
Cultivated. 300685-0304D; W6 16913. Collected 06/30/1985 in Turkey.  
Elevation 560 m. Threshed, 36km from Aktepl towards Gaziantep. Desi  
type obtained from within the kabuli type of PI 509132.
- PI 595966. *Cicer arietinum* L.**  
Cultivated. 300685-0601D; W6 16914. Collected 06/30/1985 in Turkey.  
Elevation 565 m. Threshing area, Kocabeyli village, road to Kilis,  
Gaziantep Province. Desi type obtained from within the kabuli type of  
PI 509135.
- PI 595967. *Cicer arietinum* L.**  
Cultivated. 300685-0703D; W6 16915. Collected 06/30/1985 in Turkey.  
Elevation 700 m. Harvested plants drying in field in cracking dry soil,  
road to Gaziantep, 19km N of Kilis, Gaziantep Province. Desi type  
obtained from within the kabuli type of PI 509137.
- PI 595968. *Cicer arietinum* L.**  
Cultivated. 300685-0803D; W6 16916. Collected 06/30/1985 in Turkey.  
Elevation 700 m. Threshing area, Kazikle village, road to Gaziantep,  
Gaziantep Province. Desi type obtained from within the kabuli type of  
PI 509138.
- PI 595969. *Cicer arietinum* L.**  
Cultivated. 300685-0902D; W6 16917. Collected 06/30/1985 in Turkey.  
Elevation 755 m. Threshing area, 8km N of Kazikle village, road to  
Gaziantep, Gaziantep Province. Desi type obtained from within the  
kabuli type of PI 509139.
- PI 595970. *Cicer arietinum* L.**  
Cultivated. 300685-1002D; W6 16918. Collected 06/30/1985 in Turkey.  
Elevation 910 m. Harvested, roadside from Kilis, 18km S of Gaziantep,  
Gaziantep Province. Desi type obtained from within the kabuli type of  
PI 509140.
- PI 595971. *Cicer arietinum* L.**  
Cultivated. 010785-0401D; W6 16919. Collected 07/01/1985 in Turkey.  
Elevation 670 m. Villager at Karoatlak village, about 7km S of Halfeti,  
Urfa Province. Desi type obtained from within the kabuli type of PI  
509142.
- PI 595972. *Cicer arietinum* L.**  
Cultivated. 010785-0701D; W6 16920. Collected 07/01/1985 in Turkey.  
Elevation 750 m. Threshing area in Kocaali village, on Birecik to Urfa  
road, 15km E of turnoff to Halfeti. Desi type obtained from within the  
kabuli type of PI 509145.
- PI 595973. *Cicer arietinum* L.**  
Cultivated. 020785-0103D; W6 16921. Collected 07/02/1985 in Turkey.  
Elevation 650 m. 2km after intersection towards Bozova, 12km from Urfa.  
Desi type obtained from within the kabuli type of PI 509146.
- PI 595974. *Cicer arietinum* L.**  
Cultivated. 030785-0202D; W6 16922. Collected 07/03/1985 in Turkey.

Elevation 520 m. Tatarchayuk village, Urfa Province, 15 Km after village Variatepe. From threshing pile in village. Desi type obtained from within the kabuli type of PI 509148.

**PI 595975. *Cicer arietinum* L.**

Cultivated. 050785-0202D; W6 16923. Collected 07/05/1985 in Turkey. Elevation 510 m. Near dam site, direction of Samsat 3km after Birecik village, Adiyaman Province. Desi type obtained from within the kabuli type of PI 509355.

**PI 595976. *Cicer arietinum* L.**

Cultivated. 050785-0201D; W6 16924. Collected 07/05/1985 in Turkey. Elevation 510 m. Harvested piles, 3km after village of Birecik, towards Samsat, Adiyaman Province. Desi type obtained from within the kabuli type of PI 509158.

**PI 595977. *Cicer arietinum* L.**

Cultivated. 050785-0303D; W6 16925. Collected 07/05/1985 in Turkey. Elevation 390 m. Piles in field, Seitbulak village, Adiyaman Province. Desi type obtained from within the kabuli type of PI 509160.

**PI 595978. *Cicer arietinum* L.**

Cultivated. 050785-0401D; W6 16926. Collected 07/05/1985 in Turkey. Elevation 450 m. Kovanoluk-Samsat, near Firat river, Adiyaman Province. Desi type obtained from within the kabuli type of PI 509161.

**PI 595979. *Cicer arietinum* L.**

Cultivated. 050785-0402D; W6 16927. Collected 07/05/1985 in Turkey. Elevation 450 m. Piles in field, Tepeonu village, near Samsat, Adiyaman Province. Desi type obtained from within the kabuli type of PI 509162.

**PI 595980. *Cicer arietinum* L.**

Cultivated. 050785-0404D; W6 16928. Collected 07/05/1985 in Turkey. Elevation 400 m. Harvested piles, Tepeonu-Hozriyan-Nezrase village, near Firat river, Adiyaman Province. Desi type obtained from within the kabuli type of PI 509163.

**PI 595981. *Cicer arietinum* L.**

Cultivated. 060785-0101D; W6 16929. Collected 07/06/1985 in Turkey. Elevation 490 m. Threshing pile, 12km NW of DSI camp at Ataturk dam, on road from DSI camp to Adiyaman, Adiyaman Province. Desi type obtained from within the kabuli type of PI 509164.

**PI 595982. *Cicer arietinum* L.**

Cultivated. 060785-0102D; W6 16930. Collected 07/06/1985 in Turkey. Elevation 495 m. Threshing pile, Kuyulu village, 14km from DSI camp, Ataturk dam on road to Adiyaman, Adiyaman Province. Desi type obtained from within the kabuli type of PI 509165.

**PI 595983. *Cicer arietinum* L.**

Cultivated. 060785-0401D; W6 16931. Collected 07/06/1985 in Turkey. Elevation 620 m. Piles of dry plants in farmer's field on rocky calcareous soil, on old road 12km N of separation of old and new roads to Adiyaman, Adiyaman Province. Desi type obtained from within the kabuli type of PI 509170.

**PI 595984. *Cicer arietinum* L.**

Cultivated. 060785-0703D; W6 16932. Collected 07/06/1985 in Turkey. Elevation 560 m. Oluklu village near Kahta, Adiyaman Province. Desi type obtained from within the kabuli type of PI 509174.

**PI 595985. *Cicer arietinum* L.**

Cultivated. 060785-0802D; W6 16933. Collected 07/06/1985 in Turkey. Elevation 605 m. Adiyaman Province. Desi type obtained from within the kabuli type of PI 509175.

**PI 595986. *Cicer arietinum* L.**

Cultivated. 060785-0902D; W6 16934. Collected 07/06/1985 in Turkey. Elevation 610 m. Eskitas village, Adiyaman Province. Desi type obtained from within the kabuli type of PI 509176.

The following were collected by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Fred J. Muehlbauer, USDA, ARS, Washington State University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington 99164-6434, United States. Received 04/06/1987.

**PI 595987. *Cicer arietinum* L.**

Cultivated. 060785-0902SD; W6 16935. Collected 07/06/1985 in Turkey. Elevation 610 m. Adiyaman Province, Eskitas village. Small desi type obtained from within the kabuli type of PI 509176.

The following were donated by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Fred J. Muehlbauer, USDA, ARS, Washington State University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington 99164-6434, United States. Received 04/06/1987.

**PI 595988. *Cicer arietinum* L.**

Cultivated. 060785-1001D; W6 16936. Collected 07/06/1985 in Turkey. Elevation 540 m. Storage, Dardason-Kahta village, near Firat river, Adiyaman Province. Desi type obtained from within the kabuli type of PI 509177.

**PI 595989. *Cicer arietinum* L.**

Cultivated. 060785-1102D; W6 16937. Collected 07/06/1985 in Turkey. Elevation 680 m. Piles, Dardagon village, Kahta, Adiyaman Province. Desi type obtained from within the kabuli type of PI 509178.

**PI 595990. *Cicer arietinum* L.**

Cultivated. 060785-1201D; W6 16938. Collected 07/06/1985 in Turkey. Elevation 740 m. Narinci village, Kahta, Adiyaman Province. Desi type obtained from within the kabuli type of PI 509179.

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

University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington  
99164-6434, United States. Received 04/06/1987.

**PI 595991. *Cicer arietinum* L.**

Cultivated. 060785-1201SD; W6 16939. Collected 07/06/1985 in Turkey.  
Elevation 740 m. Narinci village-Kaht, Adiyaman Province. Small desi  
type obtained from within the kabuli type of PI 509179.

The following were donated by Walter J. Kaiser, USDA, ARS, Washington State  
University, Regional Plant Introduction Station, Pullman, Washington  
99164-6402, United States; Fred J. Muehlbauer, USDA, ARS, Washington State  
University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington  
99164-6434, United States. Received 04/06/1987.

**PI 595992. *Cicer arietinum* L.**

Cultivated. 070785-0101D; W6 16940. Collected 07/07/1985 in Turkey.  
Elevation 600 m. Piles of dry plants in farmer's field on brown rocky  
soil, on road to Siverek, 17km E of Kahta, Adiyaman Province. Desi type  
obtained from within the kabuli type of PI 509181.

Unknown source. Received 04/06/1987.

**PI 595993. *Cicer arietinum* L.**

Cultivated. 070785-0101SD; W6 16941. Small desi type obtained from  
within the kabuli type of PI 509181.

The following were donated by Walter J. Kaiser, USDA, ARS, Washington State  
University, Regional Plant Introduction Station, Pullman, Washington  
99164-6402, United States; Fred J. Muehlbauer, USDA, ARS, Washington State  
University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington  
99164-6434, United States. Received 04/06/1987.

**PI 595994. *Cicer arietinum* L.**

Cultivated. 070785-0301D; W6 16942. Collected 07/07/1985 in Turkey.  
Elevation 410 m. Piles of dry plants in farmer's field on rocky brown  
soil, Cayor village near the Firat (Euphrates) River, 4 km after  
Mustafa, Adiyaman Province. Desi type obtained from within the kabuli  
type of PI 509183.

The following were collected by Walter J. Kaiser, USDA, ARS, Washington State  
University, Regional Plant Introduction Station, Pullman, Washington  
99164-6402, United States; Fred J. Muehlbauer, USDA, ARS, Washington State  
University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington  
99164-6434, United States. Received 04/06/1987.

**PI 595995. *Cicer arietinum* L.**

Cultivated. 070785-0301SD; W6 16943. Collected 07/07/1985 in Turkey.  
Elevation 410 m. 4 Km after Mustafa, Cayor village near the First  
(Euphrates) River, Adiyaman Province. Collected seeds from piles of dry  
plants in farmer's field on rocky brown soil. Small desi type obtained  
from within the kabuli type of PI 509183.

The following were donated by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Fred J. Muehlbauer, USDA, ARS, Washington State University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington 99164-6434, United States. Received 04/06/1987.

**PI 595996. *Cicer arietinum* L.**

Cultivated. 070785-0402D; W6 16944. Collected 07/07/1985 in Turkey. Elevation 510 m. Piles , 2km after Mardi village, towards Siverek main road, Adiyaman Province. Desi type obtained from within the kabuli type of PI 509184.

**PI 595997. *Cicer arietinum* L.**

Cultivated. 070785-0502D; W6 16945. Collected 07/07/1985 in Turkey. Elevation 550 m. Piles of dry plants in farmer's field on rocky brown soil, Basele village towards Siverek, Adiyaman Province. Desi type obtained from within the kabuli type of PI 509185.

**PI 595998. *Cicer arietinum* L.**

Cultivated. 070785-0801D; W6 16946. Collected 07/07/1985 in Turkey. Elevation 1060 m. Roadside, from Siverek, 60km from Diyarbakir, Urfa Province. Desi type obtained from within the kabuli type of PI 509186.

**PI 595999. *Cicer arietinum* L.**

Cultivated. 090785-0101D; W6 16947. Collected 07/09/1985 in Turkey. Elevation 645 m. Piles, 11km from Diyarbakir towards Cinar, Diyarbakir Province. Desi type obtained from within the kabuli type of PI 509187.

**PI 596000. *Cicer arietinum* L.**

Cultivated. 100785-0302D; W6 16948. Collected 07/10/1985 in Turkey. Elevation 710 m. Threshing pile, village on road from Diyarbakir to Silvan, 56km from Silvan, Diyarbakir Province. Desi type obtained from within the kabuli type of PI 509191.

The following were collected by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Fred J. Muehlbauer, USDA, ARS, Washington State University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington 99164-6434, United States. Received 04/06/1987.

**PI 596001. *Cicer arietinum* L.**

Cultivated. 100785-0302SD; W6 16949. Collected 07/10/1985 in Turkey. Elevation 710 m. 56 Km from Silvan on the Diyarbakir to Silvan road, Diyarbakir Province. Small desi type obtained from within the kabuli type of PI 509191.

The following were donated by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Fred J. Muehlbauer, USDA, ARS, Washington State University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington 99164-6434, United States. Received 04/06/1987.

**PI 596002. *Cicer arietinum* L.**

Cultivated. 100785-0601D; W6 16950. Collected 07/10/1985 in Turkey. Elevation 780 m. Farmer's field on brown rocky soil, Bagdere village, 26km to Silvan, Diyarbakir to Silvan road, Diyarbakir Province. Desi type obtained from within the kabuli type of PI 509193.

The following were collected by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Fred J. Muehlbauer, USDA, ARS, Washington State University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington 99164-6434, United States. Received 04/06/1987.

**PI 596003. *Cicer arietinum* L.**

Cultivated. 100785-0601SD; W6 16951. Collected 07/10/1985 in Turkey. Elevation 780 m. Bagdere village, 26 Km to Silvan on the Diyarbakir-Silvan road, Diyarbakir Province. Collected from plants growing in farmer's field near village on brown rocky soil. Small desi type obtained from within the kabuli type of PI 509193.

The following were donated by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Fred J. Muehlbauer, USDA, ARS, Washington State University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington 99164-6434, United States. Received 04/06/1987.

**PI 596004. *Cicer arietinum* L.**

Cultivated. 100785-0703D; W6 16952. Collected 07/10/1985 in Turkey. Elevation 720 m. Brown, rocky soil, 16km from Silvan, Diyarbakir to Silvan road, Diyarbakir Province. Desi type obtained from within the kabuli type of PI 509195.

**PI 596005. *Cicer arietinum* L.**

Cultivated. 110785-0201D; W6 16953. Collected 07/11/1985 in Turkey. Elevation 700 m. Field, piles of drying plants in brown soil, road to Elazig, 18km N of Diyarbakir, Diyarbakir Province. Desi type obtained from within the kabuli type of PI 509199.

**PI 596006. *Cicer arietinum* L.**

Cultivated. 110785-0301D; W6 16954. Collected 07/11/1985 in Turkey. Elevation 790 m. Piles of drying plants in farmer's field on red soil, road to Elazig, 41 km N of Diyarbakir, Diyarbakir Province. Desi type obtained from within the kabuli type of PI 509200.

**PI 596007. *Cicer arietinum* L.**

Cultivated. 120785-0301D; W6 16955. Collected 07/12/1985 in Turkey. Elevation 860 m. Farmer's field on light brown loamy soil, 58km to Malatya from intersection of road to Arapkir, Malatya Province. Desi type obtained from within the kabuli type of PI 509203.

**PI 596008. *Cicer arietinum* L.**

Cultivated. 130785-0201D; W6 16956. Collected 07/13/1985 in Turkey. Elevation 1080 m. Maturing plants in field of rocky, brown soil,

Doganler village, 320km to Kayseri, Maltaya Province. Desi type obtained from within the kabuli type of PI 509205.

**PI 596009. *Cicer arietinum* L.**

Cultivated. 130785-0401D; W6 16957. Collected 07/13/1985 in Turkey. Elevation 1480 m. 286km to Kayseri from Malatya, Malatya Province. Desi type obtained from within the kabuli type of PI 509206.

**PI 596010. *Cicer arietinum* L.**

Cultivated. 130785-0502D; W6 16958. Collected 07/13/1985 in Turkey. Elevation 1400 m. Storage, village of Pazaroren, 26km after Pinarbasi, Kayseri Province. Desi type obtained from within the kabuli type of PI 509207.

The following were collected by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Fred J. Muehlbauer, USDA, ARS, Washington State University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington 99164-6434, United States. Donated by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 04/06/1987.

**PI 596011. *Cicer arietinum* L.**

Cultivated. 130785-0502SD; W6 16959. Collected 07/13/1985 in Turkey. Elevation 1400 m. 26 Km after Pinarbasi, Kawseri Province, village of Pazaroren. Small desi type obtained from within the kabuli type of PI 509207.

The following were donated by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Fred J. Muehlbauer, USDA, ARS, Washington State University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington 99164-6434, United States. Received 04/06/1987.

**PI 596012. *Cicer arietinum* L.**

Cultivated. 160785-0201D; W6 16960. Collected 07/16/1985 in Turkey. Elevation 1160 m. Cukuragil village, 30km to Beysehir, Konya Province. Desi type obtained from within the kabuli type of PI 509221.

**PI 596013. *Cicer arietinum* L.**

Cultivated. 160785-0301D; W6 16961. Collected 07/16/1985 in Turkey. Elevation 1130 m. Road from Konya, 24km to Beysehir, Konya Province. Desi type obtained from within the kabuli type of PI 509222.

**PI 596014. *Cicer arietinum* L.**

Cultivated. 160785-0401D; W6 16962. Collected 07/16/1985 in Turkey. Elevation 1100 m. Road from Konya, 14km to Beysehir, Konya Province. Desi type obtained from within the kabuli type of PI 509223.

**PI 596015. *Cicer arietinum* L.**

Cultivated. 160785-0702D; W6 16963. Collected 07/16/1985 in Turkey. Elevation 1050 m. Road to Konya, 10km from Seydisehir, Konya Province. Desi type obtained from within the kabuli type of PI 509229.



**PI 596016. *Cicer arietinum* L.**

Cultivated. 160785-0801D; W6 16964. Collected 07/16/1985 in Turkey. Elevation 1110 m. Green and maturing plants in farmer's field on brown, rocky soil, road to Konya, 25km from Seydisehir, Konya Province. Desi type obtained from within the kabuli type of PI 509230.

**PI 596017. *Cicer arietinum* L.**

Cultivated. 170785-0401SD; W6 16965. Collected 07/17/1985 in Turkey. Elevation 50 m. Road to Adana, near salt lake (Tuz Golu), 28km to Serefli- Kochesar, Ankara Province. Small desi type obtained from within the kabuli type of PI 509232.

**PI 596018. *Cicer arietinum* L.**

Cultivated. 170785-1002D; W6 16966. Collected 07/17/1985 in Turkey. Desi type obtained from within the kabuli type of PI 509235.

Unknown source. Received 04/06/1987.

**PI 596019. *Cicer arietinum* L.**

Cultivated. 170785-0602D; W6 16967.

The following were donated by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Fred J. Muehlbauer, USDA, ARS, Washington State University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington 99164-6434, United States. Received 04/06/1987.

**PI 596020. *Cicer arietinum* L.**

Cultivated. 170785-0701D; W6 16968. Collected 07/17/1985 in Turkey. Elevation 920 m. Piles of dry plants in farmer's field, 12km to Kaman from the Hirfanli Dam, Ankara Province. Desi type obtained from within the kabuli type of PI 509233.

**PI 596021. *Cicer arietinum* L.**

Cultivated. 170785-0901D; W6 16969. Collected 07/17/1985 in Turkey. Elevation 820 m. Golbasi Lake, 14km after Meryenkasi village, Kirsehir Province. Desi type obtained from within the kabuli type of PI 509234.

**PI 596022. *Cicer arietinum* L.**

Cultivated. 170785-1101D; W6 16970. Collected 07/17/1985 in Turkey. Elevation 1020 m. 16km to Kirsehir, Kirsehir Province. Desi type obtained from within the kabuli type of PI 509236.

Unknown source. Received 04/06/1987.

**PI 596023. *Cicer arietinum* L.**

Cultivated. 170785-1101SD; W6 16971. Small desi type obtained from within the kabuli type of PI 509236.

The following were donated by Walter J. Kaiser, USDA, ARS, Washington State

University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Fred J. Muehlbauer, USDA, ARS, Washington State University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington 99164-6434, United States. Received 04/06/1987.

**PI 596024. *Cicer arietinum* L.**

Cultivated. 180785-0201D; W6 16972. Collected 07/18/1985 in Turkey. Elevation 1010 m. Pods from green and maturing plants on brown clay loam soil, road from Kirsehir, 14km to Cicekdagi, Kirsehir Province. Desi type obtained from within the kabuli type of PI 509237.

**PI 596025. *Cicer arietinum* L.**

Cultivated. 210785-0701D; W6 16973. Collected 07/21/1985 in Turkey. Elevation 800 m. 23km to Kalecik from Cankiri, Cankiri Province. Desi type obtained from within the kabuli type of PI 509244.

Unknown source. Received 04/06/1987.

**PI 596026. *Cicer arietinum* L.**

Cultivated. 230785-0102D; W6 16974.

The following were donated by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Fred J. Muehlbauer, USDA, ARS, Washington State University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington 99164-6434, United States. Received 04/06/1987.

**PI 596027. *Cicer arietinum* L.**

Cultivated. 230785-0202D; W6 16975. Collected 07/23/1985 in Turkey. Elevation 1060 m. 21km from Dinar on road to Afyon, Afyon Province. Desi type obtained from within the kabuli type of PI 509247.

**PI 596028. *Cicer arietinum* L.**

Cultivated. 230785-0301D; W6 16976. Collected 07/23/1985 in Turkey. Elevation 1050 m. Kiziloren village, about 25km from Dinar on road to Afyon, Afyon Province. Desi type obtained from within the kabuli type of PI 509248.

**PI 596029. *Cicer arietinum* L.**

Cultivated. 230785-0303D; W6 16977. Collected 07/23/1985 in Turkey. Elevation 1050 m. Piles of plants drying in field, Kiziloren village, 25km from Dinar on road to Afyon, Afyon Province. Desi type obtained from within the kabuli type of PI 509251.

**PI 596030. *Cicer arietinum* L.**

Cultivated. 230785-0501D; W6 16978. Collected 07/23/1985 in Turkey. Elevation 1040 m. Afyon-Kusra, (Dogansu) village, 40km N of Dinar, Sandikli town, Afyon Province. Desi type obtained from within the kabuli type of PI 509254.

**PI 596031. *Cicer arietinum* L.**

Cultivated. 230785-0502D; W6 16979. Collected 07/23/1985 in Turkey. Elevation 1040 m. Piles of plants in field near Dogansu village, 40km N

of Dinar on road to Afyon, Afyon Province. Desi type obtained from within the kabuli type of PI 509255.

Unknown source. Received 04/06/1987.

**PI 596032. *Cicer arietinum* L.**

Cultivated. 230785-0102D; W6 16980.

Unknown source. Received 04/06/1987.

**PI 596033. *Cicer arietinum* L.**

Cultivated. 230785-0701D; W6 16981.

The following were donated by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Fred J. Muehlbauer, USDA, ARS, Washington State University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington 99164-6434, United States. Received 04/06/1987.

**PI 596034. *Cicer arietinum* L.**

Cultivated. 230785-0702D; W6 16982. Collected 07/23/1985 in Turkey. Elevation 1100 m. 10km to Haydarle, 30km to Dinar, Afyon Province. Desi type obtained from within the kabuli type of PI 509257.

**PI 596035. *Cicer arietinum* L.**

Cultivated. 240785-0102D; W6 16983. Collected 07/24/1985 in Turkey. Elevation 1100 m. Dikici village, 14km after Dinar on way to Isparta. Desi type obtained from within the kabuli type of PI 509259.

**PI 596036. *Cicer arietinum* L.**

Cultivated. 240785-0201D; W6 16984. Collected 07/24/1985 in Turkey. Elevation 950 m. Gumiesgin village, on way from Dinar to Isparta, Isparta Province. Desi type obtained from within the kabuli type of PI 509260.

**PI 596037. *Cicer arietinum* L.**

Cultivated. 240785-0401D; W6 16985. Collected 07/24/1985 in Turkey. Elevation 910 m. 13km to Isparta on road from Dinar, Isparta Province. Desi type obtained from within the kabuli type of PI 509261.

**PI 596038. *Cicer arietinum* L.**

Cultivated. 240785-0702D; W6 16986. Collected 07/24/1985 in Turkey. Elevation 850 m. Road from Bucak to Burdur, 32km to Burdur, Burdur Province. Desi type obtained from within the kabuli type of PI 509264.

**PI 596039. *Cicer arietinum* L.**

Cultivated. 240785-0801D; W6 16987. Collected 07/24/1985 in Turkey. Elevation 1200 m. Bucak-Burdur road, 25km from Burdur, Burdur Province. Desi type obtained from within the kabuli type of PI 509265.

**PI 596040. *Cicer arietinum* L.**

Cultivated. 240785-1101D; W6 16988. Collected 07/24/1985 in Turkey.

Elevation 1200 m. Harvested piles of plants in field, Caltak village, on way from Burdur to Yesilova, Burdur Province. Desi type obtained from within the kabuli type of PI 509268.

Unknown source. Received 04/06/1987.

**PI 596041. *Cicer arietinum* L.**

Cultivated. 250785-0501D; W6 16989.

The following were donated by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Fred J. Muehlbauer, USDA, ARS, Washington State University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington 99164-6434, United States. Received 04/06/1987.

**PI 596042. *Cicer arietinum* L.**

Cultivated. 250785-0701D; W6 16990. Collected 07/25/1985 in Turkey. Elevation 1100 m. 7km from Civril on way to Usak, Denizli Province. Desi type obtained from within the kabuli type of PI 509284.

**PI 596043. *Cicer arietinum* L.**

Cultivated. 250785-0801D; W6 16991. Collected 07/25/1985 in Turkey. Elevation 1010 m. 33km to Usak from Civril, 8km from Usak-Denizli border, Usak Province. Desi type obtained from within the kabuli type of PI 509285.

Unknown source. Received 04/06/1987.

**PI 596044. *Cicer arietinum* L.**

Cultivated. 250785-0801SD; W6 16992. Small desi type obtained from within the kabuli type of PI 509285.

The following were donated by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Fred J. Muehlbauer, USDA, ARS, Washington State University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington 99164-6434, United States. Received 04/06/1987.

**PI 596045. *Cicer arietinum* L.**

Cultivated. 260785-0402SD; W6 16993. Collected 07/26/1985 in Turkey. Elevation 1200 m. Storage, Aykpınar yulu village, near Gediz, Kutahya Province. Small desi type obtained from within the kabuli type of PI 509294.

**PI 596046. *Cicer arietinum* L.**

Cultivated. 270785-0202D; W6 16994. Collected 07/27/1985 in Turkey. Elevation 920 m. 39km from Eskisehir on road from Kutahya, Kutahya Province. Desi type obtained from within the kabuli type of PI 509296.

**PI 596047. *Cicer arietinum* L.**

Cultivated. 270785-0203D; W6 16995. Collected 07/27/1985 in Turkey.

Elevation 920 m. 39km from Eskisehir on road from Kutahya, Kutahya Province. Desi type obtained from within the kabuli type of PI 509297.

**PI 596048. *Cicer arietinum* L.**

Cultivated. 280785-0102SD; W6 16996. Collected 07/28/1985 in Turkey. Elevation 180 m. Threshing area, Bezirci village, 26km to Gonen on road to Canakkale, Balikesir Province. Small desi type obtained from within the kabuli type of PI 509302.

**PI 596049. *Cicer arietinum* L.**

Cultivated. 280785-0404D; W6 16997. Collected 07/28/1985 in Turkey. Elevation 50 m. Seed store, Guvemalan village, 34km after Gonen on road to Biga, Canakkale Province. Desi type obtained from within the kabuli type of PI 509306.

The following were collected by Paul Gepts, University of California, Dept. of Agronomy & Range Science, Davis, California 95616-8515, United States; L. Guzman, Cent. de Invest. Fitoecogeneticas de Pairumani, Casilla 128, Cochabamba, Bolivia; Daniel Debouck, Centro Internacional de Agraicultura Tropical, Germplasm Resources Unit, Apdo. aereo 6713, Cali, Colombia; Raul Rios, Centro de Investigaciones Fitogeneticas de Pairumani, Cochabamba, Bolivia. Received 07/22/1996.

**PI 596050. *Capsicum* sp.**

Wild. 3002. Collected 05/14/1994 in Chuquisaca, Bolivia. Latitude 19 deg. 7' 0'' S. Longitude 64 deg. 38' 0'' W. Elevation 3200 m. Zudanez, Oda Rio Kulmijue'u chu, 1 km W Patas Tejas.

**PI 596051. *Capsicum eximium* Hunz.**

Wild. 3003. Collected 05/14/1994 in Chuquisaca, Bolivia. Latitude 19 deg. 7' 0'' S. Longitude 64 deg. 38' 0'' W. Elevation 2290 m. Zudanez, Esancia Tejas.

**PI 596052. *Capsicum baccatum* L.**

Wild. 3004. Collected 05/14/1994 in Chuquisaca, Bolivia. Latitude 19 deg. 16' 0'' S. Longitude 64 deg. 24' 0'' W. Elevation 2150 m. Tomina, Hacienda Sobo Sobo.

**PI 596053. *Capsicum eximium* Hunz.**

Wild. 3005. Collected 05/14/1994 in Chuquisaca, Bolivia. Latitude 19 deg. 16' 0'' S. Longitude 64 deg. 24' 0'' W. Elevation 2150 m. Tomina, Hacienda Sobo Sobo.

**PI 596054. *Capsicum baccatum* L.**

Wild. 3008. Collected 05/15/1994 in Chuquisaca, Bolivia. Latitude 19 deg. 17' 0'' S. Longitude 64 deg. 20' 0'' W. Elevation 2060 m. Tomina, Estancia Campo Redondo.

**PI 596055. *Capsicum baccatum* L.**

Wild. 3009. Collected 05/15/1994 in Chuquisaca, Bolivia. Latitude 19 deg. 17' 0'' S. Longitude 64 deg. 20' 0'' W. Elevation 2100 m. Tomina, Estancia Campo Redondo, Achuma.

**PI 596056. *Capsicum baccatum* L.**

Wild. 3013. Collected 05/15/1994 in Chuquisaca, Bolivia. Latitude 19 deg. 35' 0'' S. Longitude 64 deg. 26' 0'' W. Elevation 1900 m. Tomina, Rio Grande, 5 km N de San Pedro.

**PI 596057. *Capsicum baccatum* L.**

Wild. 3014. Collected 05/15/1994 in Chuquisaca, Bolivia. Latitude 19 deg. 37' 0'' S. Longitude 64 deg. 28' 0'' W. Elevation 1870 m. Azurduy, 1 km ? de San Pedro.

**PI 596058. *Capsicum baccatum* L.**

Wild. 3015. Collected 05/16/1994 in Chuquisaca, Bolivia. Latitude 19 deg. 28' 0'' S. Longitude 64 deg. 11' 0'' W. Elevation 2150 m. Tomina, El Rosal, 42 km SSE Padilla.

**PI 596059. *Capsicum chacoense* Hunz.**

Wild. 3016. Collected 05/16/1994 in Chuquisaca, Bolivia. Latitude 19 deg. 34' 0'' S. Longitude 64 deg. 6' 0'' W. Elevation 1200 m. Tomina, Comunidad Thiu Mayu, 68 km SSE Padilla.

**PI 596060. *Capsicum chacoense* Hunz.**

Wild. 3019. Collected 05/17/1994 in Chuquisaca, Bolivia. Latitude 19 deg. 49' 0'' S. Longitude 63 deg. 48' 0'' W. Elevation 1160 m. Hernando Siles, Cruz Pampa, 34 km E de Monteagudo.

**PI 596061. *Capsicum annuum* L.**

Wild. 3026. Collected 05/21/1994 in Chuquisaca, Bolivia. Latitude 21 deg. S. Longitude 65 deg. 11' 0'' W. Elevation 2240 m. Sudlinti, 15 km SE, Villa Abecia en Camblaya Grande.

**PI 596062. *Capsicum eximium* Hunz.**

Wild. 3027. Collected 05/22/1994 in Chuquisaca, Bolivia. Latitude 20 deg. 35' 0'' S. Longitude 64 deg. 46' 0'' W. Elevation 2160 m. NorCinti, St. Elena.

**PI 596063. *Capsicum chacoense* Hunz.**

Wild. 3028. Collected 05/22/1994 in Chuquisaca, Bolivia. Latitude 20 deg. 35' 0'' S. Longitude 64 deg. 46' 0'' W. Elevation 2160 m. NorCinti, St. Elena.

The following were collected by Qinghua Zhang, Chinese Academy of Forestry, Beijing, China. Donated by Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 11/08/1996.

**PI 596064. *Indigofera pseudotinctoria* Matsum.**

Wild. 96108. Collected 10/1995 in Zhejiang, China. Elevation 700 m. Tianmu.

The following were donated by Crookham Company, Caldwell, Idaho, United States. Received 1987.

**PI 596065. *Zea mays* L. *ssp. mays***

Breeding. 101dgA-2723:62.

The following were donated by Nicholas D Molenaar, Crookham Company, P.O. Box 520, Caldwell, Idaho 83606-0520, United States. Received 1982.

PI 596066. *Zea mays* L. *ssp. mays*  
Breeding. 101DGA-3347:61.

PI 596067. *Zea mays* L. *ssp. mays*  
Breeding. 101dgB-2727:62.

The following were donated by Crookham Company, Caldwell, Idaho, United States. Received 1979.

PI 596068. *Zea mays* L. *ssp. mays*  
Breeding. 101dgB-3348:61.

PI 596069. *Zea mays* L. *ssp. mays*  
Breeding. 101dgB-686:60.

PI 596070. *Zea mays* L. *ssp. mays*  
Breeding. 101gAT6-2724/2723:62.

PI 596071. *Zea mays* L. *ssp. mays*  
Breeding. 101U-638:60.

PI 596072. *Zea mays* L. *ssp. mays*  
Breeding. 103h-1704:58.

PI 596073. *Zea mays* L. *ssp. mays*  
Breeding. 103n-1342:59.

PI 596074. *Zea mays* L. *ssp. mays*  
Breeding. 103q-1705:58.

The following were developed by W. Huelsen, Illinois Agricultural Experiment Station, Illinois, United States. Donated by Crookham Company, Caldwell, Idaho, United States. Received 1979.

PI 596075. *Zea mays* L. *ssp. mays*  
Breeding. 104b-777/61-M53.

The following were donated by Crookham Company, Caldwell, Idaho, United States. Received 1979.

PI 596076. *Zea mays* L. *ssp. mays*  
Breeding. 104q-1344:59.

PI 596077. *Zea mays* L. *ssp. mays*  
Breeding. 107a-3016:59.

PI 596078. *Zea mays* L. *ssp. mays*

Breeding. 107a-3704:58.

**PI 596079. *Zea mays* L. *ssp. mays***

Breeding. 110d-370:61.

**PI 596080. *Zea mays* L. *ssp. mays***

Breeding. 110k-1718:58.

The following were donated by Nicholas D Molenaar, Crookham Company, P.O. Box 520, Caldwell, Idaho 83606-0520, United States. Received 1987.

**PI 596081. *Zea mays* L. *ssp. mays***

Breeding. 110k-240:60.

The following were donated by Crookham Company, Caldwell, Idaho, United States. Received 1979.

**PI 596082. *Zea mays* L. *ssp. mays***

Breeding. 110K\*-1352:57.

**PI 596083. *Zea mays* L. *ssp. mays***

Breeding. 110k\*1331:56.

**PI 596084. *Zea mays* L. *ssp. mays***

Breeding. 110m-1353:57.

**PI 596085. *Zea mays* L. *ssp. mays***

Breeding. 110m-539:60.

**PI 596086. *Zea mays* L. *ssp. mays***

Breeding. 110n-1333:56.

**PI 596087. *Zea mays* L. *ssp. mays***

Breeding. 110n-1354:57.

**PI 596088. *Zea mays* L. *ssp. mays***

Breeding. 110n-1719:58.

**PI 596089. *Zea mays* L. *ssp. mays***

Breeding. 110p-1720:58.

**PI 596090. *Zea mays* L. *ssp. mays***

Breeding. 119g-2008:54.

**PI 596091. *Zea mays* L. *ssp. mays***

Breeding. 11D-1495:68.

**PI 596092. *Zea mays* L. *ssp. mays***

Breeding. 124a-2806:63.

The following were donated by Nicholas D Molenaar, Crookham Company, P.O. Box 520, Caldwell, Idaho 83606-0520, United States. Received 1988.



**PI 596093. Zea mays L. ssp. mays**  
Breeding. 124b-1735:58.

The following were donated by Crookham Company, Caldwell, Idaho, United States. Received 1979.

**PI 596094. Zea mays L. ssp. mays**  
Breeding. 125a-1370:56.

**PI 596095. Zea mays L. ssp. mays**  
Breeding. 12Z-B-820:57.

**PI 596096. Zea mays L. ssp. mays**  
Breeding. 12Z-C-821:57.

**PI 596097. Zea mays L. ssp. mays**  
Breeding. 12Z-D-822:57.

**PI 596098. Zea mays L. ssp. mays**  
Breeding. 13D-1707:59.

**PI 596099. Zea mays L. ssp. mays**  
Breeding. 14C-1013:74.

**PI 596100. Zea mays L. ssp. mays**  
Breeding. 14H-1014:74.

**PI 596101. Zea mays L. ssp. mays**  
Breeding. 14N-2100:56.

**PI 596102. Zea mays L. ssp. mays**  
Breeding. 18B-3233:63.

**PI 596103. Zea mays L. ssp. mays**  
Breeding. 18B-548:64.

**PI 596104. Zea mays L. ssp. mays**  
Breeding. 190a-5389:56.

The following were developed by W. Huelsen, Illinois Agricultural Experiment Station, Illinois, United States. Donated by Crookham Company, Caldwell, Idaho, United States. Received 1979.

**PI 596105. Zea mays L. ssp. mays**  
Breeding. 191a-3563:61.

The following were donated by Crookham Company, Caldwell, Idaho, United States. Received 1979.

**PI 596106. Zea mays L. ssp. mays**  
Breeding. 191g-2044:58.

PI 596107. *Zea mays* L. *ssp. mays*  
Breeding. 2021C-340:58.

PI 596108. *Zea mays* L. *ssp. mays*  
Breeding. 2051A-539:73.

PI 596109. *Zea mays* L. *ssp. mays*  
Breeding. 2051A-614:72.

PI 596110. *Zea mays* L. *ssp. mays*  
Breeding. 2051B-353:58.

PI 596111. *Zea mays* L. *ssp. mays*  
Breeding. 2132-143:62.

PI 596112. *Zea mays* L. *ssp. mays*  
Breeding. 2132-3076:63.

PI 596113. *Zea mays* L. *ssp. mays*  
Breeding. 2132-3447:61.

PI 596114. *Zea mays* L. *ssp. mays*  
Breeding. 2256-653:60.

PI 596115. *Zea mays* L. *ssp. mays*  
Breeding. 2256-670:60.

PI 596116. *Zea mays* L. *ssp. mays*  
Breeding. 27A\*123-1395:66.

PI 596117. *Zea mays* L. *ssp. mays*  
Breeding. 27A\*123-2994:62.

PI 596118. *Zea mays* L. *ssp. mays*  
Breeding. 27A\*123-424:65.

PI 596119. *Zea mays* L. *ssp. mays*  
Breeding. 27A\*123-850:68.

PI 596120. *Zea mays* L. *ssp. mays*  
Breeding. 3002-1440:60.

PI 596121. *Zea mays* L. *ssp. mays*  
Breeding. 304a-2947:62.

PI 596122. *Zea mays* L. *ssp. mays*  
Breeding. 304a-3181:63.

PI 596123. *Zea mays* L. *ssp. mays*  
Breeding. 304a-3341:61.

PI 596124. *Zea mays* L. *ssp. mays*  
Breeding. 437a-1766:58.

**PI 596125. Zea mays L. ssp. mays**  
Breeding. 437a-365:65.

**PI 596126. Zea mays L. ssp. mays**  
Breeding. 439a-1769:58.

**PI 596127. Zea mays L. ssp. mays**  
Breeding. 442a-953:65.

**PI 596128. Zea mays L. ssp. mays**  
Breeding. 454a-3187:63.

**PI 596129. Zea mays L. ssp. mays**  
Breeding. 459a-367:65.

**PI 596130. Zea mays L. ssp. mays**  
Breeding. 465a-293:64.

**PI 596131. Zea mays L. ssp. mays**  
Breeding. 511a-1399:59.

The following were donated by Nicholas D Molenaar, Crookham Company, P.O. Box 520, Caldwell, Idaho 83606-0520, United States. Received 1979.

**PI 596132. Zea mays L. ssp. mays**  
Breeding. 5145A-554:62.

The following were donated by Crookham Company, Caldwell, Idaho, United States. Received 1979.

**PI 596133. Zea mays L. ssp. mays**  
Breeding. 5261A-693:57.

The following were developed by John Haber, Pau Seed, RR 5, Box 3, Ames, Iowa 50010, United States. Donated by Crookham Company, Caldwell, Idaho, United States. Received 1979.

**PI 596134. Zea mays L. ssp. mays**  
Breeding. 5261B-3716:58.

The following were donated by Crookham Company, Caldwell, Idaho, United States. Received 1979.

**PI 596135. Zea mays L. ssp. mays**  
Breeding. 5261B-689:57.

**PI 596136. Zea mays L. ssp. mays**  
Breeding. 540a-1254:60.

The following were developed by W. Huelsen, Illinois Agricultural Experiment

Station, Illinois, United States. Donated by Crookham Company, Caldwell, Idaho, United States. Received 1979.

**PI 596137. Zea mays L. ssp. mays**  
Breeding. 540a-3569:61.

The following were donated by Crookham Company, Caldwell, Idaho, United States. Received 1979.

**PI 596138. Zea mays L. ssp. mays**  
Breeding. 5418A-930:56.

**PI 596139. Zea mays L. ssp. mays**  
Breeding. 541a-1782:58.

**PI 596140. Zea mays L. ssp. mays**  
Breeding. 541b-1273:56.

**PI 596141. Zea mays L. ssp. mays**  
Breeding. 542a-880:55.

**PI 596142. Zea mays L. ssp. mays**  
Breeding. 542c-1411:59.

**PI 596143. Zea mays L. ssp. mays**  
Breeding. 543a-1784:58.

**PI 596144. Zea mays L. ssp. mays**  
Breeding. 543b-1785:58.

**PI 596145. Zea mays L. ssp. mays**  
Breeding. 552a-1450:57.

**PI 596146. Zea mays L. ssp. mays**  
Breeding. 557a-1285:56.

**PI 596147. Zea mays L. ssp. mays**  
Breeding. 571b-362:65.

**PI 596148. Zea mays L. ssp. mays**  
Breeding. 574a-1800:58.

**PI 596149. Zea mays L. ssp. mays**  
Breeding. 598a-1425:59.

**PI 596150. Zea mays L. ssp. mays**  
Breeding. 598a-295:64.

**PI 596151. Zea mays L. ssp. mays**  
Breeding. 6038D-119:64.

**PI 596152. Zea mays L. ssp. mays**  
Breeding. 6038D-31722F.

**PI 596153. Zea mays L. ssp. mays**  
Breeding. 6038D-31722R.

**PI 596154. Zea mays L. ssp. mays**  
Breeding. 6038D-36784T.

**PI 596155. Zea mays L. ssp. mays**  
Breeding. 607a-1260:60.

**PI 596156. Zea mays L. ssp. mays**  
Breeding. 611a-5394:56.

The following were donated by Nicholas D Molenaar, Crookham Company, P.O. Box 520, Caldwell, Idaho 83606-0520, United States. Received 1987.

**PI 596157. Zea mays L. ssp. mays**  
Breeding. 615a-1309:56.

The following were donated by Crookham Company, Caldwell, Idaho, United States. Received 1979.

**PI 596158. Zea mays L. ssp. mays**  
Breeding. 616a-1461:57.

**PI 596159. Zea mays L. ssp. mays**  
Breeding. 665a-1843:58.

**PI 596160. Zea mays L. ssp. mays**  
Breeding. 668a-1844:58.

The following were donated by Nicholas D Molenaar, Crookham Company, P.O. Box 520, Caldwell, Idaho 83606-0520, United States. Received 1987.

**PI 596161. Zea mays L. ssp. mays**  
Breeding. ARTIC FIRST 34597.

The following were donated by Crookham Company, Caldwell, Idaho, United States. Received 1979.

**PI 596162. Zea mays L. ssp. mays**  
Breeding. AUNT MARY-788:70M.

**PI 596163. Zea mays L. ssp. mays**  
Breeding. AUNT MARY-790:70M.

**PI 596164. Zea mays L. ssp. mays**  
Breeding. AUNT MARY-789:70M.

**PI 596165. Zea mays L. ssp. mays**  
Breeding. BANTAM CROSBY-26782.

The following were donated by Nicholas D Molenaar, Crookham Company, P.O. Box 520, Caldwell, Idaho 83606-0520, United States. Received 1982.

PI 596166. *Zea mays* L. *ssp. mays*  
Breeding. C12A-CONN-98:60.

PI 596167. *Zea mays* L. *ssp. mays*  
Breeding. C12B-100:60.

PI 596168. *Zea mays* L. *ssp. mays*  
Breeding. C131DG-3030:62. Developed in United States.

PI 596169. *Zea mays* L. *ssp. mays*  
Breeding. C13B-3475:61.

PI 596170. *Zea mays* L. *ssp. mays*  
Breeding. C13et-123:68.

PI 596171. *Zea mays* L. *ssp. mays*  
Breeding. C13GL-287B:68.

PI 596172. *Zea mays* L. *ssp. mays*  
Breeding. C13LDg-01286-3028:62.

PI 596173. *Zea mays* L. *ssp. mays*  
Breeding. C13LDG-32705pr T.

PI 596174. *Zea mays* L. *ssp. mays*  
Breeding. C16.M.1-1363:60.

PI 596175. *Zea mays* L. *ssp. mays*  
Breeding. C2-10:65.

PI 596176. *Zea mays* L. *ssp. mays*  
Breeding. C2-25-2569:62.

PI 596177. *Zea mays* L. *ssp. mays*  
Breeding. C2-81-2524:63.

PI 596178. *Zea mays* L. *ssp. mays*  
Breeding. C22-2825:63. Developed in United States.

The following were donated by Crookham Company, Caldwell, Idaho, United States. Received 1996.

PI 596179. *Zea mays* L. *ssp. mays*  
Breeding. C23-1071:53. Developed in United States.

The following were donated by Nicholas D Molenaar, Crookham Company, P.O. Box 520, Caldwell, Idaho 83606-0520, United States. Received 1982.

PI 596180. *Zea mays* L. *ssp. mays*

Breeding. C27B-3237:61.

The following were donated by Crookham Company, Caldwell, Idaho, United States. Received 1979.

**PI 596181. Zea mays L. ssp. mays**  
Breeding. C3-2540:63.

**PI 596182. Zea mays L. ssp. mays**  
Breeding. C3-2577:62.

The following were donated by Nicholas D Molenaar, Crookham Company, P.O. Box 520, Caldwell, Idaho 83606-0520, United States. Received 1982.

**PI 596183. Zea mays L. ssp. mays**  
Breeding. C3-2ABCA-2286:73.

The following were donated by Crookham Company, Caldwell, Idaho, United States. Received 1979.

**PI 596184. Zea mays L. ssp. mays**  
Breeding. C40A-379:54.

**PI 596185. Zea mays L. ssp. mays**  
Breeding. C42-332:55.

**PI 596186. Zea mays L. ssp. mays**  
Breeding. C5-1-3344:66.

**PI 596187. Zea mays L. ssp. mays**  
Breeding. C5NT-36938(x).

The following were donated by Nicholas D Molenaar, Crookham Company, P.O. Box 520, Caldwell, Idaho 83606-0520, United States. Received 1987.

**PI 596188. Zea mays L. ssp. mays**  
Breeding. C68R(x)-552:63.

**PI 596189. Zea mays L. ssp. mays**  
Breeding. C6GA-116:60-720:71.

**PI 596190. Zea mays L. ssp. mays**  
Breeding. C8A-89:55.

The following were donated by Crookham Company, Caldwell, Idaho, United States. Received 1979.

**PI 596191. Zea mays L. ssp. mays**  
Breeding. C90 ELITE-2A2A-492:58. Developed in United States.

PI 596192. *Zea mays* L. *ssp. mays*  
Breeding. C90 ELITE-2A2A-1677:59.

PI 596193. *Zea mays* L. *ssp. mays*  
Breeding. C90 ELITE-2A2A-1333:60.

PI 596194. *Zea mays* L. *ssp. mays*  
Breeding. Cr P8A-220:61.

PI 596195. *Zea mays* L. *ssp. mays*  
Breeding. Cr P8-219:61.

PI 596196. *Zea mays* L. *ssp. mays*  
Breeding. Cr G8A-2655:62.

PI 596197. *Zea mays* L. *ssp. mays*  
Breeding. Cr P8B-221:61.

The following were donated by Nicholas D Molenaar, Crookham Company, P.O. Box 520, Caldwell, Idaho 83606-0520, United States. Received 1983.

PI 596198. *Zea mays* L. *ssp. mays*  
Breeding. CR LDG-125:63.

The following were donated by Crookham Company, Caldwell, Idaho, United States. Received 1979.

PI 596199. *Zea mays* L. *ssp. mays*  
Breeding. Cr Me45-928:65.

PI 596200. *Zea mays* L. *ssp. mays*  
Breeding. Cr M8-222:61.

The following were donated by Nicholas D Molenaar, Crookham Company, P.O. Box 520, Caldwell, Idaho 83606-0520, United States. Received 1982.

PI 596201. *Zea mays* L. *ssp. mays*  
Breeding. MA21547-1-PA-2675:63.

The following were donated by Crookham Company, Caldwell, Idaho, United States. Received 1979.

PI 596202. *Zea mays* L. *ssp. mays*  
Breeding. Ma21547-1339:61.

The following were donated by Nicholas D Molenaar, Crookham Company, P.O. Box 520, Caldwell, Idaho 83606-0520, United States. Received 1982.

PI 596203. *Zea mays* L. *ssp. mays*  
Breeding. MA2412-1-2645:63.



**PI 596204. Zea mays L. ssp. mays**

Breeding. MA52.429-901:58.

**PI 596205. Zea mays L. ssp. mays**

Breeding. MA53 372-898:58.

**PI 596206. Zea mays L. ssp. mays**

Breeding. MA54 368-984:57.

**PI 596207. Zea mays L. ssp. mays**

Breeding. MA65.132-51-408-1-1-2-1-3-1-2-76:66. Developed in United States.

**PI 596208. Zea mays L. ssp. mays**

Breeding. Me 57-5967:65.

The following were donated by Crookham Company, Caldwell, Idaho, United States. Received 1979.

**PI 596209. Zea mays L. ssp. mays**

Breeding. Me 66-5968:65.

The following were donated by Nicholas D Molenaar, Crookham Company, P.O. Box 520, Caldwell, Idaho 83606-0520, United States. Received 1987.

**PI 596210. Zea mays L. ssp. mays**

Breeding. Me-8-5963:65.

The following were donated by Crookham Company, Caldwell, Idaho, United States. Received 1979.

**PI 596211. Zea mays L. ssp. mays**

Breeding. Me1-130:53.

The following were donated by Nicholas D Molenaar, Crookham Company, P.O. Box 520, Caldwell, Idaho 83606-0520, United States. Received 1982.

**PI 596212. Zea mays L. ssp. mays**

Breeding. ME100-926:58.

The following were donated by Crookham Company, Caldwell, Idaho, United States. Received 1979.

**PI 596213. Zea mays L. ssp. mays**

Breeding. Me123-551:62.

The following were donated by Nicholas D Molenaar, Crookham Company, P.O. Box 520, Caldwell, Idaho 83606-0520, United States. Received 1988.

**PI 596214. Zea mays L. ssp. mays**  
Breeding. Me266-1002:57.

The following were donated by Crookham Company, Caldwell, Idaho, United States. Received 1979.

**PI 596215. Zea mays L. ssp. mays**  
Breeding. NARROW GRAIN EVERGREEN-475:66.

**PI 596216. Zea mays L. ssp. mays**  
Breeding. NARROW GRAIN EVERGREEN-453:67.

The following were donated by Nicholas D Molenaar, Crookham Company, P.O. Box 520, Caldwell, Idaho 83606-0520, United States. Received 1982.

**PI 596217. Zea mays L. ssp. mays**  
Breeding. NJ E10-400:63.

**PI 596218. Zea mays L. ssp. mays**  
Breeding. NJ1301-929:58.

**PI 596219. Zea mays L. ssp. mays**  
Breeding. NJ1303-1008:57.

The following were donated by Crookham Company, Caldwell, Idaho, United States. Received 1979.

**PI 596220. Zea mays L. ssp. mays**  
Breeding. NJ143Y-604:58.

**PI 596221. Zea mays L. ssp. mays**  
Breeding. NJ143Y-971:57.

**PI 596222. Zea mays L. ssp. mays**  
Breeding. NJ143Y-977:57.

The following were donated by Nicholas D Molenaar, Crookham Company, P.O. Box 520, Caldwell, Idaho 83606-0520, United States. Received 1982.

**PI 596223. Zea mays L. ssp. mays**  
Breeding. NJ502-309:68.

**PI 596224. Zea mays L. ssp. mays**  
Breeding. NJ504-313:68.

**PI 596225. Zea mays L. ssp. mays**  
Breeding. NJ505-417:68.

**PI 596226. Zea mays L. ssp. mays**  
Breeding. NJ506-314:68.

The following were donated by Crookham Company, Caldwell, Idaho, United States. Received 1979.

**PI 596227. Zea mays L. ssp. mays**  
Breeding. NJ510-315:68.

The following were donated by Nicholas D Molenaar, Crookham Company, P.O. Box 520, Caldwell, Idaho 83606-0520, United States. Received 1982.

**PI 596228. Zea mays L. ssp. mays**  
Breeding. NJ510-393:69M.

**PI 596229. Zea mays L. ssp. mays**  
Breeding. NJ538A-378:70M.

**PI 596230. Zea mays L. ssp. mays**  
Breeding. NJ603-380:70M.

The following were donated by Crookham Company, Caldwell, Idaho, United States. Received 1979.

**PI 596231. Zea mays L. ssp. mays**  
Breeding. NJ618-406:69M.

**PI 596232. Zea mays L. ssp. mays**  
Breeding. NJ618-407:69M.

The following were donated by Nicholas D Molenaar, Crookham Company, P.O. Box 520, Caldwell, Idaho 83606-0520, United States. Received 1982.

**PI 596233. Zea mays L. ssp. mays**  
Breeding. NJ664-392:70.

The following were donated by Crookham Company, Caldwell, Idaho, United States. Received 1979.

**PI 596234. Zea mays L. ssp. mays**  
Breeding. NJ688-397:70M.

**PI 596235. Zea mays L. ssp. mays**  
Breeding. NJ688-398:70M.

The following were donated by Nicholas D Molenaar, Crookham Company, P.O. Box 520, Caldwell, Idaho 83606-0520, United States. Received 1987.

**PI 596236. Zea mays L. ssp. mays**  
Breeding. NJ710-412:68.

- PI 596237. *Zea mays* L. *ssp. mays*  
Breeding. NJ710-423:69M.
- PI 596238. *Zea mays* L. *ssp. mays*  
Breeding. NJ714-403:68.
- PI 596239. *Zea mays* L. *ssp. mays*  
Breeding. NJ715A-399:70M.
- PI 596240. *Zea mays* L. *ssp. mays*  
Breeding. NJ846-494:73.

The following were donated by Crookham Company, Caldwell, Idaho, United States. Received 1979.

- PI 596241. *Zea mays* L. *ssp. mays*  
Breeding. OLCOTT-1067:72.
- PI 596242. *Zea mays* L. *ssp. mays*  
Breeding. OLCOTT-1068:72.
- PI 596243. *Zea mays* L. *ssp. mays*  
Breeding. OLCOTT-1069:72.
- PI 596244. *Zea mays* L. *ssp. mays*  
Breeding. OLCOTT-1923:53.

The following were donated by Nicholas D Molenaar, Crookham Company, P.O. Box 520, Caldwell, Idaho 83606-0520, United States. Received 1982.

- PI 596245. *Zea mays* L. *ssp. mays*  
Breeding. P13-285:61.
- PI 596246. *Zea mays* L. *ssp. mays*  
Breeding. P16-263:60.
- PI 596247. *Zea mays* L. *ssp. mays*  
Breeding. P39-10-226:61.
- PI 596248. *Zea mays* L. *ssp. mays*  
Breeding. P39-10-228:61.
- PI 596249. *Zea mays* L. *ssp. mays*  
Breeding. P39-16-262:60.
- PI 596250. *Zea mays* L. *ssp. mays*  
Breeding. P39-16-275:61.
- PI 596251. *Zea mays* L. *ssp. mays*  
Breeding. P39-16-276:61.
- PI 596252. *Zea mays* L. *ssp. mays*  
Breeding. P39-16-278:61.

**PI 596253. Zea mays L. ssp. mays**  
Breeding. P39-16-287E:68.

The following were donated by Crookham Company, Caldwell, Idaho, United States. Received 1987.

**PI 596254. Zea mays L. ssp. mays**  
Breeding. P39Le-253:60.

The following were donated by Nicholas D Molenaar, Crookham Company, P.O. Box 520, Caldwell, Idaho 83606-0520, United States. Received 1987.

**PI 596255. Zea mays L. ssp. mays**  
Breeding. P39LE-261:61.

**PI 596256. Zea mays L. ssp. mays**  
Breeding. P39LE-3438:64.

**PI 596257. Zea mays L. ssp. mays**  
Breeding. P39LE-3502:61.

**PI 596258. Zea mays L. ssp. mays**  
Breeding. P39M94-2590I:60.

The following were donated by Crookham Company, Caldwell, Idaho, United States. Received 1979.

**PI 596259. Zea mays L. ssp. mays**  
Breeding. P39M94-3437:61.

The following were donated by Nicholas D Molenaar, Crookham Company, P.O. Box 520, Caldwell, Idaho 83606-0520, United States. Received 1987.

**PI 596260. Zea mays L. ssp. mays**  
Breeding. P39W-2590E:60.

**PI 596261. Zea mays L. ssp. mays**  
Breeding. P39W-3435:61.

**PI 596262. Zea mays L. ssp. mays**  
Breeding. P51-3289:61.

The following were donated by Crookham Company, Caldwell, Idaho, United States. Received 1979.

**PI 596263. Zea mays L. ssp. mays**  
Breeding. P51-482:59.

**PI 596264. Zea mays L. ssp. mays**

Breeding. P51-51:61.

**PI 596265. *Zea mays* L. ssp. *mays***  
Breeding. SYN COGENT-1828:61.

**PI 596266. *Zea mays* L. ssp. *mays***  
Breeding. T20R-35871(x).

**PI 596267. *Zea mays* L. ssp. *mays***  
Breeding. T20R-35871A(x).

The following were donated by Nicholas D Molenaar, Crookham Company, P.O. Box 520, Caldwell, Idaho 83606-0520, United States. Received 1984.

**PI 596268. *Zea mays* L. ssp. *mays***  
Breeding. T26R-546:62.

**PI 596269. *Zea mays* L. ssp. *mays***  
Breeding. T60R-548:62.

The following were donated by Crookham Company, Caldwell, Idaho, United States. Received 1979.

**PI 596270. *Zea mays* L. ssp. *mays***  
Breeding. T69W-1236:60.

The following were developed by Ron D. Barnett, University of Florida, North Florida Res. & Ed. Center, R.#3, Box 4370, Quincy, Florida 32351, United States. Received 09/01/1996.

**PI 596271. *Triticum aestivum* L., nom. cons.**  
Breeding. Pureline. FL85238-G585; NSGC 6138. Pedigree - FL8172-G116/Florida 303 ; sister line to Morey. Soft red winter wheat. Early, good disease resistance. No genes for Hessian fly resistance. Bearded, white chaff. Sister line to Morey.

The following were developed by David S. Marshall, Texas A&M University, Research & Extension Center, 17360 Coit Road, Dallas, Texas 75252-6599, United States. Received 09/01/1996.

**PI 596272. *Triticum aestivum* L., nom. cons.**  
Breeding. Pureline. TX91D7012; NSGC 6139. Pedigree - Siouxland/TAM 300//Caldwell/Era. Soft red winter wheat. Good winterhardiness for a soft red winter wheat adapted to the southern U.S. Carries leaf rust resistance genes Lr1, Lr2a, Lr2c, plus factors for adult-plant resistance.

**PI 596273. *Triticum aestivum* L., nom. cons.**  
Breeding. Pureline. TX92D7374; NSGC 6140. Pedigree - Coker 983/Florida 302//Caldwell. Soft red winter wheat. Carries leaf rust resistance genes Lr10, Lr11, Lr18, plus adult-plant resistance.

**PI 596274. *Triticum aestivum* L., nom. cons.**

Breeding. Pureline. TX92D7741; NSGC 6141. Pedigree - Florida 302/Fundulea 113D//McNair 1003. Soft red winter wheat. Carries leaf rust resistance genes Lr1, Lr10, Lr11, plus adult-plant resistance.

The following were developed by A.I. Al-Suliman, National Agriculture and Water Research Center, P.O. Box 17285, Riyadh 11484, Saudi Arabia; K.A. Al-Zeir, National Agriculture and Water Research Center, P.O. Box 17285, Riyadh 11484, Saudi Arabia; Aly Ibrahim, U.S. Department of Agriculture, 1636 East Alisal Street, Salinas, California 93905, United States. Received 12/05/1996.

**PI 596275. *Cucurbita moschata* (Duchesne) Poiret**

Cultivar. HAMDAN. A plant with small fruit selected after four generations of selection and inbreeding from an open-pollinated population of the Egyptian pumpkin. Fruit small, uniform shape, skin cream-colored, easy to peel, smooth texture. Sweeter than local variety. Mature in 122 days from planting to harvest. Vines vigorous. Plant extends to 5 m in diameter. Averages 3 fruit per plant. Grows well in the hot, dry Saudi environment. Excellent keeping and storing quality. May be kept for 2 months at room temperature and 20-30% relative humidity. Suitable for export.

**PI 596276. *Cucurbita moschata* (Duchesne) Poiret**

Cultivar. QASIM. Long-necked fruit selected from a large population of Egyptian pumpkins at a local market in the Qasim area in 1989. Fruit length 62 to 87 cm, skin cream-colored with touch of bronze at harvest. Neck length 40 to 60 cm, represents 70% of total fruit length and 66% of total fruit weight, flesh solid orange. Bulb small with small cavity; seeds embedded in the bulb. Mature in 112 days. Vines vigorous, extending to >3 m. Leaves dark green and mottled around veins. Average 2 fruit per plant and yielded 27% more than local variety. Grows well in the hot, dry Saudi environment. Excellent keeping and storing quality. May be kept for 2 months at room temperature and 20-30% relative humidity. Suitable for export.

The following were developed by Mark T. Nielsen, University of Kentucky, Agronomy Department, N212E Ag. Sci. Bldg., Lexington, Kentucky 40546, United States. Received 12/09/1996.

**PI 596277. *Nicotiana tabacum* L.**

Cultivar. Pureline. "KY908". CV-113. Pedigree - KY17/TN86. Flowers approx. 70 days after transplanting. Largest leaf average 67 x 34 cm. Stalk diameter average 3.73 cm. Resistant to tobacco mosaic virus, black root rot (*Thielaviopsis basicola*), wildfire (*Pseudomonas syringae* pv. *tabaci*), and tobacco vein mottling virus. Moderate resistance to tobacco etch virus, black shank (*Phytophthora parasitica* var. *nicotianae*), and Fusarium wilt (*Fusarium oxysporum*).

The following were donated by Herb S. Aldwinckle, Cornell University, New York State Agric. Exp. Station, Department of Plant Pathology, Geneva, New

York 14456-0462, United States. Received 12/15/1988.

**PI 596278. *Malus ombrophila* Hand.-Mazz.**  
Uncertain. GMAL 3123. Collected in China.

The following were donated by L. Shreve, Texas A & M University, P.O. Box 1849, Uvalde, Texas 78802, United States. Received 12/15/1988.

**PI 596279. *Malus ioensis* (Alph. Wood) Britton**  
Uncertain. GMAL 3127; TEXANA.

The following were collected by Elizabeth Dickson, Cornell Univ., L.H. Bailey Hortorium, Ithaca, New York 14853, United States; C. Sperling, USDA-ARS, Plant Exploration Office, Bldg 001, BARC-West, Beltsville, Maryland 20705-2350, United States; Herb S. Aldwinckle, Cornell University, New York State Agric. Exp. Station, Department of Plant Pathology, Geneva, New York 14456-0462, United States. Received 10/10/1989.

**PI 596280. *Malus sieversii* (Ledeb.) M. Roemer**  
Wild. USSR-89-23-02; GMAL 3265. Collected 09/05/1989 in Uzbekistan.  
Elevation 1630 m. Loose white rocky soil. Calcareous. Open scrub and herbaceous vegetation. Tree to 5.0 m.

The following were donated by Herb S. Aldwinckle, Cornell University, New York State Agric. Exp. Station, Department of Plant Pathology, Geneva, New York 14456-0462, United States. Received 12/15/1988.

**PI 596281. *Malus ombrophila* Hand.-Mazz.**  
Uncertain. GMAL 3125. Collected in China.

The following were collected by Elizabeth Dickson, Cornell Univ., L.H. Bailey Hortorium, Ithaca, New York 14853, United States; C. Sperling, USDA-ARS, Plant Exploration Office, Bldg 001, BARC-West, Beltsville, Maryland 20705-2350, United States; Herb S. Aldwinckle, Cornell University, New York State Agric. Exp. Station, Department of Plant Pathology, Geneva, New York 14456-0462, United States. Received 10/10/1989.

**PI 596282. *Malus sieversii* (Ledeb.) M. Roemer**  
Wild. USSR-89-06-03; GMAL 3244. Collected 08/31/1989 in Tajikistan.  
Elevation 1490 m. 35 km North of Dushanbe. Village of Gazni in Gazni valley. Oktjabski district. Steep ravine at edge of stream. Fine clay soil. Growing with *Juglans regia*.

**PI 596283. *Malus sieversii* (Ledeb.) M. Roemer**  
Wild. USSR-89-31-04; GMAL 3310. Collected 09/09/1989 in Kazakhstan.  
Elevation 1550 m. NE slope (ca. 30%). Forest of mature apple trees with mostly closed canopy. Tree height to 10 m, 18 cm DBH.

The following were collected by Richard M. Hannan, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington



99164-6402, United States; Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington  
99164-6402, United States. Received 08/24/1992.

**PI 596284. *Avena barbata* Pott ex Link**

Wild. B92-46; W6 10746; NSGC 1411. Collected 06/28/1992 in Bulgaria.  
Elevation 30 m. Behind Institute of Wheat and Sunflower (IWS) Guest house.

The following were collected by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington  
99164-6402, United States; Fred J. Muehlbauer, USDA, ARS, Washington State University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington  
99164-6434, United States; Calvin R. Sperling, USDA, ARS, Natl. Germplasm Resources Laboratory, Room 402, Building 003, BARC-West, Beltsville, Maryland  
20705-2350, United States. Received 09/15/1989.

**PI 596285. *Hordeum vulgare* ssp. *spontaneum* (K. Koch) Thell.**

Wild. 040689-0401; W6 2002; NSGC 5987. Collected 06/04/1989 in Mardin, Turkey. Latitude 37 deg. 30' N. Longitude 40 deg. 51' E. Elevation 880 m. 7.5 km NE of Pinardere on road to Savur from Mardin or 26 km after turnoff to Savur from Mardin-Midyat road. Common at base of limestone outcrop. Steep rocky limestone slopes.

**PI 596286. *Triticum monococcum* L.**

Cultivated. 030689-0303; W6 1993; NSGC. Collected 06/03/1989 in Diyarbakir, Turkey. Latitude 37 deg. 36' N. Longitude 40 deg. 30' E. Elevation 850 m. 19 km S of Cinar or 3 km before Yukari-Konak. Common. Hard limestone outcrops, rubble. Heavily grazed. Scattered. Coppiced. Steep N facing slope. Associated with wild barley, *H. spontaneum* and diploid wheat. Annual to 0.5m. Spikes tan to black.

**PI 596287. *Aegilops markgrafii* (Greuter) K. Hammer**

Wild. 060689-0502; W6 2038; NSGC 5989. Collected 06/06/1989 in Mardin, Turkey. Latitude 37 deg. 28' N. Longitude 41 deg. 9' E. 4.3 km W of the intersection of the Senkoy-Savur road on road from Midyat-Mardin. Or 20.3 km E of Oemerli. Common. Steep E facing rocky limestone slope, heavily grazed, abandoned terraces. Cultivated lentil field.

**PI 596288. *Aegilops neglecta* Req. ex Bertol.**

Wild. 060689-0503; W6 2039; NSGC 5990. Collected 06/06/1989 in Mardin, Turkey. Latitude 37 deg. 28' N. Longitude 41 deg. 9' E. 4.3 km W of the intersection of the Senkoy-Savur road on road from Midyat-Mardin. Or 20.3 km E of Oemerli. Abundant. Cultivated lentil field.

**PI 596289. *Triticum timopheevii* var. *araraticum* (Jakubz.) Yen**

Wild. 020689-0304; NSGC 5991. Collected 06/02/1989 in Diyarbakir, Turkey . Latitude 37 deg. 51' N. Longitude 39 deg. 49' E. Elevation 1320 m. 20 km east of Karacadag on road Siverek to Diyarbakir, 7 km east of Karabache village at highway maintenance substation 1 km south of road in protected ungrazed recently forested. Rocky basalt outcrops, vegetation dominated by *Secale montanum*, *Hordeum bulbosum*, annual and perennial legumes.

**PI 596290. *Triticum timopheevii* var. *araraticum* (Jakubz.) Yen**  
Wild. 100689-0103; NSGC 5992. Collected 06/10/1989 in Siirt, Turkey.  
Latitude 37 deg. 43' N. Longitude 42 deg. 15' E. Elevation 1160 m. 6 km  
east of Eruh on the Eruh-Sirnak road. Steep, south facing slope in  
canyon; hard limestone with oak trees.

The following were developed by Crop Experiment Station, Office of Rural  
Development, Suwon, Kyonggi, Korea, South. Donated by Bong Ho Lee, Crop  
Experiment Station, Rural Development Administration, Suwon, Kyonggi 441-100,  
Korea, South. Received 04/06/1993.

**PI 596291. *Perilla* sp.**

Cultivar. "Yeupsildlggae"; Ames 20207. Pedigree - The F1 population it  
was selected from was first grow in 1981. Released 1988. Used for  
oilseed and vegetable production. In Korea, flowers September 6, matures  
seeds October 3, and grows 143cm tall. Yields 126 kg/ha of seeds. Leaves  
green and heart shaped. Seeds dark brown and small, with 45.6% oil.

**PI 596292. *Perilla frutescens* (L.) Britton**

Cultivar. "Daeyeupdlggae"; Ames 20208. Pedigree - Selection from the  
Bosung local strains collected in 1985. Released 1992. Seeds white and  
weigh 6.3 g per 1,000 seeds. In Korea, flowering is on Sept. 3, maturity  
is on Oct. 3, and grows 140cm tall. Used for leaf and seed production.  
Improves on older cultivars by having larger seeds and leaves, better  
insect resistance, and less lodging. Seeds higher in unsaturated fatty  
acid, protein, and essential amino acids, than older cultivars.

The following were developed by Duane L. Johnson, Colorado State University,  
Dept. of Agronomy, Fort Collins, Colorado 80523, United States. Received  
12/1986.

**PI 596293. *Chenopodium quinoa* Willd.**

Cultivar. "COLORADO 407D"; "407"; "DAVE"; "CO407"; 407/DAVE/CO407; NSL  
219867. Pedigree - From Chilean germplasm. Released 1987. An early  
maturity type, maturing in 95 to 100 days. Plant height varies with  
moisture, nutrition, and plant density, but at 250,000 to 300,000 plants  
per acre they average 99 cm. Compared to other germplasms evaluated,  
better general resistance to powdery mildew, damping off, various  
lepidoptera, and leaf miners. Suceptable to sugarbeet root aphid. At  
physiological maturity, 94% of the plants turn red and gold, 3% are  
green and 3% are green with red panicles. Seed pericarp variable in  
color with 95% yellow pericarps and 5% assorted colors (red, white, and  
black). Seed homozygous recessive for translucent endosperm.

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