

PLANT MATERIAL INTRODUCED BY THE DIVISION OF FOREIGN PLANT INTRODUCTION, BUREAU OF PLANT INDUSTRY, JULY 1 TO SEPTEMBER 30, 1930 (Nos. 88433-89210)

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INTRODUCTORY STATEMENT

The plant introductions included in this inventory (Nos. 88433-89210), for the period from July 1 to September 30, 1930, are largely made up of foragecrop material sent in from China and Chosen by the agricultural explorers, P. H. Dorsett and W. J. Morse, who in recent months have sent in over 200 varieties of soybeans besides alfalfa (*Medicago sativa*, 89041-89047, 89111-89121) and grasses which may prove useful as forage. During this period H. L. Westover was in Morocco and Tunis and sent in grasses (Nos. 88715-88730, 88900-88934) and alfalfa (No. 88936) and seeds of the argan tree (*Argania spinosa*, No. 88935) which is to be tried out in the Southwest as forage for goats. A shipment of forage crops (Nos. 88516-88523) was received from Canberra, Australia, presented by the Division of Plant Industry, Council for Scientific and Industrial Research.

T. H. Parsons, Curator of the Royal Botanic Gardens, Peradeniya, Ceylon, sent a collection of palms (Nos. 88671–88677, 88864) which will be used in the permanent planting at Coconut Grove; later, seeds of these trees will be ready for distribution. From the Philippine Islands, P. J. Wester has sent two palms (Adonidia merrillii, No. 88868, and Heterospathe elata, No. 89203); also two ornamentals, Bauhinia monandra (No. 88512) and Anemone vitifolia (No. 88511).

From S. W. McLeod Braggins, superintendent of La Mortola Gardens, Ventimiglia, Italy, was received a collection of ornamentals, *Aloe* spp. (Nos. 88733 and 88738), *Cotyledon* spp. (Nos. 88739–88740), *Crassula* spp. (Nos. 88741–88743), *Echeveria* spp. (Nos. 88744–88751), stonecrop (*Sedum* spp., Nos. 88753–88757), and houseleek (*Sempervivum* spp., Nos. 88758–88772), all of which will be studied by our plant breeders. A shipment of varieties of cyclamen (*Cyclamen* spp., Nos. 89085–89099), which are not commonly grown in this country, was purchased from the Zwanenburg Nurseries, Haarlem, Netherlands.

David Fairchild, during this period, was traveling in the Mediterranean countries and sent apricots (*Prunus armeniaca*, Nos. 88591–88593) and Seville oranges (*Citrus aurantium*, Nos. 88678, 88679, 88682, 88683), as well as a collection of ornamentals.

Plants of peaches (Amygdalus persica, Nos. 88543-88560), apples (Malus sylvestris, Nos. 88571-88575), and plums (Prunus spp., Nos. 88578-88582) were received from New Zealand.

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During the period of this inventory Prof. F. T. Bioletti and Knowles A. Ryerson, agricultural explorers, were in north Africa and from Tunis and Morocco sent seeds and cuttings of apricots (*Prunus armeniaca*, Nos. 88597-88606, 88704-88714, 88872-88897, 88937-88946, 88948-88965), peaches (*Amygdalus persica*, No. 88870) and lemon (*Citrus limonia*, No. 88871), all of which will be used by our department plant breeders.

The specialists working with sugarcane have received from Barbados, British West Indies, shipments of cuttings of Saccharum officinarum (Nos. 88619-88670, 89173).

The botanical determinations of these introductions have been made and the nomenclature determined by H. C. Skeels, who has had general supervision of this inventory.

KNOWLES A. RYERSON,

Principal Horticulturist, in Charge.

DIVISION OF FOREIGN PLANT INTRODUCTION, Washington, D. C., September 17, 1931.

88433. SOLANUM TUBEROSUM L. Sola-Potato. naceae.

From Huancayo, Peru. Tubers presented by Paul G. Ledig, Huancayo Magnetic Observatory, Department of Research in Terrestrial Magnetism, Carnegie Institu-tion. Received July 1, 1930.

A yellow-fleshed potato.

88434 to 88510.

From Manchuria. Seeds obtained by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Re-ceived July 1, 1930.

88434. ASTRAGALUS Sp. Fabaceae.

No. 5841. May 31, 1930. From near Hsiungyaocheng.

88435. ASTRAGALUS Sp. Fabaceae.

No. 5766. From dry rocky hillsides about halfway between Port Arthur, Ko-deisen, and Dairen, May 26, 1930. A deep-pink flowered plant of semipros-trate habit growing on poor dry rocky soil. Very abundant. Pods shatter easily.

Nos. 88436 to 88440 were obtained from a warehouse in the South Manchurian Rail-way storage yards, Yingkon, May 30, 1930.

88436. FAGOPYRUM ESCULENTUM MOench. Buckwheat. Polygonaceae.

No. 5780. Chaou mai. Grown in the Yingkon section.

Mal-88437. GOSSYPIUM NANKING Meyen. vaceae. Cotton.

Seed of native cotton grown No. 5783. in the Yingkon section.

438 and 88439. PHASEOLUS ANGULARIS (Willd.) W. F. Wight. Fabaceae. 88438 Adsuki bean.

88438. No. 5778. From section of Manchuria. From the Yingkon

88439. No. 5779. From the Yingkon

section of Manchuria.

88434 to 88510—Continued.

88440. PISUM SATIVUM L. Fabaceae. Pea.

No. 5781. From the Yingkon section of Manchuria.

- 88441 to 88510. SOJA MAX (Glycine hispida Maxim.). MAX (L.) Piper Fabaceae. Sovbean.
 - 88441. No. 5718. Ku (Tansen's yel-low). From the South Manchurian Railway Experiment Station, Hsiun-gyaocheng, May 31, 1930. Large yellow, oval, with light-brown hilum. Seed testa more or less split.
 - 88442. No. 5748. From a storage ware-house on the wharves, Dairen, May 31, 1930. Mixed yellow varieties used for export to Europe for the production of oil and oil cake.
 - 88443. No. 5749. From a bag in a storage warehouse on the wharves, Dairen, May 31, 1930. Mixed yel-low varieties, Manchurian grown. low varieties, Manchurian grown. Exported to Europe for production of oil and oil meal. This sample has a small percentage of brown seed which may have forage value.
 - 444. No. 5767. Chinghuangtou (golden yellow). Medium sized, nearly round, yellow with brown hilum. Used for oil and oil meal. 88444. No. 5767.
 - 445. No. 5768. From the storage yards of the South Manchurian Railway, Yingkon, May 30, 1930. Mixture of yellow and greenish va-rieties used for oil and oil cake. 88445. No.
 - 446. No. 5769. Hakubi (white eye). From near Yingkon, May 30, 1930. Medium sized, oval, light-yellow bean with pale hilum. Used for oil and 88446. No. 5769. oil meal.
 - 88447 to 88449. From the storage yards of the South Manchurian Railway, Yingkon, May 30, 1930.
 - **447.** No. 5770. Mixture of yellow and greenish-yellow seeded varieties used for oil and oil cake. 88447. No. 5770.

¹ It should be understood that the names of varieties of fruits, vegetables, cereals, and other plants used in this inventory are those under which the material was received when introduced by the Division of Foreign Plant Introduction, and, further, that the printing of such names here does not constitute their official publication and adoption in this country. As the different varieties are studied, their entrance into the American trade forecast, and the use of varietal names for them in American literature becomes necessary, the foreign varietal designations appearing in this inventory will be subject to change with a view to bringing the forms of the names into harmony with recognized horticultural nomenclature. It is a well-known fact that botanical descriptions, both technical and economic, seldom mention the seeds at all and rarely describe them in such a way as to make possible iden-tification from the seeds alone. Many of the unusual plants listed in these inventories are appearing in this country for the first time, and there are no seed samples or herbarium specimens with ripe seeds with which the new arrivals may be compared. The only iden-tification possible is to see that the sample received resembles seeds of other species of the same genus or of related genera. The responsibility for the identification, therefore, must necessarily often rest with the person sending the material. If there is any question regarding the correctness of the identification of any plant received from this division, herbarium specimens of leaves and flowers should be sent in so that definite identification can be made. can be made.

88434 to 88510-Continued.

- 88448. No. 5771. Mixture of yellow and greenish-yellow seeded varieties used for oil and oil cake.
- 88449. No. 5772. Mixture of yellow and brown seeded varieties.
- 88450. No. 5773. Ohinhuangtou (golden yellow). From the Taga farm, near Yingkon, May 30, 1930. Mixture of black-seeded varieties. Used in the Yingkon section for green manure on poor land.
- 88451. No. 5774. From a Chinese junk at a wharf of the South Manchurian Rallway storage yards, Yingkon, May 30, 1930. Mixture of blackseeded varieties. Used in the Yingkon section for green manure on poor land.
- 88452. No. 5775. Heiaohuangtou (small yellow). From the Yamada farm, near Yingkon, May 30, 1980. Medium small, nearly round, yellow with brown hilum. Used for oil and oil cake.
- 88453. No. 5776. Heitou. From the South Manchurlan Railway storage yards, Yingkon, May 30, 1930. Mixture of black-seeded varieties very similar to the old Wilson (No. 19183). Used in the Yingkon section on poor land for green manure.
- 88454. No. 5777. Chinhuangtou (golden yellow). From the Aiko farm, near Yingkon, May 30, 1930. Medium small, nearly round, yellow with brown hilum. Used for oil.

Nos. 88455 to 88510 are from the South Manchurian Railway Experiment Station, Hsiungyaocheng, May 31, 1930.

- 88455. No. 5784. Station No. 424-78. Medium large, oval, very light yellow with pale hilum.
- 88456. No. 5785. Enryushokozu (small round yellow). Medium sized, oval, yellow with russet-brown hilum.
- 88457. No. 5786. Koiku No. 63. Kungchuling Bred No. 63. Medium sized, oval, yellow with russet-brown hilum.
- 88458. No. 5787. Kokuzu (black). Medium sized, oval, slightly flattened, black. Yellow germ.
- 88459. No. 5788. Shokozu (small yellow). Medium sized, oval, yellow with reddish-brown hilum.
- 88460. No. 5789. *Gishutan*. Medium large, oval, light yellow with pale hilum.
- 88461. No. 5790. Ohokubi (large white eye). Medium large, oval, light yellow with pale hilum.
- 88462. No. 5791. Daikozu (large yellow). Medium sized, oval, yellow with brown hilum.
- 88463. No. 5792. Moshiito (flat cattle feed). Medium large, oblong, muchflattened brown seed. Appears identical with the Virginia variety with exception that Moshiito is a little larger.
- 88464. No. 5793. *Chuhiao*. Medium sized, oval, yellowish green with brown hilum. More or less mottled with brown. Germ yellow.

88434 to 88510-Continued.

- 88465. No. 5794. Yukoro. Medium large, oval, yellow with lightbrown to brown hilum.
- 88466. No. 5795. Shiryukozu No. 87 (yellow 4-grain No. 87). Medium sized, nearly round, oval, yellow with light-brown hilum.
- 88467. No. 5796. *Heichoko*. Medium sized, oval, yellow with pale to light-brown hilum.
- 88468. No. 5797. Iganzu (wild boar eye). Medium large, oblong, flattened, black with germ yellow.
- 88469. No. 5798. Oaoza (large green). Medium large, green, oval, with brown hilum. Germ green.
- 88470. No. 5799. Marutsubumoshiito (round cattle feed). Medium sized, oval, much flattened, yellowish brown. Quite similar to the Virginia variety.
- 88471. No. 5800. Shokozu (small yellow). Medium sized, oval, glossy yellow with black hilum.
- 88472. No. 5801. Shokokuzu (small black). Medium sized, oval, slightly flattened, black with yellow germ.
- 88473. No. 5802. Mizushirazu (unknown water). Medium sized, oval, very light yellow with brown hilum. Seed coat more or less cracked.
- 88474. No. 5803. Kurogara. Medium sized, oval, light yellow with lightbrown hilum.
- 88475. No. 5804. Daikokuzu (large black). Medium large, oval, black, slightly flattened with green germ.
- 88476. No. 5805. Hachigakuao (August green). Medium sized. oval, greenish yellow with brown hilum.
- 88477. No. 5806. *Rigaiseigu* (green). Medium sized, oval, dark green with dark-brown hilum. Germ green.
- 88478. No. 5807. Henryushokokuza (small flat black). Medium small, oblong, much flattened, black with germ yellow.
- 88479. No. 5808. Kungchuling Improved No 77. Medium sized, oval, slightly flattened, glossy yellow with russet-brown hilum.
- 88480. No. 5809. Tetsusayaaozu (iron pod green). Medium sized, yellowish green with dark-brown hilum. Mottled slightly with brown.
- 88481. No. 5810. Soseichuryu (early medium sized). Medium sized, oval, yellow with brown hilum. Mottled with dark brown.
- 88482. No. 5811. Kiikeaozu (yellow hair green). Medium sized, yellowish green with dark-brown hilum. Germ yellow. Slightly mottled with brown.
- 88483. No. 5812. Shiryuao (4-seeded green). Medium sized, oval, yellowish green with pale bilum. Germ yellow, mottled with brown.
- 88484. No. 5813. Station No. 434-66. Medium large, oval very light yellow with pale hilum.
- 88485. No. 5814. Station No. 430-76. Medium sized, oval, light yellow with pale hilum.

88434 to 88510—Continued.

- 88486. No. 5815. Kaigen's kingenzu. Medium sized, oval, light yellow with brown hilum.
- 88487. No. 5816. Yonryuao (green 4grain). Medium sized, oval, slightly flattened, green with dark-brown hilum. Germ green.
- 88488. No. 5817. Aokowazu (green skin). Medium sized, oval, light green with brown hilum. Germ yellow.
- 88489. No. 5819. Genzan. Medium large, oval, slightly flattened, glossy yellow with pale-brown hilum. Seed coat slightly cracked.
- 88490. No. 5820. Haouben. Medium sized, oval, yellowish green with russet-brown hilum. Germ yellow. Slightly mottled with brown.
- 88491. No. 5821. Ryokuchazu (green tea). Medium large, oval, slightly flattened, green with black hilum. Green germ.
- 88492. No. 5822. Nagaobaao (large longleaf green). Medium sized, oval, yellowish green with pale hilum. More or less mottled with brown.
- 88493. No. 5823. Heitankoushirosayaao (Heitankou white-podded green). Medium sized, oval, yellowish green with light-brown hilum.
- 88494. No. 5824. Showafirst, No. 7 1926). Medium sized, oval, slightly flattened, light glossy yellow with light-brown bilum.
- 88495. No. 5825. Koniku No. 66 (Kingchuling Improved No. 66). Medium sized, oval, glossy yellow with russet-brown hilum.
- 88496. No. 5826. Liaoyangkii (Liaoyang yellow). Medium large, oval, yellow with brown hilum.
- 88497. No. 5827. *Taisho* 24-9 (No. 9, 1926). Medium sized, oval, very light yellow with pale hilum.
- 88498. No. 5828. *Toshigan* (baby rabbit's eye). Medium sized, oval, slightly flattened, reddish brown.
- 88499. No. 5829. Kiizu (yellow). Medium small, nearly round, glossy yellow with brown hilum.
- 88500. No. 5830. Shirosayaaozu (whitepodded green). Medium sized, oval, yellowish green with brown hilum.
- 88501. No. 5831. Marutsubushokokuzu (small round black). Medium sized, oval, dull black with yellow germ.
- 88502. No. 5832. Ryoryuao. Medium small, oval, yellowish green with hilum varying from pale to brown.
- 88503. No. 5833. Kokusekizu. Medium sized, oval, yellowish green with brown hilum.
- 88504. No. 5834. Shiryukii (4-grain yellow). Medium sized, nearly round, yellow with light-brown hilum.
- 88505. No. 5835. Station No. 424-23. Medium sized, oval, very light yellow with pale hilum.
- 88506. No. 5836. Benikeao (red hair green). Medium small, oval, yellowish green with brown (light) hilum. Slightly mottled with brown.

88434 to 88510-Continued.

- 88507. No. 5837. Kaigenuhiseiza (Kaigen crow skin green). Medium small, oval, black with green germ.
- 88508. No. 5838. Showa No. 1-4 (1926). Medium sized, oval, slightly flattened, light yellow.
- 88509. No. 5839. Daikokuzu (large black). Medium large, oval, dull black with yellow germ.
- 88510. No. 5840. Ushigekii (cow's hair yellow). Medium sized, oval, greenish yellow with dark-brown hilum. Slightly mottled with brown and black.

88511 and 88512.

- From the Philippine Islands. Seeds presented by P. J. Wester, Bureau of Plant Industry, Department of Agriculture and Natural Resources, Manila. Received July 7, 1930.
 - 88511. ANEMONE VITIFOLIA Buch.-Ham. Ranunculaceae. Grapeleaf anemone.

From Manila. An ornamental species growing at altitudes ranging from 5,000 to 8,000 feet in Mountain Province. It is an annual, reaching a height of 3 feet, much branched, with large, deeply divided leaves and open corymbs of beautiful white flowers. These are followed by round fruits which, when ripe, burst forth in abundant, seed-bearing cotton.

For previous introduction see No. 65823.

88512. BAUHINIA MONANDRA KURZ. Caesalpiniaceae. Butterfly bauhinia.

From Bukidnon. An ornamental tropical African bush or small tree with handsome pink flowers, variegated with yellow and spotted with red.

For previous introduction see No. 68842.

88513 to 88515. CITRUS spp. Rutaceae.

- From Italy and Palestine. Scions collected by Dr. H. S. Fawcett, University of California. Received July 7, 1980.
 - 88513, CITRUS Sp.

No. 252. Chinotli. From near Abenga, Italy.

88514. CITRUS sp.

No. 124. Collected from Miekwah Israel School, near Telavio, Palestine, May 1, 1930.

88515. CITRUS Sp.

No. 125. From Palestine. Collected in May, 1930.

88516 to 88523.

- From Australia. Seeds presented by A. McTaggart, Division of Plant Industry, Council for Scientific and Industrial Research, Canberra. Received July 7, 1930.
 - 88516. AVENA SATIVA L. Poaceae. Oats.

Mulga oats.

88517. CYTISUS PROLIFERUS L. f. Fabaceae. Tagasaste.

A stout leguminous shrub, up to 12 feet high, of rather lax habit, with long, slender branches, and green trifololate leaves with silky pubescent lower sur-

88516 to 88523—Continued.

faces. The white flowers are in axillary clusters among the branches. It is native to the Canary Islands, where it is considered an excellent drought-resistant forage plant.

For previous introduction see No. 65584.

88518. DANTHONIA SEMIANNULARIS (Labill.) R. Br. Poaceae.

Wallaby grass.

A perennial, fine-leaved tussocky grass, 1 to 2 feet high, which provides feed for the greater part of the year. It is said to be a good winter grass, will stand a great amount of grazing, and its palatability both for cattle and sheep is well known.

For previous introduction see No. 81942.

88519. LOLIUM LOLIACEUM (Bory and Chaub.) Hand.-Mazz. (L. subulatum Vis.). Poaceae. Wimmera ryegrass.

An annual bunch grass with muchbranched slender prostrate or ascending stems 2 to 8 inches long. Native to dry sandy places along the coast of southeastern Europe.

For previous introduction see No. 81944.

88520. LOTUS ULIGINOSUS Schkuhr. Fabaceae.

A herbaceous perennial pasture plant of considerable importance in New Zealand, where it grows in swampy ground.

For previous introduction see No. 73267.

13201. 88521. MEDICAGO ARBOREA L. Fabaceae. Tree alfalfa.

This shrubby species is grown quite extensively as a hedge plant in the island of Minorca, and the branches are cut and fed to stock.

For previous introduction see No. 65024.

88522. STIZOLOBIUM ATERRIMUM Piper and Tracy. Fabaceae. Mauritus bean.

88523. TRIFOLIUM SUBTERRANEUM L. Fabaceae. Subterranean clover.

An Australian clover which appears to have value as a forage plant for the southern United States.

For previous introduction see No. 64592.

88524 to 88535. Gossypium spp. Malvaceae. Cotton.

From the Union of Socialistic Soviet Republics. Seeds presented by the Director of the Turkestan Plant-Breeding Station, Tashkent, through the Plant Quarantine Control Administration. Received July 7, 1930.

88524. GOSSYPIUM sp.

No. 0100. Navrotsky.

88525. Gossypium sp.

No. 169. Dakhean.

88526. Gossypium sp.

No. 182. Ak-Djura.

88527. Gossypium sp.

No. 0.251. Triumph Navrotsky.

88524 to 88535-Continued.

88528. GOSSYPIUM SD.

No. 407, Kuldja.

88529. GOSSYPIUM sp.

No. 454. Gorno-Bukharkaja.

88530. GOSSYPIUM Sp.

No. 508. Batyr.

88531. GOSSYPIUM Sp.

No. 0.937. Million Dollar.

88532. GOSSYPIUM Sp.

No. 1306. Shreder.

88533. GOSSYPIUM Sp.

No. 1838.

88534. Gossypium sp.

No. 2005.

88535. Gossypium sp.

No. 2017.

88536. FRAGARIA VESCA L. Rosaceae. Alpine strawberry.

From Istanbul, Turkey. Seeds collected by David Fairchild, agricultural explorer, with the Allison V. Armour expedition. Received July 8, 1930.

No. 3526. Osmanli or ohoman variety. Collected June 12, 1930. A very lightcolored variety extremely delicate and rather sweet which brings the highest prices on the Istanbul market, where it is sold in special baskets made of split wood. The culture is on high, dry clay soil on hillsides. It is not a first-class variety in any respect.

88537 to 88541.

From Greece. Cuttings and seeds collected by David Fairchild, agricultural explorer, with the Allison V. Armour expedition. Received July 8, 1930.

88537. OLEA EUROPAEA L. Oleaceae. Common olive.

No. 3545. Kourmadia variety. Collected June 17, 1930, from terraces near Kataraktis, South Chios Island. This variety is peculiar in that the fruits as soon as ripe are eaten fresh without processing. They are said to be sweetish and palatable. The olive is not only eaten fresh but is preserved in salt and makes a light-brown pickled olive with soft mealy fiesh and mild peculiar flavor. A very old variety in the island of Chios. Tree seems to be vigorous and productive.

88538. PRUNUS sp. Amygdalaceae.

No. 3542a. Collected June 17, 1930, from the G. J. Chovencis garden, Chios. A very pretty plumlike fruit which has a delicate pubescence on the skin. It resembles Burbank's plumcot in many respects and may be a hybrid of some sort. In flavor it is sweet, melting, and has no bitter flavor about the stone to suggest a Japanese origin. Decidedly a good fruit. Color a delicate deep pink over a greenish-yellow background. Seed seems to have an apricot character. Said to be earlier ripening than other sorts.

88539. PUNICA GRANATUM L. Punicaceae. Pomegranate.

No. 3546. So-called Seedless variety, collected June 16, 1930. This is not

88537 to 88541-Continued.

seedless, but the seed coats are so thin that one can eat the fruits with comfort. It is a favorite in the island of Chios, although not a very bright-colored variety.

88540. SARCOPOTERIUM SPINOSUM (L.) Spach. Rosaceae.

No. 3533. Collected near Messa, Mytilene, June 15, 1930. An interesting, intensely spiny shrub that grows commonly on the dry rocky hillsides of the interior of the island of Mytilene. It withstands freezing temperatures and would doubtless grow in Arizona.

For previous introduction see No. 30105.

88541, TULIPA sp. Liliaceae. Tulip.

No. 3549. Said to be white and red in color.

88542. SMITHIA JAVANICA Benth. Fabaceae.

From Java. Seeds presented by the director of the botanic garden, Buitenzorg. Received July 8, 1930.

An East Indian leguminous plant, which is a prostrate or diffuse herb, with compound leaves having five to seven pairs of oblong leaflets about one-half inch long and small yellow flowers.

For previous introduction see No. 65320.

88543 to 88585.

- From New Zealand. Plants presented by H. R. Wright, Avondale, Auckland. Received July 12, 1930.
 - 88543 to 88560. AMYGDALUS PERSICA L. (Prunus persica Stokes). Amygdalaceae. Peach.

88543. Aickin's Cling. Midseason.

88544. Free Queen. Late.

- 88545. Golden King. Cling, very late, yellow flesh.
- 88546. D. B. Anzac. Freestone dormant buds, early. (Apparently from the description, the trees begin dormancy early in the fall, or dormant buds start out early in the spring.)
- 88547. Kihi kihi. Midseason, white flesh.

88548. Lee's Salway. Late.

- 88549. Exquisite. Midseason; freestone.
- 88550. Marriage's seedling. Freestone, very late.

88551. Mitchelson. Cling; midseason.

88552. Monkton No. 1.

88553. Monkton No. 2.

88554. Nectarine peach. Midseason, freestone, white flesh; Paragon peach × Goldmine nectarine.

88555. Plummer. Freestone, midseason.

88556. Waipawa. Midseason.

88557. Wright's Bountiful. Very late, freestone, yellow flesh.

38558. Wright's Late red. Cling; very late.

88543 to 88585-Continued.

- 88559. Wright's Midseason. Freestone; yellow flesh.
- 88560. Zealandia. White flesh, freestone; midseason.
- 88561 to 88566. AMYGDALUS PERSICA NEC-TARINA Ait. Amygdalaceae. Nectarine. 88561. Dargaville.

88562. Dryden.

88563. Gold

88564. John Rivers.

88565. Pineapple.

- 88566. Zealandia.
- 88567. CITRUS NOBILIS DELICIOSA (Ten.) Swingle, Rutaceae. Mandarin orange. Seedless Emperor.
- 88568. CITRUS NOBILIS DELICIOSA × GRAN-DIS. Rutaceae.

Tineura mandarin \times grapefruit.

88569. CITRUS NOBILIS DELICIOSA X LIMO-NIA. Rutaceae.

Mandarin \times lemon.

88570. FEIJOA SELLOWIANA Berg.

Magnifica; grafted.

88571 to 88575. MALUS SYLVESTRIS Mill. (Pyrus malus L.). Malaceae. Apple. 88571. Granny Smith. Australian.

88572. Laston's Exquisite. English.

88573. Laxton's Superb. English.

88574. Owen Thomas. English.

88575. Sturmer. New Zealand.

88576. MALUS Sp.

Crimson beauty.

88577. MALUS sp.

Striped beauty.

88578 to 88582. PRUNUS spp. Amygdalaceae.

88578. PRUNUS sp.

Black Doris.

88579. PRUNUS Sp.

Bridge's early.

88580. PRUNUS sp.

Ford's early.

88581. PRUNUS sp. Jewell king.

88582. PRUNUS Sp.

Vail's early.

88583. RIBES RECLINATUM × NIGBUM. Grossulariaceae.

Worcester berry. Gooseberry \times black currant.

88584. RUBUS sp. Rosaceae.

Lloyd George raspberry.

88585. RUBUS sp. Rosaceae.

Pine's Royal raspberry.

STERA

88586 to 88595.

From the Mediterranean region. Seeds col-lected by David Fairchild, agricultural explorer with the Allison V. Armour ex-pedition. Received July 14, 1930.

88586. CALYCOTOME VILLOSA (Poir.) Link. Fabaceae.

No. 3557. Found scattered over dry hillsides of the island of Cos, June 19, 1930. A pretty yellow-flowered ex-tremely spiny little bush, the shape of a pincushion and very attractive when in flower. It should make a very useful plant for vock gardens where drought resistance is desired. Blooms in May and June. Native to the Mediterranean countries countries.

88587. COTYLEDON UMBILICUS L. Crassu-Navelwort.

No. 3553. Collected on the island of Patmos, June 17, 1930. A perennial, fleshy plant, native to western Europe, which grows about a foot high and has succulent, orbicular leaves and pendulous racemes of vollowish-graen flowers. racemes of yellowish-green flowers.

For previous introduction see No. 79153.

88588. GENISTA sp. Fabaceae.

No. 3552. Collected on a roadside of Cos Island, June 19, 1930. A large yellow-flowered species with leafless shoots tipped with the flowers. Said to be very showy and fragrant.

88589. LUPINUS GRAECUS Boiss. Faba-Lupine. ceae.

No. 3561. Collected by the roadside on the route to Ayassos. Mytilene Island, June 15, 1930. An annual leguminous plant with a rather dense raceme of in-tensely blue flowers. Native to south-eastern Europe.

88590. ONOPORDUM ILLYRICUM L. Asteraceae. Cottonthistle.

No. 3567. Collected June 15, 1930, from a roadside on the route to Ayassos, Mytilene Island. A large biennial thistle-like composite with flat, purple flower heads 3 inches across. Native to south-eastern Europe.

88591 to 88593. PRUNUS ARMENIACA L. Amygdalaceae. Apricot.

88591. No. 3555. Scions collected June 21, 1930, on the island of Rhodes. An early ripening variety which in the island is past, or almost so, at this time. A firm-fleshed, yellow apricot of medium size, with slight blush, which is said to thrive better in the calcareous soils and stand the constant drying winds better than the French and other European apri-cots that have been tried in the island of Rhodes. The quality is good to excellent; a bit dry but should be a fine shipper, though per-haps a triffe small. An indigenous varlety, not known by name.

88592. No. 3555-A. Native, early, firm-fleshed apricot of the island of Rhodes. Good quality, not very juicy or large, but resists drought and drying winds. Cuttings from same tree under No. 8555 (No. 88591).

88593. No. 3566. Seeds purchased June 21, 1930, in the market of Rhodes. Seeds from good but medium-sized

88586 to 88595-Continued.

apricots of fine flavor. See No. 3555 (No. 88591) for bud sticks of similar variety.

88594. PSORALEA BITUMINOSA L. Faba-Scurf-pea. ceae.

No. 3551. Variety palestina. Col-lected June 17, 1930, near the city, Cos Island, Greece. A very large vigorous plant, with stout stems and unusually large heads of blue flowers, that looks to be a distinct variety or form of this species.

88595. SARCOPOTERIUM SPINOSUM (L.) Spach. Rosaceae.

No. 3560. Collected June 19, 1930, on the island of Cos.

For previous introduction see No. 88540.

88596. PALAQUIUM PHILIPPENSE (Perr.) C. B. Robinson. Sapotaceae. Alakao.

From the Philippine Islands. Seeds pre-sented by P. J. Wester, Bureau of Plant Industry, Department of Agriculture and Natural Resources, Manila. Received July 14, 1930.

A large tree with oblong, pointed, stiff leaves, dark green above and russet velvety beneath. The fruit, about 2 inches long, is similar to a small sapodilla and is reported to be sweet, aromatic, and of agreeable flavor. It is native to the the Philippines.

88597 to 88606. PRUNUS ARMENIACA L. Amygdalaceae. Apricot.

From Tunisia. Seeds collected by Prof. F. T. Bioletti, University of California, and Knowles A. Ryerson, agricultural explorer, Bureau of Plant Industry. Re-ceived July 15, 1930.

88597. No. P-XLVI. Bedri. From Sfax.

88598. No. P-LII. Djerbi. From Gafsa, May 21, 1930.

599. No. P-LVII. Gros From Sfax, May 17, 1930. 88599. No. Indigene.

88600. No. P-XLV. M Gabes, May 15, 1930. Mechmech. From.

88601. No. P-LI. Mechmech. From To-zeur, May 20, 1930.

88602. No. P-XLVIII. Mechmech. From Deggache, May 19, 1930.

88603. No. P-XLIV. Me. Mahdia, May 19, 1930. Mechmech. From

88604. No. P-L. *Mechmech*. From Nefta, May 19, 1930.

88605. No. P-XLIX. M Nefta, May 19, 1930. Mechmech. From

88606. No. P-LIV. Souri. From Dra Tamar, May, 1930.

88607 and 88608. QUERCUS Spp. Faga-Oak. ceae.

Uak. rom Chosen. Seeds collected by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received December 9, 1929. Numbered in August, 1930. From Chosen.

88607. QUERCUS Sp.

No. 1573. November 1, 1929. These mixed acorns were collected under trees

88607 and 88608—Continued.

in the river bottom in the vicinity of the Keijo Prefectorate Seed and Nursery Farm, outside the east gate of Keijo.

88608. QUERCUS sp.

No. 1741. Collected November 11, 1929, from Kokan, on the island of Kokato. Acorns picked up from under narrow-leaved trees between Koka and Kokan. Trees growing on extremely poor red-yellow clay.

88609 and 88610.

- From Greece. Seeds collected by David Fairchild, agricultural explorer, with the Allison V. Armour expedition. Received July 15, 1930.
 - 88609. EUPHORBIA DENDROIDES L. Euphorbiaceae. Spurge.

No. 3513. Collected June 6, 1930, at an altitude of 1,500 feet, back of Tatoe, near Athens. A smooth, dichotomously branching shrub with small linear-lanceolate leaves and small umbels of inconspicuous flowers. The latex is said to be used as a fish poison. It is native to Greece and the Mediterranean islands.

88610. MEDICAGO ARBOREA L. Fabaceae. Tree alfalfa.

No. 3515. Collected June 6, 1930. A large-leaved variety of this leguminous shrub which occurs in the hottest reglons of Greece. It was planted as a hedge and ornamental by Professor Anagnostopulos in the Horticultural School garden of Athens. Since the temperature descends to 23° F. here and does not kill this species, I think it should be tried in Superior, Ariz. Of use for soil-binding purposes.

88611. BOBASSUS FLABELLIFER L. Phoenicaceae. Palmyra palm.

From Wad Medani, Anglo-Egyptian Sudan, Africa. Seeds purchased from the director, Blue Nile Province. Received July 15, 1930.

15, 1930. An African form of the famous Palmyra palm of India. Though a slow grower, it is a very handsome palm when old. In as much as it grows in the dry coastal regions of Ceylon, is apparently able to withstand any amount of lime, and is said to have been used successfully as a binder for sand dunes, it may prove of real value in the calcareous soils of southern Florida. In the number of uses to which it is put in Ceylon, it rivals the coconut. A delicate sugar is made from the sap, which flows in abundance from its inflorescence when cut. The seeds are germinated and the young subterranean hypocotyl used as a vegetable. The leaves are used in many different ways. The fruit, half the size of a coconut, is very attractive in appearance and when ripe exhales a delicate fragrance. The hull is eaten by the Tamils of Ceylon.

For previous introduction see No. 81073.

88612 and 88613.

From India. Seeds presented by J. N. Bitchie, Secretary, Indian Central Cotton Committee, Bombay. Received July 16, 1980.

91559-32-2

88612 and 88613-Continued.

88619. GOSSYPIUM CERNUUM Todaro. Malvaceae. Cotton.

Comilla. An erect bush, 3 feet high, cultivated in India. The flowers are pale sulphur yellow and the petals marked with a purple spot.

For previous introduction see No. 80208.

- 88613. GOSSYPIUM NEGLECTUM Todaro.
- Wani. (Gossypium neglectum verum var. kokatia.)

For previous introduction see No. 74453.

- 88614. CEROPEGIA MONTEIROAE Hook. f. Asclepiadaceae.
- From the Union of South Africa. Seeds presented by G. Thorncroft, Barberton, Transvaal. Received July 17, 1930.

A glabrous climbing vine with brownish mottled, white stems, opposite, oblongovate, succulent leaves 2 to 3 inches long with undulate margins, and axillary clusters of two to three flowers 2 to 3 inches long. The greenish corolla is tubular above an inflated base and is expanded at the top into five triangular flat plates which are white spotted with purple. It is native to tropical east Africa.

- 88615 and 88616. SOLANUM spp. Solanaceae.
- From Peru. Tubers presented by Dr. E. V. Abbott, Plant Pathologist, Estacion Experimental Agricola, Lima. Received July 18, 1930.

88615. SOLANUM sp.

Collected near Jauja, at approximately 13,500 feet above sea level.

88616. SOLANUM Sp.

Collected near Lima, at approximately 1,500 feet above sea level.

- 88617. MANGIFERA INDICA L. Anacardiaceae. Mango.
- From Cuba. Seeds presented by Mrs. F. S. Earle, Herrandura. Received July 19, 1930.

Philippino.

- 88618. MANGIFERA INDICA L. Anacardiaceae. Mango.
- From the Canal Zone. Plants presented by J. E. Higgins, Director, Canal Zone Experiment Gardens, Summit. Received July 19, 1930.

Fairchild.

88619 to 88670. SACCHABUM OFFICINA-RUM L. Poaceae. Sugarcane.

From Sydney, Australia. Cuttings presented by the Colonial Sugar Refining Co., at the request of E. W. Brandes, Bureau of Plant Industry. Received July 24, 1930.

These cuttings belong to the 21 N. G. scries, a designation which indicates that they were collected in New Guinea in 1921 and planted near Sydney.

88619.	No. 1.	88621.	No. 4.

88620. No. 2. 88622. No. 5.

88619 to 88670-C	ontinued.
88628. No. 6.	88647. No. 105.
88624. No. 7.	88648. No. 203.
88625. No. 13.	88649. No. 204.
88626. No. 22.	88650. No. 209.
88627. No. 24.	88651. No. 210.
88628. No. 27.	88652. No. 213.
88629. No. 30.	88653. No. 214.
88630. No. 31.	88654. No. 216.
88631. No. 37.	88655. No. 217.
88632. No. 49.	88656. No. 218.
88633. No. 50.	88657. No. 222.
88634. No. 52.	88658. No. 256.
88635. No. 54.	88659. No. 257.
88636. No. 55.	88660. No. 264.
88637. No. 62.	88661. No. 268.
88638. No. 63.	88662. No. 270.
88639. No. 78.	88663. No. 272.
88640. No. 82.	88664. No. 273.
88641. No. 83.	88665. No. 274.
88642. No. 84.	88666. No. 279.
88643. No. 93.	88667. No. 280.
88644. No. 99.	88668, No. 282.
88645. No. 101.	88669. No. 287.
88646. No. 104.	88670. No. 289.

88671 to 88677.

From Peradeniya, Ceylon. Seeds presented by T. H. Parsons, Curator, Royal Botanic Gardens, Department of Agriculture. Received July 28, 1930.

88671. ARECA TRIANDRA Roxb. Phoenicaceae. Palm.

A graceful spineless palm, ultimately about 25 feet high, usually with several trunks which bear crowns of pinnate leaves 4 to 6 feet in length. The fruits, about the size of olives, are orange scarlet. Native to India.

For previous introduction see No. 70777.

88672. LICUALA GRACILIS Blume. Phoenicaceae. Palm.

A small fan palm from Java which is only 5 to 7 feet high, clusters of which would grace any private garden in the Tropics.

For previous introduction see No. 66225.

88673. LICUALA SPINOSA Thunb. Phoenicaceae. Palm.

A dwarf fan-leaved palm, native to the West Indies, 10 to 12 feet high, with roundish leaves 3 feet or more in diameter and 3-angled petioles armed with brownish hooked spines. It requires abundant heat and moisture.

For previous introduction see No. 81590.

88674. ONCOSPERMA FASCICULATUM Thwaites. Phoenicaceae. Palm.

The Katu-kitul palm of Indo-Malaya is one of the graceful cluster palms which make magnificent groups, 40 to

88671 to 88677-Continued.

60 feet high, in the Peradeniya Gardens. The stems are spiny and therefore not suitable for small gardens, but rather for parks.

For previous introduction see No. 66230.

88675. ONCOSPERMA FILAMENTOSUM Blume. Phoenicaceae. Palm.

A cluster palm of great beauty which rises to a height of 50 feet and waves its pinnate leaves in the slightest breeze. Like its relative, Oncosperma fasciculatum, it is a spiny palm and therefore not suited to small garden uses but to parks. The great clumps of this palm are wonderfully effective.

For previous introduction see No. 72601.

88676. PHOENIX PUSILLA Gaertn. Phoenicaceae. Palm.

A dwarf palm about 4 feet high, with pinnate leaves having spiny petioles, sword-shaped dark-green leafiets, and black fruits. The stem is said to contain a farinaceous pith. It is native to Ceylon.

For previous introduction see No. 66234.

88677. PTYCHOSPERMA ANGUSTIFOLIA Blume. Phoenicaceae. Palm.

A tropical Australian pinnate palm which grows in great clumps. When young it is suited to pot culture, but should be tried out in the open in southern Florida in private gardens. The small, slender stems make it especially adapted to small gardens.

For previous introduction see No. 66237.

- 88678 and 88679. CITRUS AURANTIUM L. Rutaceae. Seville orange.
- From Naples, Italy. Scions collected by David Fairchild, agricultural explorer, with the Allison V. Armour expedition. Received July 28, 1930.
 - 88678. Variety *corniculata*. No. 3614. Collected July 14, 1930, from trees growing in the Botanical Garden. A variety that produces fruit with a curious horn on one side.
 - 88679. Variety foctifera. No. 3615. Collected July 14, 1930, in the Botanical Garden. A strange abnormal sport that has fruits each containing parts of another fruit embedded in its pulp. These parts sometimes have bits of perfect orange peel developed inside of the flesh of the surrounding orange.
- 88680. GLADIOLUS HIRSUTUS Jacq. Iridaceae.

From Cape Town, Union of South Africa. Seeds presented by Dr. Rudolph Marloth. Received July 28, 1930.

A species about a foot high with brightred, fragrant flowers, borne in a very lax, few-flowered spike and sword-shaped, strongly ribbed leaves; found growing in sandy stretches which are moist only during the winter.

For previous introduction see No. 62857.

88681. LYCOPEBSICON ESCULENTUM Mill. Solanaceae. Tomato.

88681—Continued.

From Lima, Peru. Seeds presented by J. Gaudron, Estacion Central Agronomica. Received July 28, 1930.

A wild tomato from near Lima, Peru.

- 88682 and 88683. CITRUS AURANTIUM L. Rutaceae. Seville orange.
- rom Naples, Italy. Seeds collected by David Fairchild, agricultural explorer, with the Allison V. Armour expedition. Received July 28, 1930. From
 - 88682. No. 3616. Variety myrtifolia. From the Botanic Garden, July 14, 1930. A dwarf tree bearing small fruits not over 2 inches in diameter and with myrtlelike leaves. May be an attractive addition to the gardens of southern Florida.
 - 88683. No. 3617. Variety salicifolia. From the Botanic Garden, July 14, 1930. A small-sized tree with wil-lowy branches and narrow willowlike leaves. Fruits small and rather dry with a bitter flavor.

88684. RHUS OXYACANTHA Schousb. Anacardiaceae.

rom Algeria. Seeds presented by the Gouvernement General de l'Algerie, Service Botanique, through David Fair-child. Received July 28, 1930. From

A shrub with gnarled, spiny branches, ternately compound glabrous leaves having slightly dentate, obovate leaflets, and ter-minal racemes of inconspicuous flowers fol-lowed by smooth, shiny, globose fruits half an inch long. It is native to northern Africa and western Asia near the Mediterranean.

For previous introduction see No. 74187.

88685 and 88686.

From Sicily, Italy. Seeds presented by Giardino Allegra, Catania. Received July 31, 1930.

88685. ARAUJIA SERICIFERA Brot. Asclepiadaceae.

A twining vine with nearly glabrous oblong-acuminate leaves 3 inches long and cymes of faintly odorous salver-shaped white flowers which are pale rose in bud. It is native to southern Brazil.

For previous introduction see No. 33920.

88686. GENISTA AETNENSIS (Bivona) DC. Aetna broom. Fabaceae.

An attractive shrub, 6 feet or less in height, with nearly leafless, slender branches and fragrant, yellow flowers in loss_terminal racemes. Native to Sicily and Sardinia.

For previous introduction see No. 63359.

88687 to 88702.

From the Mediterranean region. Seeds and bulbs collected by David Fairchild, agri-cultural explorer, with the Allison V. Armour expedition. Received August 2, 1930.

88687 to 88690. ALLIUM SDD. Liliaceae. Onion.

88687 and 88688. ALLIUM sp.

No. 3600. Collected June 21, 1930, on Monte del Propheta at Station Slia,

88687 to 88702-Continued.

island of Rhodes. Found growing on the rocks under the pines and cypress trees.

88687. Bulbs.

88688. Seeds.

88689. ALLIUM sp.

No. 3591. Collected June 25, 1930, near Spikho, Cyprus. The seed-bear-ing stems, 2 feet high, were found growing in dry baked soil of a stubble field.

88690. ALLIUM sp.

No. 3588. Collected June 25, 1930, Nicosia, Cyprus. Tiny-flowered species found on the dry plains of central Cyprus.

88691. ASTRAGALUS Sp. Fabaceae. Milkvetch.

No. 3584. Presented June 25, 1930, by the Department of Agriculture of Cyprus. A species of milkvetch growing wild at Nicosia, Cyprus.

88692. CISTUS sp. Cistaceae. Rockrose,

No. 3603. Collected June 29, 1930, Messara, Crete. A small-leaved species with very woolly leaves and apparently with many flowers on long peduncles. Gathered on the road along the moun-tains overlooking the valley.

88693. EBENUS sp. Fabaceae.

No. 3602. Collected June 30, 1930, in Crete, en route to Phestos. Legu-minous shrub, with heads like clover, that forms patches of considerable size on the dry mountain slopes of Crete, at an altitude of 1,000 feet.

88694. ORNITHOGALUM sp. Liliaceae.

No. 3589. Collected in June, 1930, near Spikho, Cyprus.

88695. ORNITHOGALUM sp. Liliaceae.

No. 3597. Collected in June, 1930, at Spikho, Cyprus.

88696. VICIA BITHYNICA L. Fabaceae.

No. 3583. Presented June 25, 1930, by the inspector of Nicosia, Cyprus.

88697. PROSOPIS STEPHANIANA (Bieb.) Kunth. Mimosaceae.

No. 3572. Collected June 25, 1930, Agriculture Department of Cyprus. A deep-rooted shrubby legume which grows abundantly on dry lands in the interior plain of Cyprus. Sheep and cattle browse on it, and the bees make good honey from its abundant flowers.

For previous introduction see No. 49481.

88698. PRUNUS sp. Amygdalaceae.

No. 3601. Obtained in the market, Mytilene Island, Greece, June 15, 1930. A small sweet plum of greenish-red color and good flavor. The species occurs wild on the island.

88699. TRIGONELLA sp. Fabaceae.

No. 3564. Collected June 19, 1930, on the island of Cos. A low-growing, yellow-flowered species which, on drying, has the odor of fenugreek very strongly developed; found in stubble field, on a townore terrace.

88687 to 88702-Continued.

Tulip. 88700. TULIPA Sp. Liliaceae. No. 3586. Obtained June 25, 1930, Nicosia, Cyprus.

88701. VICIA SATIVA L. Fabaceae.

No. 3582. Obtained June, 1930, from Nicosia, Cyprus.

88702. VICIA TENUIFOLIA Roth. Faba-Vetch. ceae.

No. 3581. Obtained June 25, 1930, through the Inspector of Agriculture, Ni-cosia, Cyprus. A deep-rooted perennial cut for hay in the hills of Cyprus, where the rainfall is light.

previous introduction see No. For 30558.

88703. CARISSA CARANDAS L. Apocyna-Karanda. ceae.

From Manila, Philippine Islands. Seeds presented by P. J. Webster, Bureau of Plant Industry, Department of Agricul-ture and Natural Resources, Manila. Received August 4, 1930.

Variety dulcis. A form said to bear egg-shaped or roundish subacid fruits having a juicy pulp of pleasant flavor which may be eaten out of hand. It came originally from India.

88704 to 88714. PRUNUS ABMENIACA L. Amygdalaceae. Apricot.

From Algiers, Algeria. Seeds collected by Knowles A. Ryerson, agricultural ex-plorer, Bureau of Plant Industry. Re-ceived August 4, 1930.

88704 to 88707. From David Lalou, Laghouat, Algiers.

88704. No. L.

88705. No. LI.

88706, No. LII.

88707. No. LIII.

88708 to 88710. From Albert Thomas, Ainel-Ibel.

88708. No. XLI.

88709. No. XLII.

88710. No. XLIII.

- 88711 to 88714. From David Lalou, Laghouat, Algiers.
 - 88711, No. XLIX.
 - 88712. No. XLVI.
 - 88713. No. XLVII.

88714. No. XLVIII.

88715 to 88730.

a. Seeds collected by H. L. agricultural explorer, Bureau From Africa. Westover, agricultural explorer, Bureau of Plant Industry. Received August 4, 1930.

88715. AGROPYRON JUNCEUM (L.) Beauv. Poaceae. Grass.

No. 3. Collected June 22, 1930, from a sand dune near Algiers.

88716. AGROSTIS sp. Poaceae. Grass.

No. 9. Collected June 30, 1930, in the mountains north of Souk-el-Arba, Tunisia.

88715 to 88730-Continued.

88717. AGROSTIS VEBTICILLATA VIII. POA-Grass. Poa-

No. 18. Collected July 4, 1930, in a garden at Ain-el-Ibel, Algeria.

88718 and 88719. AMPELODESMOS MAURI-TANICA (Pair.) Dur. and Schintz. Poa-ceae. Grass.

Collected June 30, 1930. in the moun-tains north of Souk-el-Arba.

For previous introduction see No. 60319.

88718. No. 4. Not eaten by goats or sheep.

88719. No. 6.

88720. CYNODON DACTYLON (L.) Pers. Poaceae. Bermuda grass.

No. 8. Collected June 30, 1930. An unusual type found growing under very dry_conditions several miles northwest dry cond of Tunis.

88721. CYNOSURUS ECHINATUS L. Poa-Grass. ceae.

No. 7. Collected June 30, 1930, in the mountains north of Souk-el-Arba, Tunisia.

- 88722 and 88723. MEDICAGO SATIVA Fabaceae. Alfalfa.
 - 88722. No. 16. Collected July 4, 1930, from Ain-el-Ibel, Algeria. Said to have come originally from France.

88723. No. 16-a. Collected July 4, 1930, from Laghouat, Algeria. Said to be from seed obtained in France about 15 years ago.

88724. ORYZOPSIS MILIACEA (L.) Benth. and Hook. Poaceae. Grass.

No. 17. Collected July 4, 1930, from a garden at Ain-el-Ibel.

88725 to 88728. PHALARIS spp. Poaceae. Grass.

88725. PHALARIS CANARIENSIS L. Canary grass.

No. 12. Collected in July, 1930, in the mountains between Phillipville and Constantine.

88726, PHALARIS COERULESCENS Desf.

- No. 13. Collected July 1, 1930, be-tween Phillipville and Constantine.
- For previous introduction see No. 76884.
- 88727 and 88728. PHALARIS TRUNCATA Guss.
 - 88727. No. 5. Collected June 30, 1930, in the hills northwest of Tunis.

88728. No. 11. Collected July 1, 1930, from the mountains between Phillipville and Constantine.

88729. TRIFOLIUM FRAGIFERUM L. Faba-ceae. Strawberry clover.

No. 14. Collected July 2, 1930, from a high plateau near Djelfa, Africa.

88730. ZEA MAYS L. Poaceae. Corn.

No. 15. Collected July 2, 1930, in the market at Bou Saada. A type common in the oases of northern Africa.

88731. SOLANUM TUBEROSUM L. Solanaceae. Potato.

From Yugoslavia.	Tubers collected by
David Fairchild,	agricultural explorer,
with the Allison	V. Armour expedition.
Received August	5, 1930.
Accelited Mugust	0, 1000.

No. 3618. North of Split, July 7, 1930.

88732 to 88735.

From Ventimiglia, Italy. Seeds presented by S. W. McLeod Braggins, Superintendent of the La Mortola Gardens, through David Fairchild, agricultural explorer, with the Allison V. Armour expedition. Received August 5, 1930.

88732. ACACIA ACINACEA Lindl. Mimosaceae.

No. 3623. Collected July 17, 1930. A handsome small tree with ornamental foliage and pretty flowers. Native to Australia.

For previous introduction see No. 75535.

88733. ALOE STRIATA Haw. Liliaceae.

No. 3622. Variety hanburiana. Collected July 17, 1930. A fleshy plant with a short stem, 1 to 2 feet in old plants, and a rosette of 12 to 30 oblong-lanceolate glaucous leaves 1 to 2 feet long, with a cartilaginous reddish margin. The bright-red flowers are in capitate racemes on a stout, much-branched inflorescence. Native to the coast of South Africa.

For previous introduction see No. 81139.

88734. COWANIA MEXICANA D. Don. Rosaceae.

No. 3624. Collected July 17, 1930. A shrub 3 to 6 feet high with small crowded cuneate 3-cleft to 7-cleft leaves less than half an inch long, and creamy white flowers an inch across. It is native to Mexico.

88735. ECHEVERIA MULTICAULIS Rose. Crassulaceae.

No. 3625. Collected July 17, 1930. A succulent with a stem 1 to 2 feet high bearing a rosette of spatulate leaves 1 to 2 inches long and bright-colored flowering branches with racemes of small flowers which are reddish outside and yellowish within. It is native to the State of Guerrero, Mexico.

88736. MEDICAGO ARBOREA L. Fabaceae. Tree alfalfa.

From Athens, Greece. Seeds obtained by David Fairchild, agricultural explorer, with the Allison V. Armour expedition. Received August 5, 1930.

A form with small leaves growing in the botanic garden.

88737. TRITICUM TURGIDUM L. Poaceae. Poulard wheat.

From Greece. Seeds collected by David Fairchild, agricultural explorer, with the Allison V. Armour expedition. Received August 5, 1930. From the island of Rhodes at an altitude of 1,200 feet.

88738 to 88772.

From Ventimiglia, Italy. Seeds presented by S. W. McLeod Braggins, Superintendent of the La Mortola Gardens, through

88738 to 88772-Continued.

David Fairchild, agricultural explorer, with the Allison V. Armour expedition. Received August 5, 1930.

88738. ALOE STRIATA Haw. Liliaceae.

Variety hanburiana.

For previous introduction see No. 88733.

88739. COTYLEDON MACRANTHA Berger. Crassulaceae.

A many-branched succulent undershrub up to 3 feet high with opposite, smooth, fleshy obovate leaves and flower stalks 10 inches high bearing umbellate clusters of bright red flowers, greenish yellow inside. It is native to South Africa.

88740. COTYLEDON ORBICULATA L. Crassulaceae.

A succulent plant up to 4 feet high, with opposite nearly circular mealy leaves which have red margins and panicles of large reddish flowers. It is native to South Africa.

For previous introduction see No. 78194.

- 88741 to 88743. CRASSULA spp. Crassulaceae.
 - 88741. CRASSULA CONJUNCTA N. E. Brown.

A slightly shrubby succulent with stems erect from a decumbent base, connate-perfoliate, fleshy, broadly ovate leaves about an incb long, and terminal cymes of pure white flowers. It is native to South Africa.

88742. CRASSULA PERFOLIATA L.

A shrubby succulent with thick glaucous connate leaves and cymes of bright-crimson flowers. It is native to South Africa.

For previous introduction see No. 78198.

88743. CRASSULA PORTULACEA Lam.

A much-branched succulent shrub 10 to 12 feet high, with opposite, obliquely ovate, thick leaves 1 to 2 inches long, and corymbose panicles of small rosy flowers. It is native to South Africa where the roots are said to be eaten by the natives.

88744 to 88751. ECHEVERIA spp. Crassulaceae.

88744. ECHEVERIA AMOENA L. de Smet.

A nearly stemless succulent with small dense rosettes of thick leaves and slender scapes 4 to 8 inches high, bearing 1-flowered to 8-flowered racemes of red flowers. Native to Mexico.

For previous introduction see No. 81154.

88745. ECHEVERIA EDULIS Hort.

A name for which a place of publication or description has not been found.

88746. ECHEVERIA GIBBIFLORA DC.

An erect succulent about 2 feet high with a close rosette of obovate-spatulate, highly colored leaves and a lax panicle of small flowers. It is native to Mexico.

88738 to 88772-Continued.

88747. ECHEVERIA GIBBIFLORA DC.

Variety carunculata.

88748. ECHEVERIA GLAUCA Baker.

A stemless succulent with small dense rosettes of nearly orbicular, very pale, slightly glaucous leaves having a purple mucro. The flowers are borne in a small secund raceme. It is native to Mexico.

88749. ECHEVERIA IMBRICATA Deleuil.

Said to be a hybrid between Echeveria glauca and E. metallica.

88750. ECHEVERIA MULTICAULIS Rose.

For previous introduction and description see No. 88735.

88751. ECHEVERIA PACHYPHYTIOIDES L. de Smet.

Said to be a cross between Pachyphytum bracteosum and Echeveria metallica.

88752. KALANCHOE ROTUNDIFOLIA Haw. Crassulaceae.

A succulent perennial 1 to 3 feet high with a slender stem which has a few leaves at the base and is naked above. The fieshy leaves, 1 to 2 inches long, vary in shape from broadly obovate to spatulate, and are entire or crenate. The small orange or yellow flowers are borne in flat-topped panicles. Native to South Africa.

For previous introduction see No. 86235.

88753 to 88757. SEDUM spp. Crassulaceae. Stonecrop.

88753. SEDUM ACRE MAJUS Masters.

A form which is larger and more robust than the type, having deltoidovoid leaves in 7 rows, and 2-parted cymes of yellow flowers nearly an inch across. It is native to Morocco.

88754. SEDUM COMPRESSUM Rose.

A prostrate succulent with closely set, flat spatulate leaves 1 to 2 inches long, and erect or ascending flowering branches bearing secund racemes of bright-yellow flowers. It is native to Mexico.

88755. SEDUM DENDROIDEUM Moc. and Sesse.

A smooth, much-branched, shrubby succulent a foot high, with fleshy, flat, obovate to spatulate leaves, 1 to 2 inches long, and numerous bright-yellow flowers in a paniculate cyme. It is native to Mexico.

88756. SEDUM MULTICEPS Coss. and Dur.

A dwarf, subshrubby succulent up to 6 inches high with flexuous barren shoots having dense rosettes of pinkish, papillose, linear leaves at, their tips and taller erect flowering shoots bearing scorpioid cymes of pale yellow flowers half an inch across. It is native to Algeria.

88757. SEDUM PACHYPHYLLUM Rose.

A spreading or erect much-branched succulent, up to a foot high, with closely set terete glaucous leaves 1 to 3 inches long and nearly half an inch in diameter and weak flowering stems less 88738 to 88772-Continued.

than an inch long, bearing cymose clusters of yellow flowers. It is native to Mexico.

88758 to 88772. SEMPERVIVUM spp. Crassulaceae. Houseleek.

88758. SEMPERVIVUM ARBOREUM L.

A handsome plant, 2 feet high, with striking rosettes of leaves and attractive yellow flowers.

For previous introduction see No. 81187.

88759. SEMPERVIVUM BALSAMIFERUM (Webb and Berth.) Schenk.

A shrubby succulent with rosettes of spatulate leaves which are viscous with a balsamlike substance. The yellowish flowers are in panicles. It is native to the Canary Islands.

88760. SEMPERVIVUM BERTHELOTIANUM (Bolle) Christ.

A nearly stemless fleshy plant with a dense rosette of yellowish green narrowly spatulate white-ciliate leaves and 6 to 10 pale-yellow flowers on a scape a foot or more high. Native to the Canary Islands.

For previous introduction see No. 81189.

88761. SEMPERVIVUM CHLOROCHRYSUM Hort.

A horticultural variety for which a place of publication or description has not been found.

For previous introduction see No. 81191.

88762. SEMPERVIVUM CUNEATUM (Webb and Berth.) Christ.

A fleshy evergreen plant nearly 3 feet high, with wedge-shaped leaves and terminal cymes of yellow flowers.

For previous introduction see No. 81193.

88763. SEMPERVIVUM GLUTINOSUM Ait.

A viscous perennial, 1½ feet high, with large spatulate fleshy leaves and yellow flowers in terminal cymes. Native to Madeira.

For previous introduction see No. 81195.

88764. SEMPERVIVUM HAWORTHII Salm-Dyck.

A succulent evergreen perennial with a woody stem and yellow flowers. Native to the Canary Islands.

For previous introduction see No. 81196.

88765. SEMPERVIVUM HYBRIDUM Bruegg.

A natural hybrid between Sempervirum montanum and S. doellianum, closely resembling the latter. Native to Switzerland.

For previous introduction see No. 81198.

88766. SEMPERVIVUM MANRIQUEORUM (Bolle) Christ.

A shrubby succulent 2 to 3 feet high with long-spatulate leaves with red veins and densely ciliate margins and corymbs of golden-yellow flowers on - 10 May - 11

88738 to 88772—Continued.

stems about 6 inches long. It is native to the Canary Islands.

88767. SEMPERVIVUM MARGINATUM Hort.

A name for which a place of publication or description has not been found.

88768. SEMPERVIVUM POCULIFORME Berg. and Wildem.

A herbaceous succulent with the oblong-lanceolate basal leaves in a rosette and the stem leaves obovate-spatulate. The simple erect stem bears a glabrous panicle of yellow flowers. Probably native to the Canary Islands.

For previous introduction see No. 81199.

88769. SEMPERVIVUM URBICUM C. Smith.

A shrubby succulent with a simple stout erect stem about 3 feet high and covered with leaf scars. The thick pale-green narrowly spatulate leaves are borne in a rosette at the top of the stem. The large pyramidal panicle of pale-yellow flowers is 3 feet high and nearly as broad. Native to the Canary Islands.

For previous introduction see No. 81200.

88770. SEMPERVIVUM VELUTINUM N. E. Brown.

A succulent plant about 2 feet high, with rosettes 6 to 9 inches broad of crowded spatulate velvety leaves 3 to 4 inches long, grayish green above and with darker green lines beneath. The bright-yellow flowers are in a compact cyme. Known only in cultivation.

For previous introduction see No. 81201.

88771. SEMPERVIVUM WEBBII (Bolle) Schenk.

A shrubby succulent, closely resembling *S. arborescens*, with deltoid-spatulate leaves and corymbs of pale-yellow flowers. Native to the Canary Islands.

88772. SEMPERVIVUM YOUNGIANUM (Webb and Berth.) Christ.

A fleshy plant with a thick woody stem, and thick shining dark-green obcordate-spatulate leaves with short hairs along the margins. Native to the Canary Islands.

For previous introduction see No. 81208.

88773 to 88775. CITRUS GRANDIS (L.) Osbeck. Rutaceae. Grapefruit.

From Szechwan, China. Seeds presented by L. A. Lovegren, Kiating, through D. J. Moriarty, Department of Commerce, Washington, D. C. Received August 6, 1930.

88773. Kwei gan (large).

88774. Kwei gan (average size).

88775. Kwei gan (very large).

88776. OSTERDAMIA JAPONICA (Steud.) Hitchc. Poaceae.

Japanese lawngrass.

From Chosen. Roots collected by P. H. Dorsett and W. J. Morse, agricultural 88776—Continued.

explorers, Bureau of Plant Andustry. Received August 7, 1980.

No. 5990. June 28, 1930. Collected on the bank of the Seinonko River, opposite Kokai, in 41° N. lat., Heian Hokudo Prefecture, Chosen. The temperature here fails as low as 40° below zero, and the ground freezes to a depth of 2½ feet. This grass forms a very compact sod and seeds abundantly.

- 88777 to 88836. SOJA MAX (L.) Piper (Glycine hispida Maxim.). Fabaceae. Soybean.
- From Manchuria and Chosen. Seeds collected by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received August 7, 1930.
 - 88777 and 88778. Collected June 13, 1930, from a pile of beans swept up from the floors of bean-storage houses, Dairen.
 - 88777. No. 5897. Mixture of yellow, greenish yellow, black, and brown seeds of varieties from various places in northern and southern Manchuria.
 - 88778. No. 5898. A mixture of varieties from various places in northern and southern Manchuria; mostly yellow-seeded sorts.
 - 88779 and 88780. Collected June 6, 1930, from waste beans in the open storage yards of the South Manchurian Railway, Dairen.
 - 88779. No. 5899. Mixture of yellowseeded (small percentage of greenish yellow) varieties from various places in northern and southern Manchuria.
 - 88780. No. 5900. Mixture of yellow and greenish yellow seeded varieties from various places in northern and southern Manchuria.
 - 88781 to 88783. Collected June 14, 1930, from bean-storage warehouses in the South Manchurian Railway storage yards, Dairen.
 - 88781. No. 5903. Mixture sample of yellow varieties used for oil and oil cakes.
 - 88782. No. 5905. Mixture of yellowseeded varieties. Used for bean oil and bean cake.
 - 88763. No. 5906. Mixture of yellowseeded varieties, said to have come from northern Manchuria. Used for oil and oil cakes.
 - 88784 and 88785. Collected June 14, 1930, from a mixed-storage warehouse in the storage yards of the South Manchurian Rallway, Dairen
 - 88784. No. 5907. Mixture of yellowseeded varieties, said to have come from northern Manchuria.
 - 88785. No. 5909. Mixture of yellowseeded varieties, said to have come from northern Manchuria. Used for bean oil and bean cake.
 - 88786. No. 5911. Collected June 14, 1930, from a bean warehouse in the South Manchurian Railway storage yards, Dairen. Mixture of yellow-seeded varieties, said to have come from northern Manchuria. Used for oil and oil cake.

88777 to 88836-Continued.

- 88787. No. 5912. Collected June 14, 1930, from a mixed-storage warehouse of the South Manchurian Railway storage yards, Dairen. Mixture of yellowseeded varieties, said to have come from northern Manchuria. Used for oil and oil cake.
- 88788 to 88790. Collected June 14, 1930, from a bean warehouse in the South Manchurian Railway storage yards, Dairen.
 - 88788. No. 5913. Mixture of blackseeded varieties, said to have come from along the Liao River in the Kaiyuan district. Used for green manure.
 - 88789. No. 5914. Mixture of yellowseeded varieties used for oil and oil cake.
 - 88790. No. 5915. Mixture of yellowseeded varieties used for oil and oil meal.
- 88791. No. 5916. Collected June 14, 1930, from a bean warehouse at a wharf of the South Manchurian Railway storage yards, Dairen. Mixture of yellowseeded varieties, said to have come from northern Manchuria. Used for bean oil and bean cake.
- 88792 and 88793. Collected June 14, 1930, from a bean warehouse in the South Manchurian Railway storage yards, Dairen.
 - 88792. No. 5917. Mixture of yellowseeded varieties used for oil and oil cake.
 - 88793. No. 5918. Mixture of yellowseeded varieties used for oil and oil cake.
- 88794. No. 5922. Obtained June 16, 1930, from Chinese soybean oil mill, Dairen. Mixed yellow-seeded varieties. Used for oil and oil cake.
- 88795. No. 5923. Obtained June 16, 1930, from a bean-storage warehouse of the South Manchurian Railway, Dairen. Yellow-seeded varieties used for oil and oil meal.
- 88796. No. 5924. Collected June 16, 1930, in the open storage yards of the South Manchurian Railway, Dairen. Yellow-seeded varieties used for oil and oil cake.
- 88797. No. 5925. Collected June 16, 1930, from Chinese oil (soybean) mill, Dairen. Mixture of yellow-seeded varieties used for oil and oil meal.
- 88798. No. 5926. Collected June 16, 1930, at a bean-storage warehouse of the South Manchurian Railway, Dairen. Used for oil and oil meal.
- 88799. No. 5927. Collected June 16, 1930, from a bean warehouse in the storage yards of the South Manchurian Railway, Dairen. Mixture of yellowseeded varieties. Used for oil and oil cake.
- 88800. No. 5988. Collected June 16, 1930, in open storage yards of the South Manchurian Railway, Dairen. Yellowseeded varieties used for oil and oil cake.
- 88801. No. 5930. Obtained June 16, 1930, from a wharf storage warehouse in the yards of the South Manchurian Railway, Dairen. Black-seeded varie-

88777 to 88836-Continued.

ties, said to have come from the Yingkon district. Used for green manure.

- 88802. No. 5931. Collected June 16, 1930, at Chinese oil mills, Dairen. Yellowseeded varieties, said to have come from the Kaiyuan district. Used for oil and oil meal.
- 88803. No. 5932. Collected June 16, 1930, in open storage yards of the South Manchurian Railway, Dairen. Yellowseeded varieties used for oil and oil cake.
- 88804 and 88805. Obtained June 16, 1930, at Chinese oil mills, Dairen.
 - 88804. No. 5933. Mixed yellow-seeded varieties used for oil and oil cake.
 - 88805. No. 5934. Mixed yellow-seeded varieties, said to be grown in the Mukden district and used for oil and oil cake.
- 88806. No. 5935. Collected June 16, 1930, from a bean-storage warehouse of the South Manchurian Rallway, Dairen. Used for oil and oil cake.
- 88807. No. 5936. Collected June 16, 1930, at Chinese soybean oil mill, Dairen. Mixture of yellow-seeded varieties. from the Kaiyuan district, used for oil and oil cake.
- 88808 to 88815. Purchased June 27, 1930, from a farmer at Kokai, Heian Hokudo Prefecture, Chosen.
 - 88808. No. 5966. *Mota* (noneye). Mixture of medium-sized, oval, yellowseeded varieties.
 - 88809. No. 5968. Seita (green). Medium-sized, greenish yellow, oval, light-brown hilum.
 - 88810. No. 5967. Orukon (early). Mixture of medium-sized yellow and greenish yellow varieties.
 - 88811. No. 5969. Pakute (white). Medium sized, oval, light yellow with pale hilum.
 - 88812. No. 5970. Seita (green). Medium sized, oval, bluish green with slate-black hilum.
 - 88813. No. 5971. *Ryumuo* (nonhair yellow). Medium sized, oval, yellow with slate-black hilum.
 - 88814. No. 5972. *Mote* (white eye). Mixture of medium-sized, oval, yellow-seeded varieties.
 - 88815. No. 5973. Orukon (early). Medium sized, oval, yellow with darkbrown hilum.
- 88816 to 88826. Obtained June 28, 1930, from the Kokai Village Seed & Nursery Co., Kokai, Heian Hokudo Prefecture, Chosen.
 - 88816. No. 5976. *Hota*. Medium small, oval, very light yellow with palehilum.
 - 88817. No. 5977. Waseshoryumouta (small early). Large, oval, very light yellow with pale hilum.

88818. No. 5978. Yota (Manchuria). Medium sized, oval, glossy yellowish green with pale hilum. Long linear leaves, 4-seeded pods. 88777 to 88836-Continued.

- 88819. No. 5979. Hotenhakubi (Mukden white). Medium large, oval, very light yellow with pale hilum.
- 88820. No. 5980. *Heihokuta*. Large, oval, very light yellow with pale hilum.
- 88821. No. 5981. Heihokuta No. 16. Medium sized, oval, very light yellow with pale hilum.
- 88822. No. 5982. *Hayata* (early). Very large, oval, very light yellow with pale hilum.
- 88823. No. 5983. Acta (green). Large oval, yellowish green with black hilum. Germ yellow.
- 88824. No. 5984. Shokeimei (early). Medium sized, oval, very light yellow with chocolate-brown hilum.
- 88825. No. 5985. Tsurunoko (crane's eggs). Large, oval, very light yellow with pale hilum.
- 88826. No. 5986. Kurugara (black pod). Medium small, oval, very light yellow with pale hilum.
- 88827 to 88836. Obtained June 29, 1930, from the Kisen Village Agriculture Society, Kisen, Heian Hokudo Prefecture, Chosen.
 - 88827. No. 5991. Tokusen. Mixture of yellow (glossy), medium-small seeded varieties grown by the Korean farmers about Kisen.
 - 88828. No. 5992. *Tokusen*. Medium sized, oval, glossy yellow with pale hilum. First grade.
 - 88829. No. 5993. *Tokusen*. Mediumlarge oval seed of mixed yellow varieties.
 - 88830. No. 5994. *Heihokuta*. Medium large, oval, glossy yellow, pale hilum. Excellent grade, used for tofu, miso, and soy sauce.
 - 88831. No. 5995. *Heihokuta*. Mixed sample of medium-sized, oval, yellowseeded varieties.
 - 88832. No. 5996. Heihokuta. Medium large, oval, light yellow with pale hilum.
 - 88833. No. 5997. Heihokuta. Grade No. 1. Medium large, oval, glossy yellow with pale hilum.
 - 88834. No. 5998. *Heihokuta*. Mixture of medium-large, oval, glossy, yellow-seeded varieties.
 - 88835. No. 5999. *Heihokuta*. Mixture of medium-sized, glossy, yellowseeded varieties.

88836. No. 6000. Heihokuta. Mixture of yellow-seeded varieties.

88837 to 88856.

From Chosen and Manchuria. Seeds collected by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received August 7, 1930.

88837, ASTRAGALUS Sp. Fabaceae.

No. 5850. Collected June 9, 1930, from plants along the roadside in the vicinity of Ta Fang Shen. Manchuria. This species makes a very early, small growth and is found on poor dry soil.

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88837 to 88856-Continued.

88638 and 88839. ASTRAGALUS SCABERRI-MUS Bunge. Fabaceae.

Collected June 9, 1930, from plants along the mountain sides, near Kohaton, Manchuria. A decumbent perennial covered with short stiff huirs. The compound leaves are made up of 9 to 13 oblong leaflets, and the white and purple flowers are in axillary clusters. It is native to China.

88838. No. 5820.

88839. No. 5885.

88840. LATHYRUS sp. Fabaceae.

No. 5849. Collected June 9, 1930, from plants along the roadside in vicinity of Ta Fang Shen, Manchuria. An early maturing vetch growing abundantly along the roadside and a very heavy seeder. Makes a fairly good early spring growth.

88841. MELICA SCABROSA Trin. Poaceae. Grass.

Grass. No. 5939. Collected June 19, 1930, from plants along the road of the wall surrounding the city of Chinchon, Manchuria. A perennial grass with narrowly lanceolate leaves and an open panicle of rather large spikelets. It is native to China.

88842 to 88846. OSTERDAMIA JAPONICA (Steud.) Hitchc. Poaceae. Japanese lawngrass.

This is a hardy grass used for lawns, golf fairways, and airports.

- 88842. No. 5895. Collected July 6, 1930, from plants along the hillsides near Hoshinoya, about 8 miles south of Dairen.
- 88843. No. 5941. Collected June 23, 1930, from plants along the roadsides in foothils near Rokotan, about 5 miles south of Dairen.
- 88844. No. 5942. Collected June 23, 1930, from plants along edge of field in foothills about 2 miles from Chinchon.
- 88845. No. 5960. Collected June 25, 1930, from plants along a bank of the Seisenko River, Kisen, Chosen.
- 88846. No. 5961. Collected June 26-28, 1930, from plants along the Seinonko River bank opposite the Kokai, side; Kokai, Heian Hokudo, Prefecture, Chosen.
- 88847 and 88848. PHASEOLUS ANGULARIS (Willd.) W. F. Wight. Fabaceae. Adsuki bean.
 - 88847. No. 5908. Obtained June 14, 1930, from a warehouse in the yards of the South Manchurian Railway, Dairen. Mixture of adsuki-bean warieties.
 - 88848. No. 5929. Collected June 16, 1930, in a storage warehouse of the South Manchurlan Railway, Dairen. Medium-sized, red adsuki beans used for making various kinds of adsuki confections.
- 88849 to 88851. PHASEOLUS AUREUS Roxb. Fabaceae. Mung bean.

Collected June 14, 1930, from a warehouse in the South Manchurian Railway yards, Dairen. 88837 to 88856-Continued.

- 88849. No. 5902. Medium-small, lightgreen mung bean used for sprouts, bean vermicelli, and bean noodles.
- 88850. No. 5901. Medium-small, lightgreen mung bean said to have come from northern Manchuria; used for sprouts, bean noodles, and bean vermicelli.
- 88851. No. 5904. Medium-small, lightgreen bean used for sprouts, bean noodles, and bean vermicelli.
- 88852. SORGHUM VULGARE Pers. Poaceae. Sorghum.

No. 5910. Collected June 14, 1930, from a warehouse in the South Manchurian Railway yards, Dairen. Used extensively for food and also for cattle feed.

88853. PRUNUS TOMENTOSA Thunb. Amygdalaceae. Manchu cherry.

No. 5975. Yusuraume. Purchased June 27, 1930, at a small Korean store in Kokai, Heian Hokudo Prefecture, Chosen. A small bright-red fruit, somewhat sour; grows wild in mountain sections. Kokai is in 41° N. lat., and the temperature goes as low as 40° F. below zero.

88854. TRIFOLIUM PRATENSE L. Fabaceae. Red clover.

No. 5962. Collected June 21, 1980, from plants along the River Seinonko, opposite Kokai, Heian Hokudo Prefecture, Chosen. The clover was growing quite abundantly in rather sandy soll; it makes a very good growth. Nothing is known of its source.

88855. TRIFOLIUM REPENS L. Fabaceae. White clover.

No. 5963, Collected June 26, 1930, along a bank of the Seinonko River, opposite the village of Kokai, Helan Kokudo Prefecture, Chosen. This clover is growing in abundance along the river bank and forms a rather compact sod. It is crowding out other plant species, such as Zoysia pungens.

88856. ZEA MAYS L. Poaceae. Corn.

No. 5974. Okususu. Purchased June 27, 1930. from a Korean farmer at Kokai, Heian Hokudo Prefecture, Chosen.

88857. FREESIA Sp. Iridaceae.

From Naples, Italy. Seeds presented by M. Herb, through David Fairchild, agricultural explorer, Bureau of Plant Industry, with the Allison V. Armour expedition. Received August 8, 1930.

No. 3609. June 1930. This lot may contain some of the varicolored forms that were originated by the plant breeder Ragioneri in Florence.

88858. GENISTA Sp. Fabaceae.

From the island of Crete. Seeds collected by David Fnirchild, agricultural explorer, Bureau of Plant Industry, with the Allison V. Armour expedition. Received August 8, 1930.

No. 3604. June 29, 1930. On the mountain slopes overlooking the plains of Messana, Crete, route to Phestos. This shrub should be very ornamental in the dry mountain climate of California and Arizona. May prove a good rock plant also.

88859. PRUNUS CEBASUS MARASCA (Host) C. Schneid. Amygdalaceae. Maraschino cherry.

From Yugoslavia. Seed obtained by David Fairchild, agricultural explorer, Bureau of Plant Industry, with the Allison V. Armour expedition. Received August 8, 1930.

No. 3612. July 7, 1930. From fruits for sale on the market at Spalato.

88860. ZEA MAYS L. Poaceae. Corn.

From Kruja, Albania. Seed purchased by David Fairchild, agricultural explorer, Bureau of Plant Industry, with the Allison V. Armour expedition. Received August 8, 1930.

No. 3610. July 5, 1930. Field corn from the village of Kruja. It is the variety commonly grown in the mountains of Albania.

88861 to 88863.

- From Medan, Sumatra. Seeds presented by L. A. Lorzing, through David Fairchild, agricultural explorer, Bureau of Plant Industry. Received August 8, 1930.
 - 88861. ACTINORHYTIS CALAPPARIA Wendl. and Drude. Phoenicacene. Palm.

A robust palm 40 feet high, with a smooth stem conspicuously ringed, large pinnate leaves 9 feet long and 6 feet wide, and a large pendulous cluster of small flowers followed by ovoid red fruits 3 inches long. Native to the East Indies.

For previous introduction see No. 78467.

- 88862. SAGUERUS Sp. Phoenicaceae. Palm.
- 88363. XIPHIDIUM COERULEUM Aubl. Haemodoraceae.

An irislike plant, native to tropical America, with oblong-lanceolate leaves 1 to 2 feet leng and a compound raceme of small white or blue flowers.

- 88864. ARECA TRIANDRA ROXD. Phoenicaceae. Palm.
- From Peradeniya, Ceylon. Seeds presented by T. H. Parsons, Curator, Royal Botanic Gardens. Received August 11, 1930.

A graceful, spineless palm, ultimately about 25 feet high, usually with several trunks which bear crowns of pinnate leaves 4 to 6 feet in length. The fruits, about the size of olives, are orange scarlet. Native to India.

For previous introduction see No. 70777.

- 88865. ZEPHYBANTHES Sp. Amaryllidaceae. Zephyrlily.
- From Tucuman, Argentina. Bulbs collected by S. Venturi. Received August 20, 1930.

Collected in Saimbon, Department of Tafi, at an altitude of 4,500 to 5,000 feet.

88866. ORYZA SATIVA L. Poaceae.

Rice.

88866-Continued.

From Amritsar, India. Seeds presented by Dr. Tara Chand, through C. E. Chambliss, Bureau of Plant Industry. Received August 20, 1930.

Grown under irrigation in the Punjab region.

- 88867. AMYGDALUS PERSICA L. (Prunus persica Stokes). Amygdalaceae. Peach.
- From New South Wales, Australia. Plants purchased from Swane Bros., Enterprise Nurseries, Ermington, Received August 21, 1930.

Taylor's Anniversary Red.

- 88868. ADONIDIA MERRILLII Beccari (Normanbya merrillii Beccari). Phoenicaceae. Palm.
- From Manila, Philippine Islands. Seeds presented by P. J. Wester, Bureau of Plant Industry, Manila. Received August 21, 1930.

Bonga de China or bonga de Jolo. A medium-sized palm with graceful, somewhat-curved pinnate leaves, resembling the common betel-nut palm, but not so tall. The crimson fruits, less than an inch long, are borne just below the leaves. In Manila this palm is grown as an ornamental.

For previous introduction see No. 81851.

88869 to 88893.

From Africa. Cuttings and seeds collected by Knowles A. Ryerson, agricultural explorer, Bureau of Plant Industry. Received August 21, 1930.

88869. ALOE ANTANDROE Hort. Liliaceae.

Cutting. A name for which a place of publication or a description has not been found.

88870. AMYGDALUS PERSICA L. (Prunus persica Stokes). Amygdalaceae. Peach.

No. 59. Semicling, white flesh. From the market at Bone, Algeria, July, 1930. 88871. CITRUS LIMONIA Osbeck. Rutaceae.

Lemon.

Ba Ahmed. From Morocco.

- 88872 to 88893. PRUNUS ARMENIACA L. Amygdalaceae. Apricot.
 - 88872 to 88876. Beni Amar (Zerhoun). From Virelizier Garden, Mekinez (Mekness), Morocco.
 - 88872. No. XXIV-A. Tree about 10 years old. Fruit of average color. maturing at the beginning of June.
 - 88873. No. XXIV-B. Tree about 10 years old; fruit matures about the first days of June.
 - 88874. No. XXV-A. Tree 8 to 10 years old; fruits begin maturing in June.
 - **-88875.** No. XXV-B. Tree about 10 years old; fruit matures toward the end of May.
 - 88876. No. XXVI-A. Tree 8 to 10 years old; fruit matures at the end of May.

88877 to 88880. From Virelizier Garden, Mekinez (Mekness), Morocco. 88869 to 88893-Continued.

- 88877. No. XXVI-B. Zerhoun Caid Khacem. Vigorous trees with large, colored fruits which mature at the end of May.
- 88878. No. XXVII-A. Zerhoun Caid Khacem. Very vigorous trees. The colored fruits, from average to large in size, mature in June.
- 88879. No. XXVII-B. Meknes. Fruits mature during June; production average.
- 88880. No. XXVIII-A. Fruits mature at the end of June.
- 88881 to 88884. From Jardin de la Residence, Fez, Morocco.
 - 88881. No. XXXI-A. Tree No. 2. Fruit small, colored, and fragrant; matures between the middle of May and the middle of June; production average.
 - 88882. No. XXXI-B. Tree No. 3. Fruit below average in size, fragrant, and of good flavor; pit nonclinging; matures in June; production very heavy.
 - 88883. No. XXXI-C. Tree No. 5. Fruits small and sour, maturing in July; production very heavy.
 - 88884. No. XXXI-D. Tree No. 6. Fruit small, slightly colored and of good flavor; matures in July; production average.
- 88885 and 88886. From Jardin de Bellevue, Fez, Morocco.
 - 88885. No. XXXII-A. Tree No. 1. Fruit large, slightly colored and fragrant; pit flat and pointed, nonclinging; matures at the end of June; production average.
 - 88886. No. XXXII-B. Tree No. 1. The highly colored fruit is average in size and fragrant; pit small, nonclinging; matures in June; production very heavy.
- 88887. No. XXXIII-A. From Jardin de Dar Tazi, Fez, Morocco. Tree No. 2. Fruit large, colored, and very fragrant; pit very large, plump, and slightly pointed; nonclinging, matures during the last half of May; production large.
- 88888. No. XXXIV-A. From Ecole Lamtyin, Fez, Morocco.

Tree No. 1. Fruit average in size; colored and very fragrant; pit small and nonclinging; matures by the middle of May.

- 88889 to 88893. From Jardin de M. Sultana, Fez, Morocco.
 - 88889. No. XXXV-A. An early type, maturing during the last half of May.
 - 88890. No. XXXV-B. An early type maturing about the 22d of May.
 - 88891. No. XXXV-C. An early type maturing about the 20th of May.
 - 88892. No. XXXV-D. Oued Fes lot Dimeglio. An early type maturing about May 25.
 - 88893. No. XXXV-E. Fruit matures about May 30.

88894 to 88899.

- From north Africa. Seeds and cuttings collected by Prof. F. T. Bioletti, Uni-versity of California, and Knowles A. Ryerson, agricultural explorer, Bureau of Plant Industry, Received August 21, 1930
 - 88894 to 88897. PRUNUS ARMENIACA L. Apricot. Amygdalaceae.
 - Seeds from M. Flous, Sefron, near Sfax, Morocco.
 - No. XXXVII. Clingstone, plus 88894. medium size, golden yellow hue.
 - 88895. No. XXXVIII-A. Creamy yel-low or yellow hue, pebble size (very small), clingstone, reddening on side exposed to the sun.
 - 896. No. XL. Golden yellow hue, freestone, huge fruit similar to Gloire I' Auvergue, red spots on the sunny side. 88896. No.
 - 88897. No. XXXIX. Golden yellow hue, freestone, few dark spots; more than medium size.
 - 88898. PRUNUS sp. Amygdalaceae. Plum.

(Heat resistant.) Cuttings of a plum from Jolan, Morocco.

88899. PRUNUS Sp. Amygdalaceae. Plum.

Belciana. Cuttings of a plum from Rabat, Morocco.

88900 to 88934.

From Africa. Seeds collected by H. L. Westover, agricultural explorer, Bureau Westover, agricultural explorer, Bureau of Plant Industry. Received August 21, 1930

88900. AMMOPHILA ARENARIA (L.) Link. Poaceae. Beachgrass.

No. 35. From Mogador, Morocco, July 3, 1930. Used in controlling sand 23. dunes.

88901. ANDROPOGON SERICEUS R. Br. Poa-Grass.

No. 25. Queensland blue grass. From Maison Carree, Algeria, July 9, 1930. A grass, most palatable to stock, very widely distributed in Australia. It grows over 3 feet high on good soil and never less than 1 foot on the worst of soils; keeps green all the year round and is scarcely affected by drought or frost.

For previous introduction see No. 34047.

88902. ARISTIDA ADSCENSIONIS L. Poa-Grass. ceae.

No. 55. From the limestone plains of Mogador, Morocco, July 22, 1930. A tufted weedy annual 6 to 12 inches tall, with dense narrow panicles; the awns of the crowded spikelets are horizontally spreading.

For previous introduction see No. 54396.

88903. BRACHYPODIUM DISTACHYUM (L.) Beauv. Poaceae. Grass.

No. 50. From the mountains south-west of Marrakech. Morocco, July 17, 1930. A very stiff. densely branched annual grass, 4 to 12 inches high, up-right or ascending in habit. It is found in cultivated fields and along roadsides,

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88900 to 88934—Continued.

often in chalky soil, in the Mediterranean countries.

For previous introduction see No. 60363.

88904. BRACHYPODIUM RAMOSUM Roem. and Schult. Poaceae. (\mathbf{L}_{i}) Grass.

No. 42. From the experiment station, Casa Blanca, July 17, 1930. A blue-green perennial creeping grass, much branched at the base, found in the warmer portions of the Mediterranean countries, especially on chalky soil and in dry rocky places.

For previous introduction see No. 60364.

88905. BROMUS RIGIDUS Roth. Poaceae. Grass.

No. 51. From the mountains south-west of Marrakech, Morocco, July 17, 1930. A weedy annual 2 feet tall with hairy foliage and drooping panicles of long awned spikelets. Native to the Mediterranean region.

For previous introduction see No. 53092.

88906. CHAETOCHLOA NIGRIROSTRIS (Nees) Skeels (Setaria nigrirostris Dur. and Schinz.). Poaceae. Grass.

No. 24. From Maison Carree, Algeria, July 9, 1930. A hardy tufted grass which has made good growth. Although the leaves are a little hard, there is a very large quantity in proportion to the stem; it appears to be a quick succulent grower, carries a good quantity of seed, and grows well in New South Wales.

previous introduction see No. For 46133.

88907. CORONILLA Sp. Fabaceae.

No. 37. From the mountains south of Marrakech, Morocco, July 21, 1930.

88908. CYMBOPOGON SCHOENANTHUS (L.). Spreng. (Andropogon schoenanthus L.). Camel hay. Poaceae.

No. 33. From Morocco, July 19, 1930. Seed of native grass obtained from the experiment station and said to be relished by sheep.

88909. FESTUCA ELATIOR ARUNDINACEA (Schreb.) Celak. Poaceae. Fescue grass.

No. 40. From an irrigation ditch, Demnat, Morocco, July 19, 1930.

For previous introduction see No. 25209

88910. LOTUS sp. Fabaceae.

No. 28. From the experiment station, Casa Blanca, Morocco, July 17, 1930.

88911. Lotus sp. Fabaceae.

No. 43. From Mogador, Morocco, July 23, 1930.

88912 to 88914. MEDICAGO SATIVA L. Fa-Alfalfa.

88912. No. 29. From Demnat, Morocco, July 19, 1930; wild alfalfa.

88913. No. 30. From Pasha, Demnat, Morocco, July 19, 1930.

88900 to 88934-Continued.

88914. No. 31. From Rabat, Morocco, July 15, 1930. Seed produced at the experiment station, Rabat, from wild seed grown at Demnat.

88915. MELILOTUS ITALICA (L.) Lam. Fabaceae. Sweetclover.

No. 45. From the experiment station, Casa Blanca, Morocco, July 17, 1930.

For previous introduction see No. 30296. 88916. ONONIS sp. Fabaceae.

No. 46. From Mogador, Morocco. July 23, 1930; collected on the sand dunes.

88917. ORYZOPSIS COERULESCENS (Desf.) Hack. Poaceae. Grass.

No. 49. From the mountains southwest of Marrakech, Morocco, July 17, 1930.

88918. PANICUM MILIACEUM L. Poaceae. Proso.

No. 47. From the experiment station, Casa Blanca, Morocco, July 17, 1930.

88919. PANICUM REPENS L. POACEAE. Grass.

No. 41. From the experiment station, Casa Blanca, Morocco, July 17, 1930. A gray-green, creeping or ascending perennial grass up to 2 feet high, native to the Mediterranean countries, and distributed through Asia Minor and troplcal Africa. The stout rootstalks of this grass make it difficult to eradicate.

For previous introduction see No. 67999.

88920. SORGHUM VULGARE Pers. Poaceae. Sorghum.

No. 39. From the experiment station, Rabat, Morocco, July 15, 1930.

88921. STIPA PARVIFLOBA Desf. Poaceae. Feathergrass.

No. 48. From the mountains southwest of Marrakech, Morocco, July 18, 1930.

88922. STIPA TENACISSIMA Jusl. Poaceae. Feathergrass.

Nos. 52 and 53. From the mountains southwest of Marrakech, Morocco, July 17, 1930.

For previous introduction see No. 31559. 88923. (Undetermined.)

No. 44. From the mountains southwest of Marrakech, Morocco, July 21, 1930.

88924. VICIA NARBONENSIS L. Fabaceae. Vetch.

No. 32. From the experiment station, Marrakech, Morocco, July 19, 1930. Seed originally obtained from a wild plant.

88925. ZEA MAYS L. Poaceae. Corn. No. 38. From Morocco, July 18, 1930. A type commonly grown.

88926. HORDEUM BULBOSUM L. Poaceae. Grass.

No. 26. From Maison Carree, Algeria, July 9, 1930.

For previous introduction see No. 78781.

88927. HYPARRHENIA HIRTA (L.) Stapf. (Andropogon hirtus L.). Poaceae. Grass. 88900 to 88934-Continued.

No. 34. From the mountains south of Bone, Algeria, July, 1980.

For previous introduction see No. 75897.

88928. LOLIUM MULTIFLORUM Lam. Poaceae. Italian ryegrass.

No. 23. From Maison Carree, Algeria, July 9, 1930.

Suly 9, 1990. 88929. MEDICAGO ARBOREA L. Fabaceae. Tree alfalfa.

No. 20. From Maison Carree, Algeria, July 9, 1930.

88930. MEDICAGO SATIVA GAETULA Urban. Fabaceae. Alfalfa.

No. 19. From the Institut Agricole d'Algeria, Maison Carree, Algeria, July, 1930.

88931. OBYZOPSIS MILIACEA (L.) Benth. and Hook. Poaceae. Grass.

No. 21. Smilo grass. From Maison Carree, Algeria, July 9, 1930. A perennial grass, native to the Mediterranean region, and known in Australia as velt grass. In California it has been called Smilo grass, San Diego grass, mountain rice, and many-flowered millet. Under California conditions it has exhibited considerable promise. It has been generally introduced into Australia and New Zealand, where it possesses considerable merit.

For previous introduction see No. 66815.

88932. PENNISETUM VILLOSUM R. Br. Poaceae. Grass.

No. 22. From Maison Carree, Algeria, July 9, 1930.

88933. PHALARIȘ BULBOSA Jusl. Poaceae. Grass.

No. 27. From Maison Carree, Algeria, July 9, 1930. A perennial tufted grass with shiny leaves about two-fifths of an inch wide and roots penetrating the soil to a depth of nearly 3 feet; native to the Mediterranean countries. It is now cultivated in New South Wales, where it appears to be an excellent permanent winter grass for coastal and table-land districts. Owing to its deep roots it can endure a considerable amount of drought. The seeds are borne very sparsely on short stems which stand up in the center of the crown.

For previous introduction see No. 63974.

88934. TRIFOLIUM sp. Fabaceae. Clover.

No. 36. From the Roman amphitheater at Churchill, Algeria, July 10, 1930.

88935. ARGANIA SPINOSA (L.) Skeels (A. sideroxylon R. and S.). Sapotaceae. Argan.

From Morocco. Seeds collected by Knowles A. Ryerson and H. L. Westover, agricultural explorers, Bureau of Plant Industry. Received August 22, 1930.

No. 61. From near Bigoudin, July 21, 1930. The argan tree of western Morocco is very limited in its range, occurring only in that part of the African Continent. It grows to a large size and bears an abundance of light-yellow fruits somewhat resembling small plums in shape. Cattle and 88935—Continued.

goats are said to feed upon these fruits, which are exceedingly acrid. The seeds are very thick-walled and contain an oil which is used as food and also for illumi-nating purposes. Apparently the tree is not injured by considerable frost, and it may thrive wherever the hardy citrus grows.

For previous introduction see No. 80669.

88936. MEDICAGO SATIVA L. Fabaceae. Alfalfa.

From Morocco. co. Seeds collected by H. L. agricultural explorer, Bureau Westover, agricultural explorer, Bureau of Plant Industry. Received August 22, 1930.

From Agourai, July 23, 1930. No. 58. A wild alfalfa.

- 88937 to 88946. PRUNUS ARMENIACA L. Amygdalaceae. Apricot.
- From Morocco. Seeds collected by Knowles A. Ryerson, agricultural explorer, Bureau of Plant Industry. Received August 22, 1930.

Nos. 88937 to 88939 are from Ben Hal-ima Garden, Mekness.

- 88937. No. XXI. Tree with rather spiny, arched branches and small leaves. Flowers about March 10 to 15; fruit somewhat red, ripening about June 20, averaging 65 to the 2.2 pounds.
- 938. No. XXII. Tree with somewhat spiny, erect branches and small, ever-green leaves. It blooms about March 10 to 15 and the fruit ripens about June 25. The very small, yellow fruit averages about 155 to the 2.2 pounds. 88938. No. XXII.
- 88939. No. XXIII. Tree with slightly spiny, arched branches and large leaves; blooms March 15 to 20. The pink fruit ripens about June 30 and is quite large, averaging 33 to the 2.2 nounds large, averaging 33 to the 2.2 pounds.
- 88940. No. 13. From Paris Lyons Mar-seilles Garden, Marrakech.
- Nos. 88941 to 88946 are from H. Brayard, Marrakech.

88941. No. 2. Ferdi.

88942. No. 3. Ferdi.

88943. No. 1. MajorelU.

88944. From Arnaud Farm.

88945. No. 1. Zachetti.

88946. No. 2. Zachetti.

88947. (Undetermined.)

From Fort Dauphin, Madagascar. presented by P. B. Stolee. August 22, 1930. Seeds Received

Voaloboka-gasy. An unidentified plant known as native grape, said to be used as a stock for grafting true grapes. Its 1-seeded fieshy fruits are eaten by natives, but are not agreeable to foreigners.

- 88948 to 88965. PRUNUS ARMENIACA L. Amygdalaceae. Apricot.
- From Morocco. Seeds collected by Knowles A. Ryerson, agricultural explorer, Bureau of Plant Industry. Received August 25, 1980.

88948 to 88965-Continued.

88948. No. 11. From Menara, Marrakech. Nos. 88949 to 88954 are from Ba Ahmed. Marrakech.

- 88949, No. 6. 88950. No. 5. 88951. No. 8. 88952. No. 7.
- 88953. No. 1.

88954. No. 2.

- 88955. No. 17. From H. Brayard, Marrakech.
- 88956. No. 1. From Ba Ahmed, Marrakech.
- 88957. No. 18. From H. Brayard, Marrakech.
- 88958. No. 14. From Paris Lyons Marseilles Garden, Marrakech.
- 88959. No. 15. From Compagnie Fer-miere, Marrakech.
- 88960. No. 9. From Ba Ahmed, Marrakech.
- 88961. No. 10. From Ba Ahmed, Marrakech.
- 88962. No. 14. From Paris Lyons Marseilles Garden, Marrakech.
- 88963. No. 5. From Ba Ahmed, Marrakech.
- 88964. No. 7. From Ba Ahmed, Marrakech.

88965. No. 19. From We Brayard), Marrakech. From Woehr Place (H.

88966. OSTERDAMIA JAPONICA (Steud.) Hitchc. Poaceae.

Japanese lawngrass.

From Kokai, Chosen. Seeds collected by P. H. Dorsett and W. J. Morse, agricul-tural explorers, Bureau of Plant Indus-try. Received August 25, 1930.

No. 6010. July 6, 1930.

For previous introduction and descrip-tion see No. 88776.

88967 to 89015.

- From Manchuria. Seeds collected by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received August 25, 1930.
 - 88967. AGROPYRON CILIARE (Trin.) Franch. Poaceae. Grass.

No. 5873. From mountain south of Dairen, July 10, 1930. A tall-growing short-awned grass. May be of value in the Northwest.

For previous introduction see No. 64765.

- 88968 to 88989. MEDICAGO SATIVA L Fa-Alfalfa. baceae.
 - 2968. No. 6004. From a river bank near Impukujoshi, July 14, 1930. Said to be a wild species of alfalfa. It is a blue-flowered form, procum-bent in habit. 88968, No. 6004.
 - 88969. No. 6011. From a road along the west wall of Chinchon, July 17, 1930. An erect plant with light-

88967 to 89015-Continued.

blue flowers. Probably introduced by the Russians during their occu-pation.

- No. 6012. 88970. From road of north 970. No. 6012. From road of north wall of city of Chinchon, Manchuria, July 17, 1930. These seeds were collected from several plants which are procumbent with flowers varying in color from light blue to pinkish blue. Not known when introduced, but probably brought by Russians when they occupied this territory.
- 88971 to 88989. From single plants along road of north wall of Chin-chon, Manchuria, July 17, 1930. Probably introduced by Russians during their occupation.

88971. No. 6016. Plant procumbent, with pale-blue flowers.

88972. No. 6014. Plant procumbent, with pale-blue flowers.

88973. No. 6015. Plant with pale-blue flowers. Plant semierect.

88974. No. 6016. Plant procumbent, with blue flowers.

88975. No. 6017. Plant procumbent, with blue flowers.

88976. No. 6018.

88977. No. 6019.

88978. No. 6020. Plant procumbent, with pale blue flowers.

88979. No 6021

88980. No. 6022. Plant procumbent, very prolific, with blue flowers.

88981. No. 6023. Plant semiprocum-bent, with blue flowers.

88982. No. 6024. Plant semiprocum-bent, with blue flowers.

88983, No. 6025.

88984. No. 6026.

88985. No. 6027.

88986, No. 6028. Plant semiprocumbent, with purple flowers.

88987. No. 6029.

88988, No. 6030.

88989, No. 6031.

88990, MELILOTUS SUAVEOLENS Ledeb. Sweetclover. Fabaceae.

No. 5871. July 8, 1930. From plants along roadside, near Ta Fang Shen, Manchuria. Plants vary considerably in time of maturity and in plant characters. Some plants with mature seed still have green foliage, while others with mature seed are dead.

previous introduction see No. For 61320.

88991 to 88995. OSTERDAMIA JAPONICA (Steud.) Hitchc. Poaceae. Japanese lawngrass.

For previous introduction see No. 88776.

991. No. 5867. July 8, 1930. Along the railroad about 1 mile from Chin-chon, Manchuria. Plant has white flowers. light-green foliage, and 88991. No. 5867. light straw-colored seed.

88967 to 89015-Continued.

- 992. No. 5868. July 8, 1930. Along a roadside about 1 mile from Chin-chon, Manchuria. Mixed seed of the white fourced 88992. No. 5868. forms or strains of this grass. It grows in sandy soil and is used for binding railroad embankments.
- 88993. No. 5869. July 8, 1930. From a bank along the beach near Maka-ton, Manchuria. Seed from a white-flowered, light-green foliage strain that occurs quite abundantly in this section.
- 88994. No. 5870. July 8, 1930. From plants along the bank of a beach near Makaton, Manchuria. Seed from white and purple-flowered strains of this species.
- 88995. No. 6003. July 14, 1930. Along roadside near Shia Chiahotzu, Man-churia. Light straw-colored seed, light-green foliage, and white flow-ers. Used for binding railroad em-bankments and for lawns.
- 88996. PHASEOLUS AUREUS Roxb. Faba-ceae. Mung bean.

No. 5921. July 21, 1930. From a warehouse in the South Manchurian Rail-way storage yards, Dairen. Medium-sized, light-green beans; used for bean sprouts and for making bean vermicelli.

88997 to 89015. SOJA 997 to 89015. SOJA MAX (L.) Piper (Glycine hispida Maxim.). Fabaceae. Piper Soybean.

Nos. 88997 to 89014 are from a ware-house in the South Manchurian Railway storage yards, Dairen, July 12, 1930. Medium-sized, mixed yellow varieties; used for oil and oil meal.

88997.	No. 5874.
88998.	No. 5943.
88999.	No. 5944.
89000.	No. 5945.
89001.	No. 5946.
89002.	No. 5947.
89003.	No. 5948.
89004.	No. 5949.
89005.	No. 5950.
89006.	No. 5951.
89007.	No. 5952.
89008.	No. 5953.
89009.	No. 5954.
89010.	No. 5955.
89011.	No. 5956.
89012.	No. 5957.
89013.	No. 5958.
89014.	No. 5959.

89015. No. 6001. July 14, 1930. From Impukujoshi. Medium sized, oval, greenish yellow with slate-black hilum; germ yellow. This variety is generally grown in this section, as it succeeds better in the rainy season than the yellow-seeded varieties

89016. STIZOLOBIUM PRURITUM (Wight) Piper and Tracy. Fabaceae.

Velvetbean.

From Southern Rhodesia, Africa. Seeds presented by J. M. Moubray, Chipoli, Shamva. Received August 25, 1930.

Funguoi bean. While the plants resemble the Florida velvetbean very closely, they are not suitable for forage, owing to the trouble caused by the stinging hairs. Of possible value for green manure.

For previous introduction see No. 34439.

- 89017 to 89020. MANGIFERA INDICA L. Anacardiaceae. Mango.
- From Pasar Minggoe, Java. Plants presented by M. M. Magielse, Government horticulturist. Tulnbouwkundig Ambtenaar, through David Fairchild, agricultural explorer, Bureau of Plant Industry. Received August 26, 1930.
 - **89017.** Mangga aroemanis (grafted on madoe). In Java this is a mediumsized mango of bluish green color. The fruit is of fine flavor, has no fiber, is not injured by the winds, and is an excellent shipper. It is considered the best mango in Java.

For previous introduction see No. 81684.

89018. Mangga golek (grafted on madoe). A large, thin, very long, golden yellow, very sweet, and juicy mango with few fibers. It is a good bearer, on clay soil with stiff subsoil, but not quite as good a bearer as the Saigon.

For previous introduction see No. 81683.

89019. Mangga kopjor. A very fibrous bright yellow seedling mango which is used as a stock in eastern Java, where they have severe droughts and the soil is alkaline and not suited to the growth of ordinary mangoes.

For previous introduction see No. 81682.

89020. Mangga nanas. A seedling.

- 89021 to 89025. MEDICAGO SATIVA L. Fabaceae. Alfalfa.
- From Santiago, Chile. Seeds presented by Alberto J. Wiedmaler, Director de la Estacion Experimental, Santiago. Received August 26, 1930.

89021. Colina.

89022. Combarbala.

89023. Las Condes.

89024. Llolleo.

89025. Patagonia.

89026 and 89027.

- From Peradeniya, Ceylon. Seeds presented by T. H. Parsons, curator, Royal Botanic Gardens, Department of Agriculture. Received August 26, 1930.
 - 89026. CARYOPHYLLUS AROMATICUS L. (Eugenia aromatica Kuntze). Myrtaceae. Clovetree.

A small tree, 12 to 15 feet high, native in the Molukka Islands, now cultivated widely in tropical regions for the dried 89026 and 89027-Continued.

unopened flower buds which constitutethe cloves of commerce.

For previous introduction see No. 31776.

89027. CARYOPHYLLUS MALACCENSIS (L.) Stokes. Myrtaceae. Ohia.

When in flower, the branches of this tree are gorgeous, covered as they arewith large masses of flowers an inch or so across, filled with hundreds of beautiful deep rose-pink or crimson stamens. The fruit is much esteemed for preservesmade from it, which seem to have a characteristic flavor of some merit.

For previous introduction see No. 57820.

- 89028. CITRUS NOBILIS LOUR. Rutaceae.
- From India. Seeds presented by Sir James. R. Roberts, through R. Y. Jarvis, American consul, Calcutta. Received August 29, 1930.

Udaipur. A large, sweet, loose-skinned orange.

- 89029. BAMBUSA LONGISPICULATA Gamble. Poaceae. Bamboo.
- From Dehra Dun, India. Seeds presented by R. N. Parker, Forest Botanist, Forest Research Institute, New Forest. Received August 28, 1930.
- This species appears to differ from Bambusa tulda only in the larger spikelets.

For previous introduction see No. 81495.

- 89030. SORGHUM ABUNDINACEUM (Willd.) Stapf. Poaceae. Grass.
- From Belgian Congo. Seeds presented by Dr. A. Bracke, Casteau, Belgium. Received August 29, 1930.

This is closely related to Sudan grass. In its natural habitat it grows on heavy black fertile lands and is apparently perennial. It does not spread by underground roots, but volunteers very freely from seed, especially where the land has been cultivated. The stems are somewhat woodler and more canelike than those of Sudan grass.

For previous introduction see No. 56801.

89031 to 89033. CITRULLUS VULGARIS Schrad. Cucurbitaceae.

Watermelon.

From Manila, Philippine Islands. Seeds presented by Aniano Elayda, Assistant Horticulturist, Bureau of Plant Industry, Department of Agriculture and Natural Resources, Manila. Received August 30, 1930.

Varieties to be used in our breeding work for resistance to melon diseases.

89031. De Jaspi. From Baliwag, Bulacan.
89032. Long Native. From San Isidro, North Esija.

89033. Valencia. From San Miquel, Bulacan.

89034 to 89036.

From Java. Seeds presented by the director, Botanic Gardens, Buitenzorg. Received September 3, 1930.

39034 to 89036—Continued.

89084. CASSIA MOSCHATA H. B. K. Caesalpiniaceae.

A medium-sized tropical South American tree with leaves composed of 14 to 18 pairs of leaflets and yellow flowers in axillary racemes.

For previous introduction see No. 72431.

89035. SYZYGIUM ACUMINATISSIMUM (Blume) DC. (Eugenia acuminatissima Kurz). Myrtaceae.

A large evergreen tree up to 80 feet high with thinly coriaceous elliptic-lanceolate leaves about 4 inches long, compound panicles of small white flowers, and blackish purple fruits nearly an inch in diameter. It is native to Burma, the Malay Peninsula, and Sumatra.

89036. Syzygium cymosum (Lam.) DC. Myrtaceae.

An erect tree with brown branchlets, somewhat coriaceous oblong sharp-pointed leaves 2 to 4 inches long, small cymes of inconspicuous flowers, and globose fruits 1 inch in diameter. It is native to the island of Mauritius.

89037 and 89038.

- From Morocco. Seeds presented by Parker
 W. Buhrman, American consul, Casablanca. Received September 3, 1930.
 - 89037. GENISTA MONOSPERMA (L.) Lam. Fabaceae. Bridal-veil broom.

An ornamental leguminous shrub, native to Spain, about 10 feet high, with slender grayish branches and small very narrow leaves. The fragrant white flowers are in short lateral racemes.

For previous introduction see No. 78902.

89038. POLYCARPAEA NIVEA (Ait.) Webb. Silenaceae.

A low-growing gray hairy perennial plant, used extensively and successfully in the sand-binding experiments on the sand dunes.

For previous introduction see No. 71862.

89039 to 89075.

- From Manchuria. Seeds collected by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received September 4, 1930.
 - 89039 and 89040, ASPARAGUS sp. Convallariaceae.

89039. ASPARAGUS Sp.

No. 6002. July 14, 1930. Near Impukujoshi, from plants along the roadside. This species grows quite abundantly along the roadsides and hillsides. It is from 2 to over 3 feet high and apparently is a different species from No. 5872 (89040).

89040. ASPARGUS sp.

No. 5872. July 11, 1930. From wild plants on the mountain south of Dairen. This species grows quite abundantly on the mountains, and the plants range from 15 to 30 inches high.

89039 to 89075-Continued.

89041 to 89047. MEDICAGO SATIVA L. Fabaceae. Alfalfa.

Probably introduced from Russia during their occupation of this section.

- 89041. No. 6047. July 31, 1930. From plants along the roadside about 1 mile west of Hsimgyaocheng. Plants erect, with flowers ranging from light blue to deep pinkish blue.
- 89042. No. 6044. July 26, 1930. From plants along the hillside near the seashore, Hoshinoya. The plants vary in habit of growth from procumbent to nearly erect. Flowers vary from very light blue to deep purple. Some plants have smoky yellow flowers.
- 89043. No. 6045. July 29, 1930. From plants along the roadside about 1 mile southwest of Hsimgyaocheng. Plants erect, flowers varying from light blue to deep pinkish blue. Grows quite abundantly and seeds very heavily.
- 89044. No. 6042. July 26, 1930. From plants along a hillside near the seashore, Hoshinoya. Plants erect, 24 to 30 inches high, with blue flowers.
- 89045. No. 6043. July 26, 1930. From plants growing on the side of cliff near the seashore at Hoshinoya. Plants erect, 24 to 30 inches high, with pale-blue flowers.
- 89046, No. 6033. July 17, 1930. From a single plant along the road of the north wall of Chinchon. Plant erect with light-blue flowers.
- 89047. No. 6041. July 26, 1930. From plant along a roadside on a hillside near Port Arthur. Plant erect, 26 to 36 inches high, with pale-blue flowers.
- 89048 and 89049. MELILOTUS SUAVEOLENS Ledeb. Fabaceae. Sweetclover.
 - 89048. No. 6040. July 26, 1930. Collected along the roadside on the mountain near Port Arthur. Plants 30 to 36 inches high, with yellow flowers. Growth starts rather early in the spring.
 - 89049. No. 6046. July 31, 1930. From plants along the roadside north of Hsimgyaccheng. Plants 24 to 36 inches high, with yellow flowers.
- 89050. PHASEOLUS AUREUS Roxb. Fabaceae. Mung bean.

No. 6074. August 2, 1930. From a warehouse in the South Manchurian Railway storage yards at Dairen. A mediumsized, light-green bean with white hilum. Used for bean vermicelli and bean sprouts.

89051. RUBUS sp. Rosaceae.

No. 6034. July 24, 1930. From plants in a mountain valley about 2 miles northwest of Koneisen. Fruits orange red and rather sweet; the leaves of the plant are white underneath.

89052 to 89075. SOJA MAX (L.) Piper (Glycine hispida Maxim.). Fabaceae. Soybean.

From a warehouse in the South Manchurian Railway storage yards, Dairen, August 2, 1930. A collection of mediumsized mixed yellow varieties used for oil and oil meal.

89039 to 89075—Continued.	890
89052. No. 6072.	1
89053. No. 6069. Medium small to me- dium sized.	Fre
89054. No. 6050. This variety is exported to Europe.	
89055. No. 6051.	t
89056. No. 6065.	tiv
89057. No. 6062.	1
89058. No. 6054.	1
89059. No. 6063.	890
89060. No. 6070.	L
89061. No. 6053. This variety is exported to Europe.	Fre
89062. No. 6064.	
89063. No. 6052. A variety with light- brown hilum.	of 2-fi
89064. No. 6055. A variety used for soy sauce, miso, and bean curd.	flov 890
89065. No. 6073.	8
89066. No. 6058.	Fre
89067. No. 6067. Exported to Europe.	Į
89068. No. 6068.	l i
89069. No. 6071.	. 1
89070, No. 6067.	Th glo
89071. No. 6056. A nearly round va- riety with a light-brown hilum.	wh tre
89072. No. 6059.	hei eas
89073. No. 6066. Exported to Japan for making miso, soy sauce, and bean curd.	cov bri flav it
89074. No. 6061.	of see
89075. No. 6060.	me coc

89076. PISTACIA VERA L. Anacardiaceae. Pistache.

From Tehran, Perisa. Seeds purchased through Charles A. Hoffman, American College of Tehran. Received September 9, 1930.

Collected at Damghan, Persia, by M. Ziai, a Persian student at the American College, Tehran. Damghan is one of Persia's fruit-growing centers and has a reputation for producing high-quality pistache nuts. The orchards consist of seedling trees, some of which have been top-worked with scions from favorite trees. Although trees do not vary much in size, some produce larger nuts than others.

89077. EHRHARTA VILLOSA MAXIMA Stapf. Poaceae. Pyp grass.

From Australia. Roots presented by W. J. Spafford, Deputy Director of Agriculture, through J. F. Balley, Director, Botanic Garden, Adelaide. Received September 9, 1930.

A form of *E. villosa* with stouter stems and larger and more compound panicles. The typical form is a perennial grass ascending from a decumbent and rooting base, the smooth stems finally becoming about 3 feet long. The linear leaves are 2 to 3 inches long, and the erect, linear, nearly secund panicles are 3 to 4 inches long. It is native to South Africa and has been used as a sand binder.

89078. HEVEA BRASILIENSIS (H. B. K.) Muell. Arg. Euphorbiaceae. Para rubbertree.

From Sumatra. Seeds from plantations of the United States Rubber Co., East Indies, presented by Ernest Hopkinson, vice president, Akron, Ohio. Received September 11, 1930.

A tropical Brazilian tree extensively cultivated for rubber.

For previous introduction see No. 77394.

- 89079. VIGNA VEXILLATA (L.) Rich. Fabaceae.
- From Mangalore, India. Seeds received through Roland McKee, Bureau of Plant Industry. Received September 11, 1930.

A tropical vine with trifoliolate leaves of orate-oblong pointed leaflets and usually 2-flowered peduncles bearing small yellow flowers. Of possible value as a cover crop.

89080. TRICHILIA CHIRINDENSIS Swynn. and Baker. Meliaceae.

From Southern Rhodesia, Africa. Seeds presented by W. L. Thompson, Mount Silinda. Received March 9, 1930. Numbered in September, 1930.

Umkuhla, also called white mahogany. The tree has a spreading head of dark glossy leaves, lightgray bark, and dullwhite flowers; it makes an excellent shade tree, sometimes becoming 120 feet in height. The timber is reddish brown and easily worked. The seeds are partially covered with a white pulp, inclosed by a bright-red skin. This pulp has a nutty flavor and, although there is very little of it on each seed, the natives are very fond of it. An oil is also obtained from the seeds which may become solid, but when melted it does not solidify at once upon cooling.

For previous introduction see No. 54922.

89081. ANTIDESMA BUNIUS (L.) Spreng. Euphorbiaceae. Banauac.

From Manila, Philippine Islands. Seeds presented by P. J. Wester, Bureau of Plant Industry, Department of Agriculture and Natural Resources, Manila. Received September 11, 1930.

A small, attractive, dioecious tree, attaining a height of 30 feet, with dark-green thick-pointed leaves and small, dark-red, subacid, well-flavored fruits in racemes like the currant. May be eaten raw or made into a fair jelly. Widely distributed at low and medium altitudes under varying climatic conditions.

For previous introduction see No. 65791.

- 89082. PAEONIA COBALLINA Retz. Ranunculaceae. Coral peony.
- From Cyprus. Seeds presented by C. B. Ussher, Horticulturist, Office of the Director of Agriculture, through David Fairchild, Bureau of Plant Industry. Received September 11, 1980.

From Prodromos. A tail, wild peony with carrotlike roots and purple flowers, rarely whitish or yellowish. Native to southern Europe.

For previous introduction see No. 67048.

89083 and 89084.

From Mexico. Seeds collected by Paul Russell and Max Souviron, agricultural explorers, Bureau of Plant Industry. Re-ceived September 12, 1930.

89083. MAMMILLARIA Sp. Cactaceae.

Cactus.

No. 2. Near Tizapan, Distrito Federal, September 3, 1930. Rather frequent in rocky places in the Distrito Federal. A medium-sized globular cactus with stout recurved spines. Fruits dark red; flowers not seen.

89084. SYMPHORICARPUS MICROPHYLLUS H. B. K. Caprifoliaceae

Pink snowberry.

No. 1. From Rio Frio, Distrito Fed-eral, August 27, 1930. A bush 3 to 6 feet high, with attractive pinkish flowers and white translucent fruits. Collected at 8,700 feet altitude in open mixed woods.

89085 to 89099. CYCLAMEN spp. Primulaceae.

From the Netherlands. Corms purchased from C. G. Van Tubergen (Ltd.), Zwan-enburg Nurseries, Haarlem. Received September 12, 1930.

89085 to 89087. CYCLAMEN ATKINSII T. Moore.

A hybrid between *Cyclamen coum* and *O. ibericum*. The leaves are reniform and dark green, spotted white, and the pale-rose or white flowers are usually lined or spotted red.

For previous introduction see No. 79178.

89085. Variety album.

89086. Variety roseum.

89087. Variety rubrum.

89088. CYCLAMEN CILICICUM Boiss. and Heldr.

A tuberous-rooted perennial with long-stemmed oval heart-shaped leaves, dark green and white mottled above. The flowers, white and rose colored, are about three-fourths of an inch long. The plant is native to the Balearic Islands.

For previous introduction see No. 79188.

89089 to 89091. CYCLAMEN COUM Mill.

A spring-blooming tuberous-rooted plant, native from southeastern Europe to Persia, about 6 inches high, with rounded-reniform uniformly green leaves and small scentless purple flowers.

For previous introduction see No. 79191.

89089. Typical form.

89090, Variety album.

89091. Variety roseum.

89092. CYCLAMEN EUROPAEUM L.

European cyclamen.

A low more or less evergreen Euro-pean perennial with a tuberous root, rounded or kidney-shaped leaves, white marbled above and purplish beneath, and fragrant bright-red flowers on scapes 4 to 5 inches high in autumn.

previous introduction see No. For 79192.

89085 to 89099-Continued.

89093. CYCLAMEN IBERICUM Stev.

A dwarf herbaceous perennial, native to the Caucasus region, with oval-rounded leaves zoned with white above and purple flowers with darker-colored throats.

For previous introduction see No. 79196.

89094. CYCLAMEN LIBANOTICUM Hildebr.

A cyclamen with obcordate, sinuate-margined leaves marked with white above and deep violet beneath, appear-ing in autumn. The lobes of the rose-colored corolla are eared at the base and have a T-shaped, deep-red mark. It is native to Palestine.

89095 and 89096. CYCLAMEN NEAPOLITA-NUM Tenore. Neapolitan cyclamen.

A low perennial 3 inches high, arising from a large black tuber. The deep pink or rarely white flowers are borne in the autumn. Native to Italy. For previous introduction see No.

79055.

89095. Typical form.

89096. Variety album.

89097. CYCLAMEN PSEUDO-IBERICUM , Hildebr.

A spring-flowering cyclamen with ob-cordate cartilaginous crenulate margined leaves spotted silvery white on deep green and violet flowers spotted with darker color and white at the base. It is said to be native to Asia Minor.

89098 and 89099. CYCLAMEN REPANDUM Sibth, and Smith. Spring cyclamen.

A spring-flowering tuberous-rooted plant with cordate-undulate lobed leaves and showy purple flowers. Native to the Mediterous on source of the second secon Mediterranean countries.

previous introduction see No. 79198.

89098. Typical form.

89099. Variety album.

89100. PRUNUS CAPULI Cav. Amygda-Capulin. laceae.

seedling growing at the Plant Introduc-tion Garden, Chico, Calif., from seed collected in January, 1921, by Wilson Popenoe, agricultural explorer, at Am-bato, Ecuador, and originally numbered 52579.

The fruits are from one-half to five-eighths of an inch in diameter and black when fully ripe. The pit is of medium size, leaving a fair thickness of fiesh of good texture and fair flavor. There is a trace of bitterness present and a lack of acid, but for a fruit of the general type of the wild black cherry, *Prunus scrotina*, to which the capulin is closely allied, this may be considered good.

89101 to 89172.

From China, Chosen, and Manchuria. Seeds collected by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Panit Industry. Received September 12, 1930.

89101. ASPARAGUS sp. Convallariaceae.

No. 5576. August 3, 1980. Peiping, China. Small plants about 10 inches in

89101 to 89172—Continued.

height, growing on top of the Tartar wall about the city.

- 89102 to 89105. CITRULLUS VULGARIS Schrad. Cucurbitaceae. Watermelon.
 - 102. No. 5535. July 27, 1930. From Peiping, China. Huang hai knoa (yel-low watermelon.) Rind golden yel-low about one-half inch thick, flesh salmon pink to light red, with rather yellowish-green fiber, juicy, sweet, flavor not especially good. It came from Paoteng Fu originally. 89102.
 - *89103. No. 5536. July 29, 1930. From the east market, Feiping. Hei peng ohin hsi kuoa (black-skin melon). Melon 12 inches long, about 9 inches in diameter, rind very dark green, fiesh deep-golden yellow, juice sweet and of excellent quality; seeds red-dish brown dish brown.
 - **39104.** No. 5537. July 29, 1930. From the east market, Peiping. Liang hua tzu hsi kwa (bright strip melon). A melon 12 inches long and over 9 inches in diameter; rind deep green and whitish green; flesh bright red, very juicy, sweet, not very high in quality, red to within one-half inch of the rind; seeds black black.
 - 89105. No. 5538. July 29, 1930. From the east market, Peiping. Chen tou kwa (pillow watermelon). Melon 16 inches long and over 7 inches in diameter, with light-green rind; originally from Te Chou, Shantung Province. Flesh light yellow, which extends within three-fourths of an inch to the rind, julce sweet, but not as good in quality as No. 5536 (89103); seeds reddish brown.

89106 to 89110. LESPEDEZA spp. Faba-Bushclover.

89106. LESPEDEZA Sp.

No. 5541. July 30, 1930. From the Temple of Heaven, Peiping. The plant stems are sometimes over 3 feet long and flower practically throughout the entire length; flower small, white or nearly so.

89107. LESPEDEZA SP.

No. 5579. August 5, 1930. In the vicinity of the Summer Palace, Peiping.

89108. LESPEDEZA Sp.

No. 5592. August 7, 1930. From Pa Ta Chu, Western Hills, China; de-cumbent plants along the mountain side.

89109. LESPEDEZA SP.

No. 6096. August 7, 1930. From Mount Oshozen, about 4 miles north of Chinchon, Manchuria. Seed borne in buttonlike clusters along the stems.

89110. LESPEDEZA Sp.

No. 6097. August 7, 1930. From Mount Oshozen, about 4 miles north of Chinchon, Manchuria. Plants 24 to 30 inches high and growing on very poor soil.

39111 to 89121. MEDICAGO SATIVA L. Fa-Alfalfa. baceae.

89101 to 89172-Continued.

- 89111. No. 5540. July 30, 1930. From the Temple of Heaven, Peiping. Leaves small, flowers deep purple, plants generally strong growers.
- 89112. No. 5545. July 30, 1930. From the court of the Imperial World Building, Temple of Heaven, Peiping.
- 89113. No. 5547. July 30, 1930. From the court of the Imperial World Building, Temple of Heaven, Peiping.
- 114. No. 5548. July 30, 1930. In the vicinity of the Temple of Heaven, Peiping. Leaves rather narrow, flowers deep purple. 89114. No. 5548.
- 89115. No. 5553. July 30, 1930. Col-lected in the vicinity of the Temple of Heaven, Peiping.
- 89116. No. 5554. August 1, 1930. Col-lected along the railway, about 500 yards south of the station at Feng Tai, China.
- 89117. No. 5555. August 1, 1930. Col-lected along the road, about 500 yards south of the station at Feng Tai, China.
- 89118. No. 5572. August 2, 1930. Col-lected in the vicinity of the Winter Palace, Peiping. Plants 2 feet high and flowers deep purple.
- 89119. No. 5573. August 2, 1930. From the mulherry garden of the Winter Palace, Peiping. Plants with stems up to 6 feet high, dark purple flow-ers, and seeding very heavily.
- 89120. No. 5574. August 3, 1930. Col-lected in the vicinity of the Winter Palace, Peiping. Plants over 30 inches high, with dark-purple or lighter colored flowers.
- 121. No. 6100. August 8, 1930. Col-lected along the mountain side about 1 mile south of Dairen, Manchuria. Plants from 30 to 40 inches high, with light-blue to pinkish-purple flowers. The plants vary in habit 89121. No. 6100.
- 89122. MELILOTUS SUAVEOLENS Ledeb. Fabaceae. Sweetclover.

No. 5591. August 5, 1930. Collected in the vicinity of the Summer Palace, Pelping. Plants of the yellow-flowered variety, growing abundantly.

123. OSTERDAMIA JAPONICA (Steud.) Hitchc. Poaceae. Japanese lawngrass.

No. 6095. August 7, 1930. Collected along the side of Mount Oshozen, about 4 miles north of Chinchon, Manchuria. This is a hardy grass which forms a tough sod and is used for embankments, lawns, and golf fairways.

89124. SOPHORA FLAVESCENS Ait. Fabaceae.

No. 5551. July 30, 1930. From the grounds of the Temple of Heaven, Pelp-ing. A subshrubby perennial, 3 to 4 feet high, with odd-pinnate leaves of three to six pairs of elliptical leaflets 1 to 2 inches long, and loose racemes of creamy white pea-shaped flowers 1-inch long. It is native to northern China.

89125. INCARVILLEA SINENSIS Lam. Bignoniaceae.

No. 5575. August 3, 1930. Collect in the vicinity of Peiping. Plants 1 Collected 이 유민들었는

89101 to 89172—Continued.

2 feet high with finely cut foliage and light-pink flowers.

For previous introduction see No. 75983.

89126. BOEA sp. Gesneriaceae.

No. 7032. August 10, 1930. Collected on the mountain side near Pao Chu Tung Temple, China. A plant with rounded leaves in a whorl and a delicate violet.colored flower. This may make a good rockery plant in damp situations.

89127 to 89172. SOJA MAX (L.) Piper (Glycine hispida Maxim.). Fabaceae. Soybean,

Nos. 89127 to 89166 are from the Kankyo Hokudo Prefecture Seed and Nursery Farm, Kyojyo, Chosen, August 8, 1930.

- 89127. No. 6107. Oiarukon. Large, oval, light yellow with pale hilum; used for food purposes.
- 89128. No. 6108. Tsurunoko. Large, very light yellow with pale hilum; used largely for confectionery purposes.
- 89129. No. 6109. Shiromeshoryu (small white eye). Medium small, oval with pale hilum; used for food.
- 89130. No. 6110. Muyonzon. Medium large, oval, yellow, with pale hilum which has a cloudy brown spot at one end; used for food.
- 89131. No. 6111. Kankouta. Medium sized, oval, light, cloudy yellow, with hilum varying from light to dark brown.
- 89132. No. 6112. Onzonkon. Medium sized, nearly round, light yellow with hilum varying from pale to brown.
- 89133. No. 6113. Saichou. Medium large, oval, yellow, with pale hilum; used for food.
- 89134. No. 6114. Mentou. Medium large, oval, yellow with a pale hilum which has a brown spot at one end; used for food.
- 89135. No. 6115. Shimokushoryu (small blue eye). Medium sized, oval, yellow with reddish-brown hilum; used for food.
- **89136.** No. 6116. Kuroshoryu (small black). Small, round, black, yellow germ; used for sprouting.
- 89137. No. 6117. Geta. Medium sized, light cloudy yellow, oval, hilum varies from light to dark brown; used for food and for cattle feed.
- 89138. No. 6118. Zontanorukon. Medium small, slightly flattened, oval, cloudy yellow, hilums vary from brown to black; used for cattle feed.
- 89139. No. 6119. *Chietsutatsuuri*. Medium sized, oval, very light yellow with pale hilum.
- **89140.** No. 6120. Senbizebi. Medium sized, oval, yellow, and brown with brown saddle; used for cattle feed.
- 89141. No. 6121. *Chiarukon*. Medium sized, oval, yellow, with reddishbrown hilum; used for food.

89101 to 89172-Continued.

- 89142. No. 6122. Purukon. Medium large, oblong, slightly flattened, light bluish green with slate-black hilum; used for cattle feed.
- 89143. No. 6123. Kuromeshoryu (small black eye). Medium small, nearly round, yellow with black hilum.
- 89144. No. 6724. Nunkamuzankon. Medium small, oval, yellow with reddish-brown hilum.
- 89145. No. 6125. Kirukumukon. Small, flat black, yellow germ; very much like the *Peking* variety.
- 89146. No. 6126. Churyokurota. Medium sized, oval, dull black, yellow germ; used for confections.
- 89147. No. 6127. Munnurekon. Medium sized, oval, bluish green, yellow germ.
- 89148. No. 6128. Akata (red). Small, round, cinnamon brown, and used for sprouts. Very similar to Brownie (17256).
- 89149. No. 6129. *Rigenta*. Medium sized, oval, yellow with reddishbrown hilum; used for food.
- 89150. No. 6130. Takuchikon (black pod). Medium sized, oval, yellow with light to reddish-brown hilum.
- **89151.** No. 6131. Betsujota. Large, oval, bright yellow with pale hilum; used for food.
- 89152. No. 6132. *Hakuchuta*. Mediumsized, oval, glossy yellow with pale hilum; used for food.
- 89153. No. 6133. Wasenakuta (white). Medium sized, oval, light yellow with pale hilum. Brown spot on one end of hilum.
- 89154. No. 6134. Chirumukon (oil bean). Medium small, nearly round, glossy yellow with black hilum.
- 89155. No. 6135. Kirukumukon (small green). Medium small, oval, greenish yellow, slightly flattened with very light-brown hilum; germ yellow.
- 89156. No. 6136. Chonkon. Medium sized, oval, light smoky yellow, with the hilum varying from pale to dark brown; used for cattle feed.
- 89157. No. 6137. Kokuta (black bean). Large, oval, dull black with yellow germ; used in making confections.
- 89158. No. 6138. Usuao (light green). Medium sized, oval, light green with pale hilum; germ yellow.
- 89159. No. 6139. Zanikon. Medium sized, oval, black bean marked with brown concentric rings; very much like Meyer (17852).
- 89160. No. 6140. Shimohakuta (white). Medium sized, oval, light yellow with dark-brown hilum.
- 89161. No. 6141. Kankoutari. Medium sized, oval, light green with pale hilum.
- 89162. No. 6142. Hawante. Medium large, oval, light yellow with pale hilum; used for food.
- 89163. No. 6143. Mchakuta. Medium sized, oval, light glossy yellow with very pale-brown hilum; used for food.

89101 to 89172-Continued.

- **89164.** No. 6144. *Tatsuchi.* Medium sized, oval, light cloudy yellow with pale hilum.
- 89165. No. 6145. Otaikon. Medium large, oval, yellow, with pale hilum; used for food.
- 89166. No. 6146. Takuchikamuzankon. Medium small, oval, yellow, with reddish-brown hilum.
- 89167 and 89168. August 11, 1930. From a wharf warehouse at Dairen, Manchuria. Mixed yellow varieties used for oil and oil meal.

89167. No. 6155. 89168. No. 6156.

- 89169. No. 6147. Shoukokuta. August 8, 1930. From the Kankyo Hokudo Prefecture Seed and Nursery Farm, Kyojyo. Very small, round, black with green germ. Appears identical with Kingston (17255); used for sprouting.
- 89170 and 89171. August 11, 1930. From a wharf warehouse at Dairen. Mixture of yellow-seeded varieties used for oil and oil meal.

89170. No. 6157. 89171. No. 6158.

- 89172. No. 7009. From Hslang Chi Ssu Temple. A rather small, creamy yellow bean with a rather pronounced light-brown hilum.
- 89173. SACCHARUM OFFICINABUM L. Poaceae. Sugarcane.
- From Australia. Cuttings presented by the Hawaii Experiment Station, through E. W. Brandes, Bureau of Plant Industry. Received September 13, 1930.

Oramboa H. A. 409.

- 89174. COLPOTHRINAX WRIGHTH Griseb. and Wendl. Phoenicaceae. Palm.
- From Herradura, Cuba. Seeds presented by Mrs. F. S. Earle. Received September 15, 1930.

Barrigona. A fan palm with a trunk up to 40 feet high having a bottle-shaped base. It is native to Cuba.

89175. IRIS KOREANA Nakai. Iridaceae.

From Japan. Seeds purchased from K. Yashiroda (Ltd.), Tonosho-Kyoku, Kagawaken. Received September 15, 1930.

An iris with a creeping rhizome from which arise sword-shaped leaves about a foot long and stalks bearing golden-yellow flowers. The inner petals are elliptic and emarginate, and the outer petals are obovate. It is native to Chosen.

89176 to 89178.

From Mexico. Plants collected by Paul Russell and Max Souviron, agricultural explorers, Bureau of Plant Industry. Received in September, 1930.

89176. (Undetermined.)

No. 3. A low succulent with tuberous roots; grows in rocky places near Tizapan, Distrito Federal.

89177. COTYLEDON sp. Crassulaceae.

No. 4. Conchas. September 5, 1930, near Conviento del Desierto, Districto Federal. Plant forming rosettes on rocky objut just above the Conviento del Desierto, about 9,000 feet altitude. 89176 to 89178-Continued.

Snow is said to fall here every winter, hence this plant is more or less hardy.

89178, ALTAMIBANOA Sp. Crassulaceae.

No. 5. September 9, 1930, Cerro de Estrella, Distrito Federal. Growing on rocks at the summit of Cerro de Estrella, about 7,800 feet altitude. Flowers are white.

89179. LILIUM MARTAGON L. Liliaceae. Martagon lily.

From England. Seeds purchased from Rev. J. Farnworth Anderson, Glenn Hall Rockery, Great Glen, Leicester. Received September 19, 1930.

Farrer's variety.

- 89180. SOLANUM SANITWONGSEI Craib. Solanaceae.
- From Bangkok, Siam. Seeds presented by Phya Ahar Pariraks, Director of Agriculture, Department of Agriculture, Ministry of Lands and Agriculture. Received September 22, 1930.

Mawaeng-ton. A Siamese shrub about 3 feet high, with small racemes of bluish flowers and orange-colored fruits. It is said to be of value in the treatment of dlabetes.

For previous introduction see No. 77618.

89181. GARCINIA Sp. Clusiaceae.

From Indo-China. Seeds presented by M. Poilane, Jarden Botanique and Zoologique de Saigon. Received September 22 1930.

Tree 30 feet high and 3 feet in circumference, having yellow edible fruits; may be used as a stock for grafting mangosteens (Garchia mangostana).

- 89182 and 89183. ZEA MAYS L. Poaceae. Corn.
- From Guatemala City, Guatemala. Seeds presented by the Minister of Agriculture, through Sheldon Whitehouse, American minister. Received September 23, 1930. 89182. Black 89183. Red.
- 89184. CAJANUS INDICUS Spreng. Fabaceae. Pigeon pea.
- From Hawaii. Seeds presented by F. S. Krauss, University of Hawaii, Honolulu, through O. W. Barrett. Received September 25, 1930.

A Hawaiian variety with brownish black seeds, selected from the progeny of a collection originally received from Porto Rico.

- 89185 and 89186. SACCHARUM OFFICINA-RUM L. PORCERE. Sugarcane.
- From Barbados, British West Indies. Cuttings presented by the director, Department of Science and Agriculture. Received September 30, 1930.

89185. B. 726. 89186. B. 891.

89187 to 89197. TRITICUM AESTIVUM L. (T. vulgare Vill.). Poaceae.

Common wheat.

From Australia. Seeds presented by H. Wenholz, Director of Plant Breeding,

89187 to 89197—Continued.

Department of Agriculture, Sydney, New South Wales. Received September 18, 1930.

Varieties grown at Glen Innes, New South Wales.

89187. Anchor.

89188. Barwang.

- 89189. Bombard.
- 89190. Burrill.

89191. Cleveland.

- 89192. Ford.
- 89193. Lawson.
- 89194. Linden.

89195. Marchief.

89196. Nabawa.

89197. Warren.

- 89198 to 89202. GossyPium spp. Malvaceae. Cotton.
- From India. Seeds received through the Plant Quarantine and Control Administration, San Francisco, Calif. Received September 26, 1930.
 - 89198 and 89199. GOSSYPIUM NANKING Meyen.

89198. Variety Mallisoni (N. T. 15/29). White flower.

89199. (N. T. 17/29.) Yellow flower.

89200 and 89201. GOSSYPIUM NEGLECTUM Todaro.

89200. (N. T. 8/29.) Yellow flower.

89201. Variety Rosea (N. T. 10/29). White flower.

89202. GOSSYPIUM SANGUINEUM Hassk.

(N. T. 12/29.) Broad-lobed, pink flower.

89203. HETEROSPATHE ELATA Scheff. Phoenicaceae. Sagisi palm. 89203—Continued.

From Manila, Philippine Islands. Seeds presented by P. J. Wester, Bureau of Plant Industry, Department of Agriculture and Natural Resources, Manila. Received September 26, 1930.

A tall unarmed paim with a straight slender stem and long pinnate leaves, growing in protected situations and where the rainfall is evenly distributed. It is a most attractive and graceful paim and will make a good plant for the conservatory and possibly a good house paim.

For previous introduction see No. 64595.

- 89204 to 89208. SOLANUM TUBEROSUM L. Solanaceae. Potato.
- From Scotland. Tubers presented by Donald McKelvie, Newlanark, Lambash, Arran Island. Received April 14, 1930. Numbered in September, 1930.

McKelvie seedlings.

89204.	A. 415.	89207.	A. 596,
89205.	A. 581.	89208.	675.

89206. A. 592.

89209 and 89210.

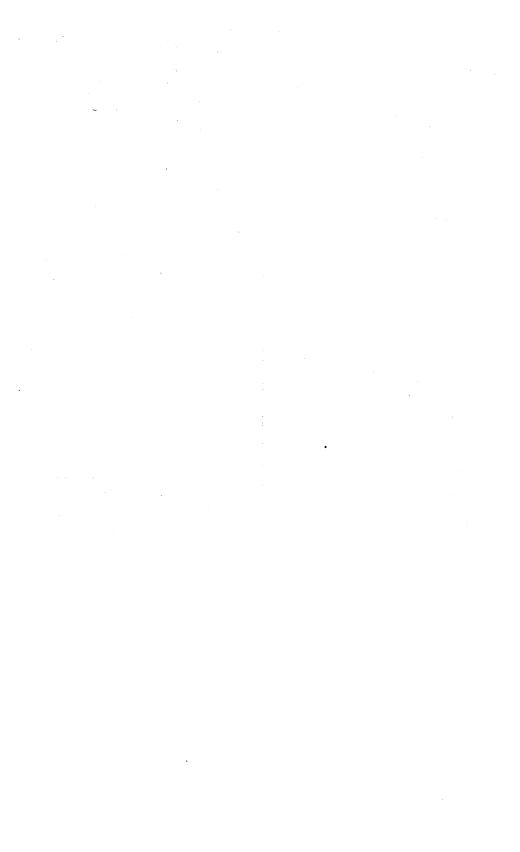
- From Java. Seeds presented through the Tuinbouwkundig, Ambtenaar, Pasarminggoe. Received March 19, 1930. Numbered in September, 1930.
 - 89209. ARTOCARPUS CHAMPEDEN (Lour.) Spreng. (A. polyphema Pers.). Moraceae.

A handsome East Indian shade tree bearing small elongated fruits which are rather smooth-skinned. The aril has a peculiar sweet flavor.

For previous introduction see No. 78574.

89210. ARTOCARPUS INTEGRA (Thunb.) L. Moraceae. Jackfruit.

Variety nangka. A tree that begins to fruit when 5 to 6 years of age. The unripe fruits and young leaves are used as greens, and the mature fruits are eaten as dessert fruits.



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