INTRODUCTORY STATEMENT

The plant material included in this inventory (Nos. 81620 to 82599) for the period from October 1, 1929, to December 31, 1929, represents very largely the collections made in the Orient by W. J. Morse and P. H. Dorsett. Since forage crops in general and soybeans in particular were the aims of this expedition, it is not surprising that over 250 samples are represented. They include types and strains ranging from those bought from farmers' fields to specialized samples representing local selection work. It is interesting to observe also among the notes given for Nos. 81762 to 81786 the extent of variations already observed and isolated at the several experiment stations and to note that their collections include strains originally obtained outside of Japan. Red clovers also are well represented with samples collected in the wild in many parts of Japan, three samples coming from the Koton Experiment Station at Hokushu from seed originally obtained from Finland and one from Sweden; also four collections were obtained from Chosen.

A few alfalfas are included, some collections being from native sources, while others are purchases, but all resulting from the work of H. L. Westover, of the Division of Forage Crops and Diseases.

Adsuki beans are also included in several numbers as a result of the collecting work of Messrs. Dorsett and Morse. These show almost as much variation in character and in origin as do the soybeans. Most of these were obtained in Chosen, together with samples of mung beans and rice beans from the native markets.

Lespedezas are included also in the general collections from Dorsett and Morse, all being received as unidentified species.

In addition to the material sent in by the explorers already mentioned, this inventory includes material sent in by Messers. Ryerson, Alderman, and Leslie from Canada, by R. K. Beattie from Japan, and by W. E. Whitehouse from Persia, as well as material received in exchange from foreign collaborators and that procured by purchase.

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., February 18, 1931.
INVENTORY

81620. PTEROCARPUS SERICEUS Benth. Fabaceae. From Salisbury, Southern Rhodesia, Africa. Seeds presented by the Forest Officer, Department of Agriculture, Salisbury, at the request of C. E. Legat, Chief Conservator of Forests, Pretoria. Received October 22, 1929. An unarmed evergreen tree, native to southern Africa, with alternate, unequally pinnate leaves, shining silky beneath or on both sides, and oval-roundish pods about an inch and a half long.

For previous introduction see No. 50179.


81624 to 81633—Continued.


81630 and 81631. PISTACIA VERA L. Anacardiaceae. 81630. PESHAH. 81631. Quetta.

81632 and 81633. PRUNUS ARMEIGNACA L. Amygdalaceae. Fruity. 81632. No data. 81633. No data.

81634. ACANTHUS YEZOENSE Nakai. Ranunculaceae. Monkshood. From Sapporo, Hokushu, Japan. Roots collected by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received October 1, 1929. No. 1193. Botanical Garden, Hokkaido Imperial University, September 24, 1929. A hardy herbaceous perennial native to northern Japan, which becomes about 5 feet high. The leaves are palmately 3-parted to 5-parted, and the large, deep purplish-blue flowers are borne in large clusters.

81635 and 81636. PITHECOLLOBIUM spp. Mimosaceae. 81635. PITHECOLLOBIUM CLYPEARIA (Jack) Benth. From Buitenzorg, Java. Seeds presented by Dr. W. M. Docters van Leeuwen, Director, Botanic Gardens. Received December 16, 1929. A low tropical ornamental tree with fine-cut foliage and small whitish flowers. Native to the East Indies. For previous introduction see No. 73214.

81636. PITHECOLLOBIUM HYMENEAEFOLIUM (Humb. and Bonpl.) Benth. It should be understood that the names of horticultural 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 identification 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 identification 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 identifications, 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.
81635 and 81636—Continued.
An ornamental leguminous tree with pinnate foliage. Native to tropical America.
For previous introduction see No. 73276.

81637. VITIS VINIFERA L. Vitaceae.
*European grape.*
From Weihsien, Shantung, China. Cuttings presented by J. Ashley Fitch, American Presbyterian Mission. Received December 17, 1929.
A white or green grape a little smaller than the usual cultivated variety and rarely containing seeds. It is very good for cooking and canning, and it should make a good table variety for those who like an acid grape. It ripens about the first part of August in Weihsien. The canned fruit has a noticeable deposit of cream-of-tartar crystals when taken out of the cans. This variety is known as Dzang or Dzang pu tao in Chinese.

81639 to 81660—Continued.

81638. CHRYSOPHYLLUM FULVUM S. Moore. Sapotaceae.
From Mount Silinda, Melaetter District, Southern Rhodesia, Africa. Seeds presented by Dr. W. L. Thompson. Received September 21, 1929.
A large tropical tree up to 100 feet high, with leathery, oblong-lanceolate leaves 3 to 6 inches long, small white axillary flowers, and brownish fruits which contain a milky latex. Native to Gazaland, Africa.

81639. MEIBOMIA JAPONICA (Miquel) Kuntze. Fabaceae.
From Taisho Mura, September 22, 1929. The variety is extensively grown. A cultivated variety with large leaves and yielding more oil than the ordinary mint.
For previous introduction see No. 75137.

No. 1381. From wild plants at the edge of the woods near the table-land of Tokachi, Experiment Station, Taisho Mura, September 22, 1929.

81644. LEPEDEZA sp. Fabaceae. Bushclover.
No. 1079. Obtained from plants along a road near the table-land of Tokachi, Taisho Mura, September 22, 1929. The plants are 4 to 6 feet high and very abundant.

No. 1372. Obtained along a path in the woods near Nokkenshi, September 23, 1929.

No. 1370. Obtained from the Kitami Branch Experiment Station, Nokkenshi, September 24, 1929. Kitami akamaru. This variety is grown most generally in the district of Kitami where peppermint is extensively grown. A cultivated variety with large leaves and yielding more oil than the ordinary mint.
For previous introduction see No. 75689.

81647. MAPLE. Aceraceae.
No. 1090. Obtained along the road near Nokkenshi, September 22, 1929.

81648. PAEONIA sp. Roots.
No. 1093. From a vine in the foothills near Odorari, Sakhalin Island, September 22, 1929. A large tropical tree up to 100 feet high, with glossy pale-green leaves 1 to 2 inches long, an abundance of greenish-yellow flowers in dense clusters at the ends of the short branches, and small blackish-purple berries.

81642. EUTONYMUS ALATUS (Thunb.) Rupr. Celastraceae. Winged euonymus.
No. 1049. Obtained from a shrub in the school grounds at Obihiro, September 18, 1929. A spreading shrub, 4 or 5 feet high, with sharply toothed elliptic leaves about 2 inches long, small clusters of yellowish flowers, and small 2-seeded fruits.
For previous introduction see No. 65278.

81643. FALCATA JAPONICA Oliver. Fabaceae.
No. 1055. A leguminous vine growing along the sides of a bank near the river in the vicinity of Obihiro, September 20, 1929.
For previous introduction see No. 65278.
25, 1929.

Yamaguchi Ken, by S. Hayashi, September in the wild at Saka Ue Mura, Kuga Gun, From Japan. Seeds obtained by R. K. Beattie, Bureau of Plant Industry. Received in October, 1929.

81665 to 81669.

From Japan and China. Seeds collected by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received in October, 1929.

81665. LILUUM CORDIFOLIUM T. H. L. Liliaceae. 

Lily.

No. 1420. From the Botanic Garden, Hokushu Imperial University, Sapporo, Japan, October 2, 1929. A lily, native to Japan, 3 to 4 feet high, with pendent leaves 12 to 18 inches long and wide and a raceme of 4 to 10 fragrant white flowers often 6 inches long. These seeds were received as Lilium pachycladum, which is said to differ very slightly from typical L. cordifolium.

For previous introduction see No. 75677.

81666. LILUUM DAURICUM Ker. Liliaceae. Candlestick Lily.

No. 1413. From the Botanic Garden, Hokushu Imperial University, Sapporo, Japan, October 2, 1929. A plant about 3 feet high, with a smooth or slightly furrowed stem which is green or tinged with brown or purple. The 20 to 30 horizontal leaves are 3 to 5 inches long and the flowers, one to five in a cluster and 3 to 5 inches across, are orange red, slightly spotted with purplish black and tinged with yellow in the center; the anthers are red.

For previous introduction see No. 78605.

81667. SOYA MAX (L.) Piper (Glycine hispida Maxim.). Fabaceae. Soybean.

No. 1374. Obtained from Lukashik & Sons, Wuchang Road, Tientsin, China, September 27, 1929. An early yellow variety known as Selection I. V. V. Crouse No. 75677, said to ripen in the vicinity of Harbin within 90 to 100 days.

81668. TRIFOLIUM PRATENSE L. Fabaceae. Red clover.

No. 1377. Obtained along a roadside near the sea coast in the vicinity of the Ainu village of Shiraoi, southern Hokkushu, Japan, September 29, 1929.

81669. (Undetermined.)

No. 1375. From plants along the roadside near Koeto, Hokkushu, Japan, September 10, 1929.

81670. UVARIA SP. Annonaceae.

From Isabela, Luzon, Philippine Islands. Seeds presented by P. J. Wester, Bureau of Agriculture, Manila. Received October 26, 1929.

A small ornamental tree with a dark-green, dense crown, and red, edible fruits about an inch long.

81671. ANIGOZANTHOS MANGLESII D. Don. Amaryllidaceae.

From Perth, Western Australia. Seeds presented by Miss Helen Ogden. Received October 29, 1929.

An amaryllidaceous plant native to the Swan River country of southwestern Australia. It bears scapoid racemes, nearly a foot long, on stout, woolly, bright-red stems. The lustrous green, tomentose flowers, 3 inches long, are tubular long in bud, but split nearly to the base on opening, with the tips recurved, and bear the yellow stamens on the curve.

For previous introduction see No. 51344.
81672. TERMINALIA BROWNII FRESN. Combretaceae.

From Giza, Egypt. Seeds presented by Thomas W. Brown, Director, Horticultural Section, Ministry of Agriculture. Received October 25, 1929.

A small tropical tree with ash-colored bark and broadly lanceolate leaves, 3 to 6 inches long, in large tufts at the tips of the branches. The inconspicuous greenish flowers are in long lax spikes and are followed by flat-winged purplish-red fruits 2 to 3 inches long. Native to Ethiopia.

81673 and 81674.

From Bogota, Colombia. Roots presented by Hernando Villa. Received October 30, 1929.

81675. OXALIS TUBEROSEA MOLLINA. Oxalidaceae.

Zibia. A plant, native to South America, related to the woodsorrel of the United States. It is grown in the Andes for its edible tubers.

For previous introduction see No. 74701.

81674. TROPAEAOLUM TUBEROSEUM RULZ and PAV. Tropaeolaceae. Nasturtium.

Cubita. A tuberous-rooted herbaceous climber, with red and yellow flowers, native to the highlands of northern South America, where the tubers are boiled and eaten as a vegetable. The plant is said to be able to withstand a slight frost.

For previous introduction see No. 69896.

81676. CASTANOPSIS ARGYROPHYLLA King. Fagaceae.

Evergreen chinquapin.

From Dehra Dun, United Provinces, India. Seeds presented by R. N. Parker, Forest Botanist, Forest Research Institute and College. Received November 1, 1929.

A tropical evergreen tree, 50 to 60 feet high, with thinly coriaceous lanceolate leaves, 4 to 6 inches long, green above and silvery beneath. The one to three rusty tomentose nuts are in a thin-walled shell which has awl-shaped hooked spines, native to India.

81676 to 81678. FICITS CARICA L. Moraceae.

Common fig.

From West Worthing, England. Cuttings obtained from the Tarring Fig Garden, through Dr. S. H. Cameron, University of California, Berkeley. Received October 24, 1929.

81676. Brown Turkey.

81677. Honey.

81678. Madagascar.

81679. ALLIUM CEPA L. Liliaceae.

Onion.

From Valencia, Spain. Seeds purchased through Clement S. Edwards, American consul. Received October 31, 1929.

Grano.

81680. CITRUS GRANDIS (L.) Osbeck (C. decumana MURR.). Rutaceae.

Grapefruit.

81680—Continued.

From Honolulu, Hawaii. Setons presented by W. T. Pope, Hawaii Agricultural Experimental Station, through W. T. Swingle, Bureau of Plant Industry. Received November 1, 1929. Victoria shaddock.

81681 to 81685. MANGIFERA INDICA L. Anacardiaceae. Mango.

From Pasar Minggoe, Java. Plants presented by the Tuinbouwkundig Ambtenaar. Received August 20, 1929. Numbered in October, 1929.


81682. No. 2. Kopijor. 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 alkalin and not suited to the growth of ordinary mangos.

81683. No. 4. 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 soils with stiff subsoil, but not quite as good a bearer as the Soignon.

81684 and 81685. Aroemanis. In Java this is a medium-sized mango of bluish-green color. The fruit hangs on peduncles, 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.

81684. Aroemanis grafted on Madoe.

81685. Aroemanis grafted on Mangifera odorata.

81686. DIOSPYROS SP. Diospyraceae. Persimmon.

From Denison, Tex. Plants purchased from the Munson Nurseries. Received November 12, 1929.

Kawakami. A hybrid of the Josephine (Diospyros virginiana) with the Yemon Japanese (D. kaki). The shape of the fruit is like that of the native species, but it is much larger. It has much of the native quality and is an excellent persimmon.

81687 to 81689.

From Honolulu, Hawaii. Seeds presented by H. L. Lyon, in Charge of the Department of Botany and Forestry, Experiment Station, Hawaiian Sugar Planters' Association. Received November 5, 1929.

81687. ABECASTRUM ROMANZOFFIANUM (Cham.) Becc. (Ococos romanzeffiana Cham.) Phoeinaceae. Palm.

A palm, native to Brazil, with an unbranched trunk about 30 feet high and a foot in diameter, bearing a crown of plumelike pinnate leaves 12 to 15 feet long. The fruit is a pale orange drupe about the size of a large acorn, inclosing a bony seed which has three eyes near the base.

For previous introduction see No. 44534.

81688. FLACOURTIA JANGOMAS (Lour.) GRANO. (F. cataphracta Roxb.). Flacourtaceae. Panaita.

A small spiny tropical tree of compact habit native to India. It bears small purplish subacid fruits about an inch in diameter, which may be made into an excellent jelly,
OCTOBER 1 TO DECEMBER 31, 1929

81687 to 81689—Continued.

For previous introduction see No. 48284.


A stout, rapid-growing palm, native to the lower altitudes of western Java, becoming 16 to 25 feet high, with annulate stems 2 inches in diameter, reddish when young, and beautiful terminal fronds with pinnate blades 4 feet long and half as wide. This is one of the hardiest species of Pinanga known.

For previous introduction see No. 51735.

81689.

PINANGA KUHLLII
Blume. Phoenicaceae. Palm.

81690 and 81691. MYRCIABIA FLOEI-BUNDA (West) Berg (Eugenia floribunda West). Myrtaceae.

Guava berry.

From St. Croix, Virgin Islands of the United States. Seeds presented by J. B. Thompson, Director, Agricultural Experiment Station. Received November 5, 1929.

A small slender tropical tree with ovate-lanceolate leaves 2 to 3 inches long, and axillary clusters of small white flowers followed by globose edible fruits about a quarter of an inch in diameter. The fruits make a delicious preserve with an aromatic flavor. The tree is native to the West Indies.

For previous introduction see No. 41057.

81690. A variety bearing golden-yellow fruits.

81691. A variety bearing dark-red fruits.

81692 to 81723.

From Canada. Seeds and plants collected by Knowles A. Ryerson, Bureau of Plant Industry, W. A. Alderman, Minnesota Agricultural Experiment Station, and W. R. Leslie, Superintendent of the Experiment Station, Morden, Manitoba. Received September 30, 1929. Numbered in November, 1929.

81692 to 81702. RIBES spp. Grossulariaceae.

81692. RIBES TRISTE Pall. Swamp red currant.

No. 19-A. From Mari Lake, Manitoba.

For previous introduction see No. 40457.

81693 to 81699. RIBES OXYACANTHOIDES L.

For previous introduction see No. 40471.

81693. No. 29. From Mari Lake, Manitoba.

81694. No. 59. From an island at the west end of Reed Lake, Manitoba. A variety with large, purplish fruits.

81695. No. 68. From an island in Reed Lake, Manitoba. A variety bearing very large fruits about half an inch in diameter.

81696. No. 69. From an island in Reed Lake, Manitoba. A very nearly spineless variety bearing red fruits.

81697. No. 71. From an island in Reed Lake, Manitoba. A variety with dark red fruits.

81698. No. 72. From an island west of Wyckstand Island, Reed Lake, Manitoba. A variety with purplish-red, very large fruits up to half an inch in diameter.

81699. No. 75. From an island west of Wyckstand Island, Reed Lake, Manitoba. A large-fruited type.

81700 to 81702. RIBES GLANDULOSUM Grauer (R. prostratum L'Her.). Fetid currant.

81700. No. 41. Plants.

81701. No. 30. From Cold Lake, Manitoba.

81702. No. 70. A large variety.

81703. RUBUS TRIFLORUS Richards. Rosaceae.

Dwarf red blackberry.

No. 19. From Mari Lake, Manitoba.

81704 to 81710. RUBUS IDABUS STBIGOSUS (Michx.) Maxim. Rosaceae.

Common red raspberry.

For previous introduction see No. 68823.

81704. No. 28. From Cold Lake, Manitoba. A fairly large form.

81705. No. 60. From an island at the west end of Reed Lake, Manitoba. A large-fruited form.

81706. No. 61. From an island at the west end of Reed Lake, Manitoba. A large-fruited form.

81707. No. 62. From an island west of Wyckstand Island, Reed Lake, Manitoba.

81708. No. 74. From Wyckstand Island, Reed Lake, Manitoba.

81709. No. 97. From a dry rocky slope, Little Quebec, Herb Lake. A large-fruited form of dwarf plants 12 to 14 inches high.

81710. From Herb Lake, Manitoba. A large-fruited form.

81711. VITIS VULPINA L. Vitaceae.

Riverbank grape.

No. 178. Southeastern ridge of Riding Mountains, about 20 miles southwest of Dauphin, Manitoba. An early-fruiting form, maturing between two and four weeks earlier than the usual season.

81712. SORBUS AUCUPARIA EDELIS Dieck. Malaceae. Edible mountain-ash.

No. 185. From Bidgen's Nursery, Dauphin, Manitoba.

81713. AMELANCHIER ALNIFOLIA Nutt. Malaceae. Saskatoon.

No. 24. From a small lake between Barrier Lake and Cold Lake, Manitoba. Bushes 6 to 8 feet high producing an abundance of large berries.

81714. CRATAEGUS COCCINEA L. Malaceae.

Thicket hawthorn.

No. 152. From Red Deer River, Saskatchewan, about 5 miles west of Hudson Bay Junction.

81715. FRAGARIA VESCA L. Rosaceae.

Alpine strawberry.

No. 58. From Reed Lake, Manitoba.
81726 to 81760—Continued.

81727. **Astragalus sinicus** L. Fabaceae. Milkvetch.

No. 1542. From the Gifu Agricultural Experiment Station, October 17, 1929. A red-flowered variety quite common in the farming area about Tokyo, where it is said to be used for forage and green manure. It is a winter crop, being planted early in the fall. For previous introduction see No. 80533.

81728 to 81730. **Avena sativa** L. Poaceae. Oats.

From the Hokushu Experiment Station, Kotoni, October 7, 1929.

81728. No. 1532. Shiro kataho (white one side of spike).


No. 1154. From the Sapporo Botanic Garden, Sapporo, Hokushu, October 7, 1929. A shrub or small tree up to 20 feet high, with spreading branches and short thorns. The broadly oval, serrate leaves are 2 to 3 inches long, and the corymb of rather large white flowers with purple anthers are followed by bright-red fruits half an inch across. Native to eastern Siberia. For previous introduction see No. 68414.

81732. **Diervella** sp. Caprifoliaceae.

No. 1478. Growing wild in a field along the road near Kawaizce, October 12, 1929.

81733 and 81734. **Euonymus** spp. Celastraceae.

81733. **Euonymus** sp.

No. 1180. From trees along the trail up Molwayama, near Sapporo, Hokushu, August 28, 1929.

81734. **Euonymus** sp.

No. 1454. From Chiaki Park, Akita, October 11, 1929. An ornamental shrub having a spread of about 8 feet and about 8 feet high.

81735. **Celastrus articulatus** Thumb. Bittersweet.

No. 1503. From Sapporo, Hokushu, October 3, 1929. A leafless vine with small clusters of fruit. The husk is parted and of a golden-yellow color, opening out and showing a 3-parted deep orange-red fruit.

81736. **Euonymus** sp.

No. 1504. From Sapporo, Hokushu, October 3, 1929. A beautiful shrub densely covered with leaves which vary in color from green to deep red. The husk of the single orange-red fruit is red.

81737 and 81738. **Fagopyrum esculentum** Moench. Polygonaceae. Buckwheat.

From the Hokushu Experiment Station, Kotoni, October 7, 1929.

81737. No. 1535. Zairai shu (original variety).

81726 to 81760—Continued.

81738. FRAGARIA sp. Rosaceae. 
Strawberry.

No. 1506. Plants obtained October 7, 1929. Developed by the main Hokushu Experiment Station at the Kotoni Experiment Station. Kotoni. A variety considered one of the best at the station. The fruits are very large and dark red.


No. 1531. From the Hokushu Experiment Station, Kotoni, October 7, 1929.


No. 1530. From the Hokushu Experiment Station, Kotoni, October 7, 1929.

81742. Lespedeza striata (Thunb.) Hook. and Arn. Fabaceae.

No. 1476. Along the road near Kawazoe, October 12, 1929.


From the Hokushu Experiment Station, Kotoni. October 7, 1929. Varieties developed by the station.

81744. No. 1538. Pelno No. 1.

81745. Melocotonia japonica (Miquel) Kunthae (Desmodium podocarpum DC.). Fabaceae.

No. 1493. Along the trail on Mowiyama, near Sapporo, Hokushu, October 7, 1929. A perennial, shrubby at the base, with herbaceous stems 2 to 3 feet high, trifoliate leaves with membranous leaflets 2 to 3 inches long, and axillary and terminal racemes, often a foot long, of reddish pea-shaped flowers. Native to China and Japan.

For previous introduction see No. 60448.


From the Hokushu Experiment Station, Kotoni, October 7, 1929.

81746. No. 1523. Shishonga (cross road). A variety of rice, adapted to very dry land.
81747. No. 1524. Kairyo moohichi (cross & Hon@a road). A variety of rice, adapted to very dry land.

81749. No. 1488. From a farmer’s field near Kawazoe, October 12, 1929. A very prolific variety with red seeds.

81750. No. 1489. From a farmer’s field near Kawazoe, October 12, 1929. A very prolific early variety with mottled or marbled red and black seeds and rather different shaped leaves than other adski varieties.

81751. No. 1515. From the Hokushu Experiment Station, Kotoni, October 7, 1929. Maruba (round leaf). Medium-sized maroon seeds.

81752. No. 1516. From the Hokushu Experiment Station, Kotoni, October 7, 1929. Bossed dairyu (early large grain). Medium-large maroon seeds.

49237—31—2

81726 to 81760—Continued.

81753. No. 1517. From the Hokushu Experiment Station, Kotoni, October 7, 1929. Souset maruba (early round leaf). Medium-small maroon seeds.

81754 to 81758. Pisum sativum L. Fabaceae. 
Pea.

From the Hokushu Experiment Station, Kotoni, Hokushu, October 7, 1929.

81757. No. 1521. Sapporo ao tenshi. An improved strain of the Ao tenshi, which is very generally grown in Hokushu.
81758. No. 1522. From the Hokushu Experiment Station No. 6728. A yellowish-green seeded strain developed by the station.

81759. Prunus sp. Amygdalaceae. 
Cherry.

No. 1182. Cuttings collected near a shrine along Mowiyama, near Sapporo, Hokushu, October 6, 1929. A tree with light gray smooth bark, beautiful red leaves, and slightly astringent, black fruits.

81760. Raphanus sativus L. Brassicaceae. 
Radish.

No. 1541. From the Gifu Agricultural Experiment Station, October 17, 1929.

81761 to 81768. Soja max (L.) Piper Fabaceae. 
Soybean.

From Japan. Seeds collected by P. H. Dorsett and W. J. Morse, Agricultural explorers, Bureau of Plant Industry. Received in October and November, 1929.

81761. No. 1425. Obtained from a factory making sugared soybeans, Sapporo, Hokushu, October 3, 1929. Aofora. A variety with greenish-white seeds used in making sugared beans; also used as a vegetable. Said to be sweeter and to have a higher protein value than other varieties. The seeds were grown in Hokushu.

81762 to 81772. From the Akita Experiment Station, October 10, 1929.

81762. No. 1458. A variety native to Russia, with very small dull-black seeds and purple flowers.

81763 to 81768. Moshibo (forage beans). Chinese varieties from Manchuria. 
81763. No. 1459. Small shiny black seeds and white flowers.
81765. No. 1461. Dull-black seeds and white flowers.
81767. No. 1463. Small glossy brown seeds and white flowers.
81768. No. 1464. Small glossy brown seeds and purple flowers.
From Japan. Seeds collected by P. H. Dorssett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received in October and November, 1929.

For previous introduction see No. 77866.

81787. TRIFOLIUM PRATENSE L. Fabaceae. Red clover.

No. 1487. From a field near Kawazoe, Akita Prefecture, October 12, 1929. A handsome tree, native to Japan, 50 feet high, with erect branches and red bark. The thickish obvate-lanceolate leaves are yellowish green, and the large white flowers are borne in summer.

A spring wheat developed by the Kotoni station.


From the Hokushu Experiment Station, Kotoni, October 7, 1929.


81787 to 81807.


81761 to 81786—Continued.

81761 to 81786—Continued.


81770. No. 1466. Selection No. 503. A Chinese variety from Manchuria with small glossy brown seeds and purple flowers.

81771. No. 1467. Selection 504. A yellow-seeded variety used for horse feed.

81772. No. 1468. Selection 505. A yellow-seeded variety said to have been grown in this section for many years.

81773. No. 1484. From a farmer’s field near Kawazoe, October 12, 1929. Shiroawa (white pod). An early yellow-seeded variety said to have been grown in this section for many years.

81774. No. 1485. From a farmer’s field near Keezou, Akita Prefecture, October 12, 1929. An early, gray, pubescent variety said to be native and grown in this section for many years. The seeds are straw yellow with a brown hilum.

81775. No. 1486. From the Akita Prefecture Horse Breeding Station, near Wada, October 12, 1929. A mixture of yellow-seeded varieties used for horse feed.

81776. No. 1498. Kurozaya (black pod). An early, gray, pubescent variety said to be native and grown in this section for many years. The seeds are straw yellow with a brown hilum.


81779. No. 1507. Kenashi daizu. A yellow-seeded variety developed by the station. It is resistant to the pod borer moth, one of the worst insect pests in Hokushu.

81780. No. 1508. Tsurunoko (young crane). Large yellow seeds with a pale hilum.

81781. No. 1509. Oyachi ichigo (Oyachi No. 1). A selection from Oyachi, one of the high-yielding varieties. The yellow seeds are medium sized with a deep-brown hilum.

81782. No. 1510. Oyachii. The Oyachi is quite generally grown in Hokushu and is a heavy yielding strain, but is very subject to attack by the pod borer moth. The yellow, medium-sized seeds have a brown hilum.


81784. No. 1512. Shiro shoyu (small white). Yellow, medium-small seeds with a light-brown hilum.

81785. No. 1513. Chusai hadaka (middle season smooth). Yellow, rather small seeds with a brown hilum. It is quite resistant to attack by the pod borer moth.
From Chiaki Park bears a greater abundance of much larger fruits.

**81787. VACCINIUM JAPONICUM** Miquel.

No. 1455. From the Sapporo Botanic Garden, Hokkushu, October 7, 1929.

No. 1417. From the Botanic Garden, Hokkushu Imperial University, Sapporo, October 2, 1929. A deciduous low shrub resembling the wintergreen (Gaultheria procumbens) in habit. The obvate leaves are 1 to 2 inches long, and the small pinkish-tinged white flowers are followed by bright-red sweet edible fruits, half an inch in diameter, with a strawberrylike fragrance. Native to northern Japan.

**81798 to 81807—Continued.**

**81800. TERMINALLY BENTZOE** Burchell. Combretaceae.

No. 1472. Along the road near Kawazoe, October 12, 1929. A shrub with bright-red berries.

**81810 to 81817.**

**81810. CASTANEA SATIVA** Mill. Fagaceae.

No. 321. From the Sukhum Experiment Station, Caucasus Mountains, October 11, 1929. A leafy variety, 3 to 4 feet high, producing a large quantity of coarse feed.

**81811. CHAETOCHLOA ITALICA** (L.) Scribn. Poaceae. Grass.

No. 327. From the Sukhum Experiment Station, Caucasus Mountains, October 11, 1929. A well-shaped ornamental tropical evergreen tree with lanceolate leaves, inconspicuous flowers, and narrowly 2-winged fruits. Native to the Malay Archipelago.

**81812. CHARTHOCLAO ITALICA** (L.) Scorbn. (Setaria italica Beauv.). Poaceae. Grass.

No. 326. A wild grass found on partially shaded slopes at Sukhum, Caucasus Mountains, October 11, 1929. A type with long panicles.

**81813. EUCILHAена MEXICANA** × **ZEA MAYS** Poaceae. Teosinte-maize hybrid.

No. 327. From the Sukhum Experiment Station, Caucasus Mountains, October 12, 1929. A type with long panicles.

**81814. EUCILHAена MEXICANA** × **ZEA MAYS** Poaceae. Teosinte-maize hybrid.

No. 321. From the Sukhum Experiment Station, Caucasus Mountains, October 10, 1929.

**81815 and 81815.**

**81787 to 81807—Continued.**

**81807. ZEA MAYS L. Poaceae. Corn.**

No. 1382. From the Ainu village of Shiraoi, Hokkushu, September 29, 1920.

**81808. TERMINALIA BENTZOE** (L.) Pers. Combretaceae.

From Port Louis, Mauritius. Seeds presented by D. d'Emmerez de Charmoy, Director, Department of Agriculture. Received November 16, 1929.

A handsome tropical evergreen tree with lanceolate leaves, inconspicuous flowers, and narrowly 2-winged fruits. Native to the Malay Archipelago.

**81809. TERMINALIA SERICEA** Burchell. Combretaceae.

From Salisbury, Southern Rhodesia, Africa. Seeds presented by the Secretary of the Department of Agriculture. Received November 16, 1929.

A weald-shaped ornamental tropical evergreen tree up to 30 feet high, with a flat crown, silvery white foliage, and yellow wood of excellent quality. Bark cloth of poor quality is made from the bark.

For previous introduction see No. 61867.

**81810 to 81817.**

From Russia. Seeds collected by H. L. Westover, Bureau of Plant Industry. Received November 14, 1929.

**81810. ANDROPOGON ISCHAEMUM** L. Poaceae. Grass.

No. 325. A wild grass found in the vicinity of Sukhum, Caucasus Mountains, October 11, 1929. A leafy variety, 3 to 4 feet high, producing a large quantity of coarse feed.


No. 326. A wild grass found on partially shaded slopes at Sukhum, Caucasus Mountains, October 11, 1929. A type with long panicles.

**81812. CASTANEA SATIVA** Mill. Fagaceae. Spanish chestnut.

No. 323. From the Caucasus Mountains, south of Armavir, October 7, 1929.

**81813. EUCILHAена MEXICANA** × **ZEA MAYS** Poaceae. Teosinte-maize hybrid.

No. 321. From the Sukhum Experiment Station, Caucasus Mountains, October 10, 1929.

**81815 and 81816.**

**81787 to 81807—Continued.**

**81807. ZEA MAYS L. Poaceae. Corn.**

No. 1382. From the Ainu village of Shiraoi, Hokkushu, September 29, 1920.

**81808. TERMINALIA BENTZOE** (L.) Pers. Combretaceae.

From Port Louis, Mauritius. Seeds presented by D. d'Emmerez de Charmoy, Director, Department of Agriculture. Received November 16, 1929.

A handsome tropical evergreen tree with lanceolate leaves, inconspicuous flowers, and narrowly 2-winged fruits. Native to the Malay Archipelago.

**81809. TERMINALIA SERICEA** Burchell. Combretaceae.

From Salisbury, Southern Rhodesia, Africa. Seeds presented by the Secretary of the Department of Agriculture. Received November 16, 1929.

A weald-shaped ornamental tropical evergreen tree up to 30 feet high, with a flat crown, silvery white foliage, and yellow wood of excellent quality. Bark cloth of poor quality is made from the bark.

For previous introduction see No. 61867.

**81810 to 81817.**

From Russia. Seeds collected by H. L. Westover, Bureau of Plant Industry. Received November 14, 1929.

**81810. ANDROPOGON ISCHAEMUM** L. Poaceae. Grass.

No. 325. A wild grass found in the vicinity of Sukhum, Caucasus Mountains, October 11, 1929. A leafy variety, 3 to 4 feet high, producing a large quantity of coarse feed.


No. 326. A wild grass found on partially shaded slopes at Sukhum, Caucasus Mountains, October 11, 1929. A type with long panicles.

**81812. CASTANEA SATIVA** Mill. Fagaceae. Spanish chestnut.

No. 323. From the Caucasus Mountains, south of Armavir, October 7, 1929.

**81813. EUCILHAена MEXICANA** × **ZEA MAYS** Poaceae. Teosinte-maize hybrid.

No. 321. From the Sukhum Experiment Station, Caucasus Mountains, October 10, 1929.

**81815 and 81816.**
PLANT MATERIAL INTRODUCED

81810 to 81817—Continued.

81817. TRIFOLIUM sp. Fabaceae. Clover. 
No. 322. Obtained in the forest, Sukhum Experiment Station, October 10, 1929.

81818. OXYTROPIS PILOSA (L.) DC. Fabaceae.
From Russia, Union of Socialistic Soviet Republics. Seeds presented by A. Kol, Chief, Bureau of Introduction, Institute of Applied Botany and New Cultures. Leningrad. Received November 19, 1929.

81819. CITRUS sp. Rutaceae.
Cuban shaddock.
From Holguin, Cuba. Seeds presented by Thomas R. Towns. Received November 21, 1929.

81820 to 81822. From Newry, Ireland. Seeds purchased from T. Smith, Daisy Hill Nursery. Received November 19, 1929.

81823. Ficus RELIGIOSA L. Moraceae. Sacred bo tree.
From Hanover, Germany. Plants purchased from Hermann A. Hesse. Received November 23, 1929.

81824 and 81825. PRUNUS ARMEcIACA L. Amygdalaceae. Apricot.
From Russia, Union of Socialistic Soviet Republics. Cuttings and scions presented by A. Kol, Chief, Bureau of Introduction, Institute of Applied Botany and New Cultures. Received November 23, 1929.

81826 to 81830. From Hanover, Germany. Plants purchased from Hermann A. Hesse. Received November 23, 1929.

81827. LOCKENKOPF. Plant about 2 feet tall, blooming in July and August. The long, deep purple flowers, with three or four series of deep-cut ray flowers, remind one of "ostrich feather aster." 

81828. NIobe. One of the finest sorts with unusually large pure white heads. The ray flowers are lightly undulate.

81829. DAPhNE ALPINA L. Thymelaeaceae. Alpine daphne.
An erect alpine shrub 2 feet high, with narrow deciduous leaves, and fragrant white or pinkish flowers in terminal clusters. Native of Europe.

81830. DAPhNE CAUCASICA Pall. Thymelaeaceae. Caucasian daphne.
A hardy deciduous shrub, up to 4 feet high, with lanceolate leaves and fragrant white flowers in terminal heads of 3 to 20 flowers. Native to the Caucasus region.

81831 and 81832. From Rumania. Seeds obtained through H. L. Westover, Bureau of Plant Industry. Received November 25, 1929.

81831. MEDICAGO SATIVA L. Fabaceae. Alfalfa.
From Transylvania.

81832. TRlFOLIUM PRATENSE L. Fabaceae. Red clover.
From Moldova.

81833. JUGLANS FORMOSANA Hayata. Juglandaceae.
From San Marino, Calif. Nuts presented by William Hertrich, Superintendent, Huntington Botanic Garden. Received November 25, 1929.

A very ornamental tree which is nearly evergreen at San Marino, Calif. The nuts resemble the butternut (Juglans cinerea) in size and shape. Native to Taiwan.
From Tashkent, Turkestan, Union of Socialistic Soviet Republics. Seeds presented by the Turkestan Plant Breeding Station. Received November 25, 1929.

81834 to 81835. Gossypium herbaceum L.
81834. No. 455 A. From West Pamirian.
81835. No. 2522 B. From Khoresm.

81836. No. 2992. From Khanabad, Afghanistan.
81837. No. 3101. From Khoresm.
81838. No. 5028. From Smyrna, Turkey.
81839. No. 7172. From Artyshe, near Kashgar, Sinkiang, China.
81840 and 81841. Gossypium hirsutum L. Upland cotton.
81841. No. 1838. Bred by the Turkestan Plant Breeding Station by means of hybridization.

From Mexico. Scions collected by C. V. Newman, President, and George B. Hodgkin, Manager, Calavo Growers of California, Los Angeles, Calif. Received November 26, 1929.

81842. No. 1. Atlisco.
81843. No. 2. Atlisco.

From Papeete, Tahiti. Seeds presented by Dr. Gerrit P. Wilder. Received November 29, 1929.
A variety of custard-apple introduced into Tahiti 50 years ago by Mr. Goupil, a Frenchman who had a coconut plantation near Papeete. It has a white skin when ripe, and a creamy white, fine-grained pulp of excellent flavor.

From Mount Silinda, Melsetter District, Southern Rhodesia, Africa. Seeds presented by Dr. W. L. Thompson. Received September 19, 1929.
Muogomo. A large tree, sometimes 3 or 4 feet in diameter, with delicious edible nuts, though the shell is hard and tough. The kernel is inclosed within a second hard shell within the outer shell.
For previous introduction see No. 50029.

From Cape Town, Union of South Africa. Seeds purchased from Charles Howie & Co. Received November 30, 1929.

81846. Lachenalia orchoides (L.) Att. A herbaceous perennial with a bulb about half an inch in diameter and two-fleshy, sword-shaped leaves, 9 inches long, having pustules on the upper surface. The white or reddish campanulate flowers are borne in a dense raceme, 2 to 3 inches long, on a peduncle 6 inches long. Native to southern Africa.

81846 and 81847—Continued.
81847. Lachenalia pustulata Jacq. A herbaceous perennial with a bulb about half an inch in diameter and two-fleshy, sword-shaped leaves, 9 inches long, having pustules on the upper surface. The white or reddish campanulate flowers are borne in a dense raceme, 2 to 3 inches long, on a peduncle 6 inches long. Native to southern Africa.

From Keaton, Kent, England. Plants purchased from G. Reutte, Foxhill Hardy Plant Farm. Received December 5, 1929.
A deciduous shrub, 6 to 15 feet high, with downy young shoots and oval or ovate-lanceolate leaves 2 to 6 inches long. The bell-shaped flowers are about an inch long and borne on pedicels at the end. In the leaf axils of short side shoots. The corolla is deep rose outside and paler within except in the throat, which is orange colored. Native to western China.

For previous introduction see No. 40178.

From Peru. Seeds presented by Dr. Wilson Peepose, Research Department, United Fruit Co. Received November 25, 1929.
A thick-flesed variety.

From Winnipeg, Manitoba, Canada. Cuttings presented by Prof. F. W. Broderick, Department of Forestry and Horticulture, Agricultural College, University of Manitoba. Received November 13, 1929.
According to its originator, Dr. Augustine Henry, this hybrid poplar is intermediate in characters between its parents, P. trichocarpa and P. angustata and P. trichocarpa. It is a rapid-growing, unusually vigorous tree with coarse serrate leaves which are pale gray beneath.

For previous introduction see No. 62111.

From Manila, Philippine Islands. Seeds presented by F. J. Wester, Bureau of Agriculture, Manila. Received October 1, 1929.
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. 73693.

From Sapporo, Hokkushu, Japan. Bulbs collected by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received October 1, 1929.
No. 1017. Obtained from the Sapporo Botanic Garden, September 2, 1929. A bulb like bulbous perennial with 1-flowered stems 6 to 18 inches high.
The 10 to 15 leaves are lanceolate, the lower ones in whorls; and the livid wine-purple flowers are about an inch long. Native to Siberia and Alaska.


81854. *CINNAMOMUM MINDANENSE* Elmer. Lauraceae. **Kami.** From Lipa, Batangas, Philippine Islands. Seeds presented by S. Youngberg, Director, Bureau of Agriculture, Manila. Received October 2, 1929. A small erect tropical tree, up to 30 feet high, with slender branches, smooth pale-green bark, and small pointed leathery leaves. The inconspicuous flowers are followed by numerous small shining steel-blue fruits. The bark is very similar to the cinnamon of commerce, and the tree has possibilities as a source of cinnamon. Native to the Philippines.

For previous introduction see No. 79540.


81857 to 81864. *SACCHARUM OFFICINALE* L. Poaceae. **Sugarcane.** From Honolulu, Hawaii. Cuttings presented by H. L. Lyon, in charge, Department of Botany and Forestry, Experiment Station, Hawaiian Sugar Planters' Association. Received October 7, 1929.

81857. No. 28-245.
81858. No. 28-4997.
81859. No. 28-5009.
81860. No. 28-5055.
81861. No. 28-5019.
81862. No. 28-5114.
81863. No. 28-5118.
81864. Unnumbered variety (Striped Tip).

81865 to 81883. *CUCUMIS MELO* L. Cucurbitaceae. **Melon.** From India. Seeds presented by the Associate Professor of Botany, Punjab Agricultural College, Lyallpur, through Rennick S. McNiece, American consul, Karachi. Received October 4, 1929.

81865 to 81883—Continued.

81865. *D. J. Khan No. 1.* From the Northwest Frontier Province. A variety with yellow skin which is segmented by prominent black lines.

81866. *D. J. Khan No. 2.* From the Northwest Frontier Province. A variety with yellow skin which is segmented by green lines.

81867. *Jhang No. 1.*

81868 to 81871. From Jullundur.

81868. No. 1. **Philauti Sufaiyda.** A white-fleshed variety.
81869. No. 2. **Local Sufaiyda.** A white-fleshed variety.
81870. No. 3. **Chenai white.** A white-fleshed variety.
81871. No. 4. **Nakodri red.** A red-skinned variety.

81872 to 81883. From Lyallpur.

81872. No. 1. A round variety with a smooth yellow skin.
81873. No. 2. An ovoid variety with a rough yellow skin.
81874. No. 3. An ovoid, ribbed, yellow-skinned variety.
81875. No. 4. A round, ribbed, yellow-skinned variety.
81876. No. 5. **A round, yellow, smooth-skinned variety.**
81877. No. 6. A round, yellow-skinned variety segmented with green lines.
81878. No. 7. A round, yellow-skinned variety segmented with green lines.
81879. No. 8. A round variety with greenish-yellow rough skin.
81880. No. 9. A round, reddish-yellow, smooth-skinned variety.
81881. No. 10. A round variety with reddish-yellow, smooth skin.
81882. No. 11. A round, yellow-skinned variety segmented with thin lines.
81883. No. 1. **Shorkot.**

81884 to 81914. From Japan. Seeds collected by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received October 1, 1929.

81884 to 81886. *DELPHINIUM* spp. Ranunculaceae. **Larkspur.**

81884. *DELPHINIUM CONSOLIDA* L. Field larkspur. No. 1145. An erect hairy annual, native to Europe, about 1½ feet high, with blue or white flowers in loose panicles. For previous introduction see No. 53044.

81885. *DELPHINIUM ORIENTALE* J. Gay. No. 1146. An annual larkspur which closely resembles the rocket larkspur, *Delphinium ajacis*, but differs in being a foot to a foot and a half high, with an upright, branching stem bearing numerous dense racemes of violet, pink, or white flowers. Native to southern Europe.
81884 to 81914—Continued.

No. 1146. A larkspur, native to China, with a leafy stem, 5-parted leaves, and attractive flowers with violet sepal and blackish petals.

For previous introduction see No. 62127.

81887. *Fragaria* sp. Rosaceae.
*Strawberry.*
No. 1151. From the Sapporo Botanic Garden, Sapporo, Hokushu, August 26, 1929. A species said to be grown in the mountain regions at high altitudes.

81888. *Lathyrus* sp. Fabaceae.
No. 1157. Growing at an altitude of 1,600 feet on Moiwayama, near Sapporo, Hokushu, September 2, 1929. An elm considered as fine a lawn and park tree as *Ulmus americana.*

81889. *Lonicer*a sp. Caprifoliaceae.
*Honeysuckle.*

81890. *Lonicer*a sp. Caprifoliaceae.
*Honeysuckle.*
No. 1161. From the Sapporo Botanic Garden, Sapporo, Hokushu, August 26, 1929.

81891 and 81892. *Picrasma quassioides* (Don) Bennett. Simaroubaceae.
A tree 15 to 25 feet high, with seeds varying from peacock green to purple. Its chief ornamental value consists in the handsome foliage which turns orange and scarlet in the autumn, and the bright-red fruits.

For previous introduction see No. 40188.

81893. No. 1163. From the Sapporo Botanic Garden, Sapporo, Hokushu, August 22, 1929.

81894. *Rubus* sp. Rosaceae.

81895. *Rubus* sp. Rosaceae.
No. 1164. From a farmer's market at Sapporo, Hokushu, August 26, 1929. A dwarf species, more or less of a runner, with trifoliolate leaves white underneath, and beautiful red fruits of a good flavor.

From the Sapporo Botanic Garden, Sapporo, Hokushu, August 26, 1929.

No. 1184. Woods along the trail up Molwayama, near Sapporo, Hokushu, August 28, 1929. A hardy herbaceous perennial with an elongated creeping rhizome, digitately 5-parted leaves, and glabrous, paired, bright-red fruits.

No. 1012. From a tofu or bean curd factory in Sapporo, Hokushu, August 30, 1929. A variety considered by this factory to be the best for making tofu; from 5 to 8 bushels are used daily. The beans are grown in Tokachi Province, the leading soybean section of Hokushu.


81901. No. 1001. Near the railroad station at Asamushi, August 10, 1929.

81902. No. 1002. Along the roadside in the Sapporo Botanic Garden, Hokushu, August 19, 1929.

81903. No. 1003. From a field in the Murayama Park, Sapporo, Hokushu, August 19, 1929.


81905. No. 1005. From a field between Kotoni and Sapporo, Hokushu, August 22, 1929. This plant was much earlier than others and made an abundance of heads much smaller than other plants near by.

81906. No. 1006. Along the roadside near Shiroyishi, Hokushu, August 24, 1929.

No. 1192. From the Imperial Botanical Garden, Hokushu University, Sapporo, September 2, 1929. An elm considered as fine a lawn and park tree as the American elm, *Ulmus americana.* There are some beautiful specimens in the Botanical Garden and campus of the Hokushu Imperial University and along the streets of Sapporo.

For previous introduction see No. 76469.

No. 1162. From the Sapporo Botanic Garden, Sapporo, Hokushu, August 26, 1929. A shrub 4 to 6 feet high, with spreading branches, oblong-lanceolate leaves 1 to 2 inches long, and 1-flowered to 3-flowered clusters of red campanulate flowers followed by black berries. Native to Japan.

81909. *Vaccinium* sp. Vacciniaceae.
No. 1163. Growing at an altitude of 1,600 feet on Molwayama, near Sapporo, Hokushu, August 28, 1929. Plants 12 to 18 inches high.
81884 to 81914—Continued.

81910. Viburnum sp. Caprifoliaceae.
No. 1165. From the Sapporo Botanic Garden, Sapporo, Hokushu, August 26, 1929.


81911. Vicia sativa L. Common vetch.
No. 1129. Along the roadside between Kotoni and Sapporo, Hokushu, August 22, 1929. Flowers large and single, with purple standard and pink keel.

81912. Vicia sp.

81913. Vicia sp.
No. 1141. Along the roadside between Kotoni and Sapporo, Hokushu, August 22, 1929. Racemes of purple flowers.

81914. (Undetermined.)
No. 1189. From the woods along the trail up Moiwayama, near Sapporo, Hokushu, August 28, 1929. A variety about 30 inches high, producing bright-red fruits.

From Lalla, Tasmania, Australia. Trees purchased from Frank Walker. Received October 8, 1929.

81915. Lalla. A sport from a Delicious apple tree which produced a bright, full, red fruit. The flesh is, perhaps, slightly firmer than the Delicious, but in no other respect except in the brilliance of its color is there any noticeable difference.

81916. Tasman. This is the most popular and well known of all the apples raised in Tasmania. It is a late variety, highly colored, and a good keeper. Though not possessing a delicate flavor, it is greatly sought after for dessert purposes because of its deep brilliant red color.

81917. Tasman's Pride. This is essentially a dessert apple possessing a good flavor, besides being highly colored and juicy. While not being classed as a keeping variety, it may be held for a fair period in cold storage; it is very similar to the Jonathan in this respect.

81918 to 81920. Lathyrus spp. Fabaceae.

81918 and 81919. Lathyrus magellanicus Lam. Lord Anson pea.
A strong-growing, woody, almost evergreen species, usually a perennial, covered with a bluish bloom. The smooth angled, somewhat branched stem is 3 to 5 feet long, the leaflets are ovate or oblong-lanceolate and the dark purplish-blue flowers are on long peduncles. Native to southern South America.

81918 to 81920—Continued.
For previous introduction see No. 40876.


81919. Combes No. 713. Andean expedition. A dark-purple form which received the Royal Horticultural Society's Award of Merit.

81920. Lathyrus nervosus Lam. Anson pea.
A slender climber with trifoliate leaves, borne upon slender wiry stems, which suggest those of the common bean (Phaseolus). The plant is of interest chiefly for the small bright-red seeds, with a black eye, which are strikingly similar to those of Abrus precatorius, the crab's eye of the West Indies.

For previous introduction see No. 80090.

81921 and 81922.
From Lavras, Minas Geraes, Brazil. Seeds presented by B. H. Hunningcott, Instituto Gama, through Carlton Jackson, commercial attaché, Rio de Janeiro, Jackson, commercial attaché, Rio de Janeiro, received October 7, 1929.

A vine bearing seeds which are commonly used for making necklaces.

81922. Dolicholus phaseoloides (Swartz) Kunze (Rhynchosia phaseoloides DC.), Fabaceae. Rosary bean.
A slender climber with trifoliate leaves, borne upon slender wiry stems, which suggest those of the common bean (Phaseolus). The plant is of interest chiefly for the small bright-red seeds, with a black eye, which are strikingly similar to those of Abrus precatorius, the crab's eye of the West Indies.

For previous introduction see No. 68855.

81923 and 81924.
From Peradeniya, Ceylon. Seeds presented by T. H. Parsons, Curator, Royal Botanic Gardens. Received October 7, 1929.

A moderate-sized spineless leguminous tree native to the East Indies. It is of very rapid growth, with trifoliate leaves and red flowers. In Ceylon the tree is used to shade crop plants, and also the foliage is lopped for use as manure. It is being tested as a cover plant at the experiment station in Peradeniya.

For previous introduction see No. 68855.

A tropical evergreen tree, native to New Guinea, with very thick ash-brown branches and oblong-ovate leaves, a foot long, which are hairy beneath when young. The edible seeds, over an inch long, are inclosed in an ovoid drupe over 2 inches long.

From Tanauan, Atimonan, Tayabas, Philippine Islands, the darje presentsd by S. Youngberg, Director, Bureau of Agriculture, Manila. Received October 14, 1929.
81925—Continued.

81929 to 81931—Continued.

For previous introduction see No. 81929.


An unarmed fan palm with a ringed trunk up to 30 feet high. Circular leaves 1 to 2 feet across and divided on the margin into bifid segments, and inconspicuous flowers and fruits. Native to Jamaica.

81931. (Undetermined.)

81932 to 81934. ALLIUM CELA L. Liilacaceae. Onion.

From Santa Cruz, Tenerife, Canary Islands. Seeds purchased from C. Garcia Dorta. Received October 10, 1929.

81932. Crystal Wax.

81933. Red Bermuda.

81934. Yellow Bermuda.

81935. GARCINIA MANGOSTANA L. Clusiaceae. Mangosteen.

From Peradeniya, Ceylon. Seeds presented by T. W. Parsons, Curator, Royal Botanic Gardens. Received October 21, 1929.

A delicious fruit about the size of a mandarin orange, round and slightly flattened at each end, with a thick, smooth, rich red-purple rind, which, when cut, exposes the white segments lying loose in the cups. The inside cup surface of the rind is a most delicate pink. The separate segments are whitish and covered with a delicate network of fibers. The texture of the pulp resembles that of the plum, and the flavor is indescribably delicious.

81936. STYLOSANTHE S ERECTA Beauv. Fabaceae.

From Bomal, Belgian Congo, Africa. Seeds presented by the Secrétaire Général, Congolese Government General. Received October 17, 1929.

A copiously branched ascending shrub about 4 feet high, with broad, rather stiff compound leaves, and terminal oblong heads of inconspicuous flowers. It is native to tropical Africa and is said to be of value as a fodder plant.

For previous introduction see No. 56708.

81937. MAGONIBERA INDICA L. Anacardiaceae. Mango.

From Honolulu, Hawaii. Bud wood presented by W. T. Pope, Horticulturist of the Agricultural Experiment Station, through Eugene May, Bureau of Plant Industry. Received October 17, 1929.

Victoria.

81938 to 81940. PANDANUS spp. Pandanaceae. Screwpine.

From Bultenzorg, Java. Seeds presented by Dr. W. M. Docters van Leeuwen, Director, Botanic Gardens. Received November 12, 1929.

81938. PANDANUS AFFINIS Kurz.

A low shrubby evergreen closely related to Pandanusa fordii, with lanceolate leaves, 4 to 6 feet long, which are spiny along the midrib and margins. Native to Ceylon.
81938 to 81940—Continued.

For previous introduction see No. 72802.

81939. PANDANUS ATROCARPUS Griffith.

A tree, 40 to 60 feet high and about 6 inches in diameter, with linear acuminate dark-green leaves, 20 feet long and 4 inches wide, which are used for making coverings for carts, screens, hats, etc. The fragrant white spikes are 4 to 6 inches long, and the fruits an inch long.

For previous introduction see No. 51727.

81940. PANDANUS VANDERMEESCHII Balf. f.

A screw pine, native to the island of Mauritius, up to 20 feet high, having lateral branches 8 feet long and stiff, suberect leaves 2 feet long.

For previous introduction see No. 75906.

81941. HYLOCEREUS sp. Cactaceae.

Nightblooming cereus.

From Honolulu, Hawaii. Cuttings obtained through T. C. Zchakke, by W. A. Lloyd Extension Service, United States Department of Agriculture. Received October 22, 1929.

From the Pan-Pacific Club in Honolulu.

One of the epiphytic, moisture-loving cacti, with a 3-angled stem. By means of aerial roots it clings to trees and walls and climbs to great heights in tropical America, where this genus is native.

81942 to 81945.

From Burringbar, New South Wales, Australia. Seeds presented by B. Harrison. Received October 12, 1929.

81942. DANTHONIA SEMIANNULARIS (La-hill.) R. Br. Poaceae.

Perennial veldt grass.

A heavy-yielding drought-resistant and nutritious grass which grows to a height of over 4 feet and seeds profusely. It promises to outrival even the famous Rhodes grass, and should prove valuable to stock owners, especially in dry districts.

For previous introduction see No. 74412.


Grass.

A heavy-yielding drought-resistant and nutritious grass which grows to a height of over 4 feet and seeds profusely. It promises to outrival even the famous Rhodes grass, and should prove valuable to stock owners, especially in dry districts.

For previous introduction see No. 74436.

81944. LoliUM LOLIACEUM (Bo r y and Chaub.) Hand.-Mazz. (L. subulatum Vis.) Poaceae.

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

81945. Lupinus HIRSUTUS L. Fabaceae.

European blue lupine.

An ovate-leaved lupine used for forage and green manure.

For previous introduction see No. 75914.

81946. ALLOGOPTERA CAUDESCENS (Mart.) Knutze (Diplothemium caudescens Mart.). Phoenicaceae.

Palm.

From Georgetown, Demerara, British Guiana, presented by A. A. Abraham, Assistant Superintendent, Botanic Gardens. Received December 23, 1929.

A stout palm up to 25 feet high, with a trunk a foot in diameter and a crown of pinnate leaves 9 to 12 feet long, made up of narrowly lanceolate segments which are green above and silvery beneath. Native to Brazil.

81947 to 81973.

From Japan. Collected by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received in October, 1929.

81947. Actaea SPICATA L. Ranunculaceae.

Black baneberry.

No. 1030. Seeds from plants growing in the forest reservation near Nopporo, Hokkushu, September 5, 1929. Tsubome o moto. A low-growing liliaceous perennial from damp places in southeastern Siberia. The erect broadly oblong leaves, 6 inches long, are green, paler beneath. The greenish-yellow flowers, borne on a scape, are not showy, and the fruits are deep blue.

For previous introduction see No. 72405.


Solomonseal.

No. 1029. Seeds from plants growing in the forest reservation near Nopporo, Hokkushu, September 5, 1929. Tsunomono. A herbaceous perennial 1 or 2 feet high, with racemes of deep-blue fruits in autumn.

For previous introduction see No. 72405.

81949. Disporum SESSILE (Thunb.) Don. Convallariaceae.

Fairybells.

No. 1105. Seeds from plants growing in the forest reservation near Nopporo, Hokkushu, September 5, 1929. A small herbaceous perennial closely allied to the Uvularia, of the eastern United States. The narrowly ovate leaves are sessile, and the flowers, usually solitary, are white. Native to Japan.

81950. Panax REPENS Maxim. Araliaceae.

No. 1194. Seeds from plants growing in the forest reservation near Nopporo, Hokkushu, September 6, 1929. A heavy-yielding drought-resistant and nutritious grass which grows to a height of over 4 feet and seeds profusely. It promises to outrival even the famous Rhodes grass, and should prove valuable to stock owners, especially in dry districts.

For previous introduction and description see No. 81958.


Solomonseal.

No. 1200. Seeds from plants growing in the forest reservation near Nopporo, Hokkushu, September 5, 1929. Okaomadoro. A herbaceous perennial, 1 or 2 feet high, closely related to the Solomonseal of the eastern United States. The oval leaves are 2 to 3 inches long, and the white, greenish-white flowers are about one-fourth of an inch across. Native to Japan.

81952. Ribes sp. Grossulariaceae.

No. 1349. Seeds from plants growing in a field near Odomari, Sakhalin Island, September 12, 1929. Fruits red.
81947 to 81973—Continued.

81953. **RUBUS** sp. Rosaceae.

No. 1322. Seeds from plants growing along the seashore near Koetoi, Hokushu, September 10, 1929. A low-growing variety producing rather sour, deep-red fruits.


For previous introduction and description see No. 81980.


No. 1026. Seeds from plants growing in a field near Maruyama Park, near Sapporo, Hokushu, September 4, 1929. A very early variety with greenish-yellow seeds.

81956 to 81963. **TRIFOLIUM** spp. Fabaceae. **Clover**.

No. 1138. From the roadside near Nopporo, Hokushu, September 5, 1929. A variety found abundantly along roadsides and in open fields.

81962. **TRIFOLIUM** sp. 

No. 1028. From the Kotoni Experiment Station, Hokushu, September 3, 1929. A prolific and early strain.

81963. **TRIFOLIUM** sp. 

No. 1029. From the Kotoni Experiment Station, Hokushu, September 3, 1929. A very early strain.

81964. **VICTA** sp. Fabaceae. *Vetch*.


81965. **VICTA** sp. Fabaceae. *Vetch*.

No. 1121. Seeds from plants growing in Maruyama Park, near Sapporo, Hokushu, August 19, 1929. A light purple-flowered species growing in abundance and making a very heavy growth.

81966. **LILIUM CORDIFOLIUM** Thunb. (*L. glehni* F. Schmidt).

No. 1083. Seeds from plants along the road near Taicho Mura, Hokushu, September 22, 1929. A lily, native to Japan, 3 to 4 feet high, with pendulous leaves 12 to 18 inches long and wide, and a raceme of 4 to 10 fragrant white flowers often 6 inches long.

For previous introduction see No. 75677.

81967. **LILIUM** sp. 


81968. **LILIUM** sp. 


81969. **LILIUM** sp. 

No. 1086. Near Obihiro, Hokushu, September 22, 1929.

81970. **LILIUM** sp. 

No. 1044. Seeds from plants in a field near Odomari, Sakhalin Island, September 12, 1929.

81981. KNIPHOFIA spp. Liliaceae. ** Torchlily**.

From Haarlem, Netherlands. Roots purchased from C. G. van Tubergen. Received December 2, 1929.
81981—Continued.

81980. R. Wilson. A variety with broad spikes.

81981. Solitare. A robust growing bearing broad spikes of yellow flowers shaded with bronze.


From Stellenbosch, Union of South Africa. Seeds presented by the Secretary of the Department of Agriculture. Received November 16, 1929.

A much-branched spreading shrub, sometimes 10 feet high, native to Upper Guinea, Ethiopia, and the Mozambique district. The coriaceous leaves are revolute margined when dry, and the flowers, in terminal spreading racemes, are rose, shades of purple or violet, or variegated with white.

For previous introduction see No. 45477.

81983 and 81984. LACHENALIA spp. Liliaceae. Cape-cowslip.


81983. LACHENALIA ORCHIOIDES (L.) Ait. For previous introduction and description see No. 81846.

81984. LACHENALIA PUSTULATA Jacq. For previous introduction and description see No. 81847.

81985 to 81987. ROSCOEA spp. Zingiberaceae.

From Liverpool, England. Plants purchased from Bees (Ltd.). Received December 5, 1929.

81985 and 81986. ROSCOEA CAULTELOIDES Gagn. A perennial herbaceous ginger-like plant, 9 to 12 inches high, native to China. It has thick fleshy roots, broad leaves, and showy primrose-yellow flowers borne on many-flowered scapes.

For previous introduction see No. 61793.

81986. August Beauty. A very vigorous variety which flowers two months later, but is otherwise like the type.

81987. ROSCOEA HUMEANA Balf. and Smith. A stout gingerlike perennial about 8 inches high, with cigar-shaped rhizomes, four to six broadly lanceolate sessile leaves 4 to 8 inches long, and four to eight large violet-purple flowers in a terminal spike. It is native to Yunnan, southwestern China, and has flowered freely at Kew, England, where it is considered the finest of the genus and where likewise it appears entirely hardy.

For previous introduction see No. 80205.

81988. SOLANUM BULLATUM Vell. Solanaceae.

From Viçosa, Brazil. Seeds presented by P. H. Rolfs, Consultor Technico de Agricultura do Estado de Minas Gerais, Escola Superior de Agricultura e Veterinaria. Received December 3, 1929.

According to chemical analysis, the foliage of this plant contains as much nitrogen as alfalfa, possibly a little less. It very frequently grows into a small tree about the size and shape of a small plum tree, but most frequently it is browsed and then continues to sprout up from the crown. It is very drought resistant and is eaten by cattle and mules.

For previous introduction see No. 54676.

81989 to 81991. From Ottawa, Canada. Cuttings presented by W. T. Macoun, Dominion Horticulturist, Central Experimental Farm Department of Agriculture. Received March 7, 1929. Numbered in November, 1929.

81988. ROSA RUBROSA Preston. Rosaceae. Rose.

Variety Carmenetta. A strong-growing hybrid between R. rubrifolia and R. rugosa with single, pale-pink flowers which are intermediate in size between those of the parents.

81990 to 81994. SYRINGA PRESTONIAE McKelvey. Oleaceae. Lilac.

A race of hybrids between Syringa reflexa and S. villosa, with large freely produced panicles varying in color from very pale pink to pinkish lilac.

81990. Variety Bianca.

81991. Variety Jacqenetta.

81992. Variety Jessica.

81993. Variety Julia.

81994. Variety Portia.

81995 and 81996. From Manila, Philippine Islands. Seeds presented by P. J. Wester, Bureau of Agriculture. Received November 26, 1929.

81995. CITRUS MIARAY Wester. Rutaceae.

A handsome ornamental tree suggested as a stock for cultivated citrus fruits. It has slender drooping willowy branches, dark-green leaves, and fruits resembling the lime in appearance and flavor. Native to the Philippine Islands.

For previous introduction see No. 77599.

81996. (Undetermined.) Tantelak. An asclepiadaceous vine from the lower Sulu Archipelago, with large tender pods eaten as a vegetable.


From Paris, France. Plants purchased from Vilomir-andrieux & Co. Received December 17, 1929.

An evergreen climbing shrub with the main trunk sometimes a foot in diameter. It is native to Hupeh, central China. The trifoliate leafy leaves are 3 to 5 inches long, and the dark chocolate-colored flowers are borne in racemes on the old wood. The woody pods are up to a foot in length.
From Italian Somaliland, Africa. Seeds collected by Dr. Mario Calvino, San Remo, Italy. Received December 7, 1929.
A high-climbing tropical woody vine with branches 6 feet or more long. The rounded oval leaves are 5 inches wide, and the handsome bell-shaped light-orange flowers, 2 inches or more long, have red-margined petals and are in nearly sessile cymes. Native to Italian Somaliland.

For previous introduction see No. 80046.

From Newry, Ireland. Seeds purchased from T. Smith, Dalav Hill Nursery. Received December 13, 1929.
An evergreen shrub, native to southern Europe. 10 feet high, with upright branches, small lustrous dark-green linear leaves in whorls of three or four, and long cylindrical spikes of greenish-white flowers.

For previous introduction see No. 79018.

From the Galápagos Islands and the Marquesas Islands. Seeds obtained by A. K. Fisher, Bureau of Biological Survey. Received December 4, 1929.

A high-climbing tropical woody vine with branches 6 feet or more long. The rounded oval leaves are 5 inches wide, and the handsome bell-shaped light-orange flowers, 2 inches or more long, have red-margined petals and are in nearly sessile cymes. Native to Italian Somaliland.

For previous introduction see No. 80046.

From Newry, Ireland. Seeds purchased from T. Smith, Dalav Hill Nursery. Received December 7, 1929.
An evergreen shrub or small tree up to 30 feet high, with broad-elliptic, crenate-serrate leaves 1 to 3 inches long. Native to China and Japan.

An evergreen shrub or small tree up to 30 feet high, with broad-elliptic, crenate-serrate leaves 1 to 3 inches long. Native to China and Japan.

From Vahuka, Marquesas Islands, August 21, 1929. Leaves entire (?), pubescent above, densely tomentose beneath. Bolls larger and less pointed than in A [No. 82000], three lock. Lint whitish to pale buff, rather coarse, tightly adherent to the seed. Seeds larger than in A, completely covered with fuzz of a pale buff color.

From Vahuka, Marquesas Islands, September, 1929. Bolls very small, abruptly short pointed, three lock or four lock. Lint light reddish brown (some of it lighter in color), rather silky, strongly adherent to the seeds. Seeds small, lacking a well-differentiated fuzz, but partly covered with rather long, strongly adherent, whitish and tawny hairs.

From Vahuka, Marquesas Islands, September, 1929. The contents of this package were mixed. The bolls ranged from not larger than in C [No. 82002] to about twice as large. The lint was nearly white for the most part, but some of it had a tawny tinge. After removal of the lint, five different types of seeds were distinguished.

D-1. Seeds large, coffee colored, longitudinally striate, naked except for a minute tuft of tawny fuzz at the base.

D-2. Seeds as in D-1 [No. 82003], except that they are smaller and a lighter brown.
The threadlike leaves usually appear after the flowers, which are white, tinged with red, and are borne on a slender scape 3 to 6 inches long. The strap-shaped leaves are fully developed in June and September.

LEUCOJUM AUTUMNALÉ

A bulbous plant with a 3-angled stem common on the coast of Algeria. In its usual surroundings this plant is a rather dwarfed weed of dry texture, but it has been found that when it is transplanted to a garden soil with plenty of fresh water it produces, during the winter, large plants with white, tender, and succulent underground parts. If the green leaves are removed the rest of the stem forms a delicate vegetable with no odor of garlic.

For previous introduction see No. 46580.

CHRYSANTHEMUM MAXIMUM

The very large white flowers are borne on long stiff stems. This is one of the best varieties for cutting.

CHRYSANTHEMUM MULTIFLORUM

A variety bearing large orange-yellow flowers between June and September.

HELENIUM AUTUMNALE

An autumn-blooming bulbous plant native to Turkestan. The deep-rose flowers are produced freely in many-flowered umbels on scapes 12 inches high.

For previous introduction see No. 82034.

From Damghan, Persia. Cuttings collected by W. E. Whitehouse, Bureau of Plant Industry. Received in December 1929.

Variety auranticum. A variety bearing large orange-yellow flowers between June and September.

PISTACIA LENTIS

For previous introduction see No. 78987.

PISTACIA VEBA

A particularity striking species native to Turkestan. The bright-yellow flowers are in compound heads.

For previous introduction see No. 82034.

From Leningrad, Russia, Union of Socialist Soviet Republics. Seeds presented by A. Kol, Chief, Bureau of Introduction, Institute of Applied Botany and New Cultures. Received December 17, 1929.

Persimmon.

AMYGDALUS PERSICA

A large-fruited variety. From Tashkent. A large-fruited variety.
82035 to 82046—Continued.

82036. No. 109320. From Tashkent. A large-fruited white variety.


82040. No. 109677. From Mashad, Uzbekistan. *Isfara Kandak*.

82041. No. 109690. From Tura Kurgan, Uzbekistan. *Ah Uriuh*.


82045. No. 109711. From Namangan, Mashad, Uzbekistan. *Psta Kandah*.


From Avery Island, La. Plants presented by E. A. Mcllhenny. Received December 20, 1929.

This bamboo, according to a statement of November 19, 1929, from Mr. Mcllhenny, is one of two introductions sent to him from Chico, Calif., by the Department of Agriculture, April 3, 1914, under Nos. 23242 and 23243. It is believed by Mr. Mcllhenry to be the smooth-sheathed *P. mits* and has reached a height of 28 feet in poor soil at Avery Island.

82048 to 82051. *HELENIUM AUTUMNAL* L. Asteraceae. Sneezeweed.

From Dedemsvaart, Netherlands. Roots purchased from B. Ruys, Royal Moerheim Nurseries. Received December 10, 1929.

82048. *Maritensonne*. A variety bearing, between the last of August and the last of October, brilliant golden-yellow flowers with velvet-brown centers.


82050. *Grandicepsatum Julisonne*. A variety 3 feet high, bearing an abundance of dark-yellow flowers with dark-brown centers.

82051. *Variety pumilum magnificum*. A variety 2½ feet high, bearing a great number of large, yellow flowers from June until autumn.


From Japan. Seeds collected by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received October 12, 1929.

No. 1350. From a field near Odomari, Sakhalin Island, September 12, 1929.

82053 to 82058. From Twyford, Berks, England. Plants purchased from John Waterer Son & Crisp. Received December 13, 1929.


82056. *Mrs. F. Daniels*. A medium late variety bearing snowy white flowers.

82057. *Phyllis Smith*. A variety bearing an abundance of beautiful lustrous white flowers on long wiry stems. The petals of the flowers are deeply cut, giving the flowers a ruffled appearance.

82056 to 82058. *HELENIUM AUTUMNAL* L. Asteraceae. Sneezeweed.

82056. *Variety pumilum magnificum*. A variety bearing an abundance of yellow flowers between June and September.

82057. *Crimson Beauty*. A greatly improved variety of *cupremum*.


From Marrakech, Morocco. Seeds presented by H. Brayard, Directeur de la Station d’Essais. Received December 20, 1929.

82059. No. 6054.

82060. No. 6063.

82061 to 82084. From Chosen and Japan. Seeds collected by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received December 9, 1929.


No. 1552. From the Imperial Botanical Garden, Keijo, October 26, 1929. From shrubs 6 feet or more high, with dense, almost round clusters of black or dark-purple fruits.

For previous introduction see No. 76203.


No. 1567. From the Imperial Botanical Garden, Keijo, October 27, 1929. A small cut-leaved maple with bright-red foliage.


82063. *Berberis* sp.

No. 1706. From the Forest Experiment Station, Government General of Chosen, Keijo, November 6, 1929. A deciduous plant 10 feet high, with rather long racemes of fruits.

82064. *Berberis* sp.

No. 1709. Collected along the road between Rensen and Senkoku, No-
28061 to 28084—Continued.

vember 6, 1929. The young shoots color up beautifully, and the rather small red fruits are in good-sized clusters.


A hardy ornamental tree, native to Japan, up to 75 feet high, with broadly oval leaves. It is closely related to Betula pendula.

For previous introduction see No. 75671.

28065. No. 1518. From Sulgen, November 2, 1929.

28066. No. 1576. From Sulgen, November 2, 1929. From a small tree at the Agricultural Experimental Forest Station.

28067. Cassia sp. Caesalpiniaceae.

No. 1612. A wild legume growing along the road in a rather mountainous country near Kuroya, October 18, 1929.

28068. Clematis sp. Ranunculaceae.

No. 1596. From the Imperial Botanical Garden, Keijo, October 27, 1929. A wild clematis having a feathery appearance during this season.


No. 1543. Between the villages of Kazimori and Chichilu, October 18, 1929. Greenish to purple fruits.


A tree, native to Chosen, up to 60 feet high, with reddish-brown branchlets, dark-green elliptic leaves 3 to 6 inches long, loose clusters of small white flowers, and black fruits.

For previous introduction see No. 75401.

28070. No. 1550. From the Imperial Garden, Keijo, October 26, 1929.

28071. No. 1633. From the Chosen Imperial Grounds, Keijo, October 26, 1929.


No. 1584. From the arboretum of the forestry branch of the Agricultural Experiment Station, Sulgen, November 2, 1929. A native variety with small red fruits. The bright-red globose fruits, one-third inch in diameter, are in rather dense corymbs.

For previous introduction see No. 68414.


No. 1574. A native red hawthorn obtained from the forestry branch of the Agricultural Experiment Station, Sulgen, November 2, 1929. A plant about 12 feet high, with fairly large fruits.

28074. Crotalaria sp. Fabaceae.

No. 1228. Along the path near Zenkoku, November 7, 1929. Wild plants 19 to 18 inches high.

28075. Lbspeidea stipulacea Maxim. Fabaceae.

28061 to 28084—Continued.

No. 1734. Koka, island of Kokato, November 10, 1929. From a dry exposed situation on the dry, mountain back of the village society.


No. 1570. From a wild species along the road between Chotan and Koryoho, October 30, 1929.


No. 1731. Sanseiri, island of Kokato, November 10, 1929. From a tree 55 inches in circumference and 30 or more feet high; it is said to be 100 years or more old.

28078. Fagara ailanthoides (Sieb. and Zucc.) Engl. Rutaceae.

No. 1554. From the chosen Hotel grounds, Keijo, October 26, 1929. The leaves are compound, and, judging from the quantity of clusters of small shiny black seeds, this tree flowers freely. The seeds have a pleasant odor when crushed and are quite oily.


28080. No. 1700. From the Chosen farmers' market, Keijo, October 31, 1929. Mei Miru.

28081. Falcata japonica Oliver. Fabaceae.

No. 1202. From the woods of the Chosen Government Forest Reservation near Keijo, November 6, 1929. Vines 3 to 4 feet long. They may be of value for green manure.

For previous introduction see No. 65278.

28082. Forsythia sp. Oleaceae.

No. 1628. From the Chosen Imperial Grounds, Keijo, October 26, 1929. A species said to be native to Chosen.


No. 1622. From the Imperial Botanical Garden, Keijo, October 26, 1929. A large tree, up to 100 feet high, with compressed thorns and purplish branchlets. The pinnately compound leaves are made up of 16 to 20 oblong leaflets 1 to 2 inches long, and the slender racemes of inconspicuous flowers are followed by flat, twisted pods about a foot long. Native to Japan and China.


No. 1710. From the village of Rensen, November 7, 1929. Said to be a native variety. The plants in the small area along the road outside of Rensen, between the village and Zenkoku, were not more than about 2 feet high.

28085 to 82101.

From Chosen. Seeds collected by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received December 9, 1929.
Six-rowed barley.

From the Chosen farmers' market, Keijo, October 31, 1929.

No. 1583. Kannori. Said to be a spring variety.

No. 1584. Kannori. Said to be a spring variety.

No. 1835. Port. Said to be a fall variety.

LESPEDEZA sp. Fabaceae. Indigo

No. 1900. Near Kuroya, October 18, 1929. A species of possible value as a green-manure crop.


No. 1583. From the arboretum of the forestry branch of the Agricultural Experiment Station, Suigen, November 2, 1929. A graceful pyramidal shrub or small tree up to 30 feet high, native to eastern Asia. The branches are ascending and the branchlets pendulous; the spreading, linear-subulate, sharp-pointed leaves are an inch long; and the globose fruits, a quarter of an inch in diameter, are brownish black, covered with bloom.

For previous introduction see No. 78402.

LESPEDEZA spp. Fabaceae.

No. 1227. Along the road near Zurkoku, November 7, 1929. Plants, 12 to 18 inches high, growing on rather poor lava soil.

LESPEDEZA sp.

No. 1581. From the forestry branch of the Agricultural Experimental Station, Suigen, November 2, 1929.

LESPEDEZA sp.

No. 1921. From the forestry branch of the Agricultural Experimental Station, Suigen, November 2, 1929.

LESPEDEZA sp.

No. 1931. From the Chosen Imperial Grounds, Keijo, October 26, 1929. A species known as Chosen tree clover which grows between 10 and 16 feet high. Some of the shrubs measured 1 to 2 inches in diameter.

LESPEDEZA sp.

No. 1632. From the Chosen Imperial Grounds, Keijo, October 26, 1929. A fairly erect, branching variety 12 to 20 inches high, bearing an abundance of small, nearly black seeds.

LESPEDEZA sp.

No. 1634. From the Chosen Imperial Grounds, Keijo, October 26, 1929. A species quite frequent in the woods and waste places in the Chosen Imperial Grounds. It resembles very closely sweetclover in growth and habit, and reaches from 4 to 8 feet high. The black, somewhat elongated seeds are very numerous. Most of the stems are still green, and the buds show prominently and are very abundant about the base of the stem. This species looks promising as a forage plant and with doubt would give a good second growth if cut at blooming time.
PLANT MATERIAL INTRODUCED

82102 to 82107—Continued.

No. 1556. From a hillside in the Imperial Botanical Garden, Keijo, October 26, 1929.


82106. No. 1568. From the Imperial Botanical Garden, Keijo, October 27, 1929.

82107. No. 1627. From the Chosen Imperial Grounds, Keijo, October 26, 1929.

82108 to 82152. PHASEOLUS spp. Fabaceae.

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

82108 to 82133. PHASEOLUS ANGULARIS (Willd.) W. F. Wight. Adsuki bean.

82108. No. 1233. From the Chosen Fair exhibit, Keijo, November 8, 1929; originally grown in the Helan Nando Prefecture. Seeds medium sized and maroon colored; used in making confections.

82109. No. 1234. From the Chosen Fair exhibit, Keijo, November 8, 1929; originally grown in the Helan Nando Prefecture. Seeds medium sized and maroon colored; used in making confections.

82110. No. 1240. From plants growing in the woods of the Chosen Government Forest Reservation near Keijo, November 8, 1929. Vines, 5 to 8 feet long, with pods, about 2 1/2 inches long, which shatter very readily. The seeds are very small and black.


82113 to 82129. From the Chosen farmers’ market, Keijo, October 28, 1929.

82113. No. 1687. Patsu. A medium sample used, after grinding, for cattle feed. A medium-small, brownish-red variety used for confections.

82114. No. 1688. Patsu. A black and red variety used, after grinding, for cattle feed.

82115. No. 1689. Kunipatsu. A marbled gray and black variety used, after grinding, for cattle feed.

82116. No. 1690. Yoganunipatsu. A black and white variety used, after grinding, for cattle feed.


82118. No. 1692. Kenopia. A medium gray and black variety used, after grinding, for cattle feed.


82120. No. 1694. Patsu taure. A red variety used in making confections.

82121. No. 1695. Patsu taure. A red variety used in making confections.

82122. No. 1696. Patsu taure. A red variety used in making confections.

82123. No. 1697. Patsu taure. A red variety used in making confections.

82124. No. 1698. Patsu taure. A red variety used in making confections.

82125. No. 1699. Patsu taure. A red variety used in making confections.

82126. No. 1700. Patsu taure. A red variety used in making confections.

82127. No. 1701. Patsu taure. A red variety used in making confections.

82128. No. 1702. Patsu taure. A red variety used in making confections.

82129. No. 1703. Patsu taure. A red variety used in making confections.

82130. No. 1704. Patsu taure. A red variety used in making confections.

82131 to 82133. From the Chosen farmers’ market, Keijo, October, 1929.


82132. No. 1680. Kurinipatsu. A marbled red and black variety used, after grinding, for cattle feed. A medium-sized, glossy, olive-green variety used for sprouts.


82134. No. 1682. Chindare. A marbled gray and black variety used, after grinding, for cattle feed. A very small olive-green variety used for sprouts.

82135. No. 1683. Chindare. A marbled gray and black variety used, after grinding, for cattle feed. A very small olive-green variety used for sprouts.


82138 to 82134. PHASEOLUS AUREUS Roxb. Mung bean.

82138. No. 1235. From the Chosen Fair exhibit, Keijo, November 8, 1929; originally grown in the Helen Hokudo Prefecture. A medium-sized, glossy, light-green variety used for sprouts.

82139. No. 1236. From the Chosen Fair exhibit, Keijo, November 8, 1929; originally grown in the Helen Hokudo Prefecture. A medium-sized, glossy, light-green variety used for sprouts.

82140. No. 1237. From the Chosen Fair exhibit, Keijo, November 8, 1929; originally grown in the Helen Hokudo Prefecture. A medium-sized, glossy, light-green variety used for sprouts.

82141. No. 1238. From the Chosen Fair exhibit, Keijo, November 8, 1929; originally grown in the Helen Hokudo Prefecture. A medium-sized, glossy, light-green variety used for sprouts.

82142. No. 1239. From the Chosen Fair exhibit, Keijo, November 8, 1929; originally grown in the Helen Hokudo Prefecture. A medium-sized, glossy, light-green variety used for sprouts.

82143. No. 1240. From plants 18 to 24 inches high, along a dry hillside near Koryoho, October 30, 1929. A prolific variety of good growth.


82108 to 82152—Continued.

82139. No. 1801. *Rokuto*. A green variety used for sprouts and bean vermicelli.

82140. No. 1802. *Rokuto*. A green variety used for sprouts and bean vermicelli.

82141. No. 1803. *Rokuto*. A green variety used for sprouts and bean vermicelli.


82146. No. 1210. From plants in the Chosen Government Forest Reservation near Keijo, November 6, 1929. Vines 4 to 6 feet long.

82147. No. 1239. From plants in the woods of the Chosen Government Forest Reservation near Keijo, November 8, 1929. Vines with pods 2¾ to 3⅜ inches long, and small, brown seeds which shatter easily.

82148. No. 1699. From the Kankyo Hokudo Prefecture. A variety used for sprouts and bean vermicelli.

82149. No. 1801. From the Chosen farmers' market, Keijo, October 31, 1929. *Ipatwu*. A mixed sample of maroon and greenish-yellow seeds used for cattle feed, and also for cattle medicine for fever.

82150. No. 1802. From the Chosen farmers' market, Keijo, October 31, 1929. *Ipa*. A maroon variety said to be used for cattle feed and especially as a medicine for fever.

82151. No. 1803. From the Chosen farmers' market, Keijo, October 31, 1929. *Ipa*. A maroon variety used for cattle feed.

82152. No. 1838. From plants in the Kankyo Hokudo Prefecture. A mixed sample of maroon and greenish-yellow seeds used for cattle feed, and also for cattle medicine for fever.

82153—Continued.

P. *bambusoides*. The fresh culm sheath is plain mauve colored, puberulent above, glaucous all over, and very handsome with its small terminal wavy pseudophyll of bright green. These plants are from some which were previously sent to Mr. McLhenny under No. 24761.

82154 to 82160.

From Chosen. Collected by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received in December, 1929.


Seeds obtained at the Chosen Fair exhibit, Keijo, November 8, 1929.


No. 1705. Near the village of Ryuga-kuku, northwest of Heijo, November 17, 1929. Scions cut from a small tree growing in the wild. The branches are a beautiful bright red.


No. 1204. Seeds from plants along the road between Chotan and Koryoho, October 30, 1929. A kudzu which may prove to be a hardier form than the one grown in the United States. For previous introduction see No. 47579.


For previous introduction see No. 47155.

82158. No. 1572. Seeds from small spiny shrubs in a river bottom near the Keijo seed and nursery farm outside the East Gate, Keijo, November 8, 1929.

82159. No. 1593. From the Forest Experiment Station of the Government General of Chosen, Keijo, November 6, 1929. Seeds from a thorny tree 10 to 12 feet high.


No. 1572. Seeds from small spiny shrubs in a river bottom near the Keijo seed and nursery farm outside the East Gate, Keijo, November 1, 1929.


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

82161 to 82175—Continued.
An upright shrub, up to 6 feet high, with rose-colored flowers which appear very early in the spring. The leaves turn a beautiful scarlet in the autumn.
For previous introduction see No. 71126.

82161. No. 1589. From the Forestry Experiment Station of the Government General of Chosen, Keijo, November 6, 1929.

82162. No. 1739. From the mountain side adjacent to the boat landing at Kokan, island of Kokato, November 11, 1929.

82163 and 82164. RHODODENDRON SCHLIPPENBACHII Maxim. Royal azalea.
A beautiful deciduous shrub 15 feet high, with large clear pink flowers appearing before the leaves in the spring. The leaves turn with rose-colored flowers which appear a beautiful scarlet in the autumn.

82165. RHODODENDRON sp.
No. 1557. An azalea collected in the wild in the Botanical Garden, Keijo, October 27, 1929.

82166. RHODODENDRON sp.
No. 1558. A rhododendron, native to Chosen, from the Forestry Experiment Station, Keijo, November 6, 1929.

82167. RHODODENDRON sp.
No. 1558. From the Forestry Experiment Station of the Government General of Chosen, Keijo, November 6, 1929. It was found growing wild on the decomposed granite hillside.

82168. RHODODENDRON sp.
No. 1591. From plants in the wild at the Forestry Experiment Station of the Government General of Chosen, Keijo, November 6, 1929. An azalea, native to Chosen, about 2 feet high, found in decomposed granite soil in exposed dry situations.

82169. RHODODENDRON sp.
No. 1620. From the Imperial Botanical Garden, Keijo, October 26, 1929.

82170. RHODODENDRON sp.
No. 1624. From the Chosen Imperial Grounds, Keijo, October 26, 1929.

82171. RHODODENDRON sp.
No. 1625. From the Chosen Imperial Grounds, Keijo, October 26, 1929.

82172. RHODODENDRON sp.
No. 1637. From the woods of the Chosen Imperial Grounds, Keijo, October 27, 1929. Said to be native to Chosen.

82173. RHODODENDRON sp.
No. 1638. From the woods of the Chosen Imperial Grounds, Keijo, October 27, 1929. Said to be native to Chosen.

82174. RHODODENDRON sp.
No. 1722. From Funai or Koka village, island of Kokato, November 10, 1929.

82175. RHODODENDRON sp.
No. 1723. From the village of Kan-chori, island of Kokato, November 10, 1929.

82176 to 82181.
From Chosen. Seeds collected by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received December 9, 1929.


82176. No. 1580. From the arboretum of the forestry branch of the Agricultural Experiment Station, Sulgen, November 2, 1929. An interesting native variety.


82178 to 82180. ROSA spp. Rosaceae. Rose.

82178. ROSA sp.
No. 1582. From the arboretum of the forestry branch of the Agricultural Experiment Station, Sulgen, November 2, 1929, and said to have originally come from Siberia. A small plant with very shiny green leaves and black hips.

82179. ROSA sp.
No. 1594. A native Chosen species from the Forestry Experiment Station of the Government General of Chosen, Keijo, November 6, 1929.

82180. ROSA sp.
No. 1598. From the Forestry Experiment Station of the Government General of Chosen, Keijo, November 6, 1929. A strong-growing species with rather long, pointed, bright-red hips.

No. 1592. From the Forestry Experiment Station of the Government General of Chosen, Keijo, November 11, 1929. Trailing vines with rather small leaves.

82182 to 82230. SOJA MAX (L.) Piper (Glycine hispida Maxim.). Fabaceae. Soybean.

Chonte. A variety bearing medium-sized, yellowish-green to green seeds with a brown hilum. The seeds are used as boiled beans with other foods.
82184. No. 1207. Obtained near the East Gate, Keijo, November 5, 1929. *Purapoma*. A variety bearing medium-sized yellow seeds having a pale-brown to dark-brown hilum, used as boiled beans and for cattle feed.

82185. No. 1208. Obtained near the East Gate, Keijo, November 6, 1929. *Kirugumatu*. A variety having medium-sized yellow seeds with a light-brown hilum, used for making bean curd, miso, and soy sauce.

82186. No. 1211. From the grain market, Rensen. Medium-sized beans with a brown hilum, used as boiled beans with other foods and also boiled for cattle feed.

82187. No. 1212. Obtained in the village of Rensen, November 7, 1929. *Puran Page*. Medium-sized, nearly round, black seeds with the hilum varying from pale brown to dark brown; used in making bean curd, miso, and soy sauce.

82188. No. 1213. From the grain market, Rensen. Medium-sized yellow seeds with a light-brown hilum; used for making bean curd, miso, and soy sauce.

82189. No. 1214. From the grain market, Rensen. Medium-sized, yellow seeds with the hilum varying from pale brown to a russet brown; used as boiled beans with other foods and also boiled for cattle feed.

82190. No. 1215. A large black-seeded variety, used as boiled beans.

82191. No. 1216. Obtained in the Prefecture. Large, nearly round, yellow seeds with a light-brown hilum; used in making bean curd, miso, and soy sauce.

82192. No. 1217. A slender variety 3 to 4 feet high, with medium-sized seeds having a brown hilum; used as boiled beans and also boiled for cattle feed.

82193. No. 1218. Medium-sized yellow seeds with a brown hilum; used as boiled beans and also boiled for cattle feed.

82194. No. 1219. Medium-sized greenish-yellow seeds with a brown hilum; used as boiled beans.

82195. No. 1220. Medium-sized yellow seeds with a brown hilum; used as boiled beans.

82196 to 82201. Near Zenkoku, November 7, 1929.

82196. No. 1221. *Puran Page*. A variety with very large pods, 2½ to 3½ inches long, containing large, much flattened, black and greenish-yellow seeds; used as a green vegetable and as boiled beans.

82197. No. 1222. *Kirugumate*. A variety 30 to 36 inches high, bearing very small yellow seeds with a russet-brown hilum; used for sprouts and as boiled beans with other foods.

82198. No. 1223. *Komijankon*. Large black seeds with the seed coat more or less split; used as boiled beans.

82199. No. 1224. *Pankon*. Large yellow seeds with seed coat split to a very considerable extent; used as boiled beans and also boiled for cattle feed.

82200. No. 1225. *Puran Page*. Medium-large yellowish-brown seeds; used as a green vegetable and also as boiled beans.

82201. No. 1226. Medium-sized greenish-yellow seeds used as boiled beans and also boiled for cattle feed.

82202. No. 1229. From the Chosen Fair soybean exhibit, Keijo, November 8, 1929; originally grown in Kogendo Prefecture. Large, nearly round, yellow seeds with a light-brown hilum; used for making bean curd, soy sauce, and miso.

82203. No. 1230. From the Chosen Fair soybean exhibit, Keijo, November 8, 1929; originally grown in Keikido Prefecture. Seeds medium sized, nearly round, with a pale hilum; used in making bean curd, miso, and soy sauce.

82204 to 82216. Obtained near Kokato, November 11, 1929.


82205. No. 1243. *Komjanjkon*. Medium-sized, black, slightly flattened seeds used as boiled beans and in making confectons.

82206. No. 1244. *Hinkon*. Medium to medium-large seeds usually with a pale hilum, but sometimes having a brown hilum; used as boiled beans and also boiled for cattle feed.

82207. No. 1245. *Kirumukon*. A variety with very small, nearly round, yellow seeds with a light-brown hilum; used for sprouts.

82208. No. 1246. A variety with very small, nearly round, black seeds which are of the Kingston type [No. 17255], but the hilum is yellow. The variety may be of value for sprouts.

82209. No. 1247. *Hinkon*. Glossy yellow seeds with a brown hilum; used as boiled beans and also boiled for cattle feed.

82210. No. 1248. Seeds medium sized and marbled with brown and yellow, and having a brown hilum; the seed coat is glossy.

82211. No. 1249. *Komujankon*. Seeds mixed blacks, very similar to those of the old Wilson variety [No. 19183].

82212. No. 1250. Mixed sample of medium to medium-large seeds varying from greenish yellow to yellow; used as boiled beans for cattle feed.

82213. No. 1251. *Nxupuru*. Medium-sized greenish-yellow seeds with a bluish tinge; used as boiled beans.

82214. No. 1252. *Funkon*. Mixed sample of yellow seeds varying in size and shape and in the color of the hilum. The seeds are more or less mottled with brown.

82215. No. 1253. *Komjancon*. Mixtures of black seeds varying in size and shape, but all more or less flattened.
82182 to 82330—Continued.

82216. No. 1254. *Keryian*. Medium-sized yellow seeds varying somewhat in the color of the hilum; said to be native to Chosen; used in making confections.

82217. No. 1255. From Sosha, near Jinsen, November 11, 1929. *Komujankon*. Medium-sized black, somewhat flattened seeds; used as boiled beans.

82218. No. 1256. From Sosha, near Jin- sen, November 11, 1929. *Menunikon*. Medium-sized yellow seeds, more or less mottled with brown, with a light-brown to brown hilum; used as boiled beans and also boiled for cattle feed.


82221. No. 1266. Near Kokato, November 11, 1929. *Chonteprunko*. A mixed variety, undoubtedly heterozygous, with yellow to yellowish green, medium to medium-large seeds; used as boiled beans and also boiled for cattle feed.

82222. No. 1604. From the Asamí bean curd or tofu shop, Kagemori, October 18, 1929. Medium-seized yellow seeds grown in this region and used in the manufacture of bean curd.

82223. No. 1605. From the Asamí bean curd or tofu shop, Kagemori, October 18, 1929. *Sapporo*. A medium-sized, round, yellow-seeded variety grown in this region and used in the manufacture of bean curd.

82224. No. 1606. From a farmer's field near Kagemori, October 18, 1929. A medium-sized yellow-seeded variety, said to be native to Chosen.

82225. No. 1607. A medium-sized, nearly round, yellow-seeded variety grown in Manchuria; grown largely in this section for the seeds, which are used in the manufacture of bean curd.

82226. No. 1608. A medium-large, nearly round, yellow-seeded variety with a brown hilum, said to be native to Manchuria; grown extensively in this region for the seeds, which are used in the manufacture of bean curd.

82227. No. 1609. A very small yellow round-seeded variety, more or less mixed; said to be native to Chosen.

82228. No. 1610. A medium-large, greenish-yellow seeded variety with a gray pubescence; said to be native to Manchuria; used for bean curd.

82229 to 82237. Obtained in the Chosen farmers' market, Kelo, October 28, 1929.

82229. No. 1640. *Pimajo*. A variety bearing black-and-white seeds with the seed coat split in fine network; said to be used in making confections.

82230. No. 1641. *Kamunjon*. A medium-sized, slightly flattened, black-seeded variety, said to be native to Chosen; used for making confections.

82231. No. 1642. *Purukon*. A medium-sized, nearly round-seeded variety, said to be native to Chosen; used in making confections.

82232. No. 1643. *Ute*. A very small, light-yellow, round-seeded variety, said to be native to Chosen and to be used for sprouting.

82233. No. 1644. *Menumin*. A variety bearing medium-large, slightly flattened, black-and-brown seeds with the black in concentric rings like the Meyer variety [No. 17852]. It is said to be used in making confections.

82234. No. 1645. *Parakon*. A medium-large green-seeded variety, said to be native to Chosen.


82236. No. 1647. *Burukon*. A medium-large, slightly flattened, green-seeded variety, said to be native to Chosen.

82237. No. 1648. *Hinkon* No. 2. A yellow-seeded variety which appears to have variations in the size of the seeds and in the color of the hilum; said to be native to Chosen.

82238. No. 1649. *Hinkon* No. 1. A medium-sized yellow-seeded variety with a pale hilum; said to be native to Chosen.

82239. No. 1650. *Konekon*. A medium-large, nearly round, black-seeded variety, said to be native to Chosen.

82240. No. 1651. *Kurugunbunko*. Large, nearly round, yellow seeds slightly mottled with brown and having a pale hilum; said to be native to Chosen. The seeds are of the Dixie type.

82241. No. 1652. *Chonte*. A medium-large, nearly round, green-seeded variety, said to be native to Chosen.

82242. No. 1653. *Funkoe*. A medium-sized yellow-seeded variety, more or less mixed; said to be native to Chosen.

82243. No. 1654. *Menunikon*. A variety with medium-sized, slightly flattened, black-and-brown seeds, the black arranged in concentric rings like the Meyer variety [No. 17852]. It is said to be native to Chosen.


82245. No. 1656. *Kirugumu*. A very small, yellow, round-seeded variety, excellent for sprouting and used in Chosen for this purpose. It is said to be native to Chosen.

82246. No. 1657. *Funkonja*. A medium-sized, nearly round, yellow-seeded variety, more or less mixed. It is said to be native to Chosen.

82247. No. 1658. *Hinkon Kamujankon*. A medium-large, slightly flattened variety which is not a pure sort, as the seeds vary from black and brown.
32182 to 32330—Continued.

to black. It is said to be native to
Chosen and is used for confections.

32245. No. 1659. Kamujan. A medi-
urn-large, slightly flattened, black-
seeded variety, said to be native to
Chosen.

32249. No. 1660. Hinukon. A medium-
large, nearly round, yellow-seeded
variety, said to be native to Chosen.

32250. No. 1661. Purunkon. A medi-
large brown variety, said to be native
to Chosen.

32251. No. 1662. Hinukyon. A va-
variety bearing medium-large, yellow
seeds with a pale hilum, said to be
native to Chosen. The seeds are
of the Dixie type.

32252. No. 1663. Funron. A variety
bearing large, nearly round, deep-
green seeds, said to be native to
Chosen.

32253. No. 1664. Komujonkon. A va-
variety bearing medium-large, nearly
round, black seeds which are used in
making confections. It is said to be
native to Chosen.

small, nearly round, yellow-seeded
variety with a pale hilum. It is said
to be native to Chosen and to be used
for sprouting.

32255. No. 1666. Kamujonkon. A va-
variety bearing medium-large, more or
less flattened black seeds, said to be
native to Chosen and used in mak-
ing confections.

32256. No. 1667. Kirute. A variety
bearing medium-small, round, yellow
to olive-yellow seeds, said to be
native to Chosen and used for
sprouting.

32257. No. 1668. Fakute. A variety
bearing medium-large, slightly flat-
tened, black seeds. It is said to be
native to Chosen and to be used for
making confections.

32258. No. 1669. Kirute. A variety
bearing medium-small, nearly round,
yellow seeds with a pale hilum. It
is said to be native to Chosen and to
be used for sprouting. It appears
to be an excellent bean for this
purpose.

32259. No. 1670. Chonte. A medium-
sized greenish-yellow variety with a
pale hilum, said to be used as boiled
beans and also boiled as cattle feed.

32260. No. 1671. Chonte. A medium-
large, green, nearly round variety,
used for boiling with other foods.

32261. No. 1672. Chonte. A medium-
sized green variety with a light-
brown hilum; used for boiled beans
and also boiled as cattle feed.

32262. No. 1673. Pepute. A medium-
large yellow variety with variations
as to the color of the hilum; used
in making bean curd, miso, and soy
sauce.

32263. No. 1674. Pepute No. 2. A
medium-sized, yellow, more or less
mixed variety, used for making bean
curd, miso, and soy sauce.

32182 to 32330—Continued.

32264. No. 1675. Kwae Jo. A very
small, nearly round, yellow variety,
used for sprouts and also cooked as
cattle feed.

32265. No. 1676. Ko Ko Te. A very
small black-seeded variety, nearly
round, very similar in size and shape
to the Kingston [No. 17255]. It is
used for boiling.

32266. No. 1677. Shin Fun. A medi-
un-sized green variety, used for
boiling with other foods.

32267. No. 1683. Hinukon. A medium-
large yellow-seeded variety, used in
making bean curd, miso, and soy
sauce, and also boiled as cattle feed.

32268 to 32281. Near Koryoho, October,
1929.

32269. No. 1814. Bam Pan Kon. A
variety bearing medium-sized green
seeds with a deep-brown hilum; used
for food purposes.

32270. No. 1815. Bam Mi Kon. A me-
dium-large brown variety with a split
seed coat; used as boiled beans with
other foods.

32271. No. 1816. Chotan. Medium-
sized yellow seeds with variations in
the color of the hilum; used for
bean curd, miso, and soy sauce.

32272. No. 1817. A variety said to
be white; it is undoubtedly an es-
caped cultivated variety that volun-
teers freely. The seeds are olive
green, medium sized, and much flat-
tened and are easily shattered.

32273. No. 1819. Bam Pan Kon. Me-
dium-large buff-colored seeds with the
seed coat more or less split; used as
boiled beans and also cooked as
cattle feed.

32274. No. 1820. Chotan. A medium-
sized yellow variety more or less
mixed as to the color of the hilum;
used for bean curd, miso, and soy
sauce.

32275. No. 1678. Chotan. A medium-
large, green, medium sized, and much
flattened, and a sooty black. The
plants have a pale hilum; used exten-
sively because of their quality for bean
curd.

32276. No. 1679. Chotan. A medium-
large buff-colored seeds with the
seed coat more or less split; used as
boiled beans and also cooked as
cattle feed.

32277. No. 1682. Oriaru Kon. Seeds
mixed, but mostly of a bluish-green
color; used for cooking.

32278. No. 1683. Medium-sized black,
slightly flattened seeds, used as
boiled beans with other foods.

32279. No. 1684. A variety said to
be wild, but it appears much like
Sooty [No. 16790-A]. The plants
are erect, not viny, quite branching,
and the seeds are easily shattered.
The seeds are medium small, much
flattened, and a sooty black.

32280. No. 1825. Mixed sample of
black and yellow beans used as
boiled beans.

32281. No. 1826. Seeds medium large,
black; used for boiled beans and in
making confections.

32281. No. 1827. A mixture of yellow
seeds, used for making miso, bean
curd, and soy sauce.
82182 to 82330—Continued.

82282. No. 1828. Obtained at the railway station, Chotan, October 30, 1929. Chotan. Medium-sized yellow seeds with a pale hilum; used for making bean curd, miso, and soy sauce.

82283. No. 1829. From a farmer's field near Yoryoho, October 30, 1929. A large, yellow-seeded, somewhat flattened variety; used for boiling with other foods.

82284. No. 1830. A sample of the improved Chotan variety, obtained from the Director of the Soybean Improvement Society in the Yunai section, Chotan, October 30, 1929. A medium-sized yellow variety with a pale hilum. Because of its high protein content it is especially valuable for making soybean curd, and is exported to the main island largely for this purpose.

82285 to 82316. Obtained in the Chosen farmers' market at Kyo, October, 1929.

82285. No. 1840. Somo Kute. A very small, nearly round, black variety, very similar to Kingston [No. 17250], but with a yellow germ; used for boiling and also boiled as cattle feed.

82286. No. 1841. Kon Chote. A very small, nearly round, yellow-seeded variety, more or less mixed, used for sprouting and also boiled as cattle feed.

82287. No. 1842. Kon Pute. A mixed sample of black varieties ranging from medium small to medium large; used as boiled beans with other foods.

82288. No. 1843. Paru Kon Hon. Medium-sized brown seeds, used as boiled beans with other foods.

82289. No. 1844. Kon Pute. Medium-large black seeds with the seed coat having a tendency to split; used as food.

82290. No. 1845. Kon Chotan. Medium-large medium-yellow beans, more or less mixed; used for tofu, miso, and soy sauce.

82291. No. 1846. Kon Sui Yen. Seeds very small, yellow, nearly round; used for sprouting and also for cooking.


82293. No. 1848. Purute. Seeds medium sized, brown; used as boiled beans.

82294. No. 1849. Kon Chotan. Medium-sized yellow seeds, grown in the Chotan section; said to be excellent for making bean curd.

82295. No. 1850. Maru Kon Chotan. Seeds medium sized, yellow, but mixed as to the color of the hilum; originally from the Chotan district; used for making bean curd, miso, and soy sauce.

82296. No. 1851. Kon Konganoto. Seeds large, yellow, mixed as to color of hilum; used for bean curd, miso, and soy sauce.

82297. No. 1852. Otaru. Medium-large black-and-brown seeds with the colors arranged in concentric bands like the Meyer [No. 17652]; used as boiled beans and in making confections.

82298. No. 1853. Kon Jon Kon. A medium-sized black variety, used for boiling with other foods and also in making confections.

82299. No. 1854. Kon Kiru Muten. A small, yellow to greenish, nearly round variety, used for sprouting and also cooked for cattle feed.


82301. No. 1856. Kiru Gunte. Medium-small, nearly round, yellow seeds with a slate-brown hilum; used for sprouting and as boiled beans.

82302. No. 1857. Kiru Gunte. Very small, nearly round, yellow variety, somewhat mixed; used for sprouting and boiled as cattle feed.

82303. No. 1858. Hon Kon. Medium-large yellow seeds with a pale hilum; used for bean curd, miso, and soy sauce.

82304. No. 1859. Fin Kona Pute. A medium-sized, yellow, more or less mixed variety; used for bean curd and also boiled as cattle feed.

82305. No. 1860. Kon Jon Kon. A medium-large black variety, used for boiling and also for making confections.

82306. No. 1861. Kirun Kon. A very small, nearly round, yellow, more or less mixed variety; used for sprouting and also boiled as cattle feed.

82307. No. 1862. Hon Kon. A medium-sized yellow variety with a pale hilum; used for making bean curd, miso, and soy sauce. It is very similar to Chotan.

82308. No. 1863. Kon Chonte. A medium-sized greenish-yellow variety, very similar to Tokyo [No. 17264]. Used as boiled beans and also cooked as cattle feed.

82309. No. 1864. Hon Kon. A medium-sized yellow-seeded variety with a russet-brown hilum; used for bean curd and miso and also boiled for cattle feed.

82310. No. 1865. Kon Jon Kon. A large black-seeded variety, used for boiling with other foods and also in making confections.

82311. No. 1866. Kon Papute. Seeds medium sized, yellow, with variations in the color of the hilum; used for cattle feed when boiled.

82312. No. 1867. Kirby Gunte. A very small, nearly round, yellow-seeded variety, used for sprouts and also boiled for cattle feed.

82313. No. 1871. Kon Chone. A medium-small green variety with a light-brown hilum; used for cooking with other foods.

82314. No. 1872. A medium-sized yellow sample, but mixed as to varieties; used for bean curd, miso, and soy sauce, and also boiled for cattle feed.
82315. No. 1873. Medium-sized, yellow seeds, more or less mottled with brown, with many variations as to color of hilum; used for miso and also cooked for cattle feed.

82316. No. 1874. A medium-large, black, slightly flattened variety, used as boiled beans and also for making infections.

82317. No. 1876. Obtained in Sulgen, November 2, 1929. Kom Jon Kon. Black seeds of evidently several varieties varying from medium small to medium; used for boiled beans with other foods.

82318. No. 1877. Obtained in Sulgen, November 2, 1929. Fun Kon. Seeds yellow, but of several varieties; used in making miso and also cooked for cattle feed.


82327. No. 1889. Seeds medium; used for sprouts and boiled beans.

82328. No. 1890. Medium-large black seeds, used as cattle feed when cooked.

82329. No. 1891. Seeds of a medium-large black, slightly flattened variety, used as boiled beans and also for making infections.

82330. To 82333. FROM CHOSEN AND JAPAN. Seeds collected by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received December 9, 1929.

82331. Sophora sp. Fabaceae.

82332. No. 1551. From trees, 20 feet or more high, growing in the Imperial Botanical Garden, Keijo, October 26, 1929.

82333. No. 1564. From Keijo, October 28, 1929.


82335. No. 1708. From an upland valley with apparently rather adverse conditions, between Rensen and Zenkoku, November 7, 1929.

82336 to 82340. From the Chosen farmers' market, Keijo, October 31, 1929. Sasa.

82336. No. 1595. From the forestry branch of the Agricultural Experiment Station, Suigen, November 2, 1929.


82342 to 82358. From Chosen and Japan. Seeds collected by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received December 9, 1929.

82342. No. 1618. From the Chosen Imperial Tree Peony Gardens, Keijo, October 26, 1929. Plants about 3 feet long with numerous long stems and quite an abundance of flower heads.

82344. No. 1618. From the Chosen Imperial Grounds, Keijo, October 26, 1929. Seeds deep purple.
82342 to 82358—Continued.

82345. No. 1619. From the Chosen Imperial Grounds, Keijo, October 26, 1929.

82346. Viburnum sp. Caprifoliaceae.

No. 1552. From the Imperial Botanical Garden, Keijo, October 26, 1929. A variety said to be native to Chosen, with handsome foliage varying from green to deep maroon, and black fruits.

82347 to 82351. Vigna sinensis (Torner) Savl. Fabaceae.

82352. No. 1532. From the Imperial Botanical Garden, Keijo, November 11, 1929. Tonbu. A brown-eyed, small, white variety used as food.

82353. No. 1565. From the Imperial Botanical Garden, Keijo, November 6, 1929. A shrub about 8 feet high.

82354. (Undetermined.)

82355. (Undetermined.)


No. 1517. From the Forestry Experiment Station of the Government of Chosen, Keijo, November 6, 1929. For previous introduction see No. 71146.

82357. (Undetermined.)

82358. (Undetermined.)

82359 to 82383.

From Nancy, France. Plants purchased from Lemoine & Sons. Received December 17, 1929.

PLANT MATERIAL INTRODUCED
82359 to 82383—Continued.


A deciduous climbing shrub with ovate-oblong leaves 2 to 4 inches long, and white clethralike flowers, either solitary or in few-flowered clusters, followed by berrylike black fruits. Native to northwestern China.

82367. *ESCALLONIA* sp. Escalloniaceae.

C. F. Ball. A red-flowered hybrid made by C. F. Ball at the Botanic Gardens, Glasnevin. It is believed to be a cross between *Escallonia rubra* and *E. macrantha*.

For previous introduction see No. 50101.

82368 to 82371. *JASMINUM* spp. Oleaceae.


A slender shrub about 3 feet high, with grooved branchlets and leaves reduced to one lanceolate leaflet 2 to 4 inches long. The pink to deep-rose, salver-shaped fragrant flowers are borne in clusters of one to three. Native to western China.


6 feet high, with hairy, angled branchlets, compound leaves of three to five ovate leaflets, and yellow flowers in clusters of three to nine, followed by black fruits. Native to central China.

82370 and 82371. *JASMINUM HETEROPHYLLUM* Roxb.

82370. A stout shrubby jasmine with shiny, alternate, narrowly oval leaves up to 5 inches long. The flowers are yellow, up to one-third of an inch long, and occur in compound cymes.

82371. Variety *glabricymosum*. A smooth-flowered form of this Himalayan shrub which is said to be native to China. It is a strong-growing bush with a profusion of golden-yellow flowers.

For previous introduction see No. 76581.

82372 to 82374. *NEILLIA* spp. Rosaceae.

82372. *NEILLIA LONGRACEMOSA* Hemsl.

A deciduous shrub up to 10 feet high, with ovate-cordate, usually entire leaves 2 to 3 inches long, and tubular pink flowers in dense solitary racemes sometimes 6 inches long. Native to western China.

82373. *NEILLIA RIBESIFOIDES* Rehder.

A deciduous shrub 3 to 6 feet high, with triangular-ovate, usually 3-lobed leaves, and clusters of pink flowers. Native to western China.

82374. *NEILLIA THIBETICA* Franch.

A deciduous shrub closely related to *Neillia longiracemosae*, but usually 3 to 6 feet high, the leaves slightly three lobed, and the racemes shorter. Native to western China.

82375. *NOTOHDAPANAX DAVIDI* (Franch.) Harms. Araliaceae.

An evergreen shrub with smooth brownish bark, thick leathery bright-green entire or sometimes 3-lobed leaves, and rather large greenish-white flowers in terminal racemose umbels up to 6 inches long. Native to the mountains of Moupin, China.


An evergreen shrub, native to China, up to 15 feet high, with opposite, oblong, spiny-toothed leaves 4 to 6 inches long, axillary or terminal panicles of small fragrant white flowers, and ovoid fruits. For previous introduction see No. 77688.

82377. *OSMANTHUS SERRULATUS* Rehder.

An evergreen shrub or small tree, native to China, sometimes 35 feet high, with coriaceous obovate spiny serrulate leaves 3 to 5 inches long, panicles of fragrant white flowers, and black fruits. It is closely related to *Osmanthus fragrans*.

For previous introduction see No. 77659.


Variety *fargesii*. A handsome variety introduced from central China by the late Maurice de Vilmorin. It differs from the well-known type by its taller branches, more ample foliage, and larger pendulous flowers of a snowy whiteness.

For previous introduction see No. 78156.


A deciduous shrub, closely related to *Viburnum carlesii*, with more slender branchlets and smaller leaves and cymes. It is a shrub 3 to 5 feet high, bearing fragrant white flowers and blue-black fruits. Native to Japan.

82380. *VIBURNUM CYLINDRICUM* Buch.-Ham.

A handsome evergreen shrub or small tree which is very distinct because of its tubular-campanulate flowers. The dark dull-green, nearly entire oblong leaves are 3 to 8 inches long, the white flowers have violet anthers, and the fruits are blue black. Native to the Himalayas and western China.

For previous introduction see No. 47826.

82381. *VIBURNUM FRAGRANS* Bunge.

A shrub up to 10 feet high, bearing an abundance of very fragrant flowers which are white shaded with rose and appear in the early spring before the leaves. The elliptic, serrate leaves are 2 to 4 inches long, with purplish peti- oles, and the ovoid fruits are blue black. Native to northern China.

For previous introduction see No. 66519.

82382. *VIBURNUM PROPINQUUM* Hemsl.

An evergreen shrub with lustrous red-brown branchlets, elliptic to ovate-lanceolate nearly entire leaves 2 to 4 inches long, and greenish-white flowers followed by globose blue-black fruits. Native to central and western China.
From Erfurt, Germany. Bulbs purchased 82384 to 82396—Continued.

For previous introduction see No. 66323.

82384 to 82396.

From Erfurt, Germany. Bulbs purchased from Haage & Schmidt. Received December 16, 1929.

82384 to 82394. ALLIUM spp. Liliaceae.

For previous introduction and description see No. 82009.

82385. ALLIUM AUREUM Hort.

A blue-flowered onion, to be grown for identification.

82386. ALLIUM CYANEUM Regel.

A rather dwarf plant, less than a foot high, with small heads of pendulous bright-blue flowers. Native to northern China.

For previous introduction see No. 75979.

82387. ALLIUM GIGANTEUM Regel.

One of the tallest members of the genus, becoming 4 feet high. It is native to the Himalayas. The bulbs are large, and the fleshy leaves are about 18 inches long, lying close to the ground. The bright-lilac flowers are in heads 4 inches in diameter.

For previous introduction see No. 75981.

82388. ALLIUM GLACUM Hort.

An onion with broad glaucous leaves and small heads of rose-colored flowers in September.

82389. ALLIUM NARCISIFLORUM VIII.

For previous introduction and description see No. 82016.

82390. ALLIUM OSTRORSKIANUM Regel.

For previous introduction and description see No. 82017.

82391. ALLIUM PENDULINUM Tenore.

An alpine, native to Italy, with linear keeled leaves and long-peduncled nodding whitish flowers.

For previous introduction see No. 75989.

82392. ALLIUM ROSENBACHIANUM Regel.

A bulbous perennial, native to Turkestan, with oblong lanceolate leaves 8 inches high, and a large globular umbel of purple flowers on a scape 2 feet high.

For previous introduction see No. 76209.

82393. ALLIUM SCHUBERTII Zucc.

A large bulbous plant, native to Asia Minor and Persia, with broadly strap-shaped leaves, and huge subglobose rose-colored flower heads which are at times a foot in diameter.

82394 to 82396—Continued.

82394. ALLIUM SITPURITUM Regel.

A herbaceous perennial with linear-lanceolate leaves, a stem 2 to 3 feet high, and many-flowered hemispheric umbels of rose-like fragrant flowers. Native to central Asia.

82395. NOTHOSCORDUM FRAGRANS (Vent.) Kunth. Liliaceae.

A bulbous plant, native to tropical America, closely related to the onion. The bulb is round and yellowish white, and the ear, obtuse leaves are 8 to 12 inches long. The fragrant flowers, white flushed with pink, have purplish stamens and anthers and are borne on a scape 20 inches high.

For previous introduction see No. 79175.


Variety sikkimensis. A form with more numerous flowers of a different shade of purple from the type, which is a herbaceous perennial a foot high, with lanceolate leaves and purple, pale-lilac, or white flowers in a sessile spike. Native to the Himalayas in northern India.

82397. QUERCUS SUBER L. Fagaceae.

Cork oak.

From Santa Olalla, Huelva, Spain. Acorns presented by Edward E. Silvers, Armstrong Cork Co., Seville, through Frank L. Goll, Bureau of Plant Industry. Received December 20, 1929.

For previous introduction see No. 76019.

82398. FICUS ALTISSIMA Blume. Moraceae.

Lofty fig.

From Oneco, Fla. Plants presented by N. A. Reasoner, Royal Palm Nurseries. Received November 4, 1929.

A large spreading tree native to the tropical Himalayas. It is said to yield as good caoutchouc as its relative, Ficus elastica.

For previous introduction see No. 47843.

82399. BUTIA CAPITATA (Mart.) Becari (Cocos capitata Mart.). Phoe nicaceae.

Palm.

From Nice, France. Seeds collected by H. S. Fawcett, College of Agriculture, University of California, Riverside, Calif. Received December 12, 1929.

A large coconuttike palm, native to Argentina, with a spineless trunk, pinnate leaves, and large bunches of small edible fruits. It is said to be harder than any species of Cocos.

For previous introduction see No. 77149.


Apple.

From Saona, near Padua, Italy. Trees purchased from Fratelli Sgaravatti. Received December 14, 1929.

Limoncella. A winter apple producing ovoid, medium-sized fruits with yellow skin and tender flesh of exquisite flavor.

82401 to 82403.

From Heijo, Chosen. Seeds collected by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received December 16, 1929.
82401 to 82403—Continued.


No. 1784. Obtained in the market, November 18, 1929. Rubus. The native name may mean hawthorn or small fruit. The fruits are medium sized.

82402. CELASTRUS ARTICULATUS Thumb. Celastraceae.

No. 1768. A vine climbing over a rosebush along the roadside northwest of Helio, November 17, 1929.

82403. SOJA MAX (L.) Piper (Glycine hispida Maxim.). Fabaceae. Soybean.

No. 1252. November 16, 1929. Purakos. A variety with medium-sized oval-shaped brown seeds, said to be used for cattle feed when boiled.

82404 and 82405. MEDICAGO SATIVA L. Fabaceae.

From Italy. Seeds obtained through H. L. Westover, Bureau of Plant Industry. Received December 20, 1929.

82404. From the Stabilimento Guido Calosi, Florence.

82405. From Fratellina Ingegnolia, Milan.

82406. FRAGARIA HAGENBACHIANA Lange. Rosaceae. Strawberry.

From Paris, France. Plants presented by Vilimorin-Andrieux & Co. Received December 26, 1929.

A French strawberry closely related to Fragaria viridis, but flowering earlier and having all the leaflets persistent.

82407. PISTACIA VERA L. Anacardiaceae.

From Rahimabad, Persia. Seedlings collected by W. E. Whitehouse, Bureau of Plant Industry. Received December 27, 1929.

No. 174. From the nursery of Cholam Reza Yezdi, November 19, 1929. Seedlings grown by a Persian pistache grower from selected nuts of large size.

82408. BROMELIA PINGUIN L. Bromelliaceae.

From Rio Piedras, Porto Rico. Seeds presented by Pedro Osuna, Horticulturist, Insular Experiment Station, Department of Agriculture and Labor. Received December 27, 1929.

A tropical succulent plant, 3 to 4 feet high, with spiny margined leaves that turn red with age. The reddish flowers are in dense panicles, and the acid fruits, the size of plums, yield a cooling juice. Native to the West Indies.

For previous introduction see No. 76199.


From Zacapam, Huatusco, Vera Cruz, Mexico. Seeds presented by Dr. C. A. Purpus. Received December 27, 1929.

The horsechestnut-leaved pochote is a medium-sized tree 20 to 30 feet high and usually diffusely branched. Its trunk and larger branches bear stout coarse spines. The leaves are palmately compound, with five to seven elliptic or obovate leaflets, 2 to 8 inches long, usually glaucous beneath. The flowers are white at first, but turn brown with age. The petals are 4 to 6 inches long, yellow, hairy on the outside. The seed pods are ellipsoid oblong, 5 to 8 inches long, five celled, with five segments about one-fourth of an inch thick, and bearing on the placental membranes white downlike kapok and brown finely roughened seeds, irregularly spherical, one-fourth of an inch in diameter. The down, consisting of fine unicellular hairs about an inch long, may serve the same purpose as kapok for filling mattresses, cushions, life preservers, and insulation. This tree is native from Vera Cruz across southern Mexico to southern Jalisco and southward to Guatemala.

82410 to 82412. DIOSPYROS KAKI L. f. Diospyraceae. Kaki persimmon.

From Kejlo, Chosen. Scions collected by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received December 23, 1929.

Obtained from trees at the residence of Chino Herata on Kejlo Shrine, November 21, 1929.


82411. No. 1932. Bansht. A rather small flat persimmon, supposed to be the same as No. 1931 [No. 82410], but the scions are from a different tree.


82413 to 82418. AMYGDALUS PERSICA L. (Prunus persica Stokes). Amygdalaceae. Peach.

From Palestine. Seeds presented by A. Grasovsky, Subinspector of Agriculture and Forests, Southern Circle, Jerusalem. Received December 30, 1929.


82416. No. 3. Franji. From Nazareth.

82417. No. 4. Franji. From Artas.

82418. No. 5. Franji. From Acre.

82419 to 82446.

From Chosen. Seeds collected by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received December 23, 1929.

82419. CHRYSANTHEMUM MORIFOLIUM (Ramat.) Hemsl. Asteraceae. Mulberry chrysanthemum.

No. 1745. Obtained at the base of Shuriin Fuji to the south and southeast of Shariin, November 14, 1929. A rather tall-growing wild species with yellow flowers about half an inch in diameter.


82421. DIOSPYROS LOTUS L. Diospyraceae. Dateplum.
Continued.

No. 1730. Obtained from young trees or rather water sprouts at Koka, island of Kokato, November 10, 1929. A native wild species used for stocks.


No. 1719. From a vine on the hill north of the village of Koka, near the office of the village society, island of Kokato, November 10, 1929.

EUONYMUS sp. Celastraceae.


EUONYMUS sp. Celastraceae. Bittersweet.

No. 1749. Obtained in the market at Kokakashu, November 15, 1929. Used chiefly for noodles.

EUONYMUS sp. Celastraceae.

No. 1784. Gathered along the mountain side near Fusanmeu, November 17, 1929. A variety over 3 feet high.

FRAXINUS sp. Oleaceae. Ash.

No. 1748. Obtained from young trees in the garden of the Chikuzenya Inn, Shariin, November 17, 1929. Seeds from what was left in a small planted area of Chosen native cotton.

LESPEDEZA sp. Fabaceae. Pea.

No. 1783. Obtained in the Chosen grain market at Keijo, November 21, 1929. Reddish, medium-sized, wrinkled seeds.

RHAMNUS sp. Rhamnaceae. Buckthorn.

No. 1770. Obtained from the plants along the mountain side northwest of Heijo, November 17, 1929.

RHODODENDRON sp. Ericaceae. Azalea.

No. 1750. Obtained from the garden of the Chikuzenya Inn, Shariin, November 15, 1929. A rather small-leaved variety 5 to 6 feet high.

RHODODENDRON sp. Ericaceae.

No. 1767. From small plants on the mountain side, Ringen, November 17, 1929. A variety 3 to 4 feet high.

TRIFOLIUM pratense L. Fabaceae. Red clover.

No. 1271. From plants in the village of Sanseri.

RIBES sp. Grossulariaceae.

No. 1721. Collected just back of the office of the village society, Fusan or Koka, island of Kokata, November 10, 1929, and also from plants in the village of Sanseri.

ROSACEAE sp. Rosaceae. Rose.

No. 1769. Collected from plants along the roadside northwest of Heijo, November 17, 1929. A variety 6 feet or more high which did not resemble the common wild rose of Japan.

TRIFOLIUM pratense L. Fabaceae. Red clover.

No. 1271. From plants in front of the Western Chosen Agricultural Experiment Station, Shariin, November 15, 1929. A variety about 2 feet high, with many stems and an abundance of seeds.

Common wheat.

From Russia. Seeds collected by A. J. Bruman. Received December 26, 1929.

From the Chongar Peninsula, a small peninsula in the Azof Sea, north of the Crimea, August, 1929. *Krimka Chongarka.* A winter wheat of the variety *Krimka* which was brought to Chongar from the Crimea about seven or eight years ago. It has apparently become thoroughly acclimated to the severe winters and extremely dry summers of Chongar. The name *Krimka Chongarka* is suggested for the reason that the variety has become quite distinct from the original *Krimka."

82448 to 82467. TRITICUM AESTIVUM L. (T. vulgare Vill.). Poaceae.

Common wheat.

From Sydney, New South Wales, Australia. Seeds received were irregularly subglobose and very white and when cooked might easily pass for a white potato of exceptionally high quality. The flesh of this yam is fine grained and weighed slightly more than a pound.

82468. DIOSCOREA SEPTEMLOBA (L.) Zucc. Dioscoreaceae.

Yam.

From Keijo, Chosen. Tubers collected by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received December 23, 1929.


82470 to 82488.

From Chosen. Seeds presented by T. Watanabe, Forest Experiment Station, Keijo. Received December 26, 1929.

82470. ABIES HOLOPHYLLA Maxim. Pinaceae.

Needle fr.

From Kyosen. A tall, handsome fir, eventually 100 feet or more high, with stout spreading or ascending branches and dark-green foliage.

For previous introduction see No. 66257.

82471. ACER PSEUDOSIEBOLDIANUM Komarov. Aceraceae.

Maple.

From Hosen. A small maple, native to Manchuria, with coriaceous leaves divided into 9 to 11 lanceolate serrate lobes, and corymbs of purple flowers.

For previous introduction see No. 78399.

82472. ACER TRIFLORUM Komarov. Aceraceae.

Maple.

From Hosen. A tree up to 25 feet high, with glabrous branchlets. The leaves are made up of three oblong-lanceolate leaflets with entire or coarsely toothed margins, and the flowers, in groups of three, are followed by densely pubescent fruits having wide-spreading, nearly straight wings nearly 2 inches long. Native to Chosen and Manchuria.

For previous introduction see No. 78400.

82473. ALNUS HIRSUTA SIBIRICA (Fisch.) C. Schneid. Betulaceae.

Alder.

From Keijo. A handsome tree, native to Siberia, 60 feet high, of broad-pyramidal habit and vigorous growth, with broadly ovate leaves, about 5 inches long, which are dark green above and glaucous beneath.

For previous introduction see No. 78409.

82474. BETULA DAVURICA Pall. Betulaceae.

Birch.

From Keijo. A tree up to 60 feet high, with widespread branches and purplish-brown flaky bark. The broadly wedge-shaped leaves, 2 to 4 inches long, are dark green above and have serrate margins.

For previous introduction see No. 78400.

82475. CORNUS COREANA Wanger. Cornaceae.

Dogwood.

From Heizan. A tree, native to Chosen, up to 60 feet high, with reddish-brown branchlets, dark-green, elliptic leaves 3 to 6 inches long, loose clusters of small white flowers, and black fruits.

For previous introduction see No. 78401.

82476. CORNUS OFFICINALIS Sieb. and Zucc. Cornaceae.

Japanese cornelian-cherry.

From Hosen. A shrub or small tree up to 30 feet high, closely resembling the common cornelian-cherry, *Cornus mas.* The ovate to elliptic leaves are 2 to 6 inches long and have large axillary tufts of brown hairs on the under side. The umbels of small yellow flowers are followed by oblong scarlet fruits. Native to Japan.

For previous introduction see No. 56924.
82470 to 82488—Continued.

82477. FORSYTHIA KOREANA Nakai. Oleaceae.

From Keijō. While a place of publication or a description for this name has not been found, the forsythias are hardly ornamental shrubs with yellow flowers much used in ornamental plantings, and the addition of another form is desirable.

82478. FRAXINUS CHINENSIS RHYNCHOPHYLLA (Hems.) Hemsl. Oleaceae. Ash.

From Junten. A rather small ash, native to China, 40 feet or less in height, with dark-green leaves, lighter beneath, ornamental shrubs with yellow flowers.

82479. FRAXINUS CHINENSIS RHYNCHOPHYLLA var. mandshurica Rupr. Oleaceae. Manchurian ash.

From Inritsu. A handsome ash, often 100 feet high, native to Japan and the adjacent parts of the Asiatic mainland. The leaves are up to 15 inches long, with dull-green bristly leaflets. The tree is said to be susceptible to late spring frosts.

For previous introduction see No. 66258.

82480 to 82488. LESPEDEZA spp. Fabaceae.

From Keijō.

82480. LESPEDEZA BICOLOR Turcz. Shrub bushclover.

A bushy, herbaceous perennial, native to Japan, which bears a profusion of rosy purple flowers, during the early autumn, practically covering the drooping branches which sometimes become 6 feet in length.

For previous introduction see No. 71390.

82481. LESPEDEZA FORMOSA (Vogel) Koehne, Purple bushclover.

Received as Lespedeza japonica intermedia, which appears to be a form of L. formosa. L. japonica intermedia was originally described as an erect semishrubby plant, 6 to 12 feet high, with trifoliate leaves of oblong leaflets and racemes of rosy purple flowers. Native to Chosen.


A shrubby bushclover from Chosen, resembling Lespedeza buergeri, from which it differs in the structure of its calyx. The leaves are very thin, dull-green above, bright green below, and the violet flowers are arranged in loose whorls.


From Hosen. A 5-needle pine, up to 100 feet high, native to Japan. It produces valuable lumber and edible seeds and is also of ornamental value, being slow in growth and forming a dense broad pyramidal head with handsome foliage.

For previous introduction see No. 75680.


82470 to 82488—Continued.

From Mozan. A pine up to 75 feet high, with dark-gray bark on the trunk, red on the branches, and orange or grayish-yellow branchlets. The glaucous leaves, usually two in a cluster, are up to 3 inches long, and the ovoid cones, 2 to 4 inches long, are pale tawny yellow, changing to dark brown and persisting for several years.

For previous introduction see No. 78405.

82485. RHODODENDRON SCHLIPPENBACHII Maxim. Ericaceae. Royal azalea.

For previous introduction and description see No. 82165.


From Helzan. A loosely branched shrub up to 12 feet high, with ovate, long-pointed leaves 6 inches long, and loose clusters of pale, purple-lilac flowers. Native to Chosen.

For previous introduction see No. 78412.

82487. ULMUS PARVIFOLIA Jacq. Ulmaceae. Leatherleaf elm.

From Keijō. Received as Ulmus sieboldii koreana, which is a form of U. parvifolia, said to differ from the usual form in having deciduous rather than half-evergreen leaves, persistent deeply fissured bark, and larger fruits. Native to Chosen.

82488. ZELEKOVA SERRATA (Thunb.) Makino (Z. acuminata Planch.). Ulmaceae. Sawleaf zelkova.

For previous introduction and description see No. 82353.

82489 to 82495. DIOSPYROS spp. Diospyraceae.

From Koka, island of Kokato, Chosen. Scions collected by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received December 9, 1929.

82489. DIOSPYROS KAKI L. f. Kaki persimmon.

82490. No. 1724. November 10, 1929. Shushi. From a tree about 30 or 40 years old, producing round, somewhat-flattened fruits about 2 inches in diameter. Said to be an astringent and seedless variety and is used rather commonly for drying.

82491. No. 1725. November 10, 1929. Panyori or Panshi. A flat variety 2 to 3 inches across and over 1 inch deep. This variety is rather abundant, and the fresh fruits are extensively used on the island. At one time they were used for drying.

82492. No. 1726. November 10, 1929. Shushi. A large flat persimmon somewhat larger than the Panyori (No. 82491), but not so thick and not so extensively grown, though the fruits are very good; they are non-astringent and seedless.


82494. No. 1728. November 10, 1929. Choshi. An extensively grown variety producing seedless, astringent...
82499 to 82504—Continued.

Fruits which are somewhat longer pointed than those of No. 1729 [No. 82494].

82499. No. 1729. November 10, 1929. Choshi. A medium-long pointed and round variety. While not the largest, it is one of the best.

82499. Diospyros lotus L. Dateplum.
No. 1750. November 10, 1929. From water sprouts from an old kaki tree.

82496. Euonymus sp. Celastraceae.
From Chosen. Seeds collected by P. H. 82497 to 82503.

82497. No. 1267. From Kokato, November 11, 1929. The dwarf habit of this Euonymus may be due to adverse conditions on the mountains, combined with annual cutting back. The husk of the fruit is pink and the berries are red.

82497 to 82503. Phaseolus spp. Fabaceae.
From Chosen. Seeds collected by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received December 9, 1929.


82498. No. 1269. From Kokato, November 11, 1929. Chapa. A medium-small olive-and-black marbled variety, used, after grinding, for cattle feed.

82499. No. 1708. From the mountain adjacent to the boat landing at Kokan, island of Kokato, November 11, 1929. The dwarf habit of this Euonymus may be due to adverse conditions on the mountains, combined with annual cutting back. The husk of the fruit is pink and the berries are red.


82502. No. 1798. From the Chosen grain market, Keijo, November 21, 1929. A medium-small olive-and-black marbled variety, coarsely ground and used as cattle feed.

82503. No. 1799. From the Chosen grain market, Keijo, November 21, 1929. A medium-long pointed and round variety. While not the largest, it is one of the best.

82504. No. 1270. Pokon. A variety with medium-sized glossy yellow seeds with a pale hilum; used for miso, soy sauce, and tofu.

82505. No. 1271. Hinkon. A variety with medium-sized glossy yellow seeds with a pale hilum; used for miso, soy sauce, and tofu.

82506. No. 1272. Selected out of the Hinkon variety. The seeds are greenish yellow, more or less motiled with brown, and have a brown hilum. They are flattened and much like the Virginia variety in shape. Used when boiled for cattle feed.

82507. No. 1273. Chinunikon. A medium-sized, nearly round, brown variety, said to be used for cattle feed.

82508. No. 1274. Purunkon. A mixture of yellow-seeded varieties, ranging from medium small to medium large; said to be used for cattle feed.

From Keijo, Chosen. Seeds collected by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received December 9, 1929.

No. 1561. October 27, 1929. A fine specimen with corky or winged branches which showed most beautiful fall coloration.

No. 1555. A vine growing to the top of a tree about 20 feet high, in the grounds of the Chosen Hotel. The yellow husks of the fruit open and persist, showing the red fruit.

No. 1560. October 27, 1929. A species with corky or winged branches.

For previous introduction see No. 81642.

82509 to 82509. Soyba max (L.) Piper soybean.

82509. No. 1269. Hinkon. A variety with medium-sized glossy yellow seeds with a pale hilum; used for miso, soy sauce, and tofu.

82510. No. 1270. Pokon. A variety with brown, medium-sized, much flattened seeds, very much the color and shape of the Virginia variety. The plants are somewhat slender and 36 to 42 inches high. It is commonly called the cow or ox bean.

82511. No. 1272. Selected out of the Hinkon variety. The seeds are greenish yellow, more or less motiled with brown, and have a brown hilum. They are flattened and much like the Virginia variety in shape. Used when boiled for cattle feed.

82512 to 82537.

From Japan. Seeds collected by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received December 9, 1929.
82516. No. 1281. A medium-sized oval green variety, used for making confections.
82517. No. 1283. A medium-sized oval, yellow variety with a light-brown hilum; used for bean curd, miso, and soy sauce.
82518. No. 1284. A medium-sized oval, yellow variety, mostly exported to the main island of Hondo for making soy sauce, miso, and bean curd.

82530 to 82537. From the Chosen farmers market, Shariin, November 15, 1929.
82538. No. 1754. From a warehouse in Kokakoshu, November 15, 1929. Kosanto. A medium-large, nearly round, glossy yellow variety, used for bean curd, soy sauce, and miso.
82539. No. 1755. From a warehouse in Kokakoshu, November 15, 1929. Chonte. A medium-sized, nearly round, glossy yellow variety, used for bean curd, soy sauce, and miso.
82540 to 82547. From the Chosen farmers' market, Shariin, November 15, 1929.
82542. No. 1758. A medium-large, nearly round variety with a light-brown hilum; used for bean curd, soy sauce, and miso.
82543. No. 1759. Pattekon. A mixture of medium-small, yellow, greenish-yellow, and brown varieties; used when boiled for cattle feed.
82544. No. 1760. Chankon. A medium-small, much flattened, yellow variety more or less mixed with greenish-yellow and brown varieties; used when boiled for cattle feed.
82545. No. 1761. Oiarukon. A medium-large, nearly round, yellow variety with a light-brown hilum; used for bean curd, miso, and soy sauce.
82546. No. 1762. Chonte. A medium-sized oval, yellow variety, used for sprouts and also boiled for cattle feed.

82590 to 82598—Continued.
82591. No. 1290. Ginta Unsei. A mixture of medium-small, yellow, greenish-yellow, and brown varieties; used entirely when boiled for cattle feed.
82592. No. 1291. Panunkon. A mixture of medium-small to small yellow varieties, used for sprouts and also boiled for cattle feed.
82593. No. 1292. Chankon. A medium-sized, olive, black variety, said to be used as boiled beans and in making confections.
82594. No. 1293. Oiarukon. A medium-sized oval, yellow variety with a pale to light-brown hilum; used for bean curd, miso, and soy sauce.
82509 to 82598—Continued.

82554. No. 1792. Haiyonkon. A large, black variety, used in making soybean confections.

82555. No. 1796. Chapakute. A medium-sized oval glossy yellow variety with a pale hilum; used in the manufacture of bean curd, soy sauce, natto, and miso.

82556. No. 1707. Futte. A medium-sized, somewhat flattened black variety, used in making soybean confections, especially candied beans.

82557. No. 1709. Kirgunte. A medium-small, nearly round green variety with a light-brown hilum; used for sprouts.


82559 to 82575. From Keljo, November, 1929.

82559. No. 1901. Kirupakute. A mixed sample of yellow varieties varying in size and shape and in the color of the hilum; used for miso and soy sauce, and also boiled for cattle feed.

82560. No. 1902. Pakute. A mixture of yellow and greenish-yellow varieties; used for miso and soy sauce, and also boiled for cattle feed.

82561. No. 1903. Shote. A medium-small, nearly round, yellow variety with a light-brown hilum; used for sprouts.


82563. No. 1905. Chikamunukon. A medium-small green variety with a brown hilum; used for sprouts.

82564. No. 1906. Kirumukon. A mixed sample of yellow-seeded varieties; used for miso and soy sauce, and also boiled for cattle feed.

82565. No. 1907. Purukon. A medium-sized greenish-yellow variety with a red hilum, resembling the Tokio [No. 17267]; used for cattle feed.

82566. No. 1908. Purute. A medium-sized oval yellow variety with a pale hilum; used in making miso, natto, bean curd, soy sauce, and also boiled for cattle feed.

82567. No. 1909. Namuri. A medium-small greenish-yellow variety with variations in the color of the hilum; used for cattle feed when boiled.

82568. No. 1910. Fukuuto. A medium-large seal-brown variety, used as boiled beans for cattle feed.

82569. No. 1911. Kon. A medium-small yellow variety with a brown hilum; used for boiled beans and also boiled for cattle feed.

82570. No. 1912. Fukuto. A medium-large seal-brown variety, used for cattle feed when boiled.

82571. No. 1913. Namute. A medium-sized greenish-yellow variety with a brown hilum; used as boiled beans and also for sprouts.

82572. No. 1914. Hinkon. A medium-sized yellow variety with a pale hilum; used as boiled beans and also boiled for cattle feed.

82573. No. 1915. Pankute. A medium-large, nearly round, yellow variety with a light-brown hilum; used for bean curd, miso, and soy sauce.

82574. No. 1916. Chosenkon. A sample of mixed yellow beans; of medium-large size and with variations in the color of the hilum; used as boiled beans and also for miso, soy sauce, and bean curd.

82575. No. 1917. Pakukon. A mixed sample of yellow varieties varying in the size and shape of the seeds and in the color of the hilum; used for miso, soy sauce, and bean curd.

82576. No. 1918. Urukon. A mixed sample of yellow varieties varying from medium small to medium sized; used when boiled for cattle feed.

82577. No. 1919. Kirukon. A medium-sized brown variety with a small mixture of yellow beans; used when boiled for cattle feed.

82578. No. 1920. Pakute. A medium-sized yellow variety varying in the color of the hilum; used as boiled beans and also in making miso and soy sauce.

82579 to 82598. From Keljo, November, 1929.


82580. No. 2002. Hinkon. A medium-sized yellow variety with a pale hilum and a slight mixture of beans with brown hilums; used in making natto, bean curd, soy sauce, and miso.
82509 to 82598—Continued.


82585. No. 2008. *Pakute*. A mixed sample of yellow seeds varying from medium to very large; used in making miso and soy sauce, and boiled as cattle feed.


82587. No. 2010. *Kirugunkon*. A very small, nearly round, yellow variety with a pale hilum; used for bean sprouts.

82588. No. 2011. *Kahei*. A medium-sized oval glossy yellow variety with a brown hilum; also used for soy sauce and bean curd.


82591. No. 2014. *Papute*. A large nearly round, yellow variety with a pale hilum; used in making miso and soy sauce, and also boiled for cattle feed.

82592. No. 2016. *Funkon*. A medium to medium-large oval yellow variety with a pale hilum, and a slight mixture of beans with a brown hilum; used as boiled beans and also as cattle feed.


82594. No. 2019. *Chonte*. A medium-large, green, nearly round variety with a green germ; used as boiled beans.

82595. No. 2020. *Chimmikon*. A medium-sized oval glossy yellow variety with the color of the hilum varying from pale brown to a darker brown; used in making bean curd, soy sauce, and natto.


82597. No. 2022. *Chonte*. A medium-large oval green variety with a brown hilum; used as boiled beans.

82598. No. 2023. *Kirugunte*. A mixed sample of small, nearly round, yellow varieties with variations in the color of the hilum from pale to black or brown; used for sprouts.


From Chosen, Japan. Seeds collected by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received December 23, 1929.

INDEX OF COMMON AND SCIENTIFIC NAMES

Abies holophylla, 82470.
Acanthopanax sp., 81639.
Acer spp., 81640, 82062.
diabilicum, 81726.
pseudo-sieboldianum, 82471.
triforum, 82472.
Aconitum yezoense, 81634, 81641.
Adonidia merrillii, 81851.
Allagdptera caedescon, 82473.
Alnus Mrsuta sibirica, 81725.
Astragalus sinicus, 81731, 82072.
Azalea. See Rhododendron spp.
Avocado. See Persea americana.

Actaea spicata.
Bamboo. See Phyllostachys spp.
Barberry. See Berberis spp.
Barley. See Hordeum spp.
Bean, aduki. See Phaseolus angularis.
common. See P. vulgaris.
mung. See P. aureus.
Birch. See Betula davurica.
Bittersweet. See Celastrus articulatus.
Blackberry, dwarf red. See Rubus triflorus.

Brome. See Celastrus articulatus, 82471.
Bromelina pinquin, 82032.
Buffaloberry, russet. See Lepargyraea canadensis.

Bushclover. See Lespedeza spp.
purple. See L. formosa.
shrub. See L. bicolor.

Butia capitata, 82399.

Cape-cowslip. See Lachenalia spp.
Capparis microcarantha, 81928.
Cassia sp, 82067.
Castanea dentata, 81812.
Castaneopsis sp., 82032.
argyrophylla, 81675.
Celastrus articulatus, 81735, 82402, 82422, 82506, 82507.
Cereus, nightblooming. See Hylocereus sp.
Chaetochloa italicata, 81813.
Cherry. See Prunus spp.
pin. See P. penneyvanica.
sand. See P. pumila.
Chinquinapin, evergreen. See Castaneopsis spp.
Chokecherry, common. See Prunus virginiana.
Chrysanthemum maximum, 81828-81828, 82022, 82023, 82035-82036, 82419.
Chrysanthemum, mulberry. See Chrysan-
themum maximum.
Pyrenees. See C. maximum.
C. gracilis, 81955.
C. grandiflora, 81955.
mislay, 81955.
Clematis sp., 82068.
chrysogona, 82359.
farinii, 82360.
heracleaefolia, 82021.
montana, 82361-82363.
linearis, 82364.
montana wilsonii, 82365.
Clematis, anemone. See C. montana.
Clematotheca integrifolia, 82366.
Chrysothamnus nelsonii, 82069.
Clover. See Trifolium spp.
red. See T. pratense.
white. See T. repens.
Cocculus trilobus, 82420.
Cocos capitata.
Corktree. See Phellodendron sp.
Corn. See Zea mays.
Cornelian-cherry. See Cornus officinalis.
Cornus comutata, 82070, 82475.
oficialis, 82476.

Cotton. See Gossypium spp.
upland. See G. hirsutum.
Cowpea. See Vigna sinensis.
Cranesbill, Iberian. See Geranium montana lilacina.
Crataegus spp., 82021.
ribes glandulosum.
swamp red. See R. triste.

winterberry. See R. fasciculatum.

45
PLANT MATERIAL INTRODUCED

Strawberry. See *Fragaria* spp.

Stylosanthes *cortusa*, 81936.

Styrax *japonicum*, 82378.

Sugar-apple. See *Annona* reticulata.

Sugarcane. See *Saccharum officinarum.*

*Syringa* spp., 81972, 81973, 82342.

obata *dilatata*, 82436.

prestoniae, 81990–81994.

Teosinte-maize hybrid. See *Euchlaena mexicana* X *Zea mays.*

Terminalia *bentsoe*, 81808.

*bronte*, 81872.

*kaempfachti*, 81924.

*cervica*, 81909.

*Thrinae parviflora*, 81930.

Torchily. See *Kniphofia* spp.

*Trifolium* spp., 8197, 81982, 81983.

*pratense*, 81655, 81966, 81688, 81788, 81832, 81900–81906, 82443–82445, 82446.

*repens*, 81789.

*Triticum* *aestivum*, 81790–81793, 82447, 82448–82467, 82469.

*vulgare*. See *T. aestivum.*

*Tropaeolum tuberosum*, 81974.

*Ulmus* *japonica*, 81907.

*parvifolia*, 82497.

Undetermined, 81699, 81914, 81931, 81996, 82354, 82359, 82357, 82358.

*Uvaria* sp., 81070.

*rufa*, 81927.

*Vaccinium* spp., 81657, 81909.

*ciliatum*, 81794, 81795.

*hirtum* *maialii*, 81908.

*japonicum*, 81796.

*praestans*, 81797.

Velvetbean. See *Stizolobium sempervirens.*

Vetch. See *Vicia* spp.

common. See *V. sativa.*

cow. See *V. cracca.*

*Viburnum* spp., 81798–81801, 81910, 82346.

*bitchiuense*, 82379.

*cylindricum*, 82380.

*fragrans*, 82381.

*propinquum*, 82382.

*utile*, 82383.

*Viburnum* service. See *Viburnum utile.*

*Yedo*. See *V. bitchiuense.*

*Vicia* spp., 81659, 81802, 81903, 81912, 81913, 81964, 81965.

*cracca*, 81658.

*sativa*, 81911.

*Vigna* *sinensis*, 81804, 81805, 82347–82351, 82399.

Violet tree, Rhodesia. See *Securidaca longipedunculata.*

*Vitis* spp., 81660, 82352.

*vinifera*, 81621, 81622, 81637.

*vulpina*, 81711.

Watermelon. See *Citrullus vulgaris.*

Wheat, common. See *Triticum aestivum.*

Willow. See *Salix* sp.

Yam. See *Dioscorea* spp.

*Zanthoxylum piperitum*, 81908.

*Zea mays*, 81907.

Zebova, sawleaf. See *Zelkova serrata.*

*Zelkova serrata*, 82363, 82488.

U.S. GOVERNMENT PRINTING OFFICE: 1931

For sale by the Superintendent of Documents, Washington, D. C. - - - - - Price 5 cents