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UNITED STATES DEPARTMENT OF AGRICULTURE



INVENTORY No. 88



Washington, D. C. Issued April, 1929

PLANT MATERIAL INTRODUCED BY THE OFFICE OF FOREIGN PLANT INTRODUCTION, BUREAU OF PLANT INDUSTRY, JULY 1 TO SEPTEMBER 30, 1926 (NOS. 67837 TO 68955)

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INTRODUCTORY STATEMENT

The plant material received during the summer months of 1926 covers a wide range of material from diverse parts of the world. Collections from the East Indies, made by David Fairchild, included additional cover and green-manure crops (Nos. 67838 to 67847) for testing in comparison with legumes previously introduced from this region. A pink-fleshed grapefruit (*Citrus grandis*, No. 67980) with flesh reported to be so dry that the follicles can be broken from one another and eaten from the hand was also obtained. Many tropical and subtropical trees, shrubs, and fruits (Nos. 67932 to 67941, 67982 to 67985, 67994 to 67996, 68015 to 68040, 68151 to 68153, 68295 to 68298) were included in Doctor Fairchild's collection.

P. H. Dorsett continued to collect field crops and miscellaneous native trees and ornamental shrubs in Manchuria. His introductions are represented by Nos. 67992, 68001 to 68014, 68404 to 68414, and 68420 to 68825. The greater part of these were soy-bean varieties which already, in preliminary tests in the United States, show great promise.

F. A. McClure, continuing his work in southern China, sent in a large number of varieties of rice and vegetables (Nos. 68361 to 68403, 68867 to 68907, 68913 to 68948). From the Institute of Applied Botany, at Leningrad, through A. Kol, was received a good collection of seeds of field crops and miscellaneous plants* (Nos. 68054 to 68104, 68171 to 68177). Other seeds from Russia are represented by Nos. 68180 to 68293, wheat and barley, and Nos. 68158 to 68169, *Iris* spp. The collection of iris from Asia Minor (*Iris* spp., Nos. 67909 to 67921) is deserving of special mention.

Attention is called to *Macadamia ternifolia* (No. 67883) and also to the attempt to introduce a related species with a larger nut, *M. prealta* (No. 67882). The horticultural possibilities of *M. ternifolia* make it appear desirable to encourage the planting of this species as specimen trees for homeyards and also for avenue and street purposes in the warmer portions of the country. In this way superior horticultural varieties may be selected from such seedling plantings. *M. ternifolia* is a very fine specimen and avenue tree, and the fact that it is an evergreen makes it serviceable in places where such trees are preferred. Thin-shelled varieties are known to exist in Australia as individual trees, and to find such a variety is one of the objectives of large plantings in this country. Attention perhaps should be called to the fact that the area having climatic conditions suitable to species of *Macadamia* is limited and somewhat more restricted than in the case of citrus plants. However, more hardy strains than the ones already introduced may yet be found. While *M. prealta* is less well known than *M. ternifolia* and not yet established in the United States, its large nut makes it seem worth special attention by further introductions and subsequent testing.

The introduction of *Pentzia incana* under No. 67880 should again call attention to this shrub as a possible asset to the dry range area of the southwestern United States from the Panhandle of Texas south to the Rio Grande and west to the Pacific coast. It is the well-known karoo bush of the pasture lands of South Africa and affords the best dry-land reserve feed in that region. It is essentially a sheep browse and is reputed to be responsible for the fine quality of wool shipped from Africa. If it can be successfully established in our Southwest it should be a great feed insurance for drought years.

Other plants in this inventory that should be specifically mentioned on account of the results with previous introductions or their promise as indicated by their behavior in their original homes are *Telopea speciosissima* (No. 68912), *Calopogonium mucunoides* (No. 68845), *Arachis nambyquaræ* (Nos. 68830 and 68831), *Populus maximowiczii* (No. 68170), and *Myoporum sandwicense* (No. 68157). The *Myoporum* is suggested for special testing in windy and exposed areas along ocean fronts where a mild climate prevails.

The botanical determinations of these introductions have been made and the nomenclature determined by H. C. Skeels, and the descriptive matter has been prepared under the direction of Paul Russell, who has had general supervision of this inventory.

KNOWLES A. RYERSON,
Senior Horticulturist, in Charge.

OFFICE OF FOREIGN PLANT INTRODUCTION,
Washington, D. C., July 16, 1928.

INVENTORY¹

67837 to 67847.

From Buitenzorg, Java. Seeds obtained by David Fairchild, agricultural explorer, Bureau of Plant Industry, with the Allison V. Armour expedition. Received July 27, 1926.

The following seeds were obtained at the tea experiment station, Buitenzorg, May 22, 1926.

67837. *ACACIA VILLOSA* (Swartz) Willd.
Mimosaceae.

No. 803. A native of Venezuela which is used in Java for the same purpose as *Leucaena glauca*; that is, as a shade for field crops, and is preferred because of its slower growth. It is said to be used in the teak forest plantings as a permanent leguminous undershrub to add nitrogen and humus to the soil.

For previous introduction see No. 44865.

67838. *ALYSICARPUS VAGINALIS NUMMULARIFOLIUS* (L.) Baker. Fabaceae.

No. 808. A low creeping annual legume.

For previous introduction see No. 33640.

67839. *BRADBURYA PUBESCENS* (Benth.) Kuntze (*Centrosema pubescens* Benth.)
Fabaceae. Butterfly pea.

No. 806. A climbing tropical American annual legume of great value in Java as a cover crop, having roots which penetrate 11½ feet into the soil in one year's time.

For previous introduction see No. 65315.

67840. *CRACCA CANDIDA* (DC.) Kuntze (*Tephrosia candida* DC.). Fabaceae.

No. 799. A low leguminous shrub with slender branches and large clusters of reddish or white flowers, which is used as a cover crop.

For previous introduction see No. 60642.

67837 to 67847—Continued.

67841. *CRACCA NOCTIFLORA* (Bojer) Kuntze (*Tephrosia noctiflora* Bojer). Fabaceae.

No. 796. A bushy brown-hairy leguminous plant which is used as a cover crop. It has compound leaves about 4 inches long and lax terminal racemes of reddish flowers which open late in the afternoon. Native to tropical Africa.

67842. *CROTALARIA ALATA* Buch.-Ham. Fabaceae.

No. 805. A bushy annual leguminous plant, about a foot high, with pale-yellow flowers; suitable for use as a cover crop.

For previous introduction see No. 51832.

67843. *CROTALARIA USARAMOENSIS* Baker f. Fabaceae.

No. 804. One of the less important cover crops. A leguminous plant which forms a dense low growth and endures partial shade.

For previous introduction see No. 64064.

67844. *INDIGOFERA ENDECAPHYLLA* Jacq. Fabaceae.

No. 809. A native of southern British India, which is considered one of the best cover crops used in Java on the tea estates. It roots from the internodes, as well as from the nodes, and stands drought well.

For previous introduction see No. 63605.

67845. *INDIGOFERA SUFFRUTICOSA* Mill. (*I. anil* L.). Fabaceae.

No. 807. A slender yellow-flowered bushy legume, 3 to 5 feet high, producing a rather scanty growth, which is not considered one of the best cover crops.

For previous introduction see No. 64036.

¹ 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 Office 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 specific 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 office, herbarium specimens of leaves and flowers should be sent in, so that definite identification can be made.

67837 to 67847—Continued.

67846. *STIZOLOBIUM VELUTINUM* (Hassk.)
Piper and Tracy. Fabaceae.

No. 802. A selected variety of the velvet bean which covers the ground in two and one-half months. It grows up to an altitude of 3,000 feet.

For previous introduction see No. 43536.

67847. *VIGNA VEXILLATA* (L.) Rich. Fabaceae.

No. 798. A South American yellow-flowered climber which is being used as a cover crop in Java.

For previous introduction see No. 48607.

67848. *ZIZIPHUS XYLOPYRUS* (Retz.)
Willd. Rhamnaceae.

From Bombay, India. Seeds obtained by Wilbur Koblinger, United States consul. Received August 24, 1926.

A small thorny Indian tree, a close relative of the Chinese jujube (*Ziziphus jujuba*). In its native country, where it grows in hot dry places, the young shoots, leaves, and fruits serve as fodder for livestock, and the hard tough wood is used in making carts. The hard bony fruits in close two or three edible kernels.

For previous introduction see No. 53593.

67849. *ZINZIBER OFFICINALE* Roscoe.
Zinziberaceae. Ginger.

From Kandy, Ceylon. Tubers obtained by David Fairchild and P. H. Dorsett, agricultural explorers, Bureau of Plant Industry, with the Allison V. Armour expedition. Received February 26, 1926. Numbered July, 1926.

No. 319. January 12, 1926. A variety grown in the vicinity of Kandy.

67850. *QUERCUS* sp. Fagaceae. Oak.

From San Jose, Costa Rica. Seeds presented by Federico Peralta, Director, San Jose Department of Agriculture. Received July 19, 1926.

A central American tree of possible value for the warmer parts of the United States.

67851. *COUSINIA* sp. Asteraceae.
Taimat.

From Tangier, Morocco. Seeds presented by Moses Albert Azancot, Paseo Cenarro. Received July 23, 1926.

Taimat. This plant grows wild here around the wheat fields. The flower buds are boiled in salted water and eaten; they taste something like asparagus. The uncooked juice from the plant is used with apparent success as a substitute for rennet by the local cheese manufacturers. (*Azancot*.)

A prickly leaved thistlelike plant.

67852 to 67856.

From Yalta, Crimea, Russia. Seeds presented by Th. K. Kalajda, horticultural director, Nikta Botanic Garden. Received July 23, 1926.

Locally grown seeds.

67852 to 67856—Continued. *

67852. *MELILOTUS ALBA* Desr. Fabaceae.
White sweet clover.

67853. *MELILOTUS OFFICINALIS* (L.) Lam.
Fabaceae. Sweet clover.

67854. *MELILOTUS TAURICA* (Bieb.)
Seeringe. Fabaceae. Sweet clover.

67855. *TRIFOLIUM ARVENSE* L. Fabaceae.
Clover.

67856. *TRIFOLIUM PRATENSE* L. Fabaceae.
Red clover.

67857 to 67863. *TRIFOLIUM RESUPINATUM* L. Fabaceae. Persian clover.

From Leningrad, Russia. Seeds presented by A. Kol, chief, bureau of introduction, Institute of Applied Botany. Received August 3, 1926.

A small prostrate annual clover common in the vicinity of Cairo, Egypt; usually found in heavy soils.

67857. No. 2525. 67861. No. 3287.

67858. No. 2526. 67862. No. 3701.

67859. No. 2537. 67863. No. 4155.

67860. No. 2541.

67864 to 67879. *TRITICUM AESTIVUM* L.
(*T. vulgare* Vill.). Poaceae.
Common wheat.

From Melbourne, Victoria, Australia. Seeds presented by H. A. Mullett, superintendent of agriculture. Received July 15, 1926.

67864. *Confederation*. 67872. *Omrah*.

67865. *Free Gallipoli* 67873. *Rajah*.
No. 58.

67866. *Ghurka*. 67874. *Rajah Seln*.

67867. *Mac's White*. 67875. *Ranee*.

67868. *Mahratta*. 67877. *Sterling* (78
A).

67869. *Marmora*. 67878. *Turvey*.

67871. *Nizam*. 67879. *Wannon*.

67880. *PENTZIA INCANA* (Thunb.)
Kuntze (*P. virgata* Less.). Astera-
ceae.

From Cape Province, Union of South Africa. Seeds presented by George A. Gill, principal, Grootfontein School of Agriculture, Middleburg. Received July 28, 1926.

A low-growing, spreading bush which layers naturally when the tips of its branches arch over and touch the ground. In the eastern Provinces of Cape Colony, where the rains occur in summer but where long, severe droughts are frequent, this is one of the most valuable of all the karoo plants for fodder purposes. It is especially good for sheep and goats, which eat it down almost to the ground. (*Note by David Fairchild under No. 10635.*)

For previous introduction see No. 64649.

67881 to 67883.

From Dundas, New South Wales, Australia. Seeds presented by Herbert J. Rumsey. Received August 9, 1926.

67881 to 67883—Continued.

67881. *HICKSBBACHIA PINNATIFOLIA* F. Muell. Proteaceae.

This tree, native to New South Wales, grows to a height of 30 to 40 feet, and the fruit is borne in racemes, attached to the bark and branches of the tree. Each raceme consists of 10 or 12 fruits. The flavor is not quite so good as the Queensland nut, *Macadamia ternifolia*, nor does it keep so well, but nevertheless they are sold in some fruit shops in New South Wales.

For previous introduction see No. 39871.

67882. *MACADAMIA PREALTA* (F. Muell.) F. M. Bailey. Proteaceae.

An evergreen tree, sometimes as much as 100 feet tall, with narrow leathery shining-green leaves about 7 inches long and smooth hard nuts about an inch in diameter which are said to be edible. Native to Queensland and New South Wales, Australia.

67883. *MACADAMIA TERNIFOLIA* F. Muell. Proteaceae.

Var. *integrifolia*. A form of the so-called Queensland nut which has entire leaves. The typical form is a large evergreen tree with narrowly oblong leaves in whorls of three or four and thick-shelled edible nuts an inch in diameter.

For previous introduction see No. 44769.

67884 to 67889.

From San Juan, Porto Rico. Seeds and bud wood presented by O. W. Barrett, agricultural director, Department of Agriculture and Labor. Received August 3, 1926.

67884 to 67887. *CITRUS* spp. Rutaceae.

Varieties grown in Porto Rico.

67884 and 67885. *CITRUS AURANTIUM* L. Sour orange.

67884. *Reg. Seville.*

67885. *Spineless.*

67886. *CITRUS BERGAMIA* Risso. Bergamot.

Bergamote cordoba.

67887. *CITRUS LIMONIA* Osbeck. Lemon.

Tusk lemon.

67888. *MEIBOMIA BENSONI* Painter. Fabaceae.

The *barajillo* is a rapid-growing shrub, which, as described in the *Revista de Agricultura Tropical, Salvador* (vol. 1, p. 65), is found in Salvador at altitudes of 2,000 to 4,000 feet. The trifoliate leaves are softly hairy and up to 3½ inches in length, and the small purplish flowers are borne in terminal racemes late in October. The roots of the *barajillo* are very large and penetrate deeply into the soil; the tubercles formed by the nitrogen-gathering bacteria are usually found only on the upper third of the root. Cattle are exceedingly fond of this plant; furthermore, it endures prolonged drought and thrives in very poor soil.

For previous introduction see No. 55446.

67884 to 67889—Continued.

67889. *TERAMNUS LABIALIS* (L.) Spreng. Fabaceae.

A slender leguminous tropical American vine, used as forage in St. Thomas, Virgin Islands. (*Barrett.*)

67890 to 67893.

From Avondale, Auckland, New Zealand. Seeds presented by H. R. Wright. Received July 29, 1926.

67890. *CORYNOCARPUS LAEVIGATA* Forst. Corynocarpaceae. Karaka.

The karaka is a large, handsome New Zealand tree, with a round crown and glossy laurellike leaves 5 to 7 inches long. The small white flowers are in erect panicles about 4 inches long, and the extremely poisonous orange fruits are oblong and about an inch in length. The kernel of the fruits, however, is not poisonous, and was one of the staple articles of diet of the Maoris, the original inhabitants of New Zealand.

For previous introduction see No. 46764.

67891 and 67892. *HOHERIA POPULNEA* A. Cunn. Malvaceae.

67891. A small ornamental tree or large shrub, up to 30 feet high, with leaves varying in shape from broadly oval and deeply toothed to long and narrow, and attractive snow-white flowers borne in great profusion in axillary clusters. Native to New Zealand, where the white tough wood is sometimes used by cabinetmakers.

For previous introduction see No. 45094.

67892. Var. *Osbornei*. Differs from the normal form in having blue instead of white stamens.

67893. *NAGEIA FERRUGINEA* (G. Benn.) Kuntze (*Podocarpus ferruginea* G. Benn.). Taxaceae. Miro.

A large evergreen tree from New Zealand with gray or blackish bark, which peels off in large flakes, and small narrow pointed leaves arranged in two rows on the branches. The bright-red fruits, the size of small plums, have the taste and odor of turpentine, but are eaten eagerly by the native pigeons.

For previous introduction see No. 44851.

67894 to 67896.

From Stockholm, Sweden. Seeds presented by Dr. Eric Hulten, Stockholm, through David Fairchild, agricultural explorer, Bureau of Plant Industry, with the Allison V. Armour expedition. Received August 13, 1926.

67894. *BETULA ERMANI* Champ. Betulaceae. Birch.

No. 915. July 22, 1926. Collected during 1925 by Doctor Hulten at the botanic gardens, Leningrad, Russia. According to the collector this birch covers considerable areas in Kamchatka, where it is native. The tree is rather low growing, and owing to its hardness it deserves to be tested in the extreme North. The trunk is white and the branches orange or yellowish. The broadly oval, coarsely toothed leaves are hairy when young.

67894 to 67896—Continued.

67895. HEDYSARUM HEDYSAROIDES (L.) Stuntz (*H. obscurum* L.). Fabaceae.

No. 916. July 22, 1926. Collected during 1919 near the mouth of the Kamchatka River by Doctor Hulten. A hardy herbaceous ornamental perennial native to the alpine regions of central Europe. It is about a foot high and produces spikes of purple flowers in mid-summer.

67896. LONICERA CAERULEA EDULIS (Turcz.) Regel. Caprifoliaceae.
Honeysuckle.

No. 914. July 22, 1926. Collected in Kamchatka by Doctor Hulten. An erect or spreading hardy shrub about 5 feet high, native to northeastern Asia. The oblong or lanceolate pubescent leaves are up to 2 inches long, and the oblong edible blue berries are sweet and are used for making excellent jam.

67897 to 67904.

From Buitenzorg, Java. Seeds presented by Dr. W. M. Docters van Leeuwen, director, botanic gardens. Received August 24, 1926.

67897. ALTINGIA EXCELSA Noronha. Hamamelidaceae.

A magnificent tree of the tropical evergreen forests of the Indian archipelago and northeastern India. In Java it yields in small quantity an odorous medicinal resin known in Europe as "storax," which is obtained by incisions in the trunk; the tree is not regularly cultivated. The soft reddish gray wood with lighter streaks is used in India for building and ordinary domestic purposes.

For previous introduction see No. 50695.

67898. CARYOTA RUMPHIANA Mart. Phoenicaceae. Palm.

An East Indian palm about the size of the coconut palm, with a smooth trunk and graceful bipinnate leaves composed of segments with truncate jagged tips. From the central pith of the bark is prepared a sago which is eaten in the East Indies in times of scarcity.

For previous introduction see No. 51710.

67899. CASSIA ABSUS L. Caesalpiniaceae.

An erect annual tropical legume, about 2 feet high, with small reddish yellow flowers.

67900. EUTERPE ACUMINATA (Willd.) Wendl. Phoenicaceae. Palm.

A graceful spineless palm from tropical South America, with a trunk 36 feet tall, terminated by about 10 pinnate fronds 7 or 8 feet long. The black roundish fruits are fleshy and about half an inch in diameter.

For previous introduction see No. 51719.

67901. GLAZIOVA TREUBIANA Beccari. Phoenicaceae. Palm.

A small palm, cultivated in the Botanical Garden, Buitenzorg, Java. According to Beccari (Annals du Jardin Botanique de Buitenzorg, Supplement 3, pt. 2, p. 791) its native country is unknown. The trunk is entirely covered with old leaf bases and terminates in gracefully arching pinnate leaves about 10 feet long.

67897 to 67904—Continued.

67902. GLORIOSA ABYSSINICA A. Rich. Melanthiaceae. Glory lily.

A tall, lilylike Abyssinian plant, with large, long-stalked yellow flowers.

67903. PIGAFETTIA ELATA (Mart.) Wendl. Phoenicaceae. Palm.

A tall ornamental palm, with a stout trunk, spiny above, and spreading pinnate foliage resembling that of the coconut. Native to the East Indies.

67904. TRADESCANTIA GENICULATA Jacq. Commelinaceae. Spiderwort.

A tender herbaceous perennial from the West Indies, about a foot high, with blue flowers.

67905 to 67926.

From Tiflis, Georgia, Russia. Seeds presented by A. Grossheim, director, botanic garden. Received September 1, 1926.

67905. AMYGDALUS GEORGICA Desf. (*Prunus nana georgica* DC.). Amygdalaceae.

A hardy bush, native to southern Russia, which closely resembles *Amygdalus nana*, differing in its larger colored flowers and smaller leaves.

67906. AMYGDALUS NANA L. (*Prunus nana* Stokes). Amygdalaceae.
Russian almond.

A hardy bush about 5 feet high, native to Russia and western Asia, with thick stiff sharply toothed leaves and solitary pinkish flowers. The small hard hairy fruit contains a large pit of bitter flavor.

For previous introduction see No. 43814.

67907. BRASSICA ELONGATA Ehrh. Brassicaceae.

An annual herb, native to south-central Europe, of possible use as a vegetable.

67908. GALANTHUS CAUCASICUS Baker. Amaryllidaceae. Snowdrop.

A spring-blooming bulbous plant, native to the Caucasus, with sword-shaped leaves about 9 inches long and large white flowers.

67909 to 67921. IRIS spp. Iridaceae.

67909 and 67910. IRIS ACUTILOBA Meyer.

67909. A dwarf purple-flowered iris about a foot in height, native to the Caucasus.

67910. Var. *lineolata*.

67911. IRIS CARTHALINIAE Fomin.

A Caucasian iris described (Monteur du Jardin Botanique de Tiflis, 1909) as having a thick rhizome and four-flowered or five-flowered stems nearly 3 feet high. The sword-shaped leaves are about two-thirds of an inch wide, and the flowers are light blue. In its native country the plant grows in damp places.

For previous introduction see No. 64297.

67905 to 67926—Continued.

67912. IRIS CAUCASICA Hoffm.

A rather dwarf iris described by Baker (Irideae, p. 45) as having about six bright-green, very narrow leaves 3 to 6 inches long, a short stem, and pale or bright-yellow flowers which appear in March or April. It is native from Asia Minor to Turkestan, ascending to 6,000 feet above sea level.

For previous introduction see No. 64298.

67913. IRIS FOMINII Hort.

A horticultural variety.

67914. IRIS GROSSHEIMII Hort.

A horticultural variety.

67915. IRIS IBERICA Hoffm. Iberian iris.

A dwarf iris, 18 inches high, native to Asia Minor, with falcate, narrow leaves and large flowers; these are pale-brown marked with purple-brown on the outer segments, with the inner segments pure white, faintly veined.

67916. IRIS LYCOTIS Woron.

67917. IRIS MUSULMANICA Fomin.

An iris from the vicinity of Elisabethopol, Caucasus, which, according to the *Moniteur du Jardin Botanique de Tiflis* (vol. 14, 1909), inhabits brackish swamps. It is less than 2 feet tall, and the flowers are either sky blue or yellowish.

For previous introduction see No. 64299.

67918. IRIS PARADOX Stev. Velvet iris.

A low iris with linear leaves 3 to 6 inches long and large flowers, lilac to white. Native to dry places in Asia Minor.

67919. IRIS RETICULATA Bleb. Netted iris.

An early-flowering iris, native to Asia Minor, with a tuft of two to four short, erect, four-angled leaves 18 inches high, a very short stem, and very fragrant, bright-purple flowers.

67920. IRIS SCHELKOWNIKOWI Fomin.

67921. IRIS TALYSCHI Hort.

A horticultural variety.

67922 to 67924. MUSCARI spp. Liliaceae. Grape hyacinth.

67922. MUSCARI CAUCASICUM (Griseb.) Baker.

An ornamental purple-flowered bulbous plant with a scape 8 inches high. Native to the dry mountainous regions of the Caucasus.

67923. MUSCARI LONGIPES Boiss.

A spring-flowering bulbous plant, native to Palestine, about a foot high, with wavy-margined leaves and dense racemes of purple flowers.

67924. MUSCARI NEGLECTUM Guss.

A low bulbous plant, native to the Mediterranean countries, with numerous strap-shaped leaves up to a foot in length, and fragrant dark-blue flowers.

For previous introduction see No. 66589.

67905 to 67926—Continued.

67925. PISUM ELATIUS Bleb. Fabaceae. Pea.

A hardy annual, about 5 feet high, with leaves composed of one to three pairs of narrow leaflets, and purple flowers. Native to woods and thickets in the alpine regions of Europe.

For previous introduction see No. 64640.

67926. ULMUS ELLIPTICA Koch. Ulmaceae. Elm.

A large hardy elm, native to the Caucasus.

67927. SOLANUM TUBEROSUM L. Solanaceae. Potato.

From Wolverhampton, England. Tubers obtained from F. W. Keay, through William Stuart, Bureau of Plant Industry. Received July 3, 1926.

Patterson's Victoria. English-grown tubers.

67928. HEDYCHIUM sp. Zinziberaceae. Ginger lily.

From Brazil. Roots obtained from Miss Mary C. Bell, Bayside, N. Y. Received May 11, 1926. Numbered September, 1926.

A leafy, strong-growing tropical ornamental herbaceous perennial, related to ginger. The flowers are in terminal spikes.

67929 to 67931. LILIUM spp. Liliaceae.

From Tunbridge Wells, England. Seeds purchased from R. Wallace & Co., The Old Gardens. Received August 5, 1926.

67929. LILIUM MARTAGON L. Martagon lily.

Variety *dalmaticum*. A Dalmatian variety which often grows to be over 6 feet high, with 12 to 40 flowers of richer, deeper purple than the typical variety.

67930. LILIUM MONADELPHUM Bleb. Great Caucasian lily.

Variety *szovitzianum*. A variety with larger, lemon-yellow flowers, more thickly purple-dotted than the typical species, and with reddish brown anthers.

67931. LILIUM MARTAGON × HANSONI. Lily.

Seeds of hybrids between *Lilium martagon* and *L. hansonii*, raised by the late Mrs. R. O. Backhouse, an English plant breeder.

67932 to 67941.

From Ceylon. Seeds obtained by David Fairchild, agricultural explorer, Bureau of Plant Industry, with the Allison V. Armour expedition. Received July, 1926.

67932 and 67933. SESBANIA GRANDIFLORA (L.) Poir. Fabaceae.

Seeds, purchased in Peradeniya, of small, rapid-growing, soft-wooded trees, 15 to 20 feet high, with pinnate leaves and large pendulous flowers, followed by long, sickle-shaped pods. The fleshy petals are used in curries and soups in the Indian Archipelago, where these trees are native. The leaves and young shoots are sometimes used as fodder.

For previous introduction see No. 61778.

67932 to 67941—Continued.

67932. No. 914-a. A red-flowered variety.

67933. No. 915-a. A white-flowered variety.

68934. *KLUGIA NOTONIANA* (Wall.) A. DC. Gesneriaceae.

No. 811. Hakgala Botanic Gardens. May 22, 1926. The dyanilla of the Singhalese. A small blue-flowered annual native to Ceylon.

67935. *MONODORA TENUIFOLIA* Benth. Annonaceae.

No. 911. Peradeniya Botanic Gardens. June 9, 1926. A small deciduous tropical African tree, which bears an abundance of yellow, orchidlike flowers in the dry season, when the tree is leafless.

67936. *MUNTINGIA CALABURA* L. Elaeocarpaceae.

No. 912. Peradeniya Botanic Gardens. June 9, 1926. A small ornamental spreading tropical American tree with pinnate leaves and small white flowers. The small yellow berries make good tarts or jam, and the leaves are used for tea.

67937. *PITHECOLOBIUM SUBCORIACEUM* Thwaites. Mimosaceae.

No. 812. Hakgala Botanic Gardens. May 22, 1926. An ornamental tropical leguminous tree about 30 feet high, with glossy leathery compound leaves and dense flower heads about an inch in diameter. Native to Ceylon.

67938. *RHODODENDRON ARBOREUM* J. E. Smith. Ericaceae.

This Himalayan rhododendron is variable both in its foliage and in the color of its flowers. In one form the leaves are silvery on the lower surface, while in another they are covered with a brownish red down. The bell-shaped flowers, borne in dense trusses, vary from deep crimson to pure white. The tree sometimes reaches a height of 35 feet, with a trunk 4 feet in circumference.

For previous introduction see No. 60655.

67939. *RUBUS ELLIPTICUS* J. E. Smith. Rosaceae. Raspberry.

No. 813. Hakgala Botanic Gardens. A Himalayan raspberry, described as follows by J. F. Rock, under No. 55499: "A very stout shrub which, especially when young, is densely covered with long, red, almost hairlike spines. The flowers are white, and the deep-yellow, almost orange, very juicy acid fruits are collected by the hill tribes and brought to the markets; the fruits ripen earlier on the mountains than in the valley. The shrub is found at altitudes of 6,000 to 7,000 feet."

67940. *RUBUS MOLUCCANUS* L. Rosaceae.

No. 814. Hakgala Botanic Gardens. Variety *macrocarpus*. A variety of the tropical high-altitude *Rubus* which produces large fruits with little flavor.

67941. *RUBUS* sp. Rosaceae.

No. 815. Hakgala Botanic Gardens.

67942. *LILIUM PYRENAICUM* Gouan. Liliaceae. Lily.

From London, England. Seeds purchased from Watkins & Simpson, Covent Garden. Received July 29, 1926.

A lily from the Pyrenees Mountains, about 4 feet high, with pale lemon-yellow flowers, dotted purplish black. It resembles *Lilium pomponium*, differing in its greater height, larger bulbs, wider leaves, and larger flowers.

67943. *ERYTHROXYLON COCA* Lam. Erythroxylaceae. Cocaine tree.

From Port of Spain, Trinidad, British West Indies. Plants presented by W. G. Freeman, Director of Agriculture. Received July 21, 1926.

A native tree of tropical South America which thrives from sea level up to 5,000 feet altitude.

67944. *SACCHARUM OFFICINARUM* L. Poaceae. Sugar cane.

From Rio Piedras, Porto Rico. Cuttings obtained from the Porto Rican Insular Experiment Station, through E. W. Brandes, Bureau of Plant Industry. Received July 20, 1926.

A Porto Rican variety.

67945. *GOSSYPIUM* sp. Malvaceae. Cotton.

From Caracas, Venezuela. Seeds presented by H. Pittier, Ministerio de Relaciones Exteriores, Museo Comercial. Received July 16, 1926.

Wild Venezuelan cotton.

67946 to 67948.

From Richmond, Victoria, Australia. Seeds presented by F. H. Baker. Received July 16, 1926.

67946. *ACACIA DECURRENS* Willd. Mimosaceae.

Variety *normalis*. A variety of the Green wattle, which is cultivated in California, with sepals as long as the petals. The typical form is a handsome tree with light-green feathery foliage and bright yellow flowers.

67947. *ACACIA DISCOLOR* Willd. Mimosaceae.

A tall unarmed shrub or small tree, native to southeastern Australia and Tasmania, which bears, in autumn, terminal and axillary clusters of yellow flowers.

For previous introduction see No. 62960.

67948. *HAKEA LAURINA* R. Br. Proteaceae. Sea-urchin hakea.

A tall Australian shrub, 30 feet or less high, remarkable for its showy crimson flowers. These are in globular heads, about 2 inches in diameter, from which numerous golden yellow styles protrude an inch or so in all directions.

For previous introduction see No. 64483.

37949. PSIDIUM SP. Myrtaceae. Guava.

From Merauke, New Guinea. Seeds presented by P. T. L. Putnam. Received July 14, 1926.

A locally developed form.

67950 to 67964. PRUNUS spp. Amygdalaceae.

A collection of flowering cherries growing at the United States Plant Introduction Garden, Chico, Calif., originally received from Highland Park, Rochester, N. Y. Numbered July, 1926.

67950 to 67954. PRUNUS SERRULATA Lindl.

67950. P. I. G. No. 16776. Row 123, tree 4, O. T. O. *Ochichima*. A small spreading tree with rough light-brown bark and rather deeply toothed leaves. The double flowers, produced on slender pedicels $1\frac{1}{2}$ inches long, are white, with faint shadings of pink; they are about $1\frac{1}{2}$ inches in diameter.

67951. P. I. G. No. 16784. Row 127, tree 4, O. T. O. *Gosiozakura*. A small spreading tree with rough light-brown bark. The semidouble flowers, produced in clusters of five on slender pedicels $1\frac{3}{4}$ inches in length, are white, faintly overspread with pink, and are $1\frac{1}{2}$ inches in diameter.

67952. P. I. G. No. 16787. Row 131, tree 4, O. T. O. *Oshimazakura*. A quick-growing and comparatively short-lived tree up to 30 feet high, with pale-gray bark and thick, spreading branches. The numerous small, single, white or pinkish flowers are fragrant, and the small ovoid fruits are shining black. Native to central and southern Japan.

67953. P. I. G. No. 16790. Row 133, tree 4, O. T. O. *Hisakura*. A small tree with light-brown bark. The semidouble flowers, produced in clusters of four on slender pedicels an inch in length, are about $1\frac{1}{2}$ inches in diameter and delicate rose pink. The rather round petals of the flowers are daintily frilled on the edges.

67954. P. I. G. No. 16783. Rows 139 and 141, trees 4, O. T. O. *Minakami*. Flowers about $1\frac{1}{2}$ inches across, fragrant, single or nearly so, white, in clusters of three, profusely produced. One of the best single white varieties.

67955. PRUNUS SERRULATA SACHALINENSIS (Schmidt) Makino (P. *sargentii* Rehder).

P. I. G. No. 16795. Row 133, tree 5, O. T. O. *Yamazakura*. The mountain cherry of northern Japan, which under favorable conditions becomes a large tree, up to 70 feet tall, with a spreading crown. It is hardy and long lived and is said to be one of the handsopest of the wild cherries of eastern Asia. The young foliage is bronze green, and the mature leaves assume brilliant colors in autumn, changing to shades of yellow, orange, and crimson. The numerous single flowers, pink or at times nearly white, are up to 4 centimeters across, and the black fruits are about the size of peas. An important feature of this wild cherry is the possibility of its use as a stock for cultivated forms, for which purpose it appears to be well suited.

67950 to 67964—Continued.**67956 to 67959. PRUNUS SERRULATA Lindl.**

67956. P. I. G. No. 16801. Rows 139 and 140, trees 5, O. T. O. *Taktmio*. Tree rather small and spreading, about 15 feet high; bark brownish gray; flowers pure white, single, very fragrant, about $1\frac{1}{2}$ inches across, in clusters of three or four; blooming midseason. The Japanese varietal name means "fragrant white water-fall."

67957. P. I. G. No. 16806. Rows 139 to 141, trees 6, O. T. O. *Senriko*. Tree upright ascending in habit, about 20 feet high; bark brownish gray; young foliage coppery green; flowers single or nearly so, white with a pink blush, fragrant, about $1\frac{3}{4}$ inches across, usually three or four in a cluster.

67958. P. I. G. No. 16811. Row 144, tree 1, O. T. O. *Oshimazakura*.

For previous introduction and description see No. 67952.

67959. P. I. G. No. 16821. Rows 146 to 148, trees 2, O. T. O. *Gyoiko*. A vigorous, erect tree, 12 to 14 feet in height, bearing flowers in great profusion. The semidouble, greenish-white flowers, the petals of which are striped darker green with an occasional tinge of pink, are about $1\frac{1}{2}$ inches in diameter and produced in clusters of three to five.

67960. PRUNUS SUBHIRTILLA AUTUMNALIS Makino.

P. I. G. No. 16831. Row 145, tree 4, O. T. O. *Jugatsuzakura*. Tree spreading, with a rounded crown, about 20 feet high; flowers rosy pink, semidouble, about half an inch in diameter, produced freely in the early spring and also sparingly in October. Occasionally a scanty crop of flowers in the spring is followed by a normal crop the following fall.

67961 and 67962. PRUNUS SERRULATA Lindl.

67961. P. I. G. No. 16835. Row 146, tree 4, O. T. O. *Yedozakura*. Tree about 15 feet high, with brownish bark; buds red; flowers double, light pink, large, about $1\frac{3}{4}$ inches across, freely produced in clusters of three. An excellent variety.

67962. P. I. G. No. 16836. Rows 147 to 149, trees 4, O. T. O. *Tatsanzukun*. Tree erect, about 15 feet high, with dark-brown bark; flowers semidouble to double, pink, about an inch in diameter, often borne near the ends of the branches.

67963. PRUNUS SERRULATA SPONTANEA (Maxim.) Wilson.

P. I. G. No. 16838. Rows 146 and 147, trees 5, O. T. O. *Yamazakura*. A native Japanese cherry, common on mountain sides from the extreme southern part of Japan to about the central portion. It becomes a tree 80 feet high, of spreading habit, with single pink flowers, and is of value chiefly because of its possible use as a stock for the better varieties of flowering cherries.

67950 to 67964—Continued.

67964. PRUNUS YEDOENSIS Mats.

Yoshino cherry.

P. I. G. No. 16845. Rows 146 to 148, trees 6, O. T. O. *Yoshino*. A handsome Japanese tree, ultimately about 40 feet high, with smooth pale-gray bark, thick wide-spreading branches, and large oblong sharply-toothed leaves which normally appear after the flowers have passed their prime. The flowers, borne in great profusion in the spring, are single, pink, or nearly white and about an inch across. The small black fruits are sometimes produced abundantly and afford an easy means of propagation.

67965 to 67968.

From Peradeniya, Ceylon. Seeds presented by the manager, publication depot and central seed store, Department of Agriculture. Received July 1, 1926.

The following are being tested as cover plants at the experiment station, Peradeniya.

67965. ALBIZZIA FALCATA (L.) Backer.
(*A. moluccana* Miquel). Mimosaceae.

A rapid-growing tree with large feathery leaves and small globular flower heads. Because of its thin foliage it is grown as a shade for field crops in Ceylon.

For previous introduction see No. 40776.

67966. CRACCA VILLOSA PURPUREA (L.) Kuntze (*Tephrosia purpurea* Pers.). Fabaceae.

A purple-flowered herbaceous perennial, of low spreading habit, which is native to tropical Africa. According to T. H. Holland (Planters' Chronicle, Ceylon, vol. 21, p. 87), trials in Ceylon show this plant to be suited for growing in the dry parts of the island as a source of green manure.

For previous introduction see No. 62909.

67967. ERYTHRINA VARIEGATA ORIENTALIS (L.) Merr. (*E. lithosperma* Blume). Fabaceae.

A moderate-sized spineless leguminous East Indian tree of very rapid growth, with trifoliate leaves and red flowers. In Ceylon, where it is called the *dadap*, this tree is used as a shade for cover plants, and the foliage is lopped for use as green manure.

67968. INDIGOFERA CONFUSA Prain and Baker (*I. arrecta* Benth., not Hochst.). Fabaceae.

A slender bushy, South African perennial, 1 to 2 feet high. The whole plant is a livid, blue-green, indicating the presence of indigo, according to W. H. Harvey (Flora Capensis, vol. 2, p. 183). The small flowers are silky white.

67969. LILIUM CHALCEDONICUM L. Liliaceae. Chalcedonian lily.

From Athens, Greece. Bulbs purchased from D. Demades, Botanical Museum of the University of Athens. Received August 18, 1926.

The Chalcedonian lily, which came originally from southern Europe, has a green purple-tinged stem 2 to 4 feet high, 100 or more leaves 2 to 6 inches long, and three

to six or more flowers about 3 inches in diameter. These are brilliant scarlet, with scarlet anthers.

67970. CASTILLA sp. Moraceae.

Rubber tree.

From San Pedro, Honduras. Seeds presented by H. A. Dike. Received September 7, 1926.

The Castillas are Central American trees from several of which rubber is obtained.

67971. GARCINIA BANCANA Miquel. Clusiaceae.

From Singapore, Straits Settlements. Seeds presented by the superintendent of the botanic gardens. Received July 12, 1926.

An East Indian tree, which, as described by Ridley (Flora of the Malay Peninsula, vol. 1, p. 174), is 20 to 80 feet tall, with leathery, broadly oval leaves and ovoid fruits.

67972. NERINE SARNIENSIS (L.) Herbert. Amaryllidaceae. Guernsey lily.

From Capetown, South Africa. Bulbs purchased from W. S. Duke & Co. Received February 4, 1926. Numbered July, 1926.

A South African bulbous plant with bright-green linear leaves about a foot long, developed after the bright-crimson flowers; the latter are in umbels of about twelve.

For previous introduction see No. 66981.

67973. CASTILLA sp. Moraceae.

Rubber tree.

From Bayeau, Haiti. Seeds collected by W. H. Jenkins. Received July 12, 1926.

A Central American tree introduced as a possible source of rubber, which is obtained from a number of species of this genus.

67974 to 67976. GOSSYPIUM spp. Malvaceae. Cotton.

From Kulikoro, French West Africa. Seeds presented by R. H. Forbes, collaborator of the Bureau of Plant Industry. Received July 2, 1926.

67974. GOSSYPIUM ANOMALUM Wawra.

This is described by Oliver (Flora of Tropical Africa, vol. 1, p. 211) as a shrub 5 to 10 feet high, with rough branches, reddish flowers, and oval capsules about an inch in length.

For previous introduction see No. 62591.

67975. GOSSYPIUM ARBOREUM L.

Locally grown seeds.

67976. GOSSYPIUM OBTUSIFOLIUM Roxb.

Locally grown seeds of a native Indian cotton.

67977. PAVETTA ZIMMERMANNIANA Valet. Rubiaceae.

From Buitenzorg, Java. Seeds presented by Dr. W. M. Docters van Leeuwen, director, botanic gardens. Received July 6, 1926.

A small East Indian evergreen tree or large shrub, with opposite elliptic leaves and clusters of slender-tubed white flowers. One of the most interesting features of this

plant is that the leaves have been found to contain colonies of nonmotile, nitrogen-fixing bacteria, making the species of possible agricultural value. This feature is discussed by Zimmermann and Faber in the *Jahrbücher für Wissenschaftliche Botanik*, vol. 51, p. 285, 1912, and vol. 54, p. 243, 1914.

67978. MIMUSOPS KAUKI L. Sapotaceae.

From Merauke, New Guinea. Seeds presented by P. T. L. Putnam. Received July 14, 1926.

A medium-sized tropical evergreen tree, 20 to 30 feet high, with oval leaves about 4 inches long, crowded at the ends of the branches, and small clusters of white flowers. The slightly acid fruits, about an inch in diameter, are eaten in parts of India.

67979. PASPALUM NOTATUM Fluegge. Poaceae. Grass.

From Jaguey Grande, Cuba. Seeds presented by Eugenia Gomez. Received August 9, 1926.

A perennial tropical American grass which has shown promise as a pasture grass in the southern United States. It has very stout rootstocks, makes a firm sod, and does well on sandy as well as on loam soils. The flowering culms and ascending stems attain a height of about 1 foot.

For previous introduction see No. 62049.

67980. CITRUS GRANDIS (L.) Osbeck (*C. decumana* Murr.). Rutaceae. Grapefruit.

From Buitenzorg, Java. Seeds obtained by David Fairchild, agricultural explorer, Bureau of Plant Industry, with the Allison V. Armour expedition. Received July 16, 1926.

No. 810. May 22, 1926. A deep pink-fleshed variety which is so dry the follicles can be broken from each other and eaten out of hand.

67981. POPULUS sp. Salicaceae. Poplar.

From Santiago, Chile. Cuttings presented by Salvador Izquierdo. Received July 9, 1926.

A tall fastigate rapid-growing poplar developed by selection at Santa Ines, the nursery of Señor Izquierdo, located near Santiago.

67982 to 67985.

From India. Seeds obtained by David Fairchild, agricultural explorer, Bureau of Plant Industry, with the Allison V. Armour expedition. Received July 19, 1926.

67982. BROWNEA GRANDICEPS Jacq. Caesalpiniaceae.

No. 907. Peradeniya Botanic Gardens, Ceylon. June 9, 1926. A large handsome Venezuelan tree, up to 40 feet in height, with attractively mottled young foliage and bright-red flowers in large, dense clusters borne at the ends of the branches.

For previous introduction see No. 52308.

67983. GARCINIA CORNEA L. Clusiaceae.

No. 909. Peradeniya Botanic Gardens, Ceylon. June 9, 1926. A handsome tree much like the mangosteen, but with

67982 to 67985—Continued.

smaller leaves. The fruits are about the size of a small orange and are said to be edible.

For previous introduction see No. 49537.

67984. GARCINIA MANGOSTANA L. Clusiaceae. Mangosteen.

Seeds obtained in India.

67985. GARCINIA sp. Clusiaceae.

A tropical Asiatic tree closely related to the mangosteen.

67986 to 67988. CITRUS GRANDIS (L.) Osbeck (*C. decumana* Murr.). Rutaceae. Grapefruit.

From Java. Seeds obtained from Mr. Cornelio, through W. T. Swingle, Bureau of Plant Industry. Received July 9, 1926.

Locally developed grapefruit varieties.

67986. Djerोक Panden Wangi.

67987. Djerोक Bale.

67988. Djerोक Delima.

67989. TRIFOLIUM PRATENSE L. Fabaceae. Red clover.

From Melbourne, Australia. Seeds purchased from F. H. Brunning. Received July 15, 1926.

Giant Colonial cowgrass. A high-yielding form of red clover developed under New Zealand conditions, of high feeding value, suitable for grazing, cutting for green feed, or cutting for hay. (*Brunning.*)

67990. TRIFOLIUM PRATENSE L. Fabaceae. Red clover.

From Leningrad, Russia. Seeds purchased from A. Kol, chief, bureau of introduction, Institute of Applied Botany. Received July 15, 1926.

Seeds grown in Perm, Russia.

67991. LITCHI CHINENSIS Sonner. (*Nephelium litchi* Cambess.). Sapindaceae. Lychee.

From Manila, Philippine Islands. Seeds presented by S. Youngberg, Director, Bureau of Agriculture. Received July 19, 1926.

Seeds from trees growing spontaneously in the Philippines.

67992. ULMUS PUMILA L. Ulmaceae. Chinese elm.

From Harbin, Manchuria. Seeds obtained by P. H. Dorsett, agricultural explorer, Bureau of Plant Industry. Received July 17, 1926.

No. 5489. June 1, 1926. Seeds from trees growing on the streets and in the parks of Harbin.

67993. HYMENOCALLIS AMANCAES (Ruiz and Pav.) Nichols. Amaryllidaceae. Spider lily.

From Lima, Peru. Bulbs presented by Carlos Rospigliosi, founder and director, Museo de Historia Natural. Received July 26, 1926.

A tender bulbous plant about 2 feet high with large bright-yellow flowers. Native to Peru and Chile.

67994 to 67996.

From Ceylon. Seeds obtained from the Peradeniya Botanic Garden by David Fairchild, agricultural explorer, Bureau of Plant Industry, with the Allison V. Armour expedition. Received July 19, 1926.

67994. *COUROUPITA GUIANENSIS* Aubl.
Lecythidaceae.

No. 910. June 9, 1926. The "cannon-ball" tree, native to Guiana, is one of the strangest freaks of the vegetable kingdom. It is a large, handsome tree which produces pink fleshy flowers of curious shape on special crooked branches rising from the trunk. These flowers are followed by cannon-ball shaped fruits 4 to 5 inches in diameter.

For previous introduction see No. 50475.

67995. *PARKIA TIMORIANA* (DC.) Merr.
(*P. roxburghii* G. Don.). Mimosaceae.

No. 913. June 9, 1926. A beautifully shaped park tree with a clear smooth trunk, attaining a height of 100 feet or more. It is a rapidly growing legume native to Burma. The flowers appear during November, and large clusters of long brown pods are produced on long peduncles. The fine feathery foliage and the graceful form of the tree combine to make an exceptional shade tree for tropical gardens.

For previous introduction see No. 61064.

67996. *STERCULIA LANCEOLATA* Cav. Sterculiaceae.

No. 908. June 9, 1926. A rather small evergreen tree from southeastern Asia, with small lanceolate leaves, which is particularly striking when bearing its bright scarlet fruits. These consist of a cluster of five spreading follicles which open on the under side, displaying the black shiny seeds.

67997 to 68000.

From Buitenzorg, Java. Seeds presented by Dr. W. M. Docters van Leeuwen, director, botanic gardens. Received July 12, 1926.

67997. *ECHINOCHLOA STAGNINA* (Retz.) Beauv. Poaceae.

A tall perennial grass, 6 feet or less high, which grows wild in marshy land in tropical Africa, where, according to Holland (Useful Plants of Nigeria, pt. 4, p. 831), it is a good fodder, much relished by stock.

For previous introduction see No. 49845.

67998. *ORYZA LATIFOLIA* Desv. Poaceae.

A native Brazilian rice, which is a perennial, sometimes 8 feet high, growing on land which is not flooded, according to a note by Andre Goeldi, of the Museu Goeldi, Para, Brazil, published under No. 50491.

67999. *PANICUM REPENS* L. Poaceae.
Grass.

A gray-green creeping or ascending perennial grass up to 2 feet high, native to the Mediterranean countries, and distributed throughout Asia Minor and tropical Africa. The stout rootstocks of this grass make it difficult to eradicate.

67997 to 68000—Continued.

68000. *SOJA MAX* (L.) Piper (*Glycine hispida* Maxim.). Fabaceae. Soy bean.

Locally grown seeds.

68001 to 68014.

From Kungchuling, Manchuria. Seeds obtained by P. H. Dorsett, agricultural explorer, Bureau of Plant Industry. Received July 16, 1926.

From the Kungchuling Agricultural Experiment Station.

68001 to 68005. *SORGHUM VULGARE* Pers. Poaceae. Sorghum.

68001. No. 5490. *Hung ko tai she jen* (red-husked large snake eye).

68002. No. 5491. A late-maturing variety with a stalk over 3 meters long.

68003. No. 5492. *Kei ko she jen hing* (black-husked red snake eye). A land variety which matures in mid-season.

68004. No. 5493. *Lao mu chu pu tai tou* (old pig does not lift up his head). An early dwarf variety.

68005. No. 5494. *Pai kao liang* (white kaoliang). A late-maturing variety.

68006. *HORDEUM VULGARE NIGRUM* (Willd.) Beaven. Poaceae.

Six-rowed barley.

No. 5496½. *Feng tien hei* (Mukden black barley). A local strain.

68007. *HORDEUM VULGARE PALLIDUM* Seringe. Poaceae. Six-rowed barley.

No. 5495. *Feng tien pai* (Mukden white barley). The best strain in southern Manchuria, widely cultivated near Mukden.

68008 to 68011. *SOJA MAX* (L.) Piper (*Glycine hispida* Maxim.). Fabaceae. Soy bean.

68008. No. 5498. *Ssu li huang* No. 4. Selected from a local variety in Kungchuling in 1914. It is the best strain available for distribution.

68009. No. 5499. *Mukden pai mei*. An early-maturing variety cultivated in the vicinity of Mukden.

68010. No. 5500. *Ssu piu chieh hei chi*. Cultivated in the vicinity of Ssuiuchieh.

68011. No. 5501. *Pai hua tso zu*. A midseason variety cultivated in the vicinity of Kungchuling.

68012 to 68014. *TRITICUM AESTIVUM* L. (*T. vulgare* Vill.). Poaceae.

Common wheat.

68012. No. 5496. Originally from San-sheng, northern Manchuria.

68013. No. 5497. A local variety cultivated near Nangan, southern Manchuria, which matures in midseason.

68014. No. 5498½. *Kung chuling improved* No. 3. A selected strain.

68015 to 68040.

From southeastern Asia and the Balearic Islands. Seeds obtained by David Fairchild, agricultural explorer, Bureau of Plant Industry, with the Allison V. Armour expedition. Received July 29, 1926.

68015 to 68040—Continued.

68015. *SESBANIA GRANDIFLORA* (L.) Poir. Fabaceae.

No. 859. Tandjong Priok, Java. May 26, 1926. A remarkably rapid-growing small leguminous tree which produces attractive purplish flowers, 2½ inches long. This tree is much used as a half shade for various cultures in the East Indies. The white variety is much more common, and seeds of the purple variety are very hard to obtain.

For previous introduction see No. 61778.

68016. *ALLAMANDA SCHOTTII* Pohl. Apocynaceae.

No. 847. Botanic garden, Singapore, Straits Settlements. May 30, 1926. A shrub having an abundance of flowers which are smaller than those of *A. grandiflora*.

68017. *ALLIUM CEPA* L. Liliaceae. Onion.

No. 793. Iviza, Balearic Islands. May 21, 1926. The giant onion of Iviza produces bulbs of very large size, some measuring over 6 inches in diameter and 2 inches thick. These onions were found to be an excellent dish when boiled; a single onion will serve five persons.

For previous introduction see No. 64449.

68018. *ARTOCARPUS CHAMPEDEN* (Lour.) Spreng. (*A. polyphema* Pers.). Moraceae.

No. 843. Singapore, Straits Settlements. May 31, 1926. A handsome shade tree bearing small elongated fruits which are rather smooth skinned. The arillus has a peculiar sweet flavor.

For previous introduction see No. 51804.

68019. *BRADBURYA PLUMIERI* (Turp.) Kuntze (*Centrosema plumieri* Turp.). Fabaceae. Butterfly pea.

No. 801. Buitenzorg, Java. May 22, 1926. An ornamental leguminous vine, native to Brazil.

For previous introduction see No. 48597.

68020. *CASSIA BACILLARIS* L. f. Caesalpiniaceae.

No. 734. Sibolangit Botanic Garden, Sumatra. March 28, 1926. A small tree suitable for street and park planting. The flowers are golden yellow and an inch or more in diameter.

68021. *CASUARINA SUMATRANA* Jungh. Casuarinaceae.

No. 844. Botanic garden, Singapore, Straits Settlements. May 31, 1926. This species is one of the handsomest of the Casuarinas. It has large cones and very fine drooping branchlets.

For previous introduction see No. 54705.

68022. *CITRUS GRANDIS* (L.) Osbeck (*C. decumana* Muir.). Rutaceae. Grapefruit.

No. 795. From the Department of Agriculture, Buitenzorg, Java. May 22, 1926. The "Djerok pandan wangi" of Java. A very large variety which has brilliant pink flesh of good quality and texture. The fruit has a secondary

68015 to 68040—Continued.

fruit in its interior. In fact it is a navel, showing this character on the exterior. It is very good for eating out of hand because it is so dry.

68023. *CITRUS* sp. Rutaceae.

No. 794. From the Department of Agriculture, Buitenzorg, Java. May 22, 1926. "Japanese citron." A very productive curious hybrid variety found in the kampongs of Java. It is suggestive of a cross between the tangerine and the lime and is very sour. It is a remarkable citrus stock in the wet region of western Java.

68024. *DIALIUM LAURINUM* Baker. Caesalpiniaceae.

No. 840. From the market at Singapore, Straits Settlements. May 31, 1926. The so-called "Velvet tamarind." The attractive gray fruits have a thin shell which is easily broken, and they contain a thin, very sweet, and agreeable pulp.

For previous introduction see No. 51770.

68025. *DIALIUM MAINGAYI* Baker. Caesalpiniaceae.

No. 841. Singapore market, Straits Settlements. May 31, 1926. A smaller fruited species with acid pulp instead of sweet; otherwise much like *Dialium laurinum*.

68026. *EUGENIA AQUEA* Burm. f. Myrtaceae.

No. 735. Botanic garden, Sibolangit, Sumatra. March 28, 1926. This small tree makes a superb showing with its crimson fruits, which have a color quality rarely seen.

For previous introduction see No. 48223.

68027 to 68034. *GARCINIA* spp. Clusiaceae.

68027. *GARCINIA BANCANA* Miquel.

No. 860. Botanic garden, Penang, Straits Settlements. June 5, 1926. A tree with large handsome leaves and large yellow one-sided fruits with thick rind, extremely sour flesh, and seeds 1½ inches long and half an inch thick. The fruits are about the size of the largest fruits of *Garcinia wanthochymus*, but in character of the rind remind one more of *G. atroviridis*. There is little arillus, but what there is has a pleasant acid flavor.

68028. *GARCINIA DULCIS* (Roxb.) Kurz.

No. 821. Singapore, Straits Settlements. May 31, 1926. A sour variety called Munda by the Malays. The fruits are larger than those of *Garcinia wanthochymus*, and like them are very acid.

For previous introduction see No. 30970.

68029. *GARCINIA FORBESII* King.

No. 817. Botanic garden, Singapore, Straits Settlements. May 31, 1926. A small-leaved lowland tree, 15 feet high, of Singapore, where the annual precipitation is 150 inches. The red fruits are the size of a cherry and have acid pulp. The arillus is red.

68030. *GARCINIA GRIFFITHII* T. Anders.

No. 819. Botanic garden, Singapore, Straits Settlements. May 31, 1926.

68015 to 68040—Continued.

A common tree in the woods of Singapore. It is 60 feet tall, with smooth bark and large leaves, 9 to 16 inches long. The acid fruits are said to be 3 inches in diameter, globose, flattened at the top and brownish green, resembling a russet apple.

68031. *GARCINIA MANGOSTANA* L.
Mangosteen.

No. 861. Penang, Straits Settlements. The largest seeds, separated from the smaller ones, to see whether they had more vitality.

68032. *GARCINIA MANGOSTANA* L.
Mangosteen.

No. 862. Penang, Straits Settlements. The small seeds, which are believed to have little vitality.

68033. *GARCINIA MANGOSTANA* L.
Mangosteen.

No. 864. Penang, Straits Settlements. A mixture of medium-sized and large seeds.

68034. *GARCINIA NIGRO-LINEATA* Planch.

No. 818. Botanic garden, Singapore, Straits Settlements. May 31, 1926. A handsome park tree 40 feet tall, with large leaves 6 to 8 inches long and small edible fruits.

68035. *GUSTAVIA* sp. Lecythidaceae.

No. 849. Botanic garden, Singapore, Straits Settlements. May 30, 1926. A handsome shrub or small tree with rather curious flowers, reminding one of a passion flower with its many stamens.

68036. *MIMOSA INVISA* Mart. Mimosa-ceae.

No. 797. Tea experiment station, Buitenzorg, Java. May 22, 1926. A most remarkable humus producer which makes a mat of herbage 3 feet high. It is a pink-flowered, very spiny bush, native to tropical America.

For previous introduction see No. 45618.

68037. *OLEA MARITIMA* Wall. Oleaceae.

No. 845. Botanic garden, Singapore, Straits Settlements. May 31, 1926. A shrub or small tree common in the lowlands near the sea in Singapore, and there probably capable of withstanding some salt. It bears round velvety black or very dark brown fruits, one-fourth of an inch in diameter, which resemble olives.

68038. *PASSIFLORA LAURIFOLIA* L. Passifloraceae. Yellow granadilla.

No. 846. Botanic garden, Singapore, Straits Settlements. May 30, 1926. A yellow-fruited granadilla with refreshing pulp which is not so juicy as *Passiflora edulis*. It is a handsome evergreen climber.

For previous introduction see No. 44852.

68039. *SHUTERIA VESTITA* Wight and Arn. Fabaceae.

No. 379. Ramboda Falls, Ceylon. January 27, 1926. A trailing legume with trifoliate leaves, which have a dark spot on each leaflet. The stems are extremely strong and slender and difficult to break.

68015 to 68040—Continued.

68040. *VIGNA HOSEI* Hort. Fabaceae.

No. 800. Buitenzorg, Java. One of the most successful cover crops which has been used on the shady ground under the rubber plantations, and one which does not die back when exposed to the sun.

68041 to 68053. *SACCHARUM OFFICINARUM* L. Poaceae. Sugar cane.

From Pasoeroean, Java. Cuttings purchased from J. Kuyper, assistant director, sugar experiment station. Received August 6, 1926.

Varieties grown in Java.

68041. No. 331. 68048. No. 2752.

68042. No. 105. 68049. No. 2753.

68043. No. 139. 68050. No. 2878.

68044. No. 501. 68051. No. 2883.

68045. No. 1335. 68052. *Gr. D. N. G.*

68046. No. 1499. 68053. *White Ceram.*

68047. No. 2722.

68054 to 68104.

From Leningrad, Russia. Seeds presented by A. Kol, chief, bureau of introduction, Institute of Applied Botany. Received July 26, 1926.

68054 and 68055. *AGROPYRON CRISTATUM* (L.) Gaertn. Poaceae. Wheatgrass.

A perennial, thickly caespitose grass with stout rhizomes, native to southeastern Europe. It is both drought and cold resistant and promises to be of value for the cold grassland area of the Rocky Mountains.

For previous introduction see No. 64090.

68054. No. 2997. From Nemkommuna, Samara Government.

68055. No. 2998. A broad-leaved variety from Nemkommuna, Samara Government.

68056. *AGROPYRON TENERUM* Vasey. Poaceae. Slender wheatgrass.

No. 9453. From the Western Siberian Experiment Station, Omsk.

68057. *ALLIUM SCHOENOPRASUM* L. Liliaceae. Chives.

No. 9270. From Moscow Government. The sand leek or rocambole of Europe and Asia Minor resembles garlic, but has smaller bulbs of milder flavor, which are produced at the tip of the stem as well as at its base.

For previous introduction see No. 59691.

68058. *AMARANTHUS CAUDATUS* L. Amaranthaceae. Amaranth.

No. 1101. From the Voronezh Government Step. Experiment Station.

For previous introduction see No. 56611.

68059. *ANETHUM GRAVEOLENS* L. Apiaceae. Dill.

No. 9260. From Kiev Government.

For previous introduction see No. 64340.

68054 to 68104—Continued.

- 68060 to 68063. *AVENA SATIVA* L. Poaceae. Oats.
68060. No. 1328. From the Shatilov Experiment Station, Tula Government.
68061. No. 1329. From the Shatilov Experiment Station, Tula Government.
68062. No. 9451. From the Western Siberian Experiment Station, Omsk.
68063. No. 9452. From the Western Siberian Experiment Station, Omsk.
- 68064 and 68065. *BRASSICA OLERACEA CAPITATA* L. Brassicaceae. Cabbage.
- From Moscow Government.
68064. No. 2918. *Kubysbka*.
68065. No. 2919. *Leverka*.
68066. *BROMUS ERECTUS* Huds. Poaceae. Meadow brome grass.
- No. 7395. From the Tulun Experiment Station, Irkutsk Government. A perennial, thickly caespitose grass, with upright stems 1 to 3 feet high. Native to Europe and Asia Minor.
68067. *CORIANDRUM SATIVUM* L. Apiaceae. Coriander.
- No. 9256. From Geraj, Afghanistan.
- 68068 to 68071. *CUCUMIS SATIVUS* L. Cucurbitaceae. Cucumber.
- From Moscow Government.
68068. No. 2929. 68070. No. 2935.
68069. No. 2933. 68071. No. 2937.
68072. *DACTYLIS GLOMERATA* L. Poaceae. Orchard grass.
- No. 7408. From Bekasovo, Moscow Government.
- For previous introduction see No. 55382.
68073. *Daucus carota* L. Apiaceae. Carrot.
- No. 2927. *Vorobjewsk*. From Moscow Government.
68074. *FESTUCA ELATIOR* L. Poaceae. Meadow fescue.
- No. 7416. From the Tulun Experiment Station, Irkutsk Government.
68075. *HELIANTHUS ANNUUS* L. Asteraceae. Sunflower.
- No. 3002. From the Saratov Experiment Station.
- 68076 and 68077. *LENS ESCULENTA* Moench. Fabaceae. Lentil.
68076. No. 3006. From the Bogorodizkaja Experiment Station, Kursh Government.
68077. No. 3454. From Kasvin, Persia.
68078. *LEPIDIUM SATIVUM* L. Brassicaceae. Garden cress.
- No. 9276. From Falsabad, Afghanistan.
68079. *LOTUS CORNICULATUS* L. Fabaceae. Bird's-foot trefoil.
- No. 7435. From the Tulun Experiment Station, Irkutsk Government.
- For previous introduction see No. 57967.

68054 to 68104—Continued.

68080. *MEDICAGO SATIVA* L. Fabaceae. Alfalfa.
- No. 9893. From Tashaus, Turkestan.
68081. *PANICUM MILIACBUM* L. Poaceae. Froso.
- No. 3003. From the Saratov Government Experiment Station.
- 68082 to 68085. *PAPAVER SOMNIFERUM* L. Papaveraceae. Poppy.
- From Mongolia.
68082. No. 9263. 68084. No. 9265.
68083. No. 9264. 68085. No. 9267.
68086. *PHALARIS CANARIENSIS* L. Poaceae. Canary grass.
- No. 9286. From Tauris.
- 68087 and 68088. *PHASEOLUS VULGARIS* L. Fabaceae. Common bean.
68087. No. 2909. From Kharkof Government.
68088. No. 2910. From Kiev Government.
68089. *PIMFINELLA ANISUM* L. Apiaceae. Anise.
- No. 9255. From Mongolia.
- 68090 to 68092. *PISUM SATIVUM* L. Fabaceae. Pea.
68090. No. 1085. From the Kokutchev Experiment Station.
68091. No. 1090. From the Moscow Agricultural Academy.
68092. No. 1096. From Rostov, Don.
68093. *RAPHANUS SATIVUS* L. Brassicaceae. Radish.
- No. 2944. From Moscow Government.
68094. *SPINACIA OLERACEA* L. Chenopodiaceae. Spinach.
- No. 9273. From Kandagar, Afghanistan.
68095. *TRIGONELLA FOENUM-GRÆCUM* L. Fabaceae. Fenugreek.
- No. 9284. From Afghanistan.
- 68096 to 68102. *TRITICUM AESTIVUM* L. (*T. vulgare* Vill.). Poaceae. Common wheat.
68096. No. 2999. *Belokolosska*. From the Saratov Experiment Station.
68097. No. 3001. From the Saratov Experiment Station.
68098. No. 6985. From the Ekaterinoslav Experiment Station.
68099. No. 9446. From the Western Siberian Experiment Station, Omsk.
68100. No. 9447. From the Western Siberian Experiment Station, Omsk.
68101. No. 9448. From the Western Siberian Experiment Station, Omsk.
68102. No. 9449. From the Western Siberian Experiment Station, Omsk.
- 68103 and 68104. *TRITICUM DURUM* Desf. Poaceae. Durum wheat.
68103. No. 2996. From the Krasnokut Experiment Station, Samara Government.
68104. No. 10407. *Mieri Bugdaj*. From Merv District, Turkestan.

68105 to 68125.

From Buitenzorg, Java. Seeds presented by Dr. W. M. Docters van Leeuwen, director, botanic gardens. Received August 13, 1926.

68105. ALPINIA HOOKERIANA Valet. Ziniberaceae.

A biennial tufted leafy herb, 4 to 6 feet high, with bright-green leaves a foot or so long and drooping white and orange flowers in erect panicles. Native to the Malay Peninsula.

68106. ANGIOPTERIS JAVANICA Presl. Marattiaceae. Fern.

A coarse tropical fern native to Java, with a massive rounded rootstock and large bipinnate fronds.

68107. ARECA ALICAE F. Muell. Phoenicaceae. Palm.

An Australian palm with several slender graceful spineless trunks, 9 feet or more in height, and pinnate shining-green leaves 3 to 6 feet long.

68108. ARECA TRIANDRA Roxb. Phoenicaceae. Palm.

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

For previous introduction see No. 45956.

68109. ARENGA MICROCARPA Beccari. Phoenicaceae. Palm.

A handsome East Indian palm, with a ringed trunk, covered with black hairs when young and a crown of large pinnate leaves.

68110. ASPLENIUM SQUAMULATUM Blume. Polypodiaceae. Fern.

A tropical fern, native to Java.

68111. CARYOTA MITIS Lour. Phoenicaceae. Palm.

A Malayan palm about 20 feet high with a straight cylindrical spineless ringed trunk, 4 inches or more in diameter, and bipinnate leaves 4 to 9 feet in length. The purple fruits are about the size of cherries.

For previous introduction see No. 51709.

68112. CARYOTA SOBOLIFERA Mart. Phoenicaceae. Palm.

A handsome East Indian palm with a spineless trunk about 25 feet high, crowned by a graceful cluster of pinnate leaves composed of short broad segments.

68113. CHRYSALIDOCARPUS MADAGASCARIENSIS Beccari. Phoenicaceae. Palm.

A graceful palm, native to Madagascar, about 15 feet high with leaves 10 feet long. The pinnate leaves, with 18-inch long segments arranged in fascicles of six or eight, seem to be arranged on the stem in threes, giving it a triangular appearance. This arrangement of the leaves and the fascicled arrangement of the leaflets is peculiar to this genus, not being found in any other pinnate-leaved palm.

For previous introduction see No. 45958.

68105 to 68125—Continued.

68114. CORYPHA GEBANGA Blume. Phoenicaceae. Palm.

A tall East Indian palm with a stout, spineless trunk and large, terminal orbicular fanlike leaves.

68115. CYRTOSTACHYS LAKKA Beccari. Phoenicaceae. Palm.

A stately and elegant palm, native to the East Indies, with a slender spineless stem crowned by a cluster of boldly arched leaves 3 to 4 feet in length. The fruits are elongate egg-shaped and about half an inch long.

For previous introduction see No. 55579.

68116. CYRTOSTACHYS REND A Blume. Phoenicaceae. Palm.

A Sumatran palm of stately habit, about 25 feet high, with a slender spineless trunk crowned by a graceful cluster of pinnately divided leaves, with bright-red leaf sheaths.

68117. IXORA JAVANICA (Blume) DC. Rubiaceae.

An ornamental East Indian evergreen shrub, about 3 feet high, with oval-oblong leaves up to 7 inches long and clusters of deep orange-red flowers.

68118 to 68120. LATANIA spp. Phoenicaceae. Palm.

68118. LATANIA COMMERSONII Gmel.

A palm from the island of Mauritius, which reaches a height of 30 to 40 feet, with slightly spiny, fan-shaped, dark-green leaves marked with red in young trees. The leaves are used by the natives in making fans, hats, mats, etc.

For previous introduction see No. 51720.

68119. LATANIA LODDIGESII Mart.

A low spineless palm, native to Mauritius, with rounded, fan-shaped leaves 3 to 5 feet long and pear-shaped fruits over 2 inches long.

For previous introduction see No. 59316.

68120. LATANIA VERSCHAFFELTII Lem.

A fan-leaved palm about 20 feet high, with pale-green leaves 5 feet long, and hairy petioles, with orange margins, 5 to 8 feet long. Native to the island of Rodriguez, east of Mauritius.

For previous introduction see No. 51722.

68121. LICUALA AMPLIFRONS Miquel. Phoenicaceae. Palm.

A showy dwarf fan palm from Sumatra with leaves about 2½ feet long and usually 12-parted.

68122. MARATTIA SAMBUCINA Blume. Marattiaceae. Fern.

A large coarse tropical fern with stiff bipinnate fronds. Native to damp situations in the mountains of Java.

68123. NORMANBYA MUELLERI Beccari. Phoenicaceae. Palm.

An elegant Australian palm with attractive pinnate leaves.

68105 to 68125—Continued.

68124. *TRICHOSANTHES GLOBOSA* Blume. Cucurbitaceae.

An ornamental cucurbitaceous climber, native to Java, with 3-palmate to 5-palmate leaves and globose fruits.

68125. *ZEPHYRANTHES CITRINA* Baker. Amaryllidaceae. **Zephyr lily.**

A bulbous plant, unknown except in cultivation, with linear bright-green leaves a foot long and bright-yellow flowers 1½ inches long, on scapes about 5 inches high.

68126. *CANNA* sp. Cannaceae.

From Haina, Santo Domingo, Dominican Republic. Seeds presented by Dr. R. Ciferri, Director, Estación Agronómica de Haina. Received August 18, 1926.

A native canna from the Dominican Republic.

68127 and 68128.

From Kedjadar, Java. Seeds presented by A. M. Cramer. Received August 18, 1926.

68127. *CASSIA LAEVIGATA* Willd. Caesalpinziaceae.

An erect shrubby ornamental tropical cassia about 3 feet in height, with axillary and terminal racemes of large yellow flowers and cylindrical leathery pods 2 to 3 inches long, inflated when ripe.

For previous introduction see No. 55599.

68128. *PHASEOLUS LUNATUS* L. Fabaceae. Lima bean.

Java-grown seeds of a pole Lima bean.

68129. *PHASEOLUS CARACALLA* L. Fabaceae. **Bertoni bean.**

From Summit, Canal Zone. Seeds presented by Holger Johansen, Plant Introduction Garden. Received August 8, 1926.

A perennial leguminous climber from the warmer parts of Paraguay, which bears attractive purplish or yellowish flowers during the late summer and autumn.

For previous introduction see No. 37010.

68130 to 68136. *AVENA SATIVA* L. Poaceae. Oats.

From Melbourne, Victoria, Australia. Seeds presented by H. A. Mullett, Superintendent of Agriculture. Received August 5, 1926.

Australian-grown oat varieties.

68130. *Burt's Early.*

68131. *Lachlan.*

68132. *Palestine.*

68133. *Ruakura.*

68134. *Sunrise.*

68135. *Wild oats* × *Ruakura.*

68136. *Yarran.*

68137 to 68140.

From Bayswater, Bloemfontein, South Africa. Seeds presented by Charles A. Beck. Received August 18, 1926.

68137 to 68140—Continued.

68137. *ACACIA HORRIDA* (L.) Willd. Mimosaceae.

A spreading, flat-topped, spiny tree, about 20 feet high, widely distributed throughout South Africa. The fragrant yellow flower heads are often visited by bees, but the main value of the tree in South Africa is as a shade for stock.

For previous introduction see No. 48518.

68138. *CUSSONIA UMBELLIFERA* Sond. Araliaceae.

A South African tree, about 35 feet high, with compound, shining-green leaves a foot or so long, and large umbels of small fleshy fruits.

68139. *ERAGROSTIS* sp. Poaceae.

A South African perennial grass.

68140. *ZIZIPHUS MUCRONATA* Willd. Rhamnaceae.

A spiny tree, native to South Africa, about 25 feet high, with small, three-nerved leaves, inconspicuous yellowish flowers, and red fruits about the size of cherries.

68141 to 68150.

From Brignoles, France. Seeds presented by R. Salgues, Station Botanique de Brignoles. Received August 18, 1926.

68141. *ANDROSACE MAXIMA* L. Primulaceae.

A small ornamental tufted European annual, about a foot high, which belongs to the primrose family. The white flowers appear in the spring.

68142. *ANTHYLLIS TETRAPHYLLA* L. Fabaceae.

A leguminous annual, native to southern Europe, about a foot high, with spikes of yellow flowers.

68143. *ELICHRYSUM STOECNAS* (L.) DC. Asteraceae.

A handsome evergreen shrub about 2 feet high, with yellow flowers. Native to the Mediterranean region.

68144. *HUMULUS LUPULUS* L. Moraceae. Hop.

European-grown hop seeds.

For previous introduction see No. 42024.

68145. *IRIS FOETIDISSIMA* L. Iridaceae. Gladwin iris.

An iris, native to the Mediterranean countries, with leaves a foot long and bright-lilac flowers borne on a stem about 2 feet high.

For previous introduction see No. 66576.

68146. *PHALARIS ARUNDINACEA* L. Poaceae. Reed canary grass.

Locally grown seeds.

For previous introduction see No. 60881.

68147. *RANUNCULUS FALCATUS* L. Ranunculaceae. Buttercup.

A low annual, with small yellow flowers, native to southern Europe.

68141 to 68150—Continued.

68148. *RUSCUS ACULEATUS* L. Convallariaceae. Butcher's-broom.

An ornamental evergreen shrub, about a foot high, with prickly stems and large red berries. Native to England.

68149. *SCORPIURUS SUBVILLOSA* L. Fabaceae.

A decumbent or ascending annual with one to three stems up to 20 inches in length, long-stemmed, simple, grass-green, narrow leaves, and small yellow flowers. Native to the Mediterranean countries.

For previous introduction see No. 65035.

68150. *TRAGOPOGON LONGIROSTRIS* Bisch. Cichoriaceae.

A hardy biennial with narrow grass-like leaves and yellow flower heads. Native of southern Europe.

68151 to 68153.

From the Balearic Islands and Morocco. Seeds obtained by David Fairchild, agricultural explorer, Bureau of Plant Industry, with the Allison V. Armour expedition. Received August 20, 1926.

68151. *CERATONIA SILIQUA* L. Caesalpiniaceae. Carob.

San Antonio, Iviza, Balearic Islands. August 15, 1925. Variety *Pauseca*. One of the best sorts in this section.

68152. *POLYCARPÆA NIVEA* (Ait.) Webb. Silenaceae.

Obtained near Mogador, Morocco. June 5, 1925. A low-growing gray hairy perennial plant used extensively and successfully in the sand-binding experiments on the sand dunes.

68153. *THYMUS ZYGIS* L. Menthaceae.

San Antonio, Iviza, Balearic Islands. August 14, 1925. *Frigola*. An aromatic plant from which a strong intoxicant is brewed.

68154 to 68157.

From Honolulu, Hawaii. Seeds presented by C. S. Judd, superintendent of forestry. Received August 20, 1926.

68154. *COLUBRINA OPPOSITIFOLIA* Brongn. Rhamnaceae.

A small evergreen tree, with opposite, oval or oblong papery leaves up to 7 inches in length. The wood is very hard and was once used by the native Hawaiians for making spears.

68155. *KOKIA ROCKII* Lewton. Malvaceae. Kokio.

A Hawaiian tree, up to 40 feet in height, closely related to cotton (*Gossypium* spp.). When covered with its large orange-red flowers it is of striking beauty.

68156. *MEZONEURUM KAUAIENSE* (Mann.) Hillebr. Caesalpiniaceae.

A leguminous tree growing to a height of 30 feet. The blossoms are red, and the hard, black heartwood is used by the Hawaiians for clubs and tapa beaters. (Judd.)

68157. *MYOPORUM SANDWICENSE* (A. DC.) A. Gray. Myoporaceae.

A tree 20 to 30 feet high, or sometimes a shrub, with alternate oblong leaves,

68154 to 68157—Continued.

up to 6 inches long, crowded toward the ends of the branches, and clusters of small white flowers. The heartwood becomes very fragrant when dried, with an odor resembling that of sandalwood.

68158 to 68169. *IRIS* spp. Iridaceae.

From Tiflis, Georgia, Russia. Rhizomes presented by A. Grossheim, director, botanic garden. Received September 1, 1926.

68158. *IRIS ACUTILOBA* Meyer.

A wild iris native to the Caucasus, with purple and fawn-colored flowers.

For previous introduction see No. 67018.

68159. *IRIS CARTHALINIAE* Fourn.

A Caucasian iris described (Moniteur du Jardin Botanique de Tiflis, 1909) as having a thick rhizome, and four-flowered or five-flowered stems nearly 3 feet high. The sword-shaped leaves are about two-thirds of an inch wide, and the flowers are light blue. In its native country the plant grows in damp places.

For previous introduction see No. 64297.

68160. *IRIS FOMINII* Hort.

A horticultural variety.

68161. *IRIS APHYLLA* L. Stool iris.

A European iris with glaucous leaves up to a foot long or sometimes leafless. The dark-lilac flowers are about 2 inches long.

For previous introduction see No. 66930.

68162. *IRIS GROSSHEIMII* Hort.

A horticultural variety.

68163. *IRIS IBERICA* Hoffm. Iberian iris.

A dwarf, nearly stemless iris, native to mountainous parts of Asia Minor, with narrow leaves 3 to 6 inches long, and large flowers; these have pale-brown outer segments blotched with purple-brown, and pure white inner segments, although these colors are not constant.

68164. *IRIS LYCOTIS* Wurm.

A species belonging to the *Oncocyclus* section and probably related to *Iris acutiloba*.

68165. *IRIS MUSULMANICA* Fourn.

An iris from the vicinity of Elisabethopol, Caucasus, which, according to the Moniteur du Jardin Botanique de Tiflis (vol. 14, 1909), inhabits brackish swamps. It is less than 2 feet tall, and the flowers are either sky-blue or yellowish.

For previous introduction see No. 67917.

68166. *IRIS PARADOXA* Stev. Velvet iris.

A dwarf, linear-leaved iris, 2 to 6 inches high, with large lilac or white flowers. Native to northern Persia and Asia Minor, where it grows in dry situations.

68167. *IRIS RETICULATA* Bieb. Netted iris.

A tufted iris, native to Asia Minor, with short erect leaves about 1½ feet high, a very short stem, and very fragrant, bright-purple flowers with the outer segments about 2 inches long.

68158 to 68169—Continued.

68168. IRIS SCHELKOWNIKOWI Fomin.

A species belonging to the *Oncocylus* section and probably related to *Iris acutiloba*.

68169. IRIS TASCHIA Hort.

A horticultural variety.

For previous introduction see No. 64300.

68170. POPULUS MAXIMOWICZII A. Henry. Salicaceae. Poplar.

From Jamaica Plain, Mass. Cuttings presented by the Arnold Arboretum. Received November 8, 1922. Numbered September, 1926.

A very fast growing and stately tree native to China. It will succeed in the coldest portions of the United States on the poorest and driest soils. At all times it makes phenomenally rapid growth. Its leaves, which are handsomely crinkled like those of *Rosa rugosa*, appear very early in the spring and remain longer in the fall than those of almost any other deciduous plant. The tree is not attacked by borers or leaf-eating insects. It is highly recommended as a shade tree and windbreak generally, especially for the northwest Plains country.

For previous introduction see No. 51877.

68171 to 68177.

From Leningrad, Russia. Seeds presented by A. Kol, chief, bureau of introduction, Institute of Applied Botany. Received August 23, 1926.

68171. BROMUS INERMIS Leyss. Poaceae. Brome grass.

No. 7393. A perennial European grass, with creeping rhizomes and stems up to 30 inches high.

68172. FESTUCA ELATIOR L. Poaceae. Meadow fescue.

No. 2963. A loosely tufted perennial European grass with short creeping rootstalks and erect stems up to 4 feet high.

68173. LENS ESCULENTA Moench. Fabaceae. Lentil.

No. 3455. An annual legume, 1½ feet high, of Russian strain, native to southern Europe.

68174 and 68175. PHASEOLUS VULGARIS L. Fabaceae. Common bean.

Russian varieties.

68174. No. 2892. *Bomba*. Variety ellipticus.

68175. No. 2908. Variety oblongus.

68176. TRITICUM AESTIVUM L. (*T. vulgare* Vill.). Poaceae. Common wheat.

No. 6984. Variety ferrugineum. A Russian strain.

68177. VICIA ERVILIA (L.) Willd. Fabaceae. Vetch.

No. 3453. An annual erect vetch, native to the Mediterranean countries.

68178. AMYGDALUS PERSICA NECTARINA Ait. Amygdalaceae. Nectarine.

From Chico, Calif. A variety of unknown origin, grown at the United States Plant

Introduction Garden under No. 26503, but distinct from the original trees of that number. Numbered September, 1926.

(Trees 7 and 8, new test orchard, propagated from trees 4 and 5, old test nursery.) Fruit very large, spherical, about 2½ inches in diameter; stem heavy; skin almost uniformly yellow-green, sometimes overlaid with more or less red; flesh medium firm, greenish white, moderately juicy, mildly subacid, of good rich flavor and of excellent quality; pit of medium size, slightly staining flesh. Fruit ripens at Chico the latter part of August.

68179. GARCINIA BENTHAMII Pierre. Clusiaceae.

From Manila, Philippine Islands. Seeds presented by S. Youngberg, Director, Bureau of Agriculture, through Dr. W. A. Orton, director, Tropical Plant Research Foundation, Washington, D. C. Received August 31, 1926.

A small, evergreen, rapidly growing tropical tree, closely related to the mangosteen (*Garcinia mangostana*). The edible fruits are very similar to those of the mangosteen except that they are slightly smaller, bright red, and have very acid flesh; probably suited for making preserves. Native to low altitudes in the Philippines.

68180 to 68293.

From Gandja, Transcaucasia, Russia. Seeds presented by the Director, Central Transcaucasian Agricultural Plant Breeding and Experiment Station. Received August 30, 1926.

Locally grown strains.

68180 to 68229. HORDEUM spp. Poaceae.

68180. HORDEUM DISTICHON PALMELLA Harlan. Two-rowed barley. No. 8.

68181 to 68200. HORDEUM VULGARE NIGRUM (Willd.) Beaven. Six-rowed barley.

68181. No. 10. 68191. No. 158.

68182. No. 11. 68192. No. 159.

68183. No. 116. 68193. No. 160.

68184. No. 118. 68194. No. 161.

68185. No. 144. 68195. No. 162.

68186. No. 145. 68196. No. 163.

68187. No. 151. 68197. No. 164.

68188. No. 154. 68198. No. 165.

68189. No. 155. 68199. No. 167.

68190. No. 157. 68200. No. 169.

68201 to 68229. HORDEUM VULGARE PAL-LIDUM Seringe. Six-rowed barley.

68201. No. 3. 68210. No. 111.

68202. No. 4. 68211. No. 112.

68203. No. 7. A 68212. No. 114.

white variety. 68213. No. 123.

68204. No. 9. 68214. No. 124.

68205. No. 12. 68215. No. 125.

68206. No. 104. 68216. No. 126.

68207. No. 105. 68217. No. 127.

68208. No. 106. 68218. No. 128.

68209. No. 107. 68219. No. 129.

68180 to 68293—Continued.

68220. No. 132.	68225. No. 140.
68221. No. 133.	68226. No. 141.
68222. No. 134.	68227. No. 142.
68223. No. 138.	68228. No. 146.
68224. No. 139.	68229. No. 190.
68230 to 68293. TRITICUM spp. Poaceae.	
68230 to 68236. TRITICUM AESTIVUM L. (T. vulgare Vill.). Common wheat.	
68230. No. 329.	68234. No. 357.
68231. No. 335.	68235. No. 408.
68232. No. 336.	68236. No. 413.
68233. No. 338.	
68237 to 68291. TRITICUM DURUM Desf. Durum wheat.	
68237. No. 5.	68265. No. 64.
68238. No. 6.	68266. No. 65.
68239. No. 9.	68267. No. 66.
68240. No. 12.	68268. No. 67.
68241. No. 13.	68269. No. 77.
68242. No. 14.	68270. No. 81.
68243. No. 17.	68271. No. 86.
68244. No. 18.	68272. No. 87.
68245. No. 20.	68273. No. 100.
68246. No. 22.	68274. No. 117.
68247. No. 23.	68275. No. 128.
68248. No. 24.	68276. No. 134.
68249. No. 25.	68277. No. 160.
68250. No. 26.	68278. No. 194.
68251. No. 27.	68279. No. 224.
68252. No. 28.	68280. No. 232.
68253. No. 29.	68281. No. 331.
68254. No. 30.	68282. No. 333.
68255. No. 34.	68283. No. 354.
68256. No. 37.	68284. No. 356.
68257. No. 39.	68285. No. 358.
68258. No. 41.	68286. No. 360.
68259. No. 43.	68287. No. 362.
68260. No. 52.	68288. No. 410.
68261. No. 54.	68289. No. 415.
68262. No. 55.	68290. No. 422.
68263. No. 56.	68291. No. 445.
68264. No. 63.	
68292 and 68293. TRITICUM POLONICUM L. Poaceae. Polish wheat.	
68292. No. 332.	68293. No. 351.

68294. AGAVE FUNKIANA Koch and Bouche. Amaryllidaceae.

From Ciudad Victoria, Tamaulipas, Mexico. Seeds presented by Bernardo Zorrilla's Sons, through L. H. Dewey, Bureau of Plant Industry. Received September 16, 1926.

This plant grows wild on the mountain sides surrounding the Jaumave and Las Palmas Valleys, in the State of Tamaulipas. The leaves are 5 to 7 centimeters wide

and 50 to 100 centimeters long, with horny borders bearing sharp-hooked prickles and a terminal spine. The fiber, known in the market as Jaumave itle, is cleaned by hand from the leaves forming the central cogollos or buds. This fiber is used in the manufacture of brushes and also twines. The plant has not been cultivated commercially, but it may be propagated either from seeds or from suckers. (Dewey.)

68295. DOLICHOS LABLAB L. Fabaceae. Hyacinth bean.

From Sumatra. Seeds obtained by David Fairchild and P. H. Dorsett, agricultural explorers, Bureau of Plant Industry, with the Allison V. Armour expedition. Received May 14, 1926. Numbered September, 1926.

No. 539. March 4, 1926. Seeds black with a white hilum; plant found growing along the shore of Lake Tewar, near Taken-gon.

68296 to 68298.

From Sumatra and Ceylon. Seeds obtained by David Fairchild, agricultural explorer, Bureau of Plant Industry, with the Allison V. Armour expedition. Received August 31, 1926.

68296. PHASEOLUS SCABERULUS Miquel. Fabaceae.

From Sumatra. A twining, leguminous vine, with hairy stems and leaves, and leaflets up to 3½ inches in length, according to Miquel (Flora Indiae Batavae, vol. 1, pt. 1, 197). It is native to Java.

68297. SOPHORA TOMENTOSA L. Fabaceae.

No. 436. Found on the beach at Pulu We, near Sebang, Sumatra. February 17, 1926. A beach-loving shrub with attractive foliage.

For previous introduction see No. 46446.

68298. (Undetermined.)

February, 1926. A leguminous vine found on salt plains near the sea at Jafna, Ceylon.

68299 and 68300.

From Teneriffe, Canary Islands. Seeds presented by Juan Bolinaga, Jardin de Aclimatación de Orotava. Received September 1, 1926.

68299. JUNIPERUS CEDRUS Webb. Pinaceae. Juniper.

A Canary Island relative of the common juniper, differing only in minor botanical characters and also in being less hardy. According to Bean (Trees and Shrubs Hardy in the British Isles, vol. 1, p. 669), Dr. Georges Perez of Orotava, Canary Islands, reported trees of this species with trunks a yard or more in diameter. The leaves are uniformly awl-shaped and in whorls of threes. The wood is pleasantly perfumed.

For previous introduction see No. 57080.

68300. PINUS CANARIENSIS C. Smith. Pinaceae. Canary pine.

A pine, native to the Canary Islands, which thrives in warm temperate climates. It is suited to nearly all soils and has a straight trunk even when it grows in an isolated position. The wood of this pine, known in the Canary Islands as

68299 and 68300—Continued.

"tea," is very hard, very difficult to work, but unequaled for duration and building purposes because it does not rot.

For previous introduction see No. 62096.

68301 to 68323. *VITIS VINIFERA* L. **Vitaceae.** **Grape.**

From Teheran, Persia. Cuttings presented by F. J. Harris, Teheran, at the request of the Earl of Chichester, through Thomas Cook & Sons, New York, N. Y. Received March 24, 1926. Numbered September, 1926.

- 68301. No. 1. *Eskari Riz.*
- 68302. No. 2. *Sahabi.*
- 68303. No. 3. *Kechwechi Bleue.*
- 68304. No. 4. *Lal Guermez.*
- 68305. No. 5. *Chali Sar.*
- 68306. No. 6. *Umagun.*
- 68307. No. 7. *Kechwechi Rouge.*
- 68308. No. 8. *Cefid.*
- 68309. No. 9. *Lal Cefid.*
- 68310. No. 10. *Quanque.*
- 68311. No. 11. *Tagouti Rouge.*
- 68312. No. 13. *Kalili.*
- 68313. No. 14. *Takri.*
- 68314. No. 15. *Lore Koche.*
- 68315. No. 16. *Chani Rouge.*
- 68316. No. 17. *Chirazi.*
- 68317. No. 18. *Sahabi Charial.*
- 68318. No. 19. *Jagonti Charial.*
- 68319. No. 20. *Hadjes Guermez.*
- 68320. No. 21. *Melhi Khany.*
- 68321. No. 22. *Angur Kalili.*
- 68322. No. 23. *Angur Noir Grande.*
- 68323. No. 24. *Ceskarg Charial.*

68324. *DAVIDIA INVOLUCRATA* Baill. **Cornaceae.** **Dove tree.**

From Newry, Ireland. Plant purchased from T. Smith, Daisy Hill Nursery. Received September 24, 1926.

The Chinese dove tree, as this is sometimes called, is a native of the mountain forests of central and western China. In its native home it becomes a tree 75 feet tall, with a shapely pyramidal crown. When in bloom the tree is unusually striking because of the two or three large, snow-white bracts which subtend each flower. These bracts are of unequal size, the largest being 4 to 8 inches long and 2 to 4 inches broad. The bright-green, oval, sharply toothed leaves are 3 to 6 inches long.

For previous introduction see No. 65439.

68325 to 68348.

From Darjiling, India. Seeds presented by G. H. Cave, Curator, Lloyd Botanic Garden. Received September 9, 1926.

68325. *ACACIA CATECHU* (L. f.) Willd. **Mimosaceae.**

The pale-yellow gum obtained from this acacia has very strong adhesive

68325 to 68348—Continued.

powers and is considered a better substitute for gum arabic than that of *Acacia arabica*, according to Watt (Dictionary of the Economic Products of India, vol. 1). The tree is found wild in parts of India and Burma, where it sometimes becomes 70 feet high, though usually smaller. The leaves are very finely pinnate, and the white or pale-yellow flowers are in spikes.

For previous introduction see No. 65246.

68326. *ACACIA PENNATA* (L.) Willd. **Mimosaceae.**

A climbing, prickly shrub, up to 20 feet in height, with very narrow, rigid leaflets and dense panicles of yellow flower heads. Native to the central and eastern Himalayas.

68327 to 68329. *ACER* spp. **Aceraceae.** **Maple.**

68327. *ACER CAMPBELLII* Hook. f. and Thoms.

The pleasing contrast of the bright-green leaves and red stalks of this Himalayan maple make it worthy of a trial as an ornamental shade tree for the warmer parts of the United States. In its native country the grayish white, moderately hard timber is used for cabinetwork and for planking.

For previous introduction see No. 58901.

68328. *ACER HOOKERI* Miquel.

A handsome tree 40 to 50 feet high, with deeply fissured brown bark, native to the Sikkim Himalayas at altitudes of 8,000 to 10,000 feet. The oval leaves, though usually green, are sometimes copper colored. The wood is gray with small pores and very numerous fine red medullary rays.

For previous introduction see No. 58902.

68329. *ACER OBLONGUM* Wall.

A subtropical maple described by Hiern (Hooker, Flora of British India, vol. 1) as a tree 40 to 50 feet tall, with a trunk 1 or 2 feet in diameter, and dark-green, oblong, entire leaves up to 7 inches long. The reddish wood is used for making agricultural implements.

For previous introduction see No. 62808.

68330. *ALNUS NEPALENSIS* D. Don. **Betulaceae.** **Alder.**

A tree up to 70 feet high, with a trunk 3 to 4 feet in diameter, which is very common all over Yunnan at altitudes of 4,000 to 7,000 feet. It is a rapid grower, used chiefly for firewood, and appears to thrive in spite of the tall grass, 5 to 8 feet high, which surrounds it. I would recommend it strongly for planting in grassland where trees can not usually be grown. (Note by J. F. Rock, under No. 56636.)

68331. *CAPPARIS OLACIFOLIA* Hook. f. and Thoms. **Capparidaceae.**

An erect, thorny shrub, 6 to 8 feet tall, with shining green leaves and large, axillary flowers, white with blue anthers. The shrub is found in the tropical valleys of the Himalayas from Nepal to Assam.

For previous introduction see No. 47653.

68325 to 68348—Continued.

68332. CLEMATIS GOURIANA Roxb. Ranunculaceae.

A tall-climbing, subtropical clematis, with pinnate or bipinnate shining-green leaves, and large panicles of white or yellowish flowers. Native to the western Himalayas at altitudes up to 3,000 feet.

For previous introduction see No. 50336.

68333. CLEMATIS MONTANA Buch-Ham. Ranunculaceae.

A vigorous subtropical climber, native to the Himalayas, which often attains a stem length of 20 feet. The sweet-scented, white flowers, with conspicuous yellow stamens, are about 2 inches across and are produced in several-flowered axillary clusters.

For previous introduction see No. 50337.

68334. ERYTHRINA ARBORESCENS Roxb. Fabaceae. Coral tree.

When covered with its bright-scarlet flowers this small tree is very attractive and is often planted as an ornamental in the streets of Darjiling. There are but few prickles on its branches, and the thin greenish leaves are often a foot in width. The strongly curved pods are about an inch wide and 6 to 9 inches long. The tree is found native in the central and eastern Himalayas at altitudes ranging up to 7,000 feet.

For previous introduction see No. 58907.

68335. ERYTHRINA VARIEGATA Stickm. (*E. indica* Lam.). Fabaceae. Coral tree.

A moderate-sized, quick-growing, deciduous tree, native throughout India, and cultivated in many parts of the Tropics. The clusters of large bright-red flowers appear before the leaves. The pods, 4 to 8 inches long, contain several dark carmine seeds. The flowers are dried for use as a dye; the bark is used for tanning and dyeing and yields an excellent, pale straw-colored fiber. The leaves are used as cattle fodder; the bark and leaves are also used medicinally. The open-grained, light wood is durable and does not split or warp; it is used for boxes, toys, and also for firewood. Much of the lacquered ware of India is made of the wood of this tree.

For previous introduction see No. 54898.

68336. FICUS HOOKERI Miquel. Moraceae. Fig.

A subtropical tree with large, oval leaves up to 11 inches in length, native to the temperate Himalayas of north-eastern India. It is of possible use as a shade tree for the warmer parts of the Gulf States and California.

For previous introduction see No. 49635.

68337. FRAXINUS FLORIBUNDA Wall. Oleaceae. Ash.

A large handsome deciduous tree, native to the more temperate portions of the Himalayas at altitudes up to 11,000 feet. The leaves, up to 15 inches long, are composed of seven to nine leaflets, and the white flowers are in large terminal panicles.

For previous introduction see No. 50366.

68325 to 68348—Continued.

68338. HIBISCUS PUNGENS Roxb. Malvaceae.

An erect bristly annual or perennial, native to the tropical Himalayas, with roundish heart-shaped, deeply lobed leaves 5 to 8 inches long and purple-centered yellow flowers 5 inches in diameter.

For previous introduction see No. 47691.

68339. LUCULIA GRATISSIMA (Wall.) Sweet. Rubiaceae.

A tree or spreading shrub, native to the temperate Himalayas, where it attains a height of 10 to 16 feet. It is a very attractive ornamental because of the gorgeous rounded masses of pink or rose-colored flowers. It is said to make an excellent table plant when grown in a pot and treated somewhat similarly to a gardenia.

For previous introduction see No. 47710.

68340. MIMOSA RUBICULIS Lam. Mimosaecae.

A low straggling spiny shrub or small tree, native throughout India up to 5,000 feet altitude. The thin, finely pinnate foliage and reddish yellow flower heads make the shrub of possible value as an ornamental in the warmest parts of the United States. It is said also to make a good hedge.

For previous introduction see No. 55749.

68341. XOLISMA OVALIFOLIA (Wall.) Rehder. (*Andromeda ovalifolia* Wall.). Ericaceae.

Although this shrub or small tree may prove of value as a semihardy ornamental because of its racemes of bluish or white flowers, it is used as an insecticide in its native country, India, because of the presence of a poisonous principle in the young leaves and buds. The oblong, leathery leaves are 3 to 6 inches long.

For previous introduction see No. 64121.

68342. QUERCUS INCANA Roxb. Fagaceae. Oak.

A large evergreen oak from the mountains of eastern India, with bark rich in tannin and acorns which are eaten by the wild animals of the Himalayas.

For previous introduction see No. 61621.

68343 to 68345. RHODODENDRON spp. Ericaceae.

68343. RHODODENDRON CILIATUM Hook. f. Fringed rhododendron.

A Himalayan rhododendron of somewhat dwarf habit, bearing many small loose trusses of pinkish white flowers less than 3 inches wide. It rarely exceeds 6 feet in height.

For previous introduction see No. 58919.

68344. RHODODENDRON GRANDE Wight.

A handsome shrub about 15 feet high, native to the Himalayas. It bears numerous loose trusses of bell-shaped flowers about 2½ inches in diameter. These are at first suffused

68325 to 68348—Continued.

with a faint rose tint which later changes to white.

For previous introduction see No. 58923.

68345. RHODODENDRON MADDENI Hook. f.

A shrub 6 to 8 feet high with red-stemmed, dark-green leaves. The large delicately fragrant flowers, tinged with rose, are produced in threes at the ends of the branches. Native to the Himalayas.

For previous introduction see No. 58927.

68346. RUBUS ROSAEFOLIUS J. E. Smith. Rosaceae.

A Philippine raspberry, which, as described by Brown (Wild Food Plants of the Philippines, p. 66), is a spiny shrub, rarely over 3 feet high, common in the mountains of Luzon, the Visayan Islands, and Mindanao, Philippine Islands. The red fruits, borne singly or in clusters, are about 1.5 centimeters in diameter; they are juicy but rather insipid.

For previous introduction see No. 65267.

68347. VACCINIUM DUNALIANUM Wight. Vacciniaceae. Blueberry.

A large erect subtropical shrub with narrow oblong slender-tipped leaves and axillary clusters of small inconspicuous flowers. It is native to the mountainous sections of northern and eastern India.

For previous introduction see No. 60667.

68348. VIBURNUM STELLULATUM Wall. Caprifoliaceae.

A large evergreen shrub with small orange-red berries, native to the temperate Himalayas, and said to be hardy in England.

68349. BAMBUSA MURIAKI Hort. Poaceae. Bamboo.

From France. Plant obtained through the Federal Horticultural Board. Received April 20, 1926. Numbered September, 1926.

A Japanese bamboo.

68350. PHOENIX DACTYLIFERA L. Phoenicaceae. Date palm.

From Culiacan, Sinaloa, Mexico. Seeds presented by C. J. Stafford, through T. Ralph Robinson, Bureau of Plant Industry. Received September 8, 1926.

Mexican-grown date seeds.

68351. CHALCAS KOENIGII (L.) Kuntz (Murraya koenigii Spreng.). Rutaceae.

From Peradeniya, Ceylon. Plants obtained by David Fairchild, agricultural explorer, Bureau of Plant Industry, with the Allison V. Armour expedition. Received July 19, 1926.

No. 894. Peradeniya Botanic Gardens. June 9, 1926. A small tree of the orange family closely related to the orange jasmine (*Murraya exotica*), but with larger leaves and less attractive habit. The fresh leaves form a constant ingredient of the Ceylon curries and give them a very agreeable flavor.

68352 to 68355.

From New South Wales, Australia. Trees received during July and September, 1923, at the United States Plant Introduction Garden, Chico, Calif., where these trees are now growing. Numbered September, 1926.

68352 to 68354. AMYGDALUS PERSICA L. (Prunus persica Stokes). Amygdalaceae. Peach.

68352. Pullar's Cling. Fruits nearly spherical, about 2½ inches long; skin dark rich yellow overlaid on one side with red blush or striping; flesh firm, dark lemon yellow or orange, somewhat rough, medium juicy, slightly red at pit, slightly acid, flavor good. Appears to have the qualities of a good canning peach.

68353. Golden Queen. Fruits generally spherical, about 2½ inches long; skin firm, uniformly orange-yellow, with medium heavy fine tomentum; flesh firm, medium fine texture, orange-yellow, medium juicy, mildly subacid, clinging tightly to pit, of good quality, but lacking in special aroma, not stained at pit; pit medium size. Appears to be a good canning peach.

68354. Goodman's Choice. Fruits spherical, about 2¼ inches long; skin medium firm, ground color yellow, overlaid in part or almost entirely with dark red, medium heavy fine tomentum; flesh dark yellow, almost orange, firm, medium juicy, medium fine texture, with little or no staining at pit, of rich sweet flavor; pit medium or small. Would make an excellent canning peach.

68355. PRUNUS ARMENIACA L. Amygdalaceae. Apricot.

Trevatt. Trees 9 to 14 feet high, yielding well. Fruits almost round, 2 inches in diameter, yellow; skin smooth; flesh apricot yellow, rather soft, sweet, of fair quality; pit large, loose in cavity. Ripen at Chico, Calif., in June.

68356 and 68357.

From Ceylon and Sumatra. Seeds obtained by David Fairchild and P. H. Dorsett, agricultural explorers, Bureau of Plant Industry, with the Allison V. Armour expedition. Received February and May, 1926. Numbered September, 1926.

68356. BROWNEA MACROPHYLLA Masters. Caesalpiniaceae.

No. 301. Peradeniya Gardens, Ceylon. January 9, 1926. A beautiful plant bearing very large clusters of bright-rose flowers with long protruding bright-colored stamens. It is one of the rare ornamental trees from Colombia.

68357. ARTOCARPUS ELASTICA Reinw. Moraceae.

No. 712. Sibolangit Botanic Gardens, Sumatra, March 26, 1926. A tree which grows to a height of 40 meters. The young trees furnish a fiber, and the latex is a remarkable bird lime. The fruits are eaten by the Battaks.

For introduction of seeds see No. 67673.

68358. DICELLOSTYLES AXILLARIS (Thwaites) Benth. Malvaceae.

From Peradeniya, Ceylon. Seeds presented by F. A. Stockdale, Director of Agriculture. Received September 10, 1926.

A malvaceous tree, closely related to cotton (*Gossypium* spp.), with narrowly oval leaves about 4 inches long, white flowers, and globose, hispid capsules. Native to Ceylon.

68359. RUBUS FRAXINIFOLIUS Poir. Rosaceae.

From the Philippine Islands. Seeds presented by P. J. Wester, Ballston, Va. Received September 24, 1926.

Palawan. A tropical raspberry, described (Brown, Wild Food Plants of the Philippines, p. 63) as a scrambling shrub, with branches 2 to 4 meters long, which is very common in the mountains from Luzon to Mindanao, Philippine Islands. The stems and leaves are armed with sharp spines, and the white flowers are about 2 cm. across. The bright-red berries, 10 to 15 mm. in diameter, borne in clusters, are fairly juicy and edible, but rather tasteless.

68360. (Undetermined.)

From Sumatra. Seeds obtained by David Fairchild and P. H. Dorsett, agricultural explorers, Bureau of Plant Industry, with the Allison V. Armour expedition. Received May 14, 1926. Numbered September, 1926.

No. 669. Between Takengon and Bireun. March 9, 1926. A very striking tree with purple, olive-shaped fruits hanging from brown capsules.

68361 to 68403.

From China. Seeds obtained by F. A. McClure, agricultural explorer, Bureau of Plant Industry. Received September 14, 1926.

68361. ALEURITES MONTANA (Lour.) Wilson. Euphorbiaceae. Mu-oil tree.

No. 242. Baptist Mission Compound, Wuchow, Kwangsi. November 18, 1925. *Tung yau*. Trees of average yield growing at the foot of a terrace in yellow-clay granitic subsoil, with their roots partly in filled soil of the same composition, but naturally looser in texture.

For previous introduction see No. 66064.

68362 to 68402. ORYZA SATIVA L. Poaceae. Rice.

In general there are two harvests of rice each year in this latitude, one in July or August and another in October or November. It is of interest that the varieties planted for the first crop are apparently distinct from those which are planted for the second crop. Preliminary experiments carried out at the Canton Christian College confirm this. When the first-crop variety is planted at the second-crop season, or vice versa, it does not develop and ripen properly or at the expected time. It may be that the two groups have different adaptations as to length of day required for bringing them to proper flowering and fruition. The second-crop varieties, in general, are said to be of better quality, possibly because of the fine weather that usually prevails during the ripening and harvesting time. It is said that poor soil, while yielding less, gives a better quality of grain.

68361 to 68403—Continued.

68362 to 68373. These seeds of second-crop varieties were obtained at Foh-t-suen, Lohkongtung district.

68362. No. 442. *Pa ang chim*. Starchy.

68363. No. 443. *Shue nga kuk*. Starchy.

68364. No. 444. *Chim tsai kuk*. Starchy.

68365. No. 445. *Wong hok yau chim kuk*. Starchy.

68366. No. 446. *Paak hok yau chim kuk*. Starchy.

68367. No. 447. *Paak hin tsai noh kuk*. Glutinous.

68368. No. 448. *Tsai mei chim kuk*. Starchy.

68369. No. 449. *Kam fung kuk*. Starchy.

68370. No. 450. *Sz miu kuk*. This is one of the two most popular starchy varieties because of the excellent quality.

68371. No. 451. *So kuk*. A bearded, starchy variety.

68372. No. 452. *Tuai noh kuk*. Glutinous.

68373. No. 453. *On naam noh kuk*. Glutinous.

68374. No. 454. *Chiu on lai chim kuk*. A starchy second-crop variety which has been growing at the Canton Christian College for four years. The growing season is about 104 days, and the average yield is about 2,400 pounds per acre.

68375. No. 455. *Toi shaan hung tau tsai kuk*. A starchy second-crop variety originally from the Toishaan district, Kwangtung, which has been growing at the Canton Christian College for the last year. The growing season is about 89 days, and the yield is about 1,800 pounds per acre.

68376. No. 456. *Tung koon taai chim kuk*. A starchy second-crop variety originally from the Tungkoon district, which has been growing at the Canton Christian College. This is one of the most popular second-crop varieties of rice because of its excellent quality.

68377. No. 457. *Lok cheung maah kuk*. A starchy second-crop variety, originally from the Lokcheung district, which has been growing at the Canton Christian College for the last year. The growing season is 89 days, and the yield is about 1,100 pounds per acre.

68378. No. 458. *Toi shaan sheung kong chim kuk*. An early starchy second-crop variety originally from the Toishaan district, Kwangtung, which has been growing at the Canton Christian College for the last year. The growing season is 91 days, and the yield is about 800 pounds per acre.

68379. No. 459. *Kwai peng paak fa chim kuk*. A starchy second-crop variety, originally from the Kwai peng district, which has been growing at the Canton Christian College for four years. The growing season is about 101 days, and the average yield is about 2,600 pounds per acre.

68361 to 68403—Continued.

- 68380.** No. 460. *Foh shiu chim kuk.* A starchy second-crop variety which has been grown at the Canton Christian College for one year. The growing season is 91 days, and the yield is about 1,140 pounds per acre.
- 68381.** No. 491. *Wong hok noh kuk.* A glutinous second-crop variety which has been grown at the Canton Christian College for four years. The growing season is about 105 days, and the average yield is about 2,200 pounds per acre.
- 68382.** No. 462. *Paak hok sheung kong chim kuk.* An early starchy second-crop variety which has been grown at the Canton Christian College for the last year. The growing season is 91 days, and the yield is about 2,400 pounds per acre.
- 68383.** No. 463. *Wan fau paak kuk tsai.* A starchy second-crop variety, originally from the Wanfaun district, which has been grown at the Canton Christian College for the last year. The growing season is 95 days, and the yield is about 2,100 pounds per acre.
- 68384.** No. 464. *Tsuen shui kuk.* A starchy second-crop variety which has been grown at the Canton Christian College for the last four years. The average growing season is 105 days, and the average yield is about 2,600 pounds per acre.
- 68385.** No. 465. *Ng wa hoi woh.* A starchy second-crop variety, originally from the Ngwa district, which has been growing at the Canton Christian College for the last year. The growing season is 99 days, and the yield is about 1,600 pounds per acre.
- 68386.** No. 466. *King chow paak fa chim kuk.* A starchy second-crop variety originally from Kingschow, in the island of Hainan, which has been grown at the Canton Christian College for one year. The growing season is 100 days, and the yield is about 2,300 pounds per acre.
- 68387.** No. 467. *Haung kwang noh.* A second-crop glutinous variety which has been grown at the Canton Christian College for one year. The growing season is 90 days, and the yield is about 500 pounds per acre.
- 68388.** No. 468. *Naam hoi yau chim kuk.* A starchy second-crop variety originally from the Naamhoi district, which has been grown at the Canton Christian College for the last four years. The growing season is about 103 days, and the average yield is about 3,000 pounds per acre.
- 68389.** No. 469. *Shui kai noh kuk.* A glutinous second-crop variety originally from Shuikai, which has been grown at the Canton Christian College for the last four years. The average growing season is 106 days, and the average yield is about 1,600 pounds per acre.
- 68390.** No. 470. *Toi shaan cheung miu chui ue kuk.* A starchy second-crop variety originally from the Toishaan district, which has been

68361 to 68403—Continued.

- grown at the Canton Christian College for the last year. The growing season is 96 days, and the yield is about 2,100 pounds per acre.
- 68391.** No. 471. *Hoi niu kuk.* A starchy second-crop variety which has been grown at the Canton Christian College for the last four years. The average growing season is 105 days, and the average yield is about 2,300 pounds per acre.
- 68392.** No. 472. *Paak hok yau chim.* A starchy second-crop variety which has been grown at the Canton Christian College for the last four years. The average yield is about 2,600 pounds per acre.
- 68393.** No. 473. *Taai po paak hok noh kuk.* A glutinous second-crop variety which has been grown at the Canton Christian College for the last four years. The average growing season is 98 days, and the average yield is about 2,500 pounds per acre.
- 68394.** No. 474. *Toi shaan oo uk tsai kuk.* A starchy second-crop variety originally from the Toishaan district, which has been grown at the Canton Christian College for the last year. The growing season is 96 days, and the yield is about 2,400 pounds per acre.
- 68395.** No. 475. *Ng tsuen noh chaap kuk.* A glutinous second-crop variety originally from Ngtsuen, a village on Honam Island, which has been grown at the Canton Christian College for the last year. The growing season is 105 days, and the yield is about 2,600 pounds per acre.
- 68396.** No. 476. *Tsang sheng sz miu kuk.* A starchy second-crop variety originally from the Tsangsheng district, which has been grown at the Canton Christian College for the last year. The growing season is 95 days, and the yield is about 2,200 pounds per acre.
- 68397.** No. 477. *Heung shaan noh chaap kuk.* A glutinous second-crop variety originally from the Heungshaan district, which has been grown at the Canton Christian College for four years. The average growing season is 98 days, and the average yield is about 2,600 pounds per acre.
- 68398.** No. 478. *Shui kai wong noh kuk.* A glutinous second-crop variety originally from Shuilai, which has been grown at the Canton Christian College for four years. The growing season is about 98 days, and the average yield is about 1,900 pounds per acre.
- 68399.** No. 479. *Kam shaan chim kuk.* A starchy second-crop variety which has been grown at the Canton Christian College for the last year. The growing season is 97 days, and the yield is about 1,400 pounds per acre.
- 68400.** No. 480. *Sai chim kuk.* A starchy second-crop variety which has been grown at the Canton Christian College for the last year. The growing season is 91 days, and the yield is about 1,200 pounds per acre.

68361 to 68403—Continued.

68401. No. 481. *Tung koon paai hok sz mhu kuk*. A starchy second-crop variety originally from the Tung-koon district, which has been grown at the Canton Christian College for the last four years. The average growing season is 102 days, and the average yield is about 1,900 pounds per acre.

68402. No. 482. *Paak hok yau chin kuk*. A starchy second-crop variety which has been grown at the Canton Christian College for four years. The average yield is about 2,400 pounds per acre.

68403. *SMILAX* sp. Smilacaceae.

No. 441. *Ma kaap*. An attractive ornamental vine with very large shiny leaves and large clusters of bright-red fruits which persist for a long period. Collected on Chauen Mountain, northern Kwantung.

68404 to 68414.

From Manchuria. Seeds obtained by P. H. Dorsett, agricultural explorer, Bureau of Plant Industry. Received September 18, 1926.

68404. *ACER BARBINERVE* Maxim. Aceraceae. Maple.

No. 6098. From the V. F. Kovalsky forest concession near Hengtaohotze, July 3, 1926. A shrubby maple, native to Manchuria, with coarsely toothed, five-lobed leaves.

For previous introduction see No. 65909.

68405. *ACER MANDSHURICUM* Maxim. Aceraceae. Maple.

No. 6099. From the V. F. Kovalsky forest concession, near Hengtaohotze, July 3, 1926. A hardy Manchurian maple which forms a shrub or small tree.

For previous introduction see No. 65480.

68406. *ACTAEA SPICATA* L. Ranunculaceae. Black baneberry.

No. 6325. From the White River Valley, near Bariam. July 24, 1926. A hardy herbaceous perennial, 3 feet high, with a rather long spike of bright-red, oblong berries.

For previous introduction see No. 65483.

68407. *AQUILEGIA OXYSEPALA* Trautv. and Mey. Ranunculaceae. Columbine.

No. 6304. Bariam. July 19, 1926. A hardy herbaceous perennial native to Siberia. The large flowers are blue, yellow, and white.

For previous introduction see No. 64766.

68408. *CALAMAGROSTIS* sp. Poaceae. Grass.

No. 6318. From the White River Valley, near Bariam. July 25, 1926. A grass from Manchuria, said to be good for hay.

68409. *CORNUS ALBA* L. Cornaceae. Tartarian dogwood.

No. 6324. From the White River Valley, near Bariam. July 24, 1926. A

68404 to 68414—Continued.

hardy ornamental shrub, native to Manchuria, producing creamy white fruits.

68410. *DAUCUS CAROTA* L. Apiaceae. Carrot.

No. 6336. Pingtingchow, Shansi. August 2, 1926. A short thick red variety from northern China.

68411. *PRUNUS TOMENTOSA* Thunb. Amygdalaceae. Manchu cherry.

No. 6075. Purchased from the agricultural section of the Manchurian Research Society, Harbin. June 30, 1926. A hardy fruiting shrubby cherry, native to Manchuria.

68412. *RHEUM* sp. Polygonaceae. Rhubarb.

No. 6328. From the White River Valley, near Bariam. July 23, 1926. A vigorous variety with leaves 6 to 18 inches across and stalks 12 to 20 inches long and sometimes an inch in diameter.

68413. *SALIX LIVIDA CINERASCENS* Wahlenb. Salicaceae. Willow.

No. 6125. Boketu. July 5, 1926. A very dwarf willow with small leaves which are mottled above and quite tomentose beneath. The bark is yellow to yellowish brown.

68414. *CRATAEGUS SANGUINEA* Pall. Malaceae.

No. 6334. From the White River Valley, near Bariam. July 31, 1926. A hardy ornamental tree, native to Manchuria, with roundish red and yellow fruits. The tree from which this material was obtained was quite small, about 10 feet high and only about 3 inches in diameter.

For previous introduction see No. 65693.

68415 to 68419.

From Rangoon, Burma. Seeds presented through Richard R. Willey, United States vice consul in charge. Received September, 1926.

68415. *CHAETOCHLOA ITALICA* (L.) Scribn. (*Setaria italica* Beauv.). Poaceae. Millet.

This millet is cultivated to a limited extent on light sandy soils in the dry districts.

68416. *ORYZA SATIVA* L. Poaceae. Rice.

Theikpan Taungdikpan paddy gives the best table rice in Upper Burma and is in great demand.

68417. *PANICUM MILIACEUM* L. Poaceae. Proso.

This grain, like millet, is grown as a dry crop on high ground.

68418. *PISUM SATIVUM* L. Fabaceae. Pea.

A variety which is grown throughout Burma both as a field and a garden crop. It is generally sown on light soils and silts.

68419. *TRITICUM AESTIVUM* L. (*T. vulgare* Vill.). Poaceae. Common wheat.

A variety of hard wheat grown in the plains of Burma (Sagaing, Shwebo, and Mandalay), which is generally used for making flour. It can be grown profitably on black cotton soil.

68420 to 68825.

From Manchuria. Seeds obtained by P. H. Dorsett, agricultural explorer, Bureau of Plant Industry. Received June, July, August, and September, 1926.

68420 to 68816. SOJA MAX (L.) Piper (*Glycine hispida* Maxim.). **Soy bean.**

The following seeds of huang tou (yellow bean) from the 1925 crop were obtained through the agricultural section of the Manchurian Research Society, Chinese Eastern Railway, during June, July, and August, 1926.

68420. No. 5820. Yaomyn. Beans yellow, almost round, with brown hilum. R. S.² No. 255.

68421. No. 5821. Shuanchenpu. Beans yellow, medium size, oblong; hilums brown.

68422. No. 5822. Shuanchenpu. Beans yellow, medium size, slightly oblong; hilums range from brown to almost black.

68423. No. 5823. Shuanchenpu. Beans yellow, of medium size, slightly oblong to round; hilums brown.

68424. No. 5824. Shuanchenpu. Beans yellow, of medium size, slightly oblong to round; hilums vary from brown to black.

68425. No. 5825. Antah. Beans yellow, slightly oblong to round, hilums vary from almost white to brown.

68426. No. 5826. Mangou. Beans yellow, hilums vary from white to nearly black.

68427. No. 5827. Shuanchenpu. Beans yellow, slightly oblong to round; hilums vary from brown to almost black.

68428. No. 5828. Shuanchenpu. Beans yellow, medium size, slightly oblong to almost round; hilums vary from brown to practically black.

68429. No. 5829. Shuanchenpu. Beans yellow, medium size, slightly oblong to nearly round; hilums vary from brown to almost black.

68430. No. 5830. Shuanchenpu. Beans yellow, medium size, oblong to almost round; hilums vary from brown to almost black.

68431. No. 5831. Antah. Beans yellow, medium size, oblong to nearly round; hilums vary from almost white to brown, sometimes to nearly black.

68432. No. 5832. Shuanchenpu. Beans yellow, medium size, oblong to practically round; hilums vary from nearly white to almost black.

68433. No. 5833. Shuanchenpu. Beans yellow, medium size, oblong to almost round; hilums range from brown to almost black.

68434. No. 5834. Shuanchenpu. Beans yellow, medium size, oblong to nearly round; hilums vary from light to dark brown, sometimes to nearly black.

68435. No. 5835. Antah. Beans yellow, average size, oblong to round; hilums vary from almost white to brown and nearly black.

68420 to 68825—Continued.

68436. No. 5836. Shuanchenpu. Beans yellow, medium size, oblong to round; hilums vary from brown to almost black. R. S. No. 17.

68437. No. 5837. Antah. Beans yellow, average size, oblong; hilums vary from almost white to dark brown. R. S. No. 146.

68438. No. 5838. Shuanchenpu. Beans yellow, medium size, oblong to nearly round; hilums vary from light to dark brown and almost black. R. S. No. 67.

68439. No. 5839. Shuanchenpu. Beans yellow, medium size, oblong to round; hilums vary from nearly white to brown and almost black. R. S. No. 20.

68440. No. 5840. Shuanchenpu. Beans yellow, below the average size, oblong to round; hilums grading from light to dark brown. R. S. No. 72.

68441. No. 5841. Shuanchenpu. Beans yellow, average size, oblong to almost round; hilums light brown. R. S. No. 43.

68442. No. 5842. Shuanchenpu. Beans yellow, average size, oblong to almost round; hilums dark brown ranging to almost black. R. S. No. 85.

68443. No. 5843. Shuanchenpu. Beans yellow, average size, oblong to almost round; hilums vary from light to dark brown, sometimes to almost black. R. S. No. 45.

68444. No. 5844. Shuanchenpu. Beans yellow, below average size, oblong to round; hilums range from light to dark brown and in some cases to almost black. R. S. No. 51.

68445. No. 5845. Duitsinshan. Beans yellow, larger than the average, oblong to round; hilums vary from almost white to dark brown. R. S. No. 206.

68446. No. 5846. Shuanchenpu. Beans yellow, below the average size, oblong to round; hilums vary from light to dark brown. R. S. No. 73.

68447. No. 5847. Shuanchenpu. Beans yellow, average size, oblong to round; hilums vary from nearly white to dark brown, sometimes practically black. R. S. No. 57.

68448. No. 5848. Antah. Beans yellow, average size, oval to round; hilums vary from white to deep brown, sometimes to almost black. R. S. No. 186.

68449. No. 5849. Duitsinshan. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, sometimes to almost black. R. S. No. 225.

68450. No. 5850. Antah. Beans yellow, average size, oblong to almost round; hilums vary from almost white to dark brown, sometimes to almost black. R. S. No. 187.

68451. No. 5851. Shuanchenpu. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown and almost black. R. S. No. 34.

² R. S. = Research Society.

68420 to 68825—Continued.

68452. No. 5852. Shuanchenpu. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, in some instances to almost black. R. S. No. 100.
68453. No. 5853. Shuanchenpu. Beans yellow, average size, oblong to almost round; hilums vary from almost white to dark brown, sometimes to almost black. R. S. No. 25.
68454. No. 5854. Duitsinshan. Beans yellow, average size, oblong to nearly round; hilums vary from white to dark brown. R. S. No. 209.
68455. No. 5855. Shuanchenpu. Beans yellow, below average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 59.
68456. No. 5856. Antah. Beans yellow, average size, oblong to almost round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 193.
68457. No. 5857. Mangou. Beans yellow, average size, oblong to nearly round; hilums vary from nearly white to dark brown, occasionally to almost black. R. S. No. 361.
68458. No. 5858. Shuanchenpu. Beans yellow, average size, oblong to round; hilums vary from very light to very dark brown, sometimes to almost black. R. S. No. 53.
68459. No. 5859. Shuanchenpu. Beans yellow, average size, oblong to almost round; hilums vary from almost white to light and dark brown. R. S. No. 24.
68460. No. 5860. Shuanchenpu. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown. R. S. No. 2.
68461. No. 5861. Shuanchenpu. Beans yellow, less than average size, oval to almost round; hilums vary from light to dark brown, occasionally black. R. S. No. 13.
68462. No. 5862. Yaomyn. Beans yellow, average size, oblong to nearly round; hilums vary from very light to dark brown, sometimes to almost black. R. S. No. 286.
68463. No. 5863. Shuanchenpu. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, occasionally to black. R. S. No. 40.
68464. No. 5864. Shuanchenpu. Beans yellow, below average size, oblong to round; hilums vary from white to dark brown, sometimes to almost black. R. S. No. 30.
68465. No. 5865. Shuanchenpu. Beans yellow, less than average size, oblong to round; hilums vary from light to dark brown, sometimes to almost black. R. S. No. 64.
68466. No. 5866. Shuanchenpu. Beans yellow, average size, oblong to round; hilums vary from light to quite dark brown, sometimes to almost black. R. S. No. 18.

68420 to 68825—Continued.

68467. No. 5867. Antah. Beans yellow, over average size, oblong to almost round; hilums vary from almost white to dark brown. R. S. No. 141.
68468. No. 5868. Antah. Beans yellow, average size, oblong to almost round; hilums almost white with a few light to dark brown. R. S. No. 150.
68469. No. 5869. Antah. Beans yellow, average size, oblong to almost round; hilums vary from almost white to dark brown. R. S. No. 158.
68470. No. 5871. Shuanchenpu. Beans yellow, average size, oblong to almost round; hilums vary from almost white to dark brown, with a few almost black. R. S. No. 31.
68471. No. 5872. Shuanchenpu. Beans yellow, below average size, oblong to round; hilums vary from light to dark brown, and occasionally to almost black. R. S. No. 26.
68472. No. 5873. Antah. Beans yellow, average size, oval to almost round; hilums are almost white, a few vary from light to dark brown. R. S. No. 203.
68473. No. 5874. Antah. Beans yellow, average size, oblong to almost round; hilums almost white. R. S. No. 147.
68474. No. 5875. Shuanchenpu. Beans yellow, below average size, oblong to almost round; hilums vary from almost white to dark brown, sometimes to almost black. R. S. No. 22.
68475. No. 5876. Mangou. Beans yellow, average size, oblong to almost round; hilums vary from almost white to dark brown, sometimes to almost black. R. S. No. 371.
68476. No. 5877. Yaomyn. Beans yellow, average size, oval to almost round; hilums vary from very light to very dark brown and occasionally to almost black. R. S. No. 293.
68477. No. 5878. Shuanchenpu. Beans yellow, average size, oblong to almost round; hilums vary from light to dark brown, occasionally to almost black. R. S. No. 81.
68478. No. 5879. Sanchahe. Beans yellow, average size, oblong to almost round; hilums vary from almost white to dark brown, sometimes to almost black. R. S. No. 378.
68479. No. 5880. Yaomyn. Beans yellow, average size, oblong to almost round; hilums vary from light to dark brown. R. S. No. 282.
68480. No. 5881. Yaomyn. Beans yellow, average size, oblong to round; hilums vary from almost white to dark brown. R. S. No. 282.
68481. No. 5882. Antah. Beans yellow, average size, oblong to round; hilums vary from almost white to dark brown. R. S. No. 178.
68482. No. 5883. Antah. Beans yellow, average size, oblong to nearly round; hilums are almost white. R. S. No. 161.

68420 to 68825—Continued.

68483. No. 5884. Shuanchenpu. Beans yellow, average size, oblong to almost round; hilums vary from light to dark brown. R. S. No. 5.
68484. No. 5885. Shuanchenpu. Beans yellow, below average size, oblong to almost round; hilums vary from light to dark brown, sometimes to almost black. R. S. No. 38.
68485. No. 5886. Shuanchenpu. Beans yellow, average size, oblong to almost round; hilums vary from almost white to dark brown, sometimes to almost black. R. S. No. 10.
68486. No. 5887. Antah. Beans yellow, below average size, oblong to almost round; hilums vary from almost white to dark brown. R. S. No. 162.
68487. No. 5888. Shuanchenpu. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, occasionally to almost black. R. S. No. 70.
68488. No. 5889. Shuanchenpu. Beans yellow, below average size, oblong to almost round; hilums rather dark brown. R. S. No. 64.
68489. No. 5890. Shuanchenpu. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, occasionally to almost black. R. S. No. 66.
68490. No. 5891. Antah. Beans yellow, average size, oblong to nearly round; hilums are almost white. R. S. No. 168.
68491. No. 5892. Shuanchenpu. Beans yellow, average size, oblong to almost round; hilums vary from light to dark brown, occasionally to almost black. R. S. No. 80.
68492. No. 5894. Antah. Beans yellow, average size, oblong to nearly round; hilums vary from white to dark brown. R. S. No. 125.
68493. No. 5895. Shuanchenpu. Beans yellow, average size, oblong to almost round; hilums vary from light to dark brown. R. S. No. 69.
68494. No. 5896. Shuanchenpu. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 78.
68495. No. 5897. Mangou. Beans yellow, average size, oblong to round; hilums mostly white, a few are light to dark brown and occasionally almost black. R. S. No. 312.
68496. No. 5898. Mangou. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown. R. S. No. 302.
68497. No. 5899. Mangou. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown; a few are almost black. R. S. No. 327.
68498. No. 5900. Shuanchenpu. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown and occasionally to almost black. R. S. No. 21.

68420 to 68825—Continued.

68499. No. 5901. Mangou. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown and occasionally to almost black. R. S. No. 369.
68500. No. 5902. Mangou. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown and occasionally to almost black. R. S. No. 354.
68501. No. 5903. Duitsinshan. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown and frequently to almost black. R. S. No. 218.
68502. No. 5904. Antah. Beans yellow, average size, oval to almost round; hilums vary from nearly white to dark brown. R. S. No. 166.
68503. No. 5905. Shuanchenpu. Beans yellow, below medium size, oblong to nearly round; hilums vary from almost white to dark brown, sometimes to almost black. R. S. No. 32.
68504. No. 5906. Mangou. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, sometimes to almost black. R. S. No. 353.
68505. No. 5907. Mangou. Beans yellow, average size, oblong to round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 310.
68506. No. 5908. Mangou. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown and sometimes to almost black. R. S. No. 333.
68507. No. 5909. Yaomyn. Beans yellow, less than average size, oblong to almost round; hilums vary from nearly white to dark brown. R. S. No. 291.
68508. No. 5910. Yaomyn. Beans yellow, smaller than the average size, oblong to almost round; hilums vary from nearly white to dark brown and sometimes to almost black. R. S. No. 292.
68509. No. 5911. Antah. Beans yellow, average size, oblong to almost round; hilums vary from white to dark brown and occasionally to almost black. R. S. No. 196.
68510. No. 5912. Antah. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown and occasionally to almost black. R. S. No. 176.
68511. No. 5913. Mangou. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown and occasionally to almost black. R. S. No. 342.
68512. No. 5914. Yaomyn. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, occasionally to almost black. R. S. No. 279.
68513. No. 5915. Antah. Beans yellow, average size, oblong to oval; hilums vary from almost white to dark brown and occasionally to almost black. R. S. No. 183.

68420 to 68825—Continued.

68514. No. 5916. Shuanchenpu. Beans yellow, less than average size, oblong to almost round; hilums vary from nearly white to dark brown and occasionally to almost black. R. S. No. 46.
68515. No. 5917. Yaomyn. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown and occasionally to almost black. R. S. No. 281.
68516. No. 5918. Mangou. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown and occasionally to almost black. R. S. No. 373.
68517. No. 5919. Mangou. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown and occasionally to almost black. R. S. No. 304.
68518. No. 5920. Yaomyn. Beans yellow, less than average size, and almost round; hilums vary from nearly white to dark brown and occasionally to almost black. R. S. No. 259.
68519. No. 5921. Yaomyn. Beans yellow, average size, oval to almost round; hilums vary from nearly white to dark brown and occasionally to almost black. R. S. No. 261.
68520. No. 5922. Antah. Beans yellow, above average size, oblong to almost round; hilums vary from nearly white to dark brown. R. S. No. 168.
68521. No. 5923. Duitsinshan. Beans yellow, below average size, oblong to almost round; hilums vary from nearly white to dark brown and occasionally to almost black. R. S. No. 205.
68522. No. 5924. Mangou. Beans yellow, above the average size, almost round; hilums vary from nearly white to dark brown and occasionally to almost black. R. S. No. 314.
68523. No. 5925. Antah. Beans yellow, average size, oblong to almost round; hilums vary from almost white to dark brown and occasionally to almost black. R. S. No. 170.
68524. No. 5926. Mangou. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown and a few to almost black. R. S. No. 315.
68525. No. 5927. Shuanchenpu. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown and occasionally to almost black. R. S. No. 35.
68526. No. 5928. Shuanchenpu. Beans yellow, below average size, oblong to nearly round; hilums vary from almost white to dark brown and occasionally to almost black. R. S. No. 97.
68527. No. 5929. Duitsinshan. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown and occasionally to almost black. R. S. No. 217.
68528. No. 5930. Mangou. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown and occasionally to almost black. R. S. No. 341.

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68529. No. 5931. Mangou. Beans yellow, average size, oval to nearly round; hilums vary from almost white to dark brown and occasionally to almost black. R. S. No. 365.
68530. No. 5932. Shuanchenpu. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown and occasionally to almost black. R. S. No. 15.
68531. No. 5933. Shuanchenpu. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown and occasionally to almost black. R. S. No. 6.
68532. No. 5934. Yaomyn. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown and occasionally to almost black. R. S. No. 262.
68533. No. 5935. Yaomyn. Beans yellow, below average size, oblong to nearly round; hilums vary from almost white to dark brown and occasionally to black. R. S. No. 266.
68534. No. 5936. Mangou. Beans yellow, average size, oblong to nearly round; hilums vary from nearly white to dark brown and occasionally black. R. S. No. 216.
68535. No. 5937. Yaomyn. Beans yellow, below average size, oblong to nearly round; hilums vary from almost white to dark brown and a few are almost black. R. S. No. 290.
68536. No. 5938. Mangou. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown and occasionally to almost black. R. S. No. 368.
68537. No. 5939. Mangou. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, and a few are nearly black. R. S. No. 308.
68538. No. 5940. Shuanchenpu. Beans yellow, average size, oblong to nearly round; hilums vary from nearly white to dark brown with a few almost black. R. S. No. 87.
68539. No. 5941. Shuanchenpu. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown and occasionally to almost black. R. S. No. 33.
68540. No. 5942. Mangou. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown with a few almost black. R. S. No. 311.
68541. No. 5944. Mangou. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown with an occasional one almost black. R. S. No. 366.
68542. No. 5945. Yaomyn. Beans yellow, below average size, oblong to nearly round; hilums vary from almost white to dark brown with a few almost black. R. S. No. 255.
68543. No. 5946. Shuanchenpu. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown and occasionally to almost black. R. S. No. 41.

68420 to 68825—Continued.

68544. No. 5947. Sanchahe. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, occasionally to almost black. R. S. No. 397.
68545. No. 5948. Mangou. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, occasionally to almost black. R. S. No. 309.
68546. No. 5950. Shuanchenpu. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 44.
68547. No. 5951. Mangou. Beans yellow, normal size, oblong to nearly round; hilums vary from almost white to dark brown; a few are almost black. R. S. No. 343.
68548. No. 5952. Mangou. Beans yellow, above average size, oblong to almost round; hilums vary from light to dark brown, but the majority are white. R. S. No. 301.
68549. No. 5953. Mangou. Beans yellow, average size, oblong to almost round; hilums are mostly white with a few light to dark colored. R. S. No. 340.
68550. No. 5954. Mangou. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown with a few almost black. R. S. No. 325.
68551. No. 5955. Mangou. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown with an occasional one almost black. R. S. No. 247.
68552. No. 5956. Yaomyn. Beans yellow, below the average size, oval to almost round; hilums vary from nearly white to dark brown, occasionally to almost black. R. S. No. 260.
68553. No. 5957. Mangou. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, occasionally to almost black. R. S. No. 321.
68554. No. 5958. Mangou. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown and an occasional one to almost black. R. S. No. 345.
68555. No. 5959. Mangou. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, occasionally to almost black. R. S. No. 329.
68556. No. 5960. Shuanchenpu. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 99.
68557. No. 5961. Mangou. Beans yellow, average size, oblong to almost round; hilums vary from almost white to dark brown and occasionally to almost black. R. S. No. 334.
68558. No. 5962. Mangou. Beans yellow, average size, oblong to almost round; hilums vary from nearly

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- white to dark brown, occasionally to almost black. R. S. No. 372.
68559. No. 5963. Antah. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown with a few almost black. R. S. No. 192.
68560. No. 5964. Antah. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, occasionally to almost black. R. S. No. 164.
68561. No. 5965. Anda. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown and occasionally to almost black. R. S. No. 199.
68562. No. 5966. Sanchahe. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown with a few almost black. R. S. No. 383.
68563. No. 5967. Anda. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown; occasionally one is almost black. R. S. No. 165.
68564. No. 5968. Mangou. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, and a few are almost black. R. S. No. 370.
68565. No. 5969. Anda. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown with a few almost black. R. S. No. 175.
68566. No. 5970. Mangou. Beans yellow, average size, oblong to almost round; hilums vary from almost white to dark brown, and a few are almost black. R. S. No. 331.
68567. No. 5971. Mangou. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown and occasionally to almost black. R. S. No. 359.
68568. No. 5972. Shuanchenpu. Beans yellow, below average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 48.
68569. No. 5973. Mangou. Beans yellow, average size oblong to almost round; hilums vary from nearly white to dark brown, occasionally to almost black. R. S. No. 330.
68570. No. 5974. Anda. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 152.
68571. No. 5975. Mangou. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown. R. S. No. 313.
68572. No. 5977. Anda. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 188.
68573. No. 5978. Anda. Beans yellow, average size, oblong to almost round; hilums vary from light to dark brown with a few almost black. R. S. No. 179.

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- 68574.** No. 5979. Mangou. Beans yellow, average size, oblong to round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 338.
- 68575.** No. 5980. Yaomyn. Beans yellow, medium size, oblong to almost round; hilums vary from nearly white to dark brown, a few to almost black. R. S. No. 275.
- 68576.** No. 5981. Mangou. Beans yellow, normal size, oblong to almost round; hilums vary from light to dark brown with an occasional one almost black. R. S. No. 355.
- 68577.** No. 5982. Mangou. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown with a few almost black. R. S. No. 358.
- 68578.** No. 6020. Duitsinshan. Beans are yellow; now and then there is one of another color, a selected sample of first grade, oblong to almost round; hilums vary from almost white to dark brown, and a few are almost black. R. S. No. 212.
- 68579.** No. 6021. Duitsinshan. Beans yellow, oblong to nearly round; hilums vary from almost white to dark brown, sometimes to nearly black. R. S. No. 207.
- 68580.** No. 6022. Eighth District, Harbin. Beans, yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown with a few which are almost black. R. S. No. 229.
- 68581.** No. 6023. Eighth District, Harbin. Beans yellow, above average size, oblong to almost round; hilums vary from nearly white to dark brown, and a few are almost black. R. S. No. 233.
- 68582.** No. 6024. Anda. Beans yellow, average size, oblong to almost round; hilums vary from white to dark brown, and a few are almost black. R. S. No. 189.
- 68583.** No. 6025. Eighth District, Harbin. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, sometimes to almost black. R. S. No. 278.
- 68584.** No. 6026. Anda. Yellow beans, average size, oblong to almost round; hilums vary from almost white to dark brown and almost black. R. S. No. 190.
- 68585.** No. 6027. Mangou. Beans yellow, average size, oblong to almost round; hilums vary from almost white to dark brown and occasionally to almost black. R. S. No. 303.
- 68586.** No. 6028. Sanchahe. Beans yellow, below average size, oblong to almost round; hilums vary from almost white to dark brown and occasionally to almost black. R. S. No. 377.
- 68587.** No. 6029. Mangou. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown and occasionally to almost black. R. S. No. 348.

68420 to 68825—Continued.

- 68588.** No. 6030. Harbin. Beans yellow, above average size, oblong to almost round; hilums vary from nearly white to dark brown, in a few to nearly black. R. S. No. 234.
- 68589.** No. 6031. Anda. Beans yellow, average size, oblong to round; hilums vary from almost white to dark brown and occasionally to almost black. R. S. No. 197.
- 68590.** No. 6032. Anda. Beans yellow, normal size, oblong to almost round; hilums vary from nearly white to dark brown and sometimes to almost black. R. S. No. 104.
- 68591.** No. 6033. Mangou. Beans yellow, over average size, oblong to almost round; hilums vary from nearly white to dark brown, almost black. R. S. No. 256.
- 68592.** No. 6034. Anda. Beans yellow, average size, oblong to round; hilums vary from almost white to dark brown, almost black. R. S. No. 198.
- 68593.** No. 6035. Mangou. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark pink, occasionally to almost black. R. S. No. 328.
- 68594.** No. 6036. Shuanchenpu. Beans yellow, below average size; hilums vary from almost white to dark brown, sometimes almost black. R. S. No. 93.
- 68595.** No. 6037. Sanchahe. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, occasionally to almost black. R. S. No. 381.
- 68596.** No. 6038. Mangou. Beans yellow, average size, oblong to nearly round; hilums range from almost white to dark brown and a few are almost black. R. S. No. 374.
- 68597.** No. 6039. Shuanchenpu. Beans yellow, below average size, oblong to almost round; hilums vary from nearly white to dark brown, occasionally almost black. R. S. No. 49.
- 68598.** No. 6040. Mangou. Beans yellow, below average size, oblong to nearly round; hilums range from almost white to dark brown, occasionally almost black. R. S. No. 375.
- 68599.** No. 6041. Shuanchenpu. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown. R. S. No. 91.
- 68600.** No. 6042. Sanchahe. Beans yellow, average size, oblong to nearly round; hilums range from almost white to dark brown, sometimes almost black. R. S. No. 382.
- 68601.** No. 6043. Yaomyn. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, occasionally almost black. R. S. No. 278.
- 68602.** No. 6044. Mangou. Beans yellow, average size, oblong to almost round; hilums vary from almost white to dark brown, and a few are almost black. R. S. No. 351.

68420 to 68825—Continued.

68603. No. 6045. Mangou. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 360.
68604. No. 6046. Yaomyn. Beans yellow, below average size, oblong to almost round; hilums vary from nearly white to dark brown, and a few are almost black. R. S. No. 285.
68605. No. 6047. Mangou. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 363.
68606. No. 6048. Anda. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown with a few almost black. R. S. No. 109.
68607. No. 6049. Yaomyn. Beans yellow, below average size, oblong to almost round; hilums vary from nearly white to dark brown, occasionally almost black. R. S. No. 267.
68608. No. 6050. Yaomyn. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark pink, and a few are almost black. R. S. No. 274.
68609. No. 6051. Mangou. Beans yellow, average size, oblong to almost round; hilums vary from almost white to dark brown, occasionally almost black. R. S. No. 320.
68610. No. 6052. Anda. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, sometimes almost black. R. S. No. 142.
68611. No. 6053. Sanchahe. Beans yellow, below average size, oblong to almost round; hilums vary from nearly white to dark brown, occasionally almost black. R. S. No. 380.
68612. No. 6054. Anda. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, occasionally almost black. R. S. No. 194.
68613. No. 6055. Duitsinshan. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown; a few are quite black. R. S. No. 215.
68614. No. 6056. Harbin. Beans yellow, above average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 238.
68615. No. 6057. Anda. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, occasionally to almost black. R. S. No. 105.
68616. No. 6058. Duitsinshan. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 208.
68617. No. 6059. Mangou. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 306.

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68618. No. 6060. Anda. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, sometimes to almost black. R. S. No. 151.
68619. No. 6061. Mangou. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, occasionally to almost black. R. S. No. 349.
68620. No. 6062. Mangou. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 307.
68621. No. 6063. Anda. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, occasionally to almost black. R. S. No. 116.
68622. No. 6064. Yaomyn. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally almost black. R. S. No. 277.
68623. No. 6078. Mangou. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, occasionally to almost black. R. S. No. 324.
68624. No. 6079. Mangou. Beans yellow, below average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 326.
68625. No. 6080. Anda. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, and occasionally to almost black. R. S. No. 120.
68626. No. 6081. Yaomyn. Beans yellow, below average size, oblong to almost round; hilums vary from nearly white to dark brown, and a few are almost black. R. S. No. 276.
68627. No. 6082. Mangou. Beans yellow, average size, oblong to almost round; hilums vary from almost white to dark brown, and occasionally to almost black. R. S. No. 305.
68628. No. 6083. Mangou. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, and a few are almost black. R. S. No. 318.
68629. No. 6084. Anda. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, and occasionally to almost black. R. S. No. 169.
68630. No. 6085. Mangou. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown and in some instances to almost black. R. S. No. 346.
68631. No. 6086. Mangou. Beans yellow, average size, oblong to nearly round; hilums range from almost white to dark brown, and occasionally to almost black. R. S. No. 364.
68632. No. 6087. Yaomyn. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, sometimes almost black. R. S. No. 263.

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68633. No. 6089. Anda. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to light brown, occasionally to almost black. R. S. No. 119.
68634. No. 6090. Mangou. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, occasionally to black. R. S. No. 367.
68635. No. 6091. Sanchahe. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 376.
68636. No. 6092. Yaomyn. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, occasionally to almost black. R. S. No. 269.
68637. No. 6093. Mangou. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, occasionally to almost black. R. S. No. 317.
68638. No. 6094. Duitsinshan. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, occasionally to almost black. R. S. No. 222.
68639. No. 6095. Mangou. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 322.
68640. No. 6096. Mangou. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, and a few are almost black. R. S. No. 336.
68641. No. 6097. Duitsinshan. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, occasionally to almost black. R. S. No. 221.
68642. No. 6100. Mangou. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown and occasionally to almost black. R. S. No. 335.
68643. No. 6101. Shuanchenpu. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, and occasionally to almost black. R. S. No. 62.
68644. No. 6102. Mangou. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown or almost black. R. S. No. 323.
68645. No. 6103. Mangou. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, and in some instances are almost black. R. S. No. 362.
68646. No. 6104. Anda. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to nearly black. R. S. No. 173.
68647. No. 6105. Mangou. Beans yellow, average size, oblong to almost round; hilums vary from nearly

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- white to dark brown, occasionally to almost black. R. S. No. 344.
68648. No. 6106. Mangou. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown or nearly black. R. S. No. 350.
68649. No. 6107. Anda. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown or nearly black. R. S. No. 165.
68650. No. 6108. Mangou. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown and occasionally to nearly black. R. S. No. 357.
68651. No. 6109. Anda. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 111.
68652. No. 6110. Anda. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, occasionally to nearly black. R. S. No. 107.
68653. No. 6111. Mangou. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally black. R. S. No. 332.
68654. No. 6112. Shuanchenpu. Beans yellow, average size, hilums vary from almost white to dark brown, sometimes to almost black. R. S. No. 76.
68655. No. 6113. Shuanchenpu. Beans yellow, average size, hilums vary from almost white to dark brown, sometimes to almost black. R. S. No. 47.
68656. No. 6114. Mangou. Beans yellow, average size, oblong to almost round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 319.
68657. No. 6115. Anda. Beans yellow, larger than the average, oblong to almost round; hilums vary from almost white to dark brown, sometimes to almost black. R. S. No. 180.
68658. No. 6116. Anda. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 114.
68659. No. 6117. Shuanchenpu. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, occasionally to almost black. R. S. No. 77.
68660. No. 6118. Duitsinshan. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 223.
68661. No. 6119. Shuanchenpu. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, occasionally almost black. R. S. No. 12.
68662. No. 6120. Shuanchenpu. Beans yellow, average size, oblong to nearly round; hilums vary from white to dark brown and occasionally to almost black. R. S. No. 79.

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68663. No. 6121. Yaomyn. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, occasionally to almost black. R. S. No. 268.
68664. No. 6122. Anda. Beans yellow, average size, oblong to almost round, hilums vary from nearly white to dark brown, occasionally to almost black. R. S. No. 134.
68665. No. 6123. Yaomyn. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, occasionally to almost black. R. S. No. 288.
68666. No. 6124. Shuanchenpu. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 23.
68667. No. 6145. Anda. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, occasionally to almost black. R. S. No. 131.
68668. No. 6146. Harbin. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, sometimes to almost black. R. S. No. 249.
68669. No. 6147. Anda. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, occasionally to almost black. R. S. No. 137.
68670. No. 6148. Anda. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 174.
68671. No. 6149. Shuanchenpu. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally to black. R. S. No. 19.
68672. No. 6149-a. Harbin. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, occasionally to almost black. R. S. No. 243.
68673. No. 6150. Anda. Beans yellow, above average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 181.
68674. No. 6151. Shuanchenpu. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, occasionally to almost black. R. S. No. 90.
68675. No. 6152. Shuanchenpu. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown and occasionally to almost black. R. S. No. 82.
68676. No. 6153. Yaomyn. Beans yellow, average size, oblong to almost round; hilums vary from almost white to dark brown, occasionally to black. R. S. No. 283.
68677. No. 6154. Harbin. Beans yellow, average size, oblong to nearly round; hilums vary from almost

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- white to dark brown, occasionally to almost black. R. S. No. 245.
68678. No. 6155. Anda. Beans yellow, fair grade, oblong to almost round; hilums vary from nearly white to dark brown, occasionally to almost black. R. S. No. 121.
68679. No. 6156. Yaomyn. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 298.
68680. No. 6157. Shuanchenpu. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, sometimes to almost black. R. S. No. 88.
68681. No. 6158. Anda. Beans yellow, above average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally practically black. R. S. No. 191.
68682. No. 6159. Anda. Beans yellow, average size, oblong to almost round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 136.
68683. No. 6160. Anda. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 139.
68684. No. 6161. Shuanchenpu. Beans yellow, average size, oblong to almost round; hilums vary from light to dark brown, occasionally to practically black. R. S. No. 74.
68685. No. 6162. Yaomyn. Beans yellow, below average size, oblong to almost round; hilums vary from nearly white to dark brown, occasionally to almost black. R. S. No. 265.
68686. No. 6163. Shuanchenpu. Beans yellow, a little below average size, oblong to almost round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 83.
68687. No. 6164. Anda. Beans yellow, average size, oblong to almost round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 144.
68688. No. 6165. Anda. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, occasionally to almost black. R. S. No. 201.
68689. No. 6166. Shuanchenpu. Beans yellow, below average size, oblong to nearly round; hilums vary from almost white to dark brown, sometimes to almost black. R. S. No. 84.
68690. No. 6167. Duitsinshan. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, occasionally to almost black. R. S. No. 224.
68691. No. 6168. Anda. Beans yellow, below average size, oblong to almost round; hilums vary from nearly white to dark brown, occasionally to practically black. R. S. No. 184.

68420 to 68825—Continued.

68692. No. 6169. Yaomyn. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, occasionally to almost black. R. S. No. 284.
68693. No. 6170. Duitsinshan. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, sometimes to black. R. S. No. 211.
68694. No. 6171. Harbin. Beans yellow, average size, oblong to almost round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 236.
68695. No. 6172. Shuanchenpu. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, a few to almost black. R. S. No. 7.
68696. No. 6173. Anda. Beans yellow, below the average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 113.
68697. No. 6174. Shuanchenpu. Beans yellow, below average size, oblong to almost round; hilums vary from nearly white to dark brown, sometimes black. R. S. No. 29.
68698. No. 6175. Shuanchenpu. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 14.
68699. No. 6176. Anda. Beans yellow, average size, oblong to almost round; hilums vary from almost white to dark brown, occasionally to practically black. R. S. No. 153.
68700. No. 6177. Shuanchenpu. Beans yellow, below average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally to black. R. S. No. 56.
68701. No. 6263. Yaomyn. Beans yellow, average size, oblong to almost round; hilums vary from light to dark brown, occasionally to almost black. R. S. No. 270.
68702. No. 6264. Anda. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, a few being almost black. R. S. No. 185.
68703. No. 6265. Duitsinshan. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 216.
68704. No. 6266. Shuanchenpu. Beans yellow, below average size, oblong to almost round; hilums vary from nearly white to dark brown, occasionally to almost black. R. S. No. 95.
68705. No. 6267. Anda. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown or almost black. R. S. No. 172.
68706. No. 6268. Yaomyn. Beans yellow, below average size, oblong to nearly round; hilums vary from al-

68420 to 68825—Continued.

- most white to dark brown, occasionally to nearly black. R. S. No. 294.
68707. No. 6269. Anda. Beans yellow, average size, oblong to almost round; hilums vary from almost white through the browns to black. R. S. No. 202.
68708. No. 6270. Yaomyn. Beans yellow, below the average size, oblong to nearly round; hilums vary from light to dark brown, occasionally to black. R. S. No. 300.
68709. No. 6271. Anda. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally to black. R. S. No. 200.
68710. No. 6272. Harbin. Beans yellow, average size, oblong to almost round; hilums vary from almost white to dark brown, occasionally to nearly black. R. S. No. 246.
68711. No. 6273. Harbin. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally to black. R. S. No. 252.
68712. No. 6274. Yaomyn. Beans yellow, below average size, oblong to almost round; hilums vary from nearly white to dark brown, a few to practically black. R. S. No. 287.
68713. No. 6275. Shuanchenpu. Beans yellow, average size, oblong to nearly round; hilums vary from light brown to almost black. R. S. No. 86.
68714. No. 6276. Yaomyn. Beans yellow, below average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally to quite black. R. S. No. 295.
68715. No. 6277. Shuanchenpu. Beans yellow, below the average size, oblong to almost round; hilums vary from nearly white to dark brown, occasionally to black. R. S. No. 4.
68716. No. 6278. Shuanchenpu. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally to black. R. S. No. 8.
68717. No. 6279. Anda. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, sometimes to black. R. S. No. 133.
68718. No. 6280. Shuanchenpu. Beans yellow, below average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 101.
68719. No. 6281. Shuanchenpu. Beans yellow, below average size, oblong to almost round; hilums vary from nearly white to dark brown, occasionally to almost black. R. S. No. 89.
68720. No. 6282. Anda. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally to black. R. S. No. 126.

68420 to 68825—Continued.

68721. No. 6283. Shuanchenpu. Beans yellow, below average size, oblong to almost round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 11.
68722. No. 6284. Anda. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 103.
68723. No. 6285. Yaomyn. Beans yellow, below average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally to nearly black. R. S. No. 297.
68724. No. 6286. Duitsinshan. Beans yellow, below average size, oblong to almost round; hilums vary from nearly white to dark brown, occasionally to almost black. R. S. No. 213.
68725. No. 6287. Yaomyn. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, occasionally to almost black. R. S. No. 296.
68726. No. 6288. Shuanchenpu. Beans yellow, below average size, oblong to nearly round; hilums vary from almost white to dark brown; a few are nearly black. R. S. No. 39.
68727. No. 6289. Anda. Beans yellow, above average size, oblong to nearly round; hilums vary from almost white to dark brown, sometimes to almost black. R. S. No. 182.
68728. No. 6290. Yaomyn. Beans yellow, average size, oblong to almost round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 257.
68729. No. 6291. Anda. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 118.
68730. No. 6292. Anda. Beans yellow, below average size, oblong to almost round; hilums vary from almost white to dark brown, occasionally to black. R. S. No. 159.
68731. No. 6293. Yaomyn. Beans yellow, below average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 289.
68732. No. 6294. Anda. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown and a few to black. R. S. No. 204.
68733. No. 6295. Shuanchenpu. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 63.
68734. No. 6296. Anda. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, occasionally to black. R. S. No. 117.
68735. No. 6297. Anda. Beans yellow, average size, oblong to round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 149.

68420 to 68825—Continued.

68736. No. 6298. Yaomyn. Beans yellow, below average size, oblong to almost round; hilums vary from almost white to dark brown, sometimes to almost black. R. S. No. 254.
68737. No. 6299. Anda. Beans yellow, average size, oblong to almost round; hilums vary from almost white to dark brown, sometimes to black. R. S. No. 156.
68738. No. 6300. Duitsinshan. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, occasionally almost black. R. S. No. 220.
68739. No. 6301. Shuanchenpu. Beans yellow, below average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 3.
68740. No. 6302. Anda. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 135.
68741. No. 6303. Yaomyn. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 272.
68742. No. 6337. Yaomyn. Beans yellow, average size, oblong to almost round; hilums vary from almost white to dark brown, sometimes to almost black. R. S. No. 256.
68743. No. 6338. Duitsinshan. Beans yellow, above average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally to black. R. S. No. 210.
68744. No. 6339. Harbin. Beans yellow, average size, oblong to almost round; hilums vary from almost white to dark brown, sometimes to almost black. R. S. No. 235.
68745. No. 6340. Shuanchenpu. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, sometimes to black. R. S. No. 98.
68746. No. 6341. Shuanchenpu. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, sometimes to almost black. R. S. No. 75.
68747. No. 6342. Yaomyn. Beans yellow, average size, oblong to almost round; hilums vary from almost white to dark brown, sometimes to almost black. R. S. No. 280.
68748. No. 6343. Yaomyn. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, sometimes to almost black. R. S. No. 299.
68749. No. 6344. Anda. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, sometimes to nearly black. R. S. No. 123.
68750. No. 6345. Harbin. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, sometimes to almost black. R. S. No. 240.

68420 to 68825—Continued.

68751. No. 6346. Yaomyn. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to very dark brown, sometimes to almost black. R. S. No. 271.
68752. No. 6400. Yaomyn. Beans yellow, below average size, oblong to almost round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 264.
68753. No. 6401. Shuanchenpu. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to almost black. R. S. No. 102.
68754. No. 6402. Anda. Beans yellow, average size, oblong to almost round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 140.
68755. No. 6403. Duitsinshan. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 214.
68756. No. 6404. Harbin. Beans yellow, average size, oblong to almost round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 247.
68757. No. 6405. Harbin. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, occasionally to almost black. R. S. No. 251.
68758. No. 6406. Shuanchenpu. Beans yellow, below average size, oblong to almost round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 36.
68759. No. 6407. Anda. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, a few to almost black. R. S. No. 143.
68760. No. 6408. Shuanchenpu. Beans yellow, below average size, oblong to almost round; hilums vary from almost white to dark brown, almost black. R. S. No. 96.
68761. No. 6409. Shuanchenpu. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 9.
68762. No. 6410. Harbin. Beans yellow, above the average size, oblong to almost round; hilums vary from white to dark brown, occasionally to almost black. R. S. No. 242.
68763. No. 6411. Anda. Beans yellow, average size, oblong to almost round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 129.
68764. No. 6412. Anda. Beans yellow, average size, oblong to almost round; hilums vary from almost white to dark brown and occasionally to almost black. R. S. No. 148.
68765. No. 6413. Shuanchenpu. Beans yellow, average size, oblong to nearly round; hilums vary from almost

68420 to 68825—Continued.

- white to dark brown, occasionally to almost black. R. S. No. 65.
68766. No. 6414. Shuanchenpu. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, sometimes to almost black. R. S. No. 52.
68767. No. 6415. Duitsinshan. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 226.
68768. No. 6416. Shuanchenpu. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, occasionally to almost black. R. S. No. 58.
68769. No. 6417. Anda. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, occasionally to almost black. R. S. No. 160.
68770. No. 6418. Anda. Beans yellow, average size, oblong to almost round; hilums vary from almost white to dark brown, occasionally to black. R. S. No. 108.
68771. No. 6419. Shuanchenpu. Beans yellow, average size, oblong to almost round; hilums vary from almost white to dark brown, occasionally to black. R. S. No. 60.
68772. No. 6420. Yaomyn. Beans yellow, below average size, oblong to almost round; hilums vary from almost white to dark brown, occasionally black. R. S. No. 273.
68773. No. 6421. Shuanchenpu. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, occasionally to black. R. S. No. 37.
68774. No. 6422. Harbin. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally to black. R. S. No. 239.
68775. No. 6423. Anda. Beans yellow, average size, oblong to almost round; hilums vary from almost white to dark brown, occasionally to black. R. S. No. 171.
68776. No. 6424. Anda. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 112.
68777. No. 6425. Anda. Beans yellow, average size, oblong to almost round; hilums vary from almost white to dark brown, occasionally to black. R. S. No. 138.
68778. No. 6426. Anda. Beans yellow, average size, oblong to almost round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 177.
68779. No. 6427. Anda. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, occasionally to almost black. R. S. No. 145.
68780. No. 6428. Anda. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown and occasionally to almost black. R. S. No. 115.

68420 to 68825—Continued.

68781. No. 6429. Harbin. Beans yellow, average size, oblong to almost round; hilums vary from almost white to dark brown, occasionally to almost black. R. S. No. 241.
68782. No. 6430. Duitsinshan. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, occasionally to black. R. S. No. 219.
68783. No. 6431. Anda. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown or black. R. S. No. 122.
68784. No. 6432. Duitsinshan. Beans yellow, average size, oblong to almost round; hilums vary from nearly white to dark brown, sometimes to almost black. R. S. No. 227.
68785. No. 6433. Harbin. Beans yellow, above average size, oblong to almost round; hilums vary from nearly white to dark brown, sometimes to almost black. R. S. No. 244.
68786. No. 6434. Harbin. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, sometimes to black. R. S. No. 231.
68787. No. 6435. Harbin. Beans yellow, above average size, oblong to almost round; hilums vary from nearly white to dark brown and occasionally to almost black. R. S. No. 250.
68788. No. 6436. Anda. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, sometimes to almost black. R. S. No. 110.
68789. No. 6437. Anda. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, sometimes to almost black. R. S. No. 130.
68790. No. 6438. Anda. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, sometimes to almost black. R. S. No. 124.
68791. No. 6439. Anda. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, sometimes to almost black. R. S. No. 195.
68792. No. 6440. Harbin. Beans yellow, average size, oblong to almost round; hilums vary from almost white to dark brown, sometimes to black. R. S. No. 230.
68793. No. 6441. Harbin. Beans yellow, average size, oblong to almost round; hilums vary from almost white to dark brown, sometimes to black. R. S. No. 228.
68794. No. 6442. Anda. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, sometimes to black. R. S. No. 154.
68795. No. 6443. Shuanchenpu. Beans yellow, average size, oblong to almost round; hilums vary from almost

68420 to 68825—Continued.

- white to dark brown, sometimes to almost black. R. S. No. 55.
68796. No. 6444. Harbin. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, occasionally to black. R. S. No. 237.
68797. No. 6445. Anda. Beans yellow, above average size, oblong to almost round; hilums vary from almost white to dark brown, sometimes to almost black. R. S. No. 155.
68798. No. 6446. Harbin. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, sometimes to almost black.
68799. No. 6447. Anda. Beans yellow, average size, oblong to almost round; hilums vary from almost white to dark brown, sometimes to almost black. R. S. No. 106.
68800. No. 6448. Mangou. Beans yellow, average size, oblong to nearly round; hilums vary from almost white to dark brown, sometimes to almost black. R. S. No. 339.
68801. No. 6449. Harbin. Beans yellow, a mixed collection, culled out of the many samples of commercial soy beans submitted to the grading board of the Chinese Eastern Railway, season of 1925.
68802. No. 6450. Harbin. Beans greenish yellow, a mixed collection culled out of the many samples of commercial soy beans submitted to the grading board of the Chinese Eastern Railway, season of 1925.
68803. No. 6450-a. Harbin. Beans greenish yellow, a mixed collection culled out of the many samples of commercial soy beans submitted to the grading board of the Chinese Eastern Railway, season of 1925.
68804. No. 6450-b. Harbin. Beans greenish yellow, a mixed collection culled out of the many samples of commercial soy beans submitted to the grading board of the Chinese Eastern Railway, season of 1925.
68805. No. 6450-c. Harbin. Beans creamy yellow, a mixed collection culled out of the many samples of commercial soy beans submitted to the grading board of the Chinese Eastern Railway, season of 1925.
68806. No. 6450-d. Harbin. Beans creamy yellow, a mixed collection culled out of the many samples of commercial soy beans submitted to the grading board of the Chinese Eastern Railway, season of 1925.
68807. No. 6450-e. Harbin. Beans greenish yellow with brown spots, a mixed collection culled out of the many samples of commercial soy beans submitted to the grading board of the Chinese Eastern Railway, season of 1925.
68808. No. 6450-f. Harbin. Beans round and black, a mixed collection culled out of the many samples of commercial soy beans submitted to the grading board of the Chinese Eastern Railway, season of 1925.

68420 to 68825—Continued.

68809. No. 6450-g. Harbin. Beans buff brown, a mixed collection culled out of the many samples of commercial soy beans submitted to the grading board of the Chinese Eastern Railway, season of 1925.
68810. No. 6450-h. Harbin. Beans long, green, a mixed collection culled out of the many samples of commercial soy beans submitted to the grading board of the Chinese Eastern Railway, season of 1925.
68811. No. 6450-i. Harbin. Beans brown, a mixed collection culled out of the many samples of commercial soy beans submitted to the grading board of the Chinese Eastern Railway, season of 1925.
68812. No. 6450-j. Harbin. Beans buff, a mixed collection culled out of the many samples of commercial soy beans submitted to the grading board of the Chinese Eastern Railway, season of 1925.
68813. No. 6450-k. Harbin. Beans dull greenish, a mixed collection culled out of the many samples of commercial soy beans submitted to the grading board of the Chinese Eastern Railway, season of 1925.
68814. No. 6450-l. Harbin. Beans long, black, a mixed collection culled out of the many samples of commercial soy beans submitted to the grading board of the Chinese Eastern Railway, season of 1925.
68815. No. 6450-m. Harbin. Beans reddish brown, a mixed collection culled out of the many samples of commercial soy beans submitted to the grading board of the Chinese Eastern Railway, season of 1925.
68816. No. 6450-n. Harbin. Beans light greenish yellow, a mixed collection culled out of the many samples of commercial soy beans submitted to the grading board of the Chinese Eastern Railway, season of 1925.
- 68817 and 68818. LONICERA CAERULEA EDULIS (Turcz.) Regel. Caprifoliaceae. Honeysuckle.
68817. No. 5983. Kaolingtzu. June 22, 1926. A bush 10 to 12 feet in height, producing oblong fruits, one-half to three-fourths of an inch in length and about one-fourth of an inch in diameter, which are very dark purple, almost black with plenty of bloom. The fruits are not very good when fresh, but are extensively used in the vicinity of Vladivostok for making jam.
68818. No. 6143. Hingan. July 8, 1926. Found in peaty soil where the climate, though now dry, is at seasons apparently very wet.
68819. PRUNUS SIBIRICA L. Amygdalaceae. Siberian apricot.
No. 6315. From the White River Valley, near Bariam. July 29, 1926. *Shan hsing* (wild mountain apricot). The plants are rarely more than 3 feet in height and are frequently heavily fruited. The fruits vary greatly in size and shape, the largest found being three-fourths of an inch in diameter. They range from pale yellowish green to golden and very often to almost red.

68420 to 68825—Continued.

68820. PRUNUS PADUS L. Amygdalaceae. European bird cherry.
No. 6305. Bariam. July 19, 1926.
68821. RIBES DIACANTHA Pall. Grossulariaceae. Red currant.
No. 6312. Near Bariam. July 21, 1926. The fruit is bright red and of very good quality.
68822. ROSA sp. Rosaceae. Rose.
No. 6326. From the White River Valley, near Bariam. July 24, 1926. Very spiny plants, with the hips pale pink to almost red.
68823. RUBUS IDAEUS STRIGOSUS (Michx.) Maxim. Rosaceae. Raspberry.
No. 6322. From the White River Valley, near Bariam. July 23, 1926. A pale-pink fruited raspberry of good size, which caps easily.
68824. RUBUS SAXATILIS L. Rosaceae. Dewberry.
No. 6323. From the White River Valley, near Bariam. July 24, 1926. A dewberry producing large bright-red fruits of good quality.
68825. VIOLA TENUCORNIS W. Becker. Violaceae. Violet.
No. 5987. Kaolingtzu. June 22, 1926. The flowers of this plant are rather light purple or violet, and are of fairly good size for a wild variety.
- 68826 to 68828. FRAGARIA sp. Rosaceae. Strawberry.
From St. Jean le Blanc, par Orleans, France. Plants presented by Edmond Versin. Received March 4, 1926. Numbered September, 1926.
Locally developed varieties.
68826. FRAGARIA sp. *Géante Rouge*.
68827. FRAGARIA sp. *L'Indispensable*.
68828. FRAGARIA sp. *Nombrot Bruneau*.
- 68829 to 68835. From Sao Paulo, Brazil. Seeds presented by Dr. Henrique Löbbe, Eng. Agronomo, Director do Campo de Sementes de Sao Simao, through A. J. Pleters, Bureau of Plant Industry. Received September 27, 1926.
- 68829 to 68831. ARACHIS spp. Fabaceae. Peanut.
68829. ARACHIS HYPOGAEA L.
A small-podded form from southern Brazil.
68830 and 68831. ARACHIS NAMBYQUARAE Hoehne.
A Brazilian relative of the peanut, which, according to Hoehne (Historia Natural Botanica, Matto Grosso, Brazil, Part XII); is a much-branched, prostrate, or ascending plant. The pod is 2 to 3 inches long, with usually two seeds which are edible and very oily.
For previous introduction see No. 65296.

68829 to 68835—Continued.

68830. A shorter podded form than No. 68831.

68831. A long-podded form.

68832. *CANAVALIA ENSIFORMIS* (L.) DC. Fabaceae. Jack bean.

Locally grown seeds.

68833 to 68835. *STIZOLOBIUM* spp. Fabaceae.

Coarse leguminous annual vines. Locally grown seeds.

68833. *STIZOLOBIUM ATERRIMUM* Piper and Tracy. Mauritius bean.

68834. *STIZOLOBIUM DEERINGIANUM* Bort. Florida velvet bean.

68835. *STIZOLOBIUM NIVEUM* (Roxb.) Kuntze. Lyon bean.

68836. *ACACIA RETINODES* Schlecht. Mimosaceae.

From Paris, France. Seeds obtained from Vilmorin-Andrieux & Co. Received September 15, 1926.

Var. *floribunda*. A tall shrub or small tree, native to Australia, with feathery foliage and dense yellow flower heads.

68837 to 68866.

From Buitenzorg, Java. Seeds presented by Dr. W. M. Docters van Leeuwen, director, botanic gardens. Received September 29, 1926.

68837 to 68840. *ALBIZZIA* spp. Mimosaceae.

68837 and 68838. *ALBIZZIA FALCATA* (L.) Backer (*A. moluccana* Miquel).

A rapidly growing tree with large feathery leaves and small globular flower heads. Because of its thin foliage it is grown in Ceylon as a shade for field crops.

For previous introduction see No. 67965.

68837. No. 1. 68838. No. 2.

68839. *ALBIZZIA ROTUNDATA* Blume.

An East Indian leguminous tree with rounded leaflets, of possible use as a shade for crop plants.

68840. *ALBIZZIA SAPONARIA* (Lour.) Blume.

A small tree, 65 feet or less high, with gray bark and alternate double compound leaves. The bark contains saponin and is used by the natives of the Philippines as soap for washing their hair. Native to the Philippines and the East Indies.

68841. *BARYXYLUM INERME* (Roxb.) Pierre (*Peltophorum ferrugineum* Benth.). Caesalpinaceae.

A large, quick-growing, symmetrical tree, with a spreading top and graceful feathery foliage, indigenous to the dry regions of Ceylon and Malaya, where the annual rainfall varies from 50 to 70 inches. The young leaves and shoots are covered with a brown velvety tomentum. The tree flowers twice a year at irregular seasons, some specimens being in blossom while others near by are in ripe fruit. The flowers are rusty yellow, sweet scented, and borne in large erect

68837 to 68866—Continued.

panicles. The tree is a magnificent sight when in full bloom. It is especially suited to dry districts, but also thrives to perfection in the moist regions up to 1,800 feet.

For previous introduction see No. 51810.

68842 to 68844. *BAUHINIA* spp. Caesalpinaceae.

68842. *BAUHINIA MONANDRA* Kuntz. Butterfly bauhinia.

An ornamental pink-flowered tropical African bush or small tree.

For previous introduction see No. 50734.

68843. *BAUHINIA TOMENTOSA* L. St. Thomas tree.

A handsome leguminous shrub, native to tropical Asia and Africa, with clusters of large showy yellow flowers.

For previous introduction see No. 38651.

68844. *BAUHINIA VIOLACEA* Hort.

A leguminous tropical plant, native to the East Indies.

68845. *CALPOGONIUM MUCUNOIDES* Desv. Fabaceae.

A tropical American plant which is said to be popular as a cover plant in Sumatra, according to J. N. Milsum and E. A. Curtler (*Malayan Agricultural Journal*, vol. 13, No. 8, August, 1925, pp. 271-272). These authorities state that a fair cover is obtained after three months from sowing, when flowering commences. The plant is a vigorous creeping herb which forms a mat of foliage 1½ feet or so in thickness over the soil. The stems, 3 to 10 feet long, form roots at each node. The pale blue flowers are in racemes 1 to 4 inches long.

For previous introduction see No. 66085.

68846 to 68848. *CASSIA* spp. Caesalpinaceae.

68846. *CASSIA MARGINATA* Roxb.

A small, graceful tropical tree with rose-colored flowers and drooping branches. Native to the East Indies.

68847. *CASSIA SURATTENSIS* Burm. f. (*C. glauca* Lam.).

A tropical leguminous shrub or small tree with pale-green compound leaves and clusters of pale-yellow flowers. Native to the East Indies.

For previous introduction see No. 33562.

68848. *CASSIA* sp.

A tropical leguminous plant native to the East Indies.

68849 to 68852. *CROTALARIA* spp. Fabaceae.

68849. *CROTALARIA GRANTIANA* Harv.

A small slender herbaceous plant with an erect, branching, leafy stem about a foot high and small yellow flowers. Native to Natal.

For previous introduction see No. 51833.

68837 to 68866—Continued.

68850. CROTALARIA USARAMOENSIS Baker f.

This East African crotalaria has been tested in Java as a green manure, according to Dr. P. J. S. Cramer, Director of the Department of Agriculture, Buitenzorg. Doctor Cramer states that it has proved very successful as a green manure when grown in alternation with corn, producing large quantities of vegetation rich in nitrogen. In the cinchona plantations it is very satisfactory, as it endures partial shade and forms a dense, low growth, which keeps the edges of the terraces together.

For previous introduction see No. 64064.

68851. CROTALARIA VALETONII Backer.

An East Indian plant described by C. A. Backer (Bulletin du Jardin Botanique, Buitenzorg, vol. 2, p. 324) as an erect, densely branched herb, 1 to 4 feet high, with simple, hairy leaves and yellow flowers in terminal, 5-flowered to 12-flowered racemes.

For previous introduction see No. 65299.

68852. CROTALARIA VERRUCOSA L.

A much-branched leguminous herb, about 2 feet high, found throughout the Tropics of both hemispheres. The white and blue flowers are in many-flowered, compact racemes.

For previous introduction see No. 65300.

68853. DETARIUM SENEGALENSE Gmel. Caesalpiniaceae.

A large spreading evergreen South African tree, up to 80 feet high, which bears large numbers of yellow oval smooth-skinned fruits about 3 inches long. The jellylike pulp is sweet and of pleasant flavor. The tree grows in regions practically free from frost.

68854. DONAX CANNAEFORMIS (Forst.) Rolfe. Marantaceae.

A shrubby moisture-loving perennial, up to 3 meters high, native to tropical America. The large leaves resemble those of a canna, and the white flowers are in lax spikes.

68855. ERYTHRINA VARIEGATA ORIENTALIS (L.) Merr. Fabaceae.

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

For previous introduction see No. 67967.

68856 to 68859. FICUS spp. Moraceae.**68856. FICUS AMPELOS** Burm. f.

A tropical Indian tree with rough ovate-oblong leaves and small grape-like fruits.

68857. FICUS KORTHALSI Miquel.

A wild fig from southern Borneo which resembles *Ficus elastica* in foliage and habit. The leaves are rigid

68837 to 68866—Continued.

and leathery and up to 8 inches long, and the ellipsoid fruits are nearly an inch in length.

68858. FICUS HIRTA Vahl.

A shrub or small tree with leaves up to a foot long, from the tropical Himalayas.

68859. FICUS RETUSA L.

A large tropical tree with aerial roots, leathery leaves 4 inches long, and red or yellow fruits a third of an inch in diameter. Native to the East Indies.

68860. MEIBOMIA GYROIDES (DC.) Kuntze (*Desmodium gyroides* DC.). Fabaceae.

A shrubby leguminous plant, 8 to 10 feet high, from the warmer parts of the central and eastern Himalayas. It has hairy leaves and terminal clusters of red flowers.

For previous introduction see No. 64177.

68861. MEIBOMIA TRIQUETRA (L.) Kuntze (*Desmodium triquetrum* DC.). Fabaceae.

A handsome shrub with triangular branches, stiff leathery leaflets, and long axillary and terminal racemes of red flowers. It is found in most places in eastern and southern India and also in China and the Philippines.

For previous introduction see No. 47727.

68862. PITHECOLOBIUM JUNGHUHNIANUM Benth. Mimosaceae.

A tropical leguminous tree, native to the mountainous regions of Java, with rather small bipinnate leaves and numerous globular umbels of small flowers.

68863. TALINUM PATENS (L.) Willd. Portulacaceae.

An erect perennial, 1 to 2 feet high, native to tropical America, with fleshy leaves and carmine flowers. The leaves are boiled and eaten like spinach.

68864. TALINUM TRIANGULARE (Jacq.) Willd. Portulacaceae.

An erect branching herbaceous plant, about 3 feet high, native to the West Indies and recently introduced from Java into the Philippine Islands. The flowers are pink and produced in great profusion. In the Philippines the fleshy tender leaves are boiled like spinach and served with meat, for which purpose they are excellent.

For previous introduction see No. 59292.

68865. TERMINALIA ARBOREA (Teysm.) Koord. and Val. Combretaceae.

An East Indian tree about 100 feet high, with alternate entire leaves. The astringent fruits are used medicinally.

For previous introduction see No. 49564.

68866. TERMINALIA BELLERICA (Gaertn.) Roxb. Combretaceae.

The small round fruits of this handsome tropical Indian tree have been exported from India for tanning purposes under the name of myrobalans. The yellowish gray wood is used for general construction. The tree also has merit as a

68837 to 68866—Continued.

shade tree for avenues, with its huge buttressed trunk and long horizontal branches.

For previous introduction see No. 61505.

68867 to 68907.

From China. Seeds obtained by F. A. McClure, agricultural explorer, Bureau of Plant Industry. Received September, 1926.

68867. *APIUM GRAVEOLENS* L. *Apiaceae*.
Celery.

No. 550. *Fuk chow pak kan tsot*. Seeds obtained from a seed store, Sanmiu, Honam, and said to have come from Fukchow, Fukien Province. This variety is planted here in August.

68868. *ARDISIA* sp. *Myrsinaceae*.

No. 521. Lungtau Mountain, northern Kwangtung. *Mo chung yeuk*. A low rosette plant having bright-green, sometimes reddish, leaves densely covered with long soft hairs, and clusters of bright-red berries which follow the small but pretty white flowers. This plant is found in moist shady situations and is good for rock gardens.

68869. *BETA VULGARIS* L. *Chenopodiaceae*.

No. 528. Canton. *Kwan taat tsot*. A Chinese vegetable similar to Swiss chard. It is grown here during the winter months, and the large, white petioles, together with the leaves, are eaten.

68870 to 68883. *BRASSICA* spp. *Brassicaceae*.68870. *BRASSICA* sp.

No. 530. Canton. *Paak fa kai laan*. A white-flowered native Chinese vegetable with a habit of growth much like wild mustard, but with much thicker, more succulent, glaucous leaves. It is grown during the winter months.

68871. *BRASSICA* sp.

No. 545. From a seed store in Sanmiu, Honam, originally from Lausek, near Fatshaan, Kwangtung. *Ma i paak tsot* (horse ear). A variety planted in July; the leaves are edible in about 40 days, and the seeds ripen in about 120 days. The leaves and their broad white tender fleshy petioles make a delicious vegetable; any surplus is dried for later use.

68872. *BRASSICA* sp.

No. 546. *Kong moon ai keuk paak tsot*. A variety with shorter, broader leaf petioles, originally from Kongmoon, in the Sunui district, Kwangtung. It is planted from July to November; the leaves are edible in about 60 days, and the seeds ripen in about 120 days. The leaves and petioles are sometimes dried for off-season consumption.

68873. *BRASSICA* sp.

No. 547. From a seed store in Sanmiu, Honam, originally from Potting, Chihli Province. *Ai keuk wong nga paak, wong paau sam*. A variety which is planted in July, forming a rather loose, globular head in about 85 days. The seeds ripen in about 160 days. It is used as a winter

68867 to 68907—Continued.

vegetable and is very tender, delicious, and of a much milder, sweeter flavor than the common cabbage.

68874. *BRASSICA* sp.

From a seed store in Sanmiu, Honam, originally from Tientsin. *Ko keuk taai tsing nga paak*. A variety planted in July; the heads form in about 80 days, and the seeds ripen in about 120 days. The heads formed by this variety are longer than those of *wong paau sam*, No. 547 [No. 68873], and loose, requiring to be tied up in order to attain their highest perfection.

68875. *BRASSICA* sp.

No. 549. From a seed store in Sanmiu, Honam, and originally from Potting, Chihli Province. *Ai keuk paau sam tsing paau nga paak*. This variety, planted in July, forms subglobular heads in about 80 days. It is distinguished from No. 547, *wong paau sam* [No. 68873], by its greener color.

68876. *BRASSICA* sp.

No. 551. From a seed store in Sanmiu, Honam, originally from Chiu-chow, Kwangtung. *Chiu chow paau sam taai kai tsot*. A variety planted in August here, which is commonly used to make a kind of salt kraut. The leaves are edible in about 80 days, and the seeds are said to ripen in about 120 days.

68877. *BRASSICA* sp.

No. 552. From a seed store in Sanmiu, Honam, originally from Chiu-chow, Kwangtung. *Taai haap chiu chow kai tsot*. A variety planted in August; the leaves are edible in about 80 days, and the seeds are said to ripen in about 120 days. It is largely used in making a salt kraut.

68878. *BRASSICA* sp.

No. 553. From a seed store in Sanmiu, Honam, originally from Fatshaan, Kwangtung. *Naam fung kai tsot*. A variety planted throughout the year. The leaves are edible in about 40 days.

68879. *BRASSICA* sp.

No. 554. From a seed store in Sanmiu, Honam, originally from Datschaan, Kwangtung. *Paak fa kai jaan tsot*. A white-flowered variety planted from July to September. The leaves are edible in about 60 days.

68880. *BRASSICA* sp.

No. 555. A locally grown variety obtained at a seed store in Sanmiu, Honam. *Tsing kwat tsot sam*. It is planted in July, and the stems and leaves are edible in about 40 days.

68881. *BRASSICA* sp.

No. 556. Said to have come from Shanghai. *Sheung hoi paau sam ye tsot*. This variety, which is cultivated locally, is planted in July, and the heads are said to form in about three months.

68882. *BRASSICA* sp.

No. 557. From a seed store in Sanmiu, Honam. *Kong naam taai tau tsot*. A variety planted here in August; the roots and the leaves are

68867 to 68907—Continued.

edible in about 70 days, and the seeds are said to ripen in about 120 days. The whole plant is often preserved with salt and dried.

68883. BRASSICA sp.

No. 558. From a seed store in Sanmiu, Honam. *Kong naam sai miu ching tsoi*. A variety planted in August, with leaves and roots edible in about 70 days. The roots are largely used after having been pickled in salt, and often the whole plant is preserved in the same way.

68884. CHLORANTHUS sp. Chloranthaceae.

No. 522. *Chuk chit cha*. A wild shrub, promising as an ornamental, found in thickets in northern Kwangtung, at an altitude of about 300 meters. It has a pleasing, clean, green foliage and stems and produces fruits of a striking red color.

68885 and 68886. CHRYSANTHEMUM CORONARIUM L. Asteraceae. Crown daisy.

For previous introduction see No. 64352.

68885. No. 529. *Tong ho tsoi*. The pretty yellow flowers of this plant make it worthy of a place in the flower gardens, although the odor of the plant itself is not altogether pleasing to some. The young plants are cultivated by the Chinese as a vegetable, during the winter months, and are used only when young. They are a favorite ingredient in the native soups.

68886. No. 559. *Taai ip tong ho tsoi*. A large-leaved variety said to have come from Chiuchow, Kwangtung. It is planted here in September and October, and the whole plant is eaten when quite young. The common use is as an ingredient in soups.

68887. CRAWFURDIA sp. Gentianeae.

No. 520. A slender twining vine with persistent, ornamental purplish red fruits, collected in the wild near Yeunguk, Lungtau Mountain, northern Kwangtung.

68888 to 68890. CUCUMIS MELO L. Cucurbitaceae. Melon.

68888. No. 531. *Heung kwa*. A native cucurbitaceous fruit very similar in fragrance and flavor to our muskmelon. The rich-yellow, smooth-skinned fruits are oblong and rather small, rarely exceeding 12 or 15 centimeters in length. This variety would be a very good addition to our list of kitchen garden melons, as it could be grown on fences or light trellis with very little trouble.

68889. No. 532. *Mat tong ching*. A melon somewhat resembling the honeydew melon. It is cylindrical in shape, rarely exceeding 8 inches in length. The skin is covered with a dense, short pubescence while the melons are young, but later it becomes very smooth and turns pale green. The flesh has an excellent flavor and texture, is light colored, and has a crispness which is akin to mealiness.

68890. No. 562. *Oheung shan paak kwa*. A locally grown variety obtained at a seed store in Sanmiu,

68867 to 68907—Continued.

Honam. It is planted from May to July and is said to produce edible fruits in 80 days. It is a long, fleshy, white-skinned cucumberlike vegetable, usually eaten stewed with meat or pickled while the fruits are young.

68891. DOLICHANDRONE CAUDA-FELINA (Hance) Benth. and Hook. Bignoniaceae.

No. 519. *Maau mei shue*. A tree of fairly rapid growth on poor soil, which has a pleasing foliage, large yellow purple-throated flowers, and woolly cat-tail-like fruits (from which it takes its native name). Its one bad feature as an ornamental is the fact that the pods are persistent after the seeds have been shed, giving the tree a somewhat untidy appearance. The wood is of no special value, but the seeds are credited by the Chinese as having therapeutic value in the treatment of venereal diseases.

68892 and 68893. LACTUCA SATIVA L. Cichoriaceae. Lettuce.

68892. No. 539. *Poh lei shaang tsoi*. Obtained at a seed store in Sanmiu, Honam, and said to have originally come from Annam. This is said to be a very delicate and delicious variety. It is planted any time from July to November, sandy clay soil being preferred; the leaves are edible in about 50 days, and the seeds ripen in about 100 days.

68893. No. 540. *Yau maak shaang tsoi*. Obtained at a seed store in Sanmiu, Honam, originally from Chiuchow, Kwangtung. A variety planted in July; the leaves are edible in about two months, and the seeds are said to ripen in about 120 days. A central stem rapidly develops, and the leaves, which are quite long, slender, and rather coarse, are removed progressively from the lower portion of the stem as fast as they reach their full size. This variety is never eaten raw.

68894 to 68896. LAGERSTROEMIA INDICA L. Lythraceae. Crape myrtle.

68894. No. 523. *Tsz shik tsz mei fa*. An ornamental purple-flowered shrub cultivated on the campus of the Canton Christian College and probably introduced from India.

68895. No. 524. *Taam hung tsz mei fa*. An ornamental pink-flowered shrub, probably introduced originally from India, which has been cultivated on the campus of the Canton Christian College.

68896. No. 525. *Hung tsz mei fa*. An ornamental red-flowered shrub, probably introduced from India, which has been cultivated on the campus of the Canton Christian College.

68897. PISUM SATIVUM L. Fabaceae. Pea.

No. 561. *Hoh laan tau*. Obtained at a seed store in Sanmiu, Honam, and said to have come from Chiuchow, Kwangtung. A variety usually planted in August. The tender young tips of the vines are used as a vegetable here, as well as the seeds and pods when quite young, and are said to be very sweet and delicious. The Chinese name of this dish is *lung so tsoi* (dragon's-beard vegetable).

68867 to 68907—Continued.

68898 to 68902. *RAPHANUS SATIVUS* L.
Brassicaceae. Radish.

68898. No. 534. *Loh paak, Laap chuk tan loh paak* (candlestick). Obtained at a seed store in Sanmiu, Honam, originally from Taaifoo, near Fats-haan, Kwangtung. A variety planted in June. The roots are edible in about 50 days and are eaten raw, with raw fish, as a hot-weather dish. The seeds ripen in about 150 days and are said to be very short-lived; they are never kept until the second year.

68899. No. 535. *Cheung shan shui paak loh paak*. A variety originally from Chiuchow, Kwangtung, which is planted in June, sandy clay soil being preferred. The roots are edible in about 50 days, and the seeds ripen in about four months. A large portion of the crop is salted and dried for off-season use.

68900. No. 536. *Chi fa taai loh paak*. Obtained at a seed store in Sanmiu, Honam, originally from Chiuchow, Kwangtung. A late-flowering variety planted in September, sandy clay soil being preferred. The roots are edible in about 60 days, and the seeds ripen in about 120 days. The crop is largely salted and dried to make a product known locally as *haam loh paak kon*.

68901. No. 537. *Tung kwa paak loh paak*. Obtained at a seed store in Sanmiu, Honam, originally from Chiuchow, Kwangtung. A variety planted in September, sandy clay soil being preferred; the roots are edible in about 60 days, and the seeds ripen in about 120 days. The surplus crop is salted and dried for future consumption.

68902. No. 538. *Pa chi loh paak* (harrow tooth). A long slender variety obtained at a seed store in Sanmiu, Honam, originally from Taaichaak, Sanui district. It is planted in July, and the roots are edible in about 40 days. The seeds ripen in about 120 days. Sandy clay soil is preferred for this variety.

68903. *RUBUS PARVIFOLIUS* L. Rosaceae.
Raspberry.

No. 527. *She paau lak, nga ying lak*. A low, rambling raspberry which occurs commonly on the uncultivated clay hills about Canton. Its inconspicuous lavender flowers are followed by small, yellowish red juicy fruits of good flavor, made up of few drupelets and sometimes nearly inclosed in the large calyx. The plants seem sturdy and free from disease and may prove of interest to breeders of small fruits.

For previous introduction see No. 52948.

68904. *RUBUS ROSAEFOLIUS* J. E. Smith.
Rosaceae. Raspberry.

No. 526. *She paau lak*. Seeds of plants growing on the Canton Christian College campus, which were brought from the vicinity of Kwongning during the spring of 1925. A low-growing raspberry which spreads by means of rhizomes and seems to thrive and bear best in moist sandy soil. The bright-red spherical fruits of fair flavor but rather seedy are made up of numerous small drupelets.

68867 to 68907—Continued.

The plants seem especially free from disease, and may be of interest to breeders of small fruit.

For previous introduction see No. 65267.

68905 and 68906. *SPINACIA OLERACEA* L.
Chenopodiaceae. Spinach.

68905. No. 543. *Chi fa haak in poh tsot*. Originally from Fats-haan, Kwangtung. A late-flowering variety with dark-green leaves; it is planted in August. The leaves and stems are edible in about 30 days, and the seeds ripen in about 120 days.

68906. No. 544. *Tso fa poh tsot*. An early flowering variety originally from Chiuchow, Kwangtung, obtained in Sanmiu, Honam. It is planted during August and September; the leaves and stems are edible in about 50 days, and the seeds ripen in about 120 days.

68907. *VIGNA SESQUIPEDALIS* (L.) Frur-wirth. Fabaceae. Yard Long bean.

No. 560. *Kam shaan tau kok*. A variety of the Chinese long bean, planted in June and July.

68908 and 68909. *GOSSYPIUM NEGLECTUM* Todaro. Malvaceae. Cotton.

From Rangoon, Burma. Seeds presented through Richard R. Willey, United States vice consul in charge. Received September 18, 1926. Notes by Mr. Willey.

68908. Variety *roseum arvensis*. A white-flowered strain of *wagale* cotton which gives a high ginning percentage and yield. It grows on the upland gravelly soils of the dry zone area of Burma.

68909. Variety *Burmanica*. An improved strain of ordinary cotton, with white flowers, producing from 600 to 700 pounds of seed cotton per acre and having a ginning percentage of 36 to 38. It is an important staple crop of the dry districts of Burma and is cultivated on a variety of soils, the typical soil being a loamy alluvial one.

68910 and 68911. *HORDEUM VULGARE* COELESTE L. Poaceae.

Six-rowed barley.

From Mongolia. Seeds obtained by Dr. Carl I. Krebs, Danish agricultural expedition to Mongolia. Received September 30, 1926.

Mongolian strains of barley.

68910. No. 1. 68911. No. 2.

68912. *TELOPEA SPECIOSISSIMA* (J. E. Smith) R. Br. Proteaceae.

Waratah.

From Sydney, New South Wales, Australia. Seeds presented by Dr. G. P. Darnell-Smith, Government botanist. Received September 30, 1926.

A very striking, evergreen Australian shrub, about 8 feet high, with irregular toothed, dark-green leaves 6 inches long and deep crimson, tubular flowers about an inch long, borne in a dense, globular head surrounded by blood-red bracts 2 or 3 inches in length. The waratah, as this

shrub is known in its native land, has come to be recognized as the State flower of New South Wales.

For previous introduction see No. 58513.

68913 to 68948. ORYZA SATIVA L. Poaceae. Rice.

From China. Seeds obtained by F. A. McClure, agricultural explorer, Bureau of Plant Industry. Received September, 1926.

Numbers 68913 to 68944 are from a collection of starchy, second-crop varieties which have been grown at the Canton Christian College for the last few years.

68913. No. 483. *Tsinguen. Tsing uen yeung chim kuk.* Growing season 90 days; yield about 1,770 pounds per acre.

68914. No. 484. A glutinous variety from Kukkong district. *Kuk kong fa noh kuk.* Growing season 90 days; yield about 2,400 pounds per acre.

68915. No. 485. *King chow hung mai chim kuk.* A red-kerneled variety from Kingchow, island of Hainan. Growing season 111 days; yield about 2,100 pounds per acre.

68916. No. 486. *Paak hok kei kuk.* Growing season 105 days; yield about 2,500 pounds per acre.

68917. No. 487. *Hop po paak fa chim kuk.* Originally from Hoppo district. Growing season 106 days; yield about 2,000 pounds per acre.

68918. No. 488. *Oon chung kuk.* A late variety. Growing season 97 days; yield about 2,075 pounds per acre.

68919. No. 489. *Tsang sheng lau fa chim kuk.* Originally from the Tsangsheng district. Growing season 90 days; yield about 1,970 pounds per acre.

68920. No. 490. *Taai koon wong shong kuk.* Growing season 100 days; yield about 2,900 pounds per acre.

68921. No. 491. *Tung koon yau chim kuk.* Growing season 101 days; yield about 2,300 pounds per acre.

68922. No. 492. *Dau fa chim.* Growing season 102 days; average yield about 2,900 pounds per acre.

68923. No. 493. *Chau hei kuk.* Growing season 104 days; yield about 1,900 pounds per acre.

68924. No. 494. *Kuk kaai kuk.* Growing season 102 days; yield about 2,100 pounds per acre.

68925. No. 495. *Hop po wong chim kuk.* Originally from the Hoppo district. Growing season 97 days; yield about 1,900 pounds per acre.

68926. No. 496. *Ma kuk yau chim kuk.* Growing season 88 days; yield about 1,480 pounds per acre.

68927. No. 497. *Lin uen yau chim kuk.* Originally from Linuen district. Growing season 91 days; yield about 1,900 pounds per acre.

68928. No. 498. *Tsai mei kuk.* Growing season 96 days; yield about 1,230 pounds per acre.

68913 to 68948—Continued.

68929. No. 499. *Ngau mei tao kuk.* Growing season 104 days; yield about 2,530 pounds per acre.

68930. No. 500. *Wan fau taai paak kuk.* Originally from the Wanfau district. Growing season 96 days; yield about 2,350 pounds per acre.

68931. No. 501. *Cheung po sz miu kuk.* Originally from the Wanfau district. Growing season 94 days; yield about 2,700 pounds per acre.

68932. No. 502. *Tit chui kuk.* Growing season 100 days; yield about 2,275 pounds per acre.

68933. No. 503. *Heung chim kuk.* Growing season 105 days; yield about 1,570 pounds per acre.

68934. No. 504. *Wat naam chim kuk.* Originally from Watnaam district. Growing season 97 days; yield about 2,085 pounds per acre.

68935. No. 505. *Yeung chung saam pei kuk.* Originally from the Yeungchun district. Growing season 106 days; yield about 2,380 pounds per acre.

68936. No. 506. *Kik sz kai kuk.* Growing season 96 days; yield about 2,025 pounds per acre.

68937. No. 507. *Oo hok kuk.* Growing season 98 days; yield about 2,200 pounds per acre.

68938. No. 508. *Noh chaap kuk.* A glutinous variety with a growing season of 105 days; yield about 2,500 pounds per acre.

68939. No. 509. *Aai keuk tai paak kok kuk.* Growing season 104 days; yield about 2,590 pounds per acre.

68940. No. 510. *Yeung chun chuk chim kuk.* Originally from the Yeungchun district. Growing season 100 days; yield about 2,900 pounds per acre.

68941. No. 511. *Tung koon yau chim kuk.* Originally from the Tungmoon district. Growing season 97 days; yield about 1,600 pounds per acre.

68942. No. 512. *Ja wa kuk.* No. 1. An awned variety originally from Java.

68943. No. 513. *Ja wa kuk.* No. 2. An awned variety originally from Java.

68944. No. 514. *Taai noh kuk.* A glutinous variety originally from Kamngauhaang. Growing season 105 days; yield about 1,180 pounds per acre.

68945. No. 515. *Paak chim kuk.* From Kamngauhaang.

68946. No. 516. *Hung mai sha chim kuk.* A red-kerneled variety from Taifohtei.

68947. No. 517. *Chim tsai noh kuk, fa hok noh kuk.* A glutinous variety from Taifohtei.

68948. No. 518. *Paak chim luk tau tsai kuk.* From Taifohtei.

68949 to 68951. PRUNUS spp. Amygdalaceae.

From Jamaica Plain, Mass. Scions presented by E. H. Wilson, Arnold Arboretum. Received July 19, 1926.

68949 to 68951—Continued.

68949. PRUNUS MEYERI Rehder.

In 1906 Frank N. Meyer, while carrying on agricultural explorations in northern Chosen, collected seeds of a small wild cherry, which, according to his note (see No. 20084) was of handsome appearance and suited for growing in parks. At the Arnold Arboretum, a tree grown from one of these seeds was described as new by Alfred Rehder (Journal of the Arnold Arboretum, vol. 2, No. 2, p. 123) and named for Mr. Meyer. Doctor Rehder states that this appears to be a hybrid between *Prunus maackii* and *P. marimowiczii*, since it has characters intermediate between those of the above species. The tree is about 20 feet high, of vigorous growth, with a dense pyramidal habit, and pleasing bright-green foliage. The small white flowers are in dense racemes.

68950. PRUNUS SERRULATA PUBESCENS Wilson. Kasumi cherry.

As described by Wilson (Cherries of Japan, p. 31), this variety develops into a tree up to 55 feet in height, with a trunk sometimes 7 feet in circumference, and leaves with pale-green lower surfaces. The white or pink single flowers are usually about four-fifths of an inch in diameter. This variety has the widest distribution of any of the Japanese cherries and flowers about two weeks later than *Prunus serrulata spontanea*, from which variety it differs in the slight hairiness of the leaves.

For previous introduction see No. 55715.

68951. PRUNUS SERRULATA SACHALINENSIS (Schmidt) Makino (*P. sargentii* Rehder). Sargent's cherry.

This variety is very similar to *Prunus serrulata pubescens*, according to E. H. Wilson (Cherries of Japan, p. 35), except that the leaves are not hairy, and the flowers, which are pink or rose colored, rarely white, are usually a little more than an inch in diameter. It is probably the handsomest of all the wild cherries of

68949 to 68951—Continued.

eastern Asia, and is the parent of several of the finest double-flowered Japanese cherries.

For previous introduction see No. 55716.

68952. CASTANOPSIS sp. Fagaceae. Evergreen chinquapin.

From China. Seeds obtained by F. A. McClure, agricultural explorer, Bureau of Plant Industry. Received January 25, 1926. Numbered July, 1926.

No. 268. Kamngauhaang. November 26, 1925. *Chui tsai, yui tsai*. A tree 6 to 8 meters high, with small entire lanceolate acuminate shiny leaves and small oblong-globular nuts which are solitary in the burs. The tree is very healthy and free from pests, though the nuts are occasionally wormy.

68953. JUGLANS sp. Juglandaceae. Walnut.

From Santiago, Chile. Plants collected by Wilson Popenoe, United Fruit Co., Tela, Honduras. Received November 4, 1921. Numbered September, 1926.

No. 650. A South American walnut which closely resembles *Juglans nigra* in general appearance. It inhabits the highlands of Ecuador at altitudes of 6,000 to 10,000 feet. The edible nuts, 1½ inches in diameter, are thick shelled, and the wood is fine grained and handsome.

68954 and 68955. SATYRIUM CARNEUM (Ait.) R. Br. Orchidaceae.

From Cape Town, South Africa. Tubers purchased from W. S. Duke & Co. Received March 11, 1926. Numbered July, 1926.

A terrestrial herbaceous South African orchid with stout stems, a pair of fleshy radical oval-rounded leaves, and large pink flowers borne on scapes up to 2 feet in height.

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