UNITED STATES DEPARTMENT OF AGRICULTURE

INVENTORY No. 85

Washington, D. C. ▼ Issued July, 1928

PLANT MATERIAL INTRODUCED BY THE OFFICE OF FOREIGN PLANT INTRODUCTION, BUREAU OF PLANT INDUSTRY, FROM OCTOBER 1 TO DECEMBER 31, 1925 (NOS. 65048 TO 65707)

CONTENTS

INTRODUCTORY STATEMENT

The outstanding feature of this inventory is the large proportion of introductions from P. H. Dorsett, agricultural explorer, who continued his work in Manchuria. The importance of this region for agricultural exploration was discussed in the introductory statement to Inventory No. 84.

The nature of the plant material obtained by Mr. Dorsett was quite general and included everything of economic value available at a given place and time. The products of the native markets were carefully scrutinized and propagating material collected of any fruits or vegetables which appeared to be superior in any way to varieties now grown in the United States. Many wild plants also were collected, including such as might be of ornamental value or useful as forage. Transportation to various parts of the country was greatly facilitated through the courtesy of the Chinese Eastern Railway, and the cooperation of the Manchurian Research Society made it possible to procure selected types of cereals and forage plants from their experiment stations.

J. F. Rock, working under the direction of the Arnold Arboretum and as a collaborator of this office, continued his botanical exploration of the Province of Kansu, western China, collecting a number of interesting woody plants. These include several hardy ornamental spruces (Picea spp., Nos. 65689 to 65692) which appear to be new to horticulture.

A collection of tubers of wild potatoes (Solanum spp., Nos. 65444 to 65449), presented by Elbert Reed of the Instituto Agricola Bunster, Angol, Chile, will be of special interest to potato breeders. These tubers were collected on the island of Chiloe and on the mainland of Chile north of this island, part of the region considered by many horticulturists to be the original home of the potato.

A collection of local varieties of the kaki (*Diospyros kaki*, Nos. 65578 to 65583) was sent in by F. A. McClure, agricultural explorer, from Honam Island, a few miles east of Canton, China. With this bud wood Mr. McClure transmitted detailed notes on the character and uses of the fruits of these varieties.

Aleurites trisperma (No. 65297), a Philippine relative of the Chinese tung-oil tree (*Aleurites fordii*), is the source of bagilumbang oil, similar in composition to tung oil, but somewhat lighter in color. The tree is tropical in its requirements, but may succeed in southern Florida. The precise value of the oil in the paint and varnish industries has yet to be determined, but this Philippine species should be included in tropical experiments with this group of oil-producing trees.

Attention may well be called again to the species of Actinidia, several of which are included in this inventory. Both *A. arguta* and *A. chinensis* have fruited in the United States and have sufficient good qualities to make them decidedly worthy the attention of horticulturists and plant breeders. Hybridization is possible, as already shown by a cross between *A. arguta* and A. *chinensis* made by Doctor Fairchild (Journal of Heredity, vol. 18, No. 2, 1927), and improvement by selection likewise offers a promising field. Horticulturists also should give attention to the cultural requirements of the several species.

Arachis nambyquarae (No. 65296) has proved very interesting in preliminary experiments by reason of its great variability. Selections made have differed widely, some giving very low yields of seed while others have given very high yields. The value of this species is yet to be determined, but it is very promising for experimental work.

Crotalaria striata (No. 65295) is but another introduction of this species which has proved of so much promise as an orchard cover and green manure in northern Florida. It needs to be widely tested throughout the southern parts of the Gulf States and west to southern California.

Interest in stocks at the present time justifies calling special attention to a German type of mazzard cherry (*Prunus avium*, No. 65127) which is reported of possible value for this purpose on account of its longevity and resistance to disease.

One of the most interesting ornamentals in this inventory is *Euonymus macropterus* (No. 65490). The brillant coloring and pendulous habit of the floral parts in its native habitat are very striking, and these characteristics together with its bright-colored autumnal foliage should make it a pleasing addition to any landscape.

Another introduction, *Edgeworthia gardneri* (No. 65250), a handsome yellow-flowered bush from the temperate Himalayas, should be given further trial in the more humid regions of the southern United States, where it may succeed better than it has in the drier portions of the Southwest and California. Besides its ornamental value, it yields a strong, tough fiber, from which excellent paper has been made in Nepal.

The botanical determinations of 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.

ROLAND MCKEE,
Acting Senior Agricultural Explorer in Charge.

OFFICE OF FOREIGN PLANT INTRODUCTION,
Washington, D. C., June 6, 1927.

INVENTORY[1]

65048. LODOICEA SONNERATI (Giseke) Baill. (*L. callypige* Comm.). Phoenicaceae. **Double coconut.**

From the Seychelles Islands. Seeds presented by P. R. Dupont, Director of Agriculture. Received October 17, 1925.

The double coconut, or coco de mer, as described by Bailey (Standard Cyclopedia of Horticulture, p. 1899), is a lofty palm, frequently 100 feet in height, with palmate leaves the blades of which are 6 feet across. The fruits are probably the largest known, the individual nuts sometimes weighing 50 pounds; from the time of flowering to the full maturity of the seeds is said to cover a period of 10 years, and the palm itself does not attain full growth until after a hundred years. It is native to the Seychelles.

65049. ROSA ROULETTII Correvon. Rosaceae. **Rose.**

From Chene Bourg, near Geneva, Switzerland. Plants purchased from H. Correvon. Received December 19, 1925.

A dwarf shrubby rose of the general type *Rosa lawrenciana*, but even smaller than the latter. As grown in my garden, it does not become more than 4 inches high, and the very numerous red flowers are produced continuously from May to January if the plant is sheltered. (*Correvon.*)

For previous introduction, see No. 61853.

65050. ARGYROXIPHIUM SANDWICENSE MACROCEPHALUM (A. Gray) Hillebr. Asteraceae. **Silversword.**

From Honolulu, Hawaii. Seeds presented by C. S. Judd, Superintendent of Forestry. Received October 1, 1925.

Collected in the crater of Haleakala on the island of Maui, at an altitude of approximately 8,000 feet above sea level. (*Judd.*)

The silversword plant of Hawaii is, according to W. J. Hooker (Icones Plantarum, pl. 75), about 2 feet high, with long, narrow, basal leaves copiously covered with long, silvery white hairs, and a flowering stem a foot or two in length which bears a large number of silvery asterlike flowers.

65051 and 65052. PRUNUS spp. Amygdalaceae. **Plum.**

From Paris, France. Seeds presented by Vilmorin-Andrieux & Co. Received October 2, 1925.

65051. PRUNUS BRIGANTINA Vill. **Alpine plum.**

The Alpine plum is a shrub or small spineless tree, native to the French Alps; the small, smooth, subacid fruits are about the size of small green-gage plums.

For previous introduction, see No. 62298.

65052. PRUNUS COCOMILIA Ten. **Italian plum.**

The Italian plum, allied to the Cherry plum (*Prunus cerasifera*), is a bush or small tree with thorny branches, oval, sharp-toothed leaves, and small globular fruits which are fairly good for eating.

For previous introduction, see No. 62299.

65053 and 65054. GUILIELMA UTILIS Oerst. Phoenicaceae. **Pejibaye.**

From Gatun, Canal Zone. Seeds presented by Joseph A. Close. Received October 3, 1925.

Two varieties of pejibaye from the headwaters of the Ciricito arm of Gatun Lake, about 30 miles west of Gatun, at an altitude of about 100 feet. (*Close.*)

65053. No. 1. **65054.** No. 2.

See No. 56158 for a descriptive note.

65055. DENDROCALAMUS SIKKIMENSIS Gamble. Poaceae. **Bamboo.**

From Kew, Surrey, England. Seeds presented by Dr. Thomas F. Chipp, assistant director, Royal Botanic Gardens. Received October 12, 1925.

This is described (Annals of the Royal Botanic Garden, vol. 7, p. 82) as a beautiful tufted bamboo native to Sikkim, India, where the dark-green culms reach a height of 60 feet or more and a diameter of 5 to 7 inches. The species is easily distinguished by its large, reddish-brown, globular flower heads and densely velvety stem sheath. The long, narrow leaves are said to be poisonous, and from the stems are made the "chungas" or native buckets, used for carrying water and milk and for churning.

For previous introduction, see No. 56457.

[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 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.

65056. BUMELIA sp. Sapotaceae.

From San Francisco, Calif. Seeds presented through Miss Alice Eastwood, California Academy of Sciences, Golden Gate Park. Received October 6, 1925.

A recent expedition of the California Academy of Sciences to Lower California visited Socorro Island, where there was discovered a tree whose fruits were being eaten by parrots and other birds. These fruits are said to be about the size, shape, and color of a ripe olive, with a sweet, delicious pulp. One of the collectors of the expedition, Mr. Mason, obtained seeds which were presented to this office through Miss Eastwood.

65057. IRIS HOOGIANA Dykes. Iridaceae. **Iris.**

From Westminster, England, Rhizomes presented by William R. Dykes, Secretary, Royal Horticultural Society. Received October 13, 1925.

This attractive iris was originally described by Mr. Dykes in the Gardeners' Chronicle (vol. 60, ser. 3, p. 216). It is a native of Turkestan and has been cultivated in England by Mr. Dykes since 1913. It is remarkable for the fact that the flowers, unlike those of the other members of the Regelia section, are of a uniform pale lavender, set off by the brilliant orange beard of closely set hairs. The leaves are about 16 inches long, glaucous green, and the stem, 20 inches high, bears a single cluster of two or three flowers.

65058 and 65059. LILIUM spp. Liliaceae. **Lily.**

From Mefun, Manchuria. Bulbs collected by P. H. Dorsett, agricultural explorer, Bureau of Plant Industry. Received October 15, 1925.

65058. LILIUM sp.

No. 4144. September 13, 1925. From the top of the mountain.

65059. LILIUM sp.

No. 4143. September 13, 1925.

65060 to 65086.

From Harbin, Manchuria. Seeds collected by P. H. Dorsett, agricultural explorer, Bureau of Plant Industry. Received October 1, 1925.

65060. ACTINIDIA sp. Dilleniaceae.

No. 4056. August 24, 1925. Presented by Mr. Erwin, of the Methodist Mission, who secured the fruits at Mefun. The fruit resembles an oblong white grape, and the pulpy flesh, inclosing small seeds, resembles that of a currant or gooseberry.

65061. ASTRAGALUS CHINENSIS L. f.

No. 3288. July 29, 1925. A herbaceous plant with white or creamy yellow pea-shaped flowers.

65062. BETULA JAPONICA Siebold. Betulaceae. **Birch.**

No. 4050. August 16, 1925. From white-barked birch trees in the garden of N. N. Prikashchikoff, Yaomin.

65063. CITRULLUS VULGARIS Schrad. Cucurbitaceae. **Watermelon.**

No. 4009. Yaomin. August 15, 1925. A small, round, very dark green, thin-skinned watermelon with deep-red flesh and black seeds. This proved to be a very good variety.

65064 to 65066. CUCUMIS MELO L. Cucurbitaceae. **Melon.**

65064. No. 4010. Yaomin. August 15, 1925. White seeds from a small oblong melon.

65060 to 65086—Continued.

65065. No. 4011. Yaomin. August 15, 1925. A yellow-skinned oblong melon with reddish seeds and thin white flesh.

65066. No. 4018. August 16, 1925. A small, bright-yellow melon with blotches of green and traces of brownish stripes, especially at the blossom end. A very fragrant variety, known as the pomegranate melon, pocket melon, and Persian apple melon.

65067 and 65068. CUCUMIS SATIVUS L. Cucurbitaceae. **Cucumber.**

65067. No. 4047. August 21, 1925. Said to be a hybrid between the local Chinese variety and a Russian variety; the seeds are from the Harbin Experiment Station, from fruits borne in the first and second leaf axils, which are said to give the earliest fruits, maturing in 50 days.

65068. No. 4048. August 21, 1925. Also from the Harbin Experiment Station, but from the second to the fifth leaf axils. This strain is said to be exceptionally good for outdoor planting, and matures later than the preceding, No. 4047 [No. 65067].

65069. ERIOCHLOA VILLOSA (Thunb.) Kunth. Poaceae. **Grass.**

No. 3994. August 18, 1925. A tall-growing, open-headed, large-seeded grass.

65070. MALUS sp. Malaceae. **Crab apple.**

No. 4046. August 21, 1925. A greenish yellow crab apple of medium size, with a pink cheek; secured from the nursery of the Chinese Eastern Railway at Harbin. The seedlings of this variety are used as stock for the variety itself.

65071. MEDICAGO FALCATA L. Fabaceae. **Alfalfa.**

No. 3186. July 29, 1925. Obtained from strong-growing plants on high, exposed ground in the new Russian cemetery.

65072. MELILOTUS OFFICINALIS (L.) Lam. Fabaceae. **Sweet clover.**

No. 4045. August 18, 1925. A tall, yellow-flowered variety found in the new Chinese cemetery.

65073. PHASEOLUS COCCINEUS L. Fabaceae. **Scarlet Runner bean.**

No. 3996. August 8, 1925. An ornamental vine used on trellises and fences in the new Russian cemetery. The flowers, which are large and very showy, are bright salmon; the beans are large and light or dark purple.

65074. POA sp. Poaceae. **Grass.**

No. 4051. Ertsingtientze. August 23, 1925. A tall, open-headed grass found on low ground.

65075. PRUNUS ARMENIACA L. Amygdalaceae. **Apricot.**

No. 4015. Yaomin. August 15, 1925. The fruits are said to be yellow with a red blush and are freestone.

65076 to 65078. PRUNUS JAPONICA Thunb. Amygdalaceae. **Cherry.**

65076. No. 4006. Yaomin. August 14, 1925. The largest fruited cherry we have seen. The fruits of this ornamental shrub are said to be used for making jam.

65077. No. 4007. Yaomin. August 14, 1925. The second largest fruited variety; from the garden of the Chinese Eastern Railway.

65078. No. 4008. Yaomin. August 14, 1925. A small-fruited variety of the Manchurian cherry secured from N. N. Prikashchikoff.

65060 to 65086—Continued.

65079. PYRUS sp. Malaceae. **Pear.**

No. 4053. Ertsingtientze. August 23, 1925. A wild Chinese variety from Mr. Wakefield's summer home; it produces hard, woody fruits. The trees are about a foot in diameter and 30 feet in height.

65080. RIBES MANSHURICUM (Maxim.) Komarow. Grossulariaceae. **Currant.**

No. 4005. Yaomin. August 14, 1925. A wild Manchurian red currant which produces the largest fruit we have seen, either wild or cultivated. The fruits, produced in bunches, are quite sour. We are told that this variety always bears a good crop and does not winterkill and that in this region it is not affected with rust, although we understand that it is so affected in the eastern part of Manchuria.

For previous introduction, see No. 40460.

65081. PRUNUS sp. Amygdalaceae. **Plum.**

No. 4013. Yaomin. August 15, 1925. From a single tree of one of the best of the seedling yellow plums in Mrs. Erenoff's orchard. The fruit of this plum is bright golden yellow and of very good quality. The tree is hardy and bears a regular crop.

65082. PRUNUS sp. Amygdalaceae. **Plum.**

No. 4014. Yaomin. August 15, 1925. A mixed lot of seeds from two hardy seedling trees in Mrs. Erenoff's orchard; this variety bears regular crops.

65083. PRUNUS sp. Amygdalaceae. **Plum.**

No. 4031. Yaomin. August 15, 1925. The largest sized yellow plum in the garden of the Chinese Eastern Railway. It is of very good quality.

65084. PRUNUS sp. Amygdalaceae. **Plum.**

No. 4033. Yaomin. August 15, 1925. The largest and best red-fruited plums, from a single tree in Mrs. Erenoff's orchard.

65085. VICIA AMOENA Fisch. Fabaceae. **Vetch.**

No. 3840. July 29, 1925. A leguminous plant, common in the vicinity of Harbin.

65086. VITIS AMURENSIS Rupr. Vitaceae. **Amur grape.**

No. 4052. Ertsingtientze. August 23, 1925. Wild grapes consisting mostly of seed, juice, and skin, used for making wine.

For previous introduction, see No. 57367.

65087 to 65121.

From Harbin, Manchuria. Seeds collected by P. H. Dorsett, agricultural explorer, Bureau of Plant Industry. Received October 6, 1925.

65087 to 65089. AVENA SATIVA L. Poaceae. **Oats.**

August 5, 1925. Local varieties of oats obtained from the experimental grounds of the Manchurian Agricultural Society, through the courtesy of B. W. Skvortzow and Wilhelm Croushul.

65087. No. 3875.

65088. No. 3876.

65089. No. 3877.

65090. ELYMUS sp. Poaceae. **Grass.**

No. 3863. August 9, 1925. A tall variety of grass with a long ryelike bearded head.

Numbers 65091 to 65101 (August 5, 1925) are seeds obtained through the courtesy of B. W. Skvortzow and Wilhelm Croushul, from the experimental grounds of the Manchurian Agricultural Society.

65087 to 65121—Continued.

65091. HORDEUM DISTICHON PALMELLA Harlan. Poaceae. **Two-rowed barley.**

No. 3874. Originally from Czechoslovakia.

65092 to 65094. HORDEUM VULGARE PALLIDUM Seringe. Poaceae. **Six-rowed barley.**

65092. No. 3872. Bearded barley, originally from Hilar.

65093. No. 3881. Bearded barley, originally from a field in Echo.

65094. No. 3893. Bearded barley, obtained by B. W. Skvortzow at Muling, July 27, 1925.

65095. SECALE CEREALE L. Poaceae. **Rye.**

No. 3873. A local variety of four-rowed rye, said to occur as a weed in wheat. This appears to be very promising.

65096 to 65121. TRITICUM AESTIVUM L. (*T. vulgare* Vill.). Poaceae. **Common wheat.**

65096. No. 3866. A local variety of bearded wheat with reddish brown heads.

65097. No. 3867. A local variety of straw-yellow wheat.

65098. No. 3868. A Japanese wheat originally from the Kungchuling Experiment Station.

65099. No. 3869. Awnless wheat; a local variety.

65100. No. 3870. A local variety of beardless wheat known at the station as "Mellurme."

65101. No. 3871. A local variety of bearded spring wheat.

65102 to 65121. August 5, 1925. This material was collected in different fields by B. W. Skvortzow.

(Numbers 65102 to 65111 were collected at Echo.)

65102. No. 3882. [Type not known.]

65103. No. 3883. Bearded wheat.

65104. No. 3884. Bearded wheat.

65105. No. 3885. Bearded wheat.

65106. No. 3886. Beardless wheat.

65107. No. 3887. Beardless wheat.

65108. No. 3888. Bearded and beardless wheat.

65109. No. 3889. Bearded and beardless wheat.

65110. No. 3890. Bearded wheat.

65111. No. 3891. Bearded wheat.

(Numbers 65112 to 65121 were collected at Muling.)

65112. No. 3892. [Type not known.]

65113. No. 3894. Beardless wheat.

65114. No. 3895. Beardless wheat.

65115. No. 3896. Beardless wheat.

65116. No. 3897. Beardless wheat.

65117. No. 3898. Beardless wheat.

65118. No. 3899. Bearded wheat.

65119. No. 3900. Bearded wheat.

65120. No. 3901. Beardless wheat.

65121. No. 3902. Bearded and beardless wheat.

65122 and 65123. QUERCUS MONGOLICA Fisch. Fagaceae. **Oak.**

From Manchuria. Seeds collected by P. H. Dorsett, agricultural explorer, Bureau of Plant Industry. Received October 15, 1925.

65122. No. 4037. Hsiaoling. August 28, 1925. Obtained from small trees growing on the mountain side southwest of Mr. Petroff's summer home. This oak is the hardest wood in northern Manchuria and is used for flooring, etc. The trees do not appear to grow very large.

65123. No. 4150. Mefun. September 11, 1925. Mongolian oak, the hardest of the Manchurian woods, obtained from the mountain side.

65124 and 65125. GOSSYPIUM PERUVIANUM Cav. Malvaceae. **Cotton.**

From Lima, Peru. Seeds presented by C. E. Guyant, American consul in charge. Received October 1, 1925.

Full Rough Peruvian cotton. These seeds are from the north of Peru. The plant grows from 10 to 12 feet high; about 5 per cent of the bolls are brown, the rest being white. (*Guyant.*)

65124. Light colored.

65125. Dark colored.

65126. ACACIA sp. Mimosaceae.

From Mandelieu, Alpes Maritimes, France. Seeds presented by A. Richon, Horticulturist, Établissement Mogadette. Received October 8, 1925.

This acacia, 30 feet high, and having green leaves with very long, thin leaflets, is supposed to be a chance seedling of *Acacia decurrens*, which is nearly as hardy as *A. dealbata*. It is the best for the production of cut flowers. The time of flowering on the French Riviera is between the middle of January and the middle of February. (*Richon.*)

65127. PRUNUS AVIUM L. Amygdalaceae. **Mazzard cherry.**

From Germany. Seeds presented by Dr. W. L. Howard, acting director, University Farm, Davis, Calif. Received October 10, 1925.

Hartz Bird cherry. A tree with smooth, silvery bark; the fruits are small, almost white, and with colorless juice. Apparently this is grown only in the Black Forest, Baden, and most of the trees are wild. This type of mazzard is reputed to be very resistant to trunk diseases and troubles like gummosis and sunburn, and the roots are hardy and long-lived. Some trees are said to be 200 years old. (*Howard.*)

65128 to 65131. CITRUS spp. Rutaceae.

From Catania, Sicily, Italy. Plants purchased from Giardino Allegra. Received October 16, 1925. Notes from the 1924 catalogue of Giardino Allegra.

65128. CITRUS AURANTIUM L. **Sour orange.**

Chinotti. Fruit small, closely resembling the mandarin; quite popular for candying. Plant very productive.

65129. CITRUS BERGAMIA Risso. **Bergamot.**

Bergamotto. Fruit medium sized and somewhat spherical; not suited for eating, but is excellent for the essential oil which it yields, the extraction of which is an extensive industry.

65130 and 65131. CITRUS LIMONIA Osbeck. **Lemon.**

65130. *Spatafora.* The best table variety, very large, good shape, juicy, and of good flavor.

65131. *Spatafora Peretto.* Smaller than the preceding [No. 65130] and abundantly produced.

65132. THESPESIA LAMPAS (Cav.) Dalz. and Gibs. Malvaceae.

From Manila, Philippine Islands. Seeds presented by S. Youngberg, acting director, Bureau of Agriculture. Received October 16, 1925.

A bushy herbaceous plant, commonly found in the jungles of India, with palmately lobed, hairy leaves about 5 inches across and yellow bell-shaped flowers over 2 inches wide with crimson centers. The plant is a near relative of Gossypium and is introduced for the use of cotton specialists.

For previous introduction, see No. 54550.

65133 to 65155. AVENA spp. Poaceae. **Oats.**

From Dookie, Victoria, Australia. Seeds presented by the Dookie Agricultural College. Received October 19, 1925.

65133 to 65145. AVENA SATIVA L.

65133. *Algerian.*
65134. *Ascot White.*
65135. *Belar.*
65136. *Calcutta Cape.*
65137. *Dookie No. 19.*
65138. *Early Blonde.*
65139. *Early.*
65140. *Early Ripe.*
65141. *Fulguleum.*
65142. *Golden.*
65143. *Great Northern.*
65144. *Grey.*
65145. *Lachlan.*

65146. AVENA NUDA Hoejer. **Naked oats.**

Laurel Skinless.

65147 to 65155. AVENA SATIVA L.

65147. *Mortgage Lifter.*
65148. *Mulga.*
65149. *Sunrise.*
65150. *Sid. 3999.*
65151. *Stable King.*
65152. *White Horse.*
65153. *White No. 1.*
65154. *Yarran.*
65155. *Dookie No. 12.*

65156. FELICIA BERGERIANA (Spreng.) O. Hoffm. Asteraceae.

From Ness, Neston, near Birkenhead, England. Seeds presented by A. K. Bulley. Received October 14, 1925.

This is perhaps the loveliest thing I saw in South Africa. It is an annual, with indescribable blue flowers. (*Bulley.*)

65157. GOSSYPIUM BARBADENSE L. Malvaceae. **Cotton.**

From Point a Pitre, Guadeloupe. Seeds presented by C. T. Allder, director, Station Agronomique. Received October 20, 1925.

This is the primitive cotton which grows spontaneously in Les Saintes, one of the dependencies of Guadeloupe. (*Allder.*)

65158. COFFEA ARABICA L. Rubiaceae. **Coffee.**

From Mayaguez, Porto Rico. Seeds presented by the Agricultural Experiment Station through O. F. Cook, Bureau of Plant Industry. Received October 13, 1925.

Variety *erecta.* According to Bulletin No. 30 of the Porto Rico Agricultural Experiment Station Mayaguez, this variety came originally from the Botanic Gardens at Buitenzorg, Java, where it was said to occur from time to time in plantations of typical *Coffea arabica* and where it was considered especially suited for situations exposed to heavy winds. In Porto Rico it yielded in 1917 the maximum for Arabian coffee when treated with fertilizer. Its productivity and vigorous growth recommend it for further trial.

65159 to 65172. ORYZA SATIVA L. Poaceae. Rice.

From Coimbatore, India. Seeds presented by the Government economic botanist, Agricultural College. Received October 16, 1925.

Locally grown strains.

65159. *A. D. T. No. I, Red Sirumani.*

65160. *A. D. T. No. II, White Sirumani.*

65161. *A. D. T. No. III, Kuruvai Early.*

65162. *A. D. T. No. V, Nellore Samba.*

65163. *G. E. B. No. 24.*

65164. *Coimbatore No. I.*

65165. *Coimbatore No. II.*

65166. *Coimbatore No. III.*

65167. *T. No. 298, Jeeraga Samba.*

65168. *T. No. 414, Basangi.*

65169. *T. No. 329, Ratnachudi.*

65170. *P. S. No. 18, Anaikomban-Tinnevelly.*

65171. *P. S. No. 25, Sornavari.*

65172. *P. S. No. 55, Rasangi.*

65173 and 65174.

From Teneriffe, Canary Islands. Seeds presented by Juan Bolinaga, Directeur du Jardin de Aclimatación de Orotava. Received October 17, 1925.

65173. ARBUTUS CANARIENSIS Dunham. Ericaceae.

According to a note by W. T. Swingle, of the Bureau of Plant Industry, published under No. 56529, this is a beautiful evergreen tree attaining a height of 40 feet. It is, as the name indicates, a native of the Canary Islands. The pretty rose-colored flowers, in racemes, are followed by orange-colored fruits about an inch in diameter, which are beautiful as seen against the shining-green foliage. The fruits are sweeter and more pulpy than those of the strawberry tree, *Arbutus unedo*, and are considered very good by the natives, in spite of their rather numerous seeds. The bark is smooth and very thin: the wood is rose colored and useful in cabinetmaking. This species should be used by plant breeders in hybridizing with the strawberry tree.

65174. FUCHSIA CORYMBIFLORA Ruiz and Pav. Onagraceae.

A handsome Peruvian fuchsia with large, serrate, taper-pointed leaves and deep-red flowers. The plant becomes tall, but requires support in order to attain full height, and is therefore adapted for pillars or pergolas in the warmest parts of the United States.

For previous introduction, see No. 65014.

65175. DOLICHOS LABLAB L. Fabaceae. Hyacinth bean.

From Port of Spain, Trinidad, British West Indies. Seeds presented by H. Caracciolo. Received October 20, 1925.

Waby bean. This has been cultivated by Professor Waby, who was for a long time in charge of the Botanic Gardens of British Guiana. It is an excellent salad bean. (*Caracciolo.*)

65176. MUSA DAVYAE Stapf. Musaceae.

From Pretoria, Union of South Africa. Seeds presented by the chief, division of botany. Received October 20, 1925.

A South African banana which, as described by Dr. Otto Stapf (Kew, Bulletin of Miscellaneous Information for 1913, p. 102), is about 40 feet high, with erect, rigid leaves sometimes 15 feet long and up to 2 feet in width. The fruit is not edible, but the plant is said to yield a fiber used by the natives. In its native habitat, the Transvaal, this banana grows at an altitude of about 4,500 feet on the Drakenberg Range.

65177 to 65195.

From Manchuria. Collected by P. H. Dorsett, agricultural explorer, Bureau of Plant Industry. Received October 15, 1925.

65177. ACTINIDIA ARGUTA (Sieb. and Zucc.) Planch. Dilleniaceae.

No. 4086. Hsiaolin. August 29, 1925. Seeds of a large growing vine bearing fruits which are quite sweet and good; these are eaten fresh or made into jam.

For previous introduction, see No. 45241.

65178. AMPELOPSIS BREVIPEDUNCULATA (Maxim.) Koehne. Vitaceae.

No. 3723. Harbin. September 4, 1925. Seeds from an attractive vine which may make a good ornamental, found in the new Russian cemetery. The fruits are yellow when ripe.

For previous introduction, see No. 63332.

65179. AQUILEGIA sp. Ranunculaceae. **Columbine.**

No. 4149. September 13, 1925. Roots of an ornamental flowering plant, collected at the base of a small hill at Mefun.

65180. ASPARAGUS SCHOBERIOIDES Kunth. Convallariaceae. **Asparagus.**

No. 4095. Hsiaolin. August 29, 1925. Black seeds of what appears to be a very good ornamental.

65181. CAPSICUM ANNUUM L. Solanaceae. **Red pepper.**

No. 4120. Harbin. September 3, 1925. Seeds from a locally grown variety of large, red, bell-shaped peppers which are sweet and of good flavor.

65182. CONVALLARIA MAJALIS L. Convallariaceae. **Lily of the valley.**

No. 4141. Mefun. September 11, 1925. A quantity of pips from an exceptionally fine variety.

65183. DIOSCOREA NIPPONICA Makino. Dioscoreaceae. **Yam.**

No. 4148. Mefun. September 13, 1925. Roots of a wild species found on the mountain side. This vine is quite common here and in several other places we have visited.

65184. FRAGARIA sp. Rosaceae. **Strawberry.**

No. 4147. September 13, 1925. Plants growing wild near the station at Mefun.

65185. IRIS KAEMPFERI Sieb. Iridaceae. **Iris.**

No. 4146. Mefun. September 13, 1925. Plants of what is said to be the handsomest of the Manchurian varieties of iris, found along the edge of a bay.

65186. IRIS sp. Iridaceae. **Iris.**

No. 4129. Harbin. September 6, 1925. Roots collected from sand ridges across the Sungan.

65187. MENISPERMUM DAURICUM DC. Menispermaceae.

No. 4090. Hsiaolin. August 29, 1925. A few seeds of a vigorous growing vine with large leaves, found in a jungle.

For previous introduction, see No. 62184.

65177 to 65195—Continued.

65188. PAEONIA OBOVATA Maxim. Ranunculaceae. **Peony.**

No. 4142. Mefun. September 11, 1925. Roots of a variety reported to be a good ornamental, found at the base of hills adjacent to swamps.

65189. PRINSEPIA SINENSIS Oliver. Amygdalaceae.

No. 4087. Hsiaolin. August 29, 1925. Seeds of a variety which may prove useful as a hedge or ornamental; secured from a river bottom.

For previous introduction, see No. 57309.

65190. PYRUS sp. Malaceae. **Pear.**

No. 4072. Harbin. August 26, 1925. Seeds of a wild pear (Chinese name, *Ba li hsiang*), from fruits shipped in from Hungshanko, in the Mukden fruit region. Prof. F. C. Reimer, of the Oregon Agricultural Experiment Station, says this is by far the most valuable of all the Chinese pears in regard to blight resistance. The fruits are small to medium sized and rather long stemmed with a raised shoulder on one side. They are yellow with a pink blush on some of the fruits; the calyx is persistent.

65191. PYRUS sp. Malaceae. **Pear.**

No. 4097. Hsiaolin. August 29, 1925. Seeds of a wild Chinese pear of value as a hardy stock. The fruit is hard, gritty, and exceedingly sour.

65192. PYRUS sp. Malaceae. **Pear.**

No. 4122. September 3, 1925. A small light-yellow pear known as *Hsiang sui li*. These seeds are from fruits purchased in the Fuchiatien market, in Harbin, where they had been shipped in from Kuangning, near Mukden.

65193. ROSA sp. Rosaceae. **Rose.**

No. 4074. Hsiaolin. August 28, 1925. Seeds of a wild rose from plants growing to the south of Mr. Petroff's summer home.

65194. RUBUS CRATAEGIFOLIUS BUNGE. Rosaceae.

No. 4093. Hsiaolin. August 29, 1925. An erect hardy shrub, about 7 feet high, with white flowers an inch across and small red berries. Native to northeastern Asia.

65195. SPODIOPOGON SIBIRICUS Trin. Poaceae. **Grass.**

No. 3995. Harbin. September 4, 1925. A tall, rather open-headed grass with small rhizomes similar to bamboo. Found in the new Russian cemetery.

For previous introduction, see No. 57343.

65196 to 65216. HORDEUM spp. Poaceae.

From Chengtu, China. Seeds presented by Frank Dickinson, Chengtu, through D. E. Stephens, superintendent, dry-farm branch station, Moro, Oreg. Received November 3, 1925.

65196 to 65200. HORDEUM DISTICHON PALMELLA Harlan. **Two-rowed barley.**

65196. No. 12. From Nanking.

65197. No. 14. From Taihsin, Shansi.

65198. No. 15. Collected near Chengtu.

65199. No. 16. From Santai, a six-day's journey from Chengtu.

65200. No. 18. From Chengtu.

65201 and 65202. HORDEUM VULGARE COELESTE L. **Six-rowed barley.**

65201. No. 5. Collected at a town about a day's journey from Chengtu.

65202. No. 19. From Tunggiang, a six-days' journey from Chengtu.

65196 to 65216—Continued.

65203. HORDEUM VULGARE NIGRUM (Willd.) Beaven. **Six-rowed barley.**

No. 17. Collected near Peking, Chihli.

65204 to 65216. HORDEUM VULGARE PALLIDUM Seringe. **Six-rowed barley.**

65204. No. 1. From Pachong, about a six-days' journey from Chengtu.

65205. No. 2. From Taihsin, Shansi.

65206. No. 3. From Tonggiang.

65207. No. 4. Collected on the northeast road from Chengtu.

65208. No. 6. Collected about a two-days' journey from Chengtu.

65209. No. 7. Collected at a small town near Chengtu.

65210. No. 8. Collected about a day's journey from Chengtu,

65211. No. 9. Collected at a town a day's journey from Chengtu.

65212. No. 10. Collected near Chengtu.

65213. No. 11. From Gwangfan, a 10-days' journey from Chengtu.

65214. No. 13. From the Province of Shansi.

65215. No. 20. From Peyhsieu, near Canton.

65216. No. 21. From Giaohwa, a seven-days' journey from Chengtu.

65217. MUSA TEXTILIS Nee. Musaceae. **Abaca.**

From the island of Mindanao, Philippine Islands. Seeds collected by H. T. Edwards, Bureau of Plant Industry. Received October 31, 1925.

From the plantation of the Gulaman Co., Malita, Province of Davao. August 21, 1925. This variety is known in the Philippine Islands as *Maguindanao*. (*Edwards.*)

65218 and 65219.

From Chene Bourg, Geneva, Switzerland. Seeds collected by David Fairchild, agricultural explorer, Allison V. Armour expedition. Received, November 11, 1925.

65218. CAESALPINIA JAPONICA Sieb. and Zucc. Caesalpiniaceae.

October 11, 1925. A handsome, scandent shrub, bearing gorgeous yellow flowers, from H. Correvon's place. This plant had climbed into the top of a tall tree near by.

65219. SAMBUCUS GAUTSCHII Wettst. Caprifoliaceae

A rank, tender shrub with large, coarse leaves and umbels of pink fruits, growing in the botanic gardens of Geneva. Native to the Himalayas.

65220. RUBUS sp. Rosaceae. **Blackberry.**

From Maidstone, England. Plants purchased from George Bunyard & Co., The Royal Nurseries. Received November 23, 1925.

British blackberry. The best variety for flavor and strongly recommended. (*Bunyard, 1924-25 catalogue.*)

65221. ALYOGYNE HAKEAEFOLIA (Giordano) Alefeld (*Fugosia hakeaefolia* Hook.). Malvaceae.

From Perth, Western Australia. Seeds presented by W. M. Carne, botanist and plant pathologist, Western Australia Department of Agriculture. Received October 28, 1925.

An Australian shrub, of erect habit, with narrow, lobed or deeply cut leaves and large purple-lilac flowers. It is a close relative of Gossypium.

65222 to 65235. BERBERIS spp. Berberidaceae. **Barberry.**

From Kew, England. Seeds presented by Dr. A. W. Hill, Director, Royal Botanic Gardens. Received October 28, 1925.

65222. BERBERIS ACTINACANTHA Mart.

A Chilean barberry, which, as described in Edward's Botanical Register (vol. 31, pl. 55), is an evergreen bush, with peculiar five-parted spines, roundish oval, rigid, spiny dentate leaves, and deep-yellow, sweet-scented flowers. In cultivation it reaches 3 or 4 feet in height and grows freely in a rich sandy loam.

For previous introduction, see No. 44523.

65223. BERBERIS ANGULOSA Wall.

An ornamental shrub from the mountainous sections of northern India, which becomes about 4 feet high, with dark glossy green leaves and elliptical scarlet berries nearly an inch long. The autumnal coloring of the foliage is said to be very striking, and the fruits, less acid than most barberries, are edible.

For previous introduction, see No. 49616.

65224. BERBERIS ATROCARPA C. Schneid.

As described by Sargent (Plantae Wilsonianae, vol. 3, p. 437), this is an ornamental shrub, 3 to 5 feet tall, with leathery evergreen leaves, shining rich green above and yellowish green beneath. It is native to western Szechwan. The almost globose fruits are jet black.

For previous introduction, see No. 53629.

65225. BERBERIS BEANIANA C. Schneid.

As described by Camillo Schneider (Plantae Wilsonianae, vol. 3, p. 439), this barberry, collected in western Szechwan, China, is a shrub with slender yellow spines, thick papery narrow leaves, yellow flowers about a quarter of an inch wide, and purple ellipsoidal berries.

For previous introduction, see No. 58137.

65226. BERBERIS CONCINNA Hook, f.

A low spreading bush up to 3 feet in height, native to the mountainous regions of Sikkim, India. The slender spines are three parted, and the semievergreen obovate leaves are an inch or less in length. The flowers are bright yellow, and the berries are red.

For previous introduction, see No. 58101.

65227 and 65228. BERBERIS CONSIMILIS C. Schneid.

A densely branched hardy shrub about 5 feet high, native to western Szechwan, China, with yellowish spines about a third of an inch long, leaves up to 1½ inches long, yellow flowers, and dark purplish elliptic fruits about three-fourths of an inch long.

65227. No. 1. **65228.** No. 2.

65229. BERBERIS EDGEWORTHIANA C. Schneid.

A barberry from the subtropical Himalayas which, as described in the Bulletin Herbier Boissier (ser. 2, vol. 8, p. 263), is a small shrub with two-parted yellowish spines less than half an inch long, narrowly elliptic leaves about the same length as the spines, and dense clusters of small flowers.

For previous introduction, see No. 52930.

65222 to 65235—Continued.

65230. BERBERIS FRANCISCI-FERDINANDI C. Schneid.

The drooping panicles of scarlet berries borne by this Chinese barberry are very handsome, according to Alfred Rehder (Bailey, Standard Cyclopedia of Horticulture, vol. 1, p. 490). It is a shrub up to 10 feet high, with red-brown branches, long spines, bright-green papery leaves 1 or 2 inches long, and narrow panicles of yellow flowers.

For previous introduction, see No. 58104.

65231. BERBERIS GUIMPELI Koch and Bouche.

A hardy, graceful barberry from the Caucasus. It is about 5 feet high, with slender branches, grayish green, narrowly oblong leaves, and pendulous clusters of ovoid, purple berries.

For previous introduction, see No. 52876.

65232. BERBERIS HOOKERI Lem.

An evergreen barberry from the Himalayas, which, as described by W. J. Bean (Trees and Shrubs Hardy in the British Isles, vol. 1, p. 243), is a dense shrub 3 to 5 feet high, with usually three-parted spines, dark-green, leathery, spiny-margined leaves, and cylindrical black-purple berries which often persist on the shrub until spring.

For previous introduction, see No. 53635.

65233. BERBERIS NERVOSA Pursh.

A dwarf shrubby barberry, by some authorities referred to Mahonia; it is native to western North America. The leafstalks are up to 4 inches long, and the pale-green, spiny-toothed, narrow leaflets are 1 to 3 inches in length. The oblong berries are blue.

65234. BERBERIS ORTHOBOTRYS Bienert.

A shrubby barberry from Kashmir, India, which, as described by Schneider (Illustriertes Handbuch der Laubholzkunde, vol. 1, p. 3100), attains a height of 3 feet, with narrowly obovate leaves and elongated berries.

For previous introduction, see No. 53637.

65235. BERBERIS UMBELLATA Wall.

A hardy subevergreen Himalayan shrub about 3 feet high, with narrow leaves slightly glaucous beneath, and umbellike racemes of yellow flowers.

For previous introduction, see No. 53645.

65236. COFFEA ARABICA L. Rubiaceae. **Coffee.**

From Porto Rico. Seeds obtained through O. F. Cook, Bureau of Plant Industry. Received November 7, 1925.

In Bulletin No. 30, Porto Rico Agricultural Experiment Station, entitled, "Coffee Varieties in Porto Rico," T. B. McClelland states that *Bourbon* is an early variety, nearly half of the crop being harvested by the end of September. In yield it has averaged, since 1918, 1.8 liters of cherries per tree. It is said to have a very fine aroma, and one authority states that it is grown on the richest soils on one-fifth of the plantations of Sao Paulo, Brazil.

65237 to 65240. BERBERIS spp. Berberidaceae. **Barberry.**

From Edinburgh, Scotland. Seeds presented by William Wright Smith, Regius Keeper, Royal Botanic Gardens. Received November 4, 1925.

65237 to 65240—Continued.

65237. BERBERIS CRETICA L.

A low deciduous shrub, sometimes prostrate in habit, indigenous to southeastern Europe. The very narrow leaves, usually entire, are about half an inch long, the flowers are yellow, and the globular berries are almost black.

For previous introduction, see No. 35162.

65238. BERBERIS HETEROPODA Schrenk.

As described by Alfred Rehder (Bailey, Standard Cyclopedia of Horticulture, vol. 1), this is a handsome spreading shrub 3 to 6 feet high, with spines, when present, often 2 inches long; and broadly oval, pale blue-green entire leaves an inch or two in length. The fragrant orange flowers are in five-flowered to seven-flowered racemes, and the dark-blue berries are covered with a glaucous bloom. Native to Turkestan.

For previous introduction, see No. 25567.

65239. BERBERIS PURPUREA EGBERTII Hort.

65240. BERBERIS STENOPHYLLA Lindl.

A hybrid between *Berberis darwinii* and *B. empetrifolia* which first appeared, according to Bean (Trees and Shrubs Hardy in the British Isles, vol. 1), in the nursery of Fisher and Holmes, near Sheffield, England, several years ago. As described by Bean it is an evergreen bush about 10 feet high, which forms a dense thicket of slender interlacing stems. The small deep-green leaves are spine tipped, and the small golden yellow flowers are profusely borne in small clusters. The globular fruits are covered with a blue-white bloom.

For previous introduction, see No. 62756.

65241 to 65243.

From Kansu, China. Seeds collected by J. F. Rock, Arnold Arboretum, Jamaica Plain, Mass. Received November 9, 1925. Notes by Mr. Rock.

65241. IRIS sp. Iridaceae.

Collected north of Titao, August 30, 1925. A bushy plant, 1 to 2 feet high, found in the meadows along the banks of the Tao River, near Choui, to the Kikonor. It is a very hardy plant and thrives best in well-drained, moist loamy soil. The flowers, of which there are many to a clump, are 3 inches or more in diameter, and white, bright blue, or purplish.

65242. PRINSEPIA sp. Amygdalaceae.

August 30, 1925. *Ma Teng Ko.* A spiny shrub, 5 feet in height, with long semierect branches, found in the Tao River Valley, between Taochow and Titao, and on the Yellow River, near Lanchowfu. The scarlet pendent drupes are edible, having a peppery flavor. It is best suited to well-drained loess soil along river banks and in sandy plains.

65243. AILANTHUS sp. Simaroubaceae.

September, 1925. This tree, 40 feet in height, is found on the loess plains to the northwest of Lanchow, at Sincheng, on the Yellow River, at an altitude of 5,600 feet, where the winter temperature is said to go to −10° F. The bark is light brown, the leaves and leaflets large, and the fruits, produced in large, drooping racemes, are pale yellow when mature. This tree is often planted near temples.

65244. CORYLUS SIEBOLDIANA MANDSHURICA (Maxim.) C. Schneid. Betulaceae. Hazelnut.

From Harbin, Manchuria. Plants collected by P. H. Dorsett, agricultural explorer, Bureau of Plant Industry. Received November 11, 1925.

No. 4249. Hsiaoliu. September 30, 1925. *Mao cheu tze* (hairy hazelnut). (*Dorsett.*)

65245. RUBUS sp. Rosaceae.

From Exeter, England. Plants purchased from Robert Veitch & Son, The Royal Nurseries. Received November 13, 1925.

The Veitchberry, as described in the 1925 catalog of Laxton Bros. (Bedford, England), is the best of all their berries. The fruits are the color of a well-ripened black mulberry and about twice the size of an ordinary blackberry. The flavor is delicious, resembling that of the blackberry and raspberry combined. It is self-fertile and sets all of its fruits. The bush is semierect, a strong grower, and needs only a stake to support it. Its ripening season is after that of the raspberries and before that of the blackberries.

65246 to 65269.

From Darjiling, India. Seeds presented by G. H. Cave, Curator, Lloyd Botanic Garden. Received October 20, 1925.

65246. ACACIA CATECHU (L. f.) Willd. Mimosaceae.

The pale-yellow gum obtained from this acacia has very strong adhesive powers and is considered a better substitute for gum arabic than that from *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. 61593.

65247. ALSTONIA SCHOLARIS (L.) R. Br. Apocynaceae.

A Himalayan tree, which, as described by Watt (Dictionary of the Economic Products of India, vol. 1, p. 197), is a tall evergreen tree, widely cultivated throughout India for ornamental purposes. The tree yields an inferior quality of gutta-percha, and from the bark is obtained a bitter principle known as ditain, which has a medicinal effect similar to that of quinine.

65248. ALSTONIA VENENATA R. Br. Apocynaceae.

Unlike the preceding, *Alstonia scholaris* (No. 65247), this is described by Hooker (Flora of British India, vol. 3, p. 642) as a shrub 6 to 8 feet high, with narrow leaves in whorls of four to six.

Since a number of the Alstonias yield gutta-percha, this Himalayan species will be tested as a possible source of that substance.

65249. DRIMYCARPUS RACEMOSUS (Roxb.) Hook. f. Anacardiaceae.

A lofty Himalayan tree with large, shining-green leathery leaves sometimes a foot long and red fruits an inch in diameter, produced in axillary clusters. This note is from Hooker's Flora of British India (vol. 2, p. 36), which gives the distribution as the mountains of Sikkim and Bhutan, India.

65250. EDGEWORTHIA GARDNERI (Wall.) Meisn. Thymelaeaceae.

A handsome shrub native to the Himalayas, whose branches are covered with dense clusters of yellow sweet-scented flowers before the leaves appear. The strong tough fiber which is obtained from the long straight twigs seems very promising as paper-making material, according to Watt (Dictionary of the Economic Products of India, vol. 3, p. 202). The finest qualities of Nepal paper are made from this plant, according to the same authority.

For previous introduction, see No. 57887

65246 to 65269—Continued.

65251. ELAEOCARPUS SIKKIMENSIS Masters. Elaeocarpaceae.

A handsome evergreen tree, native to Sikkim, India, with erect racemes of small white flowers. The sharp-pointed serrate leaves are about 8 inches long.

For previous introduction, see No. 61603.

65252. ERIOBOTRYA HOOKERIANA Decaisne. Malaceae.

According to Hooker (Flora of British India, vol. 2, p. 371), this is a small stout-branched tree with thick, leathery, oblong, sharply toothed leaves up to a foot in length, large panicles of small white flowers, and egg-shaped yellow fruits about three-fourths of an inch long. It is a native of the eastern Himalayas at altitudes of 6,500 to 8,000 feet.

For previous introduction, see No. 55679.

65253. GARCINIA STIPULATA T. Anders. Clusiaceae.

A wild relative of the mangosteen (*Garcinia mangostana*) which, as described by Hooker (Flora of British India, vol. 1, p. 267), is a tree about 60 feet high, with dark-green, thick-leathery, oblong leaves 6 to 12 inches long and smooth oblong fruits about a quarter of an inch long. The tree is a native to moist subtropical forests of the eastern Himalayas.

65254. GAULTHERIA FRAGRANTISSIMA Wall. Ericaceae.

A very fragrant evergreen shrub or small tree, found in the mountains of India from Nepal eastward to Bhutan. In summer it is loaded with white or pinkish flowers which are followed by beautiful racemes of blue-purple fruits.

For previous introduction, see No. 61746.

65255. HYPERICUM PATULUM Thunb. Hypericaceae.

An ornamental, spreading, evergreen Japanese shrub from 1 to 3 feet in height, with red stems and branches. It has bright-green leaves and numerous large yellow flowers, about 2 inches across, borne in terminal few-flowered cymes.

For previous introduction, see No. 47695.

65256. ILEX INSIGNIS Hook. f. Aquifoliaceae.

An attractive holly from the Sikkim Himalayas, where it grows at an altitude of 7,000 feet. It forms a small tree or shrub with thick, grooved branches which are purplish when young. The dark-green leathery leaves are pinnately lobed, with the lobes spine tipped and alternately raised and depressed, so that there appears to be a double row of spiny lobes on each side. This holly has proved hardy in Ireland and may be suited for growing in the Gulf States and southern California.

For previous introduction, see No. 60646.

65257. INDIGOFERA DOSUA TOMENTOSA Baker. Fabaceae.

A low, shrubby, hairy indigo from the temperate parts of the Himalayas, where it grows at altitudes of 1,000 to 5,000 feet. The dull-green compound leaves, 9 inches in length, and the long racemes of bright-red flowers, make this a decidedly ornamental species.

For previous introduction, see No. 60647.

65258. JASMINUM DISPERMUM Wall. Oleaceae.

This Himalayan jasmine, as described by Hooker (Flora of British India, vol. 3, p. 602), is a climbing shrub common in temperate regions of the Himalayas at altitudes of 2,000 to 8,000 feet. It bears very numerous white flowers in axillary cymes and terminal panicles sometimes containing a hundred flowers.

For previous introduction, see No. 55684.

65246 to 65269—Continued.

65259. JASMINUM UNDULATUM (L.) Ker. Oleaceae.

A climbing Asiatic jasmine with slender hairy branches, opposite leaves about 2 inches long, and white long-tubed flowers in terminal clusters of 6 to 10 flowers. Native to the Himalayas.

65260. LEUCOSCEPTRUM CANUM J. E. Smith. Menthaceae.

A stout-branched, densely hairy tree, commonly about 30 feet high, with large, narrowly ovate leaves, silvery hairy beneath and at times a foot long. The small white or pinkish flowers are in spikes. Native to temperate regions in the Himalayas.

For previous introduction, see No. 61609.

65261. LEYCESTERIA FORMOSA Wall. Caprifoliaceae.

A handsome ornamental bush, about 6 feet high, closely allied to the honeysuckles. The purplish flowers are in drooping spikes or spikelike racemes, and the dark-red berries are sometimes eaten by birds. It is native to the cooler sections of the Himalayas.

For previous introduction, see No. 52864.

65262. LEYCESTERIA GLAUCOPHYLLA (Hook. f. and Thoms.) C. B. Clarke. Caprifoliaceae.

A slender plant, closely allied to the honeysuckles, with pale-green leaves and bearing, in the early winter, a profusion of pink flowers, in short axillary spikes. It is native to the subtropical Himalayas at an altitude of 5,000 feet.

For previous introduction, see No. 61611.

65263. PIERIS FORMOSA (Wall.) D. Don. Ericaceae.

A Himalayan bush, 15 to 20 feet high, which bears large terminal clusters of white flowers resembling those of the lily of the valley. The glossy green foliage, which persists throughout the winter, makes a very effective background for the early blooming flowers.

For previous introduction, see No. 55909.

65264. PRUNUS CERASOIDES D. Don. (*P. puddum* Roxb.). Amygdalaceae.

The pendulous flowers of this species are campanulate and deep rosy red. They are said to appear before the foliage, which is a bright glossy green. The tree, native to the highlands of Burma, is said to endure some frost in its native country.

For previous introduction, see No. 61619.

65265. ROSA MACROPHYLLA Lindl. Rosaceae. **Rose.**

This Himalayan rose, as described by Brandis (Forest Flora of India, p. 203), is an erect, often unarmed shrub, with large red flowers 2 inches or less in width, and large soft edible fruits an inch long. In its native home this rose is found at an altitude of 10,000 feet, and plants introduced into England have proved hardy in that country.

For previous introduction, see No. 63368.

65266. RUBUS ELLIPTICUS J. E. Smith. Rosaceae. **Raspberry.**

A Himalayan raspberry, described as follows by J. F. Rock, of the Bureau of Plant Industry, 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.

65246 to 65269—Continued.

65267. 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 Bisaya Islands, and Mindanao, Philippine Islands. The red fruits, borne singly or in clusters, are about 1.5 centimeters (half an inch) in diameter; they are juicy, but rather insipid.

For previous introduction, see No. 56274.

65268. SAURAUJA FASCICULATA Wall. Dilleniaceae.

According to Hooker (Flora of British India, vol. 1, p. 287), this is a bush or small tree about 30 feet high, native to the eastern subtropical regions of the Himalayas at altitudes of 2,000 to 4,000 feet. The long narrow leaves are very hairy, especially beneath; and the flowers, which are first white, then pink, are borne in red-branched cymes.

For previous introduction, see No. 55702.

65269. SENECIO UNCINELLUS DC. (*S. densiflorus* Wall.). Asteraceae.

According to Hooker (Flora of British India, vol. 3, p. 355), the branches and leaves of this shrubby composite are covered with gray cottony wool. The narrowly oval leaves are sometimes 9 inches long and 3 inches wide, and the small yellow flowers are in dense axillary and terminal clusters. Native to the central and western Himalayas.

For previous introduction, see No. 47792.

65270 and 65271.

From Darjiling, India. Seeds presented by G. H. Cave, curator, Lloyd Botanic Garden. Received October 20, 1925.

65270. HELICIA ERRATICA Hook. f. Proteaceae.

As described by Hooker (Flora of British India, vol. 5, p. 189), this is a small tree with shining green leathery leaves about 6 inches long, and pale yellowish flowers an inch across, borne in racemes 6 to 9 inches in length. The fruit is a hard nut an inch and a half in diameter. This tree is common in the mountains of Sikkim, India.

65271. PINUS KHASYA Royle. Pinaceae.

Although usually a small tree, this southern Asiatic pine sometimes attains a height of 200 feet and a diameter of over 3 feet in the mountains of Burma, according to Watt (Dictionary of the Economic Products of India, vol. 6, pt. 1, p. 241). A note in the India Forest Bulletin, Delhi, p. 57, 1923, states that the bark of this pine yields a large amount of tannin which makes good leather, with the further observation that it should be possible to harvest the bark without injury to the tree.

65272. CEDRELA FISSILIS Vell. Meliaceae.

From Tucuman, Argentina. Seeds presented by Dr. W. E. Cross, Director, Estacion Experimentale Agricola. Received October 27, 1925.

A tall ornamental tree, native to Brazil and Paraguay, with pinnate leaves 10 to 15 inches long. Because of its handsome foliage, it should be suitable for growing as an avenue tree in the warmer parts of the United States.

For previous introduction, see No. 43417.

65273 to 65294.

From Manchuria. Seeds collected by P. H. Dorsett, agricultural explorer, Bureau of Plant Industry. Received October 28, 1925.

65273 to 65294—Continued.

65273. ACANTHOPANAX SENTICOSUM (Rupr.) Harms. Araliaceae.

No. 4072. Hsiaolin. August 29, 1925. A rather low-growing, thorny-stemmed plant obtained in the woods on the mountain side near Mr. Petroff's summer home. This may prove to be of value in ornamental plantings and for use in cross-pollination work with some of the large species.

For previous introduction, see No. 57274.

65274. CHLORIS VIRGATA Swartz. Poaceae. **Grass.**

No. 4125. Harbin. September 6, 1925. The Chinese call this variety "brush grass." We collected it in the Ming Tombs section, where it is well distributed. The seed heads resemble Rhodes grass.

65275. CIMICIFUGA sp. Ranunculaceae.

No. 4167. Mefun. September 11, 1925. A tall-growing herbaceous plant with small fragrant flowers in long spikes.

65276. ERAGROSTIS sp. Poaceae.

No. 4127. Harbin. September 6, 1925. A fine seed-headed grass secured across the Sungan River.

65277. ERAGROSTIS sp. Poaceae.

No. 4128. Harbin. September 6, 1925. A fine, long, seed-headed grass.

65278. FALCATA JAPONICA Oliver. Fabaceae.

No. 4222. Hsiaolin. September 13, 1925.

For previous introduction, see No. 21899.

65279. JUGLANS MANDSHURICA Maxim. Juglandaceae.

No. 4133. Harbin. September 7, 1925. Presented by B. W. Skvortzow, who obtained the seed from a tree growing in his garden. In general appearance and flavor the nut resembles the butternut (*Juglans cinerea*).

For previous introduction, see No. 56405.

65280. LESPEDEZA STIPULACEA Maxim. Fabaceae.

No. 3865. Harbin. September 8, 1925. A low-growing plant with small, pea-shaped, pink to purple flowers, which is quite abundant in the new Russian cemetery.

For previous introduction, see No. 59379.

65281. LILIUM DAURICUM Ker. Liliaceae. **Candlestick lily.**

No. 4131. Harbin. September 7, 1925. From plants about 3 feet in height, growing in B. W. Skvortzow's garden.

For previous introduction, see No. 58553.

65282. LONICERA sp. Caprifoliaceae. **Honeysuckle.**

No. 4234. Ertsingtientze. September 16, 1925.

65283. MEDICAGO RUTHENICA (L.) Trautv. Fabaceae.

No. 4055. Harbin. September 3, 1925. A yellow bronze-colored, flowering variety.

For previous introduction, see No. 40749.

65284. PRUNUS ARMENIACA L. Amygdalaceae. **Apricot.**

No. 4130. Harbin. September 7, 1925. A large-fruited apricot, presented by B. W. Skvortzow.

65285. PYRUS sp. Malaceae. **Pear.**

No. 4232. Ertsingtientze. September 16, 1925. Wild pears from the mountain sides.

65273 to 65294—Continued.

65286 and 65287. SCHIZANDRA CHINENSIS (Turcz.) Baill. Magnoliaceae.

For previous introduction, see No. 57314.

65286. No. 4098. Hsiaolin. August 29, 1925.

65287. No. 4160. Mefun. September 11, 1925. A vine found on the mountain side, which is very handsome with its masses of compact bunches of small bright-red berries.

65288. SOJA MAX (L.) Piper (*Glycine hispida* Maxim.). Fabaceae. **Soy bean.**

No. 4132. Harbin. September 7, 1925. A light-yellow soy bean which is the result of eight years of selection work at the experiment station.

65289. SYNTHERISMA ISCHAEMUM (Schreb.) Nash. Poaceae. **Grass.**

No. 4126. September 6, 1925. A chicken-foot grass collected in the Sungan River bottom across from Harbin.

65290. VACCINIUM VITIS-IDAEA L. Vacciniaceae.

No. 4137. Harbin. September 9, 1925. Small, bright-red fruits resembling cranberries, but round and not so large, bought in the market where they were said to have come from the Eastern Hills. The flesh is white and the seeds, few in a fruit, are very small and of a yellowish color.

For previous introduction, see No. 50344.

65291. VICIA AMOENA Fisch. Fabaceae. **Vetch.**

No. 3840. Harbin. September 4, 1925.

For previous introduction and description, see No. 65085.

65292. VICIA JAPONICA A. Gray. Fabaceae. **Vetch.**

No. 4134. Harbin. September 8, 1925. The leaves of this are broader and not so coarse as those of the preceding [No. 65291].

65293. VICIA JAPONICA A. Gray. Fabaceae. **Vetch.**

No. 4229. Harbin. September 15, 1925. This is one of the best fruiting wild varieties. There are about 15 pods in a cluster, and because the pods do not fly open like many of the other varieties, they could be harvested to good advantage.

65294. ASTRAGALUS MELILOTOIDES Pall. Fabaceae.

No. 4070. Harbin. September 8, 1925. A small, narrow-leaved, upright growing variety with lavender flowers; collected in the new Russian cemetery.

65295. CROTALARIA STRIATA DC. Fabaceae.

From Eala, Belgian Congo, Africa. Seeds presented by V. Goossens, Directeur du Jardin Botanique d'Eala. Received October 28, 1925.

An ornamental shrubby leguminous plant, described in Curtis's Botanical Magazine (pl. 3200) as low growing, with rounded green branches and elongated terminal clusters of drooping yellow flowers, the petals striped with deep orange-brown. It is to be tested as a cover plant in the southern United States.

For previous introduction, see No. 52531.

65296. ARACHIS NAMBYQUARAE Hoehne. Fabaceae.

From Sao Paulo, Brazil. Seeds presented by H. Hoehne, Chefe da Secção de Botanica do Museu Paulista. Received November 6, 1925.

A Brazilian relative of the peanut, which according to Hoehne (Historia Natural Botanica, Matto Grosso, Brazil, pt. 12), is a rather shrubby, 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. 62099.

65297. ALEURITES TRISPERMA Blanco. Euphorbiaceae. **Banucalag.**

From Manila, Philippine Islands. Seeds presented by S. Youngberg, acting director, Bureau of Agriculture. Received November 12, 1925.

This Philippine relative of the tung-oil tree of China (*Aleurites fordii*), as described in Bulletin No. 20 of the Bureau of Forestry of the Philippine Department of Agriculture, is a tree 30 to 50 feet in height, with heart-shaped leaves and rounded three-angled fruits about 2 inches in diameter. Each of the three cells of the fruit usually contains one seed; this is flattened circular, with a brittle shell and a white embryo surrounded by a large oily endosperm. This oil, known as bagilumbang oil, is of a light amber color somewhat paler than the commercial grades of tung, or lumbang, oil as it appears in the market. It is said to be so closely allied to tung oil as to be almost indistinguishable. The shells are much more easily broken than those of the lumbang (*A. moluccana*), and the kernel is not so difficult to separate from the shell.

For previous introduction, see No. 47942.

65298 to 65308.

From Buitenzorg, Java. Seeds presented by Dr. W. M. Docters Van Leeuwen, Director, Botanic Garden. Received November 3, 1925.

65298. CLITORIA HETEROPHYLLA Lam. Fabaceae.

As described by Lamarck (Encyclopédie Méthodique Botanique, vol. 2, p. 51), this East Indian plant is a climbing perennial with thread-like stems and compound leaves consisting of five small green leaflets which vary in form from orbicular to linear, borne on a winged axis. The blue flowers are borne singly in the leaf axils.

For previous introduction, see No. 22748.

65299. CROTALARIA VALETONII Backer. Fabaceae.

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.

65300. CROTALARIA VERRUCOSA L. Fabaceae.

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. 51119.

65301. CROTALARIA VITELLINA Ker. Fabaceae.

A Brazilian shrub, which, as described in the Botanical Register (vol. 6, pl. 447), is about 3 feet high, of slender habit, with oval-oblong leaflets, gray beneath, and erect terminal racemes of reddish yellow flowers. The oblong pods, scarcely an inch long, are covered with velvety pubescence.

65302. CYMBOPOGON CITRATUS (DC.) Stapf. (*Andropogon citratum* DC.). Poaceae.

A large, coarse grass with long, narrow leaves 4 or 5 feet in length, native to eastern Asia. The oil from this and a number of related species is the citronella oil of commerce, used in perfumes and as a mosquito deterrent.

For previous introduction, see No. 35132.

65298 to 65308—Continued.

65303. MEIBOMIA STIPULACEA (DC.) Kuntze (*Desmodium stipulaceum* DC.). Fabaceae.

An erect leguminous plant, 2 to 3 feet high, with oval-oblong leaflets and simple racemes of small pale-blue flowers. Native to tropical America.

65304. PENNISETUM ORIENTALE TRIFLORUM (Nees) Stapf. Poaceae.

A perennial erect or ascending grass, 2 to 6 feet high, with a stout, creeping rootstock, and very narrow leaves 1 to 2 feet long. Native to the Himalayas.

For previous introduction, see No. 54553.

65305. RHAPHIS PARVIFLORA (R. Br.) Chase. Poaceae.

A tall-growing coarse grass, about 3 feet high, with deep roots. The narrow, long-pointed leaves are 6 to 12 inches long. Native to India and distributed throughout eastern Asia; found also in Australia and South Africa.

65306. SESBANIA PAULENSIS Barb.-Rodr. Fabaceae.

A leguminous shrub described by Rodrigues (Plantas Novas Cultivadas Jardin Botanico do Rio de Janeiro, vol. 2, p. 13) as of erect habit, about 10 feet high, with narrow, angular branches, finely pinnate leaves, and handsome yellow flowers in few-flowered racemes.

65307. SOJA MAX (L.) Piper (*Glycine hispida* Maxim.). Fabaceae. **Soy bean.**

Locally grown seeds.

65308. VIGNA MEMBRANACEA A. Rich. Fabaceae.

An Abyssinian relative of the cowpea described by A. Richard (Tentamen Florae Abyssinicae, vol. 1, p. 219) as having a herbaceous stem, membranous leaflets, and violet flowers. According to Richard, it grows in humid places, and the native Abyssinian name is *ent-esterot*.

65309. COLOCASIA ESCULENTA (L.) Schott. Araceae. **Dasheen.**

From Harbin, Manchuria. Tubers collected by P. H. Dorsett, agricultural explorer, Bureau of Plant Industry. Received November 20, 1925.

No. 4446, October 5, 1925. Procured in the market where they were shipped in from Cheff. They are medium-sized and rather attractive in appearance. (*Dorsett.*)

65310 to 65313.

From Tangar, Kansu, China. Seeds collected by J. F. Rock, Arnold Arboretum, Jamaica Plain, Mass. Received November 19, 1925. Notes by Mr. Rock.

65310. BETULA sp. Betulaceae. **Birch.**

No. 13283. Kokonor. September 29, 1925. A tree 20 to 30 feet in height, found with willows, spruces, etc., on the rocky valley slopes, and forming about 30 per cent of all the vegetation in the Rako Gorge, at an altitude of 11,000 feet. The bark, silvery gray to bluish, is curled in bands 4 inches in width, the branches are ascending, and the crown is oblong pointed. The deltoid leaves 1 inch broad and long are irregularly serrate.

65311. PICEA sp. Pinaceae. **Spruce**

No. 13281. September 29, 1925. A tree, 50 to 80 feet in height, with long, descending branches, often assuming the shape of a wind-swept Monterey cypress, and sometimes branching from the base. It is a handsome tree with its deep-green needles, the cones being 3 to 4 inches long, an inch in diameter, and greenish drab colored. This species occurs singly in the ravines of the Kokonor Mountains, at altitudes of 11,000 to 12,000 feet, or associated together with Betula sp., No. 13283 [No. 65310].

65310 to 65313—Continued.

65312. PICEA sp. Pinaceae. **Spruce.**

No. 13282. September, 1925. A tree 40 to 50 feet high, which occurs in pure stands near Bamba, southeast of the Kokonor, at an altitude of 8,500 feet. The trunk of this tree is straight, the bark gray and scaly, resembling that of *Picea meyeri*, and the needles are glaucous. No large trees were observed, as they are rapidly cut down.

65313. RHODODENDRON sp. Ericaceae. **Rhododendron.**

No. 13278. Rako Gorge, Kokonor. September 28, 1925. A shrub 5 to 8 feet in height, which occurs in remote valleys of the Kokonor region, at an altitude from 10,000 to 11,000 feet. The leaves are oval, pale fawn-colored beneath, and 3 to 4 inches long; the flowers are whitish to pink.

65314. ABELIA SCHUMANNII (Graebn.) Rehder. Caprifoliaceae.

From Jamaica Plain, Mass. Plant presented by Dr. C. S. Sargent, Arnold Arboretum. Received November 24, 1925.

This handsome Chinese bush is described in The Garden (vol. 89, p. 596) as follows: It is evergreen, of somewhat spreading habit, and the young branches are pendulous with the weight of the flowers. The latter resemble small pentstemon flowers, and are a beautiful pale mauve with a white throat, a pale orange blotch, and are about an inch long. In England the flowering period commences in June and lasts for several weeks.

65315 to 65320.

From Buitenzorg, Java. Seeds presented by Dr. W. M. Docters Van Leeuwen, Director, Botanic Garden. Received November 11, 1925.

65315. BRADBURYA PUBESCENS (Benth.) Kuntze (*Centrosema pubescens* Benth.). Fabaceae.

A slender leguminous vine, up to about 6 feet in length, with trifoliate leaves and oval leaflets, the latter about 2 inches long, and white or yellowish small flowers. Native to tropical America.

For previous introduction, see No. 32780.

65316. CENCHRUS VIRIDIS Spreng. Poaceae. **Grass.**

An erect or ascending tropical American grass, usually about 2 feet high, branched or simple, with flat leaves up to 15 inches long. The spikes, usually dense and cylindrical, are 3 or 4 inches long.

65317. LEPTOCHLOA CHINENSIS (L.) Nees. Poaceae. **Grass.**

An erect or ascending annual grass, 2 to 4 feet high, with leaves sometimes a foot and a half long. Native to eastern Asia and found also in Australia.

65318. LEPTOCHLOA FUSCA (L.) Kunth. Poaceae. **Grass.**

A tall, perennial, tufted grass, 3 to 5 feet tall, with long, narrow leaves. Although native to India, it is found also in Egypt and Australia (in the last-named country in low wet ground).

65319. LIMNOCHARIS FLAVA (L.) Buch. Alismaceae.

A perennial aquatic plant, native to the West Indies and South America, with erect, angled stems over a foot high in the flowering period; narrowly oval or broadly oval leaves, and yellow flowers in umbellike clusters.

65315 to 65320—Continued.

65320. SMITHIA JAVANICA Benth. Fabaceae.

An East Indian leguminous plant, described by Bentham (Miquel, Plantae Junghuhnianae, p. 211) as a prostrate or diffuse herb, with compound leaves having five to seven pairs of oblong leaflets about half an inch long and small yellow flowers.

65321 to 65330. ORYZA SATIVA L. Poaceae. Rice.

From Assam, India. Seeds presented by M. Gangnli, botanical assistant, Karimganj Farm. Received November 16, 1925.

Locally grown strains.

65321. *A 1, Lal Ans.*

65322. *A 2, Kusalath.*

65323. *A 3, Basmati.*

65324. *A 10, Kataktara.*

65325. *A 23/1, C. P. Ans.*

65326. *A 24/1, Basanta Bahar.*

65327. *D 138/2, Tepi Durmai.*

65328. *D 138/6, Tepi Dumai.*

65329. *M 36/30, Baurash Hurali.*

65330. *M 142, Koi Hurali.*

65331 and 65332. CROTALARIA spp. Fabaceae.

From Kisantu, Belgian Congo. Seeds presented by Frère J. Gillet, Jardiin d'Essais de Kisantu. Received November 16, 1925.

65331. CROTALARIA CYLINDROCARPA DC.

A tropical African leguminous plant described by J. G. Baker (Oliver, Flora of Tropical Africa, vol. 2, p. 40) as an erect, subscrubby herb about 2 feet high, with pale-green elliptic leaflets and medium-sized flowers.

65332. CROTALARIA HILDEBRANDTII Vatke.

As described by W. Vatke (Oesterreichische Botanische Zeitschrift, vol. 29, p. 220) this is a densely bushy perennial, with broadly oval leaflets. Native to the Belgian Congo.

65333. VIBURNUM LOBOPHYLLUM Graebn. Caprifoliaceae.

From Kew, England. Seeds presented by Dr. A. W. Hill, Director, Royal Botanic Gardens. Received November 18, 1925.

An ornamental shrub from western China with coarsely toothed, rounded leaves, white flowers, and round bright-red berries about a third of an inch in diameter. George M. Darrow, of the Bureau of Plant Industry, states in his letter of October 12, 1925, that this is the only large-fruited species, so far as he knows, which has acid fruit without bitterness.

For previous introduction, see No. 53748.

65334 and 65335. CARISSA CARANDAS L. Apocynaceae. Karanda.

From the Philippine Islands. Seeds presented by P. J. Wester, Ballston, Va. Received November 24, 1925.

65334. *Karanda.* An evergreen spiny shrub or small tree, with dark-green spiny-tipped leaves, fragrant white flowers in small clusters, and reddish acid fruits about an inch in diameter. In India, where the plant is native, and also in the Philippines, where it has recently been introduced, the fruits are used as pickles when green and for jelly when ripe.

65334 and 65335—Continued

65335. *Perunkila.* A form with sweeter fruits than the *Karanda*, cultivated in the Philippines. According to Mr. Wester, it is one of the best small fruits introduced into the Philippines.

65336. GARCINIA VENULOSA (Blanco) Choisy. Clusiaceae.

From Manila, Philippine Islands. Seeds presented by S. Youngberg, acting director, Bureau of Agriculture. Received November 28, 1925.

A wild Philippine relative of the mangosteen (*Garcinia mangostana*), which, as described by P. J. Wester (Food Plants of the Philippines, p. 105), is a tree about 45 feet high, with large, oblong, leathery leaves and roundish, flattened, green fruits about 2 inches in diameter, with acid flesh inclosing several flat seeds. The Filipinos eat the fruits with fish, and Mr. Wester believes that they would probably make good preserves.

For previous introduction, see No. 32264.

65337 to 65436. SOJA MAX (L.) Piper (*Glycine hispida* Maxim.). Fabaceae. Soy bean.

From Harbin, Manchuria. Seeds collected by P. H. Dorsett, agricultural explorer, Bureau of Plant Industry. Received November 27, 1925.

October 13, 1925. Seeds sent in the pods with a portion of the vine attached. These varieties were grown at the botanical garden of the Manchurian Agricultural Research Society of Harbin, and were obtained largely through the courtesy of B. W. Skvortzow and N. Glowkhoff, the superintendent. The botanical-garden number is given for each variety.

65337. No. 4465. No. 3. A large, creamy yellow, almost round bean with a rather large, black eye.

65338. No. 4466. No. 4. A small, creamy yellow, brown-eyed bean.

65339. No. 4467. No. 5. A deep-green, black-eyed bean which is oblong and slightly flattened one way.

65340. No. 4468. No. 6. A large bean, flattened one way, which is creamy yellow with a pale-yellow eye.

65341. No. 4469. No. 6a. This creamy yellow bean, nearly round, is of good size and has a reddish-brown eye.

65342. No. 4470. No. 8. A brown-eyed, creamy yellow bean which is of average size, oblong, and slightly flattened one way.

65343. No. 4471. No. 8a. A small, almost round, creamy yellow bean with a tinge of green.

65344. No. 4472. No. 9. An almost round bean which is a clear creamy yellow. The rather large eye is very dark brown.

65345. No. 4473. No. 10. A dark-brown oblong bean, somewhat flattened one way, with a reddish-brown eye.

65346. No. 4474. No. 11. A clear creamy yellow, rather round bean. The eye is reddish brown with a white center.

65347. No. 4475. No. 12. An oblong, dark-brown bean, somewhat flattened one way with a slightly reddish-brown eye.

65348. No. 4476. No. 14. A small, flattened, brown bean with a reddish-brown eye.

65349. No. 4477. No. 15. A shiny black oblong bean, having a dull black eye.

65350. No. 4478. No. 16. A pale-yellow bean which is slightly oblong and rather flattened one way. The eye is a rich creamy yellow.

65337 to 65436—Continued.

65351. No. 4479. No. 16a. An oblong dark-brown bean, flattened one way, which has a reddish-brown eye.

65352. No. 4480. No. 17. A small, almost round bean which is creamy yellow tinged with green. The eye is scarcely discernible.

65353. No. 4481. No. 18. A large oblong dark-brown bean flattened one way. The reddish-brown eye is not very conspicuous.

65354. No. 4482. No. 18a. A round oblong black bean with a dull, inconspicuous eye.

65355. No. 4483. No. 19. An average-sized oblong black bean, flattened one way, with a dull-black inconspicuous eye.

65356. No. 4485. No. 23. An attractive oval creamy yellow bean, the eye of which is almost a white streak.

65357. No. 4484. No. 25. A large oval creamy-yellow bean having an eye of a darker shade.

65358. No. 4486. No. 25a. A brown bean, flattened one way, with a reddish-brown eye.

65359. No. 4487. No. 25b. An almost round, creamy-yellow bean with a reddish-brown eye.

65360. No. 4487a. No. 26. An oval greenish-yellow bean, flattened one way, with an inconspicuous eye of a darker shade.

65361. No. 4488. No. 27. An oblong creamy yellow bean tinged with a shade of green, having a large, rather black eye.

65362. No. 4489. No. 30. A small oblong creamy yellow bean with a shade of green encircling a large dark-brown eye.

65363. No. 4490. No. 31. A brown bean, almost round, with a reddish-brown, inconspicuous eye.

65364. No. 4491. No. 32. An oblong light-green bean, flattened one way, with a white eye.

65365. No. 4492. No. 33. A large oblong light-green bean, flattened one way, with a light-brown eye.

65366. No. 4493. No. 34. A large creamy yellow bean, flattened one way, with a large dark reddish-brown eye.

65367. No. 4494. No. 35. A large oblong flattened green bean, having a large reddish-brown eye.

65368. No. 4495. No. 36. A long flat greenish-brown bean with a reddish-brown eye.

65369. No. 4496. No. 37. A large oblong bean which is yellow with a tinge of green. The eye is large and reddish brown.

65370. No. 4497. No. 38. An almost round, light-green bean with a light-brown eye.

65371. No. 4498. No. 39. A large oblong flattened brown bean with a lighter brown eye.

65372. No. 4499. No 42. A good-sized bright-yellow bean which is oblong and has a light reddish-brown eye.

65373. No. 4500. No. 45. A small shiny black oblong bean with a dull-black eye.

65374. No. 4501. No. 46. A rather large, oblong, shiny black bean with a dull-black eye.

65375. No. 4502. No. 47. A light-brown oblong bean of fair size, with a rather small reddish-brown eye.

65376. No. 4503. No. 48. A greenish yellow, almost round bean with a slightly protruding reddish-brown eye.

65377. No. 4504. No. 50. An almost round, shiny black bean of fair size, with a dull-black eye.

65337 to 65436—Continued.

65378. No. 4505. No. 51. A clear creamy yellow oblong bean, slightly flattened and of fair size. The eye is whitish with a peculiar light-brown blotch at one end.

65379. No. 4506. No. 52. A greenish yellow, oblong, nearly round bean of average size, with a light reddish-brown eye.

65380. No. 4506a. No. 53. A reddish brown, rather round bean. The eye is a dark reddish brown with a white slit in it.

65381. No. 4507. No. 54. A fairly good-sized oblong creamy yellow bean with a tinge of green and a dark grayish eye.

65382. No. 4508. No. 54a. A rather large, creamy yellow, somewhat wrinkled bean, with a light-brown inconspicuous eye.

65383. No. 4509. No. 55. A nearly round, dull-green or drab-colored bean with a dark greenish eye.

65384. No. 4510. No. 56. An almost round, greenish yellow bean, of medium size, with a dark reddish-brown eye.

65385. No. 4511. No. 57. An oblong reddish-brown bean with a dark reddish-brown eye.

65386. No. 4512. No. 58. An oblong greenish yellow bean with a reddish-brown eye which has a dark-brown blotch under it.

65387. No. 4513. No. 59. A large, oblong, rather dark-brown bean with a long reddish-brown eye.

65388. No. 4514. No. 59a. A small brown bean, flattened one way, with a reddish-brown eye.

65389. No. 4515. No. 60. An attractive-looking oblong brown bean with a reddish-brown eye.

65390. No. 4516. No. 60a. A good-sized greenish yellow oblong bean having a large reddish-brown eye.

65391. No. 4517. No. 61. A medium-sized oblong brown bean with a reddish-brown eye.

65392. No. 4518. No. 62. A drab or olive-green oblong bean which is blotched dark green around the nearly black eye.

65393. No. 4519. No. 63. An oblong, rather shiny black bean with a dull-black eye.

65394. No. 4520. No. 65. A pale-yellow, large, almost round bean having a reddish-brown eye.

65395. No. 4521. No. 66. A large, rather round, brown bean with a dark-brown eye.

65396. No. 4522. No. 67. An oblong, flattened, drab or olive-green bean with a reddish-brown eye.

65397. No. 4523. No. 67a. An almost round, shiny black bean of good size, with a dull-black eye.

65398. No. 4524. No. 68. A light-green oblong good-sized bean with a dark-green eye.

65399. No. 4525. No. 69. An oval, light greenish yellow bean with a light reddish-brown eye.

65400. No. 4526. No. 70. A large oblong bean, creamy yellow tinged with green. The eye is a reddish brown.

65401. No. 4527. No. 71. A shiny greenish brown oblong bean with an inconspicuous eye which has a brown blotch under one end.

65402. No. 4528. No.72. A small, almost round, light-brown bean with a band of darker brown.

65403. No. 4529. No. 73. An oblong brown bean with a dark reddish-brown eye.

65337 to 65436—Continued.

65404. No. 4530. No. 73a. A good-sized oval yellowish green bean with a long reddish-brown eye.

65405. No. 4531. No. 74. A small oblong dull brownish black bean having the appearance of a wild soy bean.

65406. No. 4532. No. 76. A long flat brown bean having a reddish-brown eye.

65407. No. 4533. No. 77. A large, clear creamy yellow bean with a large, reddish-brown eye.

65408. No. 4534. No. 77a. An oblong good-sized bean of a light olive green. The eye is dull black.

65409. No. 4535. No. 78. A small brown bean which is almost round. The dark-brown eye is blotched a greenish brown.

65410. No. 4536. No. 79. An almost round, olive-green bean with a fairly dark brownish eye.

65411. No. 4537. No. 80. A medium-sized oblong brown bean having a reddish-brown eye with a light slit.

65412. No. 4538. No. 81. A rather small, almost round bean which is creamy yellow tinged with green. The eye is reddish brown.

65413. No. 4539. No. 82. An almost round, shiny black bean with a dull-black eye.

65414. No. 4540. No. 83. An attractive, large, creamy yellow bean with a large, black eye.

65415. No. 4541. No. 85. A very good-sized, almost round bean which is creamy yellow with a faint tinge of green. The eye is large and reddish brown.

65416. No. 4542. No. 86. A large oblong bean with peculiar markings of black and brown and a dull-black eye.

65417. No. 4543. No. 87. A medium-sized, almost round clear brown bean having a very narrow reddish-brown eye in which there is a light-colored slit.

65418. No. 4544. No. 87a. An oblong, flattened, wrinkled bean which is a greenish brown. The eye is long and reddish brown.

65419. No. 4545. No. 88. An oblong flattened bean with shiny and dull-brown blotches and with a long reddish-brown eye.

65420. No. 4546. No. 89. An almost round, creamy yellow bean with a large, reddish-brown eye.

65421. No. 4547. No. 90. An oblong, rather small, black bean with a dull-black eye.

65422. No. 4548. No. 91. A large, almost round, shiny black bean with a dull-black eye.

65423. No. 4548a. No. 91a. A large, almost round bean which is brown with a dull-black eye.

65424. No. 4549. No. 92. An attractive, clear creamy yellow, almost round bean with a large, black eye.

65425. No. 4550. No. 93. An oblong, rather light-brown bean with a reddish-brown eye.

65426. No. 4551. No. 94. An oblong, creamy yellow bean with a rich-yellow inconspicuous eye.

65427. No. 4552. No. 95. A small, oblong, creamy yellow bean with a rather small reddish-brown eye.

65428. No. 4553. No. 96. An oblong creamy green bean with a rather small, reddish-brown eye.

65337 to 65436—Continued.

65429. No. 4554. No. 97. A large oblong greenish yellow bean with a fairly large reddish-brown eye.

65430. No. 4555. No. 98. A large, attractive, almost round creamy yellow bean with a large, black eye.

65431. No. 4556. No. 99. A large, almost round, creamy yellow bean with a light reddish-brown eye.

65432. No. 4557. A large oblong flattened bean which is dark brown. The eye is small and reddish brown.

65433. No. 4558. A good-sized, creamy yellow, almost round bean. The inconspicuous eye is light yellow and blotched at one end with a deeper shade of yellow.

65434. No. 4559. A medium-sized oblong brown bean which is flattened. The small eye is reddish brown.

65435. No. 4560. A small, oblong, rather dull black bean with a dull-black eye.

65436. No. 4561. An almost round, creamy yellow bean with a slight greenish tinge and a small light-colored eye.

65437 and 65438. Rosa spp. Rosaceae. Rose.

From Nogent sur Vernisson, Loiret, France. Plants presented by L. Pardé, Directeur des Ecoles Forestières des Barres. Received December 3, 1925.

65437. Rosa roxburghii × rugosa.

65438. Rosa multiflora Thunb.

5907 Semis 5124 M. V. Sent from China by M. Levaille, in 1907, through P. Cavalerie. (*Letter of David Fairchild, January 31, 1925.*)

65439. Davidia involucrata Baill. Cornaceae.

From Paris, France. Seeds presented by A. Gerard. Received November 23, 1925.

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. 62007.

65440 to 65443. Citrus aurantium L. Rutaceae. Sour orange.

From Cadiz, Spain. Bud wood presented by O. W. Barrett, agricultural adviser, Department of Agriculture and Labor, San Juan, Porto Rico. Received November 24, 1925.

65440. No. 2. *Seville.* From Cordoba.

65441. No. 3. *Regular Seville.* From Seville.

65442. No. 4. *Small Seville.* From Seville.

65443. No. 5. *Spineless Seville.* From Seville.

65444 to 65449. Solanum spp. Solanaceae. Wild potato.

From Angol, Chile. Tubers presented by Elbert Reed, Instituto Agricola Bunster. Received November 20, 1925. Notes by Mr. Reed.

A collection of wild potatoes of possible value to plant breeders.

65444 to 65449—Continued.

65444. SOLANUM sp.

This plant is found on the west coast of the island of Chiloe, between 12 and 15 miles south of Quilan, the same locality where W. F. Wight, of the Bureau of Plant Industry, collected the wild potato seven or eight years ago.

65445. SOLANUM sp.

Seedling of a wild potato. These tubers were given to me by the family living at Quilan.

65446. SOLANUM sp.

These tubers were given to me at Puntra, the halfway station between Ancud and Castro, near Quilan, by a man who said he had found this potato about six years before on the west coast of the island. Since that time it has been cultivated in this man's garden and has been kept pure.

65447 to 65449. These tubers were given to me at Puntra.

65447. SOLANUM sp.

Red progeny of wild seed.

65448. SOLANUM sp.

White progeny of wild seed.

65449. SOLANUM sp.

Yellow progeny of wild seed.

65450. CASTANEA HENRYI (Skan) Rehd. and Wils. Fagaceae.

From Jamaica Plain, Mass. Scions presented by Dr. C. S. Sargent, Arnold Arboretum. Received December 7, 1925.

A Chinese chestnut which, as described in Plantae Wilsonianae (vol. 3, p. 196), is a deciduous tree 25 to 90 feet tall, with oblong, lanceolate, long-acuminate leaves, green on both sides. The burs are either solitary or two or three in a bunch, and contain usually but one nut.

65451. SACCHARUM OFFICINARUM L. Poaceae. Sugar cane.

From Santiago de las Vegas, Cuba. Cuttings presented by Gonzalo M. Fortun, Director, Estación Experimental Agronómica. Received December 7, 1925.

Cuba No. 653. A new seedling cane variety introduced for trial in Louisiana.

65452. SACCHARUM OFFICINARUM L. Poaceae. Sugar cane.

From Rio Piedras, Porto Rico. Cuttings presented by Francisco Lopez Dominguez, Director, Insular Experiment Station. Received December 8, 1925.

Variety *B-11569.* Introduced as a new and promising variety for testing in comparison with the standard varieties now in use.

65453 to 65464. ORYZA SATIVA L. Poaceae. Rice.

From Rangoon, India. Seeds presented by R. Watson, Deputy Director of Agriculture, Southern Circle. Received November 23, 1925. Notes by Mr. Watson.

65453. *Emata A 16-34.* Grown in Prome and the northern parts of the Tharrawaddy districts of Lower Burma, where the annual rainfall ranges from 47 to 67 inches. It is an early-maturing variety and is grown on an area of about 300,000 acres. This rice is very popular among the wealthier people of Burma, being classed as a fancy table variety. It does not mill well, and for this reason the bulk of the crop goes through a process of soaking and steaming before being put through the mill. The resulting product, known commercially as "Milchar," is exported to southern India.

65453 to 65464—Continued.

65454. *Letywezin B 15-1.* The districts of Tharrawaddy, Insein, and to some extent Pegu are the main tracts in which this variety is grown. The rainfall ranges from 87 to 100 inches annually. The grain is neither so slender nor so long as that of Emata [No. 65453], and it is translucent and hard. It matures early and is planted on high ground where water does not lie long enough for late-maturing varieties to mature successfully.

65455 to 65458. These varieties, commonly known in England as "Burma rice," cover probably the major area in Burma and are also the varieties exported in the largest quantity. They give both a heavy crop and a high outturn in milling, and keep well when stored after being milled. The grain is short, plump, translucent, hard, and polishes well. The main defect is the presence of red-skinned grains which detract from its appearance when milled. The annual rainfall in Lower Burma, where the largest areas under rice are situated, ranges from 100 to 130 inches.

65455. *Ngasein 8 C 14-8.*

65456. *Ngachima C 14-31.*

65457. *Ngasein 10 C 15-10.*

65458. *Early Ngasein C 19-26.*

65459. *Kamakyi Nedon D 17-88.* Like Ngasein, this variety covers a large portion of Lower Burma, but it is confined chiefly to the districts where the rainfall is heavy, requiring about 100 inches. It is generally late in maturing. The grain, which is short, plump, and soft, gives a high outturn in milling, but does not stand storage well. Locally it is preferred to Ngasein, being softer, more palatable, and easily digested. The main defect in this rice is the presence of awns which reduce the weight of a measure of grain.

65460. *Byat E 19-23.* This rice is grown chiefly in the district of Amherst, where the rainfall is from 150 to 200 inches. The grain is very large and broad, but the kernel is soft and opaque. This is one of the largest grained rices known. It matures late and requires a heavy rainfall, about 200 inches.

65461 and 65462. These two varieties supply the glutinous rice of Upper and Lower Burma. They are used chiefly for making sweet cakes and other confections and when boiled or steamed turn into a sticky mass and may be used for puddings.

65461. *Kaukhnyin Ngacheik* (black).

65462. *Kaukhnyin* (white).

65463. *Sabanet.* This is a subvariety of Medon, having a grayish black mark, which is highly esteemed for local consumption. The grains become very long and slender when cooked. This rice is usually late maturing, and like Medon it mills well, but has the same defect of awns.

65464. *Hoito.* Of Japanese origin.

65465. LALLEMANTIA IBERICA (Bieb.) Fisch. and Mey. Menthaceae.

From Paris, France. Seeds presented by Vilmorin-Andrieux & Co. Received November 27, 1925.

A blue-flowered, herbaceous perennial, native to semiarid regions in Asia Minor and Syria, whose seeds yield an oil said to be a high-grade drying oil.

For previous introduction, see No. 35594.

65466. CANAVALIA MARITIMA (Aubl.) Thouars. Fabaceae.

From Haina, Dominican Republic. Seeds presented by Dr. R. Ciferri, Director, Estacion Agronómica de Haina. Received November 28, 1925.

This plant is adapted perfectly to the seashore, in some places completely covering the sand, in others forming large, green islands of vegetation. It may be valuable for sandy areas with its stoloniferous roots and numerous root tubercles. (*Ciferri.*)

For previous introduction, see No. 43331.

65467. ARGANIA SPINOSA (L.) Skeels (*A. sideroxylon* Roem. and Schult.). Sapotaceae.

From Mogador, Morocco. Seeds presented by Louis Beachamp, Inspecteur-Adjoint des Eaux et Forêts. Received December 1, 1925.

The argan tree of western Morocco is very limited in its range, occurring only in that part of the African Continent. It grows to a large size and bears an abundance of light-yellow fruits somewhat resembling small plums in shape. Cattle and goats are said to feed upon these fruits, which are exceedingly acrid to the taste. The seeds are very thick walled and contain an oil which is used as a food and also for illuminating purposes. Apparently the tree is not injured by considerable frost and it may thrive wherever the hardy citrus grows. (*David Fairchild.*)

65468. PRUNUS SERRULATA Lindl. Amygdalaceae. **Flowering cherry.**

From Yokohama, Japan. Seeds purchased from the Yokohama Nursery Co. Received December 2, 1925.

Obtained for use as stock for horticultural varieties of flowering cherries.

65469. CYTISUS BATTANDIERI Maire. Fabaceae.

From Algiers, Algeria, Africa. Seeds presented by Dr. René Maire, University of Algiers. Received December 3, 1925.

As described by Dr. René Maire (Bulletin de la Station de Recherches Forestières du Nord de l'Afrique, vol. 1, p. 72), this is a handsome unarmed shrub, with large, rounded, silvery leaflets and elongated clusters of golden yellow flowers. It is native to northern Morocco, and, in the opinion of Doctor Maire, merits cultivation as an ornamental.

65470. PERSEA INDICA (L.) Spreng. Lauraceae.

From Orotava, Teneriffe, Canary Islands. Seeds presented by Juan Bolinaga, Directeur du Jardin de Acclimatacion. Received December 9, 1925.

A handsome tree, with oblong acute leaves 3 to 8 inches long and small white flowers in panicles 3 to 6 inches long. Native to the Canary Islands, Madeira, and the Azores.

For previous introduction, see No. 65031.

65471 to 65476. BERBERIS spp. Berberidaceae. **Barberry.**

From Nogent sur Vernisson, Loiret, France. Seeds presented by L. Pardé, Directeur des Ecoles Forestières des Barres. Received December 3, 1925.

65471. BERBERIS CANADENSIS Mill.

Received as *Berberis angulizans*, which is now referred to *B. canadensis*. French-grown seeds of the common barberry of the eastern United States.

For previous introduction, see No. 49055.

65471 to 65476—Continued.

65472. BERBERIS DICTYOPHYLLA Franch.

Variety *albicaulis*. A form with the lower surface of the leaves intensely white and the young shoots very glaucous. The typical form is a shrub 6 feet high, native to western China, with oblong-oval, sometimes spiny leaves, pale-yellow solitary flowers, and ovoid red berries.

65473. BERBERIS MORRISONENSIS Hayata.

A barberry closely resembling *Berberis dictyophylla;* as described by B. Hayata (Journal of the College of Science, Imperial University, Tokyo, vol. 30, p. 25), it is an erect, densely branched shrub, with three-parted spines and fascicled leathery oval leaves. Unlike *B. dictyophylla*, the berries are in fascicles and are more nearly round.

65474. BERBERIS UMBELLATA Wall.

A hardy subevergreen Himalayan shrub about 3 feet high, with narrow leaves slightly glaucous beneath and umbellike racemes of yellow flowers.

For previous introduction, see No. 53645.

65475. BERBERIS sp.

M. V. 4775.

65476. BERBERIS sp.

Farrer 355.

65477 and 65478. ROSA spp. Rosaceae. **Rose.**

From Nogent sur Vernisson, Loiret, France. Seeds presented by L. Pardé, Directeur des Ecoles Forestières des Barres. Received December 3, 1925.

65477. ROSA MULTIFLORA Thunb.

5907 Semis 5124 M. V. Sent from China by M. Levaille, in 1907, through P. Cavalerie. (*Letter of David Fairchild, January 31, 1925.*)

Plants received under No. 65438.

65478. ROSA ROXBURGHII × RUGOSA.

Plants received under No. 65437.

65479. AGROSTIS STOLONIFERA L. Poaceae. **Creeping bent grass.**

From Hamburg, Germany. Seeds presented by F. Splechtner, Botanisches Staatsinstitut. Received December 3, 1925.

Locally grown seeds.

65480 to 65516.

From Manchuria. Seeds collected by P. H. Dorsett, agricultural explorer, Bureau of Plant Industry. Received November 11, 1925.

65480. ACER MANDSHURICUM Maxim. Aceraceae. **Maple.**

No. 4155. Mefun. September 11, 1925. A Manchurian maple found on the mountain side.

65481. ACER TEGMENTOSUM Maxim. Aceraceae. **Maple.**

No. 4154. Mefun. September 11, 1925. An interesting green-barked maple with seeds in long racemes, found on the mountain side.

65482. ACONITUM sp. Ranunculaceae. **Aconite.**

No. 4210. Mefun. September 13, 1925. An attractive blue-flowered vine of a peculiar shape.

65483. ACTAEA SPICATA L. Ranunculaceae.

No. 4166. Mefun. September 11, 1925. A fairly high-growing herbaceous plant with a long spike of purple or black fruits, resembling that of the pokeberry (*Phytolacca decandra*).

65480 to 65516—Continued.

65484. ACTINIDIA ARGUTA (Sieb. and Zucc.) Planch. Dilleniaceae.

No. 4156. Mefun. September 11, 1925. A variety from the mountain side, with larger and better flavored fruits than No. 4086 [No. 65177]. Not only is it a good ornamental but also a good-fruiting vine, as the vine from which we collected the fruits was bearing a heavy crop. The fruits are eaten fresh or made into jam.

For previous introduction, see No. 45241.

65485. ACTINIDIA POLYGAMA (Sieb. and Zucc.) Planch. Dilleniaceae.

No. 4157. Mefun. September 11, 1925. The berries, orange-yellow when ripe, are about the same diameter as those of *Actinidia arguta*, but longer and more pointed. The plant is a vigorous grower.

65486. ARALIA ELATA (Miquel) Seem. Araliaceae.

No. 4205. Mefun. September 12, 1925. The plumlike seeds and the fruiting sprays containing small, black seeds make this a very handsome variety.

For previous introduction, see No. 44378.

65487. BETULA COSTATA Trautv. Betulaceae. **Birch.**

No. 4209. Mefun. September 13, 1925. A brown or yellow birch growing on the mountain side. We saw trees 2 to 3 feet in diameter and 75 to 100 feet in height.

65488. CONVALLARIA MAJALIS L. Convallariaceae. **Lily of the valley.**

No. 4141. Mefun. September 11, 1925. A large-flowered, wild Manchurian variety which is abundant on the mountain sides and foothills.

65489. EUONYMUS ALATUS SUBTRIFLORUS (Blume) Franch. and Sav. Celastraceae.

No. 4206. Mefun. September 12, 1925. A small shrub which has bright-red fruits with an outer coating of creamy white. It makes a very handsome appearance with its prettily colored pink and red foliage against a background of green.

65490. EUONYMUS MACROPTERUS Rupr. Celastraceae.

No. 4211. Mefun. September 13, 1925. The handsomest euonymus I have seen; the pink and red fruits resemble miniature Japanese lanterns. The square receptacles are sometimes an inch and a half in diameter.

65491. EUONYMUS sp. Celastraceae.

No. 4247. Harbin. September 18, 1925. A small-leaved variety found in the Russian cemetery. The red or pink-coated seeds are in pendulous, pink fruits. This is an attractive and really good variety, but not as fine as No. 4211 [No. 65490].

65492. IRIS sp. Iridaceae.

No. 4123. New Russian cemetery, Harbin. September 3, 1925. A rather tall-growing, lavender-flowered variety which is quite common in this section.

65493. LESPEDEZA DAURICA (Laxm.) Schindler. Fabaceae.

No. 3842. Harbin. September 15, 1925. A tall plant with white pealike flowers.

65494. LESPEDEZA BICOLOR Turcz. Fabaceae.

No. 4218. Mefun. September 13, 1925. A purple or red-flowered shrubby variety, about 6 feet high, growing near the tops of high mountains.

65480 to 65516—Continued.

65495. LILIUM sp. Liliaceae. **Lily.**

No. 4143. Mefun. September 13, 1925. Plants growing on the western and northwestern slopes of mountains. The leaves of this variety are in whorls, and there are one to five or more seed pods to the plant.

65496. LILIUM sp. Liliaceae. **Lily.**

No. 4144. Mefun. September 13, 1925. From plants growing at the top of one of the highest mountains. The leaves are similar to those of *Lilium longiflorum eximium*.

65497. LONICERA CHRYSANTHA Turcz. Caprifoliaceae. **Coralline honeysuckle.**

No. 4203. Mefun. September 12, 1925. A very attractive shrubby honeysuckle bearing large red berries.

For previous introduction, see No. 42315.

65498. LYCHNIS sp. Silenaceae.

No. 4212. Mefun. September 13, 1925. A bright red-flowered herbaceous plant.

65499. MALUS sp. Malaceae. **Crab apple.**

No. 4228. En route from Mefun to Harbin, at a station east of Ertsingtientze. September 14, 1925. A small red-fruited variety.

65500. ACTINOSTEMMA LORATUM Maxim. Cucurbitaceae.

No. 4213. Mefun. September 13, 1925. A very interesting small plant found climbing over plants on the mountain side.

65501. PINUS KORAIENSIS Sieb. and Zucc. Pinaceae. **Pine.**

No. 4219. Mefun. September 13, 1925. Known here as Manchurian cedar, but to us it is the five-needle pine. The large trees grow near the tops of the mountains, while the smaller trees are found at lower levels.

For previous introduction, see No. 35615.

65502. RHAMNUS DAVURICA Pall. Rhamnaceae.

No. 4202. Mefun. September 12, 1925. The tree from which this material was obtained was 15 feet high.

For previous introduction, see No. 62230.

65503. RHODODENDRON DAURICUM L. Ericaceae.

No. 4215. Mefun. September 13, 1925. Obtained from the top of a high mountain.

For previous introduction, see No. 38413.

65504. RIBES MANSHURICUM (Maxim.) Komarow. Grossulariaceae. **Currant.**

No. 4159. Mefun. September 13, 1925. A fine red-fruited variety found on the mountain side. The fruits, produced in bunches of good size, are large and of good quality.

For previous introduction, see No. 40460.

65505. ROSA sp. Rosaceae. **Rose.**

No. 4164. Mefun. September 11, 1925. These hips are from the mountain side.

65506. SAMBUCUS RACEMOSA L. Caprifoliaceae. **Red elder.**

No. 4162. Mefun. September 11, 1925. A variety, producing small red fruits, found on the mountain side.

For previous introduction, see No. 36744.

65507 and 65508. SOJA MAX (L.) Piper (*Glycine hispida* Maxim.). Fabaceae. **Soy bean.**

65480 to 65516—Continued.

65507. No. 4151. Mefun. September 11, 1925. A wild soy bean growing abundantly over wide areas. It varies considerably in the size of the leaves and perhaps in other ways.

65508. No. 4231. Ertsingtientze. September 16, 1925. A wild soy bean from the mountain side.

65509. SYRINGA AMURENSIS Rupr. Oleaceae. **Lilac.**

No. 4230. Harbin. September 15, 1925. Obtained from plants in the new Russian cemetery. We do not know whether this lilac is a white, purple, or lavender-flowered variety.

For previous introduction, see No. 57344.

65510. VAGNERA sp. Convallariaceae.

No. 4165. Mefun. September 11, 1925. A low-growing herbaceous plant with small bright-red fruits. It bears a spray of small, white fragrant flowers.

65511. VIBURNUM BUREJAETICUM Regel and Herd. Caprifoliaceae.

No. 4204. Mefun. September 12, 1925. An attractive shrub with dense clusters of red oblong berries which turn black when fully ripe.

For previous introduction, see No. 58807.

65512. VIBURNUM SARGENTI Koehne. Caprifoliaceae.

No. 4201. Mefun. September 12, 1925. A strong-growing shrub up to 12 or 15 feet high, with large clusters of bright-red fruits which are very showy. We do not recall having seen the flowers.

For previous introduction, see No. 43734.

65513. VICIA sp. Fabaceae. **Vetch.**

No. 3840. Harbin. A common leguminous plant found all over the cemetery and in many places in the country where we have been.

65514. VICIA sp. Fabaceae. **Vetch.**

No. 4152. Mefun. September 11, 1925. A small-leaved legume growing over brush 3 to 4 feet high, with pods like peas.

65515. VITIS AMURENSIS Rupr. Vitaceae. **Amur grape.**

No. 4153. Mefun. September 11, 1925. A local wild variety which is the best we have ever seen. The vine is a very strong grower; the bunches are large and some of them very compact. The deep-blue or black grapes are of good size, but contain large seeds and very little flesh, though there is considerable well-flavored juice which is made into wine.

For previous introduction, see No. 57367.

65516. ZEA MAYS L. Poaceae. **Corn.**

No. 4158. Mefun. September 11, 1925. A yellow dent corn from a field on a mountain side near the railway station.

65517 to 65552.

From Manchuria. Collected by P. H. Dorsett, agricultural explorer, Bureau of Plant Industry. Received November, 1925.

65517. AMPELOPSIS sp. Vitaceae.

No. 4279. From the Hai Yuan Kuan Temple (Sea Cloud Temple) which is commonly known as the Ta Lu Hua Temple, located in the Taluhua Mountains. September 24, 1925. Seeds of a hard-wooded vine with greenish yellow fruits. This might prove useful as an ornamental.

65517 to 65552—Continued.

65518. AMYGDALUS PERSICA L. (*Prunus persica* Stokes). Amygdalaceae. **Peach.**

No. 4276. Seeds from fruits obtained at the South Temple compound of the Ta Lu Hua Temple. September 24, 1925. Called *mao tao* (hairy peach) because of the fuzz on the fruit. A small, round, green peach which is a freestone; the flesh is greenish white and the quality very good.

65519. CHAETOCHLOA ITALICA (L.) Scribn. (*Setaria italica* Beauv.). Poaceae. **Millet.**

No. 4268. September 23, 1925. A few seed heads of an ordinary millet obtained near Koupangtze.

65520. CORYLUS SIEBOLDIANA MANDSHURICA (Maxim.) C. Schneid. Betulaceae. **Hazelnut.**

No. 4454. Harbin. October 9, 1925. Seeds obtained at the market in Fuchia Tien, the Chinese section.

For previous introduction, see No. 36727.

65521. DIOSCOREA sp. Dioscoreaceae. **Yam.**

No. 4455. October 11, 1925. Air tubers of the yam grown by the Chinese gardeners here at Harbin and vicinity.

65522. DOLICHOS LABLAB L. Fabaceae. **Hyacinth bean.**

No. 4272. These seeds of *yang chiao tou* (goat-horn bean) were obtained at the South Temple compound of the Ta Lu Hua Temple, September 24, 1925. The green pods are used as a fresh vegetable or are sliced up and made into pickles.

65523. FRAXINUS sp. Oleaceae. **Ash**

No. 4277. September 24, 1925. Seeds from small trees along the trail between the Central Temple compound and the East Temple compound.

65524. GOSSYPIUM NANKING Meyen. Malvaceae. **Cotton.**

No. 4270. September 23, 1925. Seeds gathered en route from Koupangtze to Kuangming.

For previous introduction, see No. 62595.

65525. HEMEROCALLIS sp. Liliaceae.

No. 4280. Ta Lu Hua Temple. Seeds collected September 24, 1925.

65526. IRIS DICHOTOMA Pall. Iridaceae.

No. 4275. September 24, 1925. Seeds obtained along the trail from the South Temple compound to the Central Temple compound, about 1,500 to 2,000 feet altitude. Perhaps this is the attractive purple iris seen in other places, but it may prove to be a lavender one.

For previous introduction, see No. 62178.

65527. JUGLANS MANDSHURICA Maxim. Juglandaceae.

No. 4441. September 30, 1925. *Shan ho t'ao* (wild mountain walnut). Seeds were obtained at Hsiaoliu.

For previous introduction, see No. 62611.

65528. LESPEDEZA sp. Fabaceae.

No. 4453. Harbin. October 9, 1925. Seeds of a rather tall-growing plant with numerous very attractive pea-shaped purple flowers, obtained in the new Russian cemetery. Some of the plants are very pendulous.

65529. LILIUM sp. Liliaceae. **Lily.**

No. 4274. Seeds collected along the trail from the South Temple compound to the Central compound, September 24, 1925.

65517 to 65552—Continued.

65530. MAACKIA AMURENSIS Rupr. Fabaceae.

No. 4438. A variety with rather inconspicuous white flowers. These seeds were obtained at Hsiaoliu, September 30, 1925.

For previous introduction, see No. 57301.

65531. MALUS sp. Malaceae. **Crab apple.**

No. 4350. Ertsingtientze. Seeds collected September 25, 1925. A wild Chinese crab apple from the mountains. This is a fine ornamental and may prove valuable as a stock and in connection with plant-breeding experiments.

65532. CYNANCHUM AURICULATUM Royle. Asclepiadaceae.

No. 3841. Harbin. September 15, 1925. Seeds of a large-leaved, pink-flowered, fragrant vine. It has a milky juice, and the seed pod is similar to that of the milkweed.

65533 to 65535. ORYZA SATIVA L. Poaceae. **Rice.**

65533. No. 4348. A few seed heads of an upland rice obtained en route from the Ta Lu Hua Temple to Koupangtze, September 25, 1925.

65534. No. 4580. A water rice, bearded, with a white hull, grown a few miles west of Harbin in the Sungari River bottom.

65535. No. 4581. Harbin. October 13, 1925. Seed heads of a red-hulled bearded water rice which is called *pukado* (?) and which is supposed to be a Japanese variety.

65536. PHYSALIS ALKEKENGI L. Solanaceae.

No. 4439. Purchased en route from Hsiaoliu to Harbin. Fruits orange scarlet, of fine quality.

65537 to 65542. PYRUS spp. Malaceae. **Pear.**

65537. PYRUS sp.

No. 4253. Koupangtze. September 22, 1925. Seeds of the *pa li hsiang li* (eight-li fragrant pear). F. C. Reimer, Talent, Oreg., says that this is the most important Chinese pear.

65538. PYRUS sp.

No. 4254. Koupangtze. September 22, 1925. Seeds of the *hsiang shui li* (fragrant water pear).

65539. PYRUS sp.

No. 4255. Seeds of a variety, which, according to Professor Reimer, is one of the four most important Chinese pears for stock. Obtained at the Ta Lu Hua Temple, September 22, 1925.

65540. PYRUS sp.

No. 4269. September 24, 1925. *Tu li* (wild pear). Seeds obtained from trees growing near the Ta Lu Hua Temple. The natives use this pear as stock for all the cultivated varieties.

65541. PYRUS sp.

No. 4416. September 26, 1925. *Chien pa li* (pointed bottom pear). Seeds purchased at Hsiungyaoching.

65542. PYRUS sp.

No. 4417. Hsiungyaoching. September 26, 1925. Seeds of the *man yuan hsiang li* (fragrant-in-the-whole-orchard pear), used in the manufacture of brandy.

65543. RICINUS COMMUNIS L. Euphorbiaceae. **Castor bean.**

No. 4582. Harbin. October 14, 1925. Seeds of a variety free from awns on the seed pods, obtained from the botanical garden of the Manchurian Agricultural Research Society.

65517 to 65552—Continued.

65544 and 65545. SALIX spp. Salicaceae. **Willow.**

Cuttings from the Sungari River bottom, October 15, 1925. These two forms should make good basket stock, as the growth is long and slender and about 8 feet in length. These willows are said to be cut off every year for fuel.

65544. SALIX sp.

No. 4590. A yellow-bark willow.

65545. SALIX sp.

No. 4591. A red-bark willow.

65546 to 65549. SOJA MAX (L.) Piper (*Glycine hispida* Maxim.). Fabaceae. **Soy bean.**

65546. No. 4273. Seeds of a large-fruited, green soy bean, obtained at the Ta Lu Hua Temple, September 24, 1925.

65547. No. 4437. September 30, 1925. Wild soy bean. These seeds were obtained by Peter Liu at Hsiaoliu.

65548. No. 4448. October 5, 1925. A wild soy bean presented by B. W. Skvortzow. These seeds were obtained in the Sungari River bottom.

65549. No. 4583. October 14 and 15, 1925. Seeds of a wild soy bean from the Sungari River bottom.

65550. SPIRAEA sp. Rosaceae. **Spirea.**

No. 4278. September 24, 1925. Seeds from plants growing near the Ta Lu Hua Temple. Apparently the plants had bloomed profusely. This may prove valuable as an ornamental.

65551. TILIA AMURENSIS Rupr. Tiliaceae. **Linden.**

No. 4271. Seeds of a small-leaved Manchurian linden growing along the trail from the South Temple compound to the Central Temple compound.

65552. TRIFOLIUM REPENS L. Fabaceae. **White clover.**

No. 4440. September 30, 1925. Seeds of a white clover obtained at Hsiaoliu, along the railroad. This variety is apparently an introduction.

65553. EUCALYPTUS LEHMANNI (Schauer) Preiss. Myrtaceae.

From Hobart, Tasmania. Seeds presented by L. A. Evans, Secretary of Agriculture, Agricultural and Stock Department. Received November 27, 1925.

In a note published under No. 28849, Alwin Berger, of La Mortola, Ventimiglia, Italy, states that this is a large shrub or small tree with rough reddish bark peeling off in irregular sheets. The greenish yellow flowers open from July to September. It is native to Western Australia, and Mr. Berger believes it to be a valuable ornamental.

65554 to 65558.

From Kharkof, Ukrainia, Russia. Seeds presented by L. P. Bordakoff, All-Ukrainian Seed-Producing Association, through F. A. Coffman, Bureau of Plant Industry. Received November 30, 1925. Notes by Mr. Bordakoff.

65554. AVENA SATIVA L. Poaceae. **Oats.**

Schatilovsci (*mutica*). From the Schatilov Experiment Station.

65555 to 65557. TRITICUM AESTIVUM L. (*T. vulgare* Vill.). Poaceae. **Common wheat.**

Varieties of spring wheat from the Saratov Experiment Station.

65555. No. 62 (*lutescens*). For humid dry regions.

65554 to 65558—Continued.

65556. No. 604 (*albidum*). To be used in dry regions.

65557. No. 721 (*albidum*). For dry regions.

65558. TRITICUM DURUM Desf. Poaceae. **Durum wheat.**

No. 05 (*hordeiforme*). From the Ekaterinoslav Experiment Station. Suited to dry regions.

65559. TRITICUM TURGIDUM L. Poaceae. Poulard wheat.

From Vannes, Brittany, France. Seeds collected by John Ashton, Columbia, Mo., and presented through C. E. Leighty, Bureau of Plant Industry. Received November 30, 1925.

This variety, collected in June, 1925, is said to yield a very heavy crop. It is not yet known by seedsmen. (*Ashton.*)

65560 to 65564.

From Italy. Seeds collected by John Ashton, Columbia, Mo., and presented through C. E. Leighty, Bureau of Plant Industry. Received November 30, 1925. Notes by Mr. Ashton.

65560. ORYZA SATIVA L. Poaceae. **Rice.**

No. 5. An excellent variety known as *Riso Maratella* (Maratella rice), collected in Pavia, Lombardy, May 1, 1925. It is a little earlier than other varieties found there.

65561. TRITICUM AESTIVUM L. (*T. vulgare* Vill.). Poaceae. **Common wheat.**

No. 1. Var. *Gentil Rosso*. From Asti.

65562. TRITICUM TURGIDUM L. Poaceae. **Poulard wheat.**

No. 2. Var. *Civitella*. From Asti.

65563. TRITICUM sp. Poaceae. **Wheat.**

No. 3. Sometimes called *Padorano* but more commonly known as *Cologna Veneto*. From Asti.

65564. TRITICUM sp. Poaceae. **Wheat.**

No. 4. *Cologna Veneto*. From Pavia, Lombardy. May, 1925.

65565 to 65572. TRITICUM AESTIVUM L. (*T. vulgare* Vill.). Poaceae. Common wheat.

From Kharkof, Ukrainia, Russia. Seeds presented by L. P. Bordakoff, All-Ukrainian Seed-Producing Association, through F. A. Coffman, Bureau of Plant Industry. Received November 30, 1925. Notes by Mr. Bordakoff.

65565 to 65572. Varieties of winter wheat.

65565. No. 117. (*ferrugineum*). From the Kharkof Experiment Station. For dry regions.

65566. *Hour Councours* (*ferrugineum*). For humid regions.

65567. *Triumf Podolian* (*ferrugineum*). For humid regions.

65568. *Kooperatorca* (*erythrospermum*). From the Odessa Experiment Station. This variety, which has very good baking qualities, is especially suited for dry regions.

65569. *Semka* (*erythrospermum*). From the Odessa Experiment Station. For humid regions.

65570. *Ukrainka* (*erythrospermum*). From the Mironof Experiment Station. For humid regions.

65571. No. 120 (*milturum*). From the Kharkof Experiment Station. For dry regions.

65565 to 65572—Continued.

65572. No. 0274. "Girca" (*milturum*). From the Odessa Experiment Station. For dry regions.

65573. GOSSYPIUM HIRSUTUM L. Malvaceae. Cotton.

From Pretoria, Transvaal, Union of South Africa. Seeds presented by C. P. Lounsbury, chief, division of entomology, Department of Agriculture. Received December 1, 1925.

Cambodia. Seeds originally from Mr. Hilson, cotton specialist, Coimbatore, India.

65574. ORYZA SATIVA L. Poaceae. Rice.

From Taihoku, Formosa, Japan. Seeds presented by Dr. Kintaro Oshima, Director, Government Research Institute. Received December 4, 1925.

Commonly known as "toa tsu" in Taiwan. (*Oshima.*)

65575. DIPLORHYNCHUS MOSSAMBICENSIS Benth. Apocynaceae.

From Tjolotjo, Southern Rhodesia. Seeds received through H. L. Shantz, Bureau of Plant Industry. Received December 7, 1925.

This variety grows in dry regions and becomes a rather handsome tree. (*Shantz.*)

In a note published under No. 48248, J. Burtt-Davy states that this is a small Rhodesian tree yielding a rubber in quantity, which, however, is of doubtful quality.

65576. EUCALYPTUS URNIGERA Hook. f. Myrtaceae.

From Hobart, Tasmania. Seeds presented by L. A. Evans, Secretary of Agriculture, Agricultural and Stock Department. Received December 4, 1925.

A tall shapely tree, native to the mountains of Tasmania, and said to be one of the hardiest of the eucalypts. The pale-yellow flowers, in clusters of three, are followed by urn-shaped capsules.

For previous introduction, see No. 50210.

65577. GOSSYPIUM HIRSUTUM L. Malvaceae. Cotton.

From Manila, Philippine Islands. Seeds presented by S. Youngberg, acting director, Bureau of Agriculture. Received December 4, 1925.

A white variety of cotton grown in the Philippines.

65578 to 65583. DIOSPYROS KAKI L. f. Diospyraceae. Kaki.

From Canton, China. Bud wood collected by F. A. McClure, agricultural explorer, Bureau of Plant Industry. Received December 15, 1925. Notes by Mr. McClure.

Numbers 65578 to 65581 (October 23, 1925) are from the village of Pakshan, Honam Island, about 6 miles east of the Canton Christian College.

65578. No. 173. *Tuai paat sin tsz.* A few-seeded variety with very attractive bright-red fruits which are globular, medium sized, and of good flavor, obtained from Mok Fai T'ong. The fruits are usually ripened by the banyan-leaf method. The season extends from the last of August until the early part of October. The shipping quality of this variety is not quite so good as that of No. 174 [No. 65579].

65579. No. 174. *Kai sam tsz.* Obtained from a tree belonging to Mok Hang. This is a seedless strain of the small-fruited variet

65578 to 65583—Continued.

known as "chicken-heart persimmon." There seem to be a number of subvarieties falling under this group, varying somewhat in size, shape of fruit, and in number of seeds. The fruits are oblong, sometimes nearly square in cross section, and with a slight, sharp projection at the apex. The season for this variety or group extends from the last of August to the last of October, the longest of any variety known to me. As with other varieties of persimmons here, this variety is harvested when the skin has turned yellow, but while the flesh is still firm. The fruits are ripened by what is known as the banyan-leaf method; they are kept in earthenware jars between layers of fresh banyan leaves for two to four days to remove the pucker. The flavor is excellent, suggesting the rich, sweet, aromatic flavor of well-ripened fruits of *Diospyros virginiana*. This is one of the most prolific varieties cultivated here.

65580. No. 175. *Taai tsz*. From a tree with unusually large leaves, belonging to Mok Pan. A large, red-fruited, seedless variety of excellent quality and flavor. The season is from late August until early October.

65581. No. 176. *Sai paat sin tsz*. A rather small red-fruited variety with few seeds, obtained from Mok Oo. The fruits are larger and more nearly globose than those of No. 174 [No. 65579]. This variety seems to be distinguished from No. 173 [No. 65578] simply by the smaller average size of its leaves and fruits.

65582. No. 177. Toichung, Honam Island. October 26, 1925. *Shui tsz, Ma t'ai yeung tsz*. Obtained from Chue Tung. The fruits are 4 to 5 centimeters in diameter, globose, light yellow, rather seedy, and have firm flesh.

65583. No. 178. Toichung, Honam Island. October 26, 1925. *Taai shui tsz*. From a tree belonging to Chue Tung. A grafted tree bearing large, nearly seedless fruits with firm, mellow flesh, which should be ripened by the limewater method.

65584 and 65585.

From Santa Cruz, Palma, Canary Islands. Seeds purchased by David Fairchild, agricultural explorer, Bureau of Plant Industry, Allison V. Armour expedition, through Aboucher & Co. Received December 7, 1925.

65584. CYTISUS PALMENSIS (Christ) Hutchinson. Fabaceae. **Tagasaste.**

A stout leguminous shrub, up to 12 feet high, of rather lax habit, with long slender branches and green trifoliolate leaves with silky pubescent lower surfaces. The white flowers are in axillary clusters among the branches. It is native to the Canary Islands, where it is considered an excellent drought-resistant forage plant.

For previous introduction, see No. 28827.

65585. PSORALEA RITUMINOSA L. Fabaceae.

The *Tedera* is a herbaceous perennial about 3 feet high which is found everywhere along the roads and trails throughout the barrancos of the islands and on some of the terraces, where the soil is too shallow and dry for alfalfa; it is cultivated for its hay. It is said to be a splendid milk producer. (*Fairchild.*)

For previous introduction, see No. 64970.

65586. MONTEZUMA SPECIOSISSIMA DC. Bombacaceae.

From San Juan, Porto Rico. Seeds presented by C. A. Figueroa, assistant agricultural adviser, Department of Agriculture and Labor. Received December 3, 1925.

A Porto Rican tree, which, as described by N. L. Britton and Percy Wilson (Scientific Survey of Porto Rico, vol. 5, p. 565), is up to 50 feet in height with a trunk sometimes a foot in diameter. The papery, rounded-oval leaves are 2 to 8 inches long, and the tree is commonly planted for shade in Porto Rico because of its showy flowers, which are deep pink shading to crimson within, with yellow anthers. The hard, valuable, durable wood, brown in color, is used for cabinetwork and for general construction.

65587. MEIBOMIA GANGETICA (L.) Kuntze (*Desmodium gangeticum* DC.). Fabaceae.

From Dehra Dun, United Provinces, India. Seeds presented by R. N. Parker, forest botanist. Received December 15, 1925.

As described by J. G. Baker (Hooker, Flora of British India, vol. 2, p. 108), this is a woody herbaceous plant, more or less erect and 3 to 4 feet high, with oblong leaflets 3 to 6 inches long and copious lateral and terminal flower clusters. Native to the Himalayas, and distributed throughout the East Indies and tropical Africa. Introduced for trial as a forage plant and for use in soil improvement in the Southern States.

For previous introduction, see No. 30874.

65588 to 65590.

From Kew, Surrey, England. Seeds presented by Dr. S. D. Cotton, keeper of the herbarium, Royal Botanic Gardens. Received December 15, 1925. Notes by Doctor Cotton.

65588 and 65589. BETA VULGARIS L. Chenopodiaceae. **Wild beet.**

65588. Collected in North Somerset by I. M. Roper.

65589. Collected in Lymington by Miss S. J. Chandler.

65590. BRASSICA OLERACEA L. Brassicaceae. **Wild cabbage.**

Collected in a remote part of Dorsetshire.

65591 to 65610. BERBERIS spp. Berberidaceae. Barberry.

From Paris, France. Seeds presented by Vilmorin-Andrieux & Co. Received December 15, 1925.

65591. BERBERIS ACUMINATA Franch.

A Chinese barberry, which, as described by W. J. Bean (Trees and Shrubs Hardy in the British Isles, vol. 1, p. 234), is an evergreen shrub of open spreading habit, with bright-red young growth and stout three-parted spines 3 to 6 inches long. The brownish yellow flowers, three-fourths of an inch broad, are in clusters of four to eight in the axils of the previous year's shoots. The oblong, black fruits are half an inch long. Native to central China.

For previous introduction, see No. 58088.

65592. BERBERIS AGGREGATA PRATTII C. Schneid.

As described in Curtis's Botanical Magazine (pl. 8549), this is a hardy shrub 6 to 10 feet high, with slender three-parted spines, oval leaves,

65591 to 65610—Continued.

narrow panicles of yellow flowers, and egg-shaped salmon-red fruits about one-fourth of an inch long. It is a native of western China and grows very freely under cultivation at Kew, England.

For previous introduction, see No. 58136.

65593. BERBERIS CANADENSIS Mill.

Received as *Berberis angulizans*, which is now referred to *B. canadensis*. This is the common barberry of the eastern United States, and seeds are now introduced for the use of horticulturists studying the genus Berberis.

For previous introduction, see No. 49055.

65594. BERBERIS CANDIDULA C. Schneid.

A prostrate evergreen shrub with yellowish branchlets, elliptic leaves, white beneath, and violet-black fruits. Native to central China.

65595. BERBERIS DICTYOPHYLLA Franch.

A graceful bushy barberry, about 6 feet high, native to southwestern China, with small tufts of oblong leaves, glaucous beneath, solitary yellow flowers, and ovoid red berries.

For previous introduction, see No. 59003.

65596. BERBERIS DIELSIANA Fedde.

A spreading, loosely branched, Chinese shrub often 10 feet high, with elliptic leaves that are whitish beneath. The beauty of the red fruits is accentuated by the bronzy color of the leaves in the fall.

For previous introduction, see No. 58103.

65597. BERBERIS FRANCISCI-FERDINANDI C. Schneid.

For previous introduction and description, see No. 65230.

65598. BERBERIS GAGNEPAINI C. Schneid.

An evergreen Chinese shrub 3 to 6 feet high, with leathery leaves, spiny on the margins, and delicate yellow flowers on red pedicels. The ellipsoid berries are dark purple.

For previous introduction, see No. 61974.

65599. BERBERIS JULIANAE C. Schneid.

A shrubby barberry, up to 7 feet high, native to western China. It has thick three-cleft spines about 1½ inches long, narrowly oval leathery leaves, and small, yellow flowers.

For previous introduction, see No. 63336.

65600. BERBERIS LEVIS Franch.

An evergreen shrub up to 5 feet high, usually with long spines, with narrow-linear leaves, and small purplish fruits. Native to western China.

For previous introduction, see No. 34553.

65601. BERBERIS MORRISONENSIS Hayata.

For previous introduction and description, see No. 65473.

65602. BERBERIS RUBROSTILLA Hort.

"An elegant seedling barberry of unrecorded parentage, but probably a hybrid between *Berberis wilsonae* and *B. concinna*. It has the habit of the latter, but has large, pendent, rich coral-red fruits. It is a very useful addition to our fruiting shrubs." (*Gardeners' Magazine, vol. 59, p. 449.*)

For previous introduction, see No. 47300.

65591 to 65610—Continued.

65603. BERBERIS SUBCAULIALATA C. Schneid.

A thickly branched shrub from Tibet, up to 4½ feet high, with spines up to an inch in length, thick lance-shaped leaves about an inch long, and globular, reddish yellow fruits one-fourth of an inch in diameter.

For previous introduction, see No. 58143.

65604. BERBERIS WILSONAE Hemsl.

A handsome, sometimes partially evergreen shrub, 2 to 4 feet high, with abundant roundish coral-red berries, somewhat translucent. The leaves assume brilliant tints in the fall. Native to western China.

For previous introduction, see No. 60419.

65605. BERBERIS sp.

Farrer No. 355.

65606. BERBERIS sp.

M. V. No. 2768.

65607. BERBERIS sp.

Vilmorin No. 117/15.

65608. BERBERIS sp.

Wilson No. 1180.

65609. BERBERIS sp.

M. V. No. 7509.

65610. BERBERIS sp.

Labeled *Berberis morrisonensis* (?) No. 10912 Wilson; fruits not like *B. morrisonensis*.

65611. SENECIO GRISEBACHII Baker. Asteraceae.

From Orotava, Teneriffe, Canary Islands. Seeds presented by Juan Bolinaga, Directeur du Jardin de Acclimatacion. Received December 9, 1925.

A Brazilian composite which, as described by Martius (Flora Brasiliensis, vol. 6, pt. 3, p. 313), is either a biennial or perennial herb, with sessile linear leaves 3 to 4 inches long, white pubescent beneath, and lax panicles of small yellow flowers.

65612 to 65684.

From Manchuria. Collected by P. H. Dorsett, agricultural explorer, Bureau of Plant Industry. Received December, 1925.

65612. ACTINIDIA KOLOMIKTA (Maxim.) Rupr. Dilleniaceae.

No. 4576. Ertsingtientze. October 26, 1925. Cuttings of an extremely ornamental vine with many of the leaves blotched white.

For previous introduction, see No. 58153.

65613. AMETHYSTEA CAERULEA L. Menthaceae.

No. 4568. October 25, 1925. Seeds presented by L. B. Smearnoff, of Echo. Seeds eaten by birds. A fragrant hardy annual about a foot high.

65614. AMPELOPSIS BREVIPEDUNCULATA (Maxim.) Koehne. Vitaceae.

No. 4633. Harbin. October 30, 1925. Cuttings of a variety producing yellowish green fruit, from the Russian cemetery. Seeds were sent in under No. 3723 [No. 65178].

For previous introduction, see No. 63332.

65612 to 65684—Continued.

65615. ASPARAGUS sp. Convallariaceae.

No. 4573. Ertsingtientze. October 26, 1925. Seeds of a wild asparagus found on the mountain side. This may prove useful as an ornamental or in connection with breeding experiments.

65616 and 65617. BETULA spp. Betulaceae. **Birch**

October 25, 1925. Seeds from trees growing in exposed places in the grounds of L. B. Smearnoff, of Echo.

65616. BETULA sp.

No. 4569. A white-barked birch.

65617. BETULA sp.

No. 4570. A yellow-barked birch.

65618. CANNABIS SATIVA L. Moraceae. **Hemp.**

No. 4571. October 25, 1925. Seeds obtained from L. B. Smearnoff, of Echo. This is a large-seeded hemp with a stronger odor than the average. The birds, especially the sparrows, are fond of the seeds.

65619 and 65620. CASTANEA MOLLISSIMA Blume. Fagaceae.

October 29, 1925. Scions obtained by J. H. Dorsett at the Fa Hua Ssu Temple, near Peking.

65619. No. 4687. *Ta chao li tze* (tiger-paw chestnut). This chestnut is about 1 inch in size and ripens in September.

65620. No. 4688. *Pai lu li tze* (white dew chestnut). The diameter of this variety is less than 1 inch; it ripens in early September.

65621 and 65622. CORYLUS HETEROPHYLLA Fisch. Betulaceae. **Hazelnut.**

Ertsingtientze. October 25, 1925. The Manchurian hazel, found on the mountain side to the north of the Chinese Eastern Railway.

For previous introduction, see No. 36726.

65621. No. 4578. Rooted plants.

65622. No. 4579. Scions.

65623. IRIS ENSATA Thunb. Iridaceae.

No. 4564. Echo. October 26, 1925. Seeds of a cluster iris which is very abundant in this region. The flowers are said to be lavender.

65624. LESPEDEZA sp. Fabaceae.

No. 4566. Echo. October 26, 1925. Seeds.

65625. LINUM USITATISSIMUM L. Linaceae. **Flax.**

No. 4565. October 26, 1925. Seeds obtained through L. B. Smearnoff, of Echo.

65626 to 65633. MALUS spp. Malaceae. **Crab apple.**

65626. MALUS sp.

No. 4630. Harbin. October 29, 1925. Scions of a small-fruited, wild Manchurian crab apple. These trees were growing on sand dunes. They might be useful for stock and breeding work and may be ornamental.

65627. MALUS sp.

No. 4638. Harbin. October 30, 1925. Seeds from the Chinese Eastern Railway nursery. The fruit is small, one-half to three-fourths of an inch in diameter, and yellow. It is an attractive ornamental and a good grower and is used here as a stock especially for the same variety.

65612 to 65684—Continued.

65628. MALUS sp.

No. 4641. Harbin. October 30, 1925. Scions of a yellow-fruited crab apple presented by the superintendent of the Chinese Eastern Railway nursery. The fruits are rather small, one-half to three-fourths of an inch in diameter. This variety is grown here quite extensively, for the fruit and as an ornamental.

65629. MALUS sp.

No. 4643. Harbin. October 30, 1925. Scions presented by the superintendent of the Chinese Eastern Railway nursery. This variety, which is their best early red crab apple, may prove valuable as a stock.

65630. MALUS sp.

No. 4673. October 29, 1925. *Hung ping kou.* Scions obtained at the Fa Hua Ssu Temple, near Peking. The fruits are red, 3½ inches in diameter, and ripen in August.

65631. MALUS sp.

No. 4674. October 29, 1925. *Hung hsiang kou.* Scions obtained at the Fa Hua Ssu Temple, near Peking. The fruits of this fragrant crab apple, 2½ to 3 inches in diameter, are half red and half green, ripening in August.

65632. MALUS sp.

No. 4675. October 29, 1925. *Hung sha kou.* Scions obtained at the Fa Hua Ssu Temple, near Peking. This crab apple produces fruits which are 1½ to 2 inches in diameter and half green and half red. They ripen in August.

65633. MALUS sp.

No. 4676. October 29, 1925. *Cha hua sha kuo.* Scions of a crab apple, collected at the Fa Hua Ssu Temple, near Peking. The fruits, 1 to 2 inches in diameter, are spotted red, ripening late in August.

65634. MORUS ALBA L. Moraceae. **White mulberry.**

No. 4628. October 29, 1925. Scions from several trees on the sand dunes across the Sungari River to the north of Harbin.

65635 and 65636. PAEONIA spp. Ranunculaceae. **Peony.**

Harbin. October 27, 1925. These roots were presented by the botanical garden of the Manchurian Research Society.

65635. PAEONIA sp.

No. 4589. The wild Manchurian peony reported to be a double pink form. This plant was originally sent to Harbin from Mefun.

65636. PAEONIA sp.

No. 4596. Originally from Mongolia. The flowers are red and the foliage deep green to reddish.

65637. PAPAVER SOMNIFERUM L. Papaveraceae. **Opium poppy.**

No. 4573. Seeds presented by L. G. Smearnoff, of Echo. October 25, 1925.

65638. PHELLODENDRON AMURENSE Rupr. Rutaceae.

No. 4662. Seeds collected in New Town, Harbin. November 1, 1925. This is a common Manchurian tree which may be useful as a hardy shade tree, although the small, black, juicy berries might be objectionable under foot. The tree is said to be rich in tannin.

65612 to 65684—Continued.

65639. PICEA sp. Pinaceae. **Spruce.**

No. 4637. October 30, 1925. Seeds from a young tree, 12 to 18 feet high, growing in the Russian cemetery.

65640. POLYGONUM ORIENTALE L. Polygonaceae. **Prince's plume.**

No. 4567. Echo. October 26, 1925. Seeds presented by L. B. Smearnoff, who says that this variety is a tall-growing ornamental plant.

65641 to 65645. POPULUS spp. Salicaceae. **Poplar.**

65641. POPULUS sp.

No. 4562. October 25, 1925. Cuttings of a poplar, appearing to be a large-leaved variety, found southeast of Echo, in a region which is barren except for the few trees that have been planted there.

65642. POPULUS sp.

No. 4627. October 29, 1925. Scions of a small-leaved poplar which is the only tree of this kind we recall having seen here at Harbin. It is on the Chinese Eastern Railway embankment across the Sungari River to the north of Harbin.

65643. POPULUS sp.

No. 4632. Harbin. October 30, 1925. Cuttings of an almost round, wavy margined-leaved poplar, with grayish white bark, which is not very common here.

65644. POPULUS sp.

No. 4634. October 30, 1925. The ordinary large-leaved poplar found most commonly in the vicinity of Harbin. These cuttings were obtained from trees in the new Russian cemetery, in a dry exposed situation.

65645. POPULUS sp.

No. 4635. New Russian cemetery, Harbin. October 30, 1925. Cuttings of a rather long-pointed leaved poplar which is common in his region. The under surface of the leaves is inclined to be white tomentose.

65646 to 65665. PRUNUS spp. Amygdalaceae.

65646 to 65648. PRUNUS ARMENIACA L. **Apricot.**

65646. No. 4604. Botanical Garden No. 3. October 27, 1925. Scions of a large yellow-leaved apricot, considered a very good variety, presented by the botanical garden of the Manchurian Research Society, Harbin.

65647. No. 4605. Botanical Garden No. 20. October 27, 1925. Scions presented by the botanical garden of the Manchurian Research Society, Harbin. This is considered their largest, earliest, and best apricot.

65648. No. 4672. October 29, 1925. *Ta pai lao yieh* (large, white god-faced apricot). Scions obtained at the Fa Hua Ssu Temple, near Peking. The freestone fruits, 1½ to 2 inches in diameter, white with a pink blush, ripen in June.

65649. PRUNUS MANDSHURICA (Maxim.) Koehne.

No. 4574. Ertsingtientze. October 25, 1925. Scions of the wild Manchurian apricot which is, by far, the finest specimen we have seen. It might make a hardy ornamental or be useful in plant breeding.

65612 to 65684—Continued.

65650 to 65652. PRUNUS TOMENTOSA Thunb. **Manchu cherry.**

65650. No. 4599. October 27, 1925. Scions of a red-fruited Manchurian cherry, about five-eighths of an inch in diameter, presented by the botanical garden of the Manchurian Research Society, Harbin.

65651. No. 4639. October 30, 1925. Scions presented by the superintendent of the Chinese Eastern Railway nursery, Harbin. This cherry is not very common here.

65652. No. 4640. October 30. 1925. Seeds of a Manchurian cherry presented by the superintendent of the Chinese Eastern Railway nursery, Harbin. We assume that they saved these seeds from their own planting.

Numbers 65653 to 65660. October 27, 1925. This material was presented by the botanical garden of the Manchurian Research Society, Harbin.

65653. PRUNUS sp. **Plum.**

No. 4592. Botanical garden No. 2. A rooted sucker of a red plum of very good quality and a good fruiter.

65654. PRUNUS sp. **Plum.**

No. 4593. Scions from the same tree as No. 4592 [No. 65653].

65655. PRUNUS sp. **Plum.**

No. 4594. Botanical garden No. 28. Scions of a large yellow plum of very good quality.

65656. PRUNUS sp. **Plum.**

No. 4598. Scions of a fairly large yellow plum of very good quality.

65657. PRUNUS sp. **Plum.**

No. 4600. Scions of a rather large red plum which ripens early in August. The flesh is yellow, fragrant, and sweet, but slightly bitter near the stone.

65658. PRUNUS sp. **Plum.**

No. 4601. Botanical garden No. 55. Scions of a fairly good-sized purple or blue plum which is the heaviest bearing variety at the garden.

65659. PRUNUS sp. **Plum.**

No. 4602. Botanical garden No. 9. Scions of a purple or blue plum used in making very good preserves. The fruits dry well, and this past season some of these plums dried on the tree. This is the only tree in the collection on which any of the plums dried in this way.

65660. PRUNUS sp. **Plum.**

No. 4603. Botanical garden No. 16. Scions of a green plum with a pinkish tinge which ripens about the first of August. The fruits are not especially large, but they are fragrant and very sweet.

65661. PRUNUS sp. **Plum.**

No. 4642. October 30, 1925. Scions of a yellow plum presented by the superintendent of the nursery of the Chinese Eastern Railway, Harbin. These scions are small, but they are from the best fruit-producing plum at the nursery.

65612 to 65684—Continued.

65662. PRUNUS sp. **Plum.**

No. 4678. *Hung chuan chiao li tze* (red string). Scions obtained at the Fa Hua Ssu Temple, near Peking, October 29, 1925. The red fruits are 1 inch in diameter and ripen in July.

65663. PRUNUS sp. **Plum.**

No. 4679. October 29, 1925. *Chang bo hung lo tze* (red long-handled plum). Scions collected at the Fa Hua Ssu Temple, near Peking. The red fruits, 1½ inches in diameter, ripen in July.

65664. PRUNUS sp. **Plum.**

No. 4595. October 27, 1925. Plants of a hardwood variety, found among rocks, presented by the botanical garden of the Manchurian Research Society, Harbin. This Siberian or Mongolian bush apricot, recently collected by N. Glowkhoff in Mongolia, bears good crops. The fruits are small. It may prove useful in breeding work.

65665. PRUNUS sp. **Cherry.**

No. 4686. October 29, 1925. *Hung shan tou ying tao* (red bean cherry). Scions obtained at the Fa Hua Ssu Temple, near Peking. The small red fruits ripen in June.

65666 to 65675. PYRUS spp. Malaceae. **Pear.**

65666. PYRUS sp.

No. 4581a. October 26, 1925. Scions of a young tree growing wild on the mountain side, near the Chinese Eastern Railway station, Ertsingtientze.

65667. PYRUS sp.

No. 4591. October 27, 1925. Seedling trees of the wild Manchurian pear from seed collected by N. E. Hansen, of Brookings, S. Dak., a year ago at Hsiaolin. These trees were presented by the botanical garden of the Manchurian Research Society, Harbin.

65668 to 65675. Collected at the Fa Hua Ssu Temple, near Peking, October 29, 1925.

65668. PYRUS sp.

No. 4671. *Ya li.* Scions of a yellow pear' 3 inches in diameter, which ripens the middle of September.

65669. PYRUS sp.

No. 4677. *Pai li* (white pear). Scions of a creamy white pear with a delicate pink blush, 2 inches in diameter. The fruits ripen about the end of September.

65670. PYRUS sp.

No. 4680. Scions of a large sugar pear 3 inches in diameter. The fruits are brown dotted with white.

65671. PYRUS sp.

No. 4681. *Tatu tze li* (big-stomach pear). The yellow fruits, 3 inches in diameter, ripen in September.

65672. PYRUS sp.

No. 4682. Scions of the *chin chin pa li* (autumn golden handle pear). The fruits are yellow, 2 to 3 inches in diameter, and ripen in September.

65673. PYRUS sp.

No. 4683. The "summer golden handle pear," 2 to 3 inches in diameter, is yellow and ripens in August.

65674. PYRUS sp.

No. 4684. *Suan li* (sour pear). The red fruits are 1½ inches in diameter and ripen the end of September.

65612 to 65684—Continued.

65675. PYRUS sp.

No. 4685. *Chuh li* (festival pear). The fruits are 1½ to 2 inches in diameter, yellow, and ripen in September.

65676. QUERCUS MONGOLICA Fisch. Fagaceae. **Oak.**

No. 4577. Ertsingtientze. October 26, 1925. Scions from young Manchurian oaks growing on the mountains.

65677. RHAMNUS DAVURICA Pall. Rhamnaceae.

No. 4631. October 29, 1925. Seeds from a small tree on the sand dunes across the Sungari River to the north of Harbin. The berries are black and the deep-yellow juice is sticky and of a bad flavor. This might be of ornamental value in dry exposed situations.

For previous introduction, see No. 62230.

65678. ROSA DAVURICA Pall. Rosaceae. **Rose.**

No. 4636. Harbin. October 30, 1925. Cuttings of a wild, single red rose obtained in the new Russian cemetery. We sent in hips under No. 3862 [No. 64447].

For previous introduction, see No. 57313.

65679. ROSA RUGOSA Thunb. Rosaceae. **Rose.**

No. 4590a. October 27, 1925. Plants of what is said to be a double-flowered, wild Manchurian rose, presented by the botanical garden of the Manchurian Research Society. Originally from Mefun.

65680. RUBUS CRATAEGIFOLIUS Bunge. Rosaceae. **Siberian raspberry.**

No. 4580. October 26, 1925. Plants of a variety found on the mountain side to the north of the Chinese Eastern Railway station, Ertsingtientze.

65681. SALIX sp. Salicaceae. **Willow.**

No. 4563. October 25, 1925. Cuttings of a medium-sized willow growing along the Chinese Eastern Railway right of way, Echo. This may prove hardy, but it will probably need a rather moist situation.

65682. SAMBUCUS sp. Caprifoliaceae. **Elder.**

No. 4629. Harbin. October 29, 1925. Cuttings obtained from a plant on sand dunes across the Sungari River, north of Harbin; perhaps the red-berried form.

65683. SORBUS sp. Malaceae. **Mountain ash.**

No. 4572. October 25, 1925. Seeds presented by L. B. Smearnoff, Echo. This Sorbus is said to be grown all over Siberia and Russia. After a frost it is used for making preserves which are a little bitter, but not objectionably so.

65684. TILIA sp. Tiliaceae. **Linden.**

No. 4575. October 26, 1925. Scions of what is said to be the broad-leaved Manchurian linden, obtained from young plants from the mountain top across from the Chinese Eastern Railway station, Ertsingtientze. This is one of the best honey plants in northern Manchuria.

65685. SOLANUM TUBEROSUM L. Solanaceae. **Potato.**

From Reading, England. Tubers presented by Sutton & Sons, through E. L. Schultz, Bureau of Plant Industry. Received December 21, 1925.

Var. *Arran Comrade.* A variety of potato reported to be immune to the wart disease.

65686. AMYGDALUS PEDUNCULATA Pall. (*Prunus pedunculata* Maxim.). Amygdalaceae.

From the Gobi Desert, Mongolia. Seeds collected by Dr. Charles P. Berkey, Palisade, N. J. Received December 18, 1925.

The fruit of this wild plum is of no consequence as found in the Desert of Gobi, but the shrub is evidently exceedingly hardy. The seeds were collected at the eastern extremity of the Altai Mountains, along drainage courses, at an altitude of about 4,000 feet. (*Berkey.*)

Introduced for trial as a hardy stock for stone fruits.

65687 and 65688. SACCHARUM OFFICINARUM L. Poaceae. **Sugar cane.**

From Fajardo, Porto Rico. Cuttings presented by the experiment station of the Fajardo Sugar Co., through E. W. Brandes, Bureau of Plant Industry. Received December 23, 1925.

Early-maturing varieties especially recommended for trial in Louisiana by the Fajardo Sugar Co. (*Brandes.*)

65687. *F. C. 305.* **65688.** *F. C. 426.*

65689 to 65692. PICEA spp. Pinaceae. **Spruce.**

From Kanchow, Kansu, China. Seeds collected by J. F. Rock, Arnold Arboretum, Jamaica Plain, Mass. Received December 22, 1925.

65689. PICEA sp.

No. 13304. October, 1925. This species, forming pure stands, ranges from 9,500 to 11,000 feet altitude at Komangssu, northeast of Tankar, northwestern Kansu. The tree, 80 to 120 feet in height and 2 to 3 feet in diameter, has pinkish gray, flaky bark. The needles are glaucous, the branchlets yellow, and the cones long and slender. The branches usually descend to the ground, but in dense forests the branches are very short and drooping.

65690. PICEA sp.

No. 13307. October, 1925. This tree occurs in forests of pure stands in a gorge on the northern slope of the North Kokonor barrier range, at altitudes from 9,500 to 11,000 feet. The tree is 90 to 100 feet or more tall, with a straight, gray-barked trunk. The curved, glaucous needles are large, long, and stiff, and the cones are large, oblong, and straight.

65691. PICEA sp.

No. 13309. October, 1925. A tree 100 to 120 feet tall and 3 to 4 feet in diameter, with large glaucous needles and large cones. It forms pure stands on Ngiusin, a mountain 18,000 feet high, rising from the North Kokonor barrier range toward the Richthofen Range, and is the only species of Picea in this whole region, being found up to an altitude of 11,500 feet.

65692. PICEA sp.

No. 13310. October, 1925. A tree 20 to 30 feet tall and 1 foot in diameter, with glaucous, whitish blue needles. This tree is only found in the Hungshiri K'ou Gorge, at an altitude of 8,500 to 9,500 feet, located on the northern slope of the Nanshan of the Richthofen Range. Unlike the Picea from Ngiusin, this species occurs in dry rocky situations.

65693. SORBUS ALNIFOLIA (Sieb. and Zucc.) Koch (*Pyrus alnifolia* Franch.). Malaceae.

From Mefun, Manchuria. Seeds collected by P. H. Dorsett, agricultural explorer, Bureau of Plant Industry. Received December 23, 1925.

No. 4739. November 12, 1925. From a small tree growing on the top of one of the mountains.

For previous introduction, see No. 37582.

65694. CUCUMIS METULIFERUS E. Mey. Cucurbitaceae.

From Cape Town, South Africa. Seeds received through H. L. Shantz, Bureau of Plant Industry. Received December 21, 1925.

This South African "wild cucumber" is native to the Kalahari Desert and the Belgian Congo, where, according to I. B. Pole Evans (see No. 60368), the fruit is considered excellent for eating. The plant is an annual creeper, much branched, and covered with bristly hairs. The dark-green leaves are similar to those of the ordinary cucumber, and the flowers are yellow. The gourdlike fruit, oblong in shape, varies from greenish yellow to red when ripe, is about 5 inches long, and is covered with short hard spines. It is eaten in the same way as the ordinary cucumber.

65695. CITRUS NOBILIS DELICIOSA (Ten.) Swingle. Rutaceae. **Mandarin orange.**

From Cadiz, Spain. Bud wood presented by O. W. Barrett, agricultural adviser, Department of Agriculture and Labor, San Juan, Porto Rico. Received November 24, 1925.

No. 6. *Mandarin.* A locally developed variety.

65696. CITRUS AURANTIUM L. Rutaceae. **Sour orange.**

From Spain. Seeds presented by O. W. Barrett, agricultural adviser, Department of Agriculture and Labor, San Juan, Porto Rico. Received December 2, 1925.

Seville.

65697 to 65701.

From Buitenzorg, Java. Seeds presented by Dr. W. M. Docters Van Leeuwen, Director, Botanic Garden. Received December 19, 1925.

65697. ANDROPOGON AMBOINICUS (L.) Merr. Poaceae. **Grass.**

A tall perennial East Indian grass, about 4 feet high, with narrowly linear leaves up to 20 inches in length.

65698. CROTALARIA ALBIDA Heyne. Fabaceae.

According to Hooker (Flora of British India, vol. 2, p. 71) this tropical Indian shrub is 1 or 2 feet high, with numerous slender silky pubescent branches, firm narrow leaves, pale-yellow flowers in short racemes, and oblong pods about half an inch long.

65699. CROTALARIA FULVA Roxb. Fabaceae.

An eastern Asiatic leguminous shrub which as described in Hooker's Flora of British India (vol. 2, p. 81) is stiffly erect, 3 to 5 feet high, with numerous paniculate branches. The silky, narrow leaves are about 4 inches long, and the flowers, in panicles, are about an inch long.

65700. CYMBOPOGON MARTINI (Roxb.) Stapf. (*Andropogon martini* Roxb.). Poaceae. **Rusa-oil grass.**

A stout perennial grass, native to northern India, which grows to a height of about 6 feet and has long, very smooth leaves of a rich green color and delicate texture. The perfume known commercially as Rusa oil is obtained from this plant.

For previous introduction, see No. 62802.

65701. PENNISETUM MACROSTACHYUM (Brongn.) Trin. Poaceae. **Grass.**

As described by Duperrey (Voyage Autour du Monde, Botanique, vol. 2, p. 104), this East Indian grass has ascending stems 2 to 3 feet high, with linear lax leaves 3 inches long, and nodding dense spikes 6 to 8 inches in length.

65702 to 65704. GOSSYPIUM NANKING Meyen. Malvaceae. **Cotton.**

From Nishigahara, Tokyo, Japan. Seeds presented by H. Ando, director, Imperial Agricultural Experiment Station. Received December 23, 1925.

65702 to 65704—Continued.

65702. *Aoki Wata.* 65704. *Shiso Wata.*

65703. *Cha Wata.*

65705. DIOSCOREA ALATA L. Dioscoreaceae. **Greater yam.**

From Tongatabu, Tonga Islands. Tubers presented by C. E. Wood, Director of Agriculture, Government of Tonga, at the request of H. A. Cowan, British consul. Received November 7, 1925.

Tubers of a yellow-fleshed yam, introduced for trial in the Gulf States.

65706 and 65707.

From Haiti. Seeds obtained through O. F. Cook, Bureau of Plant Industry. Received December 16, 1925.

65706. CRYPTOSTEGIA sp. Asclepiadaceae.

A tropical climber, with opposite leaves and large, showy reddish flowers. Introduced from Gonaives for testing as a source of rubber.

65707. HEVEA BRASILIENSIS (H. B. K.) Muell. Arg. Euphorbiaceae.

From Bayeux. The "Para" rubber tree, native to Brazil, and now extensively cultivated in the East Indies, has always ranked as the principal and most important rubber-producing tree in the world.

For previous introduction, see No. 64542.

INDEX OF COMMON AND SCIENTIFIC NAMES

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