

# PLANT MATERIAL INTRODUCED BY THE OFFICE OF FOREIGN PLANT INTRODUCTION, BUREAU OF PLANT INDUSTRY, JANUARY 1 TO MARCH 31, 1926 (F. P. I. NOS. 65708 TO 66698)

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### INTRODUCTORY STATEMENT

NEARLY a thousand introductions are included in the present inventory, IN representing practically all classes of economic plants and drawn from nearly every corner of the globe. From the cold region of Manchuria in northeastern China quantities of interest-

ing plant material have continued to come in as the result of agricultural explorations of that Province by P. H. Dorsett. As in the preceding inventory, this material includes locally developed types of practically all of the well-known fruits, vegetables, and cereals, and should be of unusual value to crop specialists

Iruits, vegetables, and cereals, and should be of unusual value to crop specialists and plant breeders in the northernmost parts of the United States. In the subtropical Province of Kwangtung, southeastern China, F. A. McClure has continued his explorations. Among his collections are seeds of *Eremochloa* ophiwroides (No. 65839), a deep-green, medium coarse, low-growing grass con-sidered to be the best lawn grass for that region. It becomes 3 to 4 inches high, has smooth soft blades, and propagates easily by runners. Previous introduc-tions of this grass have done well in the Gulf coast area and promise well for pasture and lawn purposes. Further introductions are for the purposes of getting a more hardy strain which will continue green throughout the winter period and a more hardy strain which will continue green throughout the winter period and thus afford a better lawn grass, and also to get more vigorous strains for use in pasture lands.

Material of two local varieties of the Chinese hairy chestnut (Castanea mollissima, Nos. 65805 and 65806) was also obtained by Mr. McClure; these will be of special interest for the use of plant breeders who are attempting to find blight-

of special interest for the use of plant breeders who are attempting to find blight-resistant chestnut strains for the United States. Other chestnut introductions included in this inventory will also be of interest for the same reason. Four samples of Castanea were sent in from Nanking, China—C. henryi (Nos. 65715 and 66036), C. mollissima (No. 66037), and C. seguinii (No. 66038). Seeds of an evergreen chinquapin (Castanopsis hystrix, No. 65759) were presented by the Lloyd Botanic Garden, Darjiling, India. This is a tall tree with small nuts. Its chief value is as a timber tree for subtropical regions. Forage-crop specialists will be interested in a number of introductions from Morocco and the Canary Islands which were sent in by David Fairchild during his visits to those countries. Four local strains of vetch (Vicia sativa, Nos. 66016 to 66019) were collected in different parts of Morocco. From the same country a number of grasses were obtained, including Avena barbata and A. sterilis (Nos. 66004 and 66005), Hyparnhenia hirta (No. 66008), and Triticum ovatum (No. 66015). Calopogonium mucunoides (No. 66085), which is being used successfully 7388-28-1

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in Sumatra and the Malay States as a ground cover and green-manure plant, has already shown, from a previous introduction, its probable value for these purposes in southern Florida. It makes a dense matted growth and thrives under Florida conditions. It needs to be extensively tested in the Gulf States and studied from the standpoint of varietal differences and adaptation. The Palmyra palm (Borassus flabellifer, No. 66649) of India and Ceylon is a most interesting and useful plant. Whether or not it will succeed in the continental

The Palmyra palm (Borassus flabellifer, No. 66649) of India and Ceylon is a most interesting and useful plant. Whether or not it will succeed in the continental United States is yet to be determined, but it is possible that it can be grown in southern Florida and perhaps in other places. The many uses to which it is put in its native habitat make it seem indispensable to the native population. It furnishes food, drink, and fiber, the products in each form being numerous.

Another paim, Hyphaene thebaica (No. 66656), known as the Doum palm, is interesting from the fact that it is a most beautiful plant and the only branching palm known.

An unusual series of cotton varieties (Gossypium spp., Nos. 66020 to 66026) was received from Italian Somaliland through the director of their agricultural department. These are mostly local varieties developed by the Somaliland natives, and should be of special value for semiarid regions of the Southwest.

Although the Amur grape (Vitis amurensis, No. 65960) with its brilliant autumnal coloring is usually considered from the standpoint of an exceptionally hardy ornamental vine, it should be worth the attention of grape growers desiring to obtain vigorous hardy varieties for the northernmost parts of the United States and Alaska.

An Ecuadorian highland relative of the papaya (*Carica candamarcensis*, No. 66651) is reported to have small, acid-flavored fruits used for jams and preserves. This will suggest to subtropical fruit breeders the possibility of hybridization with the idea of varying the flavor and extending the growing area of the common papaya.

Three species and one variety of Magnolia (Nos. 66077 to 66080), all native to western China, were received from Léon Chénault, Orleans, France. All of these are practically unknown in American horticulture and promise to be desirable additions to a very popular group of ornamental trees.

As a subtropical ornamental climbing shrub, *Bauhinia galpini* (No. 66148) appears to have considerable merit. It attains a height of 10 or more feet under favorable conditions, and the brick-red flowers appear continuously from spring till fall.

A number of species of the so-called butterfly bushes have become popular ornamentals in those parts of the country not having severe winters. One of the handsomest of the genus (*Buddleia colvilei*, No. 65758), native to the Himalayas, has large loose clusters of crimson flowers. It is practically unknown in American horticulture and should be tested in southern California and the Gulf States.

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

ROLAND MCKEE, Acting Senior Agricultural Explorer in Charge.

OFFICE OF FOREIGN PLANT INTRODUCTION, Washington, D. C., September 17, 1927.

#### 65708. HICORIA CATHAYENSIS (Sarg.) Chun. Juglandaceae. Hickory.

From Nanking, China. Seeds presented by W. Young Chun, Chinese Nurseries. Received February 25, 1926.

This is reported to be the only hickory found in China. As described by Sargent (Plantae Wilso-nianae, vol. 3, p. 187), it is a tree 40 to 75 feet high, with a gray-barked trunk 1 to 2 feet in diameter and compound leaves about a foot long composed of five to seven pairs of narrowly oval leaflets, pale green above and rusty brown beneath. The thick-shelled nuts, about an inch long, are collected by the Chi-nese for sale; they are eaten as a sweetmeat, and a clear yellow oil is extracted from them for uses in fancy pastry. The tough, strong wood is used for tool handles. The tree grows wild in the mountains of Chekiang, where the native name is Shan-gho-to. of Chekiang, where the native name is Shan-gho-to.

For previous introduction see No. 43952.

65709. Pyrus calleryana Decaisne. Malaceae. Pear.

From Nanking, China. Seeds presented by Prof. J. H. Reisner, College of Agriculture and Forestry, University of Nanking. Received February 25, 1926

For trial as a stock for cultivated apple and pear varieties.

65710 to 65714. RUBUS spp. Rosa-Raspberry. ceae.

From St. Jean le Blanc, near Orleans, Loiret, France. Plants presented by Edmond Versin. Received March 4, 1926. Notes from Bunyard's Catalog of Fruit Trees, 1924-25.

65710. RUBUS sp.

#### Heytor.

65711. RUBUS sp.

Lloyd George. This variety is perpetual in habit and keeps a supply of fruit from the ear-liest season till late autumn. It is vigorous and productive and is in all respects a sterling novelty. Introduced by Mr. Kettle, violet specialist of Corfe Castle.

For previous introduction see No. 62387.

65712. RUBUS sp.

Park Lane. This is the most delicious of all raspberries, and although unexcelled for dessert use it is too soft for market culture. The fruit is round and the drupes large. Introduced by Mr. Pyne.

<sup>1</sup> 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 entrances 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 identification spatible is the correct ness 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. **3** 

### 65710 to 65714-Continued.

#### 65713. RUBUS SD.

Pyne's Royal. The enormous fruits are borne Pyne's Royal. The enormous fruits are borne on short trusses, conical in shape, solid, and of good flavor; the canes are very stout and vigor-ous. This is in our opinion the largest raspberry in cultivation; it was raised by Mr. Pyne and first fruited in 1908. Introduced in 1913.

For previous introduction see No. 52491.

65714. RUBUS SD.

Red Cross. The very early fruits are large and of good flavor, and the canes stout and upright. This new and promising variety was raised by Mr. Pyne.

65715. CASTANEA (Skan) HENRYI Rehd. and Wils. Fagaceae.

From Nanking, China. Seeds presented by W. Young Chun, Chinese Nurseries. Received March 2, 1926.

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

For previous introduction see No. 65450.

65716. FICUS CARICA L.

Fig. From Beirut, Syria. Cuttings purchased from Dr. A. E. Day, American University of Beirut. Received March 3, 1926.

Moraceae.

Kazzi fig. From the district of the Murah, north of Batrun. This fig is said to be rather large, red inside and green without, and to ripen early. (Day.)

#### 65717 to 65719.

From Richmond, Victoria, Australia. Seeds pre-sented by F. H. Baker. Received February 27, 1026

65717 and 65718. ACACIA SDD. Mimosaceae.

65717. ACACIA DISCOLOR Willd.

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

#### For previous introduction see No. 62960.

### 65717 to 65719-Continued.

65718. ACACIA PENNINERVIS Sieber.

The bark of this Australian acacia contains 18 per cent of tannic acid, according to Malden (Useful Native Plants of Australia), and is said to endure comparatively low temperatures. The same authority states that it is a tall shrub or tree with narrow sickle-shaped phyllodia and short racemes of pale-yellow flowers.

For previous introduction see No. 62961.

65719. HAKEA LAURINA R. Br. Proteaceae.

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

For previous introduction see No. 64483.

65720. LILIUM SUTCHUENENSE Franch. Liliaceae. Lily.

From Kew, England. Seeds presented by the Royal Botanic Garden, through Prof. E. B. Babcock, University of California, Berkeley. Received March 1, 1926.

A lily from Szechwan, western China, with a stem 3 to 5 feet high, the underground portion running along horizontally before coming to the surface. The thickly scattered leaves are linear and deep green, and the pendulous flowers, up to 20 in number, have reflexed orange-red segments spotted purplish-black and red anthers.

For previous introduction see No. 55609.

65721. Сакіса рарача L. Рарауасеае. Рарауа.

From Pakse, Laos, Indo China. Seeds presented by G. Ricau. Received March 2, 1926.

Papaya de Ceylon. Introduced for testing in the warmest parts of the United States.

#### 65722 to 65730. Авіез spp. Pinaceae. Fir.

From Kansu, China. Seeds collected by J. F. Rock, Arnold Arboretum, Jamaica Plain, Mass. Received March 2, 1926. Notes by Mr. Rock.

#### 65722. ABIES Sp.

No. 13423. October, 1925. A tree 40 to 50 feet high, with ascending branches, found in the Maerhku Valley, northern slopes of the Minshan. The needles are glossy on both sides.

### 65728. ABIES SP.

No. 13425. A tree 60 to 80 feet high, found in the Maerhku Valley, northern slopes of the Minshan, at an altitude of 10,000 feet, October, 1925. ... The needles are long, wiry, and glaucous, the cones 2 inches long, and the scales broad and purplish black.

#### 65724, ABIES Sp.

No. 13429. From the Maerhku Valley, northern slopes of the Minshan, at an altitude of 10,600 feet, November, 1925. A tree 80 feet high, with long leaves, glossy on both sides; cones 2½ inches or more long, and broad purplish black scales.

#### 65725. ABIES Sp.

No. 13436. Djrakana, Tebbu country, November, 1925. A tree 80 feet high, growing at an altitude of 10,000 feet. The long needles are glossy whitish beneath, the cones 2½ inches long, and the scales broad with a short protruding mucro.

#### 65722 to 65730-Continued.

### 65726. ABIES Sp.

No. 13447. November, 1925, A tree 40 to 50 feet high, found on Mount Koangkei, North Tebbu country, at an altitude of 12,000 feet, The curved, emarginate leaves, glaucous beneath, are very large; the cones are 3 inches in length and the scales broad, with a remarkably large foliaceous mucro.

#### 65727. ABIES Sp.

No. 13448. November, 1925. A tree 40 feet high, growing at an altitude of 11,000 feet on Mount Koangkei, North Tebbu country. The needles and cones are smaller than my No. 13447 [No. 65726], but the scales are similar.

#### 65728. ABIES Sp.

No. 13451. A tree 60 to 80 feet high, found at Dirakana, Tebbu country, at an altitude of 11,000 feet, November, 1925. The leaves are thick, broadly sessile or slightly petiolate, and the cones are 2 inches or more long.

#### 65729. ABIES Sp.

No. 13454. A tree 80 feet high, found at Djrakana, Tebbu country, at an altitude of 11,000 feet. November, 1925. The large thick leaves are glaucous above and dull green beneath, and the purplish black cones, 1% inches long, are mucronate.

#### 65730. ABIES Sp.

No. 13466. A tree 100 to 150 feet high, growing on Lienhoa Mountain, central Kansu, at an altitude of 12,500 feet, October, 1925. The large blunt leaves are glaucous beneath, and the cones, 2 inches or more long, are purplish black.

#### 65731. HYDNOCARPUS ANTHELMINTHICA Pierre. Flacourtiaceae.

From Dalat, Anam, Indo-China. Seeds presented by R. Isl. Received March 2, 1926.

The maikrabao, as this species is called in Siam, where it is native, is a vigorous, graceful tree 30 to 60 feet high, with large leathery leaves up to a foot in length, pale yellowish above and shining green below. The rose or purplish flowers are in fewflowered racemes, and the large round fruits, about 3 inches in diameter, contain each about 80 oval seeds from which a fatty oil is expressed. In its physical characteristics and chemical composition this oil closely resembles chaulmoogra oil, which is used with great success in the treatment of leprosy. Like the true chaulmoogra oil, obtained from *Taraktogenos kurzi* King), this consists to a large extent of the glyceryl esters of chaulmoogric and hydnocarpic acids, and it may therefore be inferred that it possesses similar medicinal value.

For previous introduction see No. 58592.

#### 65732. CASSIA NODOSA Buch.-Ham. Caesalpiniaceae.

From Assam, India. Seeds presented by Mrs. S. A. D. Boggs, Louisville, Ky., through F. L. Mulford, Bureau of Plant Industry. Received March 1, 1926.

Pink and white shower. This magnificent flowering tree is one of the most commonly cultivated ornamental plants in Honolulu, where it is much used for street planting. It is a moderate-sized deciduous tree, with long drooping branches and glossy leaves; during May and June it bears a profusion of beautiful bright-pink rose-scented flowers which are in dense clusters on long stalks. It is native from the eastern Himalayas to the Malay Islands and the Philippines.

For previous introduction see No. 54984.

- 65733 to 65744. Oryza sativa L. Poaceae. Rice.
- From Cawnpore, United Provinces, India. Seeds presented by the economic botanist to the Government. Received March 1, 1926.

Locally developed Indian varieties.

65733. A-1. An early variety of fine quality.

65734. A-2. An early variety of fine quality.

65735. B-4. An early variety of medium quality.

65736. A-57. A late short round variety.

65737. A-74. A late vigorous variety of fine quality.

65738. A-99. A late variety of coarse quality.

- 65739. A-110. A late vigorous variety of fine quality.
- **65740.** A-111. A late vigorous variety of fine quality.

65741. A-112. A late variety of coarse quality.

65742. C-15. A late variety of medium quality.

65743. F-4. A late variety of coarse quality.

65744. U-13. A late variety of coarse quality.

65745. TRIFOLIUM PRATENSE L. Fabaceae. Red clover.

From Paris, France. Seeds obtained from N. Cherot, through A. J. Pieters, Bureau of Plant Industry. Received March 3, 1926.

A locally developed French strain.

- 65746 to 65748. LESPEDEZA spp. Fabaceae.
- From Fukuoka, Japan. Seeds presented by Dr. Mitsunaga Fujioka, Kyushu Imperial University. Received March 3, 1926.

65746. LESPEDEZA BICOLOR TURCZ.

A bushy herbaceous Japanese perennial which flowers in early fall, bearing a profusion of rosy purple flowers which practically cover its drooping branches. These branches are sometimes 6 feet long.

For previous introduction see No. 62382.

65747. LESPEDEZA BICOLOR INTERMEDIA Maxim.

A variety of the preceding, differing in minor botanical characters.

For previous introduction see No. 62862.

65748. LESPEDEZA CYRTOBOTRYA Miquel.

A shrub about 6 feet high, resembling Lespedeza bicolor in habit, with oval-oblong leaflets and dense clusters of purple flowers. Native to Japan.

For previous introduction see No. 62863.

#### 65749. MELILOTUS ALBA Desr. Fabaceae. White sweet clover.

#### From Moosejaw, Saskatchewan, Canada. Seeds obtained from the Saskatchewan Registered Seed Growers, through A. J. Pieters, Bureau of Plant Industry. Received March 5, 1926. Canadian-grown seed.

#### 65750. Gossypium sp. Malvaceae.

Cotton.

From Dar es Salaam, Tanganyika Territory, Africa. Seeds presented by T. H. Marshall, Tanganyika Department of Agriculture. Received March 1, 1926.

A kidney cotton, received as Gossypium kirkii, but the seeds do not agree with the description of that species.

#### 65751 to 65759.

From Darjiling, India. Seeds presented by G. H. Cave, Curator, Lloyd Botanic Garden. Received March 4, 1926.

65751. ABIES SPECTABILIS Lambert (A. webbiana Lindl.). Pinaceae. Fir.

An Asiatic fir which, as described by W. J. Bean (Trees and Shrubs Hardy in the British Isles, vol. 1, p. 128), is a tree sometimes 150 feet high in its native home in the Himalayas. The dark-green leaves are arranged in two opposite series so as to leave a  $\mathbf{v}$ -shaped opening along the top; the individual leaves are 1 to 2 inches long. The cones, about 5 inches long, are violet-purple at first, becoming brown.

For previous introduction see No. 64289.

65752. ACER CAUDATUM Wall. Aceraceae. Maple.

A large tree with dark-gray bark and fivelobed red-stemmed leaves  $2\frac{1}{2}$  to 5 inches long. The shiny, compact, moderately hard wood is white with a faint pink tinge. This maple is found in the temperate Himalayas at altitudes of 7,000 to 11,000 feet.

For previous introduction see No. 56453.

65753. ACER SIKKIMENSE Miquel. Aceraceae. Maple.

A small tree with thin gray bark, native to the eastern temperate Himalayas at altitudes of 7,000 to 9,000 feet. The laves are undivided and up to 6 inches in length. The wood is a shining gray with distinct annual rings and numerous fine medullary rays.

For previous introduction see No. 56456.

65754 to 65756. BERBERIS spp. Berberidaceae. Barberry,

65754. BERBERIS CONCINNA Hook. f.

A low bushy barberry which was discovered in the mountains of Sikkim, India, at an altitude of about 12,000 feet. It is of compact habit, with obovate leaves shining green above and white beneath. The deepyellow flowers are about one-hall inch across, and the red oblong berries are a little more than half an inch long.

For previous introduction see No. 58101.

65755. BERBERIS UMBELLATA Wall.

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

For previous introduction see No. 53645.

65756. BERBERIS WALLICHIANA DC.

A narrow-leaved evergreen barberry from temperate regions in the Himalayas, where it ascends to about 10,000 feet. The shining black-purple berries are produced in dense clusters.

For previous introduction see No. 60639.

65757. BETULA UTILIS Don (B. bhojpattra Wall.). Betulaceae. Birch.

A tree 40 to 60 feet high, with reddish brown trunk and branches and bark which peels off in papery flakes. It is native to subtropical regions of the Himalayas. The oval, coarsely toothed, sharp-pointed leaves are dark green above and paler beneath, and are 3 inches long. In winter the orange-chocolate color of the twigs is very striking.

For previous introduction see No. 56400.

#### 65751 to 65759—Continued.

#### 65758. BUDDLEIA COLVILEI Hook. f. Loganiaceae.

With its large loose terminal clusters of crimson flowers and smooth dark-green leaves this Himalayan relative of the well-known butterfly bush has been called by some authorities the handsomest of the genus. It is a shrub or small tree, 30 to 40 feet high, and has proved hardy in some parts of England and Scotland.

For previous introduction see No. 58904.

#### **§5759.** CASTANOPSIS HYSTRIX A. DC. Fagaceae. Evergreen chinquapin.

"A lofty tree 80 to 100 feet tall, with trunks 3 feet in diameter, found in pine forests in southwestern China, at an altitude of 6,000 feet. The smooth fawn-colored bark is flaky, and the straight ascending branches give the tree an oblong appearance. The burs are in long densely packed spikes, and the involucres are covered with long soft green spines. The small nuts are borne singly or in twos. This is one of the finest forest trees of the region. According to the natives, the wood is very durable and never attacked by insects." (J. F. Rock, under No. 56768.)

#### 65760 to 65765. ORYZA SATIVA L Poaceae. Rice.

From Vercelli, Italy. Seeds presented by Professor Novelli, director, Stazione Sperimentale di Risicoltura, through Asher Hobson, American delegate, International Institute of Agriculture, Rome. Received March 5, 1926.

65760. Bertone.

65761. Chinese Originario.

65762. Nero Vialone.

65763. Precoce Vittoria.

85764. Sancino.

65765. P-6.

#### 65766 to 65775.

From Nogent sur Vernisson, Loiret, France. Seeds presented by L. Pardé, directeur des Ecoles des Barres. Received March 5, 1926.

65766. CHIONANTHUS RETUSA Lindl. Oleaceae. Chinese fringe-tree.

A beautiful deciduous hardy ornamental tree bearing in spring a multitude of white deliciously fragrant flowers with handsome fringed petals, followed in the fall by masses of blue berries resembling wild grapes. It is superior to the Virginia fringe tree (*Chionanthus virginica*) because of the whiteness and fragrance of its flowers and its more graceful habit.

For previous introduction see No. 41259.

# 65767. CORNUS WALTERI Wangerin. Cornaceae. Dogwood.

A Chinese dogwood which, as described by Sargent (Plantae Wilsonianae, vol. 2, p. 576) is a tree 40 feet high, with white flowers and blueblack fruits, growing in woodlands at 900 to 2,000 feet altitude in western Hupeh, China.

For previous introduction see No. 52702.

## 65768. CORYLOPSIS WILLMOTTIAE Rehd. and Wils. Hamamelidaceae.

A deciduous shrub, up to 12 feet high, native to central China. The leaves, 1 to 3 inches long, are oval or somewhat heart-shaped with sinuate margins, and the yellow fragrant flowers, which appear in early spring, are in racemes about 3 inches long.

For previous introduction see No 34591.

#### 65766 to 65775-Continued.

65769. EXOCHORDA GIRALDII WILSONII Rehder. Rosaceae.

A slender spreading shrub about 10 feet high, native to central China. The leaves are oblongelliptic, occasionally serrate, and the pure-white flowers, 2 inches across, are in 6-flowered to 10flowered racemes.

#### 65770. LIGUSTRUM ACUTISSIMUM Koehne. Oleaceae. Privet.

A much-branched shrub, 10 feet or less in height, with spreading and curving branches and very narrow sharp-pointed leaves about 2 inches long. The white flowers are borne in dense nodding panicles about an inch long. This privet is native to Japan and China.

For previous introduction see No. 43852.

#### 65771. LONICERA FERDINANDI Franch. Caprifoliaceae. Honeysuckle.

A robust deciduous free-flowering shrub, of spreading, open habit, attaining ultimately a height of 8 or 9 feet. The oval dull-green leaves, up to 4 inches long, are hairy on both sides. The yellow flowers are produced in pairs during June, and the fruit is red. The shrub is native to Mongolia.

For previous introduction see No. 43696.

#### 65772. LONICERA KOEHNEANA Rehder. Caprifoliaceae. Honeysuckle.

A western Chinese honeysuckle, generally similar to the Manchurian species (Lonicera maackii), but readily distinguished by the slender and much longer yellow flowers. The western species is a vigorous grower, with diamond-shaped leaves 3 or 4 inches long.

65773. RHAMNUS sp. Rhamnaceae.

M. V. 6909.

65774. ROSA BEGGERIANA Schrenk. Rosaceae. Rose.

A bush 4 to 8 feet tall with prickly, pinnate leaves; the leaflets, usually seven to nine, are elliptic to oblong, smooth and deep green above, generally thickly hairy and bluish green below. The inflorescences are 1 to nearly 50 flowered; the flowers are white, cream colored, or more rarely red. The fruits are very dark red.

For previous introduction see No. 52458.

65775. SOPHORA DAVIDII (Franch.) Komarow (S. viciifolia Hance). Fabaceae.

A Chinese shrub about 6 feet high, of light and graceful habit, bearing clusters of white and blue flowers. It appears to do well in limestone soil. (Note by David Fairchild, under No. 65382.)

#### 65776 and 65777. MEDICAGO SATIVA L. Fabaceae. Alfalfa.

- From Pretoria, Union of South Africa. Seeds presented by R. W. Thornton, secretary for agriculture. Received March 5, 1926. Notes by Mr. Thornton.
  - 65776. No. 1. A standard South African variety, typical of what we are now exporting to the United States, Australia, and New Zealand. It is generally known as Cape Provence, being a variety of common lucern developed in the Cape Province and originating from seed of the Provence variety imported from France.
  - 65777. No. 2. Grootfontein Chinese, a variety which, though still in the experimental stage, has given very promising results and may in some cases replace Cape Provence, which is the variety at present commonly grown here.

#### 65778 to 65780. Amygdalus persica NECTARINA Ait. Amygdalaceae. Nectarine.

- From Maidstone, England. Plants purchased from George Bunyard & Co., The Royal Nurseries. Received March 11, 1926. Notes from Catalog of Royal Nurseries, 1924-25.
  - 65778. Darwin. Fruit large, deep orange with red flush; flesh orange, with rich flavor. Matures in September.
  - 65779. Humboldt. Fruit large, bright yellow with a dark-crimson flush and mottlings; flesh orange, very tender and juicy. Matures in August.
  - 65780. *Pineapple*. Fruit large, deep orange with a rich-crimson cheek; flesh yellow, with a delicious pineapple flavor. Matures in early September.
- 65781. CYNOMETRA CAULIFLORA L. Caesalpiniaceae.
- From Kandy, Ceylon. Seeds obtained by David Fairchild and P. H. Dorsett, agricultural explorers, Bureau of Plant Industry, with the Allison V. Armour expedition. Received March 12, 1926.

No. 384. Presented by Dr. A. Nell, February 3, 1926.

As described by Van Nooten (Fleurs et Fruits de Java, pt. 6, 1863), this is a medium-sized tree, with a very irregular, knotty trunk, covered with thick brown bark, marked with numerous grayish and whitish spots. The alternate compound leaves are smooth and light green when mature, but when young are red or pink, or, in some varieties, yellow. From the trunk and branches appear the corymbs of small pink or white flowers. The flattened, roundish, light-brown pods have a fleshy portion which is very palatable when stewed. The tree is a native of Java.

For previous introduction see No. 44895.

- 65782 to 65784. SOJA MAX (L.) Piper (Glycine hispida Maxim.). Fabaceae. Soy bean.
- From Matania el Saff, Egypt. Seeds presented by Alfred Bircher, Middle Egypt Botanic Station. Received March 9, 1926.

65789. A large flattened brown bean.

65783. A large flattened creamy-yellow bean.

65784. A small round light-green bean.

#### 65785 to 65788.

From Koslov, Government of Tambov, Russia. Seeds presented by W. M. Konstantinov. Received March 9, 1926. Notes by Mr. Konstantinov.

65785. AMYGDALUS PILOSA TURCZ. Amygdalaceae.

A hardy shrub, about 10 feet in height, with pinkish flowers. Native of Mongolia.

65786. CUCUMIS MELO L. Cucurbitaceae. Melon.

Kulenkamp's Selection. From Rjasanj, Mongolia. Matures in about 120 days.

65787. NICOTIANA TABACUM L. Solanaceae.

To bacco.

Mitchurin. A yellow tobacco resembling Mahorca.

65788. ZEA MAYS L. Poaceae. Corn.

Kulenkamp's Selection. A sugar corn which thrives here in the open.

#### 65789 and 65790.

From Pretoria, Union of South Africa. Seeds presented by I. B. Pole Evans, chief, division of botany, Department of Agriculture, through W. T. Swingle, Bureau of Plant Industry. Received March 6, 1926.

65789. ALOE STRIATA Haw. Liliaceae.

A low, fieshy plant with a dense rosette of thick, narrowly oblong leaves 1 or 2 feet long, obscurely spotted, and bright-red flowers, about an inch long, in 20 or more heads borne on a stout branched peduncle. Native to South Africa.

65790. HOODIA MACRANTHA Hort. Asclepiadaceae.

A stout fleshy perennial bushy plant, with large showy flowers. Native to South Africa.

#### 65791 and 65792.

From Lamao, Limay, Bataan, Philippine Islands. Seeds presented by the Lamao Experiment Station, through W. T. Swingle, Bureau of Plant Industry. Received March 11, 1926. Notes by P. J. Wester in Food Plants of the Philippines, Bulletin 39, Philippine Bureau of Agriculture.

65791. ANTIDESMA BUNIUS (L.) Spreng. Euphorbiaceae. Banauac.

"A small, attractive, dark-green, dioecious tree, attaining a height of 10 meters, with darkgreen, thick, pointed leaves, and small, dark-red, subacid, well-flavored fruits in racemes like a currant. May be eaten raw and also makes a fair jelly. Widely distributed at low and medium elevations and under varying climatic conditions. Rare in cultivation." (P. 43.)

For previous introduction see No. 47204.

65792. COFFEA LIBERICA Bull. Rubiaceae. Coffee.

"A small tree of upright growth, native to Africa, blight resistant; adapted to elevations at and below 350 meters, succeeding well even on rather heavy, clayey soils. Average yield approximately 565 pounds to the acre. Requires artificial drying. Properly prepared, the coffee is of good quality and commands a good price." (P. 63.)

For previous introduction see No. 58497.

- 65793 and 65794. BELOU MARMELOS (L.) Lyons (Aegle marmelos Correa). Rutaceae. Bel.
- From Colombo, Ceylon. Seeds collected by David Fairchild and P. H. Dorsett, agricultural explorers, Bureau of Plant Industry, with the Allison V. Armour expedition. Received March 12, 1926.

For previous introduction see No. 61762.

- 65793. No. 330. Obtained at the market, January 23, 1926. A variety with large spherica fruits containing many seeds. In quality this fruit is not so good as the small one with abortive seeds, No. 336 [No. 66333], but it is o good flavor. It is eaten as a tonic for break fast by the people of Ceylon.
- 65794. No. 331. Obtained at the market, January 23, 1926. A variety with flat fruits, 3½ inches in diameter, containing many seeds. The flavor is good but not so good as No. 336 [No. 66338]. It is eaten with palm sugar as a tonic.

# 65795. RHAMNUS CRENATA Sieb. and Zucc. Rhamnaceae. Buckthorn.

From Nogent sur Vernisson, Loiret, France. Seeds presented by L. Pardé, directeur des Ecoles des Barres. Received March 5, 1926.

A hardy shrub, 10 feet or less in height, native from Japan to central China. The leaves are narrowly oblong or oval, sometimes long-actuminate, and the small globular berries, a third of an inch in diameter, change from red to purplish black.

#### 65796. PINUS SYLVESTRIS L. Pinaceae. Scotch pine.

From Moscow, Russia. Seeds presented by the director, Institute of Applied Botany and New Cultures. Received March 18, 1926.

A Russian variety of Scotch pine.

#### 65797 to 65799. CoffEA spp. Rubiaceae. Coffee.

From Mayaguez, Porto Rico. Seeds presented by the director, Agricultural Experiment Station. Received January 21, 1926. Notes taken from an article on Coffees of the Dutch Indies (*Tea and Coffee Trade Journal*, vol. 35, p. 417).

#### 65797. COFFEA CANEPHORA Pierre.

The branches of this species are more slender than those of Coffea robusta and spread horizontally in the young plant. The leaves are dark green, narrower than in *G. robusta*, and reddish when young. The unripe berries are purple, the ripe berries are bright red and narrowly oblong. This stands drought better than *C. robusta* and is better fitted for higher altitudes.

For previous introduction see No. 53455.

65798. COFFEA QUILLOU P. J. S. Cramer,

Introduced into the East Indies from Libre ville, French Congo, in 1901, this was found to be distinct from *Coftea robusta*. The leaves are narrower and brighter green, and the young trees are pyramidal in habit. The berries are bright red, not dark crimson, and oblong. The crop matures later than that of *C. robusta* and under favorable circumstances is larger than that of any other coffee. Under less favorable conditions *C. robusta* is more productive.

For previous introduction see No. 61486.

65799. COFFEA UGANDAE P. J. S. Cramer.

This resembles *Coffea canephora* in many respects, but the smaller, narrower leaves are brighter green and more curled and ribbed. The bean is smaller in size and shape, but shows a purplish tinge and is not sharply striped. The flavor of the coffee is said to be better than that of *C*. robusta.

#### 65800 and 65801. SACCHARUM OFFICI-NARUM L. POaceae. Sugar cane.

 From Ensenada, Porto Rico. Cuttings presented by the South Porto Rico Sugar Co., through E. W. Brandes, Bureau of Plant Industry. Received January 2, 1926.

Locally grown varieties.

65800. G. C. 1480.

65801, Ba. 6032.

#### 65802 and 65803.

From Ronda, Spain. Seeds presented by Mrs. N. Low, at the request of David Fairchild, agricultural explorer, Bureau of Plant Industry, with the Allison V. Armour expedition. Received January 2, 1926.

#### 65802 and 65803-Continued.

65802. GENISTA MONOSPERMA (L.) Lam. Fabaceae.

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

For previous introduction see No. 64923.

65803. QUERCUS ILEX L. Fagaceae. Oak.

The Ballota is only a seedling variation of *Quercus ilex* which, in the Balearic Islands, is so much appreciated because of its large sweet acorns that it is grafted on the bitter acornbearing form as a stock. In southern Spain I was assured that acorns from a sweet Ballota tree would produce sweet acorns. (*Fairchild.*)

For previous introduction see No. 54659.

- 65804. AMYGDALUS PERSICA L. (Prunus persica Stokes). Amygdalaceae. Peach.
- From Tunbridge Weils, England. Plants obtained from Arthur Charlton & Sons. Received January 8, 1926.

Royal George. Fruit large, pale yellow flushed with blood red; flesh yellow, rich and sweet; matures early in September. (Arthur Charlton & Sons' Catalogue.)

- 65805 and 65806. CASTANEA MOLLIS-SIMA Blume. Fagaceae. Chestnut.
- From Canton, China. Seeds collected by F. A. McClure, agricultural explorer, Bureau of Plant Industry. Received January 4, 1925. Numbered January, 1926.
  - 65805. No. 185. Obtained at Chukkouen, Lohkongtung, October 30, 1925. Fung lut and hong lut. The fruits of this variety are distinguished by their gray color, which is due to an almost complete covering of adpressed hairs. This is said to be the most common variety, the most prolific bearer, and the most durable in storage.
  - 65606. No. 186. Obtained at Chukkouen, Lohkongtung, October 30, 1925. Fung lut and yau lut. The fruits of this variety are distinguished by their deep brownish red color and their almost complete freedom from the covering of gray hairs which characterizes McClure's No. 185 [No. 65805]. This variety is said to be less common than No. 185 and to bring a slightly better price on the market because of its better appearance, but it is less durable in storage.

#### 65807. SACCHARUM OFFICINARIUM L. Poaceae. Sugar cane.

From Dal Carmen, Pampanga, Philippine Islands. Cuttings presented by H. B. Ross, through E. W. Brandes, Bureau of Plant Industry. Received January 11, 1926.

A locally grown variety.

- 65808 to 65816. ZEA MAYS L. Poaceae. Corn.
- From Leningrad, Russia. Seeds presented by the Institute of Applied Botany, through G. N. Collins, Bureau of Plant Industry. Received January 5, 1926.

Locally grown varieties.

65808. No. 1252.	65813. No. 1354.
65809. No. 1255.	65814. No. 1355.
65810. No. 1339.	65815. No. 1471.
65811. No. 1347.	65816. No. 1587.
65812, No. 1348.	

#### 65817. CITRUS GRANDIS (L.) Osbeck | 65819 to 65853-Continued. (C. decumana Murr.). Rutaceae. Grapefruit.

From Los Banos, Philippine Islands. Bud wood presented by J. E. Higgins, College of Agricul-ture, through W. T. Swingle, Bureau of Plant Industry. Received January 2, 1926.

Better pummelo C. A. 1427.

- 65818. CITRUS GRANDIS (L.) Osbeck Rutaceae. (C. decumana Murr.). Grapefruit.
- From Bangkok, Siam. Seeds presented by Yai S. Sanitwongse. Received January 2, 1926.

Seeds of a variety of pummelo called Thongdie, considered by many the best in Siam. It has a thin skin and does not keep as long as the com-mercial Siamese varieties. (Sanitwongse.)

#### 65819 to 65853.

- From Kwangtung, China, and the Philippine Islands. Seeds collected by F. A. McClure, agricultural explorer, Bureau of Plant Industry. Received January 4, 1926. Notes by Mr. McClure.
  - 65819 to 65822. AMYGDALUS PERSICA L. (Prunus persica Stokes). Amygdalaceae.
  - These seeds were obtained from trees on the Canton Christian College farm, July, 1925.
    - 319. No. 231. Tim tao. A comparatively late, single-flowered variety of edible peach. The round white-skinned fruits 65819. No. 231. have sweet white flesh.
    - 320. No. 232. Suen tao. A single-flowered variety of edible, though very sour, fruits. It is the earliest variety known here, 65820. No. 232. ordinarily.
    - Shau thai tao. This peach 65821, No. 233. bears medium-sized fruit which the Chinese say is good to eat, but the chief value of this variety is its large double pink fragrant flowers, which make it an exquisite ornamental.
    - 65892. No. 234. Laan faan tao. A variety. The A very early single-flowered variety. The yellow-skinned fruits are the largest of any variety native here, but they are also the sourest The yellow flesh is dark red near the seed.

65823. ANEMONE VITIFOLIA Buch.-Ham. Ranunculaceae.

No. 239. A very pretty ornamental found in the wild on Santo Tomas (St. Thomas) Moun-tain, Luzon, Philippine Islands, at an altitude of over 2,000 meters, September, 1925. It is an annual, reaching a height of about 1 meter, much branched, with large, deeply divided leaves and open corymbs of beautiful flowers which are tinted cream and pale pink. These are followed by round fruits which, when ripe, burst forth in abundant seed-bearing cotton.

For previous introduction see No. 49615.

65824. ARTOCARPUS HYPARGYREA Hance. Moraceae.

No. 182. From a tree located at Taaishaan, Lohkongtung, Kwangtung Province, belonging to Chung Pooi Chue. Paak kwai muk paak kau long. A beautiful ornamental tree, attain-ing a height of 10 to 15 meters, with a dense cov-ering of large, soft-textured, dull-green leaves. The curious yellow fruit is about the size of a large orange, irregular in shape and very soft when ripe. In fact, the skin is so very tender and easily broken that the fruit is never shipped fresh. The skin, like that of No. 1 [No. 62009], is covered with a fine stiff short pubescence which is very unpleasant when eating. When an unripe fruit is bruised or the skin is broken it exudes a very sticky white latex. The struc-73936-28-2-2No. 182. From a tree located at Taaishaan,

73936-28--2

ture of the fruit is typical of the genus, the seg-ments being arranged radically. The texture of the deep orange-yellow flesh is very fine and tender, and the flavor is pleasant, subacid to acid. The fruit is used by the Chinese as follows: Freeh pickled in solt on on population and one Fresh, pickled in salt as an appetizer, and as a drug when dried. The tree is grown from seeds, which are considerably larger than those of No. 1, and it is not grafted.

65825. BOEHMERIA NIVEA (L.) Gaud. Urticaceae. Ramie.

No. 223. Obtained from the Linchow Dis-trict, Kwangtung Province, October, 1925. *Pak chue ma*. An erect, branched monoecious shrubby perennial, 1 to 2 meters high, with hairy branches and petioles, which is propagated here, as a rule, by means of rooted suckers spring-ing up from the base of the plant. It is culti-vated in Kwangtung for the excellent fibers which its stem yields, and the well-known Chinese grass cloth is said to be made from the selected fibers.

For previous introduction see No. 63790.

65826 to 65828. CANARIUM ALBUM (Lour.) DC. Balsameaceae.

These seeds were obtained October 31, 1925, from a tree near Chukkouen, Lohkongtung, belonging to Chung Ch'iu Chue.

For previous introduction see No. 61761.

- 65826. No. 216. Paak laam: Shaan tau paak laam. The fruits are subelliptical in longi-tudinal section and nearly round in cross section. This variety is considered by the Chinese to be the best pask laam in point of flavor and quality, and it is consumed fresh to a greater extent than any other. It is multiplied only by grafting.
- 65827. No. 217. Paak laam; saam fong paak laam. The fruits are subobovate in longilaam. The fruits are subooovate in iong-tudinal section, distinctly triangular in cross section. This variety is considered by the Chinese to rank next to No. 216 [No. 65826] in quality and flavor. The crop is used almost entirely for pickling. Multiplied only by grafting.
- 65828. No. 218. Pack laam; wong tsat. This variety is very similar to No. 216 [No. 65826] in general appearance, but turns yellow sooner. It is considered by the Chinese to be decidedly inferior to No. 216 in flavor and quality. It is not eaten fresh to any great extent, but is used for pickling. Multiplied only by grafting.
- 65829 to 65834. CANARIUM PIMELA Koen. Balsameaceae.

From a tree belonging to Chung Ch'iu Chue, at Chukkouen, Lohkongtung. October 31, 1925.

- 66829. No. 209. Oo laam; heung laam. The medium-sized fruits, 4.5 centimeters long, are irregularly oblong and stand at the top of the list in flavor and quality. They resemble No. 210 [No. 65830], but are dis-tinguished from these fruits by the less triangular and more pointed shape of the seeds. This variety is propagated only by grafting by grafting.
- 65830, No. 210. Oo laam; saam fong laam. A black olive with excellent flavor and quality, no fiber, and a rather tough skin. The fruit is bluntly oblong in shape and somewhat triangular in cross section. This olive, next to No. 209 [No. 65829], is the most highly esteemed by the Chinese. Propagated only by gratting.
- 65831. No. 211. Oo laam; taai tsung paak. This variety, propagated only by grafting, is distinguished from No. 210 [No. 65830] by its more abundant resin and more tender skin.

### 65819 to 65853-Continued.

- 65832. No. 212. Oo laam; shaan laam. A seedling tree which through neglect was never grafted. All ungrafted trees of this species are known as *shaan laam* (moun-tain olive). The fruits are long and semitain olive). The fruits are long and semi-pointed, and the seeds are comparatively long and tapering at the end. The resin and oil content seem to be higher than in the other varieties, and the quality is fair
- 65833. No. 213. Oo laam; ah paak oo laam. 835. No. 213. Oo laam; an paak oo laam. This variety, propagated only by grafting, is similar in shape to No. 212 [No. 65832] but slightly larger on the average. The quality is medium, the flavor poor, and the skin is very tough. The seed is long pointed but not so long as that of No. 212.
- 65834. No. 214. Oo laam: ngoh ko oo laam. This is the thickest fleshed variety, but also the most coarse grained and fibrous. The fruits are subobovate and the seed very long pointed. Propagated only by grafting.

#### 65835. DIANELLA CAERULEA Sims. Liliaceae.

No. 238. From the wild in the pine woods at Baguio, Luzon, Philippine Islands, at an alti-tude of about 1,500 meters, September, 1925. A herbaceous perennial, 1 to 2 meters high, with its two-ranked linear leaves in distichous ar-rangement. The under surface of the leaves is rangement. The under surface of the leaves is scantily covered with a white powdery bloom; the pale blue flowers, with yellow stamens, are borne in terminal corymbs; the fruits are pro-duced rather abundantly, soon turning black and soft, falling to the ground. Spreads by creeping rootstocks.

65836 to 65838. DIOSPYROS KAKI L. f. Diospy-Kaki.

65836. No. 179. From a tree belonging to Chue Tung, at T'oichung, Honam Island, Kwangtung Province. October 26, 1925. Shui tsz: ma tai yeung tsz. The globose, light-yellow fruits, 4 to 5 centimeters in diameter, are rather seedy and have firm flesh

For introduction of bud wood see No. 65582

- 65837. No. 180. Sai paat sin tsz. A large prolific tree found just outside of Pak-shaan, Honam Island, Kwangtung Prov-ince. October 26, 1925.
- **838.** No. 195. From a tree, near Lohfungtsz (Monastery), Lohkongtung, Kwangtung Province, belonging to Chung Ch'iu Chue, October 30, 1925. Sz man chuen tsz. This variety is considered very prolific, and the tree is about 20 feet. The fruits, the size of a goose egg, are subglobular and characterized by a depression which forms a "collar" just below the calyx. This is a rather seedy variety, some fruits having four or five seeds, but seedless ones are often found on this tree. The most striking thing about the fruits is that it is not necessary to ripen them artificially in order to remove the astringency. Ch'iu Chue says that this is the only tree he knows that produces nonastringent fruits. 65838. No. 195. From a tree, near Lohfungtsz

65839. EREMOCHLOA OPHIUROIDES (Munro) Hack. Poaceae. Grass.

No. 220. From the island of Honam, Kwang-tung Province. This variety was growing on rolling land not under cultivation, but con-stantly pastured and cut over by hunters of fuel. This grass has never been grown artifi-cially here by means of seed, but it can doubtless be grown by following the usual practices ob-served in sowing lawn grasses.

For previous introduction see No. 58389.

#### 65819 to 65853-Continued.

#### 65840. FICUS Sp. Moraceae.

Fig.

65840. FIGUS Sp. Moraceae. Fig. No. 237. A much-branched shrub up to 4 or 5 meters in height, found growing in a sink hole in a limestone formation in the wild near Baguio, Luzon, Philippine Islands, at an altitude of about 5,000 feet. September, 1925. The fruits are small, up to 2 centimeters in diameter, rich purple when ripe, sweet, and of very pleasant flavor. Owing to the tenderness of the skin and its freedom from the roughness which makes the ordinary fig a little difficult for some persons to eat, this fruit may be eaten fresh, in which state it was pronounced delicious by all those who sampled it. The leaves are mostly entire, oblong to lanceolate, acute, with a roughness to the touch which is due to a sparse covering of short, bristly scalelike excrescences. This is probably not of promise as a commercial fig, owing to the smallness of the fruits, the tender-ness of the skin, and the scant fecundity; but it may have possibilities as a stock or for breeding purposes. purposes.

65841. GLYPTOSTROBUS PENSILIS (Staunton) Koch (Taxodium heterophyllum Brongn.). Pinaceae.

No. 222. From Honam Island, Kwangtung Province. October 1925. Shui tsung. A beau-tiful ornamental which is planted along water-courses and ponds in many parts of the Canton delta because of its supposed beneficent geoman-tic influence. The lumber is considered to be very durable even when exposed to moisture, as it requires more than average moisture in order to thrive, and is therefore used in the construction of boats at Canton, particularly as heavy timbers. This tree is of scientific interest in that it is known only in cultivation. Its native home is supposed to be somewhere in southern China, since it is not known elsewhere. It can be grown as a seedling if not allowed to become too dry. become too dry.

65842. IXORA CHINENSIS Lam. Rubiaceae.

No. 187. Obtained in the wild at Kotaaitam-shaan, Lohkongtung, Kwangtung Province, October 31, 1925. Lung shuen fa. A small, ornamental bush with abundant dense terminal umbels of attractive flame-colored flowers. The leaves are large, shiny, and pale green.

65843, MELASTOMA SANGUINEUM Roxb. Melastomaceae.

No. 188. From the wild at Kotaaitamshaan, Lohkongtung, Kwangtung Province, Novem-ber 1, 1925. Mo nim. A fine ornamental shrub, attaining a height of 1 to 2 meters, with large shiny red-nerved leaves and large single deep-pink flowers with conspicuous yellow stamens.

65844 to 65848. PRUNUS SALICINA Lindl. Amyg-dalaceae. Japanese plum.

Obtained at Pakshaan, Honam Island, Kwangtung Province, June, 1925, from Mok Tai T'ong.

- 6584. No. 226. Contrary to the vernacular name, *hung fa lei* (red-flowered plum), this and all the other varieties known here have white flowers. The fruits, however, when ripe are deep red, almost black, with deep-red flesh and comparatively small seeds to which the flesh adheres very tightly. While very attractive in appearance and good shippers, these fruits are quite sour. This variety is said to be propagated almost entirely by means of root sprouts.
- 65845. No. 227. The flowers of this variety are white. The fruits are dark red, mot-tled with fine yellow dots; suture shallow, marked with darker red; apex often with slightly raised appendage; flesh firm, juicy, red, flavor fair. Propagated by grafting. The seedlings of any variety

- of the species used without preference; peach stock tried with success by Mok Tai T'ong.
- 46. No. 228. Foo yan lei. The fruits are pale yellowish red, mottled with yellow or greenish yellow, subglobular, usually with a slight ridge on one side of the suture which is marked by a line of red deeper than that of the rest of the fruit. The skin is smooth and the flesh bright-red, firm and juicy, acid, clinging tightly to the seed. The two halves of the fruit the neutral wave being in science of the fruit 65846. No. 228. are usually unequal in size.
- 65847. No. 229. Taai oo lei. Fruits dark red, mottled with greenish yellow; globular in shape; suture slightly raised and marked with a darker red line; fiesh firm, juicy, subacid, dark red; seed a cling, rather large in proportion to fruit. Propagated by grafting on seedlings of any variety of this species.
- 348. No. 230. Nooh Ko lei. Fruits rela-tively large, oblong; halves often unequal; suture not deep, marked with a thin solid red line; skin smooth, golden yellow, mottled with red; flesh firm, juicy, lemon-yellow when ripe. Propagated by grafting on seedlings of any variety of this provided. 65848, No. 230. species.

65849. RHODOMYRTUS TOMENTOSA (Ait.) Wight. Myrtaceae.

No. 202. From the wild at Kotaaitamshaan. No. 202. From the wild at Kotaaitamshaan, Lohkongtung, Kwangtung Province, November 1, 1925. Nim tsai. A pretty little shrub bear-ing abundant pale-pink flowers followed by delicious purplish fruits the size of a gooseberry. The fruits, as well as the under side of the leaves, are covered with fine gray hairs.

For previous introduction see No. 48583.

65850. RUBUS ELMERI Focke. Rosaceae.

80500. KUBUS ELMERI Focke. Kosaceae. No. 235. Found in disintegrated limestone residual at Baguio, Luzon, Philippine Islands, at an altitude of 5,000 feet, September, 1925. A very pretty, low, creeping bramble, with dark-green, rugose foliage, bearing its white flowers and yellowish fruits singly in the axils of the leaves at or near the tips of the branches. The stems, buds, petioles, and under surface of the leaves are covered with dense brownish tomen-tum. The fruits are medium sized, yellowish, very juicy, and somewhat sweet, with a good flavor. The long styles remain attached to the drupels as with our yellow raspberry in the United States. This berry is gathered from the wild and served at some of the boarding places in this region. in this region.

65851. RUBUS FRAXINIFOLIUS Poir. Rosaceae.

No. 236. Found in disintegrated limestone soil at Baguio, Luzon, Philippine Islands, at an altitude of 5,000 feet, September, 1925. A sturdy, upright, little-branched bramble, with a stiff stem up to 3 or 4 meters high and 2 to 3 centi-meters in diameter under favorable conditions. meters in diameter under lavorable conditions. The stems and branches are red, armed with short, sharp, recurved hooks. The white flowers are followed by large, attractive bright-red fruits, borne in large clusters. The drupels are small and numerous, resulting in a rather seedy, comparatively dry fruit.

For previous introduction see No. 56273.

- 65852 and 65853. SOJA MAX (L.) Piper (Glycine hispida Maxim.). Fabaceae. Soy bean.
  - 65853. No. 224. From Nodoa, Hainan Island, China. *Tung tau*; siu tau. A small black bean usually planted in December and grown during the winter months.
  - 65853. No. 225. From Nodoa, Hainan Island, China. Ch'un tau; taai tau (spring bean; big bean). A spring variety planted in May.

#### 65854 to 65859.

- From Harbin, Manchuria. Seeds obtained by P. H. Dorsett, agricultural explorer, Bureau of Plant Industry. Received January 4, 1926.
  - 65854. ABUTILON THEOPHRASTI Medic. (A. avi-cennae Gaertn.). Malvaceae.

No. 4692. November 8, 1925. Seeds from plants growing in the wild. This variety is generally known here as "Manchurian jute" and is found both wild and cultivated.

For previous introduction see No. 54748.

65855. AMYGDALUS DAVIDIANA (Carr.) Zabel (Prunus davidiana Franch.). Amygdalaceae.

No. 4670. Obtained at the Fa Hua Ssu Temple, near Peking, October 29, 1925. May prove valuable as stock.

65856 and 65857. AMYGDALUS PERSICA L. (Pru nus persica Stokes). Amygdalaceae. Peach.

Obtained at the Fa Hua Ssu Temple, near Peking, October 29, 1925.

65856. No. 4663. "Red Flowering peach," a freestone variety which ripens the middle of September and is said to fruit in pairs.

65857. No. 4670. This peach may prove valuable as a stock.

- 65858 and 65859. CASTANEA MOLLISSIMA Blume. Fagaceae. Chestnut.
  - 65858. No. 4666. Obtained at the Fa Hua Ssu Temple, near Peking, October 29, 1925. Pai luli tze (white dew chestnut). The diameter of the nuts is less than an inch; they mature early in September.

For previous introduction see No. 65620.

65859. Nos. 4667 and 4668. Mired seeds of erh luli tze (second-crop chestnut) and han luli tze (cold-dew chestnut) obtained at the Fa Hua Tze Temple near Peking, October 29, 1925. Ripen the last of Sep-tember 29, 1925. tember.

65860. ILEX CORNUTA Lindl. and Paxt. Aquifoliaceae. Chinese holly.

From Ichang, China. Seeds presented by Rev. A. S. Cooper, American Church Mission. Received May 22, 1923. Numbered January, 1926.

A holly with spiny, dark-green, glossy leaves, which in winter is loaded with clusters of scarlet berries. While it does not make as symmetrical a crown as does the native Christmas holly, *Ilex* opaca, its attractive foliage and bright-colored fruits render it a fine winter ornamental for the southern. half of the United States.

For previous introduction see No. 32945.

#### 65861 to 65880.

- From Harbin, Manchuria. Seeds obtained by P. H. Dorsett, agricultural explorer, Bureau of Plant Industry. Received January 4, 1926. Notes by Mr. Dorsett.
  - 65861. CASTANEA MOLLISSIMA Blume. ceae.

No. 4669. From the Fa Hua Ssu Temple, near Peking. Hu chaoli tze (tiger-paw chestnut). Seeds of this same chestnut were sent in under No. 700 [No. 61834], and scions under No. 1677 [No. 62257].

65862. CHAETOCHLOA 62. CHAETOCHLOA ITALICA (L. (Setaria italica Beauv.). Poaceae. (L.) Scribn. Millet.

No. 4697. November 8, 1925. Obtained at Echo.

65863. CUCURBITA MAXIMA Duchesne. Cucurbitaceae.

No. 4705. November 8, 1925. A good-sized. dark-red variety with yellow flesh.

### 65861 to 65880—Continued.

85864. ELSHOLTZIA PATRINII (Lepechin) Garcke (E. cristata Willd.). Menthaceae.

No. 4700. November 8, 1925. From Echo.

For previous introduction see No. 29928.

65865. EUONYMUS sp. Celastraceae.

No. 4690. From Echo, October 8, 1925. This may prove of value as an ornamental.

65866. FRAXINUS Sp. Oleaceae. Ash.

No. 4730. November 10, 1925. From the Ta Lu Hua Temple, Taluhua Mountains.

65867. GLEDITSIA HETEROPHYLLA Blume. Caesalpiniaceae.

No. 4708. November 8, 1925. Collected in the Western Hills, northwest of Peking. This may be the same as No. 653 [No. 61922].

65868. GLYCYRRHIZA Sp. Fabaceae.

No. 4698. November 8, 1925. A rank-growing plant with heavy seed pods and spiny capsules, found in Echo.

- 65869 and 65870. JUGLANS REGIA L. Juglandaceae. Walnut.
- From the Fa Hua Ssu Temple, near Peking, October 29, 1925.

65869. No. 4664. Chiu tze ho tao (ornament walnut). A very hard-shelled, irregularshaped variety which ripens at the end of August.

65870. No. 4665. A thin-shelled variety which ripens at the end of August.

65871. LESPEDEZA Sp. Fabaceae.

No. 4691. November 8, 1925. A herbaceous plant from Echo.

65872. LESPEDEZA Sp. Fabaceae.

No. 4701. November 8, 1925. From Echo.

65873. NICOTIANA Sp. Solanaceae. Tobacco. No. 4695. November 8, 1925. Chinese cul-

tivated tobacco grown in the vicinity of Echo.

65874. PERILLA FRUTESCENS (L.) Britton (P. ocymoides L.). Menthaceae. Perilla. No. 4703. November 8, 1925. From Echo.

For previous introduction see No. 62187.

65875. PINUS KORAIENSIS Sieb. and Zucc. Pinaceae. Pine.

No. 4706., Seeds obtained at the market, Harbin, November 8, 1925, where they had been shipped in from the mountains of the surrounding region.

For previous introduction see No. 65501.

65876. POLYGONUM DIVARICATUM L. Polygonaceae.

No. 4696. November 8, 1925. From Echo.

65877. PRUNUS Sp. Amygdalaceae. Plum.

No. 4670½. A variety which may be valuable for stock; good fruiting types also may appear. From the Fa Hua Ssu Temple, near Peking.

65878. PYRUS BETULAEFOLIA Bunge. Malaceae. Pear.

No. 4723. Nung Lo Tomb. October 18, 1925. From the same tree as the seeds sent in under No. 865 [No. 62195]. This tree is a considerable distance from any other pear tree, which perhaps accounts for so few seeds in the fruit.

#### 65861 to 65880-Continued.

65879. PYRUS Sp. Malaceae.

No. 4724 Wild pears obtained in the Peking market, October 21, 1925, where they had been shipped in from Shaho, north of Peking. They may prove of interest as stock.

Pear .

65880. SORBUS Sp. Malaceae. Mountain ash.

No. 4689. November 3, 1925. An ornamental red-fruited tree growing near Achihe station of the Chinese Eastern Railway. The berries are borne in clusters similar to elderberries and after frost may be made into jam. Seeds were sent in under No. 4572 [No. 65683].

#### 65881 to 65899. ORYZA SATIVA L. Poaceae. Rice.

From Leningrad, Russia. Seeds presented by A. Kol, chief of bureau of introduction and information, Institute of Applied Botany and New Cultures, through C. E. Chambliss, Bureau of Plant Industry. Received January 5, 1926. Locality notes by Mr. Kol.

65881. No. 1. Tchaltyk. From Armenia.

- 65882. No. 3. Tchaltyk. From Aserbejdshan, Nuchimsky District.
- 65883. No. 4. Andabru. From Aserbejdshan, Baku Government, Lenkoransky District.
- 65884. No. 7. Styk. From Aserbejdshan, Baku Government, Lenkoransky District.
- 65885. No. 8. Shala. From Turkestan, Dusety Su District.
- 65886. No. 20. Shala. From Samarkand District.
- 65887. No. 21. Shala. From Samarkand District.
- 65888. No. 22. Shala. From Samarkand District.
- 65889. No. 37. Shala (China). From Turkestan.

65890. No. 101. From Turkestan.

- 65891. No. 103. Shala. From Turkestan, Dsheti-Su.
- 65892. No. 105. Shala. From Turkestan, Samarkand District.
- 65893. No. 110. Shala. From Turkestan.
- 65894. No. 113. Gidej. From Aserbejdshan, Lenkoransky District.
- 65895. No. 116. Andadru. From Aserbejdshan, Lenkoransky District.
- 65896. No. 262. Arna Shala. From Turkestan, Samarkand District.
- 65897. No. 467. Shaly. From Turkestan, Samarkand District.
- 65898. No. 506. Berindsh. From Estate Karakar, near Erivan, Armenia.
- 65899. No. 508. From Estate Karakar, near Erivan, Armenia.
- 65900 and 65901. Gossypium NANking Meyen. Malvaceae. Cotton.
- From Kungchuling, Manchuria. Seeds presented by Dr. K. Kanda, director, Kungchuling Agricultural Experiment Station. Received January 6, 1926. Notes by Doctor Kanda.

Local strains produced in 1925 at the Hsiungyaocheng Agricultural Experiment Branch Station of the South Manchuria Railroad Co., near Liaoyang, Manchuria.

#### 65900 and 65901-Continued.

65900. Kuro tane (Manchurian black seed).

65901. Shiro tane (Manchurian white seed).

#### 65902. CARICA PAPAYA L. Papayaceae. Papaya.

From Vera Cruz, Mexico. Seeds presented by C. A. Purpus. Received January 7, 1926.

The papaya from Monserrate is an excellent variety, grown in sandy soil. It is monoecious, not dioecious. The fruit is orange red inside and very sweet. (*Purpus.*)

# 65903 and 65904. LESPEDEZA spp. Fabaceae.

From Fukuoka, Japan. Seeds presented by Dr. Mitsunaga Fujioka, Kyushu Imperial University. Received January 9, 1926.

65903. LESPEDEZA JUNCEA SERICEA (Miquel) Forbes and Hemsl.

*Medohagi.* A Japanese bush clover which develops into a shrubby plant about 3 feet high, with dense foliage and white flowers.

For previous introduction see No. 59378.

65904. LESPEDEZA STRIATA (Thunb.) Hook. and Arn.

Yahazuso. A locally developed Japanese strain.

For previous introduction see No. 62383.

65905. COFFEA QUILLOU P. J. S. Cramer. Rubiaceae. Coffee.

From Manila, Philippine Islands. Seeds presented by S. Youngberg, director, Bureau of Agriculture. Received January 9, 1926.

For previous introduction and description see No. 65798.

#### 65906 to 65961.

From Harbin, Manchuria. Seeds obtained by P. H. Dorsett, agricultural explorer, Bureau of Plant Industry. Received January 8, 1926.

65906. ABIES HOLOPHYLLA Maxim. Pinaceae. Manchurian fir.

No. 4758. November 21, 1925. A tall, handsome Manchurian fir, eventually 100 feet or more in height, with stout spreading or ascending branches and dark-green foliage.

65907. ACANTHOPANAX SENTICOSUM (Rupr.) Harms. Araliaceae.

No. 4756. November 21, 1925. A very spiny shrub bearing palmate-divided leaves and having at the end of its long shoots small umbels of black berries. Grows generally in dense shade, and may be of use as a park or garden shrub or as an undergrowth beneath tall trees. (Frank N. Meyer, under No. 57274.)

65908. ACANTHOPANAX SESSILIFLORUM (Rupr. and Maxim.) Seem. Araliaceae.

No. 4767. November 21, 1925. A vigorous deciduous shrub which forms a large spreading bush 10 feet high, with three-lobed or five-lobed, irregularly toothed leaves. The flowers, brownish purple with yellow protruding stamens, are packed closely in a spherical almost stalkless cluster about an inch in diameter and appear in July. The inky black berries are in round clusters about an inch thick. This is one of the hardiest shrubs introduced from northern China, where it is native.

For previous introduction see No. 58603.

65909 to 65911. ACER spp. Aceraceae. Maple. November 21, 1926.

#### 65906 to 65961—Continued.

65909. ACER BARBINERVE Maxim.

No. 4757. A shrubby maple, native to Manchuria, with coarsely toothed five-lobed leaves.

#### 65910. ACER GINNALA Maxim.

No. 4751. A small tree or large shrub of bushy habit, with three-lobed, slightly heartshaped leaves and very fragrant white flowers in short panicles, appearing in May. This maple is nearly allied to *Acer tataricum*, but differs markedly in shape of leaf. The foliage turns a beautiful red before falling, the species being one of the best for autumn coloring. It is native to China, Manchuria, and Japan.

For previous introduction see No. 42310.

65911. ACER UKURUNDUENSE Trautv. and Meyer (A. spicatum Lam.).

No. 4762. A small Manchurian tree with coarsely toothed, five-lobed or seven-lobed leaves.

For previous introduction see No. 30845.

65912. ALNUS HIRSUTA TURCZ. Betulaceae. Alder.

No. 4752. November 21, 1925. A rather handsome medium-sized tree, native to Japan and Manchuria, with rounded-elliptic, slightly lobed leaves, hairy beneath.

65913. ARALIA CHINENSIS MANDSHURICA (Rupr.) Rehder. Araliaceae.

No. 4763. November 21, 1925. This is a small, hardy Manchurian tree resembling *Aralia spinosa* (Hercules club), but more treelike, with few spines. It does not form many branches, but the large bipinnate leaves cast a good shade. The greenish white flowers are borne in large panicles, and the berries are dark red when ripe, producing a very pleasing effect.

For previous introduction see No. 45573.

65914 to 65916. AVENA SATIVA L. Poaceae. Oats.

From the Agricultural Experiment Station, Harbin, November 22, 1925.

65914. No. 4805. Dreger yellow, No. 37.

65915. No. 4806. Dreger white, No. 36.

65916. No. 4807. Strube, No. 40.

65917. BETULA FRUTICOSA Pall. Betulaceae. Birch.

No. 4815. November 21, 1925. A shrub, about 15 feet high, with oval-elliptic leaves 2 inches long. Native to Manchuria and Siberia.

For previous introduction see No. 37007.

65918. BETULA PLATYPHYLLA Sukaczew. Betulaceae. Birch.

No. 4753. November 21, 1925. A Siberian birch with broadly ovate, acuminate leaves 2 inches wide and long.

65919. CANNABIS SATIVA L. Moraceae. Hemp.

No. 4802. November 22, 1925. A local variety, No. 2, from the Agricultural Experiment Station, Harbin.

65920. CARPINUS CORDATA Blume. Betulaceae. Hornbeam.

No. 4755. November 21, 1925. A handsome hardy tree 40 feet or less in height, with ovaloblong, acuminate leaves 3 to 6 inches long. Native to Japan and Manchuria.

65921. CAULOPHYLLUM ROBUSTUM Maxim. Berberidaceae.

#### 65906 to 65961—Continued.

No. 4759. November 21, 1925. An ornamental perennial herb, native to eastern Asia, with panicles of small yellow-green flowers, succeeded by blue berries.

65922. CELASTRUS FLAGELLARIS Rupr. Celastraceae.

No. 4772. November 21, 1925. A shrubby Chinese vine, quite hardy, with persistent spiny stipules, small oval leaves, and small axillary fruits with crimson arils.

For previous introduction see No. 63348

65923 and 65924. CHAETOCHLOA ITALICA (L.) Scribn. (Sctaria italica Beauv.). Poacese. Millet.

November 22, 1925. From the Agricultural Experiment Station, Harbin.

65923. No. 4800. A small yellow-seeded variety.

65924. No. 4801. A small shiny yellow variety.

65925. CLEMATIS BREVICAUDATA DC. Ranunculaceae.

No. 4774. November 21, 1925. A vigorous climbing vine, native to China, with pinnate or bipinnate, coarsely toothed leaves and axillary pancices of white flowers.

65926. EUONYMUS ALATUS (Thunb.) Rupr. Celastraceae.

No. 4764. November 21, 1925. A spreading shrub about 8 feet high native to China and Japan. The sharply toothed elliptic leaves are about 2 inches long, and the yellowish flowers are in small clusters. The capsules are purplish.

For previous introduction see No. 37479.

65927. FAGOPYRUM VULGARE Hill (F. esculentum Moench). Polygonaceae. Buckwheat.

No. 4804. From the Agricultural Experiment Station, Harbin, November 22, 1925.

65928 to 65934. HORDEUM spp. Poaceae. Barley.

From the Agricultural Experiment Station, Harbin, November 21, 1925.

65928 and 65929. HORDEUM DISTICHON PAL-MELLA Harlan. Two-rowed barley.

65928. No. 4778. Moravia, No. 57.

65929. No. 4781. Tschermak, No. 53.

65930. HORDEUM VULGARE NIGRUM (Willd.) Beaven. Six-rowed barley.

No. 4783. Mukden black barley, No. 15.

65931 to 65934. HORDEUM VULGARE PALLIDUM Seringe. Six-rowed barley.

65931. No. 4779. Ganazay HIV, No..40.

65932. No. 4780. Imperial, No. 56.

65933. No. 4782. Vladivostok, No. 19.

65934. No. 4784. San toku, No. 13.

65935 and 65936. LINUM USITATISSIMUM L. Linaceae. Flax.

From the Agricultural Experiment Station, Harbin, November 22, 1925.

65935. No. 4798. Belgium, No. 11.

65936. No. 4799. Russian, No. 7.

65987. LONICERA MAACKII (Rupr.) Herd. Caprifoliaceae. Honeysuckle.

No. 4766. November 21, 1925. A bush honeysuckle, native to northeastern China, becoming about 10 feet high with widely spreading branches and dark-green leaves which are downy on both surfaces. The pure-white

#### 65906 to 65961—Continued.

flowers, an inch in diameter, are produced in pairs on the upper side of the branchlets The fruits are red.

For previous introduction see No. 57300.

65938. LONICERA RUPRECHTIANA Regel. Capri foliaceae. Honeysuckle.

No. 4770. November 21, 1925. A Man churian shrub, 12 feet high, with dark-green leaves, grayish pubescent beneath, and pure white flowers followed by red or yellow fruits.

For previous introduction see No. 53715.

65939. MAACKIA AMURENSIS Rupr. Fabaceae.

No. 4754. November 21, 1925. A small tree, native to eastern Asia, with orange-brown bark, dull-green compound leaves, and short erect clusters of small yellowish white flowers.

For previous introduction see No. 57301.

65940 and 65941. ORYZA SATIVA L. Poaceae. Rice.

Upland rice from the Agricultural Experiment Station, Harbin, November 21, 1925.

65940. No. 4785. Kon tou, No. 4.

65941. No. 4786. Tieh ling, No. 16.

65943. PICEA JEZOENSIS (Sieb. and Zucc.) Carr. Pinaceae. Spruce.

No. 4773. November 21, 1925. A tall Siberian spruce, up to 100 feet in height, with slender horizontally spreading branches, dark-gray bark, and silvery white leaves, dark green below.

For previous introduction see No. 52658.

#### 65943. RHAMNUS DAVURICA Pall. Rhamnaceae. Dahurian buckthorn.

No. 4768. November 21, 1925. A shrub or small tree up to 30 feet in height, with more or less arching branches which are often thornless. The oblong or oval leaves are slender pointed and finely toothed. The black fruits, in dense clusters, are about one-fourth of an inch in diameter. This species is native to northeastern China and Siberia and is of value for rough shrubberies.

For previous introduction see No. 57311.

65944. ROSA DAVURICA Pall. Rosaceae. Rose.

No. 4771. November 21, 1925. A Manchurian shrub closely related to the cinnamon rose, with straight slender prickles, smaller double serrate leaflets, purple flowers, and ovate scarlet fruits. (H. C. Skeels, under No. 54193.)

- 65945 to 65955. SOJA MAX (L.) Piper (Glycine hispida Maxim.). Fabaceae. Soy bean.
- November, 1925. From the Agricultural Experiment Station, Harbin.
  - 65945. No. 4787. Huang tou, No. 6. An attractive yellow bean of good size.
  - 65946. No. 4788. Tha hei ichi huang tou, No.
    20. A fine large yellow bean, practically round, with a large black eye.
  - 65947. No. 4789. Scheum huang tou, No. 60. An almost round bean of good size, with a reddish brown eye.

65948. No. 4790. Tha hei tou, No. 123. A good-sized, almost round, black bean.

65949. No. 4791. See hei tcher huang tou jofiu, No. 40. A medium-sized, almost round, yellow bean with a dark-brown eye.

65950. No. 4792. Thyanvo dam tao, No. 74. An almost round yellow bean with a deeper colored eye.

#### 65906 to 65961-Continued.

- 65951. No. 4793. Dichou lau tou, No. 180. An almost round black and brown bean, of good size.
- 65952. No. 4794. Lu tuiang tou, No. 100. A large green roundish bean.
- 65953. No. 4795. Pheo litchin tou, No. 104. A medium-sized dark-green, almost round bean with a black eye.
- 65954. No. 4796. Tha law za tou, No. 143. A medium-sized brown bean, almost round, with a lighter colored eye.
- 65955. No. 4797. Tchali tcher huang tou, No. 80. An oblong yellow bean of good size, with a brown eye.
- 65956 to 65958. TRITICUM AESTIVUM L. (T. vulgare Vill.). Poaceae. Common wheat.
- November 21, 1925. From the Agricultural Experiment Station, Harbin.

65956. No. 4775. Sapporo, No. 80. An attractive hard wheat.

65957. No. 4776. Tafogin, No. 81.

65958. No. 4777. Muriya × Khapli.

65959. VIBURNUM BUREJAETICUM Regel and Herd. Caprifoliaceae.

No. 4765. November 21, 1925. A northern Chinese species allied to the Wayfaring tree (*Viburnum lantana*); the flowers are produced in dense cymes 2 inches across, and the fruits are ovoid and bluish black.

For previous introduction see No. 58807.

65960. VITIS AMURENSIS Rupr. Vitaceae. Amur grape.

No. 4750. November 21, 1925. A stronggrowing deciduous vine somewhat similar in habit to *Vitis vinifera*. It is worth growing as an ornamental for its vigorous habit and for the fine crimson and purple autumn hues of its foliage. It is native to Chosen (Korea) and northeastern China.

For previous introduction see No. 57367.

65961, ZEA MAYS L. Poaceae. Corn.

No. 4803. November 22, 1925. A hard red flint corn, with a yellow tip, from the Agricultural Experiment Station, Harbin.

65962. GENISTA SPHAEROCARPA Lam.

From Demnat, Morocco. Seeds presented by Sergent Prot, Bureau des Renseignements, at the request of David Fairchild, agricultural explorer, Bureau of Plant Industry, with the Allison V. Armour expedition. Received January 12, 1926.

A charming, drooping, desert shrub covered with delicate, brilliant yellow flowers somewhat resembling small orchids.

For previous introduction see No. 64927.

- 65963. PHYTOLACCA DIOICA L. Phytolaccaceae. Ombu.
- From Santa Barbara, Calif. Seeds presented by E. O. Orpet, superintendent of parks. Received January 14, 1926.

An evergreen tree, native to South America, which develops eventually a thick trunk and a large crown. The slender-stemmed leaves are elliptic to oval, and the small, greenish white, inconspicuous flowers are in pendulous racemes. The chief value of this tree is as an ornamental and for shade; in its native country it is called *bella sombra* (handsome shade). It has proved hardy at Barbara, Calif., not even losing its leaves in cold weather.

For previous introduction see No. 48975.

#### 65964. ORYZA LATIFOLIA Desv. Poaceae. Rice.

From Assam, India. Seeds obtained from the director of agriculture, Assam, through Rai Sahib L. Jai Chand Luthra, officiating economic botanist to the Punjab Government, Lyallpur. Received January 16, 1926.

A perennial wild rice distributed through parts of tropical Asia, Africa, and America. The tuited stems become 6 to 8 feet high, and the plant is said to flower and produce seeds throughout the year. The smooth leaves are 1 or 2 feet long and about an inch wide, and the erect spike is 2 to 4 inches long.

For previous introduction see No. 50491.

- 65965. TRIFOLIUM PRATENSE L. Fabaceae. Red clover.
- From Warsaw, Poland. Seeds purchased through R. Y. Jarvis, American consul. Received January 16, 1926.

Locally produced seeds from Poland.

#### 65966 to 65970.

From Spain. Seeds collected by M. Sharpe, Vacaville, Calif. Received January 18, 1926.

Locally developed strains, collected along the Andarrax River in the Province of Almeria.

- 65966. AMYGDALUS COMMUNIS L. (Prunus amygdalus Stokes). Amygdalaceae. Almond.
- 65967. CASSIA Sp. Caesalpiniaceae.
- 65968. CUCUMIS MELO L. Cucurbitaceae. Melon.
  - A winter melon.
- 65969. DAUCUS CAROTA L. Apiaceae. Carrot. A black carrot.

65970. RAPHANUS SATIVUS L. Brassicaceae.

A huge radish of fine quality.

- 65971. LILIUM CENTIFOLIUM Stapf. Liliaceae. Lily.
- From Ardgowan, Inverkip, Renfrewshire, Scotland. Bulb presented by Lady Alice Shaw Stewart. Received January 21, 1926.

Received January 21, 1928. This Chinese Illy was originally discovered by Regrinal Farrer in a little garden at Siku, Kansu, in 1914, according to the Botanical Magazine (pl. 8960). It is described as follows: The stem, densely leafy and somewhat glaucous, is up to 7 or 8 feet high, arising from a slightly depressed bulb about 3 inches in diameter. The numerous leaves are dark green above and paler below, linear or linearlanceolate, and up to 18 inches long. The sweetscented flowers, 6 to 18 in number, are arranged in a short almost umbellike raceme. The individual flowers are 6 inches long and about 4 inches across the mouth. Within, the perianth is pure white, blending into lemon yellow in the throat; the outer segments are richly flushed with dark purple, while the broader inner segments are greenish with deep brownish purple midribs. The anthers are rusty red.

For previous introduction see No. 61748.

#### 65972 to 66001.

- From Saonara, Padova, Italy. Plants purchased from Fratelli Sgaravatti. Received January 21, 1926. Notes from Fratelli Sgaravatti's catalogue.
  - 65972 to 65979. AMYGDALUS PERSICA NECTARINA Ait. Amygdalaceae. Nectarine.
    - 65972. Lord Napier. Large, red and green, with juicy greenish subacid flesh of first quality. Ripens in July and August.
    - 65973. Bianca. Medium sized, white or sometimes pinkish; flesh white, melting, sugary, aromatic. Ripens in August

#### 65972 to 66001—Continued.

- 65974. De Coosa. Very large, red; flesh white; an excellent variety. Ripens in July.
- 65975. Fertile del Poitou. Very large, yellow mottled with purple, pink on exposed side; flesh white, fine, juicy, sweet, aromatic; pit small. Ripens in August.
- 65976. Galopin. Medium sized, waxy white, sometimes pink; flesh greenish white, sweet, and especially aromatic. Ripens in September.
- 65977. Gialla di Padora. Medium sized, yellow; flesh firm, yellow, aromatic, with an apricotlike flavor; quality excellent. Ripens in June.
- 65978. Regina Vittoria. Large, violet-carmine, flesh white, sugary, acidulous. Ripens in July.
- 65979. Vineuse Henri Monicourt. Medium sized, with smooth, shining, reddish violet skin; flesh blood red, whitish near pit, sugary, juicy, aromatic.
- 65980 to 66001. PRUNUS ARMENIACA L. Amygdalaceae. Apricot.
  - 65960. A mondorla dulce. Medium sized, pale yellow, marked with red; flesh moderately tender, sweet. Ripens in July.
  - 65981. Angoumis. Large, orange-yellow shaded with carmine, spotted with brown; flesh pinkish, juicy, aromatic. Ripens in July and August.
  - 65982. Bianco de Carpentras. Large; flesh orange-yellow, of exquisite flavor. Ripens in July.
  - 65983. D'Alessandria. Medium sized, sometimes large, orange-yellow shaded pink and marked with carmine; flesh firm, juicy, aromatic; of first quality. Ripens in June.
  - 65984. Di Breda. Medium sized, pale yellow shaded with bright pink. Ripens in July.
  - 65985. Di Sant'Ambrogio. Very large, skin firm, pale, yellow shaded with pink; flesh very sweet and with a delicate aroma. Ripens in July.
  - 65986. Di Versailles. Very large, pale yellow, carmine on exposed cheek; flesh yellow, melting, aromatic. Ripens in July.
  - 66987. Gloire d'Auvergne. A robust and prolific variety, excellent for preserving. Ripens in July.
  - 65988. Grosso Blanco presose d'Auvergne.

[Large, white, early maturing.]

65989. Lever du Soleil [Sunrise]. Large, of good quality, and early maturing.

- 65990. Liaband. Large, pale yellow; flesh transparent, juicy, and aromatic. Ripens in July.
- 65991. Particolare. Large, yellow shaded with pink; flesh yellow, sweet. Ripens in July.
- 65992. Pariot. Rather large; skin orangeyellow and carmine; flesh fine, melting, aromatic. Ripens in July and August.
- 65993. Persicina. Large, orange-yellow; flesh yellow-red, fine, of exceptional flavor. Ripens in July.
- 65994. Pesca di Nancy. Large, orange-yellow and pale carmine; flesh yellow, tender, very sweet. Ripens in July and August.
- 65995. Precoce di Boulbon. Large, with fine, buttery flesh. Ripens in July.

#### 65972 to 66001-Continued.

- 65996. Precoce d'Italia. Small, yellow shaded with orange; flesh whitish, fine, sweet, slightly aromatic. Ripens in June.
- 65997. *Reale.* Medium sized, downy, yellowish white, orange on exposed check; flesh melting, very fine. Ripens in June and July.
- 65998. Rosseggiante. Rather large, carmineyellow; flesh fine and aromatic. Ripens in July.
- 65999. Rosso grosso. Large, reddish; flesh melting. Ripens in June and July.
- 66000. Souvenir d'Amic. Large, yellow shaded with brown; flesh melting, of excellent flavor. Ripens in June.
- 66001. Zuccherino di Holub. Large, oblong, reddish yellow; flesh fine, very sweet, Ripens in July.

#### 66002 to 66019.

From the Mediterranean region. Seeds collected by David Fairchild, agricultural explorer, Bureau of Plant Industry, with the Allison V. Armour expedition. Received January 13, 1926.

66002. ACACIA GUMMIFERA Willd. Mimosaceae,

Found near Amismiz, Morocco, May 19, 1925, A small spiny tree, about 30 feet high, native to northern Africa. It yields the Morocco gum of commerce.

66003. ACHYRANTHES ASPERA L. Amaranthaceae.

From Barranco Ruis, Orotava, Teneriffe, Canary Islands, July 11, 1925. According to Juan Bolinaga, director del Jardin de Aclimatación, Orotava, this is a good forage plant which has become naturalized in the barrancos of Teneriffe. It is a low shrubby West Indian herb, with very small greenish flowers.

66004. AVENA BARBATA Brot. Poaceae. Grass.

Found on the roadside between Rabat and Casa Blanca, Morocco, May 8, 1925.

For previous introduction see No. 42734.

66005. AVENA STERILIS L. Poaceae. Oats.

Collected between Casa Blanca and Fedhala, Morocco, May 10, 1925.

66006. CERATONIA SILIQUA L. Caesalpiniaceae. Carob.

Collected near San Antonio, Iviza, Balearic Islands, August 14, 1925. Variety Vera. A variety extensively grown in Iviza which I think must have perfect flowers.

66007. EPHEDRA ALTISSIMA Desf. Gnetaceae.

Collected in an Arab cemetery beyond Amismiz, south of Marrakesh, in the Grand Atlas Mountains, Morocco, May 29, 1925. A handsome woody climber, 20 feet or less in height, with minute green leaves, and especially striking when covered with its ovoid scarlet berries. Native to northern Africa.

For previous introduction see No. 57930.

# 66008. HYPARBHENIA HIRTA (L.) Stap!. Poaceae. Grass.

From a roadside between Rabat and Casa. Blanca, Morocco, May 8, 1925. A perennial grass about 3 feet high, native to tropical and northern Africa.

For previous introduction see No. 39490.

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66009. LAGURUS OVATUS L. POAceae. Grass.

Found near Casa Blanca, Morocco, May 24, 1925, in rocky dry soil. A hardy annual grass, native to the Mediterranean region. The small white flower heads are used for dry bouquets.

#### 66002 to 66019-Continued.

66010. ONONIS SALZMANNIANA Boiss. and Reut. Fabaceae.

Collected near Algeciras, Spain, June 27, 1925. An annual, erect, herbaceous, leguminous plant, with simple or trifoliolate lightgreen leaves and dense spikes of pink flowers.

66011. PERIPLOCA LAEVIGATA Ait. Asclepiadaceae.

Collected north of Mogador, Morocco, June 3, 1925. An attractive evergreen shrub, native to the Canary Islands, with glossy dark-green foliage and dull-colored fragrant flowers.

66012. RUMEX LUNARIA L. Polygonaceae.

From Barranco de las Augustias, above the town of Los Llanos, Palma, Canary Islands, July 16, 1925. This perennial herb seems to be common on rocky places all over the island and is said to form goat forage of considerable importance.

66013. THAPSIA GARGANICA L. Apiaceae.

From an Arab cemetery beyond Amismiz, south of Marrakesh, in the Great Atlas Mountains, Morocco, May 29, 1925. A yellow-flowered herbaceous perennial, native to southern Europe. The fleshy root is said to have medicinal virtues.

nai virtues. 66014. TRICHOLAENA ROSEA Nees. Poaceae. Natal grass.

Obtained from Juan Bolinaga, director del Jardin de Aclimatación, Orofava, Tenerifie, Canary Islands, July 12, 1925. According to Mr. Bolinaga, this variety is thought to be indigenous. It is a very important forage crop in Tenerifie and makes a remarkable growth.

For previous introduction see No. 61692.

66015. TRITICUM OVATUM (L.) Rasp. Poaceae. Grass.

From a roadside between Casa Blanca and Marrakesh, Morocco, May 13, 1925. An annual densely branched grass, with ascending stems about a foot long. Native to dry places in the Mediterranean region.

For previous introduction see No. 56520.

66016 to 66019. VICIA SATIVA L. Fabaceae. Vetch.

66016. Collected at Piste, near Amismiz, Morocco, May 19, 1925.

66017. Collected along an oued or stream, near the Pont des Espagnols, on the road between Casa Blanca and Foukhala, Morocco.

66018. From Piste, beyond Amismiz, Morocco, May 19, 1925.

66019. Collected on the road to Mogador, near Marrakesh, Morocco, May 17, 1925.

66020 to 66026. Gossypium spp. Malvaceae. Cotton.

From Villaggio Duca Abruzzi, Italian Somaliland, Africa. Seeds presented by the direttore. Agrario e Zootecnico della Sais. Received January 18, 1926.

Cotton varieties of native origin or introduced, which have become acclimated in Italian Somaliland.

66020. GOSSYPIUM BARBADENSE L.

No. 4. Var. Sakellaridis.

66021. GOSSYPIUM HERBACEUM L.

No. 7. Var. Somala di Uaressk.

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### 66020 to 66026-Continued.

66022 to 66025. GOSSYPIUM HIRSUTUM L.

66022. No. 1. Var. Durango; Australian.

66023. No. 2. Var. Russell big boll; Austra lian.

66024. No. 3. Var. Uganda.

66025. No. 5. Var. Agordat; Eritrea.

66026. Gossypium sp.

No. 6. Var. Somala di Audegle.

66027. Gossypium sp. Malvaceae. Cotton.

From Builtenzorg, Java. Seeds presented by Dr. P. J. S. Cramer, director, general experiment station, Department of Agriculture, Industry, and Commerce. Received January 12, 1928.

A native cotton from Sumatra.

#### 66028. ILEX sp. Aquifoliaceae. Holly.

From Nanking, China. Seeds presented by M. L. Hancock, University of Nanking. Received January 19, 1926.

A "red evergreen privet" which is a species of llex with shiny spineless evergreen leaves and red berries. Collected at Nanking. (*Hancock.*)

### 66029 to 66035. TRIFOLIUM PRATENSE L. Fabaceae. Red clover.

From Aberystwyth, Wales. Seeds presented by R. G. Stapledon, director, Welsh Plant Breeding Station. Received January 23, 1926. Notes by Mr. Stapledon.

Locally grown varieties.

66029 to 66031. From Leightons Ltd., Newcastle.

66029. Station No. 1212. (Cambridge No. 92.)

66030. Station No. 1210. (Dorsett No. 194.)

- 66031. Station No. 1211. (Hertfordshire No. 85.)
- 66032. Station No. 1206. Dorsett Marlgrass clover, from H. H. Dunn, Dunns Farm Seeds (Ltd.), Salisbury.
- 66033 to 66035. From Leightons Ltd., Newcastle. 66033. Station No. 1208. (Oxfordshire No. 49.)

66034. Station No. 1209. (Oxfordshire No. 180.)

66035. Station No. 1207. (Shropshire No 118.)

66036 to 66038. CASTANEA spp. Fagaceae. Chestnut.

- From Nanking, China. Seeds purchased from Prof. J. H. Reisner, College of Agriculture and Forestry, University of Nanking. Received at the United States Plant Introduction Garden, Chico, Calif., January 22, 1926.
  - 66036. CASTANEA HENRYI (Skan) Rehd. and Wils.

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.

For previous introduction see No. 65450.

#### 66036 to 66038—Continued.

66037. CASTANEA MOLLISSIMA Blume.

In the endeavor to relieve the situation caused by the rapid disappearance of our native chestnut, due to the ravages of the blight fungus, the Chinese hairy chestnut is being introduced into this country in considerable quantity. The size and quality of the nuts compare rather favorably with that of our native chestnut, although neither the size of the tree nor the tanning content measure up to those of our native species.

For previous introduction see No. 58602.

#### 66038. CASTANEA SEGUINII Dode.

A Chinese chestnut, native to east-central China, which is usually a bush or low tree, but occasionally a shapely tree up to 40 feet in height, with deep-green leaves, paler beneath, and small nuts of sweet agreeable flavor.

66039 to 66042. CROTALARIA spp. Fabaceae.

From Nairobi, Kenya Colony, British East Africa. Seeds presented by J. McDonald, Scott Agricultural Laboratories. Received January 22, 1926.

66039. CROTALARIA AGATIFLORA Schweinf. f.

No. 6. A tropical African leguminous herb, which, as described by Engler (Hoebnel, Zum Rudolf See, Appendix 1892, p. 13), has large yellow flowers about 2 inches long and 1 inch across and sword-shaped pods about 3 inches long, containing 15 to 20 seeds.

66040. CROTALARIA Sp.

No. 8.

66041. CROTALARIA Sp.

No. 10.

66042. CROTALARIA Sp.

No. 11.

#### 66043 to 66045. Gossypium NANking Meyen. Malvaceae. Cotton.

From Buitenzorg, Java. Seeds presented by Dr. P. J. S. Cramer, director, general experiment station, Department of Agriculture, Industry, and Commerce. Received January 19, 1926.

The "Chinese" cotton of commerce is, according to Watt (Wild and Cultivated Cottons of the World), an annual or perennial bush, with delicate, sparsely branched stems and imperfectly cordate leaves. The irregular-shaped seeds are densely coated with rufous velvet and bear a silky floss, which, in all the better varieties, is white, but often shows a tendency to become reddish or khaki. This cotton is cultivated throughout tropical Asia.

For previous introduction see No. 62595.

86043. From Demak, a place in central Java, east of Semarang.

66044. No. 1. From Palembang.

66045. No. 2. From Palembang.

- 66046 to 66050. SACCHARUM OFFICI-NARUM L. POACEAE. Sugar cane.
- From Muzaffarpur, Bengal, India. Cuttings presented by Noel Deerr, superintendent of factories, through E. W. Brandes, Bureau of Plant Industry. Received February 1, 1926. Notes by Mr. Deerr.
  - 66046. Haruki. From Purtabtore, District of Saras.
  - 66047. Hatooni (otherwise known as Chemal and Baruk). From Riwa Ghat, District of Muzaffarpur. This cane seems to be very close to Sewall.
  - 66048. Nagori. A slender cane from Samastipur, District of Darbhanga.

#### 66046 to 66050-Continued.

66049. Turi. A thick green cane.

- 66050. Samari or Sewali. From Ryam, District of Darbhanga. This cane seems to be very close to Hatooni.
- 66051. HERNANDIA SONORA L. Hernandiaceae.

From Port of Spain, Trinidad, British West Indies. Seeds presented by W. G. Freeman, director of agriculture. Received January 27, 1926.

A handsome evergreen West Indian tree, sometimes 60 feet high, with oval-oblong papery leaves 7 to 12 inches long and loose terminal clusters of small yellowish flowers. The juice of this tree is said to be a painless depilatory.

#### 66052 to 66055. TRIFOLIUM PRATENSE L. Fabaceae. Red clover.

From Valence sur Rhone, France. Seeds purchased from Tizier Frères. Received February 2, 1926.

Locally grown varieties.

66052. Department of Ardeche.

66053. Department of Aveyron.

66054. Nimes.

66055. Valence and Lyon.

#### 66056 to 66058.

From Cairo, Egypt. Seeds presented by W. Carlton McQuiston, the American University at Cairo. Received January 26, 1926. Notes by Mr. McQuiston.

66056. CUCUMIS MELO L. CUCUrbitaceae.

A long-type muskmelon, known here as the Sheman.

66057 and 66058. TRITICUM spp. Poaceae.

Wheat varieties originated by the Royal Agricultural Society of Egypt.

66057. TRITICUM AESTIVUM L. (T. vulgare Vill.). Common wheat.

Hindi wheat. A variety from India. At present it is the best yielder in the Delta.

66058. TRITICUM TURGIDUM L. Poulard wheat. A selected strain of *Beladi*.

#### 66059. Gossypium sp. Malvaceae. Kidney cotton.

From Bangkok, Siam. Seeds presented by Dr. A. Kerr, director, botanical section, Ministry of Commerce. Received January 21, 1926.

A perennial cotton cultivated in this region. It is not grown as a regular crop, and the floss is used only for making string. (*Kerr.*)

66060. Gossypium sp. Malvaceae. Cotton.

From Caracas, Venezuela. Seeds presented by H. Pittier, Ministerio de Relaciones Exteriores, Museo Comercial. Received January 22, 1926.

Seeds collected in the State of Portuguesa. I believe them to be of one of the indigenous species. (*Pittier.*)

- 66061. MACADAMIA INTEGRIFOLIA Maiden and Betche. Proteaceae.
- From Dundas, New South Wales, Australia. Seeds presented by Herbert J. Rumsey. Received January 29, 1926.

As described by J. H. Maiden (Proceedings of the Linnean Society of New South Wales, vol. 21, p. 624), this close relative of the Queensland nut (*Macadamia ternifolia*) is a small bushy tree, with entire, narrowly oblong leaves, about 6 inches long, in irregular whorls of three. The globular fruits, about three-fourths of an inch in diameter, have a leathery exocarp and a hard endocarp. Native to New South Wales.

#### 66062 to 66076.

From Canton, China. Seeds collected by F. A. McClure, agricultural explorer, Bureau of Plant Industry. Received January 25, 1926. Notes Industry. Receiv by Mr. McClure.

66062 to 66064. ALEURITES MONTANA (Lour.) Wilson. Euphorbiaceae.

Baptist Mission compound, Wuchow, Kwangsi. November 18, 1925. Trees growing at the foot of a terrace, in yellow clay granitic subsoil, with their roots partly in filled soil of the same composition, but naturally looser in tracture texture.

No. 240. Tree No. 1. This tree, 66062. which appears to be the most prolific of the collection at the mission compound, is about 12 meters high and 25 centimeters in diameter at chest height. It bears the largest clusters of fruits, 11 to 13 to a cluster.

66063. No. 241. Tree No. 2. This tree is second only to tree No. 1 [No. 66062] in prolificness.

66064. No. 242. From trees of average yield.

- 66065 to 66067. BENINCASA HISPIDA (Thunb.) Cogn. Cucurbitaceae. Wax gourd. Cogn. Cucurbitaceae.
  - 961. Cucroitaceae. wat gourd. 965. No. 245. Purchased in Yunghui, Kwangsi, November 20, 1926. Paak shik kwa. The fruits are long and slender, the largest ones being 65 centimeters long and 36 centimeters in circumference, and are slightly constricted in the middle. They are thickly covered, when mature, with a white flourlike powder. The skin is pale green, thin, with a sparse outgrowth of hairs 2 or 3 millimeters in length. The flesh, 2 to 3 centimeters in thickness, is greenish for a half inch inward from the skin, otherwise white, and is tender, but 66065. No. skin, otherwise white, and is tender, but has little flavor. The Chinese usually cook the fruits with pork and often use them in soup.
  - No. 273. Tsit kwa. Purchased at 66066 Takhing, Kwangtung Province, Novem-ber 27, 1925. This variety seems very similar to No. 245 [No. 66065], differing only in being straight and not depressed in the middle.
  - 66067. No. 276. Tung kwa. Purchased in Takhing, Kwangtung Province, Novem-ber 27, 1925. A short, thick variety, depressed at both ends, which is somewhat triangular in cross section. It is light green and thickly covered with a flourlike bloom when mature.

66068. CITRULLUS VULGARIS Schrad. Cucurbi-Watermelon.

No. 251. Hung kwa tsz and sai kwa tsz. Pur-chased in Wuchow, Kwangsi, November 23, 1925. This variety is said to be cultivated for the seeds only, and the flesh is said to be worth-less. The seeds are commonly served between courses at Chinese feasts.

66069. CRATAEGUS PINNATIFIDA Bunge. Mal-aceae. Chinese hawthorn.

No. 252. Obtained at Wuchow, Kwangsi, November 23, 1925, where they had been shipped in from Tientsin, in a dried sliced condition. Shaan cha. The seeds are thick walled. A thin red circular waferlike confection is made from the flesh by adding a red coloring matter and sugar.

#### 66062 to 66076-Continued.

66070 and 66071. CUCURBITA MOSCHATA Du-chesne. Cucurbitaceae. Cushaw.

Purchased at Takhing, Kwangtung Province, November 27, 1925. Used as food only by the poorer classes and is, therefore, commonly cultivated by them.

- 66070. No. 274. 70. No. 274. Naam kwa. A variety with the skin mottled green and yellow and the flesh deep yellow.
- 071. No. 275. Hop kwa. An orange-yellow skinned variety, smaller than No. 274 [No. 66070], which is slightly paled by the presence of a scant gray bloom. 66071. No. 275.
- 66072. ELEUSINE CORACANA (L.) Gaertn. Poa-Ragi.

No. 278. Purchased November 27, at Tak-hing, Kwangtung Province. Asp keuk suk. This variety is commonly cultivated in Kwangtung, but on a small scale. It is boiled and eaten with sugar.

66073. PHASEOLUS CALCARATUS Roxb. Faba-Rice bean. ceae.

No. 277. Purchased at Takhing, Kwangtung Province, November 27, 1925. Chik siu tau. This variety, said to be grown locally in the silty soil of the annually denuded river flood plain, yields two crops a year. It is eaten after being boiled.

66074. PYRUS sp. Malaceae.

Pear.

Pear.

No. 244. Purchased at Yunghui, Kwangsi, November 20, 1925, and is said to have come from the region north of Wuchow, on the Foo River. It is said to occur also generally in the region east of Wuchow, north of the West River in Kwangtung, and it is also seen in the markets of Takhing, Kwangtung. The fruits are oblate to subglobular, the stem long, 1.5 to 2.5 centi-meters, slender, attached in a small, shallow de-pression: the aper of the fruit has a slight deprespression; state aper of the fruit has a slight depres-sion or none; the skin is olive green, thin but tough, and smooth; the flesh is fine grained, but very firm, and somewhat astringent when fresh; very hrm, and somewhat astringent when fresh; the seed section is surrounded by a thick yellow "shell" of hard granular material. The fruits are usually placed in hot water for a time before they are eaten. Another way of preparing them is to pickle them in vinegar. This variety may serve as a stock for pears or apples, but, so far as I know, it is not used for this purpose by the Chinese. Chinese

#### 66075. PYRUS Sp. Malaceae.

No. 254. From fruits purchased November 23, 1925, in Wuchow, Kwangsi. Tong lei tsai. A small round red-brown to russet fruit, thickly punctate with tiny light-brown dots. The fruits are few seeded; the flesh, mellow when ripe, is -somewhat granular, like that of pears, especially in the zone which divides the pome portion from the ovary portion of the fruit. The fruits are not eaten fresh, but are prepared for consump-tion by pickling in vinegar. This plant serves exclusively as stock for pears in southern China, so far as I have been informed. It is said to grow only in the wild or half-cultivated state, except as stock for pears, and is widely distributed in Kwangtung and Kwangsi.

#### 66076. SESAMUM ORIENTALE L. Pedaliaceae. Sesame.

No. 253. Purchased November 23, 1925, in Wuchow, Kwangsi. *Paak chi ma*. A herba-ceous annual said to be grown in the Foo River District, Kwangsi. The seeds are used in con-fections, often as a covering for cakes and candies, and the oil expressed from the seeds is used by the Chinese in cooking.

#### 66077 to 66080. MAGNOLIA spp. Mag-Magnolia. noliaceae.

om Orleans, France. Plants presented Leon Chenault. Received February 4, 1926. From Plants presented by

#### 66077 to 66080-Continued

All of these magnolias are growing at the Arnold Arboretum. The following notes are adapted from Sargent, Plantae Wilsonianae, vol. 1, pp. 394-399.

66077. MAGNOLIA DAWSONIANA Rehd. and Wils.

A tree 25 to 40 feet high, originally collected in western Szechwan, China, where it grows at an altitude of about 7,000 feet. It is readily distinguished from related magnolias by its leathery, shining-green obovate leaves, which are 3 to 5 inches long. The flowers are unknown.

66078. MAGNOLIA NICHOLSONIANA Rehd. and Wils.

A deciduous shrub or small tree, 20 feet or less in height, closely allied to Magnolia wilsonii, from which it is distinguished by its vinous-red bark, shorter petioles, and oblong-obovate leaves with densely hairy undersurfaces. The cupshaped flowers, appearing with the leaves, are white with red pistils and about 4 inches across. This magnolia is native to western China.

66079. MAGNOLIA SARGENTIANA Rehd. and Wils.

A tall tree, up to 75 feet in height, the largest magnolia found in western China, where it is native. The branches are very numerous, forming a massive flattened crown. The deciduous, leathery leaves, pubescent beneath, are 4 to 7 inches long, and, according to the natives of western China, the flowers are rosy red and 8 inches wide.

66080. MAGNOLIA SARGENTIANA ROBUSTA Rehd. and Wils.

This variety differs from the type in having longer and narrower leaves and larger fruits.

#### 66081 to 66083.

From British Honduras. Seeds collected by S. J. Record, School of Forestry, Yale University, New Haven, Conn. Received February 2, 1926.

66081. GEONOMA sp. Phoenicaceae. Palm.

The members of this tropical American genus are slender spineless palms with ringed, reedlike stems.

66082. PLECTIS sp. Phoenicaceae. Palm.

Mountain cabbage. (Record.)

The palms of this Guatemalan genus have a very tall, slender, tapering trunk and shortstemmed leaves with very numerous linear pinnae.

66063. SYNECHANTHUS FIBROSUS Wendl. Phoenicaceae. Palm.

Common monkey-tail palm. (Record.)

An unarmed Central American palm with a slender, green, ringed trunk about 4 feet high and a cluster of terminal spreading leaves about 4 feet long with numerous narrow leaflets a foot or so in length. The orange-red, ellipsoid fruit is one-seeded.

#### 66084. DISSOTIS IRVINGIANA Hook. Melastomaceae.

From Aburi, Gold Coast, Africa. Seeds presented by F. N. Howes, Government botanist, Department of Agriculture. Received February 2, 1926.

An ornamental annual plant, 1 to 3 feet high, from tropical Africa. The leaves are opposite, narrow, and acute, and the reddish purple flowers are about an inch across.

66085. CALOPOGONIUM MUCUNOIDES Desv. Fabaceae.

From Kuala Lumpur, Federated Malay States. Seeds presented by B. Bunting, agriculturist, Department of Agriculture. Received March 19, 1926. A tropical American plant which is said to be popular as a cover plant in Sumatra, according to J. N. Milsum and E. A. Curtler (Malayan Agricultural Journal, vol. 13, No. 8, August, 1925, pp. 271-272). These authorities state that a fair cover is obtained after three months from sowing, when flowering commences. The plant is a vigorous creeping herb which forms a mat of foliage 1½ feet or so in thickness over the soil. The stems, 3 to 10 feet long, form roots at each node. The pale-blue flowers are in racemes 1 to 4 inches long.

66086. (Undetermined.) Poaceae. Bamboo.

From Slidell, La. Plants presented by J. L. Gelis. Received March 19, 1926.

A bamboo obtained in 1909 from a nursery in Fresno, Calif. It grows well here and becomes 10to 18 feet high with stems about an inch in diameter. (*Gelis.*)

66087. TRITICUM AESTIVUM L. (T. vulgare Vill.). Poaceae.

#### Common wheat.

From Rome, Italy. Seeds obtained through Rev. Walter Lowrie, of the Rectory of St. Paul's, by David Fairchild, agricultural explorer, Bureau of Plant Industry, with the Allison V. Armourexpedition. Received March 12, 1926.

No. 340. Var. Piccolo rosso degli Alpi. A selected variety, 50 to 60 centimeters high, from Pragelato, Italy, at an altitude of 1,800 meters, and is adapted to 2,000 meters altitude. It is planted in June and harvested in July of the following year.

#### 66088. RUBUS PROBUS Bailey. Rosaceae. Raspberry.

From Rio Piedras, P. R. Plants presented by A. Lopez Dominguez, director, Insular Experiment Station. Received February 2, 1926.

The so-called "Queensland" raspberry, which, as described by L. H. Bailey (Gentes Herbarum, vol. 1, p. 150), is related to *Rubus rosaefolius*, but is less thorny and has glabrous leaves and pedicels, with usually seven leaflets which are relatively broader than in the above-mentioned species. The seedy red berries have a flattened appearance. The plant is upright, about 8 feet high, and the canes are not perennial. This is a cultivated plant. in Porto Rico, where it has been grown for some years, and is probably originally from Queensland.

#### 66089 to 66092. LILIUM spp. Liliaceae. Lily.

From Orleans, Loiret, France. Seeds presented by E. Debras. Received February 5, 1926.

Locally grown seed.

66089. LILIUM HENRYI Baker.

The Henry lily, native to central China, has: a stem 4 to 8 feet high, deep green, tinged and spotted with brown; the leaves, 60 to 100 in number, are horizontal and 3 to 6 inches long. The flowers, bright orange-yellow, with orange-red anthers, are about 3 inches in diameter.

66090. LILIUM HUMBOLDTH Roezl and Leichtl.

Var. magnificum. A form of the Humboldt. lily which is more robust and larger, often 8 feet high, with larger and more richly colored flowers, frequently tinged with reddish purple.

66091. LILIUM REGALE Wilson.

Regal lily.

Seeds of the regal (or royal) lily. 66092. LILIUM SARGENTIAE Wilson.

The Sargent lily, originally from western China, has a stout stem 4 to 8 feet high, green tinged with purple, and a hundred or more thickly scattered horizontal leaves 2 to 4 inches long. The fragrant flowers are waxy white inside, tinged yellow near the throat, and reddish purple outside.

- **'66093 to 66095.** Amygdalus PERSICA L. (*Prunus persica* Stokes). Amygdalaceae. **Peach**.
- From Orleans, France. Trees purchased from Grandes Roseraies du Val de la Loire. Received February 10, 1926. Notes from catalogue of Grandes Roseraies du Val de la Loire.
  - 66093. Admirable jaune. Fruit large, golden yellow, spotted with red; matures in late September.
  - 66094. Galande. Fruit large purplish, very good quality; matures in late August.
  - 66095. Madeleine de Courson. Fruit very large, red, very good quality; matures in late September.

#### 66096. Nothoscordum fragrans (Vent.) Kunth. Liliaceae.

From Orleans, Loiret, France. Seeds presented by E. Debras. Received February 5, 1926.

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

# 66097. ANOPTERUS GLANDULOSUS Labill. Escalloniaceae.

From Cradle Mountain, Tasmania. Seeds presented by G. Weinderfer, through George B. Sudworth, Forest Service. Received February 6, 1926.

A handsome evergreen Tasmanian shrub, sometimes a small tree 40 feet high in its native country. The thick narrow leaves, mostly at the ends of the branches, are 4 to 8 inches long, and the white flowers are in drooping terminal racemes. It is suitable for greenhouse culture, blooming in the spring.

For previous introduction see No. 61324.

- 66098 to 66106. BETA VULGARIS L. Chenopodiaceae. Beet.
- From Kew, England. Seeds presented by Dr. A. D. Cotton, Royal Botanic Gardens. Received February 6, 1926.

Var. maritima. Wild beet seeds collected in different parts of England.

66098. From Clevedon, Somerset.

66099. From Par Harbour, Cornwall.

66100. From Par Sands, Cornwall.

66101. From Pentewan, Cornwall.

66102. From Polperro, Cornwall.

66103. From St. Helens Spit, Isle of Wight.

66104. From Charlestown, South Cornwall.

66105. From Trenarnen, South Cornwall.

66106. From Seaton, Devonshire.

#### 66107. VACCINIUM VITIS-IDAEA L. Vacciniaceae. Lingonberry.

From Helsingfors, Finland. Seeds presented by the director of the Botanic Garden. Received February 6, 1926.

The fruits of the European form of this evergreen bush are larger than those of the mountain cranberry (Vaccinium vitis-idaea minus) found in the northeastern United States.

- 66108 to 66115. BRASSICA OLERACEA BOTRYTIS L. BRASSICACEAE. Broccoli.
- From Reading, England. Seeds purchased from Sutton & Sons. Received February 6, 1926. Notes from Sutton & Sons' catalogue.
  - Varieties not in the American trade.
  - 66108. Autumn Protecting. Equal to Michaelmas White in quality, but matures later. Heads well protected.
  - 66109. Superb Early White. Heads pure white, perfectly protected.
  - 66110. Michaelmas White. Heads very large, well formed, delicate, white, firm, quickly maturing. Excellent for early autumn use.
  - 66111. Safeguard Protecting. Heads pure white, medium sized, often enduring severe winters uninjured.
  - 66112. Satisfaction. A variety for use in April and May.
  - 66113. Snow White. Heads of uniform size and shape; for spring use.
  - 66114. Whitsuntide. Somewhat similar to Late Queen, but of larger size and later maturing. Heads pure white, large, firm, of finest quality. Has survived 22° of frost uninjured.
  - 66115. Winter Mammoth. Immense white heads, excellent in texture and quality, for use in midwinter.
- 66116 to 66123. TRIFOLIUM PRATENSE L. Fabaceae. Red clover.
- From Reading, England. Seeds presented by Martin H. Sutton, The Royal Seed Establishment. Received Feburary 8, 1926.

66116 to 66119. Early-flowering varieties.

66116. Dorset Marl.

66117. English.

66118. Giant Hybrid.

66119. Welsh.

- 66120 to 66123. Late-flowering varieties.
  - 66120. Cornish Marl.
  - 66121. English.
  - 66122. Montgomeryshire.

66123. Wild red clover.

- 66124. BAUHINIA HETEROPHYLLA Kunth. Caesalpiniaceae.
- From Little River, Fla. Plant presented by John Soar, through Charles T. Simpson, collaborator, Bureau of Plant Industry. Received February 12, 1926.

This plant is from seeds collected in the Organ Mountains of western Cuba. (Simpson.)

This is called bejuce tortuga (turtle vine) because of the characteristic turtle-shaped swellings in the older parts of the vine. It grows in low, sandy places, chiefly on the edges of lagoons and marshes in western Cuba, where it climbs over trees and shrubs. The clusters of yellowish white flowers appear in December. The young vine is used by the natives for making rough baskets and rope. (Note by Dr. Mario Calvino under No. 58824.)

#### 66125. CITRUS sp. Rutaceae.

From Miyazaki, Japan. Seeds presented by Dr. T. Tanaka, through W. T. Swingle, Bureau of Plant Industry. Received March 30, 1926.

Seeds from locally grown fruits.

#### 66126 and 66127. TRIFOLIUM PRATENSE | L. Fabaceae. Red clover. |

From Valence sur Rhone, France. Seeds purchased from Tézier Frères. Received February 10, 1926. Notes by Tézier Frères.

Local varieties.

66126. From Loire.

66127. Seeds from plants grown in dry calcareous soil in the neighborhood of Forcalquier in the Department of Basses-Alpes, at an altitude of 2,000 feet. In our opinion this strain is more winter hardy than the strains from southern France.

#### 66128 and 66129. JUGLANS REGIA L. Juglandaceae. Walnut.

From Ainsdale, Southport, England. Seeds presented by Howard Spence, The Red House. Received February 13, 1926.

Seeds from trees growing in the vicinity of Ranikhet, Kumaon, United Provinces, India. The nuts are very thick shelled and of little value, but I believe the trees may be of value as stocks. (Spence.)

66128. No. 1. 66129. No. 2.

#### 66130. CITRUS GRANDIS (L.) Osbeck (C. decumana Murr.). Rutaceae. Grapefruit.

From Singapore, Straits Settlements. Seeds presented by O. H. Reinking, Botanic Gardens. Received February 13, 1926.

Seeds of the Thong Dee Siamese Pummelo.

#### 66131. Pyrus sp. Malaceae. Pear.

From Arlington Experiment Farm, Rosslyn, Va. A hybrid seedling pear originated by M. B. Waite, Bureau of Plant Industry, at the Arlington farm. Numbered February, 1926, for convenience in distribution.

Kieffer Cross 38-12. (A cross made several years ago between Kieffer and a European variety of unknown parentage.) Tree moderately vigorous, erect to spreading. Fruit pyriform, 3 to 4 inches long by 2 to 2% inches wide, yellow, fairly smooth, with numerous small gray or yellowish ienticels. Flesh white, tender, not quite so buttery in texture as Bartlett, but with few stone cells. Rather highly flavored, mildly acid, apparently well suited to cooking and canning purposes as well as for dessert use. Appears to possess good handling and keeping qualities, not breaking down at the core. (Waite.)

#### 66132. ARTABOTRYS UNCINATUS (Lam.) Merr. (A. odoratissimus R. Br.). Annonaceae.

From Canton, China. Seeds collected by F. A. McClure, agricultural explorer, Bureau of Plant Industry. Received February 18, 1926.

No. 318. Near Uenpui. December 25, 1925. Ying chaau fa; ying chaau laan. A half-scandent shrub with long, slender, drooping branches and greenish flowers. The fruits are ovoid with a pointed, slightly curved apex and yellowish when ripe. This plant is very highly esteemed by the Chinese because of the rich fragrance of the flowers and fruits. It is commonly cultivated in monasteries.

#### 66133. SACCHARUM OFFICINARUM L. Poaceae. Sugar cane.

From Herradura, Cuba. Cuttings presented by F. S. Earle, through E. W. Brandes, Bureau of Plant Industry. Received February 12, 1926. B. 908.

# 66134. VACCINIUM VITIS-IDAEA L. Vacciniaceae.

From Stockholm, Sweden. Seeds presented by Dr. Robert E. Fries, director, Botanic Garden. Received February 13, 1926.

For previous introduction and description see No. 66107.

#### 66135 to 66141.

From Rabat, Morocco. Seeds collected by David Fairchild, agricultural explorer, Bureau of Plant Industry. Received February 11, 1926.

66135. CYTISUS LINIFOLIUS (L.) Lam. Fabaceae. Broom.

From the Forest of Mamora, near Rabat. April 19, 1925. A low shrub, 3 feet or less high, with erect, silky hairy branches and very narrow shining-green leaflets with silvery lower surfaces. The bright-yellow flowers are in short compact clusters. Native to the Mediterranean countries.

#### 66136. LOTUS sp. Fabaceae.

From a roadside near the seed-selection station, Rabat, April 17, 1925.

66137. MEDICAGO sp. Fabaceae.

Collected near the seed-selection station, Rabat, April 17, 1925.

66138. MEDICAGO sp. Fabaceae.

Found on a roadside between Meknes and Rabat, April 7, 1925.

66139. MEDICAGO sp. Fabaceae.

Collected on the road between Kenitra and Ouezzan, April 25, 1925.

66140. ORNITHOPUS ISTHMOCARPUS Coss. Fabaceae.

Collected in sandy land north of Kenitra on the road to Ouezzan, April 25, 1925. A slender annual leguminous herb, about 2 feet high, with small hairy pinnate leaves, pinkish flowers, and narrow, constricted pods about an inch long. Native to the Mediterranean region.

66141. VICIA ERVILIA (L.) Willd. Fabaceae. Vetch.

Collected April 29, 1925. Cultivated by E. Miège at the experiment station in Rabat, Morocco.

66142 to 66147. HEDYSARUM spp. Fabaceae.

From Oran, Algeria. Seeds presented by Herbier A. Faure, through David Fairchild, agricultural explorer, Bureau of Plant Industry. Received February 11, 1926.

66142 and 66143. HEDYSARUM CAPITATUM Desf.

An annual, ascending leguminous plant, with purple flowers. Native to the Mediterranean countries.

For previous introduction see No. 64553.

66142. A. 66143. B.

66144. HEDYSARUM HUMILE L.

A decumbent perennial leguminous plant, about a foot and a half high. Native to the Mediterranean countries.

66145 and 66146. HEDYSARUM PALLIDUM Desf.

A perennial procumbent leguminous plant, native to northern Africa, where it thrives on steep hillsides.

For previous introduction see No. 64554.

66145. A. 66146. B.

#### 66142 to 66147-Continued.

66147. HEDYSARUM SPINOSISSIMUM L.

An annual decumbent leguminous herb with pale-pink flower clusters. Native to the Mediterranean countries.

#### 66148 to 66158.

From Bangalore, India. Seeds presented by the director of the botanic gardens. Received February 12, 1926.

66148 to 66150. BAUHINIA SDD. Caesalpiniaceae.

66148. BAUHINIA GALPINI N. E. Brown.

A climbing shrub, 5 to 10 feet high, native to tropical Africa. The leaves, two lobed at the apex from one-fifth to one-half their length, are 1 to 3 inches long, and the brick-red flowers are borne continuously from spring to late fall.

66149. BAUHINIA HOOKERI F. Muell.

A large spreading tree, native to Australia, with broad obtuse leaflets and short terminal racemes of white flowers edged with crimson.

For previous introduction see No. 37135.

66150. BAUHINIA TOMENTOSA L.

An erect shrub or small tree with leathery laves, broader than long and with betue lobes, and few-flowered clusters of pale golden-yellow flowers, with the upper petals marked by deep-purple blotches. Native to India.

For previous introduction see No. 38651.

66151. COLVILLEA RACEMOSA BOJ. Caesalpiniaceae.

A tall, handsome tree, believed to be indi-genous to East Africa, which is related to the Royal poinciana (*Deloniv regia*). It is said to reach 40 or 50 feet in height. The pinnate leaves are 3 feet long, and the curiously shaped, brilliant scarlet flowers are borne in drooping racemes more than a foot long. The tree was named for Sir Charles Colville Governor of Mouriting; it scallet howers are borne in drooping racemes more than a foot long. The tree was named for Sir Charles Colville, Governor of Mauritius; it was discovered in 1824 on the west coast of Mada-gascar, where it flowers in April or May. In all probability it will stand no more frost than the poinciana. Like most other leguminous trees, it is readily propagated from seeds.

For previous introduction see No. 59676.

66152. PONGAM PINNATUM (L.) W. F. Wight. Fabaceae.

A tall, erect tree, or sometimes a climbing shrub, with compound leaves composed of five to seven pairs of oblong leaflets and simple racemes of white flowers. The woody pods are about a quarter of an inch thick and an inch and a half long. Native to tropical Asia. Because of its bright, handsome foliage this tree has been recommended as an ornamental for mild-win-tered regions. tered regions.

For previous introduction see No. 43662.

66153. SANTALUM ALBUM L. Santalaceae Sandalwood.

A small evergreen tree, native to the drier re-gions of southern India, and cultivated in north-ern India for the sake of the white or citron-colored wood, which, when dried, is sweet scented and esteemed as a perfume.

For previous introduction see No. 40782.

66154. SARACA INDICA L. Caesalpiniaceae.

One of the handsomest of Indian ornamental One of the handsomest of Indian ornamental trees, producing large heads of the most brilliant scarlet flowers imaginable. While restricted to the tropical sections of India, it may be suffic-iently hardy to succeed in southern Florida. (Note by Wilson Popence, Bureau of Plant Industry, under No. 36092.)

#### 66148 to 66158-Continued.

66155. TECTONA GRANDIS L. f. Verbenaceae. Teak.

The common teak is a native of southern and central India. The young branches are quad-rangular, the leaves opposite and elliptical or egg-shaped, and the white flowers are borne in terminal panicles. The wood is highly prized by shipbuilders because of its great strength and durability.

For previous introduction see No. 49563.

66156 to 66158. TERMINALIA SDD. Combretaceae.

66156. TERMINALIA ARJUNA (Roxb.) Wight and Arn.

Arjan. A very large tree with smooth green or whitish bark, found on river banks throughout central and southern India. The leaves are narrowly oblong, about 9 inches long, and the flowers, which appear in April and May, are borne in terminal panicles. This tree yields the transparent gum which is used as a drug in northern India; the bark is used for tanning, and the wood is used for carts and agricultural implements.

For previous introduction see No. 49565.

66157. TERMINALIA CHEBULA Retz.

A large deciduous tree, native to northern India, Burma, and Ceylon, with oval-elliptic leaves about 5 inches long and terminal racemes of white flowers. The ovoid, leathery fruits form the black myrobalan of commerce, which is one of the most valuable tanning materials of India.

For previous introduction see No. 63645.

66158. TERMINALIA TOMENTOSA (Roxb.) Wight and Arn.

The tropical almond (*Terminalia catappa*) is one of the most popular trees in southern Florida, where it is extensively planted as an ornamental shade tree. This closely related ornamental shade tree. This closely related Asiatic species, found in many parts of India, is described by Brandis (Forest Flora of India) as a large tree, 80 to 100 feet tall, with hard, leathery leaves 5 to 9 inches long and erect terminal racemes of dull-yellow flowers. The tree appears to thrive best in India in heavy, binding soils, and the dark-brown wood is valued for general construction pur-noses poses.

For previous introduction see No. 61624.

#### 66159 to 66162.

From British Honduras. Seeds collected by S. J. Record, School of Forestry, Yale University, New Haven, Conn. Received February 11,

66159. ACANTHORHIZA Sp. Phoenicaceae. Palm.

A tropical American palm of medium height, with palmate leaves clustered at the end of the trunk

66160. CHAMAEDOREA sp. Phoenicaceae. Palm.

A spineless palm, with pinnate leaves, native to tropical North America.

66161. DESMONCUS sp. Phoenicaceae. Palm.

slender climbing palm, with leaves scat-along the stem. Native to tropical and tered along the stem. subtropical America.

66162. PYRENOGLYPHIS sp. Phoenicaceae. Palm.

A tropical American palm which is usually low and often has a spiny trunk.

#### 66163. SOLANUM TUBEROSUM L. Solanaceae. Potato.

From Reading, England. Tubers obtained from Sutton & Sons, by F. W. Keay, Wolverhampton, and presented through C. F. Clark, Bureau of Plant Industry. Received February 18, 1926.

This variety is said to be *Paterson's Victoria*, but it is not the old Paterson's Victoria bred by William Paterson. (*Keay*.)

66164. IPOMOEA REPTANS (L.) Poir. (*I. aquatica* Forsk.). Convolvulaceae.

From Canton, China. Seeds collected by F. A. McClure, agricultural explorer, Bureau of Plant Industry. Received February 3, 1926.

No. 305. Obtained on Honam Island, December 15, 1925. Ung taoi; paak hook ung taoi. This is one of the most widely cultivated vegetables among the Chinese. It is easy to grow, yields many crops, and appeals generally to the Chinese palate. It may be grown either as a dry-land vegetable or as a water crop. The tips of the branches are eaten, together with the leaves. (McClure.)

For previous introduction see No. 54409.

#### 66165 to 66167. PYRUS spp. Malaceae. Pear.

From Algiers, Algeria. Scions presented by Dr. L. Trabut, Government botanist. Received February 11, 1926. Notes by Doctor Trabut.

66165. PYRUS GHARBIANA Trabut.

This is near to Pyrus longipes, but sufficiently characterized by the form of the leaves and the fruit. This pear grows on the tufas in the region of Lamoriciere, Daya. It is called gharbiana from the name of the region which formed part of the ancient kingdom of Gharb (of the west) at the time of Arab domination.

For previous introduction see No. 30031.

66166. Pyrus LONGIPES Coss. and Dur.

A rare Algerian wild variety of botanical interest, which forms a tall tree with few spines. It occurs in the mountains of Setif, Anini, and l'Aures, where it reaches its highest development. The leaves are small, rounded, oval, and suborbicular; the fruits are small, about the size of a cherry, and have a stalk three times their length.

For previous introduction see No. 34662.

66167. Pyrus mamorensis Trabut.

A Moroccan pear growing in the cork-oak forest of Mamora. The vigorous tree, very resistant to dryness in the sandy noncalcareous soils, will probably form a good stock. The fruits are rather large and the seeds very large.

For previous introduction see No. 45612.

- 66168. CEIBA ACUMINATA (S. Wats.) Rose. Bombacaceae. Pochote.
- From Cajenne, Sonora, Mexico. Seeds presented by Walter Thompson, through L. H. Dewey, Bureau of Plant Industry. Received February 16, 1926.

This close relative of the silk-cotton tree (*Ceiba* pentandra) is described by P. C. Standley (Contributions from the United States National Herbarium, vol. 23, pt. 3) as a large or medium-sized tree with a greenish, spiny trunk, compound leaves, and hard, oblong fruits about 7 inches long which contain brownish "cotton" used for stuffing pillows and for making candlewicks. It is native to western and southern Mexico.

For previous introduction see No. 39389.

#### 66169. ARACHIS NAMBYQUARAE Hoehne. Fabaceae.

From Sao Paulo, Brazil. Seeds presented by the Secretaria do Interior do Estado de Sao Paulo, through Arthur G. Parslee, American vice consul in charge, Santos. Received February 16, 1926.

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. Cultivated by the Nambyquara Indians in Rondonia, Matto Grosso.

For previous introduction see No. 62099.

66170.	Coffea	QUILLOU	Ρ.	J.	s.
Crar	ner. Ru	biaceae.		Cof	ee.

From Manila, Philippine Islands. Seeds presented by S. Youngberg, director, Bureau of Agriculture. Received February 16, 1926.

Introduced into the East Indies from Libreville, French Congo, in 1901, this was found to be distinct from Coffee robusta. The leaves are narrower and brighter green, and the young trees are pyramidal in habit. The berries are bright red, not dark crimson, and oblong. The crop matures later than that of C. robusta and under favorable circumstances is larger than that of any other coffee. Under less favorable conditions C. robusta is more productive. (Tea and Coffee Trade Journal, vol. 55, p. 417.)

For previous introduction see No. 65798.

- 66171. Gossypium sp. Malvaceae. Cotton.
- From Rio de Janeiro, Brazil. Seeds obtained through A. Gaylin, American consul general. Received February 18, 1926.

Mocó (tree type) cotton, a locally grown variety.

- 66172 to 66175. TRIFOLIUM PRATENSE L. Fabaceae. Red clover.
- From Aberystwyth, Wales. Seeds presented by R. G. Stapledon, director, Welsh Plant-Breeding Station. Received February 19, 1926. Locally developed varieties.
  - 66172. Sta. No. Aa-1214.
  - 66173. Sta. No. Aa-1215.
  - 66174. Sta. No. Aa-1216.

66175. Montgomery late-flowering clover.

- 66176. ELAEOCARPUS LANCEAEFOLIUS Roxb. Elaeocarpaceae.
- From Algiers, Algeria. Seeds presented by Dr. L. Trabut, Government botanist. Received February 19, 1926.

A handsome white-flowered tree from the Himalayas, which, according to J. D. Hooker (Flora of British India, vol. 1, p. 402), has serrulate, lanceolate leaves up to 6 inches in length and 2 inches in width, and flowers half an inch across, borne in racemes.

- 66177 to 66179. Gossypium spp. Malvaceae. Cotton.
- From the island of Cyprus. Seeds presented by the director of agriculture. Received February 19, 1926.

66177. GOSSYPIUM HERBACEUM L.

66178 and 66179. Gossypium Hirsutum L.

66178. Triumph.

66179. Derived from Sea Island, New Orleans, Triumph, and other varieties. 66180. TRITICUM AESTIVUM L. (T. vulgare Vill.). Poaceae.

Common wheat.

From Piacenza, Italy. Seeds presented by Fede-razione Italiana dei Consorzi Agrari. Received February 20, 1926.

Ardito. A new Italian wheat variety.

#### 66181 and 66182.

- From Rio Piedras, Porto Rico. Seeds presented by W. P. Kramer, chief, Porto Rico Forest Service. Received February 17, 1926.
  - 66181. BAUHINIA KURZII Prain. Caesalpiniaceae

As described by J. G. Baker (Hooker, Flora of British India, vol. 2, p. 280), this is a climbing shrub, with papery, rounded-cordate leaves about 4 inches long, which are slit down about one-third of their length. The flowers are borne in terminal racemes. Native to Martaban, Burma.

For previous introduction see No. 33558.

66182. CAESALPINIA SAPPAN L. Caesalpiniaceae.

A shrubby leguminous tree, native to India and Malaysia, which bears showy yellow flowers.

- The wood, known to commerce as sappan wood, yields a red dye, and the bark is used for tanning. It is said to be an excellent hedge plant and to endure rather poor dry soils.

66183. CITRUS NOBILIS DELICIOSA (Ten.) Swingle. Rutaceae.

#### Mandarin orange.

From Manila, Philippine Islands. Seeds presented by S. Youngberg, director, Bureau of Agricul-ture. Received February 20, 1926.

P. I. No. 1267. Szinkom mandarin. Grown at the experiment station in Tanauan, Batangas. (Youngberg.)

66184 to 66188. CYNARA SCOLYMUS L. Asteraceae. Artichoke.

From Paris, France. Offshoots purchased from Vilmorin-Andrieux & Co. Received February 27, 1926.

Artichoke varieties not known in the American trade.

66184. Early Purple Globe.

66185. Green Globe or Provence.

66186. Large Flat Brittany.

86187. Large Globe or Paris Improved Large Green. 66188. Perpetual.

- 66189 and 66190. COFFEA spp. Rubi-Coffee. 80686.
- From Tananarive, Madagascar. Seeds presented by the director of agriculture. Received February 15, 1926.

. 66189. COFFEA sp.

No. 1.

66190. COFFEA Sp.

No. 2.

- 66191. SACCHARUM OFFICINARUM L. Poaceae. Sugar cane.
- From Herradura, Cuba. Cuttings presented by F. S. Earle, through E. W. Brandes, Bureau of Plant Industry. Received March 1, 1926.

Co. 281. A locally grown variety.

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#### 66192 and 66193.

From the island of Mytilene, Greece. Scions pur-chased through P. D. Caldis, University Farm, Davis, Calif. Received March 1, 1926. Notes by Mr. Caldis.

66192. CYDONIA OBLONGA Mill. (Pyrus cydonia L.). Malaceae. Quince.

A variety formerly quite famous in Asia Minor. The fruit is large and fragrant and is eaten fresh like an apple.

66193. OLEA EUROPAEA L. Oleaceae. Olive.

Ropades. A variety commonly grown in the island of Mytilene which is said to lack the bitter flavor of other varieties.

#### 66194 to 66247.

From Peradeniya, Ceylon. Seeds obtained by David Fairchild and P. H. Dorsett, agricultural explorers, Bureau of Plant Industry, with the Allison V. Armour expedition. Received Feb-ruary 26, 1926.

Unless otherwise stated, the following seeds were collected at the Royal Botanic Gardens, Peradeniya.

66194. ADENANTHERA BICOLOR Moon. Mimosaceae.

No. 296. January 2, 1926. The beans of this tropical tree, unlike those of its relative, Adenan-thera pavoniana, are half red and half black like those of the Abrus precatorius. These seeds are very attractive for bead work, and the tree might be grown for the purpose of producing these seeds. Native to Ceylon.

66195. AGATI GRANDIFLORA (L.) Desv. (Sesbania granditiora Poir.). Fabaceae.

No. 311. January 11, 1926. A small, rapid-growing, soft-wooded tree, 15 to 20 feet in height, with pinnate leaves and large pendulous white flowers, followed by long sickle-shaped pods. The fleshy petals are used in curries and soups in the Indian Archipelago, where this tree is netize. The leaves and young shorts are some native. The leaves and young shoots are sometimes used as fodder.

For previous introduction see No. 61778,

66196 AMOMUM HEMISPHAERICUM (Blume) Schum. Zinziberaceae.

No. 282. January 3, 1926. A very striking and handsome species from Java, with great pinnate leaves rising from the ground to a height plinate leaves rising from the ground to a height of 12 feet and having leaflets 2 feet long. Under-neath, these leaves are the loveliest bronze-claret color, making the plant, when seen against the sunlight, a wonderful thing. Propagated usually by rhizome cuttings.

66197. 97. ANODENDRON PANICULATUM (Roxb.) A. DC. Apocynaceae.

No. 294. January 2, 1926. The dul of Ceylon climbs to the tops of the tallest trees and forms an immense snakelike stem several inches through. It bears big pods with seeds having a long white silky coma.

66198 to 66201. ARECA CATECHU L. Phoenicaceae. Palm.

This superb little palm grows everywhere in the oriental Tropies, and nobody knows whence it came; it is one of the most striking features of the landscapes here, and deserves to be thor-oughly established in the western Tropics. There are at least four distinct varieties of the Areca palm in Ceylon.

For previous introduction see No. 51803.

66198. No. 313. Variety A.

66199. No. 314. Variety B.

a mera ha tak

#### 66194 to 66247-Continued.

66200. No. 315. Variety C. The yellow fruit of the variety "Rata-puwak" is said to be larger than the others and is esteemed to be the best.

#### 66201. No. 316. Variety D.

66292. ARISTOLOCHIA RIDICULA N. E. Brown. Aristolochiaceae.

No. 300. January 8, 1926. A Brazilian plant most interesting because of its fascinating fly-trapping character. The flowers hold captive the flies which fall into them for 27 hours or until other flowers are ready to receive them as they come out well dusted with pollen. Adapted for cross-pollination. It will cover a fence, forming a mass of light-green foliage.

66203. BARYXYLUM INERME (Roxb.) Pierre (Peltophorum ferrugineum Benth.). Caesal-Pierre piniaceae.

No. 264. January 2, 1926. A beautiful large forest tree used extensively as a street tree in Ceylon because of its yellow flowers which are produced in early spring.

For previous introduction see No. 51810.

66204. BROWNEA ARIZA Benth. Caesalpinia-Cese.

No. 268. January 2, 1926. A small spreading leguminous tree from tropical America, with pinnate leaves which droop in a striking, limp way when young. It bears large dense round clusters of bright-scarlet blossoms.

For previous introduction see No. 42856.

66205. CAESALPINIA BICOLOR C. H. Wright. Caesalpiniaceae.

No. 292. January 2, 1926. A tropical Ameri-can flowering shrub with beautiful, orange, pendent blossoms of delicate form.

66206. CANARIUM BENGALENSE Roxb. Balsameaceae.

No. 267. January 2, 1926. A tall, handsome shade tree from Sylhet, British India, producing large nuts similar to those of *Canarium commune*.

86207. CANARIUM INDICUM Stickm. Balsameaceae.

No. 270. January 2, 1926. A forest tree from the Molukkas which, like *Canarium commune*, produces edible nuts. It is also a first arrest A forest tree from produces edible nuts. It is also a fine avenue tree.

66208. CANARIUM ZEYLANICUM (Retz.) Blume. Balsameaceae.

No. 241. January 1, 1926. The "mala-mekuna." A large magnificent avenue tree which is said to exude copiously a fragrant gum No. 241. mekuna." resin from the stem.

66209. CASSIA GRANDIS L. f. Caesalpiniaceae.

No. 291. January 5, 1926. This leguminous tree produces masses of pale-pink flowers during February and March, at which time it is leafless. It should be very attractive for park and garden work in southern Florida where *Cassia fistula* and others of the genus have done well.

For previous introduction see No. 54706.

66210. CHLOROXYLON SWIETENIA DC. Meliaceae.

No. 238. January 1, 1926. The "Ceylon satin wood" tree, which was at one time exported in large quantities from Ceylon. A moderate-sized tree, growing in the so-called dry zone of Ceylon, which furnishes a very hard, heavy, fine-grained timber for turners. The "flowered wood" is said to bring a high price in London. It is also worth growing as a shade tree.

#### 66194 to 66247-Continued.

66211. CUCUMIS SATIVUS L. Cucurbitaceae. Cucumber.

No. 360. January 10, 1926. A long, rather large, russet eucumber obtained in a country market west of Kandy. The flesh is white, crisp, and of good quality.

66212. CUCURBITA MOSCHATA Duchesne. Cncurbitaceae. Cushaw.

No. 359. January 10, 1926. A large oblong yellow variety obtained in a country market near Kandy. The flesh is about 1½ inches thick and of a creamy yellow color.

66213 DILLENIA BUBBIDGEI (Hook. f.) Gilg. Dilleniaceae.

No. 295. January 5, 1926. A small orna-mental tree from Borneo, with large leaves and very beautiful bright-yellow flowers 2 inches across.

For previous introduction see No. 60438.

66214. ELAEOCARPUS SERRATUS L. Elaeocarpaceae.

No. 277. January 3, 1926. The "wild olive" of Ceylon. A moderate-sized attractive tree which bears an abundance of small olive-shaped fruits. When ripe these fruits are good to eat, having a mild acid flavor and good texture. In Ceylon they are pickled somewhat as olives are, and they are said to be very good.

For previous introduction see No. 32098.

66215. ELAFOCARPUS Sp. Elaeocarpaceae.

No. 229. January 1, 1926. A forest tree of extremely attractive appearance, used as an avenue tree in the Royal Botanic Gardens. The leaves turn a beautiful scarlet as they fall, and the large, rather attractive green fruits are egg-shaped and a little sour, but not bad for eating.

66216. ELETTARIA CARDAMOMUM MAJOR (Smith) Trimen. Zinziberaceae.

No. 309. January 11, 1926. Var. majus. The wild species of Ceylon which does not furnish the commercial cardamoms, but is being used here as an ornamental in the herbaceous perennial borders with stunning effects. It would be excellent for use around houses to produce tropical effects in southern Florida.

66217. ERYTHRINA sp. Fabaceae.

No. 289. Collected on the Gompala Road, Kandy, January 6, 1926. The dadap tree is used as a shade for the tea all over Ceylon. It is a rapid grower and during the spring, when in flower, is attractive with its bright-scalet flowers.

66218. EUTERPE EDULIS Mart. Phoenicaceae. Palm.

No. 255. January 1, 1926. The Assai palm of tropical America. A very beautiful, slender-stemmed palm whose pinnate leaves, borne at the tips of the graceful stems, are waved by the slightest breeze.

For previous introduction see No. 56463.

66219. FLACOURTIA INERMIS Roxb. Flacourtia-CERA.

No. 250. January 1, 1926. The lovi-lovi free of Malaya is cultivated everywhere in the private gardens of Ceylon. The very soid, brilliant-red fruits are produced in immense quantities and are said to make excellent preserves. Judging from the taste of the sour fruits they would resemble cranberry preserves.

## 66194 to 66247—Continued.

66230. HARPULLIA CUPANIOIDES Roxb. Sapindaceae.

No. 299. January 3, 1926. The na-imbul tree of the Singhalese, who are said to use the fruits for washing purposes. Since saponin has become more valuable, it may be worth testing for its saponin content. It is suitable further-more for avenue and shade-tree purposes. Nr:

For previous introduction see No. 39419.

- 66221 and 66222. HIBISCUS SABDARFFA L. Malvaceae.
  - 321. No. 287. January 4, 1926. A deep-crimson fruited roselle, of the spreading type, which may prove superior to the variety growing in America. 66221. No. 287.
  - 66222. No. 288. Attempts to grow this variety in Ceylon for fiber have met with only partial success. It grows upright like hemp and is about as tall. Perhaps this tall-growing variety may succeed in Whender Florida.
- 66223 and 66224. LAGERSTROEMIA SPECIOSA (Muenchh.) Pers. (L. flos-reginae Retz.). Lythraceae. Crape myrtle.

For previous introduction see No. 59315

- 66223. No. 307. Collected in front of the Nursing Home, Kandy. This variety, the leaves of which fall in January, is not so showy as No. 308 [No. 66224], nevertheless it is worthy of cultivation as a street tree. It is called in Ceylon Pride of India or Queen's flower.
- 224. No. 308. Collected near Kandy, Jan-uary 9, 1926. Around the lake here at Kandy many of these trees have been planted, and already they are beginning to open their superb clusters of bright-pink flowers. This variety also is called in 66224. No. 308. Ceylon Pride of India or Queen's flower.

66225. LICUALA GRACILIS Blume. Phoenicaeace. Palm.

No. 252. January 1, 1926. A small fan palm from Java, 5 to 7 feet high, clusters of which would grace any private garden in the Tropics.

66226. LICUALA SPINOSA Thunb. Phoenicaceae. Palm.

No. 306. January 1, 1926. A beautiful fan palm, native to Singapore and Java, with grace-ful stems produced in clusters 20 to 25 feet tall.

For previous introduction see No. 62104.

66227. LYSIDICE BHODOSTEGIA Hance. Caesalpiniaceae.

No. 290. January 3, 1926. A handsome leguminous tree from southern China which was introduced into Ceylon in 1882. It bears loose panicles of rose-purple flowers with pale-pink bracts and is very attractive.

\$6228. MUSSAENDA LUTEOLA Delile. Rubiacèae. 

No. 266. January 2, 1926. A dwarf species of Rubiaceae, with small yellow flowers and large white bractlike sepals which are very showy. It reminds one slightly of our northern dogwood.

66229. ONCOBA SPINOSA Forsk. Flacourtiaceae.

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No. 240: January 1, 1926. A relative of Oncebs schinata whose seeds contain an oil hav-ing chaulmoogric acid in it. This species, native to Arabia, forms a small bushy tree bear-ing large scented white flowers and fruits the size of small apples which are reported to be adult edible.

For previous introduction see No. 49469.

#### 66194 to 66247-Continued.

66230. ONCOSPERMA FASCICULATUM Thwaites. Phoenicaceae. Palm.

No. 235. January 1, 1926. The Katu-kitul palm of Indo-Malaya is one of the graceful cluster palms which make magnificent groups. 40 to 60 feet high, in the Peradeniya Gardens. The stems are spiny and therefore not suitable for small gardens, but rather for parks, to in-crease the tropical effect.

For previous introduction see No. 45961.

#### 66231. ONCOSPEBMA FILAMENTOSUM Blume. Palm. Phoenicaceae.

No. 275. January 3, 1926. The nibung palm of Java. A cluster palm of great beauty which rises to 50 feet and waves its pinnate leaves in the slighest breeze. Like its relative, Onco-sperma fasciculatum, it is a spiny palm and there-fore not suited for small garden uses but to parks. The great clusters of this palm are wonderfully effective. effective.

For previous introduction see No. 51726.

66232. ORMOSIA MONOSPERMA (Swartz) Urban. Fabaceae.

No. 302. January 9, 1926. The so-called "necklace" tree because its beans are the size of large beads, three-fourths of an inch long, and of brilliant scarlet blotched with the deepest brown. They are among the most strikingly colored seeds I have ever seen and are sold in Kandy to tourists for high prices. The tree comes from tropical South America and fruits during the winter months during the winter months.

For previous introduction see No. 37876.

66233. PAYENA LEERII (T. and B.) Kurz. Sapotaceae.

No. 297. January 2, 1926. The gutta sundek tree of the Malay Peninsula, of possible value as a source of gutta-percha.

66234. PHOENIX FARINIFERA Roxb. Phoenica-Palm. ceae.

No. 260. January 1, 1926. A pinnate-leaved palm, native to India and Ceylon. Like most of the species of Phoenix, this will probably grow well in southern Florida.

For previous introduction see No. 41507.

66235. PITTOSPORUM TIMORENSE Blume. Pittosporaceae.

No. 265. January 2, 1926. A tropical forest tree from the island of Timor in the Dutch East Indies. This may prove valuable as a street tree.

66236. PTEROCARPUS ERINACEUS Lam. Faba-CERA.

No. 253. January 1, 1926. A very ornamental leguminous forest tree from the Philippine Islands, which is related to the species furnishing the kino gum. It bears clusters of pale-orange flowers during April. Introduced because of its suitability as an avenue tree.

For previous introduction see No. 52912.

66237. PTYCHOSPERMA ANGUSTIFOLIA Blume. Phoenicaceae. Palm.

No. 257. January 1, 1926. A tropical Austra-lian pinnate palm which grows in great clusters. When young it is suited for pot culture, but it should be tried out in the open in southern Florida in private gardens. The small slender stems make it especially adapted for small ordense gardens.

66238. SABAL GLAUCESCENS Lodd. Phoenicaceae.

No. 247. January 1, 1926. A handsome fan-leaved palm from Trinidad which grows to 40 or 50 feet high; it is suitable for parks.

### 66194 to 66247-Continued. A balant

66239. SIDEROXYLON Sp. Sapotaceae.

No. 310. January 11, 1926. A small-leaved variety with golden-yellow mealy flesh; in general appearance and flavor the fruits resemble those of the canistel (Lucuma neroso).

. 66840. STYRAX BENZOIN Drysander. Stryacacese.

No. 237. January 1, 1926. A medium-sized tree, native to Malaya, which might prove interesting as a park tree. It yields the gum benzoin which is used as incense in churches.

For previous introduction see No. 51807.

66341. TALINUM TRIANGULARE (Jacq.) Willd. Portulacaceae.

No. 317. Obtained at Kandy, January 12, 1926. A low herb, with somewhat fleshy leaves and pink flowers, which is cultivated in beds in the small market gardens around Kandy. It is used in the hotels and by the Singhalese as a "spinach" or potherb, and I must say it makes a very good one.

For previous introduction see No. 59292.

66242. TECTONA GRANDIS L. f. Verbenaceae. Teak.

No. 288. January 4, 1926. The teak tree of India furnishes one of the most valuable timbers in the world. It is said to do best in calcareous soil.

For previous introduction see No. 49562.

66243. TERMINALIA TOMENTOSA (Roxb.) Wight and Arn. Combretaceae.

No. 236. January 1, 1926. The kumbuk of the Singhalese. An immense tree which sometimes grows to 45 feet in circumference around its base in the beds of rivers in the so-called **d**ry region of Ceylon. The bark is remarkable for the amount of pure calcium carbonate which it contains, and it is burnt to obtain this pure lime, which is an ingredient of the mixture known as betel-nut quid, chewed by millions throughout the oriental Tropics.

For previous introduction see No. 61624.

66244. TOLUIFERA BALSAMUM L. (Myroxylon toluiferum H. B. K.). Fabaceae. Toulu.

No. 286. January 3, 1926. A leguminous tree of South America which, in the Peradeniya Gardens, makes a beautiful park tree. It is said to thrive in dry districts as well as most ones, and I imagine would prove a good avenue tree.

For previous introduction see No. 42720.

66245. TOLUIFERA PEREIRAE (Klotzsch) Baill. (Myroxylon pereirae Klotzsch). Fabaceae.

No. 272. January 2, 1926. Balsam of Peru is obtained from the base of this tropical American leguminous tree. It is probably a good street tree.

For previous introduction see No. 38977.

66246. TRACHYLOBIUM VERRUCOSUM (Gaertn.) Oliver. Caesalpiniaceae.

No. 231. January 1, 1926. A tall and very attractive lorest tree from East Africa which would make an excellent avenue tree, and whose copal riskin may prove to have special value. The curious fruits are covered with pustules filled with inflammable gum, which, if lighted, will birn.

For previous introduction see No. 60323.

66247. TRICHOSANTHES sp. Cucurbitaceae.

No. 305. January 6, 1926. A vine with very showy scarlet fruits, 2 inches in diameter, which are extremely ornamental but poisonous.

#### 66248 to 66256.

From Ceylon, India. Seeds collected by David Fairchild and P. H. Dorsett, agricultural explorers, Bureau of Plant Industry, with the Allison V. Armour expedition. Received March 4, 1926.

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- 66248 to 66254. From the agricultural experiment station near the villages of Gangoruwa and Yatinalagal, in the district of Kandy, January 23, 1926.
  - 66248. BRADBURYA PUBESCENS (Benth.) Kuntze (Centrosema pubescens Benth.). Fabaceae.
    - No. 371. A creeping leguminous vine used as a cover crop in a rubber plantation here.

For previous introduction see No. 32780.

66249. CRACCA CANDIDA (DC.) Kuntze (Tephrosia candida DC.). Fabaceae.

No. 366. A white-flowered shrubby perennial, 4 to 7 feet high, which yields four cuttings a year or 58 tons of green manure per acre.

For previous introduction see No. 60642.

66250. CRACCA VOGELII (Hook. f.) Kuntz (Tephrosia vogelii Hook. f.). Fabaceae.

No. 374. A very strong-growing cover crop with velvety brown pods.

For previous introduction see No. 49995.

66251. CROTALARIA ANAGYROIDES H. B. K. Fabaceae.

No. 368. A very strong rank grower with large clusters of yellow flowers.

66252. CROTALARIA USARAMOENSIS Baker f. Fabaceae.

No. 365. A very strong grower, 8 feet or more in height, with long spikes of yellow flowers which are tinged with bronze. This green-manure crop is being used extensively. For previous introduction see No. 57831.

66253. INDIGOFERA ENDECAPHYLLA Jacq. Fabaceae.

No. 369. An annual or biennial leguminous plant which has become popular as a cover plant in Ceylon, according to the Tropical Agriculturist (vol. 63, October, 1924). The trailing stems are 1 to 2 feet long and the violet-purple flowers are in dense racemes.

For previous introduction see No. 63605.

66254. MEIBOMIA GYROIDES (DC.) Kuntze (Desmodium gyroides DC.). Fabaceae.

No. 370. A shrubby leguminous plant, 8 to 10 feet high, from the warmer parts of the central and eastern Himalayas. It has hairy leaves and terminal clusters of reddish purple flowers.

For previous introduction see No. 61613.

66255. OROXYLON INDICUM (L.) Vent. Bignoniaceae.

No. 362. Kandy, January 21, 1926. A tropical Asiatic ornamental tree, sometimes 40 feet high, with glossy compound leaves 2 to 4 feet across and terminal panicles of white to purple flowers. The large flat pods, up to 3 feet long, contain winged seeds.

For previous introduction see No. 35415.

66256. PUEBARIA PHASEOLOIDES (Roxb.) Benth. Fabaceae.

No. 372. From the agricultural experiment station near the villages of Gangerura and Yatinalagal, in the district of Kandry. Jasuary 23, 1926. A twining, semishrubby plant densely covered with brown hairs, which is native to the tropical regions of the eastern Himakayas. The leaflets are green above and densely matted with gray hairs beneath. The reddish flowers are borne in copious long-stemmed racemes.

#### 66257 to 66259.

From Keijyo, Chosen, Japan. Seeds presented by Dr. M. Tozawa, director, Forest Experiment Station. Received March 9, 1926.

66257. ABIES HOLOPHYLLA Maxim. Pinaceae. Manchurian fir.

Collected at Potschonkjongdo. A tall, handsome Manchurian fir, eventually 100 feet or more in height, with stout spreading or ascending branches and dark-green foliage.

For previous introduction see No. 65906.

66258. FRAXINUS CHINENSIS RHYNCHOPHYLLA (Hance) Hemsl. Oleaceae. Ash.

Collected at Anpjon, Sudhamgjongdo. A rather small ash, 40 feet or less in height, with dark-green leaves, lighter beneath, consisting of five to seven narrowly oblong, irregularly toothed leaflets 2 to 5 inches long.

66259. SYRINGA DILATATA Nakai. Oleaceae.

Collected at Hwanghaido. A hardy compact shrub about 12 feet high, with heart-shaped, bright-green leaves and dense panicles of palelikac flowers. Native to Chosen.

#### 66260 to 66266.

From Ceylon and Italy. Seeds obtained by David Fairchild and P. H. Dorsett, agricultural explorers, Bureau of Plant Industry, with the Allison V. Armour expedition. Received March 12, 1926.

66260. AMOMUM MAGNIFICUM (Roscoe) Benth. and Hook. Zinziberaceae.

No. 363. From the Peradeniya Botanic Garden, Kandy, Ceylon, January 21, 1926. A variety with large pink flower heads on erect stalks,  $2\frac{1}{2}$  to 3 inches or more high.

66261. ARBUTUS CANARIENSIS Duham. Ericaceae.

No. 228. These seeds were presented by Professor Cavara, director, Naples Botanic Garden, November 14, 1925. A beautiful tree with smooth bark and evergreen leaves, resembling our California *Arbutus menziesii*. It is a rather rare tree in the Canary Islands.

For previous introduction see No. 56529.

66262. ARISTEA ECKLONI Baker. Iridaceae.

No. 380. Collected near Hakgalla Garden, in the region of Kandy, Ceylon, January 27, 1926. An iridaceous plant from South Africa which has become naturalized in the high altitudes of Ceylon. Though rather small, it is very pretty with its brilliant blue flowers.

66263. BOTOR TETRAGONOLOBA (L.) Kuntze (Psophocarpus tetragonolobus DC.). Fabaceae. Goa bean.

No. 341. From Peradeniya, Ceylon, February 1, 1926. A bean with winged pods, much used in curries by the Singhalese. The wings are torn off before cooking.

For previous introduction see No. 51765.

66264, ELAEOCARPUS SPHAERICUS (Gaertn.) Schum. (E. ganitrus Roxb.). Elaeocarpaceae.

No. 385. From the Botanical Gardens, Peradeniya, February 3, 1926. A good-sized ornamental tree which bears small blue fruits about the size of a plum. The seeds are rough and attractive and when dry may be used as hat pin heads.

For previous introduction see No. 50696.

#### 66260 to 66266—Continued.

66265. HIBISCUS SABDARIFFA L. Malvaceae.

No. 332. Presented by the director of the Peradeniya Experiment Station, Ceylon, January 29, 1926. A tall straight-growing variety which furnishes an excellent fiber for the manufacture of bags.

For previous introduction see No. 66222.

66266. PRUNUS ARMENIACA L. Amygdalaceae. Apricot.

No. 342. Kandy, Ceylon, January 29, 1926. This variety is from the upper hill country of India. The fruits are dried with the seed in them and are never cut open or halved. When stewed they have a delicious flavor.

#### 66267 to 66269.

From China. Seeds collected by P. H. Dorsett, agricultural explorer, Bureau of Plant Industry. Received March 12, 1926. Notes by Mr. Dorsett.

66267. EVODIA sp. Rutaceae.

No. 4814. Dairen, Manchuria. November 28, 1925. A good-sized tree, 10 inches in diameter and 25 to 30 feet high, with smooth grayish bark, which was growing in a playground park between the Yamato Hotel and the water front. The shiny black seeds have a spicy odor.

66268. GLEDITSIA Sp. Caesalpiniaceae. Honey locust.

No. 4817. Dairen, Manchuria. November 28, 1925. This tree was also growing in a playground park. It is a small tree and has large thorns which are more or less flattened.

66269. PINUS sp. Pinaceae.

No. 4818. Tsingtao, China. December 1, 1925. The small trees were growing in an exposed situation in poor gravelly clay soil.

66270 to 66324.

From Elstree, Herts, England. Plants presented by Edwin Beckett, superintendent, Aldenham House Gardens. Received March 19, 1926.

66270 to 66278. ASTER spp. Asteraceae. Aster.

66270. ASTER sp.

Dainty. A very delicate semidouble pink variety.

66271. ASTER sp.

Grace Sweet. One of the finest deep blues yet raised.

66272. ASTER sp.

Gray J.ady. A large semidouble opal-gray flowered variety which is very distinct and lovely.

#### 66273. ASTER Sp.

Moonbeams. A pale-mauve variety with large flowers which is especially pretty.

66274. ASTER sp.

Pink Perfection. A very true bright-pink variety.

66275. ASTER Sp.

Queen of the Lilacs. A variety with large, glorious pale lilac-blue flowers.

66276. ASTER SD.

Snowdrift. A semidouble snow-white flowered variety of attractive branching pyramidal habit.

Pine.

#### 66270 to 66324-Continued.

66277. ASTER SD.

Sunset. A very pretty variety with single pink flowers.

66278. ASTER SD.

Wedgewood. The flowers of this variety are a lovely shade of porcelain blue.

66279. BERBERIS ARISTATA DC. Berberidaceae. Barberry.

An almost evergreen form, native to the Himalayas, which has a fine coloring in the fall. The flowers, produced freely about July, are in racemes 2 to 3 inches long. The fruits are long and red, covered with a bluish white blocm bloom.

For previous introduction see No. 60378.

66280. BUDDLEIA FALLOWIANA Balf. f. and W. W. Smith. Loganiaceae.

A white-flowered variety with very white woolly leaves.

66281. BUDDLEIA DAVIDII Franch. Loganiaceae.

Var. nanhoensis. A Chinese variety of spreading habit, which produces an abundance of bright rosy mauve flowers.

66232. SIMMONDSIA CHINENSIS (Link) C.Schneid. (S. californica Nutt.). Buxaceae.

A much-branched evergreen shrub, 5 to 15 t high with small. narrow-oblong, leathery feet high, with small, narrow-oblong, leathery leaves. Native to southwestern California and western Mexico.

66233. COROKIA COTONEASTER Raoul. Cornaceae.

An evergreen shrub, native to New Zealand with curiously interlacing branches and small yellow flowers.

66284. CORLYUS Sp. Betulaceae. Hazel.

This is probably the Tibetan hazel. It makes a fine and interesting tree.

63285 and 66286. CHAMAECYPARIS LAWSONIANA (Murray) Parl. Pinaceae. Lawson cypress.

For previous introduction see No. 62706.

- 66285. Var. nana. A dwarfish plant, generally broader than high, and of rounded habit.
- 66286. Var. nana glauca. A low-growing dwarf form with glaucous leaves, which is suitable for rock gardens.

66287. CHAMAECYPARIS OBTUSA (Sieb. and Zucc.) Endl. Pinaceae.

Var. pygmea. A dwarf form of rounded habit, which makes an excellent conifer for the rock garden.

66288. DEUTZIA SCABRA Thunb. Hydrangeaceae.

Var. latiflora. A tall-growing, very floriferous variety with big panicles of large white flowers which are sometimes tinged with pink on the outer side of the petals.

66289. DEUTZIA WILSONI Duthie. Hydrangeaceae.

very handsome Chinese shrub with A very haddsome childse shall with reddish-brown bark, soon peeling, and scabrous oblanceolate leaves 3 to 4½ inches long. The white flowers, nearly 1 inch across, are in open corymbs, and the petal margins are wavy and hooded.

For previous introduction see No. 49946.

#### 66270 to 66324—Continued.

66290. DIERVILLA FLORIBUNDA Sieb. and Zucc. Caprifoliaceae. Crimson weigela.

Var. Aldenham Glow. A choice deep-scarlet flowered form resembling Eva Rathke.

66291. FORSYTHIA INTERMEDIA Zabel. Oleaceae.

Var. spectabilis. A wonderful golden-yellow flowered hybrid variety.

66292. HEUCHERA sp. Saxifragaceae.

A plant 3 feet high with beautiful soft-rose flowers.

66293. JASMINUM HETEROPHYLLUM Roxb. Oleaceae.

Var. glabricymosum. A strong-growing bush jasmine introduced from China by G. Forrest, which bears an abundance of golden-yellow blossoms.

66294. LESPEDEZA CYRTOBOTRYA Miquel. Fabaceae. Bush clover.

A small, deciduous bush clover, native to Japan and Chosen, which produces during August racemes of rosy purple pea-shaped flowers.

For previous introduction see No. 62863.

66295. LIGUSTRUM CONFUSUM Decaisne. Olea-Privet.

A small tree, up to 40 feet in height, which is one of the tropical relatives of the California privet (*Ligustrum oralifolium*). The leathery, obtuse leaves are about 3 inches long, and the small white flowers are in panicles 1 to 5 inches long.

For previous introduction see No. 60651.

66296. LIGUSTRUM CORIACEUM Carr. Oleaceae.

A quaint, glossy, leathery-leaved evergreen, native to Japan.

66297. LONICERA CHAETOCARPA Rehder. Caprifoliaceae. Honeysuckle.

This was originally collected in Kansu, western China, by E. H. Wilson. It is described (Curtis's Botanical Magazine, pl. 8804) as a shrub of compact habit, about 5 feet in height. The oblong leaves are bright green and more or less hairy, and the flowers, an inch or more in length, open in early June and are a pleasing primrose yellow.

For previous introduction see No. 62391.

66298. MALUS SYLVESTRIS Mill. (Pyrus malus L.). Malaceae. Apple.

Var. Excellenz Thiel. A very graceful weep-ing tree of German origin, having narrow leaves. The boughs hang down close to the trunk.

66299. MORUS ACIDOSA Griffith. ith. Moraceae. Acid mulberry.

As described by Sargent (Plantae Wilsonia-nae, vol. 2, p. 300), this is usually a broad shrub from 3 to 16 feet in height, but occasionally it is a tree 25 feet tall. It is found in the Provinces of Hupeh and Szechwan, China. The leaves are very variable in size and shape and are not used for feeding silkworms. The fruits are dark red or shining black and are quite palatable.

For previous introduction see No. 46532.

66300. MYRTUS COMMUNIS TARENTINA L. Myrtaceae.

The Tarentum myrtle. A small-leaved variety, especially fine for walls, bearing small white fragrant flowers.

#### 66270 to 66324—Continued.

66301. ONONIS FRUTICOSA L. Fabaceae.

A spreading deciduous European shrub, with almost stalkless trifoliolate leaves, and pink flowers which are produced during July and August.

66302. ONONIS ROTUNDIFOLIA L. Fabaceae.

A hardy shrubby plant, about a foot high, with trifoliolate leaves and bright-pink pealike flowers produced freely throughout the summer. Native to southern Europe.

66303 and 66304. PHILADELPHUS LEMOINEI Lemoine. Hydrangeaceae.

66303. Var. *purpureo-maculatus*. A very pretty and fragrant variety, producing flowers well expanded with round white petals which carry a deep-pink blotch at the base.

66304. Sylvaine. A variety producing large well-opened flowers with broad petals which are white tinged with pink in the center.

66305. PICEA LAXA (Ehrh.) Sarg. Pinaceae. White spruce.

Var. albertiana. A pretty slow-growing conifer of very compact habit and glaucous tone.

66306. RHAMNUS RUPESTRIS Scop. Rhamnaceae.

A low-spreading European shrub with fruits that are first red, then black.

66307. RIBES LAURIFOLIUM Jancz. Grossulariaceae.

A very fine and distinct Chinese evergreen with beautiful leaf buds during the dormant period; the flowers are greenish yellow in long racemes.

For previous introduction see No. 56061.

66308. RIBES VICARII Hort. Grossulariaceae.

An evergreen of trailing habit, very distinct, with highly aromatic leaves and dull-pink flowers.

66309. RUBUS IRENAEUS Focke. Rosaceae.

An evergreen creeping shrub, native to western China, with simple, nearly round leaves, white flowers half an inch across, and yellow fruits.

For previous introduction see No. 44401.

66310. RUBUS Sp. Rosaceae.

Hers. 2706. A new species with soft hairy leaves, three-leaved, at times five, or divided into two small leaflets at the base, with a larger one at the apex of the leaf.

66311. RUSCUS ACULEATUS L. Convallariaceae. Butcher's-broom.

Var. hermaphroditus. A superior form of the butcher's-broom, more handsome in foliage and fruit, and bearing an abundance of red berries which are retained for a very long time.

For previous introduction see No. 26882.

66312. STRANVAESIA DAVIDIANA UNDULATA (Decaisne) Rehd. and Wils. Malaceae.

A low spreading evergreen shrub, or occasionally a small tree, native to western China. The leathery narrowly oval leaves are glossy green and 1 to 3 inches long, and the white flowers, about half an inch across, appear in terminal clusters. Its greatest charm as an ornamental is the abundant crop of bright-red fruits.

For previous introduction see No. 61993.

66313 to 66315. SYRINGA spp. Oleaceae Lilac.

#### 66270 to 66324—Continued.

**66313**. Syringa villosa  $\times$  josikaea.

Var. lutece. The enormous panicles of deep-violet flowers, which are very fine in the bud, are produced abundantly during May.

66314. SYRINGA PALIBINIANA Nakai.

A very pretty lilac from China, with stiff panicles of red-purple flowers and small dark foliage.

66315. SYRINGA YUNNANENSIS Franch.

A handsome species related to Syringa wilsonii but with pale pink flowers in big panicles. The downy leaves have a distinct red midrib, the color being continued through the leaf stalk.

66316. TRITOMA Sp. Liliaceae.

Var. Lord Roberts. A very fine variety with effective spikes of bright coral red.

66317. VERONICA GAUNTLETTII Hort. Scrophulariaceae.

A very beautiful hybrid form with 6-inch spikes of salmon-pink flowers.

66318. VERONICA SPICATA L. Scrophulariaceae.

Var. rosea. The spikes, 1 foot in length, of pink flowers are very attractive.

66319 to 66324. VIBURNUM spp. Caprifoliaceae. 66319. VIBURNUM FRAGRANS Bunge.

A very early-flowering species introduced from China by Farrer. The flowers are deliciously fragrant and are shaded with rose.

For previous introduction see No. 62741.

66320. VIBURNUM HARRYANUM Rehder.

An evergreen which is very distinct, with small round quaint leaves and long black fruits.

For previous introduction see No. 62742.

66321. VIBURNUM ODORATISSIMUM Ker.

An exceptionally fine evergreen with shining leathery leaves up to 8 inches long. The fragrant white flowers are produced in large broad panicles and are followed by red fruit which turns black as it ripens.

66322. VIBURNUM PROPINQUUM Hemsl.

A distinct evergreen shrub from China, with greenish white flowers produced in goodsized cymes which are followed by blueblack fruit.

For previous introduction see No. 62744.

66323. VIBURNUM UTILE Hemsl.

A handsome hardy evergreen shrub of rather open habit with dark glossy green leathery leaves and pure white flowers produced in dense terminal rounded trusses in May. These are succeeded by oval blueblack berries. The shrub is native to western China, where it is said to grow on limestone soils.

For previous introduction see No. 63688.

66324. VIBURNUM Sp.

In appearance this resembles Viburnum venosum, but is very early flowering. A native of China.

66325 to 66335. ORYZA SATIVA L. Poaceae. Rice.

From Assam, India. Seeds presented by P. M. Gangnli, botanical assistant, Karimganj Farm. Received March 17, 1926. Indian varieties. 66325 to 66335—Continued.

66325.	Ar. 1.	Badal.
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- 66327. S. 14. Hati. 66328. S. 15. Tulshijoha.
- 66329. S. 22. Lati.
- 66330. S. 149. Indra.
- 66331. S. 155. Badshabhog.
- 66332. S. 156. Nagra.
- 66333. S. 161. Dhepi.
- 66334. S. 233. Basantabahar.
- 66335. Mixed seeds of S. 154 George and S. 156 Nagra.

66336 and 66337. TRIFOLIUM PRA-TENSE L. Fabaceae. Red clover.

From Copenhagen, Denmark. Seeds presented by L. P. M. Larsen, Danish Royal Agricultural Society. Received March 18, 1926.

66336. Tystofte No. 40. An early red clover.

66337. Hersnap. A late red clover; a good yielder.

- 66338. BELOU MARMELOS (L.) Lyons (Aegle marmelos Correa). Rutaceae. Bel.
- From Kandy, Ceylon. Scions collected by David Fairchild and P. H. Dorsett, agricultural explorers, Bureau of Plant Industry, with the Allison V. Armour expedition. Received March 12, 1926.

No. 336. From a tree near the home of Ratwatte Disawa, grandson of the former King of Kandy. A variety with abortive seeds and of excellent quality though rather small. The disawa told us that he eats one of these fruits for breakfast every morning, and that his father practically lived on them during the latter years of his life.

For previous introduction see Nos. 65793 and 65794.

#### 66339. CANNA EDULIS Ker. Cannaceae. Edible canna.

From San Juan, Porto Rico. Rhizomes presented by O. W. Barrett, agricultural director, Department of Agriculture and Labor. Received March 23, 1926.

A close relative of the ornamental cannas, cultivated for its edible tubers, which contain a large percentage of starch. The plant is very vigorous and often becomes 9 feet high, with handsome bronze-green leaves and scarlet flowers. When properly cooked the tubers are very palatable; according to F. G. Krauss, of the Hawaii Agricultural Experiment Station, they should be boiled for 30 minutes and then mashed like boiled potatoes. Prepared thus they are comparable to potatoes in taste and in Hawaii the yield is more than twice as great. As much as 60 pounds of tubers have been obtained from a single hill. The tops can be been at the state and swine.

It is as a commercial source of starch, however, that the edible canna is most promising. In Australia it is grown for this purpose in preference to the Bermuda arrowroot (Maranta arundinacca), because of its much higher yield. A deep rich well-drained soil and moderate rainfall are necessary for the successful cultivation of this plant. In the United States it will probably have to be grown as an annual, except in the warmest parts of Florida.

For previous introduction see No. 46313.

66340. ATALANTIA MISSIONIS (Wight) Oliver. Rutaceae.

From Jaffna, Ceylon. Scions collected by David Fairchild and P. H. Dorsett, agricultural explorers, Bureau of Plant Industry, with the Allison V. Armour expedition. Received March 26, 1926.

Mr. Fairchild's No. 345. The pamburu of the Singhalese and kuruntu of the Tamils. A native Ceylon tree with white flowers and very sweet fruits which are like small, dark oranges. Native to the dry district of Ceylon.

#### 66341 to 66419.

- From Tieblingho, Kirin Province, Manchuria. Seeds presented by A. D. Woelkoff, director, Experimental Farm, Echo. Received March, 1926.
  - 66341. AGROPYRON STRIGOSUM (Bieb.) Boiss. Poaceae. Grass.

No. 2. A perennial cespitose grass, native to Turkestan, with long narrow panicles and short narrow rigidly acuminate leaves.

66342. AGROPYRON Sp. Poaceae. Grass. No. 5a.

66343. AMPELOPSIS BREVIPEDUNCULATA (Maxim.) Koehne. Vitaceae.

No. 74. A handsome strong-growing vine, native to eastern Asia, which is particularly attractive in autumn with its clusters of deepblue berries; it is well adapted for covering trellises and low walls.

For previous introduction see No. 63332.

66344. ASPARAGUS SCHOBERIOIDES Kunth. Convallariaceae.

No. 57. An erect hardy herbaceous perennial asparagus, 3 feet or less in height, with red berries. Native to eastern Asia.

For previous introduction see No. 33309.

66345. CALAMAGROSTIS EPIGEJOS (L.) Roth. Poaceae. Grass.

No. 1. A stout perennial grass native to Manchuria.

For previous introduction see No. 57279.

66346. CALAMAGROSTIS Sp. Poaceae. Grass. No. 3a. A stout perennial Manchurian grass.

66347 to 66365. CHAETOCHLOA ITALICA (L.) Scribn. (Setaria italica Beauv.). Poaceae. Millet.

- 66347. No. 185. Nien ku tsa (yellow glutinous). Originally from Ninguta district, Kirin Province.
- 66348. No. 187. P'ai fang ku (white). Originally from Ninguta district, Kirin Province.
- **66349.** No. 188. Fang ku tsa. Originally from Ninguta district, Kirin Province.
- 66350. No. 190. Fang ku tsa (light yellow). Originally from Ninguta district, Kirin Province.
- 66351. No. 193. Fang ku tsa (light yellow). From Ninguta district, Kirin Province.
- 66352. No. 194. Fang ku tsa. From Tungpinghsien district, Kirin Province.
- 66353. No. 197. Fang ku tsa (light yellow). From Tungpinghsien district, Kirin Province.

66354. No. 199. Fang ku tsa. From Ninguta district, Kirin Province.

66341 to 66419-Continued.

- 66855. No. 201. Hung ku tsa (red). From Ninguta district, Kirin Province.
- 66356. No. 202. Hung niang ku tsa (red glutinous). From Ninguta district, Kirin Province.
- 66357. No. 205. Hung nien ku tsa (glutinous). From Ninguta district, Kirin Province.
- 66358. No. 918. Hung niang (glutinous). From Achiho district, Kirin Province.
- 66359. No. 924. P'ai ku tsa (white). From Ninguta district, Kirin Province.
- **66360.** No. 925. *P'ai ku tsa* (white). From the Government Agricultural Experiment Station, Peking, China.
- 66361. No. 926. Hung ku tsa. From the Government Agricultural Experiment Station, Peking, China.
- 66362. No. 927. Pah tah yil. From the agricultural experiment station, Kungchuling, South Manchurian Railway, Mukden Province, Manchuria.
- 66363. No. 928. Sui li chang. From the agricultural experiment station, Kungchuling, South Manchurian Railway, Mukden Province, Manchuria.
- 66364. No. 929. Pao pah chi. From the agricultural experiment station, Kungchuling, South Manchurian Railway, Mukden Province, Manchuria.
- 66365. No. 930. Pai sha. From the agricultural experiment station, Kungchuling, South Manchurian Railway, Mukden Province, Manchuria

66366. EUONYMUS MAACKII Rupr. Celastraceae.

No. 84. A large shrub or small tree with ovaloblong finely toothed leaves about 3 inches long and small pink 4-lobed fruits with orange-red arils. Native to northeastern Asia.

66367. EUONYMUS MACROPTERUS Rupr. Celastraceae.

No. 65. A shrub or small tree, about 20 feet high, with narrowly oval, wedge-shaped leaves, dense clusters of yellowish flowers, and pink fruits. Native to northeastern Asia.

- 66368 to 66393. HOLCUS SORGHUM L. (Sorghum vulgare Pers.). Poaceae. Sorghum.
  - 66368. No. 163. Nien kaoliang. From Ninguta district, Kirin Province.
  - **66369.** No. 166. *Hung kaoliang* (red). From Ninguta district, Kirin Province.
  - **66370.** No. 167. *Hung kaoliang* (red). From Tungpinghsien district, Kirin Province.
  - 66371. No. 171. She jen (snake eye). From Ninguta district, Kirin Province.
  - 66372. No. 801. A yellow variety from the experiment farm, Chinese Eastern Railway, Harbin, Manchuria.
  - 66373. No. 815. *Nien*. From the commercial agency of the Chinese Eastern Railway, Laoshaokou, Kirin Province.
  - 66374. No. 817. Lao tou pai. From the commercial agency of the Chinese Eastern Railway, Laoshaokou, Kirin Province.

66375. No. 824. Pai kaoliang. From Ninguta district, Kirin Province.

66376. No. 834. Dun a hsiang kaoliang.

66377. No. 835. Hung mao mung. From the Government Agricultural Experiment Station, Peking, China

#### 66341 to 66419—Continued.

- 66379. No. 836. *Hei ko she jen hung.* From the agricultural experiment station, South Manchurian Railway, Kungchuling, Mukden Province, Manchuria.
- 66379. No. 838. Huang ko chin sui. From the agricultural experiment station, South Manchurian Railway, Kungchuling, Mukden Province, Manchuria.
- 66380. No. 839. *Huang ko san sui*. From the agricultural experiment station, South Manchurian Railway, Kungchuling, Mukden Province, Manchuria.
- 66381. No. 840. *Hei ko san sui*. From the agricultural experiment station, South Manchurian Railway, Kungchuling, Mukden Province, Manchuria.
- 66382. No. 841. Hung ko san sui. From the agricultural experiment station, South Manchurian Railway, Kungchuling, Mukden Province, Manchuria.
- 66383. No. 842. *Hsia tzu fang pai yen*. From the agricultural experiment station, South Manchurian Railway, Kungchuling, Mukden Province, Manchuria.
- 66384. No. 843. Lao mu chu pu tai tou. From the agricultural experiment station, South Manchurian Railway, Kungchuling, Mukden Province, Manchuria.
- 66385. No. 844. Hei koshuang sih pan. From the agricultural experiment station, South Manchurian Railway, Kungchuling, Mukden Province, Manchuria.
- 66386. No. 846. Hung ko tai she yen. From the agricultural experiment station, South Manchurian Railway, Kungchuling, Mukden Province, Manchuria.
- 66387. No. 847. *Hei hsin pang.* From the agricultural experiment station, South Manchurian Railway, Kungchuling, Mukden Province, Manchuria.
- 66388. No. 848. Ku po hsiang. From the agricultural experiment station, South Manchurian Railway, Kungchuling, Mukden Province, Manchuria.
- 66389. No. 849. Lao ku tso. From the agricultural experiment station, South Manchurian Railway, Kungchuling, Mukden Province, Manchuria.
- 66390. No. 850. Huang jen peng. From the agricultural experiment station, South Manchurian Railway, Kungchuling, Mukden Province, Manchuria.
- 66391. No. 851. *Hien.* From the agricultural experiment station, South Manchurian Railway, Kungchuling, Mukden Province, Manchuria.
- 66392. No. 852. Huang nien. From the agricultural experiment station, South Manchurian Railway, Kungchuling, Mukden Province, Manchuria.
- 66393. No. 853. Pai kaoliang. From the agricultural experiment station, South Manchurian Railway, Kungchuling, Mukden Province, Manchuria.

66394. LILIUM HANSONI Leichtl. Liliaceae. Lily.

No. 72. A Japanese lily with smooth stems 3 to 5 feet high, horizontal leaves about 4 inches long, and 1 to 10 slightly fragrant golden-yellow flowers spotted with purplish brown.

66395. MISCANTHUS SACCHARIFLORUS (Maxim.) Hack. Poaceae. Grass.

No. 23. A tall perennial Chinese grass with large feathery fan-shaped panicles; related to sugar cane.

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#### 66341 to 66419—Continued.

66396. PHILADELPHUS SCHRENKII Rupr. Hydrangeaceae.

No. 108. An upright shrub closely related to the common "syringa" or mock orange; it has smaller flowers. Native to Manchuria.

66397. PRUNUS MAXIMOWICZII Rupr. Amygdalaceae Korean cherry.

No. 125. A large handsome tree, about 50 feet high, with horizontally spreading branches, coarsely double-toched leaves, white flowers about three-fourths of an inch across, and black fruits about the size of peas. Native to northeastern Asia.

For previous introduction see No. 43867.

66398 to 66400. RHAMNUS spp. Rhamnaceae.

66398. RHAMNUS DAVURICA Pall.

No. 82. A large spreading shrub, some-times a tree 30 feet high, with stout thorny branches, oblong dark-green leaves 2 to 4 inches long, and clusters of black berries about a third of an inch in diameter. Native to eastern Asia.

For previous introduction see No. 62230.

66399. RHAMNUS DAVURICA NIPPONICA Makino.

No. 88. A Japanese variety of the preced-ing [No. 66398] with narrower leaves, light green beneath, 2 to 6 inches long.

For previous introduction see No. 43873.

66400. RHAMNUS PARVIFOLIA Bunge.

No. 53. A Rhamnus of dense growth, having small foliage and bearing large jet-black berries. The shrub does not grow tall but assumes a well-rounded form when not mutilated. Of value as a garden and park shrub and as material for medium-sized hedges, especially for the drier sections of the United States. (Note by Frank N. Meyer under No. 36735.)

66401 to 66418. SOJA MAX (L.) Piper (Glycine hispida Maxim.). Fabaceae. Soy bean.

66401. No. 277. Huang tou tsa.

- 66402. No. 1153. A black variety from the experiment farm, Chinese Eastern Rail-way, Harbin, Manchuria.
- 66403. No. 1159. A black variety with gray pubescence. From the experiment farm, Chinese Eastern Railway, Harbin, Manchuria.
- 66404. No. 1237. Hei tou district, Kirin Province. Hei tou. From Ninguta
- 66405. No. 1238. Yuan tou (yellow). From Ninguta district, Kirin Province.
- 66406. No. 1239. Huang tou. From Ninguta district, Kirin Province.
- 66407. No. 1248. Kaiyuan pai hua. From the agricultural experiment station, South Manchurian Railway, Kungchuling, Mukden Province, Manchuria.
- 66408. No. 1249. Ssupingchieh hei chi. From the agricultural experiment station, South Manchurian Railway, Kungchuling, Mukden Province, Manchuria.
- 1250. Kungchuling won sin hei 66409 No. shih. From the agricultural experiment station, South Manchurian Railway, Kungchuling, Mukden Province, Manchuria.
- 66410. No. 1255. Hsia er tai. From the agricultural experiment station, South Man-churian Railway, Kungchuling, Mukden Province Manchuria.

#### 66341 to 66419-Continued.

- 66411. No. 1256. Mukden hei chi. From the agricultural experiment station, South Manchurian Railway, Kungchuling, Mukden Province, Manchuria.
- 66412. No. 1275. Er shih li pao. From the agricultural experiment station, South Manchurian Railway, Kungchuling, Mukden Province, Manchuria.
- 66413. No. 1259. *Hsiao hei chi*. From the agricultural experiment station, South Manchurian Railway, Kungchuling, Mukden Province, Manchuria.
- 66414. No. 1261. Kuei tzu yen. From the agricultural experiment station, South Manchurian Railway, Kungchuling, Mukden Province, Manchuria.
- 66415. No. 1263. Ssu li huan improved No. 4.
- . 66416. No. 1270. Ju shu tai. From the agri-cultural experiment station, South Man-churian Railway, Kungchuling, Mukden Province, Manchuria.
- 66417. No. 1299. A yellow variety with a black brow. From the experiment farm, Chinese Eastern Railway, Harbin, Manchuria.
- 66418. No. 1802. Kirin (green). From the commercial agency of the Chinese Eastern Railway, Laoshaokou, Kirin Province.
- 66419. SPODIOPOGON SIBIRICUS Trin. Poaceae. Grass.

No. 24. A perennial grass, 2 to 3 feet high, occurring on mountain slopes on decomposed porphyritic rock in partial shade. Possibly of forage value in the Rocky Mountain localities. (Note by Frank N. Meyer under No. 44288.)

#### 66420 and 66421. Cocos NUCIFERA L. Coconut. Phoenicaceae.

From Jaffna, Ceylon. Seeds collected by David Fairchild and P. H. Dorsett, agricultural ex-plorers, Bureau of Plant Industry, with the Allison V. Armour expedition. Received March 26, 1926.

The two most valuable coconut varieties which are grown here. They are not good for copra pro-duction, but are good for drinking and household purposes.

- 66420. No. 337. February 1, 1926. The King coconut is the handsomest of the coconuts, having nuts of a golden yellow color and smooth texture at the stage when they are cut 'for drinking purposes. The trees and fruits are smaller than those of the ordinary varieties, but as a landscape tree it is by far the prettiest.
- 66421. No. 338. February 1, 1926. The Nawasi, though not beautiful, is a curiosity. The base of the husk is edible, refreshing, and sweet, and in texture it reminds one of a tur-nip. It is one of the best varieties for drink-ting and a state of the best varieties for drinking purposes, and when the milk is at its maximum the fruit is still green in color.

#### 66422 to 66481.

- From Edinburgh, Scotland. Seeds presented by William Wright Smith, regius keeper, Royal Botanic Garden. Received March 10, 1926.
- Locally grown seeds introduced for testing as vegetables and also as ornamentals.

66422 to 66435. ALLIUM Spp. Liliaceae.

66422. ALLIUM ASCALONICUM L. Shallot.

For previous introduction see No. 52310.

### 66422 to 66481-Continued.

#### 66423. Allium Aschersonianum Barbey. Onion.

A herbaceous perennial onion, with pink flowers. Native to Asia Minor.

66424. ALLIUM BIDWILLIAE S. Wats. Onion.

A pink-flowered onion about a foot high, native to the Sierra Madre Mountains, California.

66425. ALLIUM CERNUUM Roth. Nodding onion.

The flowers of this onion are rose colored or white, produced in open, nodding umbels. Native to the eastern United States.

66426. ALLIUM CYANEUM Regel. Onion.

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

66427. ALLIUM FALLAX Schult, f.

A perennial Austrian onion with lilacpurple flowers.

66428. ALLIUM HYMENORRHIZUM Ledeb.

A perennial moisture-loving Russian species with linear leaves and purplish violet flowers.

For previous introduction see No. 60227.

66429. ALLIUM MACRANTHUM Baker.

A handsome herbaceous perennial from the eastern Himalayas. The flat leaves are over a foot long, and the mauve purple flowers are produced in clusters of 50 or more on scapes 2 feet high.

For previous introduction see No. 59975.

66430. ALLIUM ORIENTALE BOISS.

A perennial pink-flowered onion, native to Asia Minor.

66431. ALLIUM PARADOXUM (Bieb.) Don.

A perennial onion, a foot high, with white flowers. Native to Siberia.

66432. Allium sikkimense Baker.

A compact, neat little perennial 6 inches high or more, with grasslike leaves and loose umbels of deep-blue flowers. Native to Sikkim, India.

For previous introduction see No. 58884.

66433. ALLIUM URCEOLATUM Regel.

An onion, native to Turkestan, with linear leaves and bright-blue flowers borne in a hemispherical head.

#### 66434. ALLIUM VICTORIALIS L.

One of the most distinct species of European Alliums, with stems about a foot and a half high and leaves resembling those of the lily-of-the-valley. The white or greenish white flowers are produced in May.

For previous introduction see No. 59351.

66435. ALLIUM WALLICHIANUM Steud.

A tall, eastern Asiatic onion, with narrow flat leaves about 3 feet long and purple flower heads.

66436 to 66451. ASTRAGALUS spp. Fabaceae. Milk vetch.

66436. Astragalus armeniacus Boiss.

A perennial cespitose herbaceous plant, with ocher-yellow flowers. Native to Armenia.

#### 66422 to 66481—Continued.

66437. ASTRAGALUS ASPER Jacq.

An erect herbaceous perennial with yellow flowers, native to southern Russia.

For previous introduction see No. 20645.

66438. ASTRAGALUS CHLOROSTACHYS Lindl.

A herbaceous perennial, native to the Himalayas, with greenish-yellow flowers.

66439. ASTRAGALUS ECHINUS DC.

A densely branched spiny shrub from the alpine regions of Syria.

66440. ASTRAGALUS FALCATUS Lam.

An erect herbaceous perennial with yellow flowers, native to southern Russia and western Siberia.

For previous introduction see No. 34992.

66441. ASTRAGALUS GLYCYPHYLLOS L.

A prostrate, spreading herbaceous perennial native to Asia Minor.

For previous introduction see No. 20739.

66442. ASTRAGALUS GUMMIFER Labill.

A densely branched spiny shrub native to dry mountain areas in Syria.

66443. ASTRAGALUS HYPOGLOTTIS L.

An ascending or diffuse herbaceous perennial with purple flowers, native to the Caucasus.

66444. ASTRAGALUS PENTAGLOTTIS L.

A spreading annual leguminous plant with purplish flowers. Native to the Mediterranean region.

66445. ASTRAGALUS PODOCARPUS Meyer.

An erect herbaceous perennial, 1 or 2 feet high, native to Asia Minor.

66446. ASTRAGALUS PURPUREUS Lam.

A low perennial trailing plant with purple flowers. Native to southern Europe.

66447. ASTRAGALUS ROBBINSII (Oakes) A. Gray.

An erect white-flowered perennial, native to the northeastern United States.

66448. ASTRAGALUS SULCATUS L.

An erect herbaceous perennial up to 4 feet high, with light-blue flowers. Native to Siberia.

66449. ASTRAGALUS UTRIGER Pall.

A low herbaceous perennial about 4 inches high, with yellow flowers. Native to Asia Minor.

66450. ASTRAGALUS VERUS Olivier.

A stout-branched hairy spiny shrub, native to western Persia.

66451. ASTRAGALUS VICIOIDES R. Grah.

A herbaceous perennial about 2 feet high, with yellow flowers. Native to the Himalayas.

66452. BETA VULGARIS L. Chenopodiaceae. Var. cicla.

66453. CAPNOIDES CHAEROPHYLLUM (DC.) Kuntze (Corydalis chaerophylla DC.). Papaveraceae.

An upright herbaceous perennial, 2 to 4 feet high, with slender golden-yellow flowers.

#### 66422 to 66481—Continued.

66454. CAPNOIDES LUTEUM (L.) Gaertn. (Corydalis lutea DC.). Papaveraceae.

An erect or spreading annual about 7 inches high, with delicate, pale-green, much-divided leaves and short racemes of pale-yellow flowers. Native to southern Europe.

66455. CAPNOIDES SEMPERVIRENS (L.) Borkh. (Corydalis glauca Pursh). Papaveraceae.

An annual, very glaucous plant, 1 or 2 feet high, with short terminal clusters of flowers which are pink or purple with yellow tops. Native to rocky places in the northern and western United States.

66456. CORYDALIS THALICTRIFOLIA Jameson. Papaveraceae.

A herbaceous perennial, native to China, with a woody rhizome, large rigid spreading leaves, and large racemes of showy yellow flowers.

66457. CORYDALIS TOMENTOSA N. E. Brown. Papaveraceae.

A low rock-loving perennial with a rosette of oblong hairy basal leaves and erect racemes of light-yellow flowers. Native to China.

66458. CHIONODOXA LUCILIAE Boiss. Liliaceae. Glory-of-the-snow.

Var. gigantea.

66459. CRAMBE MARITIMA L. Brassicaceae Common sea kale.

66460. CRAMBE PINNATIFIDA Ait. Brassicaceae. Sea kale.

A herbaceous perennial, native to Siberia.

66461. DEUTZIA LONGIFOLIA VEITCHII (Veitch) Rehder. Hydrangeaceae.

A shrubby plant about 3 feet high, with roughly hairy leaves 3 inches or more in length, and bright-pink flowers an inch across, borne in terminal corymbs. Native to western China and considered one of the handsomest of the deutzias, although scarcely hardy north of Washington, D. C.

For previous introduction see No. 53698.

66462. ERODIUM MANESCAVI Coss. Geraniaceae. Pyrenees heronbill.

A perennial plant, belonging to the geranium family, about a foot and a half high, with narrow leaves 6 inches or more in length and rosy purple flowers about 2 inches across. It grows wild in the Pyrenees Mountains.

For previous introduction see No. 63985.

66463 to 66466. IRIS spp. Iridaceae.

66463. IRIS BULLEYANA Dyke

#### Hollowstem iris.

Hollowstem iris. An iris from western China which, as described by Dykes (The Genus Iris, p. 30), resembles *Iris clarkei*, having a hollow un-branched stem. The narrow leaves are glossy above and glaucous beneath. Thr stem, 15 to 18 inches long, bears a single head of one to two flowers. The falls have a greenish-yellow oblong haft, veined and dotted with purple. On the obovate blade the coloring becomes clearer and consists of broken veins and blotches of bright blue-purple on a creamy ground. The extremity is a uniform blue-purple, paler at the edges. The oblanceolate, channeled standards are pale blue-purple with deeper veins and diverge at an angle of about 60°. The keeled, dark-purple styles are held high above the falls. falls.

For previous introduction see No. 53703.

#### 66422 to 66481—Continued.

#### 66464. IRIS CLARKEI Baker. Clarke iris.

"A curiously local species native to a circumscribed area in the Sikkim and Bhutan region at a height of 6,000 to 11,000 feet in ground that is swampy half the year and hard ground that is swampy half the year and hard frozen under snow during most of the remain-ing months. The narrow leaves, 2 feet long, droop at the tops; the upper surface is pol-ished and shiny, the underside glaucescent. The solid stem is 2 feet long and bears one or two lateral heads. The falls are blue-purple, blotched with white, and are reflexed later-ally. The upper part of the haft is marked with yellow. The reddish purple, lanceolate standards are poised almost horizontally. standards are poised almost horizontally. The styles form the highest point of the flower; they are keeled, very convex, and 1½ miches long." (Dykes, The Genus Iris, p. 29.)

For previous introduction see No. 53704.

#### 66465. IRIS FORRESTII Dykes. Yunnan iris,

"A most pleasing iris, like a dwarf Iris wilsoni, from which it differs in the less glaucous leaves, clearer yellow, unveined stand-ards. The stem, 12 to 18 inches high, bears a single head of two flowers, although a lateral flowered branch sometimes develops. The short haft bears two central lines and broken lateral veins of brown-purple on a clear yellow ground. The oblong, ovate blade of the falls is often very long and drooping, of a clear, lemon yellow which becomes deeper around the end of the style branches and is there marked with brown-purple veins. The oblanceolate yellow blade of the standards narrows to a deeply channeled haft, yellow, shorter than the falls, and slightly divergent. The broad, short-keeled, deep-yellow styles, often discolored with purple, curve down onto the falls. Notive to onen pounts on pestures the fails. Native to open mountain pastures on the eastern flank of the Liklang Range in northwestern Yunnan, China, at an altitude of 12,000 to 13,000 feet." (Dykes, The Genus Iris, p. 27.)

For previous introduction see No. 53705.

Arctic iris.

66466. IRIS SETOSA Pall.

This was originally described as an Asiatic plant, but forms that can not be separated from it are found in North America, according to W. R. Dykes (Irises, p. 64). At least half a dozen forms come true from seed. The peculiarity of this iris is that the standards have dwindled until they are only small have uwindled until they are only small points about half an inch long, but their di-appearance is usually counterbalanced by the increased size of the falls. The color is usually blue, but ome shades are so light as to be almost gray.

For previous introduction see No. 57297.

66467. LEUCOJUM VERNUM L. Amaryllidaceae. Spring snowflake.

A hardy bulbous plant, native to central Europe, with strap-shaped leaves, and a one-flowered scape up to a foot long, bearing a white flower tipped with green.

#### 66468. LIGUSTRUM DELAVAYANUM Hariot. Oleaceae.

An evergreen shrub, about 6 feet high, with long graceful branches and dark shining-green oval leaves. The white flowers, borne in downy panicles, and the black fruits make the shrub very ornamental. It is native to the moun-tainous regions of Yunnan, China, and is prob-ably suited for growing only in the southern United States. United States.

For previous introduction see No. 58613.

## 66422 to 66481-Continued.

66469. LILIUM GIGANTEUM Wall. Liliaceae. Giant lily.

"This majestic lily is common in the damp thick forests of the Himalayas. The bulb grows close to the surface, in rich black mold, at altitudes of 7.500 to 9,000 (eet, where it is covered with snow from November to April. The smooth hollow stems are commonly from 6 to 9 feet high, and are used for musical pipes. The handsome cordate leaves, shining dark green above and paler below, are 10 to 12 inches long on petioles of equal length; both become smaller near the apex. In the large fragrant white flowers, 12 to a raceme, the perianth tube is slightly greenish and the inner surfaces of the segments are tinged with deep purple." (Curtis's Botanical Magazine, pl. 4673)

For previous introduction see No. 49641.

66470. LILIUM MARTAGON L. Liliaceae. Martagon lily.

Var. dalmaticum. A Dalmatian form of the Martagon lily which becomes 7 feet high, with five to seven whorls of leaves and 12 to 40 flowers of a deeper purple, almost black.

66471. MUSCARI ARMENIACUM Leichtl. Liliaceae. Grape hyacinth.

A handsome hardy bulbous plant, native to Armenia, with many linear leaves overtopping the racemes of deep-violet flowers. One of the last of the grape hyacinths to flower.

66472. NICOTIANA RUSTICA L. Solanaceae. Aztec tobacco.

For previous introduction see No. 56614.

66473. ORNITHOGALUM SAUNDERSIAE Baker. Liliaceae.

A South African bulbous plant with lanceolate leaves up to a foot long and white or yellow flowers borne in a dense raceme on a scape a foot or more high.

For previous introduction see No. 31854.

66474. PISUM FORMOSUM Alef. Fabaceae. Pea.

A low herbaceous perennial, with a slender creeping rhizome and rather large pink flowers. Native to Asia Minor.

66475. PISUM JOMARDI Schrank. Fabaceae. Pea.

A hardy annual white-flowered pea about 3 feet high, native to Egypt.

66476 to 66480. Rhododendron spp. Ericaceae. 66476. Rhododendron ponticum L.

Pontic rhododendron.

A shrub 10 feet high, with elliptic or oblong leaves 3 to 5 inches long and many-flowered clusters of purple flowers, spotted brownish within. Native to Asia Minor and Spain.

66477. RHODODENDRON PSEUDO-YANTHINUM Hort.

66478. RHODODENDRON SMIRNOWI Trautv.

A shrub or small tree, about 20 feet high, with dark-green leaves, grayish hairy beneath, and compact heads of rosy red flowers, each about 3 inches across. Native to the Caucasus.

66479. RHODODENDRON YANTHINUM Bur. and Franch.

A western Chinese shrub about 10 feet high, with oval-elliptic leaves and small clusters of purple, sometimes white, funnelshaped flowers.

# 66422 to 66481-Continued.

66480. RHODODENDRON YUNNANENSE Franch.

A low shrub, 6 feet or less high, with narrowly elliptic, somewhat hairy leaves, and few-flowered clusters of broadly funnel-shaped flowers, white with the upper lobes spotted blood red. Native to Yunnan, China.

66481. ROSA BANKSIOPSIS Baker. Rosaceae. False Banksian rose.

An erect shrubby rose, common in western Hupeh, China, where it is found on mountain slopes at altitudes of from 4,000 to 7,000 feet. The flowers are rose red, and the fruits are coral red.

For previous introduction see No. 50427.

66482 to 66485. ORYZA SATIVA L. Poaceae. Rice.

From Valencia, Spain. Seeds presented by Rafael Font de Mora, director, Estación Arrocera de. Sueca. Received March 19, 1926.

Spanish varieties of rice.

66482.	Amonquilli.	66484.	Bomba.	
00400	Doubleak	00495	G.,	

00200.	Dennoch.	00100.	Succu.

# 66486 to 66503.

From Ayr, Scotland. Seeds purchased from McGill & Smith. Received March 22, 1926.

Locally grown seeds.

66486 to 66489. AVENA SATIVA L. Poaceae.

66486. Castleton.

66487. Dala.

66488. Early Fellow.

66489. Tam Finlay. A pure-line stock which we are putting out this year for the first time. (McGill & Smith.)

66490 to 66503. TRIFOLIUM spp. Fabaceae.

66490 to 66498. TRIFOLIUM PRATENSE L. Red clover,

66490. Alpine.

66491. Brittany broad-leaved.

66492. English broad-leaved early.

66493. English late-towering.

66494. Montgomery.

66495. Mountain.

66496. Norwegian. We found in our trials that this is possibly the best lateflowering red clover. (McGill & Smith.)

66497. Swedish late "Hersnap."

66498. Vale of Clwyd late-flowering.

66499 to 66503. TRIFOLIUM REPENS L.

White clover, 66499. Danish Morso.

66500. English.

66501. New Zealand.

66502. Wild New Zealand.

**66503.** Wild English  $\times$  Thent.

66504. COLVILLEA RACEMOSA Boj. Caesalpiniaceae.

From Port of Spain, Trinidad, British West Indies, Seeds presented by W. G. Freeman, director of agriculture. Received March 23, 1926.

For previous introduction and description see ... No. 66151.

# 66505. CHENOPODIUM QUINOA Willd. Chenopodiaceae. Quinoa.

From Lima, Peru. Seeds presented by A. H. Rosenfeld. Received March 24, 1926.

The native inhabitants of the highlands of western South America cultivate this plant for the sake of the seeds, which are creany white and about three times as large as those of the common North American weed known as "goosefoot (*Okenopodium album*). In pre-Columbian times this native cereal ranked in importance with the potato and corn. The plant is an abundant yielder and is harvested in early summer. The seeds are washed for about 24 hours in order to remove the bitter flavor, and the washed seeds are boiled and eaten in the same manner as rice.

For previous introduction see No. 55471.

## 66506. HIBISCUS DIVERSIFOLIUS Jacq. Malvaceae.

From Wellington, New Zealand. Seeds presented by Llewelyn A. Jones. Received March 25, 1926.

A tall, hairy, rigidly upright, shrubby perennial with prickly stems, variable foliage, and yellow flowers with dark-red centers. Native to tropical Africa and the Pacific islands.

## 66507 to 66510. CITRUS spp. Rutaceae.

From Algiers, Algeria. Bud sticks presented by Dr. L. Trabut, government botanist. Received March, 1926. Notes by Doctor Trabut.

66507. CITRUS LIMONIA Osbeck. Lemon.

A seedless variety from Algeria.

66508 to 66510. CITRUS SINENSIS (L.) Osbeck. Sweet orange.

66508. Algiers navel. A handsome fruit of good quality.

66509. Matidja navel. A seedling of the Algiers navel.

66510. Zatima. A native variety. The tree is prolific, with several of the branches bearing navel oranges of good quality. Season late.

66511 and 66512. CANNA spp. Cannaceae. Canna.

From Haina, Dominican Republic. Seeds presented by Dr. R. Ciferri, director, Estación Agronómica de Haina. Received March 23, 1926. Notes by Doctor Ciferri.

Wild cannas.

66511. CANNA Sp.

February 21, 1926. From El Limon, Dominican Republic. Found in sandy places.

66512. CANNA Sp.

March 1, 1926. From Sanchez, Dominican Republic, where this canna is particularly abundant.

## 66513 to 66531.

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From Stockholm, Sweden. Seeds presented by Dr. Robert E. Fries, director, botanic garden. Received March 30, 1926.

66513 to 66520. ASTRAGALUS Spp. Fabaceae. Milk vetch.

66513. ASTRAGALUS ALPINUS L.

A perennial plant with ascending stems about 8 inches high. Native to the alpine regions of central Europe.

For previous introduction see No. 64617.

# 66513 to 66531-Continued.

66514. ASTRAGALUS BOETICUS L.

An upright, often stout annual, with compound leaves usually composed of 9 to 15 pairs of narrow leaflets and 6 to 15 paleyellow flowers in a crowded raceme. Native to the Mediterranean countries.

For previous introduction see No. 64619.

66515. ASTRAGALUS CICER L.

A European astragalus said to be valuable for forage. It is a perennial with prostrate or ascending stems.

For previous introduction see No. 64620.

66516. ASTRAGALUS DANICUS Retz.

A perennial leguminous plant, native to central Europe, with a branching rhizome, ascending stems a foot or less long, and blue or violet flowers.

66517. ASTRAGALUS FALCATUS Lam.

An upright perennial, nearly 2 feet high, with yellowish flowers in an elongated cluster. Native to southern Russia and Asia Minor.

For previous introduction see No. 35237.

66518. ASTRAGALUS FRIGIDUS (L.) A. Gray.

A perennial upright or ascending plant, entirely unbranched or with very few branches, Native to alpine slopes throughout northern Europe and Asia.

For previous introduction see No. 63979.

66519. ASTRAGALUS GALEGIFORMIS L.

A perennial, upright, slightly hairy plant, 1 to 3 feet high, native to southeastern Europe and Asia Minor.

For previous introduction see No. 63980.

66520. ASTRAGALUS GLYCYPHYLLOS L.

For previous introduction and description see No. 66441.

66521 to 66524. CREPIS spp. Cichoriaceae.

Introduced for genetic studies of the genus Crepis.

66521. CREPIS BLATTARIOIDES (L.) Vill.

A hairy perennial with large flower heads; native to central and western Europe.

66522. CREPIS RUBBA L.

An annual composite about a foot high with solitary red flowers. Native to southern Europe.

66523. CREPIS SIBIRICA L.

A hairy perennial, 2 to 3 feet high, with a terminal cluster of bright-yellow flowers. Native to Asia Minor, Europe, and the Himalayas.

66524. CREPIS TECTORUM L.

An erect annual, native to dry places in southeastern Europe.

66525. INCARVILLEA COMPACTA Maxim. Bignoniaceae.

A handsome hardy perennial, native to northwestern China, a foot or more high, with fleshy, mostly radical leaves and terminal clusters of purple flowers.

66526. LATHYRUS VERNUS FLACCIDUS (Seringe) Arcang. Fabaceae. Spring bitter vetch.

A leguminous perennial 1 to 2 feet high, with limp, very narrow leaves, and blue-violet flowers. Native to central and southern Europe.

For previous introduction see No. 40323.

#### 66513 to 66531—Continued.

66527. PENTAGONIA PHYSALODES (L.) Hiern. (Nicandra physalodes Gaertn.). Solanaceae. Apple of Peru.

A blue-flowered Peruvian annual with the fruit inclosed in a husk as in Physalis. The campanulate flowers, an inch or more in diameter, are light blue with a lighter throat; they are produced singly in the axils of the leaves.

For previous introduction see No. 58130.

66528. NICOTIANA RUSTICA L. Solanaceae. Aztec tobacco.

66529. ONOBRYCHIS CRISTA-GALLI (L.) Lam. Fabaceae.

An annual or biennial ascending plant, 8 to 20 inches high, with pinkish purple flowers. Native to dry places in the Mediterranean region.

For previous introduction see No. 33292.

66530. TRIGONELLA CALLICERAS Fisch. Fabaceae.

An erect leguminous annual with rather large yellow flowers; native to the Caucasus.

For previous introduction see No. 27294.

66531. TRIGONELLA CAERULEA (L.) Seringe. Fabaceae.

An annual, upright plant, usually from 1 to 2 feet high, with bright-blue flowers having the same odor as the fenugreek (*Trigonella foenum*graccum). Native to the Mediterranean region.

For previous introduction see No. 64646.

# 66532 to 66615.

From Kew, England. Seeds presented by Dr. A. W. Hill, director, Royal Botanic Gardens. Received March 23, 1926.

66532 to 66535. ALLIUM spp. Liliaceae. Onion.

66532. Allium karataviense Regel.

A herbaceous plant with very broad, ovate-oblong flat leaves and pink flowers borne in dense, convex umbels. The scapes are about 6 inches high. Native to Turkestan.

For previous introduction see No. 60228.

66533. ALLIUM OSTROWSKIANUM Regel.

This species, native to Turkestan, has rose-colored flowers produced freely in manyflowered umbels on scapes 6 inches high.

For previous introduction see No. 58880,

66534. Allium sikkimense Baker.

A compact, neat little perennial 6 inches high or more with grasslike leaves and loose umbels of deep-blue flowers. Native to Sikkim, India.

For previous introduction see No. 58884.

66535. ALLIUM YUNNANENSE Diels.

A cespitose onion, native to southwestern China, with linear leaves about 6 inches long and pink or purplish flowers on a scape 4 to 16 inches long.

(6536 to 66541. ASTRAGALUS spp. Fabaceae. Milk vetch.

66536. ASTRAGALUS ALOPECUROIDES L. Foxtail milk vetch.

An erect pubescent Siberian species 2 to 5 feet high with narrowly oval leaves and yellow flowers produced in thick oblong spikes.

For previous introduction see No. 58692.

# 66532 to 66615-Continued.

66537. ASTRAGALUS ARISTATUS L'Herit.

An alpine plant, native to southern Europe, where on dry, barren slopes it forms mats of spiny branches in which appear the little yellow flower heads among the minute leaves.

66538. ASTRAGALUS BOETICUS L.

An upright, often stout annual, with compound leaves usually composed of 9 to 15 pairs of very narrow leaflets, and 6 to 15 paleyellow flowers in a crowded raceme. Native to the Mediterranean countries.

For previous introduction see No. 58693.

66539. ASTRAGALUS CHINENSIS L. f.

An erect, herbaceous plant, native to China, with smooth slender stems, ellipticobtuse leaflets, and pendulous, few-flowered racemes.

For previous introduction see No. 59352.

66540. ASTRAGALUS HAMOSUS L.

An annual gray-green hairy plant, with prostrate or ascending stems 8 inches to a foot in length. Native to sunny places in the Mediterranean countries.

For previous introduction see No. 63982.

66541. ASTRAGALUS ZINGERI KORSh.

A somewhat shrubby perennial, with an erect or ascending stem 6 to 20 inches high, and spikelike clusters of white flowers. Native to rocky places on the Volga River.

66542 to 66544. BERBERIS spp. Berberidaceae. Barberry.

66542. BERBERIS ARISTATA DC.

A handsome shruh belegant, spreading habit, becoming at times 10 feet high. The spine-tipped leaves are often whitish beneath, and the numerous flowers are bright golden yellow. The spindle-shaped berries, about half an inch in length, are red, covered with a blue-white bloom. This is said to be one of the most vigorous of the Himalayan barberries; it is hardy at the Arnold Arboretum, Jamaica Plain, Mass.

For previous introduction see No. 60378.

66543. BERBERIS TISCHLERI C. Schneid.

A shrub from western China, 7 to 14 feet high, with 'spines in threes, papery spinetipped leaves up to 2 inches in length, and yellow flowers in dense racemes. The somewhat pruinose egg-shaped red fruits ripen in October.

For previous introduction see No. 58123.

66544. BERBERIS YUNNANENSIS Franch.

A deciduous shrub, 3 to 6 feet high, with dense rounded spines and nearly circular leaves. The flowers are pale yellow, and the berries are bright red. Native to western China.

For previous introduction see No. 43826.

66545. CLEMATIS REHDERIANA Craib. Ranunculaceae. Clematis.

A vigorous woody climber, native to southwestern China, which produces quantities of small, nodding, fragrant, primrose-yellow flowers in fall.

For previous introduction see No. 49937.

66548. CORIARIA JAPONICA A. Gray. Coriariaceae. Japanese coriaria.

A Japanese shrub, 2 or 3 feet high, or occasionally more, with opposite, oval leaves and racemes of bright-red berrylike fruits which become violet black when thoroughly ripe.

# 66532 to 66615-Continued.

66547 to 66555. CROCUS spp. Iridaceae.

66547. CROCUS ASTURICUS Herbert.

A Spanish crocus with flowers about 11/2 inches long; the segments are lilac, the anthers bright yellow, and the style orange.

66548. CROCUS ETRUSCUS Parl.

The leaves of this Italian crocus, about three in number, are very narrow; the peri-anth segments are about an inch long, lhac, about or the outer ones cream colored, and the throat yellow; the anthers and style are orange

66549. CROCUS IMPERATI Tenore.

An Italian species with four to six very narrow leaves, exceeding the flowers, and lilac or white flowers with the outer segments buff and three striped, and yellow anthers.

66550. CROCUS LAEVIGATUS Bory and Chaub.

The leaves of this crocus, which is native to The leaves of this circuits, which is have to of Greece, are three or four in a tut, as high as the flowers and very narrow with reflexed margins and a white band. The flowers are pure white or with three to five like stripes on the outer segments, and the threat is vellow.

66551. CROCUS MEDIUS Balb.

lilac-flowered crocus, native to France A and Italy, with narrow leaves a foot or more high

66552. CROCUS SALZMANNI J. Gay.

A Moroccan crocus, with about six very narrow leaves, not prominent at flowering time. The lilac flowers have yellowish anthers and throat.

66553. CROCUS SPECIOSUS Bieb.

The leaves of this crocus, which is native to Asia Minor, are usually three in number. They are very narrow, developing after the flowers and becoming a foot long. The flowers are lilac, with darker featherings, and the large anthers are bright orange.

66554. CROCUS TOMMASINIANUS Herbert.

A crocus native to Serbia and Dalmatia; the narrow leaves appear with the flowers, which are pale bluish red with pale orange anthers.

66555. CROCUS ZONATUS J. Gav.

The narrow-linear leaves of this Asia Minor species appear after the flowers. The rosy lilac flowers, 2 to 3 inches long, are purple veined and orange spotted within, and the throat is yellow and pubescent. The anthers are white.

66556 to 66559. CYTISUS spp. Fabaceae. Broom.

66556. CYTISUS GRANDIFLORUS (Brot.) DC.

spineless leguminous shrub with long rodlike branches, trifoliolate leaves, and large solitary yellow flowers. Native to Spain.

66557. CYTISUS BIFLORUS L'Herit.

leguminous shrub 3 feet high, with slender branches and leaflets with silky lower surfaces. The yellow flowers are single or in pairs. Native to Europe and western Asia.

66558. CYTISUS SESSILIFOLIUS L. Sessile broom.

A leguminous shrub, native to Greece, with trifoliolate leaves and erect racemes of vellow flowers.

## 66532 to 66615-Continued.

66559. CYTISUS SUPINUS L. Big-flower broom. An erect shrub about 3 feet high, native to-ntral and southern Europe. The oblongcentral and southern Europe. The oblong-oval leaflets, about an inch long, are hairy beneath, and the yellow flowers are nearly an inch long.

66560. DEUTZIA LONGIFOLIA VEITCHII (Veitch) Rehder. Hydrangeaceae. Long-leaf deutzia.

This deutzia, from Yunnan, China, which, bears its large flowers in dense many-flowered corymbs, is one of the handsomest of the genus, but it has proved hardy only under protection at the Arnold Arboretum, Jamaica Plain, Mass.

For previous introduction see No. 53698.

66561 to 66566. ERODIUM spp. Geraniaceae. Heronbill.

66561. ERODIUM CARVIFOLIUM Boiss. and. Rent.

An attractive herbaceous perennial, native to Spain, with radical leaves about 6 inches-long and purplish flowers on a scape about a. foot long.

66562. ERODIUM TRIFOLIUM Cav. (E. hymenodes L'Herit.).

A half-hardy herbaceous perennial about 9 inches high, with pink flowers. Native to Algeria.

66563. ERODIUM GLANDULOSUM (Cav.), Willd. (E. macradenum L'Herit.).

A stemless herbaceous perennial, nativeto the Pyrenees Mountains, with long stout. roots, hairy leaves 2 to 6 inches long, and light-purple flowers three-fourths of an inch. across.

66564. ERODIUM MANESCAVI Coss. Pyrenees heronbill.

A herbaceous perennial plant, belonging: to the geranium family, about a foot and a half high, with narrow leaves 6 inches or more in length, and rosy purple flowers about 2 inches across. It grows wild in the Pyrenees: Mountain Mountains.

For previous introduction see No. 63985.

66565. ERODIUM PETRAEUM (Gouan) Willd.

A herbaceous perennial, native to Asia. Minor, with a vertical rhizome, numerous: crowded basal leaves and violet or pink: flowers.

66566. ERODIUM SUPRACANUM L'Herit.

A stemless herbaceous perennial with a vertical rhizome, numerous densely hairy leaves, and white, red-veined flowers. Native to the Pyreflees Mountains.

66567. EUONYMUS MAACKII Rupr. Celastraceae.

A large shrub or small tree, with narrowly oval leaves about 3 inches long, and small clusters of pink, four-lobed fruits with orange-red arils. Native to northeastern Asia.

66568. EUONYMUS TEDOENSIS Koehne. Celastraceae.

A large handsome Japanese shrub which bears dense clusters of pink, deeply four-lobed. fruits with orange arils.

For previous introduction see No..61982.

66569. Evodia Hupemensis Dode. Rutaceae.

A very common tree in the woodlands off western Hupeh, China, according to E. H.-Wilson (Plantae Wilsonianae, vol. 2, pt. 1), where it grows to a height of 20 to 40 feet. It has smooth gray bark, spreading branches, and while flowers in large flat corymbs.

For previous introduction see No..63357.

## **66532 to 66615**—Continued.

66570. GENISTA PILOSA L. Fabaceae. Silky-leaf broom.

A dwarf procumbent or ascending leguminous shrub with dark-green leaves, hairy beneath, and axillary yellow flowers. Native to Europe and western Asia.

**466571.** HELIANTHEMUM FORMOSUM (Curt.) Dunal. Cistaceae. Sun rose.

An upright spreading hairy shrub, about 3 feet high, with oval leaves, white-hairy when young, and small clusters of flowers which are yellow, spotted purple at the base, and 2 inches across. Native to Spain.

For previous introduction see No. 40181.

66572. HEMEROCALLIS CITRINA Baroni. Liliaceae. Citron day lily.

A tall growing, very fragrant bulbous plant with lemon-yellow flowers; native to China.

66573. HEMEROCALLIS NANA Forrest and Smith. Liliaceae. Day lily.

A perennial bulbous plant, native to southwest China, which grows in several-headed clumps 4 to 10 inches high. The green linear leaves are about 6 inches long, and the flowers, orange flushed with red, are borne singly or in pairs on a stem about 5 inches long.

**66574.** HYACINTHUS AMETHYSTINUS L. Liliaceae. Hyacinth.

A slender graceful Spanish hyacinth with short racemes of light-blue flowers 6 inches or less high.

. 186575 to 86578. IRIS spp. Iridaceae.

.66575. IRIS CHRYSOGRAPHES Dykes. Goldvein iris.

One of the handsomest of the Siberian Trises; the velvety dark-purple flowers are brightened by golden reticulations at the throat.

66576. IRIS FOETIDISSIMA L. Gladwin iris.

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

For previous introduction see No. 63410.

•66577. IRIS FORRESTII Dykes. Yunnan iris.

For previous introduction and description see No. 63410.

68578. IRIS MILESII Baker. Himalayan iris.

A large Himalayan iris, with seven or eight leaves, 2 to 3 feet long, on the stem; the latter is branched and bears about four heads of bright-like flowers.

66579. LATHYRUS VENOSUS Muhl. Fabaceae.

A stout perennial, 2 to 3 feet high, with purple flowers; native to the eastern United States.

**66580.** LIGUSTRUM INSULENSE Decaisne (L. insulare Decaisne). Oleaceae. Privet.

A shrub, closely related to the common privet (Ligustrum vulgare), becoming 6 feat high, with yellowish green, often pendulous leaves and rather large flower panicles. Country of origin unknown.

66581. LIGUSTRUM YUNNANENSE L. Henry. Oleaceae. Privet.

A shrub 12 feet or less in height, with thick, narrowly oblong leaves 2 to 5 inches long. Native to Yunnan, China.

# 66532 to 66615-Continued.

#### 66582. LONICERA CHRYSANTHA TURCZ. Caprifoliaceae. Coralline honeysuckle.

A shrubby honeysuckle from Japan, up to 12 feet high, with upright stems, somewhat rhombic leaves 2 to 5 inches long, and yellowish white flowers three-fourths of an inch long. It is particularly handsome in autumn with its bright coral-red berries.

For previous introduction see No. 42315.

66583. LONICERA TRICHOSANTHA Bur. and Franch. Caprifoliaceae.

Slender honeysuckle.

A robust deciduous shrub 8 feet high, native to Szechwan, China. The whole plant has a rounded, dense, leafy habit and a pale grayish aspect. The dull gray-green leaves are paler beneath, and the pale-yellow flowers fade to a deeper shade. The berries are red.

For previous introduction see No. 53716.

66584. MAGNOLIA PARVIFLORA Sieb. and Zucc. Magnoliaceae. Oyama magnolia.

A small Japanese magnolia with oblong leaves 4 to 6 inches long and fragrant white cup-shaped flowers 3 to 4 inches across, with large pink sepals and crimson stamens.

66585 to 66589. MUSCARI spp. Liliaceae. Grape hyacinth.

66585. MUSCARI ARGAEI Hort.

Said to be an extra good variety resembling *M. neglectum* (No. 66589).

66586. MUSCARI ARMENIACUM Leichtl.

For previous introduction and description see No. 66471.

66587. MUSCARI COMPACTUM (Jord. and Four.) Baker.

A species of uncertain status, said to have flowers which are nearly black with whitish teeth.

66588. MUSCARI MAWEANUM Leichtl.

A hardy bulbous plant about 6 inches high, with pale-blue and white flowers. Native to Armenia.

66589. MUSCARI NEGLECTUM GUSS.

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

66590. NARCISSUS BULBOCODIUM L. Amaryllidaceae. Petticoat daffodil.

A small slender plant with very slender leaves and one flower ascending or horizontal, usually bright yellow throughout. Native to southern France and Morocco.

66591. NICOTIANA RUSTICA L. Solanaceae.

66592. OSMANTHUS DELAVAYI Baill. Oleaceae. Delavay osmanthus.

A beautiful evergreen shrub from southwestern China, with dense axillary clusters of pure white flowers. The dark-green, ovate leaves are an inch long and have serrate margins.

For previous introduction see No. 52685.

66593 to 66598. PAEONIA spp. Ranunculaceae. Peony.

#### 66532 to 66615-Continued.

## 66593. PAEONIA ANOMALA L.

A strong-growing wild peony found on well-drained hill slopes, mostly between scrub. Flowers large and of a pale-rose color; foliage somewhat coarse. (Note by *Frank N*. (Note by Frank N. Meyer under No. 32240.)

66594. PAEONIA ARIETINA Anders.

A European peony about 3 feet high, with solitary large, dark-red flowers.

LEONIA HIRSUTA N

A peony of unknown origin, with large double red flowers. The lobes of the leaves are narrowly spear shaped.

66596. PAEONIA LUTEA Delavay. Golden peony.

A shrubby Chinese peony, with a short woody stem 1 or 2 feet high and deep-green, leathery, three-parted leaves, white beneath, and about a foot in length. The golden yellow, single or slightly double flowers are  $2\frac{1}{2}$  inches across.

For previous introduction see No. 62758.

66597. PAEONIA PARADOXA Anders.

One of the dwarfest of the peonies, with the leaves in a dense tuft and purple-red flowers. Native to southern Europe.

66598. PAEONIA PEREGRINA Mill

A European peony about 2 feet high, with deep-green leaves, paler beneath, and darkcrimson flowers.

66599. PETTERIA RAMENTACEA (Sieber) Presl. Fabaceae.

An upright leguminous shrub, 6 feet or less high, with trifoliolate leaves and dense upright racemes of fragrant yellow flowers. Native to southern Europe.

66600. PRUNUS SERRULATA Lindl. Amygdala-Hitoye cherry. ceae.

Var. Lannesiana. A variety with the young foliage green or slightly reddish. The leaf margins are dentate, with the teeth long aristate.

66601. PEUNUS MAXIMOWICZII Rupr. Amygda-laceae. Korean cherry.

For previous introduction and description see No. 66397.

66602. RHAMNUS SAXATILIS Jacq. Rhamnaceae. Buckthorn.

A low, dense, very spiny shrub about 3 feet high, native to mountainous regions in central Europe and western Asia.

66603. RHODODENDRON YANTHINUM BUR. and Franch. Ericaceae. Rhododendron.

For previous introduction and description see No. 66479.

66604 to 66607. RUBUS spp. Rosaceae.

66604. RUBUS BIFLORUS Buch.-Ham.

A rambling shrub, with large leaves, woolly beneath, and subacid yellow berries about the size of a thimble. Native to the Himalayas.

For previous introduction see No. 58967.

66605. RUBUS FLOSCULOSUS Focke.

A deciduous shrub which, as described by E. H. Wilson (A Naturalist in Western China, vol. 2, p. 31), is up to 12 feet in height with stout erect stems arching at the much-branched top. The pinnate leaves, 4 to 7 inches long, are smooth above and covered beneath with a close white felt. The small pink flowers in parrow racemes 2 to 4 inches pink flowers, in narrow racemes 2 to 4 inches

#### 66532 to 66615-Continued.

long, are succeeded by small, very dark-red or black edible fruits of agreeable flavor. Native to central and western China.

For previous introduction see No. 52943.

66606. RUBUS INOPERTUS Focke.

A climbing shrub with stout stems and ovate green leaflets. The short-pedicelled flowers are either axillary or clustered at the tips of the branches. Native to south and central China at altitudes of 2,000 meters.

For previous introduction see No. 52945.

66607. RUBUS LASIOSTYLUS Focke. Woolly raspberry.

A wild raspberry from western China, with bluish white bristly stems, small, pinnate leaves, silvery beneath, magenta flowers, and rose-colored woolly fruits which are sweet but said to be of little use for eating.

For previous introduction see No. 58896.

66608. STYRAX WILSONII Rehder. Styracaceae. Chinese snowbell.

A very attractive, compact little shrub 6 feet or less in height, which starts to bear its small clusters of white flowers when about 2 years old. The oval leaves are white tomentose beneath. The shrub is native to the mountains of western China and is hardy as far north as the Arnold Arboretum, Jamaica Plain, Mass.

For previous introduction see No. 62287.

66609 to 66613. VIBURNUM spp. Caprifoliaceae.

66609. VIBURNUM BETULIFOLIUM Batal.

An upright shrub, ultimately about 10 feet high, with coarsely toothed oval leaves, white flowers in cymes 2 to 4 inches wide, and red fruits. Native to contral and western China

For previous introduction see No. 35199.

66610. VIBURNUM BREVIPES Rehder

An erect shrub, 6 to 10 feet high, native to western China, with membranous oblong-oval leaves and ovoid red berries.

66611. VIBURNUM BUREJAETICUM Regel and Herd. Manchurian viburnum.

A northern Chinese species allied to the wayfaring tree (Viburnum lantana); the flowers are produced in dense cymes 2 inches across, and the fruits are ovoid and bluish black.

For previous introduction see No. 58807.

66612. VIBURNUM DAVIDI Franch.

One of the handsomest small shrubs I have ever seen. The leaves have a grace of form, a texture, and color which is remarkable, and the bright-blue berries add a touch of style to the plant. This shrub, an introduc-tion from Szechwan, China, made in 1910, grows well in the shade and requires plenty of moisture. (Note by David Fairchild under No 6885) No. 62853.)

#### 66613. VIBURNUM HENRYI Hemsl.

A shrubby, evergmen viburnum 10 feet or more in height, with dark shining green, oblong leaves and stiff pyramidal panicles of white flowers. The oval fruits, one-third of an inch long, are at first red, becoming black, and give the shrub a decidedly orna-mental appearance in autumn. Native to central China and hardy as far north as Massachusetts. Massachusetts.

For previous introduction see No. 63686. 66614. (Undetermined.)

## 66532 to 66615—Continued.

66615. VICIA PYRENAICA Pourr. Fabaceae.

A perennial prostrate or ascending vetch, native to southwestern France, with stems up to a foot in length and large solitary purplish flowers.

# 66616 to 66622.

From Cluj, Rumania. Seeds presented by Dr. Al. Borza, director, botanic garden of the University of Cluj. Received March 27, 1926.

66616 to 66619. CREPIS spp. Cichoriaceae.

Introduced for genetic studies of the genus Crepis.

66616. CREPIS BIENNIS L.

A biennial composite with pinnately hastate leaves, native to southern Europe.

66617. CREPIS RUBRA L.

An annual red-flowered plant, native to southern Europe.

66618. CREPIS SETOSA Hall. f.

An erect annual herb, much branched, native to Asia Minor.

66619. CREPIS TARAXACIFOLIA Thuill.

A biennial, hairy, spreading composite with yellow flowers; native to France.

66620. GLADIOLUS GANDAVENSIS Van Houtte. Iridaceae.

A late-flowering hybrid gladiolus (*G. psit-tacinus* × cardinalis); the flowers, in long spikes, are red and reddish yellow, variously streaked and penciled.

66621. NICOTIANA RUSTICA L. Solanaceae. Aztec tobacco.

66622. TRIFOLIUM PRATENSE L. Fabaceae.

#### 66623 to 66646.

From Nancy, France. Seeds presented by Prof. Edmond Gain, director, botanic garden, Place Carnot. Received March 31, 1926.

66623 to 66625. AGROSTIS spp. Poaceae.

66623. AGROSTIS PALUSTRIS Huds. Redtop.

66624. AGROSTIS MARITIMA Lam. Bent grass.

66625. AGROSTIS CAPILLARIS L.

Rhode Island bent.

66626 to 66628. CREPIS spp. Cichoriaceae.

Introduced for genetic studies of the genus Crepis.

66626. CREPIS BIENNIS L.

For previous introduction and description see No. 66616.

66627. CREPIS MONTANA (Jacq.) Reichenb.

An alpine composite with a large head of yellow flowers, native to Switzerland.

66628. CREPIS SIBIRICA L.

A perennial composite, 2 to 3 feet high, covered with short rough hairs, bearing a terminal cluster of bright-yellow flowers. Native to Asia Minor and the Himalayas.

66629 to 66632. LATHYBUS spp. Fabaceae.

66629. LATHYRUS CIRRHOSUS Seringe.

A climbing annual 16 to 40 inches high, with a woody, straight-winged stem, leaves composed of two to three pairs of elliptic or oblong leaflets, and purple or pinkish

### 66623 to 66646-Continued.

flowers in three to eight flowered loose racemes. Native to the barren slopes of the Pyrenees Mountains.

For previous introduction see No. 44692.

66630. LATHYRUS LATIFOLIUS L. Perennial pea.

For previous introduction see No. 42076.

66631. LATHYRUS OCHRUS (L.) DC.

A prostrate or ascending annual up to 2 feet long, with winged stems and yellow flowers. Native to the Mediterranean countries.

For previous introduction see No. 29941.

66632. LATHYRUS SATIVUS L. Bitter vetch.

An annual ascending or prostrate leguminous plant with whitish flowers. Native to the Mediterranean countries.

66633. LUPINUS COCCINEUS Hort. Fabaceae. Lupine.

66634. MEDICAGO TURBINATA OLIVAEFORMIS (Guss.) Aschers. and Graebn. Fabaceae.

A leguminous annual, with prostrate stems about 2 feet long. Native to the Mediterranean countries.

66635. MEDICAGO SATIVA VARIA (Mart.) Urban. Fabaceae.

A hardy herbaceous European perennial.

66636. MELILOTUS ALBA Desr. Fabaceae. White sweet clover.

66637. MELILOTUS SPECIOSA Durieu. Fabaceae.

An erect leguminous annual, native to northern Africa.

66638. NICOTIANA TABACUM L. Solanaceae. Tobacco.

Var. macrophylla. A large-leaved form.

66639. NICOTIANA RUSTICA L. Solanaceae.

Aztec tobacco.

66640 to 66643. TRIFOLIUM spp. Fabaceae. Clover.

66640. TRIFOLIUM ALPESTRE L.

A perennial clover, with long underground roots, found over almost all the mountainous parts of Europe, especially in calcareous solls, and ascending to a height of 16,000 feet. The narrowly oval leaflets are velvety hairy, and the flowers are pinkish purple.

For previous introduction see No. 56671.

66641. TRIFOLIUM MEDIUM Huds.

Mammoth clover.

A perennial clover with a wide-creeping rhizome, upright stems over a foot high, and bright-purple flowers. Native to southern Europe.

For previous introduction see No. 57855.

66642. TRIFOLIUM MONTANUM L.

A perennial white-flowered clover, native to southern Europe, with a woody rhizome giving rise to one or more clumps of upright stems up to 2 feet high.

For previous introduction see No. 35279.

66643. TRIFOLIUM RUBENS L.

A perennial clover with widely creeping rhizomes and upright glabrous stems 1 to 2 feet high. Native to rocky places and thickets in the Mediterranean region.

For previous introduction see No. 63994.

## 66623 to 66646—Continued.

66644. TRIGONELLA CAERULEA (L.) Seringe. Fabaceae.

An upright annual, 2 feet or less high, with bright-blue flowers. Native to southeastern Europe.

For previous introduction see No. 33297.

66645. TRIGONELLA STRIATA L. f. Fabaceae.

An annual yellow-flowered leguminous plant, native to southeastern Europe and western Asia.

66646. VICIA SATIVA L. Fabaceae.

**66647.** LECYTHIS PISONIS Cambess. Lecythidaceae.

From Rio de Janeiro, Brazil. Seeds presented by Amazones Torres, botanic garden. Received March 27, 1926.

A large Brazilian tree which, as described by St. Hilaire (Flora Brasiliae Meridionalis, vol. 2, p. 377), has broadly ovate glossy green leaves 3 inches long and ellipsoidal woody fruits about the size of a child's head. These fruits open by a circular lid, and the edible seeds, the size of a cherry, have white flesh of good flavor.

## 66648 to 66660.

- From Ceylon. Seeds and cuttings obtained by David Fairchild and P. H. Dorsett, agricultural explorers, Bureau of Plant Industry, with the Allison V. Armour expedition. Received March 26, 1926.
  - 66648. ALBIZZIA ODORATISSIMA (L. f.) Benth. Mimosaceae.

No. 348. From the American Mission compound, Tellippalai, near Jaffna, February 6, 1926. A large shade tree, spreading in habit, with pure white sweet-scented flowers, which is called suriya mara by the Singhalese.

66649. BORASSUS FLABELLIFER L. Phoenicaceae. Palmyra palm,

No. 350. Jaffna. February 6, 1926. The famous Palmyra palm of India and Ceylon which in the northern part of this island takes the place of the coconut palm. Though a slow grower, it is a very handsome palm when old. Inasmuch as it grows in the dry coastal regions of Ceylon, it is apparently able to withstand any amount of lime, and as it is said to have been used successfully as a binder for sand dunes, it should prove of real value in the calcareous soils of southern Florida. In the number of uses to which it is put here it rivals the coconut. A delicate sugar is made from the sap which flows in abundance from its inflorescence when cut. The seeds are germinated and the young subterranean hypocotyli sused as a vegetable. The leaves are used in many different ways. The fruit, half the size of a coconut, is very attractive in appearance and when ripe exhles a delicate fragrance. The hull is eaten by the Tamils of Ceylon.

66650. CAESALPINIA CORIARIA (Jacq.) Willd. Caesalpiniaceae. Divi-divi.

No. 407. February 7, 1926. Seeds from a very beautiful tree growing in deep sandy soil in Regency Park, Jafina. This tree, bearing sweet-scented flowers, may prove a success as a tannin-producing plant.

For previous introduction see No. 42271.

66651. CARICA CANDAMARCENSIS Hook. f. Papayaceae.

No.401. From the Hakgala Botanic Gardens at an altitude of 6,000 feet. February 8, 1926. The mountain papaya of Ceylon. The fruits of this Ecuadorian species are entirely different from those of *Carica papaya*, being small and acid flavored and useful only for jam and preserves.

For previous introduction see No. 51389.

# 66648 to 66660-Continued.

66652. CASUARINA MONTANA Leschen. Casuarinaceae.

No. 408. From the Hakgala Botanic Gardens. January 28, 1926. A beautiful species with drooping branches growing in the cool rainy region of Hakgala.

66653. CISSUS QUADRANGULA L. (Vitis quadrangularis Wall.). Vitaceae.

No. 406. Cuttings collected on the north coast of Ceylon near Jaffna, February 6, 1926. A succulent plant with square fleshy stems of most interesting structure.

66654. CYAMOPSIS TETRAGONOLOBA (L.) Taub. (C. psoraloides DC.). Fabaceae. Guar.

No. 412. Jaffna Mission School, Batticotta. February 6, 1926. The guar or "cluster bean," whose young pods are eaten in curries, is commonly cultivated in India and occasionally in Ceylon. The plant may be useful as green manure.

For previous introduction see No. 57833.

66655. EHRETIA MICROPHYLLA Lam. Boraginaceae.

No. 344. From roadside thickets at Point Pedro, Jaffna. February 6, 1926. A dark-green glossy-leaved plant which makes an attractive shrub when grown on salty land near the seashore; suitable for hedges. The yellow fruits, about the size of a pea, are said to be edible.

For previous introduction see No. 43760.

66656. HYPHAENE THEBAICA (L.) Mart. Phoenicaceae. Doum palm.

No. 349. From Residency Park, Jaffna. February 6, 1926. A palm 25 feet high, distributed from Upper Egypt to central Africa. The stems of old trees are sometimes forked three or four times. The beautiful yellowish brown fruits are borne in long clusters of 100 to 200. In Upper Egypt the poorer classes eat the fibrous mealy fruit husk, which tastes much like gingerbread but is rather hard and husky. The hard tough wood is used for domestic utensils.

For previous introduction see No. 53848.

66657. INDIGOFERA ENDECAPHYLLA Jacq. Fabaceae.

No. 391. From the agricultural experiment station in the district of Kandy, January 23, 1926.

For previous introduction and description see No. 66253.

66658. PTYCHOSPERMA sp. Phoenicaceae. Palm.

No. 421. February 12, 1926. A pinnateleaved palm with a smooth trunk.

66659. SCHLEICHERA TRIJUGA Willd. Sapindaceae.

No.343. A very handsome sapindaceous tree, splendid for shade, growing in front of the Residency House at Jaffna. February 5, 1926. It resembles a European evergreen oak, but the small fruits are edible and slightly acid.

For previous introduction see No. 25848.

66660. THUNBERGIA COCCINEA Wall. Acanthaceae.

No. 387. From the Hakgala Botanic Garden. January 28, 1926. A beautiful red-flowered climber which is a very fine ornamental.

66661. Annona sp. Annonaceae.

From Homestead, Fla. Seeds presented by H. W. Johnston, through R. A. Young, Bureau of Plant Industry, Gainesville, Fla. Received March 30, 1926. One fruit, picked July 11, 1925, weighed nearly one-half pound, was 3 inches long and thick, and of somewhat irregular shape. The flesh was pleasantly acid sweet, of fairly good flavor, but very granular, and contained about 100 seeds. (Young.)

66662 to 66673. LILIUM spp. Liliaceae. Lily.

From London, England. Bulbs purchased from Barr & Sons, Covent Garden. Received March 29, 1926. Notes from Barr & Sons' catalogue.

66662 to 66666. LILIUM DAURICUM Ker. Candlestick lily.

For previous introduction see No. 63827.

- 66662. Var. fulgidum. 382. Var. fulgidum. A very distinct var-iety, 1 foot high, with handsome flowers of a rich dark crimson, shaded with deep orange and freely spotted.
- 363. Var. *Incomparable*. A handsome showy variety, 2 feet high, which is an intense rich crimson-scarlet and is freely 66663. Var. spotted.
- 66664. Var. Leonard Joerg. A very hand-some showy lily, 20 to 23 inches high, bearing umbels of large flowers of good form, with broad petals. The flowers are glowing orange-scarlet, shading down to golden yellow, and freely spotted with dark erimson dark crimson.
- 66665. Var. Sappho. A variety, 2 feet high, which is scarlet, shading to orange, and moderately spotted.
- 666666. Var. Splendidum. A fine showy variety of sturdy growth, 2 to 2½ feet high, producing a head of flowers, up to 12 in number, with slightly reflexed petals which are orange-scalet, shading to glowing crimson-vermilion.

66667 to 66673. LILIUM ELEGANS Thunb.

Japanese lily.

- **367.** Var. alutaceum, Prince of Orange. A showy dwarf lily, 1 foot high, with clear apricot-orange flowers which are spotted black. This is a valuable variety for flower beds, rock gardens, and massing in front borders 68667. Var. alutaceum, in front borders.
- 66668. Var. bicolor. A variety, 1½ feet high, with beautiful large flowers which are apricot-orange flamed scarlet.
- A variety, 66669. Var. marmoratum aureum. 21/ feet high, producing broad open flowers which are golden-apricot, densely spotted with purple.
- 66670. Orange Queen. A handsome, strong robust grower, 15 to 18 inches high, which is very decorative in either pots or borders. During the midsummer it produces large orange-colored flowers spotted with black.
- 66671. Var. sanguineum. A variety, 1½ feet high, with rich-crimson flowers finely spotted with dark crimson.
- **66673.** Star of Heusden. A very free-flowering varlety 1½ feet high. The large beautiful flowers are soft chrome yellow with a dark-orange stripe on each petal and finely spotted.
- 66673. Var. venustum. A grand showy lily, 11/2 feet high, which is late flowering. The flowers are glowing reddish orange.

66674. MUSCARI SP. Liliaceae. Grape hyacinth.

From Morocco. Bulbs collected by David Fair-child, agricultural explorer, Bureau of Plant Industry, with the Allison V. Armour expedi-tion. Received September 8, 1925. Numbered January, 1926.

No. 102. From Ito Plateau, near Azrou. June 17, 1925. A species peculiar to the Middle Atlas Mountains, at an altitude of 1,300 meters. A spring-Mountains, at an altitude of 1,300 meters. A spring-blooming bulbous plant with blue or white flowers in racemes or spikes.

For introduction of seeds see No. 64957.

66675. PERSEA AMERICANA Mill. (P. gratissima Gaertn. f.). Lauraceae. Avocado.

Fruits from a seedling of No. 19080, Collins, grown at the United States Plant Introduction Garden, Miami, Fla., under the Garden number 1891. Received at Washington, D. C., January 21, 1926. Numbered March, 1926.

Collinami. A large pear-shaped fruit which is light green with light-colored dots over most of the surface. The skin, comparatively smooth, is medium thick and pliable, separating easily from the flesh, which is soft, buttery, and of excellent texture and flavor. The outer seed coat separates easily from the seed, but tends to cling to the flesh. The tree is a very upright grower, similar to the parent tree. The leaves are large and rather glossy.

66676. MANGIFERA INDICA L. Ana-Mango.

From Ceylon, India. Scions presented through David Fairchild and P. H. Dorsett, agricultural explorers, Bureau of Plant Industry, with the Allison V. Armour expedition. Received March 26, 1926.

No. 347. February 6, 1926. Scions from a tree planted by Miss Eliza Agnew on the grounds of the Uduvil Girls' School, Chunnakan, Ceylon, and presented by Miss G. M. Vining. This mango, is said to be of good quality, with a small seed, little fiber, and a scarlet blush which makes it very structure. attractive.

66677 and 66678. GOSSYPIUM NAN-Malvaceae. Cotton. KING Mey'n.

From French Indo China. Seeds received March 23, 1926.

66677. No. 1. A variety which grows wild.

- 66678. No. 2. A variety cultivated in the villages.
- 66679. CYNOMETRA CAULIFLORA L. Caesalpiniaceae.

om Ceylon. Seeds obtained by David Fair-child and P. H. Dorsett, agricultural explorers, Bureau of Plant Industry, with the Allison V. Armour expedition. Received March 26, 1926. From

No. 392. Obtained from the Veyangoda Farm, between Colombo and Kandy, February 12, 1926.

For previous introduction and description see No. 65781.

- 66680 to 66693. BERBERIS spp. Ber-Barberry. beridaceae.
- From Elstree, Herts, England. Plants presented by Edwin Beckett, superintendent, Aldenham House Gardens. Received February 12, 1926.

66680. BERBERIS BRACHYPODA Maxim.

Var. gibbsii. An attractive shrub from western China, 4 to 7 feet high, with ovate, serrate leaves, long slender panicles of yellow flowers, and scarlet fruits often half an inch in length.

For previous introduction see No. 61973.

66681. BERBERIS CANADENSIS Mil.

Received as *Berberis fischeri* which is now considered to be a form of *B. canadensis.* An ornamental of great decorative value. The showy fruits are very effective.

For previous introduction see No. 65471.

## 66680 to 66693—Continued.

66682. BERBERIS CANDIDULA C. Schneid.

A charming evergreen of compact growth, with leaves silvery on the underside. (Beckett.)

66683. BERBERIS CONSIMILIS C. Schneid.

A yellow-flowered shrub, of unknown origin, cultivated at the Arnold Arboretum, Jamaica Plain, Mass., since 1904. The spiny-dentate oval-oblong leaves are 2 centimeters long, and the ellipsoid fruits are purple.

66684. BERBERIS GIRALDII Hesse.

A species with large deciduous bronze foliage and compact bunches of scarlet berries. (Beckett.)

66685. BERBERIS HOOKERI Lem.

Var. compacta. A compact dwarf variety with bright evergreen leaves. (Beckett.)

66686. BERBERIS JACOUNII Hort.

A semievergreen, strong-growing barberry, with medium-sized, glaucous, finely serrated leaves and dark-red berries in small clusters. (Beckett.)

66687. 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 3-parted spines and fascicled leathery oval leaves. Unlike B. dictyophylla, the berries are in fascicles and are more nearly round.

For previous introduction see No. 65473.

66688. BERBERIS ORTHOBOTRYS Bienert.

A semievergreen barberry with very large crimson berries. (Beckett.)

For previous introduction see No. 53637.

66689. BERBERIS PARVIFOLIA Sprague.

A low, half-evergreen shrub with small, narrow, usually entire leaves and terra-cotta colored fruits. Native to western China.

For previous introduction see No. 33022.

66690. BERBERIS Sp.

Farrer No. 355.

66691. BERBERIS SD.

Forrest No. 20179.

66692. BERBERIS Sp.

Forrest No. 20292.

66693. BERBERIS Sp.

Purdom No. 543.

## 66694. BROSIMUM ALICASTRUM Swartz. Moraceae.

From Merida, Yucatan, Mexico. Seeds presented by Julio Rendon. Received February 4, 1926.

Ramón. A large tropical American tree with shining green narrowly elliptic leaves and round yellow fruits about an inch in diameter. The fruit contains a single large seed, known as "bread-nut" in Jamaica; it is roasted and eaten in that country. The leaves are said to be good cattle feed.

For previous introduction see No. 53534.

66695. ORCHIS PAPILIONACEA L. Orchidaceae.

From Morocco. Bulbs collected by David Fairchild, agricultural explorer, Bureau of Plant Industry. Received September 8, 1925. Numbered January, 1926.

No. 38. Found in a Berber cemetery, near Amismiz, in the Great Atlas Mountains, south of Marrakesh, May 30, 1925. A terrestrial orchid, about 18 inches high, which grows in soil that bakes as hard as a brick before the last of May. This variety produces tubers the size of a pigeon's egg, and attractive red flowers.

For previous introduction see No. 64963.

66696 and 66697. ARTOCARPUS INTEGRA (Thunb.) L. Moraceae. Jackfruit.

- From Ceylon. Seeds obtained by David Fairchild and P. H. Dorsett, agricultural explorers, Bureau of Plant Industry, with the Allison V. Armour expedition. Received February 26 and March 4, 1926.
  - 66696. No. 324. Collected near Kandy, January 20, 1926. The "honey jackfruit" or peniwaraka of the Singhalese. The delicate sweet fruit pulp around each seed is excellent eating. It is quite unlike that of the ordinary jackfruit.

66697. No. 361. "Honey jackfruit" or peniwaraka. Seeds from a large fruit obtained from one of the hotel porters.

66698. COLOCASIA ESCULENTA (L.) Schott. Araceae. Dasheen.

From China. Corms collected by F. A. McClure, agricultural explorer, Bureau of Plant Industry. Received February 18, 1926.

No. 330. Kau chau oo. Obtained at Chukkouen, Lohkongtung, December 27, 1925. A dasheen cultivated to a limited extent in the region of Lohkongtung and elsewhere. This variety, rarely used as an esculent, is commonly dried and sold to drug shops. It is distinguished from the commonly cultivated varieties by having the offshoots closely adhering to the main corm so that a year's growth results in a large irregular mass rather than a number of nearly severed cormels. (McClure.)

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# ORGANIZATION OF THE UNITED STATES DEPARTMENT OF AGRICULTURE

# July 25, 1928

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