### UNITED STATES DEPARTMENT OF AGRICULTURE



### **INVENTORY No. 81**



Washington, D. C.

▼

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# SEEDS AND PLANTS IMPORTED BY THE OFFICE OF FOREIGN PLANT INTRODUCTION, BUREAU OF PLANT INDUSTRY, DURING THE PERIOD FROM OCTOBER 1 TO DECEMBER 31, 1924 (S. P. I. NOS. 61738 TO 62230)

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### INTRODUCTORY STATEMENT

In July, 1924, P. H. Dorsett, of the Office of Foreign Plant Introduction, and his son, J. H. Dorsett, were detailed for agricultural exploration work in northern China. Shipments of plant material which they collected began to arrive in Washington in October, 1924, the greater part coming from the vicinity of Peking, in the Province of Chihli. The lists of the Dorsetts' collections in northern China take up a conspicuous part of this inventory and include both seeds and scions of a large number of fruits, such as peaches, pears, apples, persimmons, apricots, grapes, and quinces, also walnuts, chestnuts, hazelnuts, various vegetables, and a number of woody and herbaceous ornamentals.

The collection of varieties of *Diospyros kaki* (Nos. 61837 to 61842) obtained by Mr. Dorsett in the vicinity of Peking, China, may include valuable additions to the list of excellent varieties previously introduced and now in the trade in this country, such as the nonastringent Fuyu (S. P. I. No. 26491) and the Tamopan (S. P. I. No. 16921), an excellent keeper.

While on his way to carry on agricultural explorations in the East Indies, David Fairchild of this office spent several days at the Royal Botanic Gardens, Kew, England, and also at Aldenham House, the estate of Hon. Vicary Gibbs, at Elstree, Herts, England. At the Royal Botanic Gardens Doctor Fairchild procured seeds of the dove tree (Davidia involucrata vilnoriniana, No. 62022). This is a handsome Chinese relative of the dogwood, and only one specimen is known to be in cultivation in this country. At Aldenham House there has been gathered together a remarkable collection of hardy rare trees and shrubs, mostly from eastern Asia, and seeds of a number of these were obtained by Doctor Fairchild (Nos. 61972 to 61996).

In the preceding inventory (No. 80) mention was made of the agricultural explorations being conducted in Argentina and Chile by H. L. Westover, of the Office of Forage Crops. During this period Mr. Westover was still abroad, and he sent in not only a number of local strains of alfalfa but also seeds of a number of native forage plants and grasses (Nos. 62060 to 62073, 62075 to 62092).

Of similar interest to Mr. Westover's shipments is a large collection of grasses, mostly native to southern South America, presented by the Federación Rural, Montevideo, Uruguay (Nos. 62031 to 62059). These grasses will

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undoubtedly be of great interest to agronomists attempting to develop strains of forage plants suitable for parts of the Southern States.

Among the shipments sent from northern China by Mr. Dorsett, whose work is mentioned above, were tubers of *Stachys sieboldi* (No. 61897). This species has been introduced a number of times previously and has been grown with satisfactory results. However, its tubers are small, and for this reason it does not have the appeal to growers that it might otherwise. It resembles closely our native *Stachys floridana* of the South, and should be given serious attention by plant breeders along with the latter species.

Seeds of Arachis nambyquarae (No. 62099), introduced in 1924, have since been grown at several of our southern experiment stations, where the plants have proved to be well adapted for growing in their new environment. The large seeds of this Brazilian relative of our common peanut make it of special interest for general experimental work.

Actinidia venosa (No. 61803) may be of value only as an ornamental, but it is a welcome addition to the Actinidias now grown in this country. These include A. arguta, which is hardy as far north as Massachusetts and which bears an edible fruit about an inch long, and A. chinensis, which bears a much larger edible fruit but which is adapted for growing only in the southern half of the United States.

The present popularity of the Japanese flowering cherries in this country is due in large measure to the fact that this office has been introducing, for several years, promising varieties from the Orient. Capt. Collingwood Ingram, of Benenden, Kent, England, who has a large private collection of flowering cherries, has presented plants of a variety which he has called Kojima (*Prunus serrulata*, No. 62101). This variety, which originated in his garden, has very large, semidouble, pure white flowers borne in drooping corymbs, and should prove a real addition to our present collection.

Specialists in the United States working with strawberries and potatoes will be interested in a collection of wild strawberry plants (Fragaria sp., No. 61885) and types of wild potatoes (Solanum spp., Nos. 61886 to 61892) made by Elbert E. Reed, of the Instituto Agricola Bunster, on the island of Chiloe, off the coast of Chile. Many of the cultivated strawberries of the American trade are derived in part from the Chiloe strawberry (Fragaria chiloensis), which is native to this region.

The botanical determinations of seeds introduced have been made and the nomenclature determined by H. C. Skeels, and the descriptive notes have 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, 1926.

### INVENTORY

### 61738 and 61739.

From China. Seeds collected by P. H. Dorsett, agricultural explorer, Bureau of Plant Industry. Received December,

61738. AMPELOPSIS ACONITIFOLIA Bunge. Vitaceæ.

No. 904. Near Laochun. October 10, 1924. The bright-blue fruits make this vine a good ornamental. (Dorsett.)

61739. AMYGDALUS PERSICA L. (Prunus persica Stokes). Amygdalaceæ. Peach.

No. 761. Peking. October 6, 1924. Seeds of a domesticated peach. (Dorsett.)

61740. Persea Americana Mill. gratissima Gaertn. f.). Lauraceæ.

Fruits from the Plant Introduction Garden, Miami, Fla. Received at Washington, November 20, 1924.

A cross between the Collinson and Trapp A cross between the Collinson and Trapp avocados, made at the Plant Introduction Garden, Miami, February, 1921, by Ed-ward Simmonds. Fruited first time this year [1924].

Fruits about 4 inches long and 3½

inches wide, roundish obovate, slightly oblique: stem short, thick, inserted at a slight angle: cavity small, shallow, wrinkled: apex obliquely flattened, slightly depressed at stigmatic point, surface depressed at stigmatic point; surface smooth, light green; dots numerous, yellowish, conspicuous; skin of medium thickness, adhering rather closely to the flesh; flesh creamy yellow, greenish near skin, smooth button; flesh creamy yellow, greenish near skin, smooth, buttery, with rich, nutty flavor and no fiber; seed large, tight in the cavity free free seed large. ity, free from seed coats,

### 61741. Campanula sp. Campanulaceæ. Bellflower.

rom China. Seeds collected by P. H. Dorsett, agricultural explorer, Bureau of Plant Industry. Received December 8, From China. 1924.

No. 712. October 10, 1924. Seeds of a plant with very pretty purple, bell-shaped flowers, collected along the trail from the Ming tombs to Silver Mountain. (Dorsett.

### 61742 to 61746.

rom Darjiling, India. Seeds presented by G. H. Cave, curator. Lloyd Botanic Garden. Received December 24, 1924.

61742. ACER OSMASTONI Gamble. Acera-Maple.

A large Himalayan maple, described (Kew, Bulletin of Miscellaneous Information, 1908, p. 446) as a tree up to 100 feet tall, growing wild in Sikkim, India, at an altitude of about 7,000 feet. The leaves, 1 to 3 lobed, are papery and bearts inches leaves. about 5 inches long.

61743. ACER STACHYOPHYLLUM Hiern. Aceraceæ. Maple.

A small maple, native to Sikkim, India, at an altitude of 10,000 feet.

61744. ALANGIUM ALPINUM (C. B. Clarke) Smith and Cave. Cornaceæ.

A deciduous tree, about 40 feet high, native to the eastern Himalayas and related to the dogwood. The white flowers are in lax 3-flowered, axillary clusters, and are succeeded by black fruits.

61745. DECAISNEA INSIGNIS (Griffith) Hook, f. and Thoms. Lardizabalaceæ.

An upright, sparingly branched shrub, An upright, sparingly branched shrub, much resembling a large-leaved sumac, found in the eastern Himalayas. The leaves, often 3 feet long, are made up of 13 to 25 elliptic, acuminate leaflets, bright green above and slightly glaucous beneath. The racemes of pendulous, greenish flowers resemble those of a yucca, but are smaller. These are followed by edible, yellow fruits, 3 to 4 inches long and about 2 inches thick, filled with a whitish pulp and black seeds. seeds.

61746. GAULTHERIA FRAGRANTISSIMA Wall. Ericaceæ:

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

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

61747 and 61748. LILIUM spp. Lilia- 61749 to 61760—Continued. Lily.

com Goring by Sea, Sussex, England. Bulbs presented by Maj. F. C. Stern, Re-ceived December 30, 1924.

61747. LILIUM FARRERI TUTTILL.

From a packet of mixed seeds collected in China by the well-known botanical explorer. Reginald Farrer, there was grown this handsome lily, described in Curtis's Botanical Magazine (pl. 8847) as having erect stems, nearly 3 feet in height, and numerous narrow leaves scattered along the entire stem. The relatively small but fragrant flowers, white with purple spots, are terminal and either solitary or in loose 6-flowered umbels. This lily has proved hardy in the mild-wintered region of southeastern England. England.

### 61748. LILIUM CENTIFOLIUM Stapf.

This Chinese lily was originally discovered by Reginald Farrer, according to the Botanical Magazine (pl. 8960); Mr. Farrer found it growing in a little garden at Siku, Kansu, in 1914. The stem, densely leafy and somewhat glaucous, is up to 7 or 8 feet in height, arising from a slightly depressed bulb about 3 inches in diameter. The numerous leaves are dark green above and about 3 inches in diameter. The numerous leaves are dark green above and paler below, linear or linear-lanceolate, 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 with deep, brownish-purple midribs.
anthers are rusty red.

### 61749 to 61760.

From Kaifeng, Honan, China, Seeds pur-chased from R. M. Lewis, St. Andrew's School, Received December 20, 1924. Notes by Mr. Lewis.

Collection of seed from the largest grain store in Kaifeng.

and 61750. PHASEOLUS AUREUS 61749 Roxb. Fabaceæ. Mung bean.

Two varieties of average quality, planted around the 5th of May, and maturing early, or later if dry.

61749, No. 8. Lü Hui tou (green gray).

61750. No. 7. Ming Lü tou (shiny green).

61752. PISUM SATIVUM L. Pea. 61751 and Fabaceæ.

751. No. 11. Hua wan and huang van (mottled and yellow). A variety of average quality, planted during September and maturing in May. 61751. No. 11.

61752. No. 12. Huang wan (yellow). One of the best varieties; planted in September and maturing in May.

61753 to 61758. Soja Max (L.) Piper (Glyeine hispida Maxim.). Fabaceæ. Soy bean.

61753. No. 1. Hei (black). A variety of average quality, planted about May 5 and maturing in September.

61754, No. 2. Hsiao hei (small). A variety a little better than the average, planted around May 5 and maturing during September.

61755. No. 3. Huang (yellow). A soy bean of average quality, planted about May 5 and maturing during September.

61756. No. 4. Huang (yellow). A variety of the best quality, planted about May 5 and maturing during September.

61757. No. 5. Ching (green, literally "clear"). Of good quality, planted about May 5 and maturing late.

61758. No. 6. Ching ("clear"). A variety of average quality, planted about May 5 and maturing late.

61759 and 61760. VIGNA SINENSIS (Torner) Savi. Fabaceæ. Cowpea.

Varieties of average quality, planted about May 5 and maturing during Sep-

61759. No. 9. Pai Chiang (white kidney).

61760. No. 10. Hung Chiang (red kid-

61761. Canarium album (Lour.) DC. Balsameaceæ.

From Peking, China. Seeds collected by P. H. Dorsett, agricultural explorer, Bureau of Plant Industry. Received De-cember 6, 1924.

No. 759, October 1, 1924. Ching Kuo (green nut). An olive-green and olivelike fruit shipped in to the market from the south. This may be made into a good candied fruit something like citron. (Dor-

### 61762 to 61766.

tember.

om Simla, India. Plants presented by H. E. J. Peake, Khaltoo Fruit Orchards, Solan brewery, through Walter T. Swingle, Bureau of Plant Industry. Re-ceived October 2, 1924. From Simla, India.

61762. BELOU MARMELOS (L.) Lyons (Aegle marmelos Correa). Rutaceæ. Lyons

The bel is a small, handsome tree, closely related to the genus Citrus; it is native to northern India, but is widely cultivated throughout India, Siam, and Indo-China. It is often spiny and has deciduous, trifoliate leaves. The greenish, globular fruit, usually about 4 inches in diameter, has a hard shell which incloses greenish, aromatic pulp of sweetish flavor. Sherbets are made from the mashed pulp, and also a beverage. In northern India the bel is said to endure a temperature of 20° F. without injury.

61763. CITRUS sp. Rutaceæ.

This is native to the Simla Hills. (Peake.)

61764. CITRUS sp. Rutaceæ.

61765. HESPERETHUSA CRENULATA (Roxb.) Roemer. Rutaceæ.

This is a shrub or small tree growing in dry situations in India, sometimes at a height of 4.000 feet. The fruits are very small, but occasionally used as a condiment by the natives. The wood is hard and suitable for parts of machinery where great strength and toughness are required. This plant belongs to the orange family and is introduced primarily in connection with experiments now in progress in the breeding of new types of citr's fruits and stocks for the same. the same

### 61762 to 61766—Continued.

61766. TOONA CILIATA Roemer (Cedrela toona Roxb.). Meliaceæ. Toon tree.

A large Himalayan tree, 50 to 80 feet high, with nearly evergreen foliage and white, honey-scented flowers. The wood, which is used for furniture, carvings, and for making cigar boxes, is very durable and is not attacked by termites.

### 61767. CORDEAUXIA EDULIS Hemsl. Cæsalpiniaceæ. Yeheb nut.

From Kew. Surrey, England. Plants presented by Dr. Arthur W. Hill, director. Royal Botanic Gardens. Received October 3, 1924.

ber 3, 1924.

The Yeheb nut is a leguminous shrub or small tree which grows wild in the great semiarid region of Italian Somaliland, known as the "Haud," where its highly nutritious nuts are a staple food of the Somali tribes who inhabit the region, and are offered in the markets on the Somali coast. The thick, evergreen leaves of this shrub are about 4 inches long, with usually four pairs of leaflets, and the crisp, leathery pod is slightly over 2 inches long. In composition the Yoheb nut closely resembles the chestnut and is comparable to it in food value. The region where the shrub is found indicates that while it should prove very drought resistant it is not likely that it will stand frost, although tests are necessary to determine this point.

### 61768. MEDICAGO SATIVA L. Fabaceæ.

From Cuenca, Ecuador. Seeds presented by E. Malo A., British vice consulate. Received October 7, 1924.

This is a sample of the alfalfa we grow in this district; we have known single plants to become over 3 feet high. We believe this may be Peruvian alfalfa. (Malo.)

### 61769. PSIDIUM GUAJAVA L. Myrtaceæ.

From Holguin, Cuba. Seeds presented by Received October 7,

A very fine large guava with golden-green skin and yellow pulp. The flavor is so sweet that the addition of sugar is unnecessary. The plant is vigorous and prolific. (Towns.)

### 61770. ECHINOCHLOA HOLCIFORMIS (H. B. K.) Chase. Poaceæ. Grass.

From the city of Mexico, Mexico, Seeds presented by Arthur Stockdale. Received October 7, 1924.

An erect perennial grass, 6 feet or more high, from humid, mountainous regions of Mexico. Introduced for testing as forage.

### 61771. MAGNOLIA CAMPBELLII Hook. f. and Thoms. Magnoliaceæ.

From Darjiling, India. Seeds presented by G. H. Cave, curator, Lloyd Botanic Garden. Received October 7, 1924.

According to Curtis's Botanical Magazine (pl. 6793), this is a beautiful, deciduous magnolia from the Himalayas, where it ascends to 8,000 feet above sea level. It reaches a height of 80 feet, has very dark bark, large elliptical dark-green leaves, and white to purple flowers 10 inches in diameter. This magnolia has flowered freely in southern France and Italy.

For previous introduction see S. P. I. No. 55688.

### 61772. Arachis hypogaea L. Fabaceæ.

From Potchefstroom, Union of South Africa. Seeds presented by F. C. Fellschop, School of Agriculture, Potchefstroom, through J. H. Beattie, Bureau of Plant Industry. Received October 9, 1924.

Locally grown seeds introduced for cultural tests and comparison with Americangrown varieties.

61773. SOLANUM OPACUM A. Br. and Bouche. Solanaceæ.

From Sydney, New South Wales. Seeds presented by George Valder, undersecretary and director. Department of Agriculture. Received October 9, 1924.

An annual Australian Solanum which is closely related to the nightshade (8. nigrum) and appears to have shown some value as a fodder plant, according to the Agricultural Gazette of New South Wales for October 31, 1921. No harmful effects on stock were observed after numerous feeding tests.

### 61774. Afzelia breiyi Wildem. Cæsalpiniaceæ.

From Brussels, Belgium. Seeds presented by Dr. Esmond Leplae, Director General of Agriculture. Received October 1, 1924.

Among the recent additions to the flora of the Belgian Congo is a leguminous tree whose seeds contain an oil promising both as an edible oil and for illumination. The tree is described (Bulletin Agricole du Congo Belge, March. 1923) as having an ultimate height of 100 feet, with finely cracked bark and handsome, bluish-green pinnate foliage. The kidney-shaped pods, about 8 inches long and 5 inches wide, contain reddish-brown seeds 1½ inches long. The oil obtained from these seeds is light brownish yellow, with a sweet, agreeable flavor resembling that of some types of oilve oil.

### 61775. Cornus controversa Hemsl. Cornaceæ. Giant dogwood.

From Jamaica Plain, Mass. Seeds collected by B. Y. Morrison, Bureau of Plant Industry. Received October 17, 1924.

This Chinese dogwood is one of the most striking of the genus: in its native home it sometimes becomes a tree 60 feet in height with a trunk 7 feet in girth. The numerous long branches extend at right angles to the trunk, with the lowest sometimes touching the ground. The white or slightly yellowish flowers are in flat clusters 6 or 7 inches in diameter, appearing from late May to early June. The black shining fruits which follow are eaten by the birds as fast as they ripen.

### 61776 and 61777.

From Nairobi, Kenya Colony, Africa. Seeds presented by S. Battiscombe, conservator of forests, Forest Department. Received October 17, 1924.

61776. BRACHYLAENA HUTCHINSII Hutchinson. Asteraceæ.

The hard, white timber of this tall East African tree is durable, easily worked, and not subject to attack by termites. In height the tree reaches 90 to 100 feet; the branches are upright and are confined to the upper fourth of the trunk.

### 61776 and 61777-Continued.

61777. OLEA CHRYSOPHYLLA Lam. Olea-

A small East African relative of the cultivated olive: its chief ornamental value lies in the golden color of the under surfaces of the leaves.

61778. AGATI GRANDIFLORA (L.) Desv. (Sesbania grandiflora Poir.). Fabaceæ.

From Summit, Canal Zone. Seeds presented by Holger Johansen, Plant Introduction Garden. Received October 17, 1924.

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 native. The leaves and young shoots are sometimes used as fodder.

For previous introduction see S. P. I. No. 57079.

61779. Rubus sp. Rosaceæ.

#### Blackberry.

From Kew, England. Seeds presented by Dr. J. Burtt Davy, Royal Botanic Gardens. Received November 5, 1924.

Selected Dartmoor (Devonshire) blackberries. The berries are large, full, and of exceptionally good flavor. Found growing wild in a hedge at Bag Tor, Ilsington, South Devon, at 800 feet altitude. (Burtt Dary.)

61780 and 61781. SOLANUM spp. Solanaceæ.

From Wolverhampton, England, Tubers presented by F. W. Keay, Received October 24, 1924.

Of possible value for breeding purposes.

61780. SOLANUM Sp.

A seedling of unknown parentage.

61781. Solanum demissum  $\times$  tuberosum. Potato.

### 61782 to 61785.

From Argentina. Seeds presented by A. K. Bulley, Ness, Neston, England. Received October 1, 1924.

These seeds were sent to Mr. Bulley by W. T. Goethe, who collected them while in Argentina.

61782 to 61784. BERBERIS spp. Berberidaceæ. Barberry.

61782. BERBERIS Sp.

No. 191. A yellow-flowered evergreen shrub. (Goethe.)

61783. BERBERIS sp.

No. 242.

61784. BERBERIS Sp.

No. 271. Large fruits, of good color. (Goethe.)

61785. Nothofagus betuloides (Mirb.) Oerst. Fagaceæ.

Oerst. Fagaceæ.

No. 62. One of the principal trees which make up the dense, dark forests of Tierra del Fuego is this evergreen species, according to the Gardeners' Chronicle (ser. 3, vol. 33). In favorable localities it becomes very large. It is closely related to the beech (Fagus spp.), but has small evergreen leaves.

#### 61786 to 61793.

From Ness, Neston, England. Seeds presented by A. K. Bulley. Received October 1, 1924.

**61786.**  $\times$  Geum borisii Kellerer. Rosaceæ.

According to a note in the Allgemeine Botanische Zeitschrift (vol. 12, p. 91) this interesting hybrid is the result of a cross between *Geum reptans* L. and G. bulgaricum Panc. It was discovered by J. Kellerer on Mount Rilo, Bulgaria, and has pendent, yellow flowers.

61787. MECONOPSIS PSEUDOINTEGRIFOLIA Prain, Papaveracce.

A stemless hairy plant from southwestern Tibet, China, with narrow leaves and one-flowered scapes; the flowers are bright yellow and up to 3 inches in diameter.

For previous introduction see S. P. I. No. 55302.

61788. MECONOPSIS SINUATA Prain. Papaveraceæ.

Var. latifolia. A horticultural form which is generally similar to Meconopsis aculeata, but the leaves are less lobed, and the stigma is deep pink or orange rather than green. The plant is 1 to 4 feet high, with spreading prickles, oblong leaves about 6 inches long, and blue flowers. Native to the Himalayas.

61789 to 61792. PRIMULA spp. Primulaceæ.

61789. PRIMULA CHIONANTHA Balf. and Forr. Primrose.

Many interesting and attractive primroses have been found in Yunnan, China; the one here considered was found in that province by G. Forrest, who collected it on the Chungtien Plateau at an altitude of 13.000 feet. It is described in Curtis's Botanical Magazine (pl. 8816) as a stout herbaceous plant 1 to 2 feet high, with blunt, narrowly oval leaves, sulphur mealy beneath, and clusters of white flowers borne in a many-flowered umbel at the apex of a stout scape. It appears to thrive best in rich, moist soil and has proved perfectly hardy at Kew, England.

### 61790. PRIMULA COCKBURNIANA Hemsl. Primrose.

A glabrous primrose from western China, with membranous, oblong leaves and yellow flowers borne on a slender scape a foot or more in height.

61791. PRIMULA INVOLUCRATA Wall. Primrose.

A Himalayan primrose with leathery, oval leaves and a long, slender scape bearing many-flowered umbels of white flowers.

61792. PRIMULA Sp. Primrose.

Red Hugh. A hybrid of Primula becsiana. (Bulley.)

61798. ROSCOEA CAUTLEOIDES Gagn. Zinziberaceæ.

A perennial herbaceous, gingerlike plant, 9 to 12 inches high, native to China, with thick, fleshy roots, irislike leaves, and primrose-yellow flowers borne on many-flowered scapes.

### 61794. Ribes sp. Grossulariaceæ. Gooseberry.

From Vineland Station, Ontario, Canada. Plants presented by James A. Neilson, Horticultural Experiment Station. Received November 7, 1924.

Celved November 1, 1924.

Clark. This variety was found in the garden of Jabez Clark, of Burlington. Ontario. It is believed to be a chance hybrid between the American and European species. This variety has been growing at the Horticultural Experiment Station since 1911 and is the only variety that survived on our very heavy clay soil. The bush is a vigorous grower and retains its foliage late in the season. It yields heavily and bears large fruits of good quality and appearance. The plants appear to be drought resistant. We consider this variety one of the best for commercial culture in this district. (G. H. Dikson, Vineland Station.)

### 61795 and 61796.

From Dar es Salaam, Tanganyika Terri-tory, Africa. Seeds presented by the director. Department of Agriculture. Received October 21, 1924.

61795. CRYPTOSTEGIA GRANDIFLORA R. Br. Asclepiadaceæ. Palay rubber.

An erect, woody climber of unknown nativity but now cultivated in many places in the Tropics of both hemispheres places in the Tropics of both hemispheres as an ornamental, and occasionally growing as an escape from cultivation. The flowers, reddish purple becoming pale pink, are about 2 inches across and are produced in short spreading cymes. In India the plant is called palay; it is cultivated for the rubber obtained from the judge.

For previous introduction see S. P. I. No. 58851.

61796. Ficus volkensii Warb. Moraceæ.

This tropical African representative of the genus is a shrub or small tree with narrow, papery leaves.

#### 61797 and 61798. ACACIA spp. Mimo-Hybrid acacia. saceæ.

From Mandelieu, near Cannes, Alpes Maritimes, France. Seeds presented by A. Richon. Received October 23, 1924. Notes by Mr. Richon.

61797. ACACIA BAILEYANA X DEALBATA.

The hybrids of these species bear very on spikes of well-colored flowers. They resemble Acacia dealbata in being hardy, but, unlike that species, the leaflets do not fold up in the evening. Some develop root suckers; others do not.

61798. ACACIA sp.

Bon Accueil. This is a chance hybrid, perhaps between Acacia decurrens and A, dealbata. I consider it one of the most beautiful acacias grown on the Riviera. The flower clusters have up to 40 heads, larger than the best varieties of A. dealbata; they are beautifully grouped at the ends of the branches. The leaves are bright green with long, very fine leaflets. The tree is vigorous and about 20 feet high, but a little less hardy than A. dealbata. A. dealbata.

### 61799 and 61800.

From Africa. Seeds collected by H. L. Shantz, Bureau of Plant Industry. Received October 24, 1924. Notes by Doctor Shantz.

61799. Hypericophyllum sp. Asteraceæ.

No. 217. Above Inhamica, Tanganyika Territory. April 21, 1924. A bright, reddish orange composite.

61800. PAHUDIA QUANZENSIS (Welw.) Prain. (Afzelia quanzensis Welw.). Cæsalpiniaceæ.

No. 483. Beira, Portuguese East Africa. No. 483. Bella, Fortuguese East Africa. May 24, 1924. A broad, spreading tree, with very rich pinnate foliage, regarded as one of the most beautiful trees for street planting and for parks. It produces beautiful wood, mahoganylike, but of much coarser grain.

For previous introduction see S. P. I. No. 49310.

61801. Oxalis incarnata L. Oxalidaceæ.

Algiers, Algeria. Bulbs presented by L. Trabut. Received October 25, From Algiers, Algeria.

A very attractive, low, bulbous plant, with reddish-purple leaves, dotted beneath, and bell-shaped flesh-colored flowers. Native to South Africa.

### 61802. Prunus sp. Amygdalaceæ.

From Siberia. Plants collected by Prof. N. E. Hansen, South Dakota State College, Brookings, S. Dak. Received October 25,

Of possible value as a stock.

61803. Actinidia venosa Rehder. Dilleniaceæ.

rom Elstree, Herts, England. Cuttings presented by Vicary Gibbs, Aldenham House, through David Fairchild. Bureau of Plant Industry. Received November 1, 1924. From Elstree,

A climbing shrubby plant from the moun-A climbing shrubby plant from the mountains of western Szechwan, China, which may prove an interesting ornamental. It is described (Plantae Wilsonianae, vol. 2) as being up to 25 feet in height, with oval, membranous leaves, short clusters of buffyellow flowers, and small, russet berries.

61804. Prunus cerasus L. Amygdala-Morello cherry.

From Dropmore, Manitoba. Canada. Seeds presented by F. L. Skinner. Received November 8, 1924.

From seedlings of the hardy Koslov-Morello cherry.

61805 to 61809. Soja max (L.) Piper (Glycine hispida Maxim.). Fabaceæ. Soy bean.

From Shaoling, Chekiang, China, Seeds presented by Rev. A. F. Ufford, American Baptist Foreign Mission Society, Re-ceived October 25, 1924.

61805. Black variety, A.

61806. Black variety, B.

61807. Green variety, A.

61808. Green variety, B.

61809. Two white varieties, mixed.

61810. Diospyros sabiensis Hiern. Di-Persimmon.

From Mount Silinda, Southern Rhodesia. Seeds presented by Dr. W. L. Thompson, American Board Mission. Received No-vember 10, 1924.

A wild persimmon from this region; the tree grows to a large size, 100 feet or more in height, and the fruit, which is very sweet and popular with the natives, is too small and full of seeds to be of much value. I have not yet tried this species as a stock for the larger fruited forms. (Thompson.)

#### 61811 to 61832.

From China. Seeds collected by P. H. Dorsett, agricultural explorer, Bureau of Plant Industry. Received November, 1924. Notes by Mr. Dorsett.

61811 to 61817, AMYGDALUS Spp. Amygdalaceæ.

61811 to 61816. Amygdalus persica L. (Prunus persica Stokes). Peach. Peach.

61811. No. 440. August 30, 1924.

61812. No. 474. September 2, 1924.

61813. No. 481. September 2, 1924.

61814. No. 497. September 4, 1924. 61815. No. 50. September 4, 1924.

61816. No. 514. September 6, 1924.

61817. Amygdalus persica platycarpa (Decaisne) Ricker. Flat peach.

No. 439. August 30, 1924. These are reported to have come from Tsinan, Shantung Province.

### 61818. ARACHIS HYPOGAEA L. Fabaceæ. Peanut.

No.  $754\frac{1}{2}$ . Peking. September 29, 1924. Purchased in the market; said to have come from the South; mostly two seeded.

61819 to 61826. MALUS spp. Malaceæ. Apple.

Seeds of domesticated apples; obtained in the Peking market.

61819. MALUS Sp.

No. 443. August 30, 1924.

61820. MALUS SD.

No. 444. August 30, 1924.

61821. MALUS Sp.

No. 445. August 30, 1924.

61822. MALUS Sp.

No. 475. September 2, 1924.

61823. MALUS sp.

No. 479. September 2, 1924.

61824. MALUS SD.

No. 480. September 2, 1924.

61825. MALUS sp.

No. 498. September 4, 1924.

61826. MALUS Sp.

No. 502. September 4, 1924.

61827. PRUNUS Sp. Amygdalaceæ. Plum.

No. 477. Peking. September 2, 1924. From fruits purchased in the market; may be useful as stock.

61811 to 61832—Continued.

61828 to 61832. Pyrus spp. Malaceæ.

61828. PYRUS Sp.

No. 496. September 4, 1924. Seeds from fruit taken from a tree in Mr. Strong's garden at the village of Mao-Chiotu, about 4 miles east of the east gate of the Peking wall. As an ornamental, with its abundance of small, bright-red fruits, it is very handsome.

61829. PYRUS Sp.

No. 703. September 19, 1924. Collected near the village of Liangchakou. This tree, which was loaded with small, bright-red fruits, may prove useful as an ornamental or for stock.

September 29, 61830 to 61832. Peking. sau to 61832. Peking. September 29, 1924. From the market. Small, wild pears said to be used in the western hills for stock. They are much larger than the wild Chinese pears we have seen.

61830. PYRUS sp.

No. 752.

61831. PYRUS sp.

No. 753.

61832. PYRUS Sp.

No. 754.

61833. Eucalyptus pauciflora Siebr. Myrtaceæ. White gum.

From Hobart, Tasmania. Seeds presented by L. A. Evans, Secretary of Agriculture, Agricultural and Stock Department. Received November 11, 1924.

The white gum, as this eucalypt is called in Australia, attains there a height of 100 feet and a diameter of about 4 feet. It grows well in swampy lowlands, and the timber is used for general building purposes.

### 61834 to 61852.

From China. Collected by P. H. Dorsett, agricultural explorer, Bureau of Plant Industry. Received November 21, 1924. Notes by Mr. Dorsett.

61834. Castanea sp. Fagaceæ. Cnestnut. No. 790. Fa Hua Ssu temple, Taitzu, Chihli. October 12, 1924. Seeds secured from trees growing on terraced, decomposed granite soil. These chestnuts are the largest and finest looking we have seen.

61835. Castanea sp. Fagaceæ. Chestnut. No. 791. Fa Hua Ssu temple, Taitzu, Chihli. October 12, 1924. Seeds. These chestnuts are the ordinary run of the crop and are of average size.

61836. CORYLUS sp. Betulaceæ. Hazel. No. 775. Shalingleang, Chihli. ber 10, 1924. Plants and scions.

61837 to 61842. DIOSPYROS KAKI Kaki. Diospyraceæ.

61837. No. 771. Tailuangyuan. October 8, 1924. Scions obtained from a tree, the best we have yet seen, growing in an orchard belonging to Sun Yu. In most cases this variety bears small crops.

61838. No. 838. No. 772. Tailuangyuan. October 8, 1924. Scions. This fruit, the quality of which is very good, is not more than one-half the size of the large Chinese persimmon.

### **61834 to 61852**—Continued.

61839. No. 782. Lungtzuting Valley. October 12, 1924. Scions from a tree growing in a large orchard of mixed fruits. Though a comparatively fruits. Though a comparatively young tree, perhaps 8 or 10 years old, this tree was full of fruit.

61840. No. 783. Lungtzuting Valley. October 12, 1924. Scions from a tree in a large orchard, the fruits of which are small and stender, reminding us very much of large acorns.

61841. No. 784. Lungtzuting Valley. October 12, 1924. Scions from young trees of what is supposed to be the "lantern" persimmon.

842. No. 785. Lungtzuting Valley. October 12, 1924. Scions from a per-simmon tree, the fruits of which are small and quite slender. 61842. No.

61843. IRIS sp. Iridaceæ.

No. 773. October 8, 1924. Plants of a wild iris collected along a rocky ter-race across the river from the Yung Lo [Ming] tomb.

61844. IRIS sp. Iridaceæ.

No. 774. October 8, 1924. Plants collected on the grounds around the Yung Lo [Ming] tomb.

Populus tomentosa Carr. Sali-Poplar. 61845. caceæ.

No. 786. October 12, 1924. Scions of a graceful poplar, the trunk of which is gray; collected along the river bank between Hungmentsun and Hsiachuang.

61846. PRUNUS Sp. Amygdalaceæ.
Cherry.

No. 781. Fa Hua Ssu temple, near the village of Haitzu, Chihli. October 11, 1924. Scions of a cherry having the appearance and habit of *Prunus pseudo*. cerasus.

61847 to 61850. PYRUS spp. Malaceæ. Pear.

Fa Hua Ssu temple, near Haitzu, Chihli. October 11, 1924. Scions introduced for trial as stock plants on which to graft cultivated varieties and for use in breeding types resistant to fire blight.

61847. PYRUS Sp.

No. 777. Called the "sugar pear" by the priest. A good-sized, russet pear covered with many small brown dots, containing a fair amount of juice, which is like sweetened water and is of poor flavor. The white flesh is crisp and gritty. This pear is reported to be one of the best keepers.

61848. PYRUS Sp.

No. 778. A fragrant pear, small and greenish yellow, covered with numerous small brown dots. The juice is like sweetened water and the white flesh is crisp, a little gritty, and slightly woody. The quality of this pear is poor, though better than the sugar pear [S. P. I. No. 61847].

61849. PYRUS Sp.

No. 779. A small to medium-sized pear, fragrant and dull greenish yellow, covered with many small brown dots. Flesh white, crisp, and gritty; juice watery and sweet.

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61834 to 61852—Continued.

61850. PYRUS Sp.

No. 780. Known as "Golden Handle." This pear is small to medium sized, creamy white, and covered with many small brown dots. The white flesh is gritty and coarse, and the sweet juice is only of fair quality. One of the most attractive of the five pears we photographed here, and we think this is the best pear seen here. is the best pear seen here.

61851. Rubus sp. Rosaceæ.

No. 776. Wanpochuan, Chihli. October 10, 1924. Plants.

Willow. 61852. SALIX sp. Salicaceæ.

No. 787. October 12, 1924. Cuttings of a quite common, upright growing wil-low, collected along a river between Hungmentsun and Hsiachuang.

61853. Rosa roulettii Correvon. Rosaceae. Rose.

From Chenebourg, near Geneva, Switzerland. Plants purchased from H. Correvon, Florage Nursery. Received November 15 1994 von, Floraire ber 15, 1924.

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

61854. Lilium sp. Liliaceæ. Lilv.

From Peking, China. Bulbs collected by P. H. Dorsett, agricultural explorer, Bu-reau of Plant Industry. Received No-vember 24, 1924.

No. 789. October 15, 1924. Procured in the market. (Dorsett.)

61855. Juglans regia L. Juglandaceæ.

From Algiers, Algeria. Seeds presented by Dr. L. Trabut. Received November 13, 1924.

These walnuts, which come from Aures, are of excellent quality. The trees are very vigorous, and this strain has been propagated from seeds by the natives for centuries. (Trabut.)

61856. Pyrus sp. Malaceæ, Pear.

From Dropmore, Manitoba, Canada. Plants presented by F. L. Skinner. Received November 4, 1924.

Tait's No. 1. Introduced for pear-breeding experiments.

61857 to 61860. TRITICUM AESTIVUM L. (T. vulgare Vill.). Poaceæ.

Common wheat.

From Maison Carree, Algeria. Seeds presented by the governor general, institute of agriculture. Received November 20, 1924.

61857. No. 1. Soudan.

61858. No. 6. Soudan.

61859. No. 11. Djeghloul.

61860. No. 87. Bahatane.

#### 61861 to 61879. Triticum durum Desf. Poaceæ. Durum wheat.

From Rabat, Morocco. Seeds presented by the Station de Sélection et D'Essai de Semences, Rabat, through J. H. Martin. Bureau of Plant Industry. Received No-vember 20, 1924.

61871. No. 120. 61861. No. 6. 61872. No. 140. 61862. No. 8. 61863, No. 14. 61873. No. 156. 61864. No. 16. 61874. No. 181. 61875. No. 182. 61865. No. 20. 61876. No. 184. 61866, No. 22. 61867. No. 24. 61877. No. 185. 61868. No. 46. 61878. No. 196. 61869. No. 88. 61879, No. 198. 61870. No. 110.

### 61880. Acacia sp. Mimosaceæ.

From Old Umtali, Rhodesia, Africa. Seeds presented by E. H. Greeley. Received November 21, 1924. Seeds

A flowering tree, 20 feet high, with hand-some foliage, and clusters of long, white, sweet-scented flowers. (*Greeley*.)

### 61881. Quercus sp. Fagaceæ.

From Chihli Province, China. Seeds collected by P. H. Dorsett, agricultural explorer, Bureau of Plant Industry. Received November 24, 1924.

No. 788. October 8, 1924. Acorns from a broad-leaved oak growing near the Yung Lo [Ming] tomb. (Dorsett.)

#### 61882. ERIOBOTRYA JAPONICA (Thunb.) Lindl. Malaceæ. Loguat.

From Babson Park, Fla. Plants presented by W. D. Carrier, Polk County Avocado Nurseries. Received November 28, 1924.

A seedling loquat, of excellent quality, from a fine old tree grown in Putnam County, Fla. This tree has survived freezes since 1894, and produces large quantities of excellent fruits. (Carrier.)

### 61883 and 61884.

From Peking, China. Tubers collected by P. H. Dorsett, agricultural explorer, Bu-reau of Plant Industry. Received No-vember 26, 1924. Notes by Mr. Dorsett.

61883. COLOCASIA sp. Araceæ.

No. 794. October 17, 1924. The smallest dasheen tubers we have ever seen offered for sale, obtained from the Morrison Street Market.

61884. SAGITTARIA SAGITTIFOLIA L. Alismaceæ. Arrowhead.

No. 795. October 17, 1924. Chinese name Tzu Ku. Obtained from the market. These are very good cooked and served with a sweet sauce.

### 61885 to 61892.

From the island of Chiloe, Chile. Collected by Elbert E. Reed, Instituto Agrícola Bunster. Received November 19, 1924.

The island of Chiloe, which lies off the coast of Chile in latitude 42° S., is a region little known horticulturally. It is reputed to be the home of wild forms of

the true potato, as well as of Fragaria chiloensis, the frutilla or Chilean strawberry, which is cultivated in several parts of the Andean region. This berry, which was carried to Europe from Concepcion, Chile. in 1712, has played an important part in the development, through crossing, of the cultivated strawberries of the present day. ent day.

In order to procure from Chiloe material for the use of North American plant breeders, actively engaged in the improvement of poactively engaged in the improvement of po-tatoes and strawberries, the Department of Agriculture arranged with Elbert Reed, horticulturist of the Instituto Agricola Bunster at Angol, Chile, to visit the island. Mr. Reed has sent in the following collec-tion together with his notes:

61885. FRAGARIA sp. Rosaceæ.
Strawberry.

Plants of a wild strawberry from sand banks more or less 100 feet high, near

61886 to 61892, Solanum spp. Solanaceæ. Wild potato.

61886 and 61887. Tubers raised from wild potato seeds by Señor Vera, wild potato seeds by of Quilan, near Cucao.

61886. SOLANUM Sp.

hybrid between the wild and Quilian varieties.

61887. SOLANUM Sp.

A wild variety.

61888. SOLANUM sp.

From a patch of ground adjoining e beach at Alpua, about 15 miles south of Cucao.

61889. SOLANUM Sp.

Presented by Sr. Everardo Werner, of Puntra. Senor Werner discovered these wild potato plants in the region called Cucao, on the west coast of Chiloe, about six years ago, while searching with a large party for the passen gers of a wrecked ship. He has cultivated these plants ever since.

61890 to 61892. Progeny of the wild potato, brought from Cucao by Señor Werner, showing a very distinct variation in the seedlings from the wild pistillate parent, both in the tuber and in the plants. It here loses all semblance to the wild type and appears like the ordinary cultivated potato. Señor Werner says that all three colors—red, white, and yellow—came from the seeds of one plant. plant.

61890. SOLANUM Sp. White strain. 61891. SOLANUM sp. Yellow strain.

61892. SOLANUM Sp. Red strain.

61893. Gossypium sp. Malvaceæ.

Cotton.

Constantza, Rumania. Seeds Richard B. Haven, American vice consul. Received December 1, 1924.

Turkish cotton which matured at Dobrodja, Rumania, where the growing season is 100 to 150 days long and usually very warm. (Haven.)

### 61894 and 61895. DIOSPYROS KAKI L. f. |

From Hanauho, Chihli, China. Scions collected by P. H. Dorsett, agricultural explorer. Bureau of Plant Industry. Received November 29, 1924. Notes by Mr. Dorsett.

61894. No. 797. October 21, 1924. Scions obtained from a young tree known here as the "Lantern persimmon." This tree was found growing in the same orchard from which the large Chinese persimmon, Nos. 771 and 798 [S. P. I. Nos. 61837 and 61895] was obtained. If giqdled, this tree produces very good and sometimes heavy crops, otherwise it appears to be sly in fruiting. Though small, the fruits are attractive. are attractive.

61895. No. 798. October 21, 1924. A large Chinese persimmon from one of the best trees in the orchard. The land on which this orchard is located is composed of sandy loam and is of your good texture. very good texture.

### 61896 to 61898.

From Peking, China. Collected by P. H. Dorsett, agricultural explorer, Bureau of Plant Industry. Received December 8, 1924. Notes by Mr. Dorsett.

61896. HELIANTHUS TUBEROSUS L. Asteracea. Jerusalem artichoke.

No. 1046. October 26, 1924. Tubers. The Chinese name is *Ti Kua*, meaning "ground gourd." These small tubers are mostly used in making pickles or are eaten raw.

61897. STACHYS SIEBOLDI Miquel. Men-Chorogi. thacem

No. 1047. October 26, 1924. Tubers. The Chinese name is Wai Kuo Chiang, meaning "foreign ginger." The tubers are of average size.

61898. Zinziber officinale Roscoe. Zin-Ginger. ziberaceæ.

No. 1050. October 27, 1924. Ginger roots purchased in the market. These had been shipped in from Fu Chen. It is reported that this is the best type of Chinese ginger.

61899. Lansium domesticum Jack. Langsat. Meliaceæ.

From Manila, Philippine Islands. Seeds presented by Adn. Hernandez, director, Bureau of Agriculture. Received Decem-ber 8, 1924.

The langsat or lanzon is reckoned one of the best fruits of the Malayan region.

The tree reaches 40 feet in height and has pinnate leaves composed of five to seven elliptic leaflets each 4 to 8 inches long. The fruit varies in form and character, but is generally oval or round, 1 to 2 inches in diameter, velvety and straw colored, with a thick leathery skin inclosing five segments of white, translucent, juicy, aromatic flesh, and one to three large seeds.

Seeds.

Two distinct kinds are known, one termed langsat and the other duku or doedoe. Choice seedling forms occur in both, and should be propagated by some vegetative

For previous introduction see S. P. I. No. 58382.

### 61900 to 61902.

From Kobe, Japan. Seeds collected by P. H. Dorsett, agricultural explorer, Bureau of Plant Industry. Received November 8, 1924. Notes by Mr. Dorsett.

CITRULLUS VULGARIS Schrad. Cu-pitaceæ. Watermelon. curbitaceæ.

No. 214. August 9. 1924. A water-melon of average size obtained from the market. The red flesh is of very good quality.

61901 and 61902. CUCUMIS MELO L. curbitaceæ. Melon.

1901. No. 212. August 9, 1924. A greenish yellow melon about 3 inches in diameter and 6 inches in length. The flesh, which is white and not very thick, is of fair quality. 61901. No. 212.

902. No. 213. August 9, 1924. A small, lemon-yellow melon, which is very fragrant; purchased in the market. The flesh is white, crisp, and of very good quality.

#### 61903 to 61914.

From China. Seeds collected by P. H. Dor-sett, agricultural explorer, Bureau of sett, agricultural explorer, Bureau of Plant Industry. Received November, 1924. Notes by Mr. Dorsett.

61903. Aristolochia sp. Aristolochiaceæ.

No. 716. Tanchientzu. September 21, 1924. Collected along the trail.

61904. Begonia evansiana Andrews. Begoniaceæ.

No. 651. Heichunghuan. September 17, 1924. A wild begonia with pink flowers; collected on the river bank.

61905. BENINCASA HISPIDA (Thunb.) Cogn. Cucurbitaceæ. Wax gourd. Cucarbitaceæ.

No. 319. Shanghai. August 16, 1924. A large gourd used in Shanghai as a vegetable and sold in the market in large quantities.

61906. BERBERIS POIRETI C. Schneid. Barberry.

No. 705. Liangshalou. September 19. 1924. This barberry has small leaves and small, bright-red berries.

61907 and 61908, CAPSICUM ANNUUM L. Solanaceæ. Red pepper. Solanaceæ,

61907. No. 495. September 3, 1924. Collected at Loutzuchang, about 4 or 5 miles east of Peking.

61908. No. 499. Peking. September 4, 1924. Purchased in the market. These bright-red peppers are of good size and much corrugated. They are used for seasoning.

61909 to 61913. CITRULLUS VULGARIS Schrad. Cucurbitacem. Watermelon. Schrad. Cucurbitaceæ.

909. No. 471. Peking. August 30, 1924. A very dark-green water-melon, weighing 22 pounds, with yellow flesh, which is sweet and of good flavor.

61910. No. 472. Peking. August 30, 1924. Purchased in the market. A watermelon striped light and dark green, weighing 14 pounds. The flesh is yellow, juicy, and sweet.

### 61903 to 61914—Continued.

- 61911. No. 473. Peking. September 1, 1924. Brought from the market by Peter Lin. This watermelon, weighing 19½ pounds, has a light-green rind and white juicy sweet flesh of good quality.
- 61912. No. 507. Peking. September 4, 1924. A long light-green watermelon, 15 pounds in weight with light-yellow flesh of fair quality.
- 61913. No. 508. Peking. September 4, 1924. A small, oval watermelon, weighing 11 pounds, with a lightgreen rind and bright-red flesh.

### 61914. CUCUMIS MELO L. Cucurbitaceæ. Melon,

No. 601. Shihmen, Chihli. September 11, 1924. A small green melon with white flesh which is crisp and of fair flavor.

### 61915. CUCURBITA MOSCHATA Duchesne. Cucurbitaceæ. Cushaw.

From Kobe, Japan. Seeds collected by P. H. Dorsett, agricultural explorer, Bureau of Plant Industry. Received November 8, 1924.

No. 215. August 9, 1924. From the market. A good-looking squash, the outside being a deep russet brown and the flesh a deep golden yellow. (Dorsett.)

### 61916 to 61971.

- From China. Seeds and tubers collected by P. H. Dorsett, agricultural explorer, Bureau of Plant Industry. Received November, 1924. Notes by Mr. Dorsett.
  - 61916 and 61917. CUCURBITA MOSCHATA Duchesne. Cucurbitaceæ. Cushaw.
    - 61916. No. 320. Shanghai. August 16, 1924. A russet-brown, long-necked squash with thick, deep-orange flesh.
    - 61917. No. 322. Shanghai. August 16, 1924. A large, crook-necked squash from the market. The rind is smooth and of terra-cotta color; the flesh is deep orange.

### 61918. CUCURBITA PEPO L. Cucurbitaceæ. Pumpkin.

No. 321. Shanghai. August 16, 1924. This rather small, oval fruit, obtained in the market, is 6 to 9 inches long and has a creamy yellow rind and yellow flesh.

- 61919 and 61920. DELPHINIUM GRANDI-FLORUM L. Ranunculaceæ. Larkspur.
  - 61919. No. 696. September 19, 1924. Seeds of a very attractive, deep-blue larkspur, collected at the Temple of the Three Saints, located on one of the ranges of the Western Hills, between Chianglou and Liangchakou.
  - 61920. No. 704. September 19, 1924. A hardy larkspur with large heads of deep-purple flowers borne on spikes sometimes 12 inches or more in length, found quite abundantly on the eastern slope of the range of mountains near the village of Liangchakou.

## 61921. DIOSCOREA sp. Dioscoreaceæ.

No. 492. September 3, 1924. From Loutzuchang, which is 4 or 5 miles east of Peking. These aerial tubers were obtained from vines about 15 feet in length.

### 61916 to 61971—Continued.

61922. GLEDITSIA HETEROPHYLLA Bunge. Cæsalpiniaceæ. Honey locust.

No. 653. Tungchuangtzu. September 17, 1924. This shrubby plant, 6 to 15 feet in height, was found on a gravelly river bank. The leaves are small, and the broad seed pods, when ripe, and the rather large, flat seeds are mahogany brown.

61923. IRIS DICHOTOMA Pall. Iridaceæ.

No. 650. Heilungkuan. September 17, 1924. A wild iris from rocky cliffs on the north side of the mountain about a day's journey from Toli.

61924. LONICERA sp. Caprifoliaceæ.

Honeysuckle.

No. 701. September 19, 1924. This shrub, bearing small, round, bright-red berries, was found on the east slope of the mountain near Liangchakou.

61925. Malus sp. Malaceæ. Apple.

No. 478. Peking. September 2, 1924. These fruits, resembling crab apples, were purchased in the market: they are rather seedy. small, round, and creamy white; the flesh is pure white, crisp, and juley, containing just enough acid to be pleasant. May prove of value to apple breeders

- 61926 to 61936, Phaseolus spp. Faba-
  - 61926 to 62929. PHASEOLUS ANGULARIS (Willd.) W. F. Wight. Adsuki bean.
    - 61926, No. 603. Shihmen, Chihli, September 11, 1924. A small, black and gray bean, with a distinct white eye, from a field near the railway station.
    - 61927. No. 672. September 18, 1924. From Precious Spring or Water Mountain, about half a day's journey from Hungmeichang. The plants are fairly vigorous, growing 18 to 24 inches high, and the seeds are a dirty creamy white.
    - 61928. No. 702. September 19, 1924. Collected near the village of Chianglou, en route to Liangchakou; creamy white beans from the steep mountain side.
    - 61929. No. 707. Liangchakou. September 19, 1924. This small red bean appears to be planted wherever we have been.
  - 61930 to 61934. PHASEOLUS AUREUS ROXD. Mung bean,
    - 61930, No. 605. Shehmen, Chihli. September 11, 1924. A small, green bean, collected in a field near the railway station. Used commonly as a green vegetable and for sprouting. It appears to do well in any kind of soil.
    - 61931. No. 616. September 16. 1924. Small, brown beans growing in sandy loam just across the river from Toli, Chihli. The plants are about 2 feet in height and are quite vigorous.
    - 61932. No. 617. September 16, 1924. Yellow beans collected across the river from Toli, Chihli. The plants are about 18 inches high and fairly vigorous.

### 61916 to 61971—Continued.

- 61933. No. 618. September 16, 1924. Green beans collected across the river from Toli, Chihli.
- 61934. No. 619. September 16, 1924. Black beans collected across the river from Toli, Chihli.
- 61935 and 61936. PHASEOLUS VULGARIS L. Common bean.
  - 61935. No. 710. Liangchakou, Chihli. September 19, 1924. Red beans.
  - 61936. No. 711. Liangchakou, Chihli, September 19, 1924. White beans.
- 61937. Physalis sp. Solanaceæ. Ground cherry.

No. 699. September 19, 1924. Pinkish yellow husk tomato collected near the village of Taanshan. May prove of value to plant breeders.

61938. PTEROCARYA STENOPTERA DC. Juglandaceæ. Chinese wingnut.

No. 295½. Shanghai. August 15, 1924. Collected from the Bubbling Well cemetery, a short distance from the grave of Frank N. Meyer. The long, pendulous catkins make this tree quite attractive.

61939. RHAMNUS GLOBOSA Bunge. Rhamnaceæ. Buckthorn.

No. 697. September 19, 1924. From the west side of one of the ranges of the Western Hills, opposite the village of Chianglou. This shrubby, thorny plant, which may be ornamental and may also prove to be a good hedge plant, was found growing in very exposed places.

- 61940 to 61952. Soja Max (L.) Piper (Glycine hispida Maxim.). Fabaceæ. Soy bean.
  - 61940 to 61943. Peking. September 4, 1924. From plants growing in the Peking Botanical Garden.
    - 61940. No. 503. Originally from Chelin. The plants are 2 feet or more high and quite vigorous.
    - 61941. No. 504. Large, green soy beans from vines about 3 feet in height.
    - 61942. No. 505. Originally from Shansi. Large, green soy beans from vines about 3 feet in height.
    - 61943. No. 506. Originally from Japan. These soy beans are large and green; the vines are about 3 feet high.
  - 61944. No. 568. September 9, 1924. an almost round, creamy yellow soy bean collected between Anshan and Kepo, Chihli, 75 to 100 miles east of Peking.
  - 61945. No. 569. September 9, 1924. Collected between Anshan and Kepo, Chihli. A creamy soy bean somewhat larger than No. 568 [S. P. I. No. 61944].
  - 61946. No. 570. September 9, 1924. Brown soy beans mottled with black, collected between Kepo and Wankuankechuang. Not nearly so common as the creamy yellow type, No. 568 [S. P. I. No. 61944].
  - 61947. No. 586. September 10, 1924. An almost round, creamy yellow soy bean, with a brown eye, collected between Kepo and Toukoankechuan.

### 61916 to 61971—Continued.

- 61948. No. 587. September 10, 1924. Brown and black striped soy beans, collected between Toukoankechuan and Kepo, Chibhi.
- 61949. No. 604. Shibmen, Chihli. September 11, 1924. This black-seeded soy bean, from a field near the railway station is only seen occasionally.
- 61950. No. 606. Shihmen, Chihli. September 11, 1924. This soy bean, mottled black and brown, is from a field near the railway station.
- 61951. No. 708. Liangchakou, Chihli. September 19, 1924. Seeds of a soy bean, rather small, oval, and creamy white, from strong, vigorous vines.
- 61952. No. 718. Mentoukou. September 21, 1924. From a very rocky area.
- 61953. SOLANUM MELONGENA L. Solanaceæ. Eggplant.

No. 509. Peking. September 4, 1924. An attractive eggplant 5 inches in diameter and 4 inches in length.

61954. SPIRAEA DASYANTHA Bunge. Rosaceæ. Spirea.

No. 670. September 19, 1924. A very free-flowering, rather dwarf plant found growing on Precious Spring or Water Mountain, Chibli.

61955. VIBURNUM sp. Caprifoliaceæ.

No. 700. September 19, 1924. A shrub growing on the mountain side, near Liangchakou. The seed berries or fruits occur two or three in a cluster and are at first red, changing to black when ripe.

61956 to 61958. VIGNA SESQUIPEDALIS (L.) Fruwirth. Fabaceæ. Yard Long bean.

Liangchakou, Chihli. September 21, 1924. Collected in a field.

61956. No. 728. Light buff.

61957. No. 728 a. Black.

61958. No. 728 b. Reddish brown,

- 61959 to 61965. VIGNA SINENSIS (Torner) Savi. Fabaceæ. Cowpea.
- 61959. No. 588. Near Kepo, Chihli. September 10, 1924. A creamy white cowpea with a purple eye.
- 61960. No. 591. Toukoankechuan, Chihli, September 10, 1924. Cowpeas tinged with greenish pink.
- 61961. No. 602. Shihmen, Chihli, September 11, 1924. A red-seeded cowpea collected in a field near the railway station.
- 61962. No. 607. Shihmen, Chihli. September 11, 1924. Cowpeas speckled dirty gray and reddish brown, collected near the railway station.
- 61963. No. 620. September 16, 1924. Purple-eyed, white cowpeas collected in a river bottom field between Toli and Koutoutsun, Chihli.
- 61964. No. 621. September 16, 1924. Red cowpeas from a river bottom field between Toli and Koutoutsun, Chihli.
- 61965. No. 622. Toli, Chihli. September 16, 1924. Pink or brick-red cowpeas from a gravelly clay hill.

### **61916 to 61971**—Continued.

61966 to 61970, ZEA MAYS L. Poaceæ.

- 61966. No. 571. September 9, 1924. Obtained from the fields between Anshan and Kepo, Chihli. One of the representatives of the average corn of this section.
- 61967. No. 589. Talitientzu. September 10, 1924. Collected in a field. One of the representatives of the average corn of this section.
- 61968. No. 675. September 18, 1924. Collected near the village of Taanshan.
- 61969. No. 676. September 18, 1924. Collected near Hungmeichang. This corn is the vellow flint and has one ear to the stalk. It is evident that corn is one of the most important crops in this mountain country.
- 61970, No. 709. Liangchakou, Chihli, September 19, 1924. One of the representatives of the average corn of this section.
- 61971. Zinnia Multiflora L. Asteraceæ. No. 654. September 17, 1924. Collected between Shatsui and Kanho. This rather attractive plant, with terra cortacolored flowers, appears to be indigenous, May prove of value to plant breeders.

### 61972 to 61996.

- From Elstree, Herts, England. Seeds presented by Hon. Vicary Gibbs, Aldenham House, through David Fairchild, Bureau of Plant Industry. Received November 12, 1924. Notes by Doctor Fairchild.
  - 61972. Aronia arbutifolia (L.) Pers. (Pyrus arbutifolia L. f.). Malaceæ. Red chokeberry.
  - No. 12. Var. grandiflora, A large-flowered form with delicate pink, almost translucent fruits.
  - 61973. Berberis Brachypoda Maxim. Berberidaceæ. Barberry.
  - Nos. 1 and 2. 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 long.

For previous introduction see S. P. I. No. 58097.

- 61974. BERBERIS GAGNEPAINI C. Schneid. Berberidaceæ. Barberry.
- No. 3. An evergreen Chinese shrub 3 to 6 feet high, with leathery leaves, spiny on the margins, and delicate yellow flowers on red pedicels. The ellipsoid berries are dark purple.

For previous introduction see S. P. I. No. 58138.

- 61975. CORIARIA TERMINALIS Hemsl. Coriariaceæ.
- No. 4. A handsome shrub of very graceful habit, with translucent golden yellow fruits which hang in long racemes from the twigs.
- 61976. COTONEASTER FRIGIDA Wall. Malaceæ.
- No. 6. Var. vicarii. A variety named after Mr. Gibbs, with small, very brilliant red fruits: one of the handsomest of the genus.

For previous introduction see S. P. I. No. 56450.

#### 61972 to 61996—Continued.

- 61977. COTONEASTER SALICIFOLIA RUGOSA (E. Pritz.) Rehd, and Wils. Mala-
- No. 5. A willow-leaved cotoneaster of very distinctive appearance with bright-scarlet fruits of small size and delicate appearance.
- For previous introduction see S. P. I. No. 58610.
- 61978. CRATAEGUS OXYACANTHA L. Malacear. English hawthorn.
- No. 7. Var. gireoudi. A remarkable variegated variety which Mr. Gibbs has proved will come true to seed.
- 61979. DIPTERONIA SINENSIS Oliver. Aceraceæ.
- No. 8. A monotypic genus from China closely related to the maples. An attractive tree with conspicuous papery winged fruits borne in the autumn. It reminds one somewhat of the bladder-nut tree (Ptelea trifoliata).
- 61980 to 61982. EUONYMUS spp. Celastraceæ.
  - 61980. EUONYMUS EUROPAEUS L. Spindle tree.
  - No. 9. Var. aldenhamensis. A beautiful variety selected by Mr. Gibbs and named in honor of his estate. The delicate pink color of its fruit is particularly attractive.
  - 61981. EUONYMUS HAMILTONIANUS Wall.
  - No. 11. A large Himalayan shrub which under favorable circumstances becomes a moderate-sized tree, 30 to 35 feet high, with a short, straight trunk 4 to 5 feet in girth. The clusters of 15 to 20 greenish-white flowers are followed by yellow capsules, the seeds of which are entirely surrounded by a scarlet aril. The fruit ripens from August onward. The leaves are brilliantly colored in autumn.

For previous introduction see S. P. I. No. 57281.

- 61982. EUONYMUS YEDOENSIS Koehne. Yeddo euonymus.
- No. 10. A particularly attractive species from Japan with more than usually beautiful pink fruits.

For previous introduction see S. P. I. No. 53702.

- 61983. MALUS THEIFERA Rehder. Malaceæ. Tea crab.
- No. 19. A small, stiff-branched tree, native to China, which bears fragrant white flowers and globose, yellow fruits with red cheeks.

For previous introduction see S. P. I. No. 54091.

- 61984. PSEDERA HIMALAYANA (Royle) C. Schneid. Vitaceæ.
- No. 27. Var. rubrifolia. A semiwoody, Himalayan climber, with handsome trifoliate leaves which become brilliant red in autumn.
- 61985. PYRUS SALICIFOLIA Pall. Malaceæ.
- No. 15. Var. nendula. An ornamental, pendulous variety of the willow-leaved pear, which is a small, often spiny tree, native to Asia Minor, with corymbs of white flowers and round, yellowish green fruits.

#### 61972 to 61996—Continued.

61986. Rosa davidi Credin. Rosaceæ.

No. 20. A pink-flowered, orange-fruited rose 3 to 18 feet high, native to western Szechwan, China, at altitudes of 4,000 to 9,000 feet. It is the nearest Chinese relative of Rosa macrophyila of the western Himalayas.

For previous introduction see S. P. I. No. 58617.

61987 to 61992. SORBUS spp. Malaceæ.

61987. Sorbus aria  $\times$  aucuparia.

No. 14. A hybrid bearing unusually large and attractive bright-red fruits.

61988 and 61989. SORBUS AUCUPARIA L. (Pyrus aucuparia Ehrh.)

European mountain ash. 61988. Var. conradinae.

No. 13. One of the Chinese forms which may prove unusually hardy. The berries are small but very bright red.

61989. Var. subarachnoidea.

No. 28. A variety with waxy white berries which stand out in striking contrast to the green leaves; this is rare even in England.

61990. SORBUS FOLGNERI (C. Schneid.) Rehder (*Pyrus folgneri* Léveillé).

No. 16. A handsome Chinese tree, with gracefully spreading branches and oval leaves, dark green above and white-hairy beneath. The ovoid, red berries are about half an inch long.

61991. SORBUS SCALARIS Koehne.

No. 17. A large shrub, one of E. H. Wilson's introductions from China. The tiny red fruits on long delicate peduncles are very attractive.

61992. SORBUS VILMORINI C. Schneid.

No. 18. A handsome shrub from Yunnan, China. The graceful, finely cut foliage, white or somewhat pinkish flowers, and bright, translucent, rosy-red fruits make an attractive ornamental.

61993. STRANVAESIA DAVIDIANA UNDULATA (Decaisne) Rehd. and Wils. Malaceæ.

No. 22. 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 S. P. I. No. 58621.

61994. STYRAX DASYANTHUM Perkins. Styracaceæ. Snowbell.

No. 23. A deciduous shrub or small tree, native to central China, with broadly oval or obovate, pointed leaves 2 to 4 inches in length, and white flowers, one-half to three-fourths of an inch long, produced during July in slender terminal racemes. It has proved hardy in the vicinity of London, England.

61995. VIBURNUM OVATIFOLIUM Rehder. Caprifoliaceæ.

No. 25. A very attractive viburnum from the mountainous districts of western Hupeh, China. The ovoid berries are bright red.

For previous introduction see S. P. I. No. 53749.

### 61972 to 61996—Continued.

61996. VITIS sp. Vitaceæ. Grap

No. 26. This is called "Bellair's vine," from the name of the man on whose place Mr. Gibbs found it. It has small bunches of grapes like those of the fox grape, and the foliage becomes bright colored in the autumn.

### 61997. VIGNA SINENSIS (Torner) Savi. Fabaceæ. Cowpea.

From Heilungkuan, China. Seeds collected by P. H. Dorsett, agricultural explorer, Bureau of Plant Industry. Received November 7, 1924.

No. 673. September 18, 1924. A red variety of cowpea from a terraced area. (Dorsett.)

### 61998. Oryza sativa L. Poaceæ. Rice.

From Changchiashihmen, Chihli, China. Seeds collected by P. H. Dorsett, agricultural explorer, Bureau of Piant Industry. Received November 8, 1924.

No. 593. September 11, 1924. A well-seeded, upland rice 18 inches to 2 feet high. (Dorsett.)

### 61999. Avena sativa L. Poaceæ. Oats.

From Rieti, Italy. Seeds presented by N. Strampelli, director, R. Stazione Sperimentale di Granicolture. Received November 11, 1924.

A strain grown locally at Rieti.

### 62000. ZEA MAYS L. Poaceæ. Corn.

From Sydney, New South Wales. Seeds presented by E. M. Lawton, American consul general. Received November 14, 1924.

Coodra Vale. This seed corn has been supplied by an important ranch in New South Wales; according to press reports this variety has produced as high as 142 bushels to the acre. (Lawton.)

### 62001. Daucus carota L. Apiaceæ.

Carrot.

From Auckland, New Zealand. Seeds presented by O'Leary Bros. & Downs, at the request of H. R. Wright. Received November 19, 1924.

Yates Improved White. A field carrot extensively grown in New Zealand for stock. This variety is a heavy yielder; about two-thirds of the root grows above the surface, making it easy to lift. (Wright.)

### 62002. TRITICUM DURUM Desf. Poaceæ. Durum wheat.

From Potchefstroom, Union of South Africa. Seeds presented by the School of Agriculture. Received November 25, 1924.

Var. Great Scott.

### 62003 and 62004.

From Suifu, Szechwan, China. Seeds presented by David C. Graham, Suifu, through W. deC. Ravenel, United States National Museum. Received November 26, 1924.

Samples of cereals which accompanied a consignment of specimens sent to the United States National Museum. (Ravenel.)

62003. HORDEUM VULGARE COELESTE. Poaceæ. Six-rowed barley.

62004. TRITICUM AESTIVUM L. (T. vulgare Vill.). Poaceæ. Common wheat.

### 62005. Diospyros sp. Diospyraceæ. Persimmon.

From Salisbury, Rhodesia, Africa. Seeds presented by Dr. F. Eyles, botanist and mycologist, Rhodesian Department of Agriculture. Received November 13, 1924.

The ripe fruit of the "Rhodesian persimmon" is round, about 1¼ inches in diameter, brown, soft, and of pleasant flavor, and usually contains four seeds. The tree, which grows in southern Rhodesia at an altitude of 3,500 feet or less, is gnarled, with blackish bark, and becomes only 25 to 35 feet in height. The native name is M'chenje. According to the natives it fruits only in alternate years. (Eyles.)

### 62006. Byrsonima spicata (Cav.) DC. Malpighiaceæ.

From Dominica, British West Indies. Seeds presented by Joseph Jones, curator, Botanic Gardens. Received November 24, 1924.

A tropical tree 30 to 40 feet high, known in Dominica as Bois Tan. The narrow leaves are shining green above and rusty brown beneath, and the yellow flowers, followed by acid, edible fruits of the same color, make the tree a showy ornamental. The tough, light wood is useful for general construction, and the bark is a source of tannin.

For previous introduction see S. P. I. No. 58370.

### 62007. DAVIDIA INVOLUCRATA Baill. Cornaceæ. Dove tree.

From Paris, France. Seeds presented by A. Gerard. Received November 18, 1924.

The dove tree, as this is sometimes called, is a native of the mountainous forests of central and western China, and was first introduced into western cultivation by E. H. Wilson of the Arnold Arboretum, who gives an account of his search for this plant in the Country Gentleman for August, 1926. After a number of disappointments Mr. Wilson finally discovered a number of trees in the neighborhood of Ichang, Hupeh, China, and collected a quantity of seeds.

in the Country Gentleman for August, 1926. After a number of disappointments Mr. Wilson finally discovered a number of trees in the neighborhood of Ichang, Hupeh, China, and collected a quantity of seeds. In its native home this tree becomes 75 feet high, with a shapely pyramidal crown. When in bloom the tree is unusually striking because of the two or three large, snowwhite bracts which subtend each flower. These bracts are unequal in size, the largest being 4 to 8 inches long and 2 to 4 inches wide. The bright-green, oval, sharply toothed leaves are 3 to 6 inches long.

### 62008. EUCRYPHIA PINNATIFOLIA Gay. Eucryphiaceæ.

From Kew, Surrey, England. Seeds presented by Dr. A. W. Hill, director, Royal Botanic Gardens. Received November 24, 1924.

An evergreen shrub from 3 to 10 feet high, which is particularly attractive because of its large, white flowers, 2½ to 3 inches across, not unlike a large, single rose with a tuft of stamens in the center. It does best in a rather moist situation protected from the strongest rays of the sun.

For previous introduction see S. P. I. No. 49271.

### 62009 and 62010.

From Canton, China. Seeds collected by F. A. McClure, agricultural explorer, Bureau of Plant Industry. Received November 26, 1924.

### 62009 to 62010—Continued.

62009. ARTOCARPUS Sp. Moraceæ.

No. I. October 1, 1924. Hung Kwai Muk. Collected by G. W. Groff from a tree on the campus of the Canton Christian College. A very ornamental tree, 5 meters (approximately 16 feet) high, with a spreading habit and glossy foliage. The tree bears abundantly, round, greenish yellow-brown fruits about the size of a large plum, with a pleasant acid flavor. The fruits can be made into a jam which resembles cherry preserves in color and flavor. Due to a certain roughness of the skin, which is not evident to the eye, the fruit is unfortunately a little difficult to eat out of hand. (McClure.)

#### 62010. GORDONIA AXILLARIS (Roxb.) Szyszyl. Theaceæ.

Szyszyl. Theaceæ.

No. 2. October 9, 1924. Collected on Hongkong Island in a wooded ravine at 300 meters (approximately 1,000 feet) altitude in decomposed granite soil. A beautiful shrub, 2 to 4 meters (approximately 7 to 14 feet) in height, with thick, glossy foliage and delicate, ephemeral, white flowers 3 to 4 centimeters (approximately 1 to 2 inches) in diameter. (McClure.)

# 62011. Amygdalus communis L. (*Prunus amygdalus* Stokes). Amygdalaceæ. Bitter almond.

From Serai, Bagdad, Mesopotamia. Seeds presented by G. S. Cameron, officiating director of agriculture. Received December 1, 1924.

Seeds of the bitter almond, introduced for comparison and cultural tests.

### 62012. DEUTZIA LONGIFOLIA Franch. Hydrangeaceæ.

From Paris, France. Seeds presented by Vilmorin-Andrieux & Co. Received December 1, 1924.

Among the many attractive species of Deutzia, this is considered to be one of the handsomest, according to the Gardeners' Chronicle (ser. 3, vol. 51). It comes from western China and is a shrub about 6 feet high, with narrow leaves, whitish below, and rosy flowers, about an inch across, produced in rounded clusters 2 to 3 inches in diameter.

### 62013. CHAMAEDOREA ELEGANS Mart. Phœnicaceæ. Pacayito.

From Zacuapam, Huatusco, Vera Cruz, Mexico. Seeds presented by Dr. C. A. Purpus. Received December 4, 1924.

The pacayito, a handsome dwarf palm native to Mexico and Central America, is an excellent ornamental house plant, and will tolerate shade to a greater extend than many other plants. It often comes into flower when not over a foot high, and the deep-green, finely pinnate, graceful leaves are very attractive. Excessive atmospheric aridity, such as frequently prevails in artificially heated rooms, is likely to prove unfavorable to this palm.

### 62014. RUBUS GLAUCUS Benth. Rosaceæ. Andean raspberry.

From Ibarra, Ecuador. Seeds presented by Sr. José Felix Tamayo. Received December 3, 1924.

The Andean raspberry is half climbing in habit and a vigorous grower. It covers arbors and fences or can be trained into bush form, making a clump about 10 feet broad and high. The stems are round and cov-

ered with a thick whitish bloom; the leaves are trifoliolate, with the leaflets ovateare trifololate, with the leanets ovate-lanceolate, long-acuminate, serrate, about 3 inches in length, light green above and whitish below. The flowers are produced in terminal racemes sometimes a foot in length; they are white and about an inch in diameter. The fruits are oblong-oval, often an inch lance grades are seen as a constant of the constant o eter. The fruits are oblong-oval, often an inch long, and composed of a large number of drupelets crowded closely together. The seeds are not so large as to be troublesome in the mouth, nor are they hard; the flavor resembles that of certain northern raspberries, being rich, aromatic, and very pleasant. Although excellent when eaten with sugar and cream, the fruit is more commonly used in Ecuador to prepare a sweet conserve or the sirup made in Otavalo called jarone de mora, from which an excellent refresco is made.

The plant grows in soils of various types.

excellent refresco is made.

The plant grows in soils of various types, from clay to light sandy loam. It will probably require intelligent pruning to make it fruit abundantly. I believe it possesses great possibilities when cultivated in the southern and southwestern United States, since its fruits are larger than any of the raspberries we now grow and are of excellent quality. (Wilson Popenoe, Bureau of Plant Industru.)

Plant Industry.)

For previous introduction see S. P. I. No.

62015 and 62016. PIROCYDONIA spp. Malaceæ.

From Ille et Vilaine, France. Plants presented by Lucien Daniel. Received December 11, 1924. Notes by Mr. Daniel.

Graft hybrids between the pear and quince.

### 62015. PIROCYDONIA DANIELI Winkler.

A small shrub, resembling the quince in general habit, cultivated in the gar-dens of the Faculté des Sciences, at Rennes, France. This graft hybrid arose from an old pear grafted on quince stock. These seedlings are grafted on pear stock.

### 62016. PIROCYDONIA WINKLERI Daniel

One of the pear grafts on the old quinces in the garden of St. Vincent College gave rise to a sucker of distinct character; this was called *Pirocydonia winkleri* by Mr. Daniel The shoots and leaves are pubescent, unlike those of the pear. The leaves are short stemmed like the quince, but are lanceolate like the pear. A very peculiar thing about this hybrid is that it had its origin below the point of union of the graft and stock. point of union of the graft and stock.

### 62017 and 62018, CASUARINA SDD. Casuarinaceæ

From Hobart, Tasmania. Seeds presented by L. A. Evans, Sceretary of Agriculture, Agricultural and Stock Department, through C. V. Piper, Bureau of Plant In-dustry. Received December 2, 1924.

### 62017. CASUARINA STRICTA Ait.

This tree, commonly cultivated in California, but more rare in Florida, is a fairly hardy species making a low, often shrubby, growth. It is conspicuous on account of its very thick, often pendulous branches and very big cones. In appearance it is not so elegant as some of the other casuarina, but it is very striking and is also of some economic value. The branchlets are said to be a favorite forage of Australian cattle. The wood is especially valuable for shingles and posts.

62017 and 62018—Continued.

62018. CASUARINA SUBEROSA Otto and Dietr.

A tree 30 to 40 feet tall, quite similar to Casuarina equisetifolia, with smooth, slender branchlets. It is considered a valuable fodder tree in the interior districts of Australia which are subject to drought. The wood is of great beauty for cabinetwork, but should be used only in veneers, as it is apt to split in drying.

For previous introduction see S. P. I. No. 56564,

62019. Tropaeolum speciosum Poepp. and Endl. Tropæolaceæ.

Vermilion nasturtium.

From Elstree, Herts, England. Seeds presented by Hon. Vicary Gibbs, Aldenham House, through David Fairchild, Bureau of Plant Industry. Received November 12, 1924.

No. 24. This is the most attractive little vine which I have seen in Great Britain. Its brilliant scarlet blooms and delicate foliage make it a unique ornamental. (Fairchild.)

**62020** and **62021**. Jasminum spp. Olea-

From Nogent sur Marne, Seine, France, Presented by the Directeur de l'Institut National d'Agronomie Coloniale. Received December 16, 1924.

62020. JASMINUM FRUTICANS L. Jasmine.

A half-evergreen, shrubby jasmine from the Mediterranean region, with a dense mass of slender, erect stems 3 to 5 feet high, and smooth, deep-green leaflets. The fragrant yellow flowers are produced in early summer, usually in threes or fives at the ends of short twigs, and the round, shining-black fruits are the size of

62021. Jasminum Primulinum Hemsl. Primrose jasmine.

An evergreen, rambling shrub, 6 to 10 An evergreen, rambing strub, to 10 for the figh, native to western China. The dark, glossy green leaflets forming a background for the fragrant bright-yellow flowers make the shrub very handsome in spring and early summer.

### 62022 to 62025

From Kew, England. Seeds presented by Dr. A. W. Hill, director, Royal Botanic Gardens, through David Fairchild, Bureau of Plant Industry. Received December 12,

62022. DAVIDIA INVOLUCRATA VILMORINIANA (Dode) Hemsl. Cornaceæ. Dove tree, (Dode) Hemsl. Cornaceæ.

A handsome tree from western China which, according to Horticulture (vol. 10, p. 433), becomes 60 to 70 feet in height; in habit and foliage it resembles a linden. The bright-green, oval leaves 3 to 6 inches long are sharply toothed and slender stalked, and the globular heads of small flowers, borne on slender nodding stalks about 2 inches long, appear in May and are made unusually striking by the two or three large bracts. These bracts are of unequal size, the largest being from 4 to 7 inches long and 2 to 4 inches broad, handsome tree from western China inches broad.

For previous introduction see S. P. I. No. 55913.

### 62022 to 62025—Continued.

Dieck. 62023. ERICA ARBOREA ALPINA Heath. Ericaceæ.

An evergreen bushy heath which is native in the mountainous region of Cuenca, Spain, and has proved hardy at the Royal Botanic Gardens, Kew, England. The dull-white flowers are produced in stiff, pyramidal clusters, but the chief beauty of the plant lies in the rich, cheerful green color of the foliage, which, in England, lasts throughout the winter. winter.

62024. PLATANUS ACERIFOLIA Willd. Plane tree. tanaceæ

The London plane, of garden origin, is a tree up to 100 feet in height and is supposed to be a hybrid between Platanus orientalis and P. occidentalis. In characters it is intermediate between the two. It resembles the American plane in foliage and is of more pyramidal habit than the European species.

62025. X QUERCUS LUCOMBEANA Sweet. Oak, Fagaceæ.

A handsome, sturdy oak, a hybrid be-tween Quercus suber and Q. cerris. It produces fertile acorns, from which have been raised numerous seedling forms of widely varying characters.

62026. Malus sikkimensis (Hook. f.) Koehne (Pyrus sikkimensis Hook.

f.). Malaceæ. Sikkim crab.

From Kew, England. Seeds presented by Dr. A. W. Hill, director, Royal Botanic Gardens, through David Fairchild, Bu-Gardens, through David Fairchild, Bureau of Plant Industry. Received December 12, 1924.

ber 12, 1922.

The Sikkim crab is a small tree which grows wild in the interior of Sikkim, India, at altitudes up to 10,000 feet. The narrowly oval leaves are very woolly beneath, and the white flowers, rosy in the bud, are about an inch across and are borne very freely in 4 to 8 flowered clusters. The pear-shaped fruits are dark red with paler dots and are about half an inch wide.

For previous introduction see S. P. I. No. 58491.

### 62027 to 62029.

From Edinburgh, Scotland. Seeds pre-sented by William Wright Smith, regius keeper, Royal Botanic Garden. Received November 17, 1924.

62027 and 62028. BOMAREA Spp. Amaryllidaceæ.

62027. Bomarea Caldash (H. B. K.) Herbert.

A twining plant of the amaryllis family, native to the Andes of Peru. The thin, spreading leaves are 3 to 6 inches long, and the flowers, orange-yellow with crimson spots, are about an inch long and borne in many-flowered pendulous clusters.

### 62028. Bomarea carderi Masters.

This Colombian species is the most beautiful of the entire genus, according to J. N. Rose, of the United States National Museum. The broadly oblong leaves are 4 to 6 inches long, and the pale-pink flowers, spotted with brown near the top of the perianth, are in large clusters about a foot long.

62029. Passiflora herbertiana Ker. Passifloraceæ.

Many of the passion flowers are charming ornamentals. This Australian species is a tall climber with 3-lobed, heartshaped leaves and white flowers.

62030. Davidia involucrata vilmorini-ANA (Dode) Hemsl. Cornaceæ.

Dove tree.

From Kew, England. Seeds presented by Dr. A. W. Hill, director, Royal Botanic Gardens. Received November 10, 1923. Numbered October, 1924.

A handsome, hardy Chinese tree of pyramidal habit, differing from the typical form in leaf characters, and perhaps less winter hardy. The white floral bracts make a striking contrast with the bright-green feliging. foliage.

### 62031 to 62059.

From Montevideo, Uruguay. Seeds pre-sented by Juan R. Piñeyro, secretary, Consejo Directivo Federación Rural. Re-ceived November 24, 1924. secretary,

62031. AGROSTIS MONTEVIDENSIS Spreng. Poaceæ.

A cespitose, perennial Uruguayan grass, with slender leaves up to a foot in length.

62032. Andropogon Lateralis Incanus (Hack.) Henr. Poacee. Grass. (Hack.) Henr.

An erect perennial grass, up to 7 feet in height, with thick, fibrous rhizomes and hard, narrow leaves. Native to

62033. Andropogon saccharoides Swartz.

An erect, or ascending perennial grass, with cylindrical canes and narrow, flat leaves prolonged to a fine point. It is very variable in character and is distributed throughout tropical and subtropical America.

62034. BOUTELOUA MEGAPOTAMICA (Spreng.) Kuntze. Poaceæ.

An erect, cespitose perennial grass, with narrow, spikelike panicles.

62035. BROMUS WILLDENOWII Poaceæ. Grass.

An annual or biennial grass, 1 feet high, said to be good for forage.

62036. CALAMAGROSTIS MONTEVIDENSIS Nees. Poaceæ. Grass.

A perennial erect grass, with woody rhizomes and straight, unbranched canes, 1 to 2 feet high. The handsome, reddish violet panicles are 6 to 8 inches long. Native to Uruguay.

037. CAPRIOLA DACTYLON (L.) Kuntze (Cynodon dactylon Pers.). Poaceæ.

Bermuda grass.

Introduced for special comparison tests.

oss. CHAETOCHLOA ONURUS (Griseb.) Scribn, and Merr. (Setaria onurus Griseb.). Poaceæ. 62038. CHAETOCHLOA

A slender-stemmed grass, 1 to 4 feet high, with a creeping root and linear leaves. Native to tropical America.

62039 to 62042. CHLORIS spp. Poaceæ.

### 62039. CHLORIS CANTERAI Arech.

An erect perennial, Uruguayan grass, with somewhat bulbous rhizomes, erect canes 2 to 3 feet high, and narrow

62040. CHLORIS CARABAEA Spreng.

An annual, erect, leafy grass, native to the West Indies, with linear, flat leaves about a foot high.

### 62031 to 62059—Continued.

62041. CHLORIS CILIATA SWARTZ.

A perennial grass with erect stems 10 to 20 inches high. Native to Uruguay.

62042. Chloris uliginosa Hack.

An erect, probably annual, grass about a foot high, with rigid linear leaves. Native to Uruguay.

62043. ERIOCHLOA PUNCTATA (L.) Hamilt.

A perennial grass with erect stems, about 4 feet high; distributed throughout tropical and subtropical America. Grows usually in damp places and is said to be

62044. Manisuris selloana (Hack.) Kuntze. Poacere. Grass. Kuntze. Poacex.

A cespitose suberect grass, common in Uruguay. The slender canes are about a foot high.

62045. PANICUM BERGI Arech. Poaceæ. Grass.

A rather densely cespitose grass, 1 to 2 feet high, with a bulbous rhizome and very narrow leaves. Native to Uruguay.

62046 to 62052, PASPALUM spp. Poaceæ. Grass.

62046. PASPALUM BARBIGERUM Kunth.

smooth, cespitose grass, native to South America, with stiff, erect culms 20 to 40 inches high.

62047. PASPALUM DILATATUM Poir.

This grass has long been introduced in the Southern States, where it is widely distributed. It is a valuable grass for pasturage, particularly on rich land, and not infrequently is cut for hay. It goes very commonly under the name of Dallis grass but is sometimes called water grass and not infrequently simply paspalum. The grass a particular of the property of A prenting. It is now quently simply paspalum. The grass is a native of Argentina, but is now extensively cultivated in Australia, New Zealand, South Africa, and in general throughout the Tropics. (C. V. Piper, Bureau of Plant Industry.)

62048. PASPALUM LARRANAGAI Arech.

A hardy grass, 5 or 6 feet in height, much relished by stock; good for growing in moist land.

62649. PASPALUM NOTATUM Fluegge.

A perennial grass which has shown promise as a pasture grass in the southern United States; now introduced for further testing in that region.

62050. PASPALUM PLICATULUM Michx.

An upright, cespitose, perennial Uru-guayan grass, about 3 feet high.

62051. PASPALUM PROLIFERUM Arech.

A stoloniferous, cespitose, perennial grass with numerous, slender culms and very narrow leaves. Native to Uruguay, and grows in sandy places.

62052. PASPALUM sp.

62053. SPOROBOLUS BERTEROANUS (Trin.) Grass. Hitchc. and Chase. Poaceæ.

An annual, erect, bunch grass, with long, slender, spikelike panicles.

62031 to 62059—Continued.

62054. STENOTAPHRUM SECUNDATUM (Walt.) Kuntze. Poaceæ. Grass.

A broad-leaved grass, extensively employed in Rio de Janeiro as a lawn grass.

62055 to 62058. STIPA SDD. Poaceæ. Grass.

62055. STIPA CHARRUANA Arech.

A perennial, slender-stemmed, Uru-guayan grass with woody rhizomes and erect culms, about 2 feet high.

62056. STIPA HYALINA Nees.

The somewhat bulbous rhizomes of this South American perennial grass send up rather woody culms about 2 feet high with very narrow leaves.

62057. STIPA PAPPOSA Nees.

A perennial Uruguayan grass of cespitose habit, with a fibrous rhizome, and slender culms about 20 inches high.

62058. STIPA SETIGERA Presl.

A perennial subcespitose grass, about 20 inches high. Native to southern South America.

62059. TRIODIA BRASILIENSIS (Nees)
Lindm. Poaceæ. Grass.

An erect, tufted perennial grass, native to Brazil, with flat leaves.

62060 to 62073.

From Argentina. Seeds collected by H. L. Westover, Bureau of Plant Industry. Received November 25, 1924.

62060. Andropogon consanguineus Kunth. Poaceæ.

No. 18. Near Teniente Origone. A slender-stemmed grass, 6 to 20 inches in height, native to southern South America.

62061. Andropogon SACCHAROIDES Swartz. Poaceæ,

No. 20. Teniente Origone. coarse, perennial grass, native to tropical America, with stems 1 to 3 feet high and attractive dense, silvery panicles.

62062. Aristida sp. Poaceæ. Grass.

No. 11. Near Choele Choel.

62063. ARISTIDA Sp. Poaceæ. Grass.

Near Teniente Origone.

62064. Bromus Unioloides (Willd.) H. B. K. Poaceæ. Rescue grass.

No. 7. Puerto Madryn. An annual or biennial grass, 1 to 2 feet high, native to South America; it has been cultivated occasionally in the Southern States for winter forage.

62065. Bromus sp. Poaceæ. Grage Near Teniente Origone.

62066. CHLORIS ARGENTINA (Hack.) Lillo and Parodi. Poaceæ. Grass.

No. 19. Teniente Origone. An erect, perennial grass, 1 to 3 feet high, native to sandy places in Argentina.

62067. HORDEUM MURINUM L. Poaceæ. Grass.

No. 10, Near Puerto Madryn. An annual European grass, a foot or more in height, with numerous rhizomes, and flat leaves about 6 inches long.

### 62060 to 62073—Continued.

62068. POA LANUGINOSA POIT. Poaceæ. Grass.

No. 13. Near Puerto Madryn. A perennial grass, 1 to 2 feet in height, with very narrow leaves and erect spikes about 4 inches long. Native to southern South America,

62069. Sporobolus RIGENS (Trin.) E. Desv. Poaceæ. Grass.

No. 8. Puerto Madryn. A perennial grass, with stiff upright, leathery leaves, and large whitish panicles. Native to Chile.

62070 to 62073. STIPA spp. Poaceæ.

62070. STIPA CHUBUTENSIS Speg.

No. 2. Puerto Madryn. A perennial, cespitose grass which, according to Spegazzini (Anales del Museo Nacional de Montevideo, vol. 4) grows in rocky fields in Chubut, Argentina, attaining a height of about 8 inches.

62071. STIPA HUMILIS Brot.

No. 4. Puerto Madryn; No. 5. Near Puerto Madryn; No. 12. Near Chubut; No. 13. Near Choele Choel.

According to Spegazzini (Anales del Museo Nacional de Montevideo, vol. 4) this is a perennial grass of densely cespitose habit, with rigid leaves up to a foot high. Native to rocky situations in southern Argentina.

62072. STIPA HYPOGONA Hack.

No. 1. Puerto Madryn. A perennial grass, with erect, terete culms about a foot high. Native to Argentina.

62073. STIPA NEAEI Nees.

Nos. 6 and 9, Puerto Madryn. A perennial grass, native to arid, stony places in southern Argentina, which is described (Spegazzini, Anales del Museo Nacional de Montevideo, vol. 4) as erect or ascending, with culms up to 4 feet in height, rigid, sedgelike leaves, and purplish glumes.

62074, Pyracantha crenulata (Don) Roemer, Malaceæ. Firethorn.

From Kew, England. Seeds presented by Dr. A. W. Hill, director, Royal Botanic Gardens, Received November 10, 1923. Numbered October, 1924.

Var. rogersiana. A rapid-growing Himalayan shrub which produces an abundance of white flowers in early summer; these are succeeded by a profusion of bright-red berries. Probably this shrub is suited best for mild-wintered sections of the United States.

### 62075 to 62083.

From Argentina. Seeds secured by H. L. Westover, Bureau of Plant Industry. Received December 1, 1924.

62075. GOURLIEA SPINOSA (Molina) Skeels. Fabaceæ. Chañal.

Collected along the Rio Negro. A small, ornamental tree 12 to 15 feet high, with long, thick branches terminating in spines. The flowers, orange streaked with red, are in loose racemes, and the fruits, about an inch in diameter, have a pulp resembling the jujube in flavor.

62076. MEDICAGO LUPULINA L. Fabaceæ. Black medic.

From Trelew Plaza, Chubut.

**62075 to 62083**—Continued.

62077 to 62079. MEDICAGO SATIVA L. Fabaceæ. Alfalfa.

62077. Chilean alfalfa grown from seeds originally brought from San Jose de Maipo, Rio Claro, Brazil.

62078. Peruvian alfalfa grown from seeds originally brought from the high mountains near Arequipa, Peru.

**62079.** Provence alfalfa grown from seeds originally brought from Provence, France.

62080. Prosopis strombulifera (Lam.) Benth. Mimosaceæ.

"Screw bean." From a valley near Rio Negro, Choele Choel. This grows commonly in the Mendoza Desert and is a low shrub not over 12 inches high. Its peculiar screw-shaped pods look like bright-yellow spikes of flowers a short distance away. The pods hang on long after the leaves have fallen.

For previous introduction see S. P. I. No. 43386.

62081. Prosopis sp. Mimosaceæ.

Collected between the Rio Chubut and Rio Negro.

62082. TRIFOLIUM REPENS L. Fabaceæ.
White clover.
From Trelew, Chubut.

62083. TRITICUM AESTIVUM L. (*T. vulgare* Vill.). Poaceæ. Common wheat. Barletta. From the Chubut Mercantile Co., Trelew, Chubut,

62084 to 62088. MEDICAGO SATIVA L. Fabaceæ. Alfalfa.

From Chubut Province, Argentina. Seeds presented through H. L. Westover. Bureau of Plant Industry. Received December 1, 1924. Notes by Mr. Westover.

62084. Presented by William H. Williams; from near Gaiman. Chubut, Argentina.

62085. Presented by William D. Owen, from near Trelew.

62086. Presented by Mrs. R. L. Owen. Saltland, from near Dolabon.

62087. From Chacre, Dolabon.

62088. Presented by J. H. Rowlands. from near Gaiman.

62089 to 62092. Medicago sativa L. Fabaceæ. Alfalfa.

From Chile. Seeds obtained through H. L. Westover, Bureau of Plant Industry. Received December 1, 1924. Notes by Mr. Westover

62089. Hacienda of Sproa, Salane y Miriel.

62090. Serena, Coquimbo.

62091. Ovalle, Coquimbo.

62092. Hurtado, Coquimbo.

### 62093 to 62098.

From Nice, France. Seeds presented by Dr. A. Robertson Proschowsky. Received November 17, 1924.

62093. Acanthosabal caespitosa Proschowsky. Phœnicaceæ. Palm.

A spiny-stemmed palm.

### 62093 to 62098-Continued.

62094. BESCHORNERIA BIGELOWII Hort. Amaryllidaceæ.

A very drought-resistant, ornamental succulent plant, hardy at Nice. (Proschowsky.)

62095, MIMOSA ACULEATICARPA Ortega (M. acanthocarpa Poir.). Mimosaceæ.

Very drought resistant; the best hedge plant I know, absolutely impenetrable. Proschowsky.)

62096. PINUS CANARIENSIS C. Smith. Pinaceæ. Canary pine.

Rapid-growing timber tree. (Proschow-sky.)

A pine, native to the Canary Islands, which thrives in warm temperate climates. It is suited to nearly all soils and has a straight trunk even when it grows in an isolated position. The wood of this pine, known in the Canary Islands as "tea," is very hard, very difficult to work, but unequalled for duration and building purposes because it does not rot.

62097. RAPHIOLEPIS UMBELLATA (Thunb.) C. Schneid. (R. japonica Sieb. and Zucc.). Malaceæ.

Fresh seeds of a beautiful evergreen, very hardy bush which will, I think, thrive in the southeastern parts of the United States, at least as far as North Carolina. (Proschowsky.)

62098. VIBURNUM sp. Caprifoliaceæ.

To be grown to ascertain its horticultural value.

### 62099. ARACHIS NAMBYQUARAE Hoehne. Fabaceæ. Peanut.

From Rio de Janeiro, Brazil. Seeds presented by F. W. Hoehne, Commissão de Linhas Telegraphicas Estrategis de Matto Grosso ao Amazonas. Received December 10, 1924.

A Brazilian relative of the peanut, which, according to Hoehne (Historia Natural Botánica, Matto Grosso, Brazil, Part XII) is a much-branched, prostrate or ascending plant. The pod is 2 to 3 inches long, usually having two seeds which are edible and very oily.

### 62100. CICER ARIETINUM L. Fabaceæ. Chick-pea.

From Bengal, India. Seeds presented by D. Dutta, second economic botanist. Received December 10, 1924.

Introduced for trial as stock feed in the southwestern United States,

### 62101 and 62102.

From Benenden, Kent, England. Plants presented by Capt. Collingwood Ingram. Received December 20, 1924.

62101. PRUNUS SERRULATA Lindl. Amygdalaceæ. Flowering cherry.

Var. kojima. A variety of Japanese flowering cherry which has very large, pure-white flowers which are somewhat campanulate and semidouble; these are produced in a long-stemmed, drooping corymb, and are slightly fragrant. The tree is quick growing and very vigorous. (Incram.)

62102. VIOLA sp. Violaceæ. Violet.

### A pink-flowered violet.

#### 62103 to 62108.

From Littleriver, Fla. Seeds presented by Charles T. Simpson. Received December 17, 1924.

These seeds were sent to Mr. Simpson by Dr. B. E. Dahlgren, Field Museum of Natural History, Chicago, Ill.

62103. RHYTICOCOS AMARA (Jacq.) Beccari (Cocos amara Jacq.). Phœnicaceæ Palm.

A tall, feather-leaved palm, 50 to 100 feet in height, with a winged trunk. It is native to Martinique, French West Indies, and is closely related to the coconut.

62104. LICUALA SPINOSA Thunb. Phœnicaceæ.

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

62105. INODES BLACKBURNIANA (Glazebr.)
O. F. Cook (Sabal blackburniana
Glazebr.). Phœnicaceæ. Palm.

The trunk of this West Indian palm is spineless, about 40 feet high, and thickened in the middle, and the rather rigid leaf blade is round, with about 40 sword-shaped segments. The pear-shaped fruits are an inch and a half long.

62106. SABAL MAURITIAEFORMIS (Karst.)
Griseb. and Wendl. Phænicaceæ.

A handsome West Indian palm with a trunk 60 to 80 feet in height and over a foot in diameter, and large, roundish leaves multifid to the middle, up to 12 feet in diameter. The black fruits are about the size of peas.

62107. SIMAROUBA AMARA Aubl. Simaroubaceæ.

A tall, evergreen, tropical American tree with alternate, leathery, pinnate leaves and yellowish white flowers with spreading petals. It yields a drug known as simaruba bark.

62108. Tabebuia serratifolia (Vahl) Nicholson. Bignoniaceæ.

A West Indian relative of the trumpet creeper of the northern United States (Tecoma radicans); it is a handsome evergreen tree, with digitate leaves and terminal panicles of yellow flowers.

62109. Rodgersia purdomii Hort. Saxifragaceæ.

From Langley Slough, England. Plants purchased from J. C. Allgrove, Middle Green. Received December 22, 1924.

A very attractive, hardy Chinese perennial with large, feathery panicles of creamy white flowers. It is said to thrive best in a somewhat moist, peaty soil.

### 62110 to 62115.

From Kew, England. Cuttings presented by Dr. A. W. Hill, director, Royal Botanic Gardens, through David Fairchild, agricultural explorer, Bureau of Plant Industry. Received December 31, 1924.

62110. × POPULUS EUGENEI Simon-Louis. Salicaceæ. Poplar

An unusually large and vigorous poplar, which is described by Bean (Trees and Shrubs Hardy in the British Isles) as a probable hybrid between the Lombardy poplar and *Populus marilandica* or *P. regenerata*, but its origin is not definitely known. The tree originated at the nursery of Simon & Louis, near Metz, Lorraine, about 1832, as a seedling, and was still standing in 1904, when it measured 150 feet in height, with a trunk 38 feet in circumference at the base.

62111. × POPULUS GENEROSA A. Henry. Salicaceæ. Poplar.

This hybrid poplar is, according to its originator, Augustine Henry, intermediate in characters between its parents, Populus angulata and P. trichocarpa. The leaves are coarsely serrate and pale gray beneath. The tree is a rapid grower and unusually vigorous.

For previous introduction see S. P. I. No. 58646.

62112. AMYGDALUS COMMUNIS L. (Prunus amygdalus Stokes). Amygdalaceæ. Almond.

Var. macrocarpa. A large-fruited variety which is also excellent as an ornamental.

62113. PRUNUS MAACKII Rupt. Amygda-Amur cherry.

A Manchurian bird cherry, 40 feet or more in height, with very smooth brown-ish yellow bark which peels off like that of a birch. The leaves are pointed and very finely toothed, and the white flowers are in short racemes borne on the previous season's wood.

For previous introduction see §. P. I. No. 57310.

62114. RUBUS THIBETANUS Franch. Rosaceæ.

The bluish purple stems and handsome The driving purple stems and handsome pinnate foliage make this shrub one of the most attractive of the Chinese species of Rubus, according to W. J. Bean (Trees and Shrubs Hardy in the British Isles). In habit it is erect, becoming about 6 feet high, and the dark-green leaves are white felted below. The purple flowers, half an inch across, are succeeded by bluish-black berries.

For previous introduction see S. P. I. No. 53538,

62115. SALIX MATSUDANA KOIGZ. Salica-Willow. ceæ.

An eastern Asiatic willow about feet in height, with ascending or pendulous, greenish branches, and narrowly lanceolate leaves 2 to 4 inches long. Observations made in northeastern China by Frank N. Meyer indicate that this willow thrives in regions having a seenty rein thrives in regions having a scanty rain-

### 62116 to 62123. PISUM SATIVUM L. Fabaceæ.

rom Cambridge, England. Seeds pre-sented by F. T. Engledow, School of Agri-culture. Received December 19, 1924.

62116 to 62119. From Bohemia.

62116. P. 63. 62118. P. 65.

62117. P. 64. 62119. P. 66.

62120 to 62123. From Tibet.

62120. (a). 62122. (c).

62121. (b). 62123. (d). 62124 to 62126. SACCHARUM OFFICI-NARUM L. Poaceæ. Sugar cane.

From Santiago de las Vegas, Cuba. Cuttings presented by Gonzalo Fortun, director, Estación Experimental Agronómica. Received December 20, 1924.

62124, Cuba 35. 62125, C. H. 64/21.

62126. Cuba del Cubana.

62127 and 62128.

From Glasnevin. Dublin, Ireland. Seeds presented by the director, Royal Botanic Gardens. Received December 30, 1924.

62127. Delphinium pylzowi Maxim. nunculaceæ. Larkspur.

A Chinese larkspur originally collected in Kansu by Przawalski, and described (Bulletin de l'Académie Impériale. St. Petersburg, vol. 23, p. 307) as having a leafy stem. 5-parted leaves, and attrac-tive flowers with violet sepals and black-igh peters. ish petals.

62128. MAGNOLIA WILSONII (F. Gagn.) Rehder. Magnoliaceæ. (Finet and

In habit this Chinese magnolia is a large shrub; it was first discovered in western Szechwan by E. H. Wilson, and appears to be a valuable horticultural addition to this already popular genus. The flowers, which are pure white and delicately fragrant, are produced freely during late May and early June.

62129. Castanea mollissima Blume. Fagaceæ. Hairy chestnut.

From Nanking, China. Seeds presented by Dr. J. H. Reisner, University of Nanking. Received November 14, 1924.

A hardy, blight-resistant chestnut from northern China, producing nuts of good quality, closely resembling our native chest-nut in size, shape, and color.

62130. Vigna sinensis (Torner) Savi. Fabaceæ. Cowpea.

From Tailungyuan, China. Seeds collected by P. H. Dorsett, agricultural explorer, Bureau of Plant Industry. Received December 8, 1924.

No. 809. October 7, 1924. Red and white seeded cowpea from one of the village farmers. This is one of the two chief varieties grown around here. (*Dorsett.*)

62131. Canna sp. Cannaceæ. Canna.

rom Summit, Canal Zone. Seeds pre-sented by Holger Johansen, agronomist. Plant Introduction Gardens. Received December 30, 1924. From Summit,

A dark-red canna, quite common here and of ornamental value. (Johansen.)

### 62132 to 62140.

From China. Bulbs and tubers collected by P. H. Dorsett, agricultural explorer, Bureau of Plant Industry. Received December 20, 1924. Notes by Mr. Dor-

62132. ALLIUM sp. Liliaceæ. Onion.

No. 1095. Peking. October 31, 1924. Bulbs of Chinese "garlic." The Chinese use garlic in many forms and especially in their cooking.

### 62132 to 62140—Continued.

- 62133 and 62134. DIOSCOREA sp. Dioscoreaceæ.
  - 62133. No. 1058. Peking. October 31, 1924. Tubers of a Chinese variety 1924. Tubers of a Chinese vari Shan Yoo (mountain medicine).
  - 62134. No. 1094. Peking. October 31, 1924. Aerial tubers purchased in the market. These tubers are said to be from the same vine which produce the long ground tubers, No. 1058 [S. P. I. No. 62133].
- 62135 to 62140. SOLANUM TUBEROSUM L. Solanaceæ. Potato.
  - 135. No. 1096. Peking. October 31, 1924. Tubers of a good-looking potato purchased in the market. It is said that these potatoes are also shipped in from Tientsin.
  - 136. No. 1097. Peking. October 31, 1924. Tubers of an oblong, medium-sized potato shipped in to the mar-ket from Tientsin.
  - 62137 and 62138. October 31, 1924. Tubers purchased in the Peking market.
    - 62137. No. 1098. Tubers of a rather small, oblong, purplish potato shipped in to the market from Kalgan.

62138. No. 1099.

- 139. No. 1312. Huangan, Chihli, November 8, 1924. These tubers are white or tinged with a delicate shade of pink, and though not so very large they are of fair appear-62139. No. ance.
- 2140. No. 1313. Huangan, Chihli, November 8, 1924. Tubers of a rather small, purple-skinned potato, The Chinese say that this variety is dug in the fall. 62140. No.
- 62141. CALOPHYLLUM CALABA L. Clusiaceæ.
- From Summit, Canal Zone. Seeds presented by Holger Johansen, Plant Introduction Garden. Received November
- A West Indian relative of the mango-steen (Garcinia mangostana) which is known as the Calaba tree; it becomes 60 feet high, with dark-green, glossy follage and axillary clusters of white flowers. The wood is used for building purposes, and the oil pressed from the seeds is some-times used, in Porto Rico, in lamps.

### 62142 to 62158.

- From China. om China. Collected by P. H. Dorsett, agricultural explorer, Bureau of Plant Industry. Received December, 1924. Industry. Received Notes by Mr. Dorsett.
  - 62142. Corylus sp. Betulaceæ. No. 1297. November 8, 1924. Scions collected between Shihchiaying and Huangan. This hazel is reported to bear flattened nuts in place of the conical nuts like those sent in under No. 799 [S. P. l. No. 62170].
  - 62143. Diospyros kaki L. f. Diospyra-Kaki.
  - No. 1229. November 6, 1924. Scions from a large orchard near Hielungkuan. The fruits are 4 inches or more in diame-
  - 62144 to 62146. JUGLANS REGIA L. Ju-Walnut. Scions.

#### **62142 to 62158**—Continued.

- 62144. No. 1285. November 8, 1924. From a good-looking young tree growing in a canyon between Shihchiaying and Huangan.
- 62145. No. 1314½. November 9, 1924. From a good-looking tree growing in a terraced orchard a short distance above Taho, Chihli.
- 62146. No. 1315½. November 9, 1924. From a large good-looking tree growing in a terraced orchard just above Taho, Chihli.
- 62147. Populus sp. Salicaceæ. Poplar.

No. 1296. November 8, 1914. Cuttings obtained from small suckers and plants growing between Shihchiaying and Huangan.

62148 to 62151. PRUNUS ARMENIACA Amygdalaceæ. Apricot.

#### Scions.

- 62148. No. 1403. November 11, 1924. From an old tree measuring 56 inches in circumference, growing in an old Chinese cemetery near Yenchia, Chihli. This tree is said to bear large, long fruits with goldenyellow fiesh which separates easily from the stone.
- 62149. No. 1404. November 11, 1924. A large, red-fruited apricot with dark-yellow flesh, from a terraced mountain side between Yenchia and Menloukou, Chihli.
- 62150. No. 1405. Honantai, Chihli. November 11, 1924. A reddish-green apricot having large fruit; from an orchard located on a terraced moun-
- 62151. No. 1406. Honantai, Chihli. November 11, 1924. An apricot known here as the Kan Ke Lo. This is said to be a good-sized apricot having yellow flesh which separates easily from the stone.
- 62152. Rosa sp. Rosaceæ. Rose.

No. 1290. November 8, 1924. Cuttings collected near an old Chinese temple between Shihchiaying and Huangan, Chihli. The hips are bright red and slender, and the stems are dull red and quite thorny.

62153. Rubus sp. Rosaceæ.

No. 1291. November 8, 1924. Plants collected between Shihchiaying Huangan.

- 62154. Salix sp. Salicaceæ. Willow. No. 1295. November 8, 1924. Cutings of a willow found growing quite abundantly between Shihchiaying and Huangan.
- 62155 to 62157. VITIS VINIFERA L. Vita-Grape.
  - 155. No. 1156. Between Peking and Toli. November 3, 1924. Scions of the so-called rose grape, secured from Mr. Tsui.
  - 62156. No. 1173. Menshuiho, Chihli, November 4, 1924. Cuttings of a rose or pink grape procured from Mr. Wang. These plants were grow-ing in sandy loam.
  - 62157. No. 1174. Menshuiho, Chihli. November 4, 1924. Cuttings of a long, white grape, known as "milk grape," procured from Mr. Wang.

### **62142 to 62158**—Continued.

62158. VITIS sp. Vitaceæ. Grape.

No. 1292. November 8, 1924. Scions collected between Shihchiaying and Huangan. This grape may prove useful as an ornamental.

#### 62159 and 62160.

From China. Tubers collected by P. H. Dorsett, agricultural explorer, Bureau of Plant Industry. Received November, 1924. Notes by Mr. Dorsett.

62159. Dioscorea sp. Dioscoreaceæ.

No. 789. October 9, 1924. Aerial tubers from a vine growing on the hill just back of the Yung Lo [Ming] tomb, Changling, Chihli.

62160. IPOMOEA BATATAS (L.) Poir. Convolvulaceæ. Sweet potato.

No. 796. Nananho, Chihli. October 21, 1924. The flesh of these good-sized sweet potatoes is creamy white with a slight tinge of pink near the skin.

### 62161 to 62184.

From China. Seeds collected by P. H. Dorsett, agricultural explorer, Bureau of Plant Industry. Received December, 1924. Notes by Mr. Dorsett.

62161 and 62162. Andropogon ischaemum Poaceæ. Grass.

62161. No. 800. October 7, 1924. A grass, called by the Chinese "brush grass," secured in a river bottom area between Tuili and Mentoukou.

62162. No. 801. October 7, 1924. Near Nankow, on the road to the Ming tombs, we found this grass forming a thick mat; the stems and panicles have a reddish cast. It grows on very dry, gravelly soil.

62163 and 62164. ARACHIS HYPOGAEA L. Fabaceæ. Peanut.

62163. No. 962. Hsingshon, Chihli. October 12, 1924. From plants growing in river-bottom soil.

62164. No. 1029. Peking. October 22, 1924. Sent in to the market from Taotingfu where considerable quantities of these small peanuts are grown. The Chinese steam these, hulls and all, in a strong salt solution, then dry and shell the nuts. These nuts are chiefly used as salted peanuts.

62165. CANNABIS SATIVA L. Moraceæ. Hemp.

No. 931. October 11, 1924. From the Fa Hua Ssu temple grounds, near Haitzu, Chihli.

62166. CAPSICUM ANNUUM L. Solanaceæ. Red pepper.

No. 994. Peking. October 17, 1924. A long smooth-skinned, red pepper, procured in the market.

62167. CARAGANA sp. Fabaceæ.

No. 905. October 10, 1924. Collected from plants growing on a mountain side near Laochun.

62168. CELTIS BUNGEANA Blume. Ulmaceæ. Hackberry.

No. 1014. October 21, 1924. A tree with small, deep-green leaves, and black fruits the size of small peas, growing in the Black Dragon temple grounds.

62161 to 62184—Continued.

62169. CHAENOMELES Sp. Malaceæ. Chinese quince,

No. 1012. October 20, 1924. Shipped in to the Peking market from Kansu. These fruits have a pleasant fragrance. The flesh is yellow, hard, gritty, and quite acid.

62170. Corylus sp. Betulaceæ. Hazel.

No. 799. Peking. October 21, 1924. Procured in the market. These hazelnuts, reported to be native Chinese hazel, are the smallest we have ever seen. They may have value for growing as stock plants on which to graft other and larger sorts.

62171. DOLICHOS LABLAB L. Fabaceæ.

Hyacinth bean.

No. 792. Peking. October 15, 1924. This bean, obtained in the market, is called "French bean" by the Chinese, who use it dried as a vegetable.

62172 to 62174, FAGOPYRUM VULGARE Hill (F. esculentum Moench). Polygonaceæ. Buckwheat.

62172. No. 864. Chunglang, Chihli. October 9, 1924. Sample of buckwheat obtained from a farmer.

62173. No. 935. Fa Hua Ssu temple, near Taitzu, Chihli. From a mountain valley.

62174. 963. Tangshan (Hot Springs). October 12, 1924. Growing on sandy loam.

62175. FALCATA EDGEWORTHII (Benth.) Kuntze. Fabaceæ.

No. 860. Yung Lo [Ming] tomb, Changling, Chibli. October 9, 1924. The seeds are greenish yellow and blotched with black. May prove useful as a ground cover.

62176. GLEDITSIA SINENSIS Lam. Cæsalpiniaceæ.

No. 1019. Wenchueng, Chihli, October 21, 1924. A good-size?, round-headed tree with compound leaves. The Chinese use the pods in the manufacture of soap.

62177 and 62178. IRIS DICHOTOMA Pall. Iridaceæ. Iris.

62177. No. 773. October 9, 1924. Collected across the river from the Yung Lo [Ming] tomb. The flowers are said to be yellow.

62178. No. 774. October 9, 1924. From plants growing in the grounds of the Yung Lo [Ming] tomb.

62179. LATHYRUS sp. Fabaceæ.

No. 906. Shalingliang, Chihli, October 10, 1924. Pods collected from a bundle of wild grass brought down from the mountain.

62180. LESPEDEZA Sp. Fabaceæ.

No. 810. October 7, 1924. Collected between Lunghutai and the Ming tombs.

62181. LESPEDEZA Sp. Fabaceæ.

No. 866. Nung Lo tomb, near Changling, Chihli. October 9, 1924. Said to be good for goats.

62182. LESPEDEZA VIRGATA (Thunb.) DC. Fabaceæ.

No. 925. Fa Hua Ssu temple, near Haitzu. October 11, 1924. A shrubby legume.

#### **62161 to 62184**—Continued.

62183. MELOTHRIA sp. Cucurbitaceæ.

No. 1027. Peking. October 22, 1924. Chih Pao (red parcel). The sweet, melonlike fruits with smooth, red skin are small but quite attractive.

62184. Menispermum dauricum DC. Menispermaceæ. Asiatic moonseed.

No. 959. Near Hssachunk. October 12, 1924. A vine having ivylike leaves and berries about as large as good-sized peas.

62185. Indigofera Macrostachya Vent. Fabaceæ. Indigo.

From Shalingliang, Chihli, China. Seeds collected by P. H. Dorsett, agricultural explorer, Bureau of Plant Industry. Received December 6, 1924.

No. 908. October 10, 1924. A shrubby plant with hairy leaflets and pink flowers in dense racemes which are longer than the leaves, found growing along the trail near Shalingliang on very poor soil.

#### 62186 to 62229.

From China. Seeds collected by P. H. Dorsett, agricultural explorer, Bureau of Plant Industry. Received December, 1924. Notes by Mr. Dorsett.

62186. ORYZA SATIVA L. PORCEE. Rice

No. 981. Tatangshan (the Large Hot Spring Mountain), Chihli. October 13, 1924. Seeds obtained from a rice farmer.

62187. PERILLA FRUTESCENS (L.) Britton (P. ocymoides L.). Menthaceæ. Perilla.

No. 930. Fa Hua Ssu temple, near Haitzu, Chihli. October 11, 1924. The small, gray seeds of this perilla are used for the oil contained in them.

62188 to 62190. PHASEOLUS ANGULARIS (Willd.) W. F. Wight. Fabaceæ.

Adsuki bean.

62188. No. 828. Tailungyuan. October 8, 1924. A mottled black and gray bean; from vines growing in a large persimmon orchard.

62189. No. 857. Lung Lo tomb, Changling, Chihli. October 9, 1924. A pink bean obtained from a farmer.

62190. No. 969. Tangshan (Hot Springs), Chihli. October 12, 1924. A small, dark-blue and gray mottled hean

62191 and 62192. PHASEOLUS AUREUS ROXD. Fabaceæ. Mung bean.

62191. No. 808. Tailungyuan. October 7, 1924. A green mung bean obtained from a farmer.

62192. No. 929. Fa Hua Ssu temple, near Haiszu, Chibli. October 11, 1924. A green mung bean.

62193. PHASEOLUS CALCARATUS Roxb. Fabaceæ. Rice bean,

No. 858. Lung Lo tomb, Changling, Chihli. October 9, 1924. A small, creamy-white bean obtained from a farmer.

62194. PINUS sp. Pinaceæ.

No. 868. Nung Lo tomb, near Changling, Chihli. October 9, 1924. This is a low, flat-headed, scraggly pine of a rather peculiar appearance.

62186 to 62229—Continued.

62195. Pyrus Betulaefolia Bunge. Malaceæ. Pear.

No. 865. Nung Lo tomb, near Changling, Chihli. October 9, 1924. This tree, 20 or more feet in height, does not show any signs of blight.

62196. Pyrus sp. Malaceæ. Pear.

No. 766. October 6, 1924. Seeds of a domesticated Chinese sugar pear found in the district of the Ming tombs, northeast of Peking.

62197. RICINUS COMMUNIS L. Euphorbiaceæ. Castor bean.

No. 907. Wanpaochuan, Chihli. October 10, 1924. From the edge of a cultivated field.

62198 to 62208. Soja Max (L.) Piper (Glycine hispida Maxim.). Fabaceæ. Soy bean.

62198. No. 804. Lunghutai. October 7, 1924. This black soy bean is the commonest type grown in this section.

62199. No. 811. Tailungyuan. October 7, 1924. This is the leading variety grown here.

62200. No. 856. Yung Lo tomb, Changling, Chihli. October 9, 1924. A yellow variety.

62201. No. 933. Fa Hua Ssu temple, near Haitzu, Chihli. October 11, 1924. A black variety.

62202. No. 936. October 12, 1924. A yellow variety, mottled with brown, obtained from the priest of the Fa Hua Ssu temple, near Haltzu, Chihli.

62203. No. 937. October 12, 1924. A very dark-brown variety obtained from the priest of the Fa Hua Ssu temple, near Haitzu. Chihli.

62204. No. 964. Tangshan (Hot Springs). October 12, 1924. A creamy yellow variety.

62205. No. 966. Tangshan (Hot Springs). October 12. 1924. A black variety; one of the most important types grown in this sandy loam river-bottom soil.

62206. No. 1013. Chouchiahsiang, Chihli. October 21, 1924. A yellow or creamy yellow variety commonly grown in this section.

62207. No. 1015. Chouchiahsiang, Chihli. October 21, 1924. A black variety commonly grown in this level valley section.

62208. No. 1030. Peking. October 22, 1924. A brown variety streaked with black, called by the Chinese Hu p't tou (tiger skin). These soy beans taste very good after being roasted.

62209 to 62211. TRITICUM AESTIVUM L. (T. vulgare Vill.). Poaceæ. Common wheat.

62209. No. 863. Nung Lo tomb, Changling. October 9, 1924. This winter wheat has the smallest grain we have ever seen, and it appears very soft

62210. No. 970. Tangshan (Hot Springs). October 12, 1924. Ordinary winter wheat with very small

### **62186 to 62229**—Continued.

62211. No. 1016. Chouchiah siang, Chihli. October 21, 1924. A winter wheat growing in a broad flat valley.

### 62212 and 62213. VICIA FABA L. Fabaceæ. Broad bean,

Peking. Beans known here as *Tsan* tou (silkworm bean). These are roasted and are also cooked and used as a vegetable.

- 62212. No. 783. October 15, 1924. A large, broad, brownish green variety.
- 62213. No. 1031. October 22, 1924. A pinkish buff variety.
- 62214. VIGNA SESQUIPEDALIS (L.) Fruwirth, Fabaceæ. Yard Long bean.

No. 802. Between Nankou and Lunghutai. October 7, 1924. The base of this bean is terra-cotta colored and is blotched or streaked with a deeper shade of red.

- 62215 to 62224. VIGNA SINENSIS (Torner)
  Savi. Fabaceæ. Cowpea.
  - 62215. 803. Between Nankou and Cotober 7, 1924. A cowpea with a pinkish or purple eye, growing in a very dry situation.
  - 62216. No. 809. Tailungyuan. October 7, 1924. A pink or brown eyed cowpea.
  - 62217. No. 855. Yung Lo tomb, Changling, Chihli. October 9, 1924. A pink cowpea.
  - 62218. No. 932. Fa Hua Ssu temple, near Haitzu, Chihli. October 11, 1924. A cowpea mottled brown and white.
  - 62219. No. 934. Fa Hua Ssu temple, near Haitzu, Chihli. October 11, 1924. A pink or brown eyed cowpea.
  - 62220. No. 965. Tangshan (Hot Springs). October 12, 1924. This brown-eyed cowpea is one of the leading types grown on this sandy loam river-bottom soil.
  - 62221. No. 968. Tangshan (Hot Springs). October 12, 1924. Cowpea mottled pink and white.
  - 62222. No. 1017. Chouchiahsiang, Chihli. October 21, 1924. A browneyed cowpea.

#### 62186 to 62229—Continued.

- 62223. No. 1018. Chouchiahsiang, Chihli. October 21, 1924. A pink cow-
- 6224. No. 1045. Peking. October 25, 1924. A mottled reddish brown and creamy yellow cowpea purchased in the market and reported to have come from the region south of Peking.

### 62225. ZANTHOXYLUM sp. Rutaceæ. Prickly ash.

No. 903. Yung Lo [Ming] tomb. Changling, Chihli. October 10, 1924. This plant is fully as broad as it is high, and the dark-green leaves have a pleasant, spicy odor. It may prove to be a good ornamental and possibly a good hedge plant.

62226 and 62227. ZEA MAYS L. Poaceæ.

- 62226. No. 806. Lunghutai. October 7, 1924. Small ears of flint corn purchased in the temple. The keeper reported that this corn is harvested within 100 days after planting.
- 62227. No. 926. Fa Hua Ssu temple, near Haitzu, Chihli. October 11, 1924. Yellow flint corn grown here on the mountain.
- 62228, Ziziphus Jujuba Mill. (Z. sativa Gaertn.). Rhamnaceæ. Jujube.

No. 758. Peking. October 1, 1924. These fruits, obtained in the market, are quite acid and of good quality.

62229. Grewia Parviflora Bunge.

No. 829. Nung Lo tomb, near Changling, Chihli. October 9, 1924. Collected from a small shrub which resembled a Celtis.

### 62230. RHAMNUS DAVURICA Pall. Rhamnaceæ. Dahurian buckthorn.

From China. Seeds collected by P. H. Dorsett, agricultural explorer, Bureau of Plant Industry. Received December 6, 1924.

No. 967. October 12, 1924. A shrub having rather small, deep-green leaves and numerous small, purple or black, one-seeded fruits; found at Neutang, a short distance from Tangshan (Hot Springs). (Dorsett.)

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