

6915



PLANT IMMIGRANTS

No. 200

December, 1922

GENERA REPRESENTED IN THIS NUMBER

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NOTES AND COMMENTS

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- 319. A new ornamental tree for the Tropics, the flor de mico (*Phyllocarpus septentrionalis*).
- 320. A rival of the royal poinciana (*Phyllocarpus septentrionalis*).

Foreign Seed and Plant Introduction

EXPLANATORY NOTE

This circular is made up principally of notes received from agricultural explorers, foreign collaborators, and correspondents, concerning the more important plants which have been received recently by the Office of Foreign Seed and Plant Introduction. It also contains reports on the behavior of plants which have been introduced in previous years.

Descriptions appearing here are revised and later published in the Inventory of Seeds and Plants Imported,-- the permanent record of plant introductions made by this Office.

Plant Immigrants should be considered merely an ANNOUNCEMENT OF THE ARRIVAL OF PLANT MATERIAL. As a rule all material is propagated before being distributed; this may require several years.

The Annual Catalogue of New Plant Introductions describes briefly the plants available for distribution. Application for seeds or plants listed in Plant Immigrants may be sent at any time, however, and will be filed in the order of their receipt. When material is ready for distribution, these requests will be given first attention; if their number is sufficient to exhaust the available supply of a given species, it will not be included in the Annual Catalogue.

Plant breeders and experimenters who desire plants not available in this country are invited to correspond with this Office which will endeavor to secure the required material through its agricultural explorers, foreign collaborators, or correspondents.

DAVID FAIRCHILD
Agricultural Explorer in Charge,
Office of Foreign Seed and Plant Introduction.

Issued March 2, 1923. Washington, D. C.

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AMYGDALUS PERSICA (Amygdalaceae), 55835 and 55836. **Peach.** From the Plant Introduction Garden, Chico, Calif. Seedling trees numbered October, 1922. Quoted notes by J. E. Morrow. A shipment of seeds of the peach variety "Tardio Amarillo" was received from southern Spain in November, 1916, and given S.P.I. No. 43570. As is well known, peach varieties do not come true to seed, and the two trees described below are promising seedlings from this shipment.

55835. "Tree No. 6, Test Nursery. Fruits $2\frac{1}{8}$ by $2\frac{1}{4}$ inches; average weight 4 ounces; color golden with a faint red blush; basin deep and narrow, slight depression at suture; flesh yellow, pit yellow. Season September 5 to September 15, later than last year. This is a good canning clingstone peach, and a heavy bearer."

55836. "Tree No. 8, Test Nursery. Fruits 2 by $2\frac{1}{8}$ inches; average weight 4 ounces; basin deep, narrow; suture only a line; flesh deep yellow, of good texture and flavor; pit small, yellow. This peach should be propagated for canning purposes. It is of smaller size than last season, and later in ripening."

AMYGDALUS PERSICA (Amygdalaceae), 55885 to 55888. **Peach.** From Yunnan, China. Seeds collected by J. F. Rock, Agricultural Explorer of the Bureau of Plant Industry. Quoted notes by Mr. Rock.

55885. "(Puerhfu. August, 1922.) A large tree growing wild in the mountains at an altitude of 5,000 feet. The fruits are a beautiful red, clingstone, with juicy, rather strong-flavored flesh resembling that of a cherry."

55886. "(Puerhfu. August, 1922.) A large tree 50 feet in height, growing wild in the mountains at an altitude of 5,500 feet. The fruits are of fairly good size, yellow with a red cheek, clingstone, with yellow, very juicy flesh of excellent flavor."

55887. "(Likiang. August, 1922.) A large vigorous tree growing at an altitude of 8,500 feet. The large fruits, $2\frac{1}{2}$ inches in diameter, are red and yellow on the surface, with firm, snow-white, quite tasteless flesh. This should be a good stock plant."

55888. "(Puerhfu. August, 1922.) A large tree, 40 to 50 feet high, growing wild in the mountains. The fruits are the size of small apples, pure white outside, clingstone, with snow-white very juicy flesh resembling that of a cherry."

COTONEASTER spp. (Malaceae), 55820, 55821, 55873, 55896. From Likiang, Yunnan, China. Seeds collected by J. F. Rock, Agricultural Explorer of the Bureau of Plant Industry. Quoted notes by Mr. Rock.

55820. **COTONEASTER** sp. "(No. 5749. August, 1922.) A very ornamental shrub 8 to 10 feet high, growing in open scrub land among limestone boulders at altitudes of 9,000 to 10,000 feet on the Likiang snow range. The leaves are densely packed along the stems; the pinkish

flowers are numerous, as are also the scarlet and yellow fruits, the latter resembling miniature apples."

55821. *COTONEASTER* sp. "(No. 5781. August, 1922.) A prostrate shrub growing on pure limestone rocks on the Likiang snow range at altitudes of 8,000 to 10,000 feet. It has small dark-green glossy leathery leaves, pinkish white flowers, and rich red fruits, and would make a splendid shrub for rockeries."

55873. *COTONEASTER HEBEPHYLLA*. "(August, 1922.) A deciduous shrub 10 to 18 feet in height, growing in limestone soil at an altitude of 10,000 to 11,000 feet on the Likiang snow range. It has long, rambling branches, white flowers, and dark-carmine fruits, and is quite ornamental."

55896. *COTONEASTER PANNOSA*. "(No. 5818. August 20, 1922.) A very ornamental shrub 10 feet high, growing among limestone boulders in fir forests and alpine meadows on the Likiang snow range at altitudes of 9,000 to 12,000 feet. The flowers are whitish pink, and the ovate fruits purplish black."

CUCUMIS SATIVUS (Cucurbitaceae), 55828. **Cucumber.** From Burringbar, New South Wales. Seeds presented by B. Harrison. "'Harrison's Long.' A cucumber 2 to 3 feet long, with tender, crisp, and palatable flesh. This variety is the result of careful selection and cultivation." (Harrison.)

GARCINIA OBLONGIFOLIA (Clusiaceae), 55894. From Hongkong, China. Seeds presented by H. Green, superintendent, Botanical and Forestry Department, Hongkong. "This species has just come into bearing in one of our greenhouses, and we find the fruit to be of very good quality for eating out of hand. The flavor suggests that of the mangosteen." (Wilson Popenoe.)

Seeds of a tree, native to Hongkong, China, which is a relative of the mangosteen. It has narrow, short-stalked leaves, terminal yellow flowers, and smooth fruits the size of a small apple. (Adapted from Bentham, *Flora Hongkongensis*, p. 25.)

MALUS spp. (Malaceae), 55817 and 55889. **Apple.** From Likiang, Yunnan, China. Seeds collected by J. F. Rock, Agricultural Explorer of the Bureau of Plant Industry. Quoted notes by Mr. Rock.

55817. *MALUS* sp. "(July, 1922.) A tree 40 feet high, found wild and semicultivated in the vicinity of Likiang. The handsome fruits, about 2 inches in diameter, are bright crimson with just a touch of yellow. The flesh is firm, not mealy, with an acid-sweet flavor. A delicious, bright-red jelly is made by boiling the fruits whole, in the skin, 2 parts of apples to 1 part of water; the juice is strained and boiled with sugar, 3 parts of sugar to 5 parts of juice."

55889. *MALUS* sp. "(August 15, 1922.) A large vigorous tree, growing wild and semicultivated. The ornamental fruits, the size of walnuts, are bright crimson with a touch of yellow on one side. Their acid-sweet, very palatable flesh, makes them excellent for jam or jelly."

MANGIFERA INDICA (Anacardiaceae), 55839. **Mango.** From Honolulu, Hawaii. Plant presented by G. P. Wilder, through Willis T. Pope, horticulturist, Hawaii Agricultural Experiment Station. "'Wootten.'" The original was produced from seed of the mango known as No. 7, originally from Jamaica, and is growing on the property of J. L. Horner, Makiki Street, Honolulu.

"In size it is medium to large; shape roundish, slightly flattened on the sides, no apex point evident; weight about 10 ounces; color when ripe between orange-yellow and yellow-orange, with tinges of pink and red at the stem end and pale yellow dots all over the surface; skin medium thin, tough, peeling qualities fair, very pleasing fragrance; flesh rich apricot-yellow, very good texture; flavor excellent, juicy, sweet-acid; seed medium to small for size of fruit.

"While still solid it has a very beautiful color as if ripe, making it a very desirable marketing form. It is one of the very best seedling mangos. In moderate temperatures it will remain in good condition as ripe fruit for two weeks." (Wilder.)

PEUMUS BOLDUS (Monimiaceae), 55871. From Santiago, Chile. Seeds presented by Salvador Izquierdo. "'Boldo.'" A small tree esteemed in Chile for its ornamental and medicinal value. The dried leaves are exported to Europe where they are employed in diseases of the liver. An infusion of the flowers is also used medicinally. The fruits are eaten but are not of great value.

"The tree is dioecious and is very aromatic in all its parts. It has opposite, rough, short-petioled, ovate leaves; the flowers, borne in small axillary racemes, are followed by fruits the size of our northern haws." (Wilson Popenoe.)

PRIMULA spp. (Primulaceae), 55899 and 55900. From Likiang, Yunnan, China. Seeds collected by J. F. Rock, Agricultural Explorer of the Bureau of Plant Industry. Quoted notes by Mr. Rock.

55899. *PRIMULA SINOPURPUREA* "(No. 5783. August 25, 1922.) A very charming robust plant 3 feet high, growing in acid soil in boggy meadows at an altitude of 14,000 feet on the Likiang snow range. The leaves are golden yellow beneath, and the large umbels of rich purple flowers appear in April and early May. When in flower this plant is very striking."

55900. *PRIMULA VINCIFLORA*. "(No. 5782. August 25, 1922.) One

of the finest primulas found on the Likiang snow range. It grows in company with the preceding *P. sinopurpurea* (S.P.I. No. 55899) in similar situations, though not nearly so common, for it does not seed readily. The deep indigo-blue flowers are an inch and a half across and, like the preceding, appear quite early."

PRUNUS URSINA (Amygdalaceae), 55872. Plum. From Beirut, Syria. Seeds presented by Alfred E. Day, American University of Beirut. "A wild plum. The fruits of this particular tree are decidedly larger and sweeter than usual; they are about $1\frac{1}{2}$ inches in diameter, and yellow with pink cheeks." (Day.)

PRUNUS spp. (Amygdalaceae), 55818, 55819, 55822 to 55824, 55901. From Yunnan, China. Seeds collected by J. F. Rock, Agricultural Explorer of the Bureau of Plant Industry. Quoted notes by Mr. Rock.

55818. PRUNUS sp. Plum. "(Near Szemao. July, 1922.) A large tree 40 feet or more in height, collected 30 li (9 miles) from Szemao at 5,000 feet altitude. The red fruits are the size of walnuts, with loose, rather sour flesh. This should be good as a stock plant."

55819. PRUNUS sp. Plum. "(Near Szemao. July, 1922.) A large tree 45 feet high, found in the mountains at an altitude of 6,000 feet. The dark-red fruits, the size of large walnuts, have hard flesh with a sour insipid flavor. This tree was free from disease and should make a good stock plant."

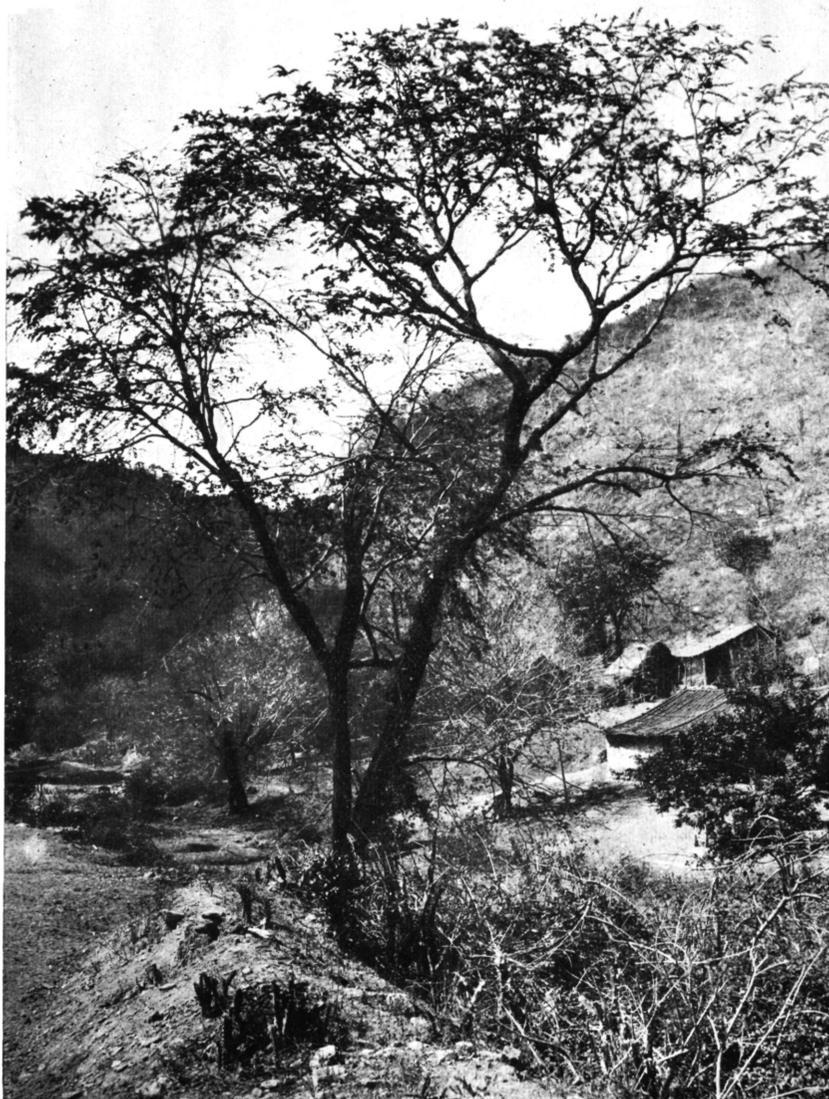
55822. PRUNUS sp. Cherry. "(Likiang. August, 1922.) A tree 35 to 40 feet high, growing among limestone boulders at an altitude of 10,000 feet. It is a fine shapely tree, with glossy leathery foliage, racemes of white flowers, and dark-red, glossy fruits the size of a pea.

"The temperature at the village of Nguluke, in the Likiang plain, drops to below zero Fahrenheit in the winter, and a fall of 22 inches of snow in December is not uncommon."

55823. PRUNUS sp. Cherry. "(Likiang. August, 1922.) A shapely tree which grows at an altitude of 10,000 feet among limestone boulders on the Likiang snow range. It has long drooping racemes of cream-colored flowers and small yellowish green fruits which are sour when ripe."

55824. PRUNUS sp. Plum. "(Likiang. August, 1922.) A very hardy plum tree 35 to 40 feet high, growing semi-wild in the vicinity of Likiang, at altitudes of 8,500 to 9,000 feet. The bright-red, perfectly round fruits are the size of large walnuts, clingstone, with yellow, sweetish sour flesh which makes excellent jelly and jam."

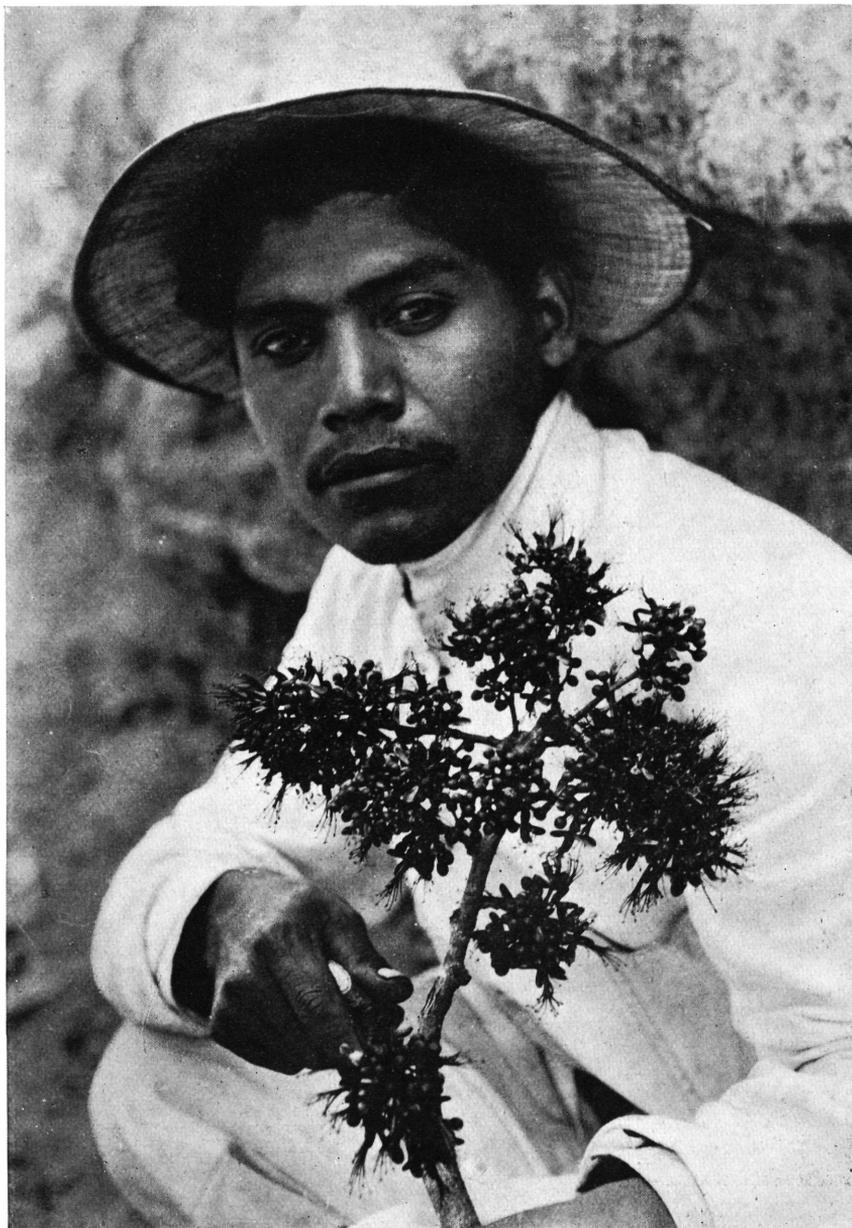
55901. PRUNUS sp. Plum. "(No. 6056. Likiang. August 25, 1922.) A wild plum tree 20 to 25 feet high, of spreading habit, found in limestone soil on the eastern side of the Likiang plain, opposite the snow range, at an altitude of 10,500 feet. It bears perfectly round fruits



A NEW ORNAMENTAL TREE FOR THE TROPICS, THE FLOR DE MICO.

(*Phyllocarpus septentrionalis* Donn. Smith, S. P. I. No. 50666.)

Of the many beautiful flowering trees cultivated in the Tropics, none is more gorgeous, when in full bloom, than the royal poinciana. The "flor de mico," or monkey flower, of Guatemala, however, may be considered a worthy rival. At the flowering season it drops its leaves and the entire tree is covered with crimson-scarlet blossoms. So far as known, this tree has never before been introduced into cultivation; on Mr. Popenoe's last voyage to Guatemala he secured 15 pounds of seed, from which several thousand sturdy young plants have been grown for distribution in southern Florida and in our tropical dependencies. (Photographed by Wilson Popenoe, Barranquillo, Guatemala, January 29, 1920; P17717FS.)



A RIVAL OF THE ROYAL POINCIANA.

(*Phyllocarpus septentrionalis* Donn. Smith, S. P. I. No. 50666.)

The "flor de mico" grows in small ravines in the lowlands of eastern Guatemala. It flowers at the end of winter, and for this reason it may be of particular interest in southern Florida, where ornamental trees which will bloom during the winter season are greatly desired. The royal poinciana, which the "flor de mico" (monkey flower) greatly suggests in appearance, does not flower until midsummer and is not attractive during the period when many thousands of people from the North visit the tropical resorts of southern Florida. (Photographed by Wilson Popenoe, Barranquillo, Guatemala, January 29, 1920; P17720FS.)

an inch in diameter, lemon yellow, opaque with firm, sour flesh which is somewhat sweet when absolutely mature. The tree is very healthy and an abundant fruiter, and should make a good stock plant where hardiness is desired. The locality where it was collected is subject to drought from October to the middle of June, the heat is intense from March to May; and snow falls in the winter."

RIBES spp. (Grossulariaceae), 55890 and 55902. From Likiang, Yunnan, China. Seeds collected by J. F. Rock, Agricultural Explorer of the Bureau of Plant Industry. Quoted notes by Mr. Rock.

55890. RIBES sp. "(No. 5833. August 16, 1922.) A shrub 6 to 15 feet in height, growing in alpine meadows at an altitude of 12,000 feet, where it is 5 or 6 feet high; also in fir forests, where it reaches a height of 15 feet. It is a beautiful plant with pendent branches loaded with flowers in early May. In the latter part of August the fruits appear; these are yellowish red berries the size of a pea, with an acid-sweet flavor."

55902. RIBES GLACIALE. "(August 21, 1922.) A shrub 15 feet high, growing in alpine meadows at an altitude of 12,000 to 15,000 feet on the Likiang snow range. The flowers, which vary from cream color to red, and the red oval berries make this shrub decidedly ornamental."

RUBUS spp. (Rosaceae), 55825, 55826, 55891 to 55893, 55903, 55904. From Likiang, Yunnan, China. Seeds collected by J. F. Rock, Agricultural Explorer of the Bureau of Plant Industry. Quoted notes by Mr. Rock.

55825. RUBUS BIFLORUS. "(July, 1922.) A rambling shrub, collected on the Likiang snow range at altitudes of 11,000 to 12,000 feet. The large leaves have woolly lower surfaces, the large calyx is foliaceous, and the subacid yellow fruits are the size of a thimble."

55826. RUBUS sp. "(No. 5359. July, 1922.) A vigorous rambling shrub, collected at an altitude of 12,000 feet on the Likiang snow range. It has red spiny stems, leaves with white lower surfaces, pinkish purple flowers, and small, dark-red fruits of a delicious sweet flavor."

55891. RUBUS sp. **Raspberry.** "(August 15, 1922.) A shrub 4 feet high, growing in protected gulches on the Likiang snow range at an altitude of 12,000 feet. It bears delicious orange-red berries, and may be only a form of the following (S.P.I. No. 55892)."

55892. RUBUS sp. **Raspberry.** "(August 15, 1922.) A shrub 4 feet high, growing on the Likiang snow range at an altitude of 13,000 feet in the shade of *Larix thibetica* and also in fir and spruce forests. The large orange-red translucent berries, an inch in diameter, are very juicy and of delicious flavor. This is certainly worthy of cultivation."

55893. RUBUS sp. **Raspberry.** "(August, 1922.) A shrub growing in sheltered ravines on the Likiang snow range at an altitude of 11,000 to 12,000 feet. It has crimson-stemmed drooping branches and trifoliate leaves with the lower surfaces slightly pruinose or silvery. The fruits, somewhat smaller than those of the preceding species, are obconical, darker red, and faintly pubescent."

55903. RUBUS sp. **Raspberry.** "(No. 5834. August 16, 1922.) A raspberry with large, rich green leaflets, collected on the Likiang snow range at an altitude of 11,000 feet. The yellow fruits, the size of a thimble, have a delicious flavor. The plant thrives in limestone soil."

55904. RUBUS sp. "(No. 6057. August 24, 1922.) One of the finest species of Rubus on the Likiang snow range, where it grows at an altitude of 13,000 feet in forests of *Larix thibetica*. The orange-yellow fruits are larger than any of the cultivated species of Rubus, and are rich in color, juice, and flavor."

RUBUS FRAXINIFOLIUS (Rosaceae), 55833. From Buitenzorg, Java. Seeds presented by Carl Hartley. "A Rubus collected at an altitude of about 3,500 feet on the Salak in West Java. The bush is often 2 meters high, and very slightly thorny. The conical strawberry-red fruit, 2.5 centimeters long and 2 centimeters wide at the base, is inclined to be hollow and deficient in pulp, but it is not acid and the flavor is fairly good. The species may prove valuable in breeding work." (Hartley.)

Behavior of Some Plant Immigrants.

Beverly T. Galloway.

Many plant immigrants reach the Office of Foreign Seed and Plant Introduction with little information as to what they are, what may be expected of them, or where they should be placed to bring out characteristics which may determine their value to American agriculture or horticulture. This, after all, is one of the charms of plant introduction work. Potential possibilities and values lie hidden in all little-known plant immigrants. To discover these and make them redound in some way to the benefit of our people is the aim of the plant introducer. From time to time we can report progress on some of the things brought in. This may give us a new starting point and be the means of broadening the field of knowledge so that other workers may profit therefrom.

MALUS SYLVESTRIS (Malaceae), S.P.I. No. 35638. **Apple.** In December, 1912, the late Frank N. Meyer, while traveling in southern Russia, secured through Svend Lange at Novo Nikolayefsk, two small lots of

apple seeds. Novo Nikolayefsk is a town close to the Gulf of Tanganrog in the Sea of Azov. The Crimean country is comparatively warm and apples coming from this region are not without interest. Mr. Meyer simply noted that the seeds were from "a variety of apple coming from the Crimea and called Oporto." The seeds were sent to the Plant Introduction Garden at Chico, California, and planted there. They were forwarded under two numbers (35636 and 35638). There is no record of any results from No. 35636, but from No. 35638 a tree was secured and planted in the test orchard at Chico - row 99, tree 5. The tree flowered in 1921, but no fruit was reported. This year (1922) samples of fruit were sent in to Washington from Chico the last of August. The apple is medium-sized, pale yellow in color, and has a pleasant subacid taste. It may be classed as a good dessert apple. Following is a description of the fruit:

Seedling apple. Chico Plant Introduction Garden.
No. 35638.

Fruit medium in size; form oblate or rounded oblate, regular; stem inclined to be slender; cavity acuminate, deep, of medium breadth, smooth; calyx small, open; basin rather shallow, medium width; skin thin, tender, smooth, pale yellow, washed, mottled, and splashed with carmine, dots few in number, yellowish or russet; core medium size; seeds rather large.

Prevailing effect yellowish splotched and mottled with red. Flesh whitish, rather coarse, mealy, mild and pleasant, subacid, good dessert. Season at Chico, California, September 1.

The tree at Chico is still small, being about 8 feet high and 2½ to 3 inches in diameter. This variety, owing to its success in the warm valley climate of Chico, would seem worthy of further study and testing, as it may prove a useful addition in many parts of the country. Samples submitted to Dr. W. A. Taylor brought forth the following comment:

"It impresses me as a fruit of very good quality which if a regular bearer under the Chico conditions would be a distinct addition to the list, at least for home use there. In practically every particular it is very different from the Crimean apples that I have seen, most of which were long-keeping winter varieties, such as Candil Sinap, White Winter Calville, Red Winter Calville, etc.

"The Calvilles of course are not peculiar to the Crimea, but are rather widely grown throughout southwestern Europe, especially in espalier and cordon methods of training. This seedling impresses me as of better texture and quality than any of them and certainly is well worth keeping an eye on."

MALUS SYLVESTRIS (Malaceae), 9471. **Apple.** Nearly twenty years ago, when the Office of Foreign Seed and Plant Introduction was still young, David Fairchild, now in charge of the office, and Mr. Barbour Lathrop were engaged in extensive agricultural explorations in various parts of the world. This work was conducted largely at Mr. Lathrop's expense. In the course of their travels, Messrs. Lathrop and Fairchild visited Italy and while in Naples they discovered the "Melo gelato" apple. This variety was being sold on the streets and its unusual aroma attracted the attention of the two explorers. Through Prof. L. Savastano arrangements were made to send some scions of the apple to the Department at the proper season. The scions arrived March 14, 1903, with the following note:

"Apple - 'Melo gelato.' Grows well in warm regions about Naples. In cold countries the yield is poor. It does best in calcareous soil." (Fairchild.)

Nearly a hundred scions were received and the records show that they were widely distributed, going to California, Texas, Arkansas, Georgia, Virginia, North Carolina, and several other states. Thirty-three of the scions were placed at the disposal of the Office of Horticultural and Pomological Investigations in the Bureau of Plant Industry and distributed by that office. A few were propagated at the Arlington Experimental Farm near Washington, and the young trees planted in the experimental orchard. In 1904 a number of reports came in to the effect that the scions had been received and were growing, and then the apple dropped out of sight until this year (1922) when it fruited at the Arlington Farm. What happened to the remaining widely distributed material is not known. Following is a description of the fruit as produced at Arlington:

Melo gelato. No. 9471. Naples, Italy. Introduced in March, 1903.

Fruit medium to rather small; generally uniform in size and shape; form roundish; flattened at the stem end; stem slender, short; cavity acute,

narrow, moderately deep; calyx small, closed; basin shallow, rather narrow; skin thin, pale green with occasional semitransparent spots on it; core rather small; seeds medium sized, few in number; flesh greenish white, rather soft and spongy, tender, somewhat coarse grained, aromatic, pleasant, juicy, and sweet.

This apple would seem worthy of further trial, particularly in the warm sections of the country or on the boarder line through southern Virginia, northern Alabama, Kentucky, and Tennessee. Season October - November.

The following is taken from Dr. Fairchild's desk book, November 17, 1922:

"I have just tasted, after nearly twenty years, the 'Melo gelato' apple, S.P.I. No. 9471, scions of which Mr. Lathrop and I collected in Portici, Italy, or, rather, which we arranged for through Professor Savastano in 1903. The delicate aroma of this apple brings back all the scenes of those delightful days in Naples, with the street venders, their street cries, and all. It has been a long time coming into fruit, this apple, but at last it is really here. How productive it will be I do not know, but its aroma is surprisingly delicate. I can not taste it without a sense of the romance of this work of bringing to America the flavor of a Naples fruit."

MALUS SYLVESTRIS (Malaceae), 10345. **Apple.** In January, 1904, there was received from Nikita, near Yalta, Crimea, a number of apple scions. These scions were presented to E. A. Bessey, who was then in charge of the Office of Foreign Seed and Plant Introduction, by Theophil Kalaida, head gardener of the Imperial Gardens at Nikita. The scions were entered under No. 10345 and the name of the apple was given as "Sabla Sinap". The only comment recorded is that the fruit is "distinguished for its beautiful appearance." In February, 1904, the scions were turned over to the Arlington Farm and thirteen grafts were made from them. Three of the young trees were planted among the apple collections on the farm and now, after eighteen years, two trees have come into bearing. While the quality of the fruit is only fair, its unusual shape and striking color would seem to make it worthy of notice for limited plantings where a highly colored, unusually shaped fall

apple is required. The two trees at the Arlington Farm are moderate growers and so far have been light croppers. The habit of growth is upright, more like that of a pear than an apple. Following is a description of the fruit:

Sabla sinap. No. 10345. Nikita, Crimea. Introduced in January, 1904.

Fruit medium size, nearly barrel shaped, and inclined to be oblate; stem short, thin; cavity shallow, acute; calyx medium size, closed; basin abrupt, moderately deep, wrinkled and ribbed; skin tough, thickish, glossy, pale yellow with beautiful deep red blush covering more than half the surface; core large; seeds medium size, wedge shaped; flesh rather coarse, yellowish white, somewhat tough, lacking in flavor, and of fair quality.

A very striking and beautiful apple on account of its shape and color, but of indifferent quality. Season October.

MALUS SYLVESTRIS (Malaceae), 6734 and 6738. **Apples.** Something over twenty years ago a collection of apples was received by the Office of Foreign Seed and Plant Introduction from C. A. Nobelius, of Emerald, Victoria. There were twenty-three varieties in this collection, and it is with two of these that this note is concerned. Scions of both the above numbers were quite widely distributed in June, 1901, but no records came to hand as to the results of the introduction until this year (1922). Both apples fruited at the Arlington Farm and, inasmuch as no descriptions of them are available, having been introduced merely under numbers and names, the following is set down as a matter of record:

Kooroochiang. No. 6734. Emerald, Victoria. Introduced in June, 1901.

Fruits large to very large, uniform in shape; form roundish, slightly oblate, occasionally slightly ribbed; stem short, rather slender; cavity acute, deep and narrow; russet streaked; calyx small; basin shallow, rather narrow, furrowed and wrinkled; skin tough, pale yellow with pale carmine blush on one side; core small; seeds few, large; flesh white, firm, rather coarse grained, crisp and juicy, with a decidedly acid

taste. An apple of fair quality and worthy of further trial. Season November - December.

Granny Smith. No. 6738. Emerald, Victoria. Introduced in June, 1901.

Fruit medium in size, rather uniform in size and shape; form roundish, slightly oblate; stem short, cavity shallow, rather broad; calyx medium in size; basin shallow, rather wide; skin tough, thin, roughened with numerous greenish protuberances, yellow or greenish yellow, with faint carmine blush; core rather small; seeds small, few in number; flesh whitish, firm, crisp and juicy, with a sprightly subacid flavor, good to very good in quality.

A promising apple well worthy of more extended trial. Season November - December.

OFFICE OF FOREIGN SEED AND PLANT INTRODUCTION
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