



PLANT IMMIGRANTS

No. 207

July, 1923

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Plates

333. The Barouni olive (*Olea europaea*).
334. The Grove of Japanese Bamboo at the Savannah Plant Introduction Garden (*Phyllostachys* sp.).

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.

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ABUTILON MOLLISSIMUM (Malvaceae), 56908. From Nice, France. Seeds presented by Dr. A. Robertson Proschowsky. An annual bushy plant, usually 4 to 5 feet high, but reported to reach a height of 10 feet in Peru, where it is native. The stem and the large, very soft, heart-shaped leaves are quite hairy, and the solitary, axillary flowers, about an inch long, are sulfur-yellow. (Adapted from Cavanilles, *Secunda Dissertatio Botanica*, p. 49, No. 67.)

AVENA SATIVA (Poaceae), 56892. Oats. From Wageningen, Netherlands. Seeds presented by Dr. R. J. Mansholt, Royal Netherland College of Wageningen. "Mansholt III." A variety obtained by selection from "Victoire de Svalof." Its chief characteristics are: straw fairly short, very thick, stiff; grain white and plump like that of "Victoire de Svalof," but distinctly larger; season early. It is an excellent variety, very resistant to lodging. It should not be grown on poor, light soils, as it requires rich, well-fertilized land. (Adapted from *International Review of the Science and Practice of Agriculture*, Monthly bulletin of Agricultural Intelligence, vol. 13, p. 331.)

COLOCASIA ESCULENTA (Araceae), 56911. Dasheen. From Canton, China. Tubers presented by G. Weidman Groff, director, Canton Christian College. "A taro, or dasheen, of good quality. The sprouts are distinctly reddish. The tubers are said to be small and quite uniformly elliptical, and the leaves dark green. The variety is also reported to yield well." (R. A. Young.)

COTONEASTER sp. (Malaceae), 57038. From Ichang, China. Seeds presented by Albert S. Cooper, American Church Mission. "An evergreen, growing prostrate on rocky surfaces. Collected on the mountains back of Patung, Hupeh, at altitudes of 6,000 to 8,000 feet." (Cooper.)

CUCUMIS sp. (Cucurbitaceae), 56794. From Johannesburg, South Africa. Seeds presented by A. J. Bester. "A 'cucumber' which I found being grown by the natives. It makes a very fine salad." (Bester.)

DILLENIA INDICA (Dilleniaceae), 56791. From Manila, Philippine Islands. Seeds presented by Adn. Hernandez, director, Bureau of Agriculture. A handsome, medium-sized tree with a round, compact crown; the dark-green leaves are 15 inches long and 3 inches wide. The large white flowers are fragrant and very attractive. The smooth, greenish, heart-shaped fruits, 3 inches long and 4 inches wide, are produced in great profusion, maturing in September and October. The edible part consists of the large, fleshy sepals which inclose the carpels and are pleasantly acid, suggesting the flavor of an unripe apple. In India the sepals are used in making jelly and cooling drinks and are also

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used in curries. (Adapted from The Philippine Agricultural Review, vol. 10, p. 16.)

FRANCOA SONCHIFOLIA (Saxifragaceae), 56909. From Nice, France. Seeds presented by Dr. A. Robertson Proschowsky. A rather shrubby ornamental about 3 feet high, with bright-green, downy, wavy-margined leaves, and handsome lilac-colored flowers in long, erect, spikelike racemes. The plant is native to Chile. (Adapted from Curtis's Botanical Magazine, pl. 3309.)

ILEX sp. (Aquifoliceae), 57085. **Holly**. From Ichang, China. Seeds presented by Albert S. Cooper, American Church Mission. "A small-leaved holly collected on the mountains back of Patung, Hupeh, at altitudes of 6,000 to 8,000 feet." (Cooper.)

IPOMOEA BATATAS (Convolvulaceae), 56920, 56997, 56998, 57002, 57004, 57007, 57011. **Sweet potato**. From St. Croix, Virgin Islands. Seeds presented by J. B. Thompson, agronomist in charge, Agricultural Experiment Station. Quoted notes by Mr. Thompson.

56920. "No. 7. A 'Big Wig' seedling. The vine is 3 to 4 feet in length. It is very leafy and covers the ground completely with a dense leafy mass. The leaves are green, broadly shouldered and lanceolate. The roots are red."

56997. "No. 2. 'Big Wig' variety. It is not known whence this variety came. It was obtained by the Station from Estate Strawberry Hill in 1920 or 1921 and has since been grown continuously at the Station. It is of bunching vineless growth and bears many dark-green deeply cut, 5-lobed leaves. The original form as obtained by the Station has red tubers. The seed collected has all been from the ordinary 'Big Wig.'"

56998. "No. 1. 'Black Rock' variety. This was introduced from Barbados by Dr. Longfield Smith, of this Station, in 1911, and is undoubtedly the most popular variety grown in St. Croix. The vines are vigorous, bearing dark-green, cordate leaves. The tubers which are long and often ill shaped are dark purplish red and attain a large size under favorable conditions. The variety has the reputation of keeping longer in storage than other varieties."

57002. "No. 2. 'Hug-me-tight' variety. A few tubers of this variety were purchased on the St. Thomas Market in May, 1922, under the above name. The tubers were said to have been grown on the Island of Tortola, a British Island some miles off the east coast of St. Thomas. The tubers are white."

57004. "No. 2. 'John Siddon' variety. A few tubers of this variety were obtained at the same time and came from the same source as those of 'Hug-me-tight' (S. P. I. No. 57001 and 57002) which were

purchased in the St. Thomas market in May, 1922, and said to have been grown on the Island of Tortola, a British Island off the coast of St. Thomas."

57007. "No. 3. 'Key West Yam.' This variety was obtained from the Federal Experiment Station at Mayaguez, Porto Rico and planted at the Virgin Islands Experiment Station some two or three years ago. After growing this variety in a number of comparative tests in which a large number of local varieties were represented, the Porto Rico Experiment Station pronounced this the best variety tested under conditions at Mayaguez. It has shown considerable merit in St. Croix but has not fully established its superiority over the 'Black Rock' and 'Big Wig' varieties. The vines are medium in length and the leaves are of a very noticeably yellow-green. The tubers are yellow."

57011. "No. 1. 'Wrenchy' variety. This is an old local variety the history of which is not known. The vines are long and slender and the tubers are white. This variety is said to yield comparatively well on hard or poorly plowed land."

JUNIPERUS CEDRUS (Pinaceae), 57080. **Juniper.** From Kew, England. Seeds presented by Dr. A. W. Hill, director, Royal Botanic Gardens. A Canary Island relative of the common juniper, differing only in minor botanical characters, and also in being less hardy. Dr. Georges Perez, of Orotava, Canary Islands, reported trees of this species with trunks a yard or more in diameter. The leaves are uniformly awl-shaped, and in whorls of threes. The wood is pleasantly perfumed. (Adapted from Bean, Trees and Shrubs Hardy in the British Isles, vol. 1, p. 669.)

LYCOPERSICON ESCULENTUM (Solanaceae), 56797. **Tomato.** From Nancy, France. Seeds presented by Prof. Edmond Gain, director, Botanic Garden. Var. "pimpinellifolium." A South American form, sometimes called the "currant tomato," with 2-ranked racemes of red fruits somewhat larger than a large red currant. The plant grows wild in Peru and Brazil, is very vigorous and comparatively hardy, and the fruits are excellent for preserving. (Adapted from Sturtevant, Notes on Edible Plants, p. 347.)

PHYLLOCARPUS SEPTENTRIONALIS (Caesalpiaceae), 56906. From El Barranquillo, Guatemala. Seeds purchased from Fernando Carrera, through A. C. Frost, American consul, Guatemala. "A magnificent flowering tree found in sandy loam in eastern Guatemala at 1,500 to 2,000 feet altitude. It is of broad spreading habit, 40 to 50 feet high, with light-green compound leaves. In January and February the tree is a mass of crimson-scarlet flowers which are borne in small clusters, and are each about an inch broad." (Wilson Popenoe.)

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PHYTOLACCA CLAVIGERA (Phytolaccaceae), 56800. From Edinburgh, Scotland. Seeds presented by William W. Smith, regius keeper, Royal Botanic Garden. A robust perennial about 4 feet high, first discovered in Yunnan, China, by George Forrest. It bears rounded, terminal spikes of small, rosy flowers which are followed by dense, club-shaped masses of black fruits. The plant has flowered and fruited freely at the Royal Botanic Garden, Edinburgh, Scotland. (Adapted from Gardeners' Chronicle, 3d ser., vol. 71, p. 39.)

SABINEA CARINALIS (Fabaceae), 57078. From Dominica, British West Indies. Seeds presented by Joseph Jones, curator, Botanic Gardens. "This tree is known locally as 'Bois Charibe,' and is one of the most showy of our native plants. It is a very fine flowering tree and I have seen nothing in the Tropics to surpass it as a mass of color. If grown on fairly good land it will not make a good show but if planted on a dry, rocky hillside where it will be scorched by the sun for a period of 3 or 4 months each year, it makes a marvelous display of flowers." (Jones.)

A shrub or small tree, with featherlike leaves and large, scarlet flowers which are borne in clusters of 3 to 5, appearing before the leaves. (Adapted from Grisebach, Flora of the British West Indies, p. 183.)

SOLANUM COMMERSONII (Solanaceae), 57213. From Montevideo, Uruguay. Tubers presented by Luis Guillot, Direccion General de Paseos Publicos. A wild relative of the white potato which is found native in humid situations in the vicinity of Montevideo, Uruguay. In general appearance the wild plant resembles that of the white potato, having dark-green leaves composed of 2 to 4 pairs of leaflets, white flowers, small green fruits, and small potatolike tubers with a bitter flavor. Under cultivation in France, a lavender-flowered variety developed, with larger tubers which were fragrant, and only slightly bitter. It has been thought that this species might be one of the parents of some of the European varieties of the potato. (Adapted from Revue Horticole, vol. 78, p. 303.)

STYLOSANTHES ERECTA (Fabaceae), 56798. From Boma, Belgian Congo. Seeds presented by General Secretary, Belgian Congo Government General. "This plant prospers in sandy soils, but does not thrive in black, humid soils. It is very drought resistant. In Guadeloupe horses search through the pastures for this plant." (General Secretary.)

A copiously branched ascending shrub about 4 feet high, with broad, rather stiff, compound leaves, and terminal oblong heads of inconspicuous flowers. It is native to tropical Africa. (Adapted from Oliver, Flora of Tropical Africa, vol. 2, p. 156.)

THEA SASANQUA (Theaceae), 57088. From Ichang, China. Seeds presented by Albert S. Cooper, American Church Mission. A large, wide-

spreading ornamental shrub or small tree common throughout the warmer parts of Japan. The branches are very slender and in the wild plant the flowers are always white. It is a popular garden shrub and, under cultivation, forms with pink and rose-colored flowers are common. The seeds contain an inferior sort of oil used by the Japanese women for dressing their hair. (Adapted from Sargent, *Plantae Wilsonianae*, vol. 2, p. 394.)

TITHONIA DIVERSIFOLIA (Asteraceae), 57093. From Manila, Philippine Islands. Seeds presented by P. J. Wester, Bureau of Agriculture. "A perennial composite with large yellow flowers which are produced in great abundance during the autumn and early winter months. It should therefore be a good ornamental for southern Florida during the winter-resident season." (Wester.)

TRIFOLIUM PHYSODES (Fabaceae), 57035. **Clover**. From Kew, England. Seeds presented by Dr. A. H. Hill, director, Royal Botanic Gardens. A perennial prostrate clover with oval leaflets and roundish heads of pink flowers which open in July and August. Native to southeastern Europe. In the flowering stage this species resembles white clover, but it does not creep. (Adapted from Ascherson und Graebner, *Synopsis der Mitteleuropaischen Flora*, vol. 6, pt. 2, p. 525.)

TRIFOLIUM PRATENSE (Fabaceae), 56896-56898. **Red Clover**. From Lausanne, Switzerland. Seeds purchased from Dr. G. Martinet, director, Seed Control Station. Quoted notes by Dr. Martinet.

56896. "No. 1021. Descended from the celebrated variety of Winkel, near Bulach, Switzerland. It is of rapid growth and yields heavily, and can be used for two years after seeding."

56897. "No. 943. ('Mattenklee'). A long-enduring variety which yields well and renews itself from time to time. The seeds are almost entirely yellow."

56898. "No. 950 ('Mattenklee'). A long-enduring variety which gives abundant forage and seeds; the latter are dark violet."

TRIPLARIS CUMINGIANA (Polygonaceae), 57092. From Balboa Heights, Canal Zone. Seeds presented by Holger Johansen, agronomist. "A native tree about 20 feet in height, generally of pyramidal habit, which prefers moist situations, such as the borders of lakes and streams. From February until the middle of April it is ablaze with red, produced by the bracts surrounding the capsules, and forms an exceedingly striking object in the landscape. As a beautiful ornamental this tree is well worthy of further distribution." (Johansen.)

Notes on Behavior of Guatemalan Avocados
(*Persea americana* Mill.) in California.

Wm. A. Spinks, Duarte, California, writes June 15 concerning the varieties sent to him:

Benik, S. P. I. No. 44626. From the finca La Polvora, Antigua, Guatemala. "An interesting and valuable late variety. The tree is vigorous, prolific, and a regular bearer. The fruit, of very fine quality, averages 10 to 12 ounces in weight. The season is rather late for good marketing."

Cantel, No. 44783. From the finca La Candelaria, Antigua Guatemala. "The tree fruited rather heavily in 1921 and somewhat less in 1922, and is evidently quite prolific, as a large crop has set again this year. The fruit is good, though not of attractive appearance. The season is too late to be valuable commercially."

Ishkal, No. 43602. From the city of Guatemala, Guatemala. "So far the tree has put most of its efforts into growth, but it has borne four fine little fruits which were rather square or angular in shape, although of attractive appearance, and of fine quality. The season is very late."

Lamat, No. 43476. From Amatitlan, Guatemala. "A good tree, not very prolific, bearing not more than two dozen fruits each year. These weigh as much as 12 ounces, and are curiously speckled like certain b-rds' eggs."

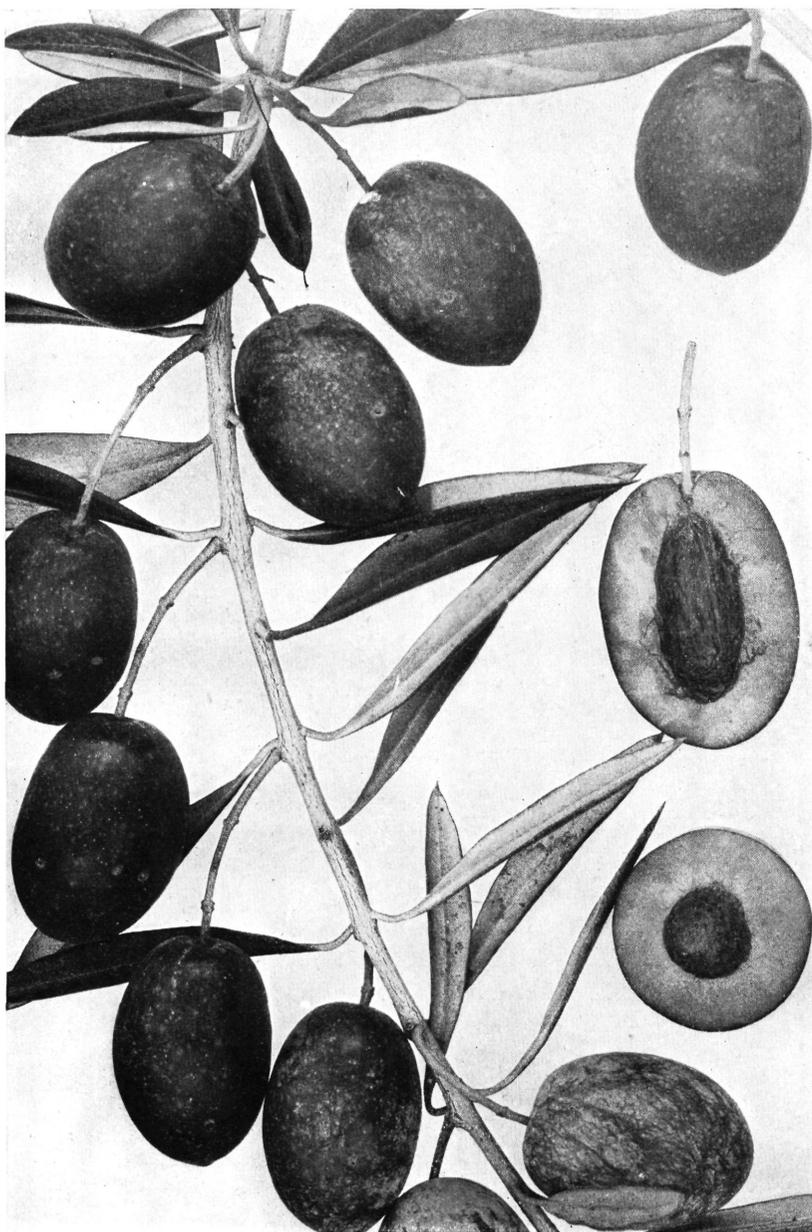
Manik, No. 45560. From the finca La Polvora, Antigua, Guatemala. "This is the most vigorous of any of the Guatemalan varieties I have had, and is fruiting for the first time this year. I should judge the season to be very late."

Mayapan, No. 44680. From Purula, Guatemala. "This is probably the best of the Guatemalan varieties which have come under my observation. The tree is strong and prolific and the fruit, though usually small and not very attractive in appearance, is of fine quality. The season is late."

Pankay, No. 44785. From Totonicapam, Guatemala. "A vigorous tree, bearing regularly. The fruits are of good quality, up to 10 ounces in weight, somewhat gourd shaped, with a rough, hard, dull-green shell."

Thomas H. Shedden, Monrovia, Calif., writes April 18:

Mayapan, No. 44680. "A vigorous, upright tree, which withstood the freeze of last year (1922) remarkably well, and right afterward set the heaviest crop of fruit I ever saw on an avocado tree of any where near its size. During the hot spell in September, when the temperature in our orchard was 110° F. in the shade, this held its fruits better than any other variety. I have eaten several fruits lately, and they were very satisfactory, with clean, yellow flesh, and a small seed. In weight the fruits range from 12 to 18 ounces."



THE BAROUNI OLIVE.

(*Olea europaea* L.; S. P. I. No. 12569.)

A large-fruited olive secured by Thomas H. Kearney in his exploration of Tunis in 1905. It was famous as the largest olive in that country and occurred almost nowhere except on the place of M. Robert at Kalaa Srira, Susa. It is proving in California to be an excellent variety for processing, either green or ripe, and deserves the serious consideration of olive growers there. A number of olive specialists believe that the Barouni will soon be the leading variety grown in California. (Photographed by P. H. Dorsett, Chico, Calif., October 13, 1921; P27393FS.)



THE GROVE OF JAPANESE BAMBOO AT THE SAVANNAH PLANT INTRODUCTION GARDEN.

(*Phyllostachys* sp.; S. P. I. No. 40851.)

This grove, which through the generosity of Barbour Lathrop, of Chicago, has come into the possession of the United States Department of Agriculture and which now covers over an acre of land and has poles in it over 55 feet high, originated from a few plants imported by Andres E. Moynelo "early in the eighties." It is spreading rapidly and stands as an example of the superbly beautiful groves of this timber bamboo which will some day change the landscapes of our Southern States and furnish a unique timber material suited for a host of purposes on the farms where it will be grown. View along the edge of the grove on Ogeechee Road. (Photographed by P. H. Dorsett, November 30, 1921; P27516FS.)

OFFICE OF FOREIGN SEED AND PLANT INTRODUCTION
BUREAU OF PLANT INDUSTRY
UNITED STATES DEPARTMENT OF AGRICULTURE

Washington Scientific Staff.

David Fairchild, Agricultural Explorer in Charge.
Wilson Popenoe, Agricultural Explorer Acting in Charge.

P. H. Dorsett, Plant Introducer, Introduction Gardens;
Peter Bisset, Plant Introducer, Experimenters' Service;
B. T. Galloway, Consulting Specialist; H. C. Skeels, Botanist, Seed Collections and Herbarium; R. A. Young, Plant Introducer, Dasheens and Tropical Yams; D. V. Lumsden, D. C. Peattie, and C. C. Thomas, Assistant Plant Introducers; Paul Russell, Junior Plant Introducer; Patty Newbold, Junior Botanist; E. L. Crandall, Assistant, Photographic Records.

Plant Introduction Garden Superintendents and Propagators.

D. A. Bisset, Superintendent, Bell, Md. (P. O. Glenn Dale, Md.), Edward Goucher, Propagator; Henry Juenemann, Superintendent, Bellingham, Wash.; E. N. Carlson, Acting Superintendent, Brooksville, Fla.; W. A. Patten, Superintendent, Chapman Field, Fla. (P. O. Coconut Grove, Fla.); J. E. Morrow, Superintendent, Chico, Calif., Henry Klopfer, Propagator; Edward Simmonds, Superintendent, Miami, Fla., Charles H. Steffani, Propagator; E. J. Rankin, Superintendent, Savannah, Ga.

Special Collaborators.

Robert H. Forbes, Kulikoro, French West Africa; A. C. Hartless, London, England; E. W. D. Holway, Faribault, Minn.; Holger Johansen, Balboa Heights, Canal Zone; Barbour Lathrop, Chicago, Ill.; Dr. H. L. Lyon, Honolulu, Hawaii; Henry Nehrling, Naples, Fla.; Dr. A. Robertson Proschowsky, Nice, France; J. F. Rock, Yunnan, China; Charles T. Simpson, Little River, Fla.; Dr. L. Trabut, Algiers, Algeria; Dr. William Trelease, Urbana, Ill.; E. H. Wilson, Jamaica Plain, Mass.