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NO. 55.

BULLETIN OF FOREIGN PLANT INTRODUCTIONS.

January 1 to 15, 1911.

NEW PLANT IMMIGRANTS.

**ANONA CHERIMOLA.** (Anonaceae.) 29350. Seeds of large cherimoya from Culiacan, Sinaloa, Mexico. Presented by Mr. W. L. McDaniel, Alvin, Texas. "These seeds came from fruits as big as a coconut. The plants grow in Mexico up to an altitude of five thousand feet and the fruit stands a week or more on the road. The party who furnished me with the above information also states that efforts to get the fruit at Culiacan for shipment to the United States have failed because the local market eats them up like hot cakes and it will be years before there will be any to spare for export. A big fine fruit costs 25 to 35 cents Mexican in Culiacan." (McDaniel.) For distribution later.

**CARICA PAPAYA.** (Papayaceae.) 29331. Seeds from Para, Brazil. Presented by Mr. Walter Fischer, Acting Director, Campo de Cultura Experimental Paraense. "Seeds of what is probably our best variety of 'mamao'. The specimen I had must have been 17 or 18 inches long and weighed 9 pounds. I have seen slightly larger ones from the same plant. The fruit was of excellent flavor and contained but few seeds. In a year or even ten months it is possible to obtain ripe fruits from the papaya in this climate. Here in Belem a papaya like the one described sells for at least a dollar." (Fischer.) For distribution later.

**COLOCASIA SPP.** (Araceae.) 29326-327. Tubers of two varieties of dasheen from Canton, China. Presented by Mr. G. Weidman Groff, Canton Christian College. No. 29326. "Kau tsau fu." No. 29327. "Pat long fu." For distribution later.

**CUCUMIS MELO.** (Cucurbitaceae.) 29332. Seeds of a muskmelon from Santarem, Brazil. Presented by Mr. Walter Fischer, Acting Director, Campo de Cultura Experimental Paraense. "Seeds of a muskmelon, the only kind seen in the markets of Belem, but even this is not grown near here but in Santarem, about 500 miles up the river. The fruit of this variety is long, smooth, and distinctly ribbed. The flesh is orange colored and of very good flavor. This particular specimen weighed 14 pounds, which is the average weight. It is probably needless to advise to plant in the tropical or subtropical regions and to grow it in the dry season. Here in Belem these melons sell for from one to two dollars." (Fischer.) For distribution later.

**DIOSPYROS SP.** (Ebenaceae.) 29329. Cuttings of persimmon from Waldo, Florida. Presented by Mr. T. K. Godbey. "Godbey's Seedless." Said to be a luscious persimmon that is absolutely puckerless. For distribution later.

**EUGENIA SP.** (Myrtaceae.) 29336. Seeds from Paraguay. Presented by Mr. C. F. Mead, Cahi Puente, Paraguay. "Called in Guarany, iba jhai (i-ba-i). A wild fruit about the size of an apricot and with meat similar in color and taste. Outside appearance similar to quince. Very acid and used to some extent for preserves but principally as food by wild animals. Borne on a tree which grows to a height of 10 meters. Tree very similar in appearance to the olive; wood excellent for furniture; bears profusely; has from one to three seeds in each fruit. Found in all parts of Paraguay." (Mead.) For distribution later.

**FERONIA ELEPHANTUM.** (Rutaceae.) 29341. Seeds from Saigon, Cochin China. Presented by Mr. P. Morange, Director of the Agricultural and Commercial Service. "This is the wood-apple of India and Ceylon, a deciduous tree with pinnate leaves, bearing a fruit about the size of an orange but with a very thick, woody rind. The pulp of the fruit is acid and aromatic, and is sometimes eaten by the natives of India; it is also used to prepare a jelly much resembling that made from black currants, but this jelly is said to have a very astringent taste. This plant is allied to the bael fruit (Belou marmelos) of India and is being grown to hybridize with that species and also for trial as a stock upon which to graft it." (W. T. Swingle.) For distribution later. See photograph.

**MANGIFERA INDICA.** (Anacardiaceae.) 29333. Budsticks presented by Mr. Kirk Munroe, Cocoanut Grove, Florida. "Haden. A seedling of a Mulgoba mango planted by the late Capt. F. P. Haden and now growing on the Mathams Estate at Cocoanut Grove, Florida. It fruited in 1910 for the first time and promises to be one of the most valuable accessions to our mango collection." (H. F. Schultz.) For distribution later.

**NICOTIANA SP.** (Solanaceae.) 29348. Seed of native tobacco from Cerritos, S.L.P., Mexico. Presented by Dr. C. A. Purpus, Minas de San Rafael. "Tobacco de perro, or coyote." This and the following introduced for use in breeding a type of tobacco resistant to the so-called Granville tobacco wilt, now injuring the North Carolina tobacco industry. For distribution later.

**NICOTIANA TRIGONOPHYLLA.** (Solanaceae.) 29342. Seed of tobacco, probably native, from Cedros, Mazapil, Zacatecas, Mexico. Presented by Dr. Elswood Chaffey. "Cimarron." For distribution later.

- ONONIS ANTIQUORUM.** (Fabaceae.) 29334. Seed from Palestine. Presented by Mr. E. F. Beaumont, American Colony, Jerusalem. "Seed of a wild, perennial plant of the pea family, which grows absolutely everywhere, on poor, rocky soil as well as good ground and which is the deepest rooting plant, next to alfalfa that grows in the country; it is quite equal to alfalfa in rooting quality. It has a thorn from one to two centimeters long. This plant is greedily eaten by all cattle, when young and the thorn is tender, but when full grown they cannot manage the thorn. We have thought that if this thorn could be bred off, it would make a splendid forage plant, as it grows so well on rocky ground on which nothing else will thrive." (Beaumont.) For distribution later.
- PERSEA AMERICANA.** (Lauraceae.) 29352. Budwood of avocado from Miami, Florida. Presented by Mr. C. O. Richardson, Miami. "A first-class, medium-late variety especially suited for the home garden. The tree is reported by Mr. Richardson as being a dwarf grower, producing crops freely and regularly. The fruits are pyriform in shape, averaging in weight between 750 and 800 grams; the seed is generally a little loose, though sometimes firm, in its cavity, and of medium size. The meat is of rich deep yellow color, greenish next to the skin and of mild, rich and nutty flavor. The skin is smooth, yellowish-green with purplish red splashes and numerous small dots of bronze; it is thick, tenacious and slightly adhesive to the meat." (H. F. Schultz.) For distribution later.
- PODOPHYLLUM EMODI.** (Berberidaceae.) 29328. Seed of the Asiatic mandrake from Royal Botanical Gardens, Sibpur, near Calcutta, India. Presented by Major A. T. Gage, Superintendent. "Fruit edible as in American species (*P. peltatum*). Probably like this can be used as a purgative and hepatic stimulant." (Mueller.) Introduced as a possible means of improving the quality of the American mandrake. For distribution later.
- TALAUMA MUTABILIS.** (Magnoliaceae.) 29358. Seeds from the Botanic Gardens, Buitenzorg, Java. Presented by the Director, Department of Agriculture. "A magnificent yellow-flowered magnolia-like tree, well worthy of introduction, and of possible value for breeding work with the magnolias." (Fairchild.) For distribution later.
- VITIS VINIFERA.** (Vitaceae.) 29343-347. Cuttings of five varieties of table grapes from London, England. Presented by Rev. W. Wilks, Secretary of the Royal Horticultural Society. No. 29343. Ascot Citronelle. No. 29344. Cannon Hill Muscat. No. 29345. Lady Hastings. No. 29346. Muscat Champion. No. 29347. Prince of Wales. For distribution later.

ZINZIBER SP. (Zinziberaceae.) 29355. Roots of ginger from Tsinanfu, Shantung, China. Presented by Mr. J. S. Whitewright, Tsinanfu Institute. Imported for investigations of the hardy forms of ginger in the hope of introducing the culture in the United States considerably farther north than has heretofore been thought possible. For distribution later.

ZIZANIA LATIFOLIA. (Poaceae.) 29173. Roots of wild-rice from Canton, China. Presented by Mr. G. Weidman Groff, Canton Christian College. "Woo kau or kau sun." (See Bulletin No. 30, this series, for description.) Introduced for trial of the succulent vegetable shoots produced from the perennial rootstocks. The grain may also be of some food value. For distribution later.

#### NOTES FROM FOREIGN CORRESPONDENTS.

ALGERIA, Algiers. Dr. L. Trabut writes December 26, 1910 that he will send us scions of pears from the Aures Mountains, and also of his new *Pyrus gharbensis*, which grows on tufas in northern Algeria. He will also include scions of a new pear which comes from an alkaline district near the Great Chott. He puts his large collection of wild forms of Asiatic *Pyrus* at our disposal. Of carobs he writes, "as for the perfect carob, it is a variety which the Spaniards consider as male, and use it as such. In reality the flowers are complete and the ovaries sometimes become very good carobs."

CUBA, Isles of Pines. Mr. F. R. Ramsdell writes January 1 that he is using bamboo plantings along his east boundary to modify the ever-blowing northeast wind. "A hedge fence of carissa I find a very efficient low windbreak and also gives a good lot of fruit. I reproduced from one carissa by layering, 240 well-rooted plants which extended our fence quite a little. I hope in time to enclose 100 acres in this hedge. It can be made so tight that chickens cannot get through and is so high and strong that nothing can pass. It is a beautiful fence."

DOMINICA, Comendador. Mr. M. E. Beall, Inspector of Customs writes December 18, 1910 of an interesting Dominican plant, the "auyama". "It is a pumpkin, rather oval in form, mottled green skin, from twelve to fourteen inches long by nine inches in diameter, yellow flesh, and very delicious when roasted. The peculiar feature of the plant is that here it will run for, I dare say, a hundred feet. My plants were not prolific bearers." He will send us seed if we wish, as well as of the native muskmelon, which on trial did not prove to be savory. He writes further, "I am in a gardener's paradise here. Today for dinner I had green corn, tomatoes, radishes and watermelon."

This place is about 1,600 feet high, and we can count on rain, not torrential tropical rains, but good, growing rains, from April 15 to December 15. From the middle of December to the middle of April there are occasional showers only. The temperature never goes above 80° and never below 60° F. I have had growing side by side, coffee and turnips, sugar cane and radishes, lettuce and pineapples, bananas and potatoes, but the latter were not a success."

**JAPAN**, Sendai. Miss B. C. Pifer writes December 19, 1910 that she will send the gampi (*Wickstroemia canescens*) seed just as soon as she gets settled, and will also send the Imperial chestnut. She will send both grafts and seed of the Shibu Kaki persimmon. She writes that the only reason she can find why the *Paulownia imperialis* is cut to the ground annually is to form a good hedge of young growth, remarkable for the striking appearance of the leaves. The bean that she sent us was of a *Wistaria* from Formosa, and she will send new seed as soon as she receives it.

**NEW ZEALAND**, Wellington. Mr. E. Clifton, Director of Agriculture writes December 10, 1910 that there is only one variety of sweet potato in New Zealand, which will be sent us in March or April next.

**NEW SOUTH WALES**, Bathurst. Mr. H. W. Peacock, Manager of the Bathurst Experimental Farm writes November 29, 1910 that *Carissa brownii* does not grow in his district but he has requested the Government Botanist to send us such species as are available.

**PALESTINE**, Jerusalem. Mr. E. F. Beaumont writes December 18, 1910 that in three or four weeks some of the American Colony will be going down to Jericho where the *Ononis* we request grows three, four and sometimes six feet tall.

**PARAGUAY**, Villarica. Mr. C. Mahaux writes December 8, 1910 that he has a supply of the *Eupatorium* (or *Stevia*) *rebaudianum*, a species which at one time was advertised as containing a substitute for sugar 16 times as sweet as the latter. The sweet substance is a glycerine. He will send us seed later, as he has a considerable number of the plants. He is in search of *Solanum ciliatum* for us. The *Feijoa*, he says, is entirely unknown in his part of Paraguay. He has sown imported seeds for three years without results. He will also send us *Pachira* (Para nuts), chayotes, *Jacaratia* (or *Carica*) *dodecaphylla*, and *Carica papaya*.

PHILIPPINE ISLANDS, Manila, Gardens of Nagtajan. Mr. William S. Lyon writes December 4, 1910, that he will have a few of the "sup-sup-sin" or "Lyon" mangos packed by a new American syrup process next year for trial in this country.

QUEENSLAND, Brisbane. Mr. John Williams, Manager of Sunnybank Nursery, writes November 29, 1910, that he is getting seed for us of the desert kumquats, which are ripe now. He has arranged with the French Consul for Queensland to secure the seed of *Oxanthera fragrans* and *O. macroptera* from New Caledonia for us. Will also try to get *Atalantia glauca* and *Parsonia paddisoni*. He is writing a friend on Tambourine Mountain for *Macrozamia denisoni*.

SIAM, Bangkok. Mr. J. Cornell Tarber, American Consul-General, writes November 18, 1910, that he has taken up the securing of "Indian Gum", and specimens of the leaves and flowers of the tree, with the Agricultural Department of Siam and hopes to get them soon.

STRAITS SETTLEMENTS, Singapore. Dr. H. N. Ridley, Director of the Botanical Gardens, writes December 13, 1910, that he "will send a small amount of the Sumatra tobacco seed which is very hard to get. Regarding the *Ficus acidula*: I know approximately where it grows but I don't see any chance of getting to it. I can't get to Baruco this year and am leaving Singapore at the end of the year or shortly after. Moulton of the Kuching Museum might get there but he is not a botanist and would probably not know the plant."

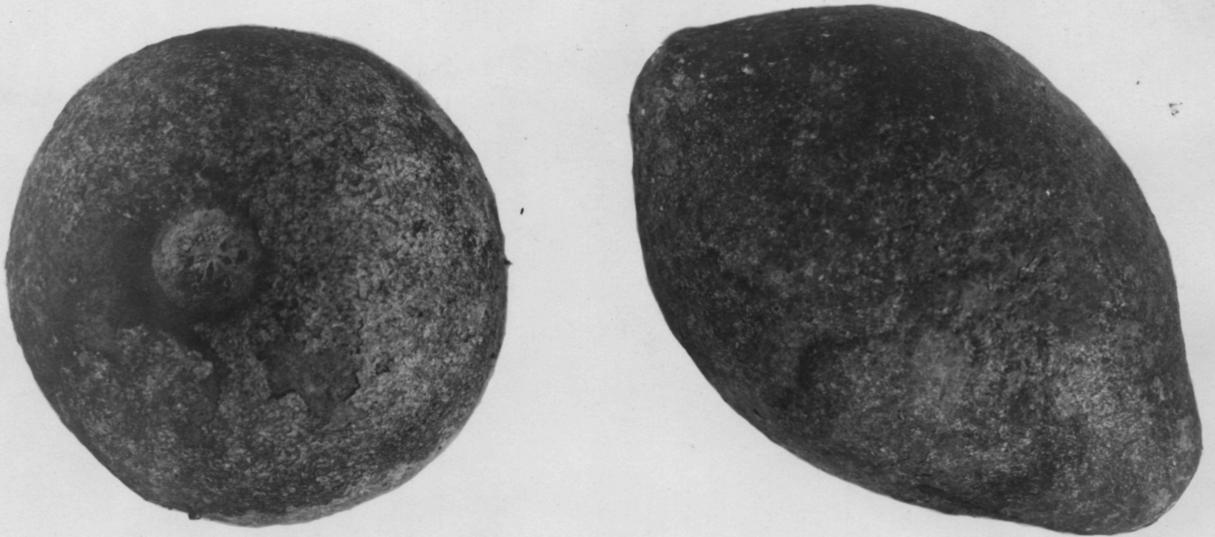
SURINAM, Paramaribo. The Director of Agriculture, Mr. P. J. S. Cramers, writes December 10, 1910, that they will send us tubers of the "Sinesie-taya", one of their edible aroids, in February. This variety can be harvested in from five to nine months. All the aroids grown there are considered as wetland crops, and they prefer a sandy loam with a thick layer of humus on top, while a light shade is beneficial to growth. They are never flooded during the growing season because the rains furnish sufficient moisture.

#### RECENT CALLERS.

Mr. A. Imachi, of the Formosa Experiment Station, at Taihoku, spent the week December 31 to January 9, in Washington, on his way to Yucatan to study the sisal hemp industry. During his stay he was able to give a large amount of information on Formosa conditions to various offices of the Bureau. He has promised to send us many interesting tropical and sub-tropical plants, including longans, gingers, taros, and especially certain varieties of grapes which do well in that warm climate.

Mr. Frank Edward Johnson, an American artist who has spent several years studying the scenery and people of northern Africa, expects to return on the 6th of February direct to Tunis, where he will spend the coming year investigating the old Roman and pre-historic ruins of that country, giving special attention to the Troglodytes and their agriculture. Mr. Johnson employs a special photographer and is much interested in gathering any information of living plant material, or in having any photographs made which will be of interest to any of the investigators of the Department who are studying the agricultural conditions of northern Africa. His permanent address is c/o The Dresdner Bank, Dresden, Germany. His home is at Norwich, Connecticut.

Mr. W. D. Jones, of the University of Chicago, called at this Office on his way to the Argentine, where he is to be employed as one of the assistant geologists in the Argentine Government Survey along the 41st parallel, which expedition is under the directorship of Prof. Bailey Willis. Three parties will work across the country in parallel lines, covering a strip from 50 to 75 miles wide along the line of the new government railroad running from San Antonio Oeste on the coast to Piramides in the foothills of the Andes. The party expects to be gone about two years, and both Dr. Willis and Mr. Jones have assured us of their heartiest cooperation in securing any material we may wish from this semi-arid, nearly unexplored region. Memoranda of some of our wants have been placed in their hands, and additional notes will be forwarded to them from time to time.



FERONIA ELEPHANTUM. WOOD-APPLE.

Natural size photograph of the fruit of a large tree of the citrus group, which yields a hard, heavy, strong but not durable wood. The gum from bark wounds forms one of the constituents of the so-called East Indian gum arabic. The pulp of the fruit, like that of the Belou marmelos, is used by the natives of India to prepare a jelly resembling black currant jelly. As the tree occurs native only from the foothills of the Himalayas southward, it is probably not as hardy as the belou which ascends to 4,000 feet in the mountains of India. Introduced at Mr. Swingle's request for the purpose of hybridizing with the bael fruit and as a stock for it. Photograph from specimen received from Kirkee, India, September, 1909.