

## BULLETIN OF FOREIGN PLANT INTRODUCTIONS.

June 1 to 15, 1910.

## NEW PLANT IMMIGRANTS.



**ANDROPOGON SORGHUM.** 28024-027. A collection of four varieties of sorghum from Tsung-ming, China. Secured by Rev. James Ware of the Foreign Christian Missionary Society, Shanghai.

- "Tsung-ming is an alluvial island in the estuary of the Yangtse River. It lies between 31° and 32° N. latitude. The soil is rich except in the northwest corner, where it is overcharged with alkali. Although the sorgo is cultivated on an extensive scale, the Chinese have never used the stalk for syrup manufacture. It is sold on the markets in bundles and chewed for the juice, and also fed to pigs." (Ware.) 28038. A sorgo secured by Mr. Ware from Chekiang Province, China. "This is a sorgo very similar to No. 28024 from Tsung-ming Island. The spikelets are heavier and the seeds much larger, which may be due, however, to differences in cultivation." (C. R. Ball.) For distribution later.

**ANDROPOGON SORGHUM.** 28057-058. Two varieties of kowliang from Manchuria. Procured by Mr. E. C. Parker. "This plant is the chief and characteristic crop of Manchuria. Its seeds are the every day food of most of the common people, as well as the chief food of the farm animals. The leaves are stripped off the plant for live stock food, and the stalks are burned to boil the water and heat the mud houses for all Manchuria." (Parker.) For distribution later.

**ANONA RETICULATA.** 28132. Budwood of custard apple secured in Nassau, New Providence, Bahamas, from a prolific seedling tree; fruit medium to large. It is being grown at the Subtropical Garden, Miami, Florida, for use in plant breeding work. For distribution later.

**ANONA SQUAMOSA.** 28133. Plants received at the Subtropical Garden from Dr. F. Franceschi; grown by him from seed obtained from Paraguay. These plants are being grown at the Garden for use in plant breeding work. For distribution later.

**ASPARAGUS SP.** 28047. From near Dushet, Caucasus. An asparagus of ornamental habit, seen only once on a dry mountain side at an elevation of about 3,000 feet above sea-level. To be cultivated as a garden perennial in regions with light annual rainfall. (Meyer's introduction.)

- BRITOA SP.** 28061. From Para, Brazil. Presented by Mr. W. Fischer. "This plant is related to the guava; the fruit is round, with a diameter of 2 to 2½ inches; the taste is almost like that of the guava, but very acid. The seeds are few. The color is like that of the guava externally; internally it is pale yellow. The skin is thin." (Fischer.) For distribution later.
- CANNABIS SATIVA.** 28054. From Manchuria. Procured by Mr. E. C. Parker. "Chinese name, How-ma. Grown in large quantities in Manchuria for the production of fiber." (Parker.) For immediate distribution.
- CAPSICUM ANNUUM.** 27536-537. From San Giovanni a Teduccio, near Naples, Italy. Purchased from Messrs. Dammaní & Co. 27536. "Sweet Spanish. A medium-sized red pepper, somewhat elongated, nonpungent and sweet, with a highly developed red color and characteristic aroma. It is grown in Spain and ground to make paprika. It is hoped that this pepper will do well in this country, and that its production may become a small industry here." 27537. "Hungarian Rose paprika. This red pepper belongs to the group of medium-sized, somewhat elongated forms, represented by a number of cultivated varieties. Its rather mild pungency, its very deep red color, and rather characteristic aroma combine to produce the commercial article known to the spice trade as Hungarian or Szegedin paprika. It is grown in Hungary or Austria, and enters foreign commerce chiefly as a powder. It has been introduced into South Carolina, where a small industry has been established." (R. H. True.) For distribution later.
- CARYOPHYLLUS AROMATICUS.** 27680. Clove from Zanzibar, East Africa. Procured by Mr. Arthur Garrels, American Consul. "A small tree 12-15 feet high, native in the Molucca Islands; now cultivated widely in tropical regions for the dried, unopened flower buds which constitute the cloves of commerce. They contain a pungent, fragrant, volatile oil in great quantity. The oil when separated by distillation is known to commerce as clove oil, and is much used in dental practise. Tannin is present in cloves as high as 17 per cent. They were formerly used as a dye stuff for coloring silks." (R. H. True.) For distribution later.
- CERATONIA SILIQUA.** 28117-121. Cuttings of five varieties of carob from Lisbon, Portugal. Presented by Companhia das Lezirias do Tejo e Sado. To be grown at Chico, California. For distribution later.

- CHAETOCHELOA ITALICA.** 28029. From Tsung-ming, China. Secured by Rev. James Ware of the Foreign Christian Missionary Society, Shanghai. "Yellow. Highly valued. In many places it is ground and takes the place of flour." (Ware.) For distribution later.
- CHAETOCHELOA ITALICA.** 28048. From Manchuria. Procured by Mr. Edward C. Parker. "Chinese name, Hsiao-me. This species of millet is grown everywhere in Manchuria. It is one of the staple and universally used human foods. When properly hulled and cooked it is an excellent breakfast food." (Parker.) For immediate distribution.
- CINNAMOMUM CAMPHORA.** 28078. Camphor from Port-of-Spain, Trinidad. Presented by Mr. F. Evans. For distribution later.
- CINNAMOMUM ZELANICUM.** 28079. Cinnamon from Port-of-Spain, Trinidad. Presented by Mr. F. Evans. For distribution later.
- COFFEA LAURENTII.** 28080. Coffee from Port-of-Spain, Trinidad. Presented by Mr. F. Evans. For distribution later.
- DIOSPYROS DISCOLOR.** 28081. From Port-of-Spain, Trinidad. Presented by Mr. F. Evans. "A small tree, native of the Philippine Islands. The fruit is like a large quince, and in some places it is called mangosteen; its proper name is mabola. It is agreeable and has a pink colored, fleshy rind." (Watt: Dict. Econ. Prod. Ind.:III:138.) For distribution later.
- DOLICHOS BIFLORUS.** 28031. "Kulthi" from Poona, Bombay, India. Procured from Mr. T. F. Main, Deputy Director of Agriculture.
- DOLICHOS LABLAB.** 28032-033. Two varieties of Bonavist bean from the same source as the preceding. For immediate distribution.
- GARCINIA COCHINCHINENSIS.** 28060. From Saigon, Cochin China. Presented by Mr. P. Morange. "This tree is more vigorous and easier to adapt to cultivation than *G. mangostana*, the true mangosteen. It is also a heavier bearer and will be valuable in connection with experiments in the cultivation of the mangosteen in Porto Rico and Hawaii. The fruit is of a golden yellow color, one-seeded, with characteristic acid pulp. Most people do not care for the taste of this fruit, but I found it most refreshing." (Fairchild.) For distribution later.
- GARCINIA MANGOSTANA.** 28083. Mangosteen from Port-of-Spain, Trinidad. Presented by Mr. F. Evans. See S. P. I. No. 25887 for description. For distribution later.

- GLYCINE HISPIDA.** 28049-051. From Manchuria. Procured by Mr. Edward C. Parker. 28049. "Large yellow. A well known and famous variety." 28050. "Small yellow. The beans of this variety are highly prized because of their heavy weight and large percentage of oil. It should be especially valuable in the Upper Mississippi Valley." 28051. "Black. These beans are principally used for production of bean curd. A meal made from them is mixed with corn meal for baking cakes." (Parker.) For immediate distribution.
- JUBAEA CHILENSIS.** 28097-098. Received from Mr. Jose D. Husbands, Limavida, Chile. 28097. Indian name, "Lilla". A short, thick-trunked Chilean palm, from which a fine table syrup, called Miel de Palma, is made, which rivals maple syrup in excellence. The palms are felled in order to tap them. 28098. Indian name, "Caucau". Same as the preceding number, but grows very tall and slim. For distribution later. (See photograph.)
- JUGLANS REGIA.** 28099-109. A collection of 11 varieties of walnuts from Chile. Received from Mr. Jose D. Husbands. For distribution later.
- LAVATERA ASSURGENTIFLORA.** 28110. From Mr. Jose D. Husbands, Limavida, Chile. "This deciduous shrub, now to some extent cultivated, is one of rare beauty and grace. As an ornamental shrub or tree, for it grows as high as 15 feet, it will be highly esteemed when more generally known. The flowers are purple, about 2½ inches broad, and in this climate continue long in bloom." (Kellogg in Proc. Calif. Acad.: 1:14.) For distribution later.
- MANGIFERA INDICA.** 28084-085. Grafted mango plants, from Port-of-Spain, Trinidad. Presented by Mr. F. Evans. 28084. **Julie.** 28085. D'or. For distribution later.
- MAYTENUS BOARIA.** 28111-112. Two varieties of the maiten from Limavida, Chile. Received from Mr. Jose D. Husbands. See S. P. I. No. 26187 for description. For distribution later.
- MEDICAGO FALCATA.** 28070-071. From Russia. Received through Prof. N. E. Hansen. 28070. "Native seed from Semipalatinsk region, Western Siberia." 28071. "Native seed from Ural region, Orenburg Province. This is a very dry, steppe region." (Hansen.) For distribution later.
- MEDICAGO HISPIDA CONFINIS.** 28062. **MEDICAGO HISPIDA NIGRA.** 28063. From Palermo, Sicily. Presented by the Director of the Palermo Botanical Garden. For distribution later.

**MEDICAGO SATIVA.** 28037. From Riga, Russia. Purchased from Messrs. Vollmer & Co. "This lucerne seed has been grown in one of the coldest Governments in Russia and has been recognized to be the hardiest strain ever offered. No other lucerne seed will compare with it, as it comes from the cold Samara Government near the Ural." (Vollmer.) For immediate distribution.

**MEDICAGO SPP.** 28039-043, 046. Six species of perennial medicagos from the Caucasus, growing at elevations of from 3,000 to 5,000 feet. They all have great value as fodder plants in the cooler sections of the United States. (Meyer's introductions.)

**MEDICAGO SPP.** 28064-069. From Madrid, Spain. Presented by the Director of the Madrid Botanical Garden. No. 28064, *M. blanchiana*. No. 28065, *M. denticulata*. No. 28066, *M. hispida*. Nos. 28067-068, *M. hispida nigra*. No. 28069, *M. rigidula*. For distribution later.

**NOTHOFAGUS SP.** 28113. Red oak from dry Central Chile. Received from Mr. Jose D. Husbands, Limavida, Chile. For distribution later.

**PISUM ARVENSE.** 28114. From Mr. Jose D. Husbands, Limavida, Chile. "Stringless peas, whose extra large, sweet, thick pods are edible like green beans." (Husbands.) For distribution later.

**ORYZA SATIVA.** 28056. From Manchuria. Procured by Mr. E. C. Parker. "Upland rice. Chinese name, Tsching-tze. Common in North Central Manchuria. This sample came from Mukden, 42° N. latitude." (Parker.) For immediate distribution.

**PHASEOLUS ACONITIFOLIUS.** 28035. "Math", from Poona, Bombay, India. Procured from Mr. T. F. Main, Deputy Director of Agriculture. For immediate distribution.

**PHASEOLUS ANGULARIS.** 28052. Adzuki bean from Manchuria. Procured by Mr. E. C. Parker. "Commonly grown in Manchuria for human food. The beans are sometimes cooked green, but more commonly dried and boiled with millet or kao-liang." (Parker.) For immediate distribution.

**PHASEOLUS MUNGO.** Mung bean from Manchuria. Procured by Mr. E. C. Parker. "Small green bean. These beans are usually cooked with millet or kao-liang for food. They are also ground into meal and mixed with kao-liang meal in the production of vermicelli." (Parker.) For immediate distribution.

- PINUS GERARDIANA.** 28034. From Poona, Bombay, India. Procured from Mr. T. F. Main, Deputy Director of Agriculture. "The Chilgoza pine is a moderate sized tree confined in its native habitat to the inner dry and arid valleys of the Northwest Himalaya. The chief product of this tree is the edible seed, nearly an inch in length, contained in the cones. The seeds are very nutritious and agreeable in flavor; they form a staple food of the inhabitants of Kunawar. A full sized cone yields over 100 seeds, and each tree produces 15 to 25 cones." (From letter of Consul-General Michael and Bull. No. 7, 1906, of India Forest Dept.) For immediate distribution.
- PSIDIUM LAURIFOLIUM.** 28088. Nicaraguan guava. From Port-of-Spain, Trinidad. Presented by Mr. F. Evans. For distribution later.
- PSIDIUM GUAJAVA.** 28134. It is being grown at the Subtropical Garden, Miami, Florida, to be used in plant breeding work. "Fruit medium large, yellowish; flesh pale red; number of seeds, average. One of the best flavored guavas that has come to my attention." (Wester.) For distribution later.
- RICINUS COMMUNIS.** 28115. Wild castor beans from the dry hills of Coquimbo. Received from Mr. Jose D. Husbands, Limavida, Chile. For distribution later.
- ROLLINIA EMARGINATA.** 28135. It is being grown at the Subtropical Garden, Miami, Florida, to be used in plant breeding work. Secured from Dr. F. Franceschi, who obtained the seed from Paraguay. "The chirimoya, as this species is popularly called in Paraguay, is indigenous to a large part of Brazil and Paraguay. It is an attractive shrub or small tree, 10 to 30 feet in height, with green, leathery leaves. The edible, fleshy fruit is globose, tuberculate, and one or more inches in diameter." (Wester.) For distribution later.
- SICANA ODORIFERA.** 28125. From Tampico, Mexico. Presented by Dr. Edw. Palmer. "A native of Brazil. It is often cultivated on account of its odorous, gourd-like fruits, which are edible when still tender." (Pittier.) For distribution later.
- SPONDIAS DULCIS.** 28090. The WE fruit or golden-apple from Port-of-Spain, Trinidad. Presented by Mr. F. Evans. See S. P. I. No. 26470 for description. For distribution later.
- THEOBROMA CACAO.** 28091-092. Cacao from Port-of-Spain, Trinidad. Presented by Mr. F. Evans. 28091. Seedling plants of var. Alligator. 28092. Grafted plants of var. Forestera. For distribution later.

**TRIFOLIUM PRATENSE.** 28036. Orel clover from Riga, Russia. Purchased from Messrs. Vollmer & Co. For immediate distribution.

**TRIFOLIUM SP.** 28045. From near Guda-ur, Caucasus. A perennial clover found on dry mountain slopes at elevations of about 7,000 feet above sea level. Apparently able to stand severe cold and is very drought resistant. (Meyer's introduction.)

**VILLARESIA MUCRONATA.** 28116. Received from Mr. Jose D. Husbands, Limavida, Chile. A tree growing in the central provinces of Chile, and extending as far southward as the region around Concepcion. For distribution later.

NOTES FROM FOREIGN CORRESPONDENTS.

**RHODESIA, Salisbury.** Mr. R. McIlwaine, May 13. Offers his services in procuring any seeds we may want from that region, and says he has exceptional facilities for securing seed.

**RUSSIA, BAKU, CAUCASUS.** MR. F. N. MEYER, AGRICULTURAL EXPLORER. In addition to the plants sent, which will be described under their S. P. I. numbers, he sends five books on grape culture in the Caucasus.



*Jubaea chilensis*. (S.P.I. Nos. 28097 and 28098.)

The *Jubaea* grows abundantly in Chile between the latitudes of  $33^{\circ}$  and  $35^{\circ}$ . The nuts are used in the preparation of sweetmeats and sugar is made from the sap found in the trunk. The leaves are used for thatching houses and the trunks are hollowed out for water pipes, etc.