



BULLETIN OF FOREIGN PLANT INTRODUCTIONS.

No 9. Dec. 29, 1908 to Jan. 13, 1909.

NEW PLANT IMMIGRANTS.

- ALEURITES TRILOBA.** 24351. From Mr. J. E. Higgins, Honolulu, Hawaii, Dec. 17, '08. "Candle nut." Seeds procured for experiments in Cuba, Isle of Pines and Porto Rico. "The fruits resemble in size and somewhat in appearance the black walnut, with a thick fleshy rind and one or two heart shaped seeds about the size of a horse-chestnut. The seeds or nuts are very thick-shelled, containing but 33 per cent of kernel. The kernels yield approximately 60 per cent oil, making for the unshelled seeds 20 per cent of oil." (Fischer.)
- ANDROPOGON SORGHUM.** 24442-443. From M. A. Peacock, Sholapur, India. Jowar. "No. 24442 apparently represents a group not heretofore introduced. No. 24443 belongs to Group VIII of India sorghums represented by S.P.I. No. 14603." (Ball.) "The Jowar furnishes an excellent fodder in its stalks and the grain is highly nutritious. At certain times of the year it furnishes the chief grain for the food of India's millions in the Deccan." (Peacock.)
- ANONA CHERIMOLIA.** 24361-364. Four kinds of cherimolias from Jose D. Husbands, Limavida, Chile, Dec. 17.
- ANONA CHERIMOLIA.** 24421. From Calabria, Valley of Messina, Italy. Presented by Mr. C. Sprenger, Dec. 3.
- ASPARAGUS FILICINUS.** 24437. From Mr. Willy Müller, Nocera Inferiore, Italy, Jan. 5. "This species was originally collected in Nepal, but has since been found in many localities extending from Burma to the Western Himalaya and thence northwards to Mongolia. It is erect in habit and attains a height of nearly 4 feet, having horizontally spreading branches."
- BELOU MARMELOS.** 24450. From W.R. Mustoe, Lahore, Punjab,

H. G. Fairbank

India, Jan. 8. "Seed of the large fruited variety of *Aegle marmelos* (Belou marmelos) known to Europeans as Bael fruit. It is a handsome tree with dark green shining leaves which have a resinous odor; it is common in the greater part of India, growing up to 4,000 feet; when cultivated is a middle sized tree of 35 feet, but when wild is a scrubby tree. The fruit is very much like an orange in shape, color and size. It is greatly valued for eating by the natives, but can scarcely be looked upon as palatable to the white man except as a sherbet and for its medicinal properties. The unripe fruit is used as a specific for diarrhoea and dysentery, and the leaves, bark and roots are used as a febrifuge. It might be tried in several districts as it grows equally as well up here as in Calcutta where the air is moist and hot all the year round, and here it is very dry and hot in the summer with a temperature of 112°-120° in the shade and in the winter with sometimes 12° of frost at night, but the Bael always looks healthy and green, no matter what the weather is; it is leafless for about one month only, January or February, and its one year's fruit is ripe about the same time that it is flowering for the next year's fruit."

CUCUMIS. 24429. From Mr. A. W. Smith, Odessa, Russia, Dec. 28. "This is a variety of sweet melon grown here. It is known here as Kachanka and sometimes also called "Tsesarka" on account of its spotted surface resembling a guinea fowl's plumage.

CUCURBITA SP. 24354-357. Four kinds of squash from Jose D. Husbands, Limavida, Chile, Dec. 17.

CYNODON DACTYLON. 24403. From Dr. J. W. Hart, Piracicaba, Brazil, Feb. 28, '08. Numbered Dec., '08. "This grass is grown in Brazil under the name of Graminaz fina. The variety is apparently distinct from the ordinary variety of Bermuda grass grown in the United States."

DELPHINIUM. 24436. From W.C. Egan, Highland Park, Ill., Jan. 2. Free-blooming plants with lovely sky-blue flowers. The plants are dwarf and resemble *Dianthus chinensis*."

ECHINACEA. 24435. Presented by Mr. W.C. Egan, Highland Park, Ill., Jan. 2, 1909. "Some years ago a German seedsman sent out seeds claimed to be the result of a cross between the sunflower and the Echinacea and called the new red sunflower. There is but little resemblance to the Helianthus, but as it grows with me it might be termed an improved Echinacea. Like all hybrid seedlings there is considerable difference in the habit of the plant, some being stocky plants of moderate height, others tall and slender. The prevailing color is various shades of red; in some the ray petals droop from the first, in others when some age is attained and some remain standing out flat until they drop. The flowers last a long time and a group of them on the margin of the woods or shrubby bed has a natural woody effect."

EVERGREEN. 24417. From Hanchau, China, through F. N. Meyer. "A very ornamental evergreen tree bearing leaves like the camphor tree, but darker green and producing blue black berries on red petioles." Seed sent to Chico.

FRAGARIA. 24416. White strawberry. Plants presented by Rev. J.M.W. Farnham, Shanghai, China, Dec. 16, 1908.

GARCINIA DULCIS. 24419. From Dr. M. Treub, Buitenzorg, Java, Dec. 30, 1908. Introduced to test as stock for the mango-steen.

HIPPEASTRUM SP. 24349. Presented by Senor Enrique Gigoux, Caldera, Chile, Dec. 18, 1908. "A yellow flowered ornamental form."

INDIGOFERA ANIL. 24440. From Wm. Harris, Kingston, Jamaica, Jan. 5. "Indigenous to West Indies and extending through continental America from Carolina to Brazil. A shrub several feet high. Pods sickle-shaped, short, compressed. One of the principal indigo plants under cultivation both in the eastern and western hemispheres.

MEDICAGO SATIVA. 24353. Alfalfa from Jose D. Husbands, Limavida, Chile, Dec. 17, 1908.

MEDICAGO SATIVA. 24430. From Messrs. Borger & Guzman, Arequipa, Peru, Jan. 2. Peruvian alfalfa.

- MOCUNA & STIZOLOBIUM. 24422-428. A collection of seven kinds of Mucunas and Stizolobiums from Dr. M. Treub, Buitenzorg, Java, Dec. 28.
- ORYZA SATIVA. 24441. From Mr. F. G. Krauss, Honolulu, Hawaii, Jan. 6. "A strong, erect grower 34-40 inches tall, bears heavily a kernel of good quality. Matures in 120 days. One of the best Japan rices grown at the Hawaii station."
- PANICUM MOLLE. 24402. From Dr. J.W. Hart, Piracicaba, Brazil, Feb. 28, 1908. Numbered Dec., 1908. "Apparently distinct from the ordinary variety of Para grass grown in the United States."
- PANICUM MOLLE. 24434. From Tampico, Mexico, through Mr. John Kennedy. Distinct from ordinary strain of Para grass, more vigorous and recovers more quickly after cutting and decidedly superior." (Tracy.) Above grown by S.M. Tracy, Biloxi, Miss., from whence it will be distributed.
- PANICUM SULCATUM. 24368. From P.J. Wester, Miami, Fla., Dec. 5, 1908. "This plant does exceedingly well here, and it has recently occurred to me that it would be a successful and cheap substitute for palms for decorative purposes." (Wester.)
- PERSEA GRATISSIMA. 24439. Avocado seeds from Wm. Harris, Kingston, Jamaica, Jan. 5.
- PENNISSETUM AMERICANUM. 24444-447. Bazra. from M.A. Peacock, Sholapur, India, Dec. 26. "There seems to be several widely different strains included in this lot." (Vinall.) "The Bazra is a food grain and is scarcely ever fed to animals on account of its expense. Both this and the Jowar (Nos. 24442-43) grow on the poorly cultivated, semi-arid plains of the Deccan." (Peacock.)
- SALIX. 24418. From Fengtai, China. Received through F.N. Meyer. "A weeping willow growing on very dry places. Used as a shade tree in the streets of Peking under trying climatic and other conditions; well worth a trial in western regions of the United States." (Meyer.) Cuttings sent to Chico.
- SOLANUM TUBEROSUM. 24358. Seeds. "Perhuencas" named from an Indian tribe of same name. Grown without deterioration from beginning of Colonial days." From Jose D. Husbands, Limavida, Chile, Dec. 17.
- TRIFOLIUM SUBTERRANEUM. 24420. From Mr. A.B. Leckenby, Auckland, New Zealand, Dec. 21. "This is a native of

Europe and is found occasionally in waste places in Western Asia, Northern Africa, Australia and New Zealand." (Ricker.)

The following numbers were sent by Mr. Jose D. Husbands, Limavida, Chile, Dec. 4, 1908.

- ACACIA. 24309. "An exceedingly valuable wild thorned tree; grows abundantly throughout central Chile, seeks the driest regions and is generally used for fences. The wood is red streaked with black, extra hard. Grows quickly in worst dry soils; the long tap root reaches moisture at great depths in a few months. It is a splendid shade tree, leaves are very fine and beautiful. Every part of the branches bloom, forming a dense mass of yellow flowers so deliciously fragrant that it is extracted by the Paris perfumers.
- ANDROPOGON SORGHUM. 24305. A food plant recently found in Chile; unknown. "Resembles somewhat the white durra of Syria." (Ball.)
- BEANS. 24211-261. A collection of fifty kinds of beans.
- CANNABIS SATIVA. 24307. The ordinary Chile hemp.
- CAPSICUM ANNUUM. 24294-24301. Various sorts of peppers in daily use; noted for their extra fine flavor.
- CICER ARIETINUM. 24265. Grown dry in poor soil.
- CRYPTOCARYA RUBRA. 24310. Peumo with crimson fruit.
- CUCURBITA. 24268-293, 24306. Collection of squashes.
- CYNARA SCOLYMUS. 24263. Common artichoke.
- HORDEUM VULGARE. 24308. The common Chile barley grown on dry hills in the worst class of red clay soil; if this same seed be sown on better land it increases largely in weight and size and grows cleaner.
- JUGLANS NIGRA. 24209. Seeds. "The Bolivian black walnut is a majestic forest tree with handsome hanging foliage; a quick grower of great industrial value. Its wood is hard, beautifully veined in dark and light grains, takes a very high finish and is useful for any purpose. The fruit is large, abundant and oily, but is not edible on account of its bitterness."

LEGUMES. 24266-24267. Two papillonaceous legumes growing wild in the sands near the sea coast. One yellow-flowered, the other blue. Might be used as food plants."

MEDICAGO SATIVA. 24210. From Huasco in the northern part of Chile. It is called by botanists *Medicago sativa*, notwithstanding it is a new and very valuable strain still unnamed. In past times both common central Chile alfalfa and "Alfalfa Peruano" were sown; this I believe to be a cross between the two which combines the merits of both and is said to be the most valuable seed known. (Husbands.)

OPUNTIA FICUS-INDICA. 24303-304. Seeds.

PERSEA LINGUE. 24208. Plants. This is a very valuable industrial forest tree of large size, handsome, compact, evergreen and is an extra quick grower; here it is not a delicate plant but grows quickly in any soil that is wet or moist, also in water. The wood is light and tough like elm, but takes a very high finish. Its lumber is highly esteemed and is lasting if protected from wet. Its bark is used for tanning and is largely exported to Europe. The forests are being stripped; in a very few years this tree will be very scarce. It is an exceedingly beautiful shade tree. Medicinally it is a powerful astringent.

PISUM ARVENSE. 24262. Exquisite flavor, sweet, medium, late, prolific; white flower, extra fine.

SOLANUM. 24302. Seeds.

VICIA FABA. 24264. Very large and early.

NOTES FROM FOREIGN CORRESPONDENTS.

AFRICA, Cape Town, Dec. 16, 1908. Chas. Lounsbury. Calls attention to a number of new beautiful ornamentals and hedge plants which grow wild there. There are a dozen or more representatives of the Vitaceae and several uncultivated Oleae. Some of the native fruits are probably valuable.

CANAL ZONE, Ancon, Dec. 21, 1908. Henry F. Schultz. Sends report regarding growth of mangosteens in Canal zone.

CHINA, Shanghai, Nov. 30, 1908. Rev. J.M.W. Farnham. Sends seeds of wood oil.

COCHIN CHINA, Saigon, Nov. 12, 1908. Jacob E. Conner. Sends report regarding species of Dipterocarpus from which wood oil is obtained, methods of obtaining it and uses to which it is put.

COLOMBIA, Cartagena. Isaac A. Manning, Dec. 18. Sends fruit of the Corozo palm and oil extracted from outer fruit and skin of the Corozo nut; also unidentified tubers used as a tonic and said to have valuable medicinal properties.

JAVA, Buitenzorg, Nov. 24. Dr. Treub sends information regarding the cultivation of doekoe (*Lansium domesticum*.)

PHILIPPINE ISLANDS, Manila. Geo. P. Ahearn, Nov. 30, 1908. Sends report regarding mangrove trees for tanning.

SPAIN, Gibraltar. W.S. Sprague, Dec. 28- 1908. Sends soil from cork woods.