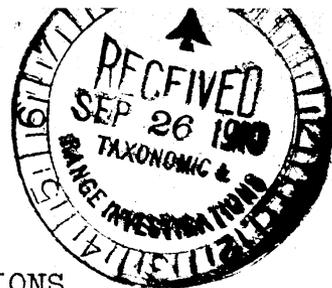


NO. 45.



BULLETIN OF FOREIGN PLANT INTRODUCTIONS.

August 1 to 15, 1910.

NEW PLANT IMMIGRANTS.

ALEURITES MOLUCCANA. (Euphorbiaceae.) 28597. Candle-nut from Manila, Philippine Islands. Procured by Mr. Wm. S. Lyon. (See No. 24351 for description.) For immediate distribution.

ALLIUM CEPA. (Liliaceae.) 28598-603. Onions from Puerto-Orotava, Teneriffé, Canary Islands. Presented by Mr. Solomon Berliner, American Consul. Varieties, Bermuda Red, Bermuda White and Crystal Wax. For immediate distribution.

ANANAS SATIVAS. (Bromeliaceae.) 28198. Pineapple from Sunnybank, near Brisbane, Queensland, Australia. Presented by Mr. John Williams, the Sunnybank Nursery. "Improved Smooth-leaf. This is a cross of Ripley Queen and Smooth Cayenne, giving it a much better flavor, and the habit of Cayenne." (Williams.) For distribution later.

ANONA SPP. (Anonaceae.) 28610-611. From Redland Bay, Queensland, Australia. Presented by Mr. James Collins. No. 28610. "As far as I know this variety has never been named. It is a giant and far superior to any of the other anonas. It often attains a weight of 6 lbs., being a veritable custard. It originated here about 30 years ago." (Collins.) For distribution later.

ARRACACHA ESCULENTA. (Apiaceae.) 28583. From Caracas, Venezuela. Presented by Senor Antonio Valero Lara. (See S. P. I. No. 3511 for description.) For distribution later.

AVENA SATIVA. (Poaceae.) 28585-587. From Domane Niemiercze, Podolia, Russia. Presented by Messrs. K. Buszczynski and M. Lazynski. Three varieties of oats: Earliest or 60 Day, Ligovo and The New Oats (cross between Ligovo and Earliest.) For distribution later.

CAPSICUM SPP. (Solanaceae.) 28632-633. Two varieties of Nepal pepper, red and yellow, from Northern India. Presented by Major A. T. Gage, Superintendent, Royal Botanic Garden. For distribution later.

CHENOPODIUM QUINOA. (Chenopodiaceae.) 28634. Received through Mr. Jose D. Husbands, Limavida, Chile. "A grain said to produce 1,000 for 1. After rubbing and washing well to remove

its bitterness it is eaten boiled, toasted and ground into flour, used in soups, etc. The ashes of the plant contain an extra amount of potash and are used in soap making." (Husbands.) For distribution later.

CHENOPODIUM QUINOA. (Chenopodiaceae.) 28644. From the Andean Highlands near Cuzco, Peru. Presented by Mrs. Harriet Chalmers Adams. For immediate distribution.

CICER ARIETINUM. (Fabaceae.) 28604. From Byers, Colorado. Procured by Mr. H. N. Vinall from Mr. Edelen. "Mr. Edelen says the original seed of these peas was given to him by an Italian. He claims they yielded 2,500 lbs. of grain per acre last year, and in the face of an extremely dry season this year he is counting on 1,000 lbs. per acre. From the looks of his field I should judge that 500 or 600 lbs. is nearer what the yield will be." (Vinall.) For distribution later.

CICER ARIETINUM. (Fabaceae.) 28620. From Baku, Caucasus, Russia. A large variety of chickpea obtained from a Persian seed dealer and said to come from Persia. Chickpeas are much used by the Orientals, preferably boiled, together with mutton, in soups and stews. (Meyer's introduction.) For immediate distribution.

OROTALARIA CANDICANS. (Fabaceae.) 28606. From Peradeniya, Ceylon. Presented by Dr. J. C. Willis, Director, Botanic Garden. (See No. 28344 for description.) For immediate distribution.

DENDROCALAMUS STRICTUS. (Poaceae.) 28607. From Sibpur, Calcutta, India. Presented by Major A. T. Gage, Superintendent, Royal Botanic Garden. "One of the most valuable bamboos; is not hurt by slight frosts, and, so it is said, is very drought resistant. Wood of the finest quality." (Houzeau de Lehaie.) For distribution later.

DIOSPYROS PEREGRINA. (Diospyraceae.) 28584. From Sibpur, Calcutta, India. Presented by Major A. T. Gage. "A beautiful small evergreen tree with dark green foliage and long, shining leaves. Produces a round fruit as big as a medium-sized apple, of rather poor quality, which is eaten by the natives. The leaves are also eaten as a vegetable. The fruit is largely used in tanning, and the juice of the unripe fruit is used in medicine as an astringent. Ainslie mentions that the carpenters of the Malabar coast use the juice of the fruit as a substitute for glue." The principal use of the wood is in the construction of boat bottoms. (Watt: Dict. Econ. Prod. Ind.:III:145.) For distribution later.

- HORDEUM SP.** (Poaceae.) 28596. From Maison-Carree, Algeria. Presented by Dr. L. Trabut. "Smooth-bearded black barley. This barley appeared as a mutation in some black barley from Australia; it is very early and very resistant to drought. It is curious on account of its absolutely smooth beards." (Trabut.) For distribution later.
- HORDEUM SP.** (Poaceae.) 28624. From Baku, Caucasus, Russia. A naked barley of superior quality said to come from Persia. Much imported into this city where it is roasted and used to adulterate coffee, producing, however, a very acceptable beverage. (Meyer's introduction.) For immediate distribution.
- LATHYRUS SATIVUS.** (Fabaceae.) 28618. From Vladikavkaz, Caucasus, Russia. A legume very rarely seen. The seeds are used locally as human food, being boiled in soups or mixed with chickpeas in stews. To be tried as a forage crop in regions with a moderately light summer rainfall. (Meyer's introduction.) For immediate distribution.
- LENS ESCULENTA.** (Fabaceae.) 28625. From Baku, Caucasus, Russia. A large variety of lentil said to come from Persia. Recommended as a crop for semi-arid regions. Much used by the Orientals in soups and stews. (Meyer's introduction.) For immediate distribution.
- MANGIFERA INDICA.** (Anacardiaceae.) 28612-613, 28627-631. Purchased from Mr. P. S. Kanetkar, Superintendent, Empress Botanical Gardens, Poona, Bombay, India. Seeds of seven varieties of mango as follows: Pyrie, Kala Hapoos, Amin, Borsha, Fernandez, Peter Pasant and Shendrya. For distribution later.
- MEDICAGO TUNETANA.** (Fabaceae.) 28646. From Oued-Zenati, Algeria. Presented by Mr. A. Clave. "The plants from which this seed was taken were found in a single, very limited place, on calcareous, uncultivated ground. I had to watch carefully to save a few flowering stems from the sheep, which are very fond of this excellent forage." (Clave.) For distribution later.
- MYRICA NAGI.** (Myricaceae.) 28609. From Kia-ying-chau, China. Presented by Mr. Geo. Campbell. (For description and photograph see Bull. No. 30 of this series.) For distribution later.
- MYRTUS SP.** (Myrtaceae.) 28635. Received through Mr. Jose D. Husbands, Limavida, Chile. "A new class of 'arrayan', a *Myrtus* that flowers in the fall, has crimson berries and seeks the altitude of the driest arid hills. The fragrance is about the same as that of the one that flowers in the spring and only

grows in wet or moist places. A dense, evergreen, ornamental treelet or bush, worthy of cultivation." (Husbands.) For distribution later.

OPUNTIA SP. (Cactaceae.) 28626. From Nice, France. Presented by Dr. A. Robertson-Proschowsky. "This opuntia is easily propagated by cuttings of the pads. Because of the value of its fruits it seems that this species is likely to prove a very valuable one for dry soils where other plants are not likely to thrive." (Robertson-Proschowsky.) For distribution later.

PASSIFLORA SP. (Passifloraceae.) 28652. From Texas. Collected by Mr. W. F. Wight. "A passiflora with handsome scarlet fruits." (Wight.) For distribution later.

PERSEA MEYENIANA. (Lauraceae.) 28636. Received through Mr. Jose D. Husbands, Limavida, Chile. "The 'lingue' of Central Chile." (Husbands.) For distribution later.

PICEA BREWERIANA. (Pinaceae.) 28370. From near Kerbyville, Oregon. Collected by Mrs. A. J. Adams. Purchased from Miss Alice Eastwood, Grey Herbarium, Harvard University, Cambridge, Mass. "This is one of the rarest and most unique of all the spruces. It grows only on the summit of the Siskiyou Mountains of Northern California and Southern Oregon. It is called the weeping spruce. I should call it the veiled spruce. It grows to a height of 70 or 80 feet, with a diameter of 1 to 2 feet. The drooping branches are clothed with long, pendent, slender and lax branchlets. It is delicate, feminine and graceful in outline, but not funereal or sad. The cones resemble those of the Norway spruce. It seems that it ought to be hardy anywhere in the temperate zone, as it grows where snow lies all winter." (Eastwood.) For distribution later.

PISUM SP. (Fabaceae.) 28619. From Vladikavkaz, Caucasus, Russia. A very small pea, apparently the offspring of a cross between *Pisum sativum* and *P. arvense*. Used locally as a food, being even more liked than the large-seeded varieties and consequently more expensive. (Meyer's introduction.) For immediate distribution.

PRUNUS SP. (Amygdalaceae.) 28650-651. Two varieties of prunes from Texas. Collected by Mr. W. F. Wight. No. 28651. "This looks to me like a very good thing. Has yellow fruit of very fair quality and a very small stone." (Wight.) For distribution later.

- ROYENA PALLENS. (Diospyraceae.) 27958. From Pretoria, Transvaal, South Africa. Presented by Prof. J. Burt-Davy, Transvaal Department of Agriculture. "Blaauw-bosch. A bush growing in the semi-tropical and southwestern districts of the Transvaal, the fruit of which is said to be edible." (Burt-Davy.) For distribution later.
- TRICHILIA DREGELI. (Meliaceae.) 28616. From Durban, Natal, South Africa. Presented by Dr. J. Medley Wood. "A handsome evergreen shade tree." (Wood.) For distribution later.
- TRITICUM SPP. (Poaceae.) 28588-593. Six varieties of wheat from Domane Niemiercze, Podolia, Russia. Presented by Messrs. K. Buszczynski and M. Lazynski. For distribution later.
- TRITICUM DURUM. (Poaceae.) 28622. From Baku, Caucasus. A good hard wheat said to come from Persia. No. 28623. From Vladikavkaz, Caucasus. An excellent hard wheat coming from Persia and called Tatuch. (Meyer's introductions.) For distribution later.
- VICIA FABA. (Fabaceae.) 28621. From Baku, Caucasus. A horse bean said to come from Persia. Used by the Orientals both in the fresh and the dried state as vegetables. (Meyer's introduction.) For immediate distribution.
- VIGNA UNGUICULATA. (Fabaceae.) 28617. From Para, Brazil. Presented by Mr. Walter Fischer. "Probably identical with the black-eye variety. I grew them on the Campo and harvested them just two months after sowing. This cowpea could hardly be called a forage variety, at least not here in this soil, where it soon goes to seed; it bears heavily." (Fischer.) For distribution later.
- VITIS VINIFERA. (Vitaceae.) 28637-642. From Elqui, Chile. Received through Mr. Jose D. Husbands. Notes by Mr. Husbands. Nos. 28637-638. "Italia. This is the finest raisin grape known." Nos. 28639-640. "Pastilla. It is from these grapes that the famous Chile brandy called Pisco is distilled." Nos. 28641-642. "Negra (black). It is from these grapes that the celebrated Elqui red wine is made." For distribution later.
- ZEA MAYS. (Poaceae.) 28614-615. From the Kalahari, about 30 miles east of Kuruman, on the Kaapsche-berg, South Bechuanaland, Africa. Presented by Prof. J. Burt-Davy, Transvaal Department of Agriculture. "White Botman flint maize. This seed was procured from a very dry region, of shallow limestone soil, cold and dry in winter. It struck me that these strains might do for the extreme southwest of the corn belt of the States." (Burt-Davy.) For distribution later.

ZEA MAYS. (Poaceae.) From the Andean Highlands, near Cuzco, Peru. Presented by Mrs. Harriet Chalmers Adams. For immediate distribution.

NOTES FROM FOREIGN CORRESPONDENTS.

BRAZIL, Diamantina. Mr. Ernest G. Swain, July 10. Offers to send seeds and plants from there. Describes a fruit resembling a cactus, called Jaca di Agua. Says he has never seen it elsewhere and will send fruits. Also describes a new spinach growing there and a very pretty wild flower resembling the Spanish-needle.

CHILE, Temuco. Mr. D. S. Bullock, July 20. Says that a plant apparently just like the cultivated potato and called by the Chileans wild potato, grows very commonly in that locality along the banks of rivers, but that he has never been able to find tubers. Has been told by the natives that up in the mountains these plants have tubers about as large as a man's thumb and 10 or 12 inches long.

CHINA, Tientsin. Dr. Yamei Kin, July 7. Speaks of a beautiful yellow varnish called t'ung yu, better known to foreigners as Ningpo varnish. It is as easy to put on as an ordinary shellac varnish, but is not in the least affected by hot or cold water, while it is so beautifully transparent that the grain of the wood shows as clearly as on a waxed floor and with a fine polish. It is a fine preservative for boats. The yellow softens to a tawny tint with age. Says that just now the Manchurian bean is attracting a good deal of attention and that the Chinese have a company with an expert chemist who has a laboratory in Paris, also that they have evolved a number of products, among them a fine soap and a kind of vegetable ivory.

CHINA, Weihsien, Shantung. Mr. Henry S. Cousins, June 28. About October 5, will send 250 cattles of pistache seeds.

INDIA, Poona, Bombay. Superintendent, Empress Botanical Garden, July 5. Describes the preparation of *Sesbania grandiflora* for food. Says the tender shoots, the fresh flowers, the pods while tender and the seeds are all used. The flowers and pods are used to make curry, the tender shoots are cut up and used as a vegetable, being cooked with asafoetida, cumin seed, sweet oil, etc.

JAVA, Lawang. Mr. M. Buysman, July 6. Suggests the establishment by this Government of a garden in Java. Says that with the exception of European fruit trees, as apples, pears, etc.,

every plant of the world will grow there. Says he will be glad to get information for us in regard to any of the species growing there.

PARAGUAY, Cango. Mr. C. F. Mead, July 6. Mr. Mead is engaged in bridge building in Paraguay, but has a deep interest in botany and agriculture. Promises to send plants found in the country through which his work takes him.

PHILIPPINE ISLANDS, Manila. Mr. Wm. S. Lyon, June 23. Sends descriptions of three of the best banana varieties of the Philippines. "LACATAN is easily the first in quality. It always commands 20 to 50 per cent more than any other variety. Its superior quality does not wholly account for this. Scarcity is a factor, as its planting is discredited by growers on account of its delicate habit, shy fruiting and very limited reproduction of suckers. There are only 40 to 50 fruits in a bunch. LA GLORIA is a glorious, clear lemon-yellow, slightly tart and commercially, the banana par excellence of the Philippines. One hundred bunches are sold or consumed as against ten or less of all other kinds combined. It is an excellent keeper. The fruit is only medium size, but is in huge bunches of 200 and more fruits. It is also of early maturity, robust habit and prolific of both fruits and suckers. It is the most cosmopolitan kind. BUMULAN is rated our second best in quality and by many accorded equal rank in quality with Lacatan, and is in all respects a better carrier. I can vouch for it as being a robust, healthy grower and so far as I have observed, free from disease. The fruit is borne 100 to 120 to the bunch and is yellow with streaks of green. It is not, however, a very attractive market fruit."