SEEDS AND PLANTS IMPORTED

DURING THE PERIOD FROM DECEMBER, 1903, TO DECEMBER, 1905.

INVENTORY No. 11; Nos. 9897 to 16796.

ISSUED MARCH 15, 1907.
BULLETINS OF THE BUREAU OF PLANT INDUSTRY.

The work of the Bureau of Plant Industry, which was organized July 1, 1901, is classified under the general subjects of Pathological Investigations, Physiological Investigations, Taxonomic Investigations, Agronomic Investigations, Horticultural Investigations, and Seed and Plant Introduction Investigations. All the scientific and technical publications of the Bureau are issued in a single series of bulletins, a list of which follows.

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[Continued on page 3 of cover.]
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1907.
BUREAU OF PLANT INDUSTRY.

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SEED AND PLANT INTRODUCTION AND DISTRIBUTION.

SCIENTIFIC STAFF.

David Fairchild, Agricultural Explorer in Charge of Seed and Plant Introduction.
W. W. Tracy, sr., Superintendent of Testing Gardens.
John E. W. Tracy, Assistant Superintendent of Testing Gardens.
O. W. Barrett, Assistant.
George W. Oliver, Expert.
C. V. Piper, Agrostologist, in Charge of Forage Crop Investigations.
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Walter Fischer, Scientific Assistant.
LETTER OF TRANSMITTAL.

U. S. DEPARTMENT OF AGRICULTURE,
BUREAU OF PLANT INDUSTRY,
OFFICE OF THE CHIEF,
Washington, D. C., August 1, 1906.

Sir: I have the honor to transmit herewith and to recommend for publication as Bulletin No. 97 of the series of this Bureau the accompanying manuscript entitled "Seeds and Plants Imported during the Period from December, 1903, to December, 1905."

This manuscript has been submitted by the Botanist in Charge of Seed and Plant Introduction and Distribution with a view to publication.

Respectfully,

B. T. GALLOWAY,
Chief of Bureau.

Hon. JAMES WILSON,
Secretary of Agriculture.
INTRODUCTORY STATEMENT.

This is the eleventh inventory of seeds and plants that have been gathered together by this Office, mainly from foreign countries, and represents two years of work.

It is not published to inform experimenters of plants that are on hand for distribution, because in the great majority of cases the plants and seeds listed have been imported for special problems upon which the Department is at work and they have been already assigned to their respective experimenters and are now, many of them, growing in some part of the country.

These inventories are historical records of the introduction of new plants, some of which have already started new industries in this country. In the past historians have as a rule disdained to consider the advent of a new crop as worthy of careful record, notwithstanding the fact that its arrival might exert a remarkable influence upon the development of the country. It is believed that the publication by the Government of such a record will avoid in the future for these new industries the uncertainty which now exists as to the time of arrival in America of some of our most important plant cultures, which were probably first introduced by the Department of Agriculture. To the large number of agricultural experiment station workers and others who are experimenting with the various introductions, these inventories will be almost indispensable.

As remarked in previous inventories no attempt is made to reform the nomenclature of the plants imported, for in many cases the identification of imported seeds and plants is impossible until several years after their introduction. They must first be grown and studied by specialists in the various plant groups, who are sure sooner or later to include them in their monographs, in which places, and not in such an inventory, botanists are accustomed to search for the most recent nomenclature.
This inventory represents not merely the names of and remarks regarding new plant introductions, but embodies often the notes made at the time of collection by agricultural explorers who have been kept at very considerable expense in the field. In the present case it includes in part the collections made by Prof. H. L. Bolley, of North Dakota, who was sent thru the flax-growing region of Europe in search of the best varieties of flax, especially to find one that was more resistant to the flax rust than those we already have. It covers a portion of the seeds and plants collected by Mr. Ernst A. Bessey during his travels thru a part of the Caucasus, the Crimea, and into Russian Turkestan. It includes a list of valuable new seeds which Hon. Robert P. Skinner very kindly secured in Abyssinia for the Department when sent as commissioner to King Menelik in 1904. The valuable collection of 100 European potato varieties, made by Prof. L. R. Jones, of the University of Vermont, is also included. This inventory includes also the results of Mr. Thomas H. Kearney's explorations in southern Tunis, where he was sent by the Office of Seed and Plant Introduction Investigations to study the date varieties of the Tunisian oases. The collection of date offshoots which Mr. Kearney secured is unique in that it was made after a careful examination of the palms while in full bearing. This is the first time that an agricultural explorer has been given the opportunity to spend the fruiting season in foreign date gardens, and Mr. Kearney's descriptions of the varieties collected in Tunis are from actual observation and not from hearsay. Dry land olives, pomegranates, pistaches, spineless opuntias, and drought-resistant fodder crops were also given attention by Mr. Kearney while in this interesting desert region. The collections made by Mr. P. H. Rolfs during his explorations of the vanilla-growing regions of Mexico are chronicled in this inventory, and the vanilla cuttings secured at that time are contributing their share toward the solution of the problem of vanilla culture in Florida.

A. J. Pieters,
Botanist in Charge.

Office of Seed and Plant Introduction and Distribution,
Washington, D. C., August 1, 1906.
INVENTORY.

9897 to 10260.

From Russia. Received thru Prof. H. L. Bolley, November 24, 1903.

A miscellaneous assortment of seeds collected by Professor Bolley during the season of 1903, as follows:

9897 to 10167. LINUM USITATISSIMUM. Flax.
10168 to 10182. Secale cereale. Rye.
10183 to 10193. Avena sativa. Oat.
10194 to 10218. Triticum vulgare. Wheat.
10223 to 10225. Helianthus annuus. Sunflower.
10227 to 10231. Medicago sativa. Wild grasses.
10232 to 10235. Ervum lens. Lentil.
10236 to 10240. Pisum sativum. Pea.
10241 to 10242. Cannabis sativa. Hemp.
10243 and 10244. Brassica napus. Rape.
10245 to 10247. Brassica sp. Mustard.
10250. Ribes grossularia (?). Gooseberry.
10251. Gleditschia sp. Honey locust.
10254. Trifolium sp. Wild clover.
10255. Lathyrus sylvestris. Flat pea.
10256 and 10257. Vicia sp. Wild yellow vetch.
10258. Vicia sp. Poppy.
10259. Papaver sp. Cherry.
10260. Prunus sp.

10261 to 10263.

From Khojend, Russian Central Asia. Presented by Mr. E. Valneff to Mr. E. A. Bessey. Received December 18, 1903.


Seed from wild trees in the mountains.
10261 to 10263—Continued.

10262. **Prunus divaricata.** Plum.
Black variety. Seed from wild trees in the mountains.

10263. **Prunus divaricata.** Plum.
Yellow variety. Seed from wild trees in the mountains.

10264. **Quercus suber.** Cork oak.
From Mustapha, Algeria. Received thru Dr. L. Trabut, December 18, 1903.

10265 and 10266. **Pistacia mutica.** Turpentine tree.
From Smyrna, Turkey in Asia. Received thru Mr. R. J. Agadjanian, December 15, 1903.


10267. **Pistacia atlantica.** Bitoom.
From Duperre, Algeria. Received thru Mr. Franck Joly, December 18, 1903.

10268. **Pistacia terebinthus.** Terebinth.
From Marseille, France. Received thru Mr. Claude Montel, nurseryman, by Mr. W. T. Swingle, August, 1903.

10269. **Avena sativa.** Oat.
From Mustapha, Algeria. Received thru Dr. L. Trabut, government botanist, by Mr. T. H. Kearney, December 18, 1903.

10270 to 10274.
From Åbo, Finland. Presented by Mr. Alarik Rosenberg, seedsman. Received September 25, 1903.
Seed from crop of 1903, grown on Hovirinha farm in St. Kerins county, state of Åbo and Björneborg, Finland.

10270. **Hordeum vulgare.** Barley.
10271. **Avena sativa.** Oat.
10272. **Triticum vulgare.** Wheat.
10273. **Secale cereale.** Rye.
10274. **Pisum sativum.** Pea.

10275 to 10283.
From Stockholm, Sweden. Secured by Mr. J. E. W. Tracy, thru the American consul at Stockholm, from the Governor of Lulea, Sweden. Received September 25, 1903.

10275. **Hordeum vulgare.** Barley.
10276. **Hordeum vulgare.** Barley.
10277. **Triticum vulgare.** Wheat.
10278. **Avena sativa.** Oat.

White.

10279. **Avena sativa.** Oat.

Black.

10280. **Secale cereale.** Rye.
10281. **Cannabis sativa.** Hemp.
10282. **Phleum pratense.** Timothy.
10283. **Vicia cracca.**
10284. **Phaseolus radiatus.**

Mung bean.

From Beaukiss, Tex. Received thru Mr. John B. Lesheen, December 11, 1903. Grown in 1903 from S. P. I. No. 6430.

10285 to 10288.

From Paris, France. Received thru Mr. W. T. Swingle from the Jardin des Plantes, December 21, 1903.

Cuttings of four species of pistache, as follows:


10288. *Pistacia atlantica.*

10289 to 10308. **Vitis vinifera.**

Grape.

From Erivan, Caucasus, Russia. Received thru Mr. E. A. Bessey, December 21, 1903.

10289. *Black Yezandari.*

10290. *Husen.*

10291. *White Seabi.*

10292. *Mskhali.*

10293. *White Kishnush.*

10294. *Khalili* (probably *Yellow Khalili*).

10295. *Shirishira.*

10296. *Kulami.*

10297. *Ambari.*

10298. *Gulyabi.*

10299. *Kyochamamasi.*

10300. *Shirazn.*

10301. *Yellow Yezandari.*

10302. *Goi-chezandarei.*


10304. *Urza.*


10306. *Khatchubes.*

10307. *Ak nuyum* (white grape).


10309 and 10310.

From Tanegashima, Japan. Presented by Mr. R. Chester to Mr. R. B. Handy. Received December 12, 1903.

Native Japanese seeds as follows:

10309. "Raishi."

A kind of gourd. "Sow when other squashes are sown, covering the seed lightly with straw. Train on sticks."

10310. *Cucurbita sp.* "Kaboucha."

A kind of gourd. Culture same as No. 10309.

10311 to 10314.

From Honolulu, Hawaii. Received thru Mr. J. G. Smith, Special Agent in Charge of the Hawaii Experiment Station, December 26, 1903.

Specimens of native yams, as follows:

10311. *Dioscorea divaricata* (?) *Hoi.*

Tubers 4 inches in diameter.

10312. *Dioscorea divaricata* (?) *Hoi.*

Axillary tubers.

10313. *Tasca pinnaatifida.* "Pia."

Tuber 5 inches in diameter.

10314. *Smilax sandwicensis.* "Uhi."
10315. Linum usitatissimum. Flax.
From Russia. Collected by Prof. H. L. Bolley in the season of 1903. Received December 21, 1903.
(Ramm, No. 2760.) Sample of Dalgonetz flax, crop of 1902, from Kharkof government.

10316. Linum usitatissimum. Flax.
From Russia. Collected by Prof. H. L. Bolley in the season of 1903. Received December 21, 1903.
Divin Gorky flax (Sakowicz No. 1). (See No. 9989.)

10317. Linum usitatissimum. Flax.
From Russia. Collected by Prof. H. L. Bolley in the season of 1903. Received December 21, 1903.
Divin Gorky (Sakowicz No. 2). Seed said to be the same pedigree as “No. 1,” S. P. I. No. 10316.

From Kharkof, Russia. Collected by Prof. H. L. Bolley in the season of 1903. Received December 21, 1903.

From Kharkof, Russia. Collected by Prof. H. L. Bolley in the season of 1903. Received December 21, 1903.

From Russia. Collected by Prof. H. L. Bolley in the season of 1903. Received December 21, 1903.

10321. Avena sativa. Oat.
From Russia. Collected by Prof. H. L. Bolley in the season of 1903. Received December 21, 1903.

10322. Pistacia terebinthus. Terebinth.
From Paris, France. Received thru Vilmorin-Andrieux & Co., December 30, 1903.

10323. Pistacia vera. Pistache.
From Catania, Sicily. Received thru Mr. Robert W. Heingartner, December 30, 1903.

10324. Solanum commersoni. Aquatic potato.
From Marseille, France. Received thru Dr. E. Heckel, January 2, 1904.
“Tubers of the so-called ‘aquatic potato’ of Uruguay. This species from Uruguay is being experimented with by Doctor Heckel, of Marseille, who is breeding it with the ordinary potato and finds that it gives successive crops on the same soil without the necessity of replanting. It also gives abundant foliage, which he thinks may be used for green forage. He further points out that the bitter flavor of the skin will protect the potato against the depredations of subterranean enemies. Its keeping qualities during the winter are good. Very little rot appears, and rats are not fond of it. The special point, however, to be emphasized in connection with this new species is that the diseases of the potato do not attack it. One difficulty in its culture consists in the necessity of working over carefully the soil to an unusual depth, because the tubers are deeply buried in the soil. It flowers abundantly, beginning in June and ending in September, the flowers having a perfume similar to that of jasmine. Their odor on a hot day is perceptible for several meters. Plant-
ing takes place in southern France by means of whole or cut tubers in April and the harvest is in October. Doctor Heckel's experiments are reported upon in the following publications: Sur le Solanum commersoni Dunal, ou pomme de terre aquatique de l'Uruguay, in the Revue Horticole, No. 581, December, 1902, p. 200; Contribution à l'Étude Botanique de quelques Solanum Tubéreuxes, par M. Edouard Heckel."

(Fairchild.)

10325. **HEDYSARUM CORONARIUM.**

*From Malta.* Received thru Dr. G. Borg, December 27, 1903.

"Dried roots of sulla covered with the root tubercles caused by Bacillus radicicola. These are imported in order to enable Doctor Moore to make cultures of the germ and ultimately to enable rational experiments to be carried out with this important forage plant, especially adapted to the poor soils, rich in lime, in our Southern States."

(Fairchild.)

10326. **PANAX GINSENG.**

*From Korea.* Received thru the North Pacific Trading Company, 56 Fifth avenue, Chicago, Ill., January 7, 1904.

Seed guaranteed by the North Pacific Trading Company to be genuine imported seed.

10327. **ANDROPOGON SORGHUM.**

*From Durban, Natal.* Received thru Messrs. Lathrop and Fairchild from Mr. Reuben W. Beningfield, January 14, 1904.

Native name *Mapela.* "Seed of a variety of sorghum from the east coast of Africa. This variety is that upon which the natives live, and according to Mr. Claude Fuller, entomologist of the Natal agricultural department, it has proved more resistant to a species of aphid which attacks the sorghum in that region than others which were growing side by side with it. This may prove of value in the sorghum regions of this country."

(Fairchild.)

10328. **PISTACIA ATLANTICA.**

*From Orléansville, Algeria.* Received thru Yahia ben Kassem, January 14, 1904. Collected in the Sahara.

10329. **PHASEOLUS RADIATUS.**

*From Cairo, Ga.* Received thru Mr. J. P. Wight, January 14, 1904.

Grown from S. P. I. No. 6430.

10330. **AVENA SATIVA.**

*From Agricultural College, N. Dak.* Received November 30, 1903.

*Swedish Select.* Grown by the North Dakota Agricultural Experiment Station from S. P. I. No. 9422.

10331 to 10339.

*From Khojend, Russian Central Asia.* Presented to Mr. E. A. Bessey by Mr. E. Valneff. Received January 21, 1904.

10331 to 10334. **VITIS VINIFERA.**

Cuttings of the best varieties of grapes grown in Russian Central Asia, as follows:

10331. *Tcharas,* or *Charas.*
10333. *Black Kishmish.*
10332. *White Kishmish.*
10334. *Maizi.*
10331 to 10339—Continued.

10335 to 10337. Amygdalus persica. Peach.
Cuttings as follows:
10335. Reginae goss (or gour). 10337. Shafi, white.
10336. Shafi-i-inzhin.

Cuttings.

Nuts from trees growing at a considerable altitude, and should, therefore, be rather late in blooming.

10340 to 10342. Vitis vinifera. Grape.
From Nikita, near Yalta, Crimea. Presented to Mr. E. A. Bessey by Mr. Theophil Kalaida, head gardener of the Imperial Gardens at Nikita. Received January 29, 1904.

Grape cuttings as follows:
10340. Shahash.
Most widely cultivated of the native sorts in Crimea, nine-tenths of the exported Crimean grapes being of this sort (in 1891). A greenish grape, forming medium-sized to large, firm bunches of large roundish berries. Table sort. (Marked Madame on label attached to cuttings.)

10341. Trebouch.
Greenish, large berries, often almost like plums. Bunches loose. Rather capricious, being easily affected by rainy or windy weather. Not much exported. Dessert sort.

10342. Assa.
Blue black, large, elongated berries in large bunches. Table sort. Not so good as the preceding, but prized for the table because of the contrast between its black bunches and the greenish ones of the other sorts.

10343 and 10344. Corylus avellana. Filbert.
From Nikita, near Yalta, Crimea. Presented to Mr. E. A. Bessey by Mr. Theophil Kalaida, head gardener of the Imperial Gardens at Nikita. Received January 29, 1904.

10343. Badem.
Native near Yalta. Elongated, large nuts.

10344. Trebizonet.
Native near Trebizond, Asiatic Turkey. Nuts large and round; much grown around Yalta.

10345 to 10348. Pyrus malus. Apple.
From Nikita, near Yalta, Crimea. Presented to Mr. E. A. Bessey by Mr. Theophil Kalaida, head gardener of the Imperial Gardens at Nikita. Received January 29, 1904.

10345. Safia Simap.
Distinguished for its beautiful appearance.

10346. Kundil Simap.
Widely grown in the Crimea. Fruit longer than No. 10348. For description of both, see Reeve Horticult., No. 17, 1890, p. 308.

10347. Konstantinopol.

10348. Sori Simap.
The most widely grown and best of the Crimean apples. Very late keeper.
10349 to 10351. **Sorbus domestica.** Service tree.

From Nikita, near Yalta, Crimea. Presented to Mr. E. A. Ressey by Mr. Theophil Kalaida, head gardener of the Imperial Gardens at Nikita. Received January 29, 1904.

10349. *Grosfrüchtige.*

A sort with pear-shaped fruits, 1½ to 1¾ inches by 1 to 1¼ inches.

10350. *Gewöhnliche.*

A sort with apple-shaped fruits, about 1 inch in diameter. Both this and No. 10349 ripen rather late.

10351.

Seedlings about 18 inches high.

**10352. Trifolium Johnstoni (†).** Uganda clover.

From Uganda, East Africa. Received thru Mr. D. G. Fairchild from Mr. R. N. Lyne, Director of Agriculture, Zanzibar, East Africa, January 30, 1904.

"The identification of this species has not been definitely made, but according to a letter of December 29 from Mr. Lyne this is the Uganda clover, which may be of value for breeding experiments in this country. The high plateau of Uganda, upon which this clover grows, although in the Tropics, has a comparatively mild climate. It is, of course, quite frostless. Mr. Lyne reports nothing further regarding the usefulness of this species, but remarks that Mr. Ainsworth, who secured the seed for him, had great difficulty in collecting it." (Fairchild.)

10353. **Phaseolus vulgaris.** Bean.

From Garretsville, Ohio. Received thru Mr. George J. Streator, February 1, 1904. Grown from S. P. I. No. 5382.

Mr. Streator reports that these beans are far superior to the ordinary white bean, for the reason that they do not spot so badly in wet weather.

10354 to 10363.

From Newton-le-Willows, Lancashire, England. Presented by T. and J. Garton for testing at the experiment stations. Received February 1, 1904.

10354. **Avena sativa.** Oat.

*Yellow.* (No. 1.)

10355. **Avena sativa.** Oat.

*Gray.* (No. 2.)

10356. **Avena sativa.** Oat.

*Black.* (No. 3.)

10357. **Avena sativa.** Oat.

*Black.* (No. 4.)

10358. **Avena sativa.** Oat.

*White.* (No. 5.)

10359. **Avena sativa.** Oat.

*White.* (No. 6.)

10360. **Hordeum hexastichum.** Six-row barley.

(No. 7.)

10361. **Hordeum hexastichum.** Six-row barley.

(No. 8.)

10362. **Hordeum distichum.** Two-row barley.

(No. 9.)

10363. **Hordeum distichum.** Two-row barley.

(No. 10.)
10364. **Triticum durum.**
Wheat.
From Idalia, Colo. Received thru Mr. J. A. Riedesel, February 4, 1904. Grown from S. P. I. No. 9478.
*Kubanka* macaroni wheat.

10365. **Citrus limetta.**
Lime.
From Seharunpur, India. Presented by Mr. W. Gollan, superintendent of the Government Botanical Gardens, at the request of Rev. N. L. Rockey. Received February 5, 1904, thru Mr. G. N. Collins.
"Fruits at Seharunpur and also at Mussoorie at an altitude of 5,800 feet. A good lime and the hardiest of the Indian sorts." (Gollan.)

10366. **Secale cereale.**
Rye.
From San Giovanni a Teduccio (near Naples), Italy. Received thru Dammann & Co., February 6, 1904.
*Abruzzes.*

10367. **Secale cereale.**
Rye.
From North Water Gap, Pa. Received thru Mr. M. Luther Michael, February 8, 1904.

10368 to 10370. **Punica granatum.**
Pomegranate.
From Chios, Turkey in Asia. Presented by Mr. N. J. Pantelides. Received February 9, 1904.

10371. **Elaeagnus angustifolia.**
Oleaster.
From Tiflis, Caucasus. Presented to Mr. E. A. Bessey by Mr. A. Rolloff, director of the Tiflis Botanical Garden. Received February 10, 1904.
*Unab-pschat* ("date fruit"), a sort with large fruits.

10372. **Elaeagnus angustifolia.**
Oleaster.
From Tiflis, Caucasus. Presented to Mr. E. A. Bessey by Mr. A. Rolloff, director of the Tiflis Botanical Garden. Received February 10, 1904.
*Matura-pschat* ("finger fruit"), a large-fruited sort.

10373 and 10374. **Trifolium alexandrinum.**
Berseem.
From Cairo, Egypt. Received thru Mr. George P. Foaden, secretary of the Khedivial Agricultural Society, February 10, 1904.
10373. *Muscovri, or Misovri.* 10374. *Saida, or Saidi.*

10375. **Lathyrus sativus.**
Bitter vetch.
From Cairo, Egypt. Presented by Mr. George P. Foaden, secretary of the Khedivial Agricultural Society. Received February 10, 1904.
Known in Egypt as *Gilban*.

10376 and 10377. **Pistacia spp.**
From Aintab, Turkey in Asia. Received thru Rev. A. Fuller, February 12, 1904.
10376. **Pistacia vera.**
Pistache.
Mixed varieties of the true pistache.
10377. **Pistacia mutica.**
Turpentine tree.
"Obtained from the eastern slope of the Amanus Mountains 60 miles west of Aintab, and 'can be relied on as good.' Trees there are largest and best in the country and climate as dry as could be desired, not being subject to the moisture which affects the western slope of the mountains, because of the nearness to the sea. This variety will take the grafts (buds) of *P. vera./* (Fuller.)
10378. **Linum usitatissimum.**

Flax.

From Salem, Oreg. Received thru Mr. Eugene Bosse, January 28, 1904.

Grown in 1903 from S. P. I. No. 9457.

10379 to 10381. **Linum usitatissimum.**

Flax.

From Vologda, Russia. Procured by Prof. H. L. Bolley from Mr. Pierotraschko, government agronomist. Received January 25, 1904.

From the northern limit for the maturing of flax seed, where the very finest type of Russian fiber is produced.

10382 to 10391. **Triticum spp.**

Wheat.

From Cairo, Egypt. Presented by Mr. George P. Foaden, secretary of the Khedivial Agricultural Society. Received February 19, 1904.

10392 to 10396. **Capsicum annuum.**

Pepper.

From Santa Clara, Cal. Received thru C. C. Morse & Co., January, 1904.

Seed grown from stock furnished by the Department, as follows:

10392. Paprika pepper.

Grown from S. P. I. No. 9475.

10393. Red pepper.

Grown from S. P. I. No. 3733.

10394. Red pepper.

Grown from S. P. I. No. 7654.

10395. Red pepper.

Grown from S. P. I. No. 3977.

10396. Sweet pepper.

Grown from S. P. I. No. 3905.

10397. **Raphanus sativus.**

Radish.

From Santa Clara, Cal. Received thru C. C. Morse & Co., January, 1904.


10398. **Lotus tetragonolobus.**

Winged pea.

From Santa Clara, Cal. Received thru C. C. Morse & Co., January, 1904.

Grown from S. P. I. No. 7700.

10399. **Raphanus sativus.**

Radish.

From Santa Clara, Cal. Received thru C. C. Morse & Co., January, 1904.


10400 and 10401. **Zea mays.**

Sugar corn.

From Auburn, N. Y. Received thru Mr. G. W. Boynton, February 25, 1904.

*Malakhof.* Two selections of *Malakhof* corn grown from S. P. I. No. 2799.

10400. First early.

10401. Better quality, but second early.

10402. **Hordeum distichum nutans.**

Two-row barley.

From Kwassitz, Austria. Received thru Aktien-Zuckerfabrik, March 2, 1904.

Original *Hanna* pedigreed brewing barley.
10403 to 10404. **Gossypium arboreum (?)**. Tree cotton.

From Guadalajara, Mexico. Secured by Mr. Edward B. Light, United States consular agent for Señor Hilario Cuevas, of San Luis Soytlan, Jalisco, Mexico. Received February 10, 1904.

10403. (Light's No. 1.)

"The common variety which grows wild in many parts of the state. It is claimed that the tree resists the effects of the drought when other trees perish. There are no known cultivated cotton trees, but there are native trees which have produced a harvest of 50 pounds of cotton. Neither the light frosts we have, nor the boll weevil, nor any other insects injuriously affect the trees. This is claimed by people who have known the tree for fifty years." (Light.)

10404. (Light's No. 2.)

"The finest quality of cotton, and yields more prolifically. It seems that a quarter of a century or more ago the natives used this cotton for making cloth, but none has been made of late years and the trees have never been cultivated by the present generation with that end in view. This tree is readily grown and is very hardy. The tree usually begins to bear when it is from 4 to 5 years old." (Light.)

10405. **Musa textilis**. Manila hemp.

From Manila, P. I. Presented by Mr. H. T. Edwards, of the Bureau of Agriculture, to Mr. L. H. Dewey. Received February 29, 1904.

Seed collected in Tayanas Province.

10406. **Vicia faba**. Broad bean.

From London, England. Received thru James Veitch & Sons (Limited), 544 King's road, Chelsea, March 1, 1904.

Veitch's Improved Longpod. This variety should be sown in pots or boxes in a cold frame in January and transplanted early in March, lifting with a good ball and molding up the plants. This is better for early supplies than sowing in the open in autumn. For succession the seed should be sown every three weeks from February 1 until June, on a north border in heavy loam in rows 3 feet apart. To get early pods, topping should take place when a good set of blooms is secured.

10407. **Phaseolus radiatus**. Mung bean.

From Whittier, Cal. Received thru Mr. C. W. Leffingwell, jr., March 5, 1904. Grown from S. P. I. No. 6450.

10408. (Undetermined.)

From Cochín China. Presented by Mr. J. B. de Taillac, Astoria, Long Island City, N. Y., February 25, 1904.

According to Mr. de Taillac's letter this plant exhales an essence which is so disagreeable to mosquitoes that when placed in windows the insects do not enter the room. This evidence of the efficaciousness of the plant Mr. de Taillac asserts on the information of a friend in Cochín China, where the plant is indigenous.

Mr. de Taillac further remarks that this is also a fodder plant of some value, although it gives to the milk a slightly disagreeable taste, which can be remedied, however, by the addition to the ration of such a fodder as beets. (See letter of February 3, 1904.)

10409. **Swietenia mahagoni**. Mahogany.

From Santa Clara, Cuba. Presented by Julio S. Montero & Brothers, March 4, 1904.

*Cuba*. Seeds of mahogany from the plantation of the father of Montero & Brothers, situated in the province of Santa Clara.

10410. **Aleurites cordata**. Wood-oil tree.

From Hankow, China. Presented by Hon. L. S. Wilcox, consul-general. Received March 3, 1904.

Seed of the wood-oil tree from the province of Hunan, China, fall crop of 1903. According to Consul-General Wilcox's letter of January 12, 1904, "this tree grows
wild in the mountains of Szechuan and is also cultivated in the lowlands. The trees, reaching 15 to 20 feet in height, are grown from seed and produce nuts in five or six years. The oil is pressed from these seeds, and when they are roasted, before being pressed, the oil is more easily extracted. It is better and more is obtained by the latter process. There are several varieties of oil. The yellow or straw-colored one is most exported. The price in this market at present is $5 gold (33 1/3 pounds). One variety is black and quite thick and is used entirely by the Chinese. It costs $9 to $10 a picul.

The name of the oil differs in various localities, as tung-yu and po-i-yu. The value of this oil is due to its astringent and drying qualities. It is used in paints, fine varnishes, and in the manufacture of fine soaps. During the past two years orders from the United States have been constantly increasing, from both the Atlantic and the Pacific coasts. The export is in its infancy but rapidly increasing. The past year 54,475,900 pounds of wood oil were exported from Hankow. This export is annually increasing, the larger portion going to Europe. Seeds can be obtained about the first of the year from orders filled in Hunan and Szechuan. Some have already been sent to the San Joaquin Valley, in California, to a private individual, where they are growing finely, and have led to a request for about 5,000 more seeds from the same party.” See also No. 13104.

10411 to 10419. Vicia Faba. Broad bean.


10514. Monarch Longpod.

“Broad beans are gross feeders and require a good rich soil and a liberal supply of manure for successful growth. For successional and main crops sow in February, March, and April. The later kinds should be planted in drills 3 inches deep, 4 to 6 inches apart in the rows, the rows to be 2 feet apart. A deep, strong, tenacious soil, liberally manured, is most suitable. Gather for the table when the beans are no larger than full-grown peas, as they become almost uneatable if left to mature, the tegument then being objectionably tough and leathery and the flavor strong. Pick evenly, not young and old together.

“In England broad beans are subject to black fly, which, if allowed to make headway, will ruin the crop.

“In England the broad bean is one of the best-paying vegetables, and altho it has been successfully grown in America its good qualities have not yet come to be appreciated here. It is worthy of serious consideration.” (Fairchild.)

10420 to 10435. Vicia Faba. Broad bean.


10421. Carter’s Improved Windsor. 10428. Muster Giant Longpod.
10427. Carter’s Harlington Green Longpod.
10428. Carter’s Leviathan.
10429. Carter’s Green Leviathan.
10430. Carter’s Masterpiece Green Longpod.
10431. Carter’s Leviathan.
10432. Carter’s Green Leviathan.

Plant from November to January for earliest, and from February to May for main crop.

7217—No. 97—07——2
10436 and 10437. **Vicia Faba.** *Broad bean.*

From Boston, England. Received thru W. W. Johnson & Son (Limited), March 3, 1904.

10436. *Johnson’s Monster Windsor.*

10437. *Johnson’s Mammoth Green Longpod.*

In England these beans are frequently sown in November, being perfectly hardy there. It is customary to plant in double rows, viz, 9 inches apart; that is to say, the two rows in a triangular manner. If when full grown in July they are attacked by black fly, cut off the tops of the plants.

10438 to 10448. **Vicia Faba.** *Broad bean.*

From Reading, England. Received from Sutton & Sons, March 3, 1904.

10438. *Sutton’s Improved Windsor.*

10439. *Sutton’s Green Windsor.*


10441. *Green Longpod.*

10442. *Sutton’s Giant Windsor.*

Culture for 10438 to 10442.—Sow in February, March, April, and May. Double rows are usual, allowing 9 inches between the two lines forming the row, and from 2 to 3 feet between the rows. The best soil for beans is a deep, strong loam, with plenty of manure.

10443. *Sutton’s Green Giant.*

10444. *Sutton’s Exhibition Longpod.*

10445. *Sutton’s Mammoth Longpod.*

10446. *Improved Monster Longpod.*

10447. *Royal Dwarf Cluster.*

10448. *Early Mazagran.*

Culture for 10443 to 10448.—A sowing may be made in November on light, dry soil, but not until January, February, or March on other soils. Double rows are usual, allowing 9 inches between the two lines for all except Nos. 10447 and 10448, for which allow only 6 inches. The double rows in all cases are from 2 to 3 feet apart. The best soil for beans when sown in the spring is a deep loam, which should be well manured.

10449. **Ilex Crenata.** *Holly.*

From Yokohama, Japan. Received thru the Yokohama Nursery Company, January 23, 1904.

“Seed of a hardy evergreen, highly esteemed as a good hedge plant for cold climates.” (H. Suzuki.)

10450. **Voandzeia Subterranea.** *Woandzu, or African goober.*

From Camden, Ala. Presented by Dr. L. E. Starr. Received February 17, 1904. Grown from S. P. I. No. 8915, originally from German East Africa.

10451 to 10453. **Nicotiana Tabacum.** *Tobacco.*

From Cuba. Received thru Mr. A. D. Shamel, of this Department, March 10, 1904.

10451.

From plantation of Señor Govino Menéndez, near San Juan y Martinez, in the Vueltas Abajo district. (Shamel’s No. 1.)

10452. *Cuban.*

From plantation of Señor Galixto López, near San Luis. (Shamel’s No. 2.)

10453. *Cuban.*

From plantation of Señor Justinio Sanchez, in Vueltas Abajo district, near Pinar del Río. (Shamel’s No. 3.)
10454. Triticum DURUM. Macaroni wheat.

From Blackfoot, Idaho. Received thru Prof. H. T. French, director of the Idaho Agricultural Experiment Station, March 9, 1904.

Kubanka macaroni wheat grown from S. P. I. No. 9478.

10455. Avena sativa. Oat.

From Blackfoot, Idaho. Received thru Prof. H. T. French, director of the Idaho Agricultural Experiment Station, March 9, 1904.

Swedish Select oat grown from S. P. I. No. 9422.

10456. Phleum pratense. Timothy.

From Copenhagen, Denmark. Presented by the Botanic Gardens of Copenhagen, thru Prof. Dr. Warming. Received March 8, 1904.

For breeding purposes.

10457. Amygdalus Persica. Peach.

From Bassorah, Arabia. Presented by Haji Abdulla el Nejem, of Bassorah. Received March 8, 1904.

Seeds of various varieties of peaches which are grown in the region of Abdul Khaseeb, the great date-growing center of Arabia. These peaches are subjected to the extreme hot weather of this portion of Arabia and are likely to be of interest for breeding purposes in California and Arizona.

10458 to 10461. Phleum pratense. Timothy.

From Austria-Hungary. Presented by Prof. Emanuel Gross, of the Agricultural Academy, Tetschen-Liebwerd. Received March 9, 1904.


From Grand Island, Nebr. Received thru Mr. E. Corbin, March 14, 1904.


From Honolulu, Hawaii. Received thru Mr. J. G. Smith, in charge of the Agricultural Experiment Station, March 12, 1904.

Seed of this tropical tree, related to the mangosteen, for Mr. Oliver’s experiments in grafting.

10464. Psidium sp. Guayabillo.

From Iguala, Guerrero, Mexico. Presented by Mr. Federico Chisolm, Arcelia. Received January 11, 1904.

10465 to 10472.

From Arcelia, Guerrero, Mexico. Presented by Mr. Federico Chisolm. Received March 12, 1904.

Native Mexican bulbs and seeds, for the most part unidentified.


From Moab, Utah. Received thru Mr. E. Corbin, of Grand Island, Nebr., March 14, 1904.

Wild or ‘Cave Dwellers’ potatoes. “I obtained these potatoes last October, when on a visit to southeastern Utah, at Moab, a town about 40 miles south of the Denver and Rio Grande Railway, leaving the railway at Thompson Springs. It is a small town near the mouth of the Grand River where it joins the Green River. Some, found where the ground was soft, were larger than others. It will be seen that there
are two kinds. They have run all over the ground where it is not cultivated. They live in the ground frozen hard all winter. They have a top and leaf resembling tomato.” (Corbin.)

**10474. Triticum monococcum.**

**Einkorn.**

From Erfurt, Germany. Received thru Haage & Schmidt, March 14, 1904.

**10475 to 10521.**

From Sydney, New South Wales, Australia. Presented by Mr. J. H. Maiden, superintendent of the Sydney Botanical Gardens. Received March 1, 1904.

A collection of small packets of seed of native plants, as follows:

**10475. Acacia aneura.**

“Mulga” or “Yarren.” A tall shrubby plant or small tree, never attaining a much greater height than 20 feet. Affords an unfailing supply of good forage during long and severe droughts. Drought-enduring qualities are remarkable. Wood is excessively hard and valuable for timber. Considered worthy of cultivation. Western Australia thru mainland colonies to Queensland. Peculiar to the arid western plains beyond the Darling River. (Reference: *Forage Plants of Australia,* p. 33.)

**10476. Acacia montana.**

A tall shrub, widely distributed in mountain and forest regions, rocky hills, etc., in the southwestern part of New South Wales.

**10477. Acacia seripholia.**

A tall shrub. New South Wales, dividing range to table-lands from Clyde River to Queensland; open forests on Balonne River.

**10478. Alchornea ilicifolia.**

A tall shrub. New South Wales, brush forests; Queen land.

**10479. Alpinia caerulea.**

An erect perennial herb, 3 to 5 feet, with a terminal inflorescence. New South Wales; coast district in brush forests from Hunter River to Queensland.

**10480. Barringtonia alba.**

Molucca Islands. “The majestic habit of the tree, the splendor of the foliage, the magnificence of the flowers, and, finally, the singular form of the fruit, will attract the attention of the most indifferent.” (Extract from *Flore des Serres,* vol. 7, genus description.)

**10481. Blandfordia flumnea.**

Tender, bulbous plant with large, showy, red flowers in short racemes. Eastern Australia, in peat bogs and on shady mountain sides.

**10482. Blennodia lasiocarpa.**

“Hairy podded cress.” Annual, 1 to 1½ feet high, covered with pubescence; pod hairy. Peculiar to the Darling River, sandy plains near the Murray River, and generally over the arid plains of Australia. Makes its growth during the hottest part of the year; valuable for forage. (Reference: *Forage Plants of Australia,* p. 4.)

**10483. Brunonia australis.**

Herbaceous plant with capitate blue flowers. New South Wales; in dry pastures, chiefly in the west; also in other colonies.

**10484. Cassinia theodorei.**

A heath-like shrub; branches and under side of leaves woolly white. New South Wales, head of Gwydir River.

**10485. Capparis mitchelli.**

“Native orange.” A small tree. Fruit from 1 to 2 inches in diameter; eaten by natives. Wood hard, whitish, close grained, suitable for carving, engraving, and similar purposes. All colonies except Tasmania and Western Australia.
DECEMBER, 1903, TO DECEMBER, 1905.

10475 to 10521—Continued.

10486. *Castanospora alpinand*. 
Large tree with pinnate leaves; flowers racemose-paniculate.

10487. *Celtis paniculata*.
Tree 25 to 35 feet high; wood soft, white, pliable; used for hoops for casks. New South Wales, Queensland, and northern Australia; not endemic in Australia.

10488. *Chloris truncata*.
"Windmill grass," or "star grass." An erect grass, perennial and showy. Valuable as a forage plant; an excellent summer and autumn grass. In all Australian colonies except Tasmania and Western Australia.

10489. *Combre's loevinghi*.
Climbing or diffuse shrub. Tropical South America.

10490. *Craspedia richea*.
A rather large perennial. New South Wales, throughout the colony in grass land; also in Victoria, Tasmania, South Australia, and Western Australia.

10491. *Dianella tasmanica*.
Perennial fibrous-rooted plant with grasslike leaves 2 to 4 feet long; large, loose panicles of blue flowers on drooping peduncles. Succeeds best in open border of a cool greenhouse. Tasmania and Australia; common in rich, moist soil.

10492. *Dillwynia cinerascens*.
Pretty yellow-flowered juniper-leaved shrub. New South Wales; also coast district and dividing range from Hunter River to Victoria; Tasmania. Common in grassy places.

10493. *Dodonaea triquetra*.
"Hop bush." A shrub. Victoria, New South Wales, Queensland.

10494. *Dysoxylum muelleri*.
"Pencil cedar" or "turnip wood." Tree with compound leaves; timber of a rich, red color; used for cabinetmaking and window work. Northern New South Wales and Queensland.

10495. *Elaeodendron curtipendulum*.
Probably a tree or shrub. Norfolk Island.

10496. *Eremophila brownii*.
Very variable shrub, often tall. Victoria, Murray desert; New South Wales, western plains; South Australia.

10497. *Eremophila latifolia*.
Small spreading shrub. New South Wales, southern interior; Western and South Australia.

10498. *Eremophila maculata*.
Tall shrub with rigid branches. Western and South Australia; western plains of New South Wales and Queensland; Victoria.

10499. *Eremophila mitchelli*.
Shrub or small tree, on elevated stony lands. New South Wales, western plains in the south.

10500. *Eremophila oppositifolia*.
"Emu bush." Ornamental shrub or small tree, sometimes attaining a height of 20 feet; more or less hoary; leaves 1 to 2 inches in length; flowers about 1 inch long. Grows in the most arid parts of the continent and is available for forage. "Will grow when not a blade of grass is seen for weeks together." Worthy of cultivation. Plains between Lachlan and Darling rivers in New South Wales; near Murray River in Victoria, and in the interior of South Australia.
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SEEDS AND PLANTS IMPORTED.

10475 to 10521—Continued.

10501.  
Eremophila bowmani.  
Erect shrub. Western plains from Byrock to Queensland.

10502.  
Eriostemon difformis.  
Small bushy shrub. Interior of New South Wales.

10503.  
Eucalyptus rehiana.  
A small shrub or small tree. Near sources of Werribee River, on stony hills; in hill forest region of Wirrabara, near Crystal Brook and Mount. Remarkable on deep, nearly clay soil.

10504.  
Eucalyptus diversicolor.  
"Karri," "Blue gum." Colossal tree, exceptionally reaching a height of 400 feet. Furnishes good timber for building. Southwestern Australia, in fertile, rather humid, valleys; on small elevations in swamps near rivers beyond the reach of water.

10505.  
Eucalyptus coccifera.  
Small tree with leaves under 3 inches long. Tasmania, 3,000 to 4,000 feet elevation. Possibly a subalpine form of E. amygdalina.

10506.  
Eucalyptus incrassata.  
Shrubby or arborescent, exceptionally rising to 30 feet. From the Murray and Darling rivers thru desert tracts to the Great Bight. Chiefly on sand ridges, but also on Tertiary limestone, extending in some places to the brink of the ocean.

10507.  
Eucalyptus tereticornis.  
"Flooded gum tree." Tall tree when well developed, but seldom exceeding 100 feet. Timber is excellent. Never very far removed from littoral regions; occupying generally humid flats or growing around swamps and lakes or along water courses, never on saline ground or salt-water streams.

10508.  
Eucalyptus virgata.  
A tall, straight-growing white gum. Valleys of the higher parts of the Blue Mountains or at the foot of cliffs in fairly good soil.

10509.  
Hovea heterophylla.  
A blue-flowered, evergreen shrub, prostrate or decumbent. New South Wales, coast district to table-land in dry, stony localities.

10510.  
Melaleuca pustulata.  
Small or tall shrub. New South Wales, southern interior; Victoria, Tasmania, South Australia.

10511.  
Myoporum deserti.  
"Sweet-fruited myoporum." Erect shrub, 3 to 4 feet high, with linear leaves 1 to 2 inches long. Said by some to be poisonous when in fruit; others state that it is a capital forage plant. Found principally in the interior of all the colonies of Australia. (See Forage Plants of Australia, p. 40.)

10512.  
Olearia pimeloydies.  
Bushy shrub. Victoria and western plains of New South Wales.

10513.  
Podolepis acuminate.  
Erect perennial shrub. New South Wales; Victoria, Hardinger range at elevations of 5,000 feet; Tasmania, abundant in many parts of the colony, ascending to 4,000 feet.

10514.  
Prostanthera striatifolia.  
Rather small, rigid shrub. New South Wales, barren hills of the interior from Lachlen River to Queensland.

10515.  
Grevillea linearis.  
A tall, delicate shrub, with spreading branches and linear leaves. New South Wales, coast district and dividing range from Clyde River to Port Jackson.
10475 to 10521—Continued.

10516.  *Sporobolus lindleyi.*
A slender-growing perennial grass. Grows on rich soil and is much relished by all kinds of stock. All Australian colonies except Tasmania.

10517.  *Sclerochena bicorns.*
"Cotton bush." Small, stout shrub, densely white, tomentose. New South Wales, western plains.

10518.  *Trichium alpestroides.*
Rather slender, perennial herb. New South Wales, western plains; also in other Australian colonies.

10519.  *Trichium obovatum.*
"Silver bush." An erect undershrub 1½ to 4 feet. Flower spikes globular. Has remarkable drought-enduring qualities; will grow in the driest of soils when once fairly established. Valuable as a forage plant. Arid interior of all Australian colonies.

10520.  *Trichium exaltatum.*
Tender perennial, 2 to 3 feet. Western plains of New South Wales; other Australian colonies.

10521.  *Trichium noile.*
"Yellow-hairy spikes." Stout perennial herb. Not easily affected by drought; affords a rich, succulent herbage even in very dry weather, of which stock are very fond. Interior of New South Wales and South Australia and Victoria. (Reference: *Forage Plants of Australia,* p. 85.)

10522.  *Garcinia morella.*

From Kingston, Jamaica. Presented by Dr. William Fawcett, director of the Botanical Garden. Received March 17, 1904.

"A moderate-sized tree which produces the true gamboge of commerce, used in Europe and America as a pigment. In the Orient this pigment is used for dying silks and other fabrics. The oil in the seeds is used in Mysore as a substitute for lamp oil. These seeds are imported for use as a stock for the mangosteen, upon which the latter was grown successfully many years ago by Mr. Harris, superintendent of Castleton Garden, Jamaica, and also later by Mr. Hart, of Trinidad. Fruit the size of a cherry, subglobose, slightly four-lobed, four-celled, and four-seeded. In Singapore this species grows without any particular attention, it is said, and attains a height of 35 to 50 feet. It is probable that this species has a much more vigorous root system than the mangosteen, and is therefore a promising possibility as a stock for the mangosteen." (Fairchild.)

10523.  *Phaseolus angulatorius.*

From Kingston, R. I. Presented by Mr. G. E. Adams, of the Rhode Island Agricultural Experiment Station. Received March 12, 1904.

A bean secured by Professor Brooks, of the Massachusetts Agricultural Experiment Station, in Japan, under the name of "White-Podded Adzuki soy bean."

10524.  *Miscanthus condensatus (?).*

From Yokohama, Japan. Presented by Mr. H. Suzuki, of the Yokohama Nursery Company. Received March 9, 1904.

"This root having been brought from the southeastern part of Japan, where there is no snow in winter, it is doubtful whether it will stand your climate. It will therefore be well to try it in such Southern States as Florida or California. I am sure it will succeed well. In the native region where these plants are growing its leaves remain green all thru the year and cattle are fed upon it. It should be cut while young, before its full growth, as the stem gets too hard if left too long. Young stems can be cut gradually from time to time throughout nearly the whole year, but a few stems on each clump should always be left without cutting, as it sometimes dies.
out if cut off too severely. I endeavored to get some seed of this plant, but the stems being constantly cut by the villagers make it very difficult to secure them. It seldom flowers. The roots, however, can be secured in any quantity.” (Suzuki)

10525. **Pyrus Malus.**

From Amassia, Turkey. Presented by Mr. H. Caramanian. Received March 16, 1904.

*Misket.* A variety of apple from this noted fruit region of Turkey. In letter of April 25, Mr. Caramanian remarks “that the Misket apple is the best variety of apple grown in this country. It has a crimson-red color when fully ripe. Its texture is fine and its flavor deliciously sweet. It has a keen, musky smell peculiar to itself, from which it takes its name, *misk* in Arabic meaning musk. In a room containing only one apple one may discover its presence by its smell. In exceptional cases individual specimens weigh as much as a pound, but are generally smaller. In such a town (Amassia), where a hundredweight of peaches costs from 20 to 25 cents, this apple is sometimes sold as high as 15 cents a pound. First-class apples are exported to Constantinople and the rest are used here.”

10526. **Prunus domestica.**

From Amassia, Turkey. Presented by Mr. H. Caramanian. Received March 16, 1904.

*Uryany.* A variety of plum from this noted fruit region of Turkey. In a letter of April 25, Mr. Caramanian says: “The Uryany plum is one of the choicest varieties of plums that I have ever seen here or in America. It is of a greenish yellow color when fully ripe. It is very fleshy and juicy, with an exceedingly thin skin. It tastes sweet and the stone is not very loose. As the orchardists do not know how to take care of the fruit trees, we find only a few perfect specimens on the trees.”

10527. **Phaseolus radiatus.**

From Patras, Greece. Received thru Mr. Socrates Xanthopoulo, March 17, 1904.

10528 to 10530. **Alnus spp.**

From Yokohama, Japan. Presented by Mr. H. Suzuki, of the Yokohama Nursery Company. Received March 9, 1904.

10528. **Alnus japonica (?).** 10530. **Alnus incana.**

10529. **Alnus firma.**

“Species of Alnus which are used by the Japanese as shade or shelter trees in the plantations of the Mitsumata paper plants, especially on hillside plantations. From the fact that the different species of Alnus produce root tubercles it is hoped that cultures can be secured of the micro-organisms which form them. It has been suggested by Mr. Swingle that the value of this Alnus as a shelter plant may be due largely to the nitrogen-collecting power of these tubercles. If this proves to be true, the cultivation of these species of Alnus may be of value for certain American cultures and especially in connection with the cultivation of the paper plant.” (Fairchild.)

10531. **Beta cicla.**

From Vomero, near Naples, Italy. Presented by Dr. Carl Sprenger, March 18, 1904.

Seeds for experiments in breeding with the sugar beet, to be carried on by Dr. C. O. Townsend and Mr. E. C. Rittue.

10532. **Trifolium pratense.**

From Riga, Russia. Secured by Mr. E. A. Bessey from Mr. Heinrich Goegginger. Received March 21, 1904.

Orel.—The seed of the promising hairless clover No. 16, to which it is desired to call special attention, was obtained by Mr. Bessey through Mr. Goegginger, of Riga, and was produced on the estate of a German grower near Yeletz, in the eastern part
of the Orel government. The grower made a practise of saving his own seed, and hence this strain had been grown on the same estate for a number of years.

According to Mr. Goegginger, the government of Orel furnishes the best red clover seed obtainable in Russia. Its chief crops are winter rye and oats, and it is in rotation with these that the clover is grown. A small quantity of winter wheat is also grown.

This variety is distinguished by the dustlessness of its hay, due to almost complete absence of hairiness from all parts of the plant; by its heavy yields for the first crop; by its leafiness and the persistence of the basal leaves; by the succulence of the stems, which improves greatly the quality of the hay and reduces the waste due to woody, uneatable portions; by greater palatability than hay from domestic seed, and by the fact that it comes to proper maturity for harvesting from ten days to two weeks later than the ordinary American red clover.

Except in certain sections and for certain purposes this variety is not recommended for supplanting domestic red clover, but rather for supplementing the latter. See Bulletin No. 95 of the Bureau of Plant Industry entitled "A New Type of Red Clover." (Charles J. Brand.)


From Riga, Russia. Secured by Mr. E. A. Bessey from Mr. Fr. Lassmann, Riga, Russia. Received March 21, 1904.

10533.

From estate owned by Mr. Legsdin, Mohileff government, near Zhlobin. 10534. Cowland.

From estate of Mr. Sillin, Neuhof, Cowland government. A high-growing sort.

10535 to 10543. *Vicia faba.* Broad bean.

From Paris, France. Received thru Vilmorin-Andrieux & Co., March 21, 1904.

10535. Large, common field variety. 10539. Windsor.


10544. Bean.

Originally from Spain. Received thru Mr. Rosendo Torras, of Brunswick, Ga., March 20, 1904.

Large white beans, slightly marked with red, varying in size. "Apparently different from any raised in this country." (Torras.)


From Vienna, Austria. Received thru Dr. Victor Lieb, Court Gardener to Palace of Miramar, near Trieste, Austria, March 24, 1904.


From Lulea, Sweden. Received thru Dr. Paul Hellström, March 24, 1904.

Grown at Persön Norrbattens Län, Sweden, in 1901. Imported for the experiments in the breeding of timothy at Ithaca, N. Y.

10547 to 10550. *Phleum spp.* Timothy.

From Vienna, Austria. Received thru Doctor Weinzierl, Councilor, Seed Control Station in Vienna, March 24, 1904.

Four species of Phleum from the experiment station in the Austrian Alps, known as the Sandling-Alp Station, which has won a wide reputation for its work on...
forage crops and grasses in the Alps. These seeds were imported for breeding purposes, especially at the Cornell Experiment Station at Ithaca, N. Y.


10551. (Undetermined.)
From Areelia, Guerrero, Mexico. Presented by Mr. Federico Chisolm. Received March 26, 1904.

Seeds of a "blue-flowered perennial 12 to 18 inches high. Flowers 1½ inches in diameter with yellow center. Ought to be used for bedding." (Chisolm.)

From Sitka, Alaska. Grown at the Alaska Agricultural Experiment Station by Prof. C. C. Georgeson, from S. P. I. No. 1341 (?). Presented to the Secretary of Agriculture (probably in 1900) by Professor Georgeson.

10553 to 10556. Cucumis melo. Muskmelon.
From Khojend, Russian Central Asia. Presented by Mr. E. Valneff to Mr. E. A. Bessey. Received March 28, 1904.
10553. Ak Kulrikik.
10554. Bogulda.
10555. Parsildak.
10556. Saruaipek.

From Hog Island, near Nassau, West Indies. Presented by Mrs. Ralph Johnson. Received March 25, 1904.

"The fruit of the akee, especially the arillus lying immediately below the seeds, is reported to be a delicious vegetable and to resemble in taste bits of sweetbread when cooked with meats or omelets. Worthy of attention in the Subtropical Gardens in Florida and a possibility as a culture in Porto Rico." (Fairchild.)

10558 to 10562. Amygdalus communis. Almond.
Received thru Mr. J. W. Kerr, of Denton, Md., April 7, 1904
10558. Castillet.
  Grown from S. P. I. No. 7133 (745).
10559. Fahlira.
  Grown from S. P. I. No. 7135 (748).
10560. Jordan.
  Grown from S. P. I. No. 7398 or No. 7401 (765 and 771).
10561. Mollar.
  Grown from S. P. I. No. 7001 (740).
10562. P'naeta.
  Grown from S. P. I. No. 7002 or No. 7134 (741 and 746).

From St. Petersburg, Russia. Secured by Mr. E. A. Bessey from Mr. G. Frick. Received April 11, 1904.

"Seed from Rjeschiza, Vitebsk government, in northwestern Russia. Should prove hardy." (Bessey.)

10564. Trifolium pratense. Red clover.
From St. Petersburg, Russia. Secured by Mr. E. A. Bessey from Mr. G. Frick. Received April 11, 1904.

"Seed from Ekaterinburg, in Siberia. Climate very cold in winter." (Bessey.)
10565 to 10567. *Trifolium* spp.  
**Clover.**

From Russia. Presented by Prof. Charles E. Bessey, of the University of Nebraska. Received April 9, 1904.

Samples of clover seed collected by Professor Bessey in the summer of 1903, as follows:

10565. *Trifolium lupinaster.*  
Five-leaf clover.

10566. *Trifolium sp.*

10567. *Trifolium hybridum.*  
**Alsike.**

"Last summer I picked up several seeds of odd clovers which interested me very much, and I am wondering whether you may not wish to have them. One of these seeds is the five-foilate clover, which was given me by the professor in the Agricultural Institute of Moscow. Another resembles the common red clover, but is evidently distinguished from that species. I collected these seeds in the heart of the Caucasus Mountains, at an altitude of probably 6,000 feet. The exact locality is Kazbek. Another resembles the alsike clover and was obtained from the same locality as the last." (Bessey.)

10568. *Cyperus papyrus.*  
**Egyptian paper plant.**


10569. *Fagopyrum esculentum.*  
**Buckwheat.**

From Walhonding, Ohio. Presented by the originator, Mr. Charles L. Lonsinger, thru Hon. J. W. Cassingham, M. C. Received April 1, 1904.

The variety is described by Mr. Lonsinger, in his letter of February 23, 1904, to Mr. Cassingham, as follows:

"It is a variety of my own creation and it withstands hot weather better than any other variety. To determine this, I have been sowing it to have it filling during heat of summer. In this I had an excellent test the summer of 1901, when it filled while the thermometer registered 95° to 102° F. in the shade day after day. My motive was to get a heat-resistant variety, in which I am pleased with my success. What I claim for it is that it will produce plump grains in hot weather, when other varieties fail and the Japanese varieties shrivel beside it; that it will produce more per acre than Silverhull or Japanese buckwheat, and will double the yield of either in hot weather. It can be sown in spring and midsummer, or in ordinary seasons two crops can be grown.

"It grows a stout plant and stands up better than Silverhull. In a test with Silverhull, 2 bushels each by weight, it produced one-half pound more flour than Silverhull and cakes were of a milder flavor than cakes from Silverhull. Six pounds in chaff (5 pounds, estimated, clean seed), selected in 1902, and sown in spring of 1903 on ordinary ground and shaded on one side by timber, produced 454 pounds, or 9 bushels 4 pounds. In 1902 I sowed it July 5 and it was ripe September 10."

10570. *Solanum tuberosum.*  
**Potato.**


10571 to 10575.

From Arcoia, Guerrero, Mexico. Presented by Mr. Federico Chisolm. Received March 28, 1904.

A collection of bulbs and tubers, mostly unidentified.

10576. *Cochlearia armoracia.*  
**Horse-radish.**

From Edgewater Park, N. J. Presented by Mr. B. D. Shedaker. Received April 13, 1904.

*Maliner Kren.* Roots grown from S. P. 1. No. 5761.
10577. **Trifolium pratense.**  
**Red clover.**

From Riga, Russia. Secured by Mr. E. A. Bessey from Mr. H. Goegginger. Received April 15, 1904.

"Red clover from Ufa, a dry region and cold in winter but having little snow. Seed rather poor, but for climatic regions ought to be valuable." (Bessey.)

10578. **Pilkum pratense.**  
**Timothy.**

From Tokyo, Japan. Presented by Dr. Oscar Loew, of Komaha Agricultural Experiment Station. Received April 15, 1904.

"Sample of seed for Mr. Gilmore's experiments in the selection of better races of timothy at the State Agricultural Experiment Station, Ithaca, N. Y. Furnished Doctor Loew by the Tokyo Plant Seed Company. The origin of the seed is uncertain. Presumably, however, it was gathered in Japan." (Fairchild.)

10579. **Eutrema hederifolia.**  
**Dry-land wasabi.**

From Yokohama, Japan. Presented by Mr. H. Suzuki, of the Yokohama Nursery Company. Received April 15, 1904.

"This wasabi is said to grow well in ordinary dry soil in shade, but it being a native of the central part of Japan it might not resist your climate. It seems to be much easier of cultivation than the ordinary wasabi which we sent you before, tho it will take some years before it grows to the size of ordinary wasabi roots, but, as the leaves have a very good flavor, it is said to be eaten by the natives as one of the best kinds of spice. It is mostly growing wild and not in cultivation yet." (Suzuki.)

10580 to 10582. **Prunus cerasus.**  
**Cherry.**

From Moscow, Russia. Secured by Mr. E. A. Bessey, thru Mr. Emil Meyer, head gardener of the Agricultural Institute. Received April 18, 1904.

10580. Vladimir.  
10582. Vladimir.

10581. Raditelsky.

10583 to 10586. **Hordeum distichum nutans.**  
**Barley.**

From Svalof, Sweden. Received thru the Allmanna Svenska Utsidesaktiebolaget (General Swedish Seed-Breeding Company), April 18, 1904.

"A collection of pedigreed brewing barleys, each one 100 per cent pure seed, which have been produced by selection at the Swedish Seed-Breeding Institute in Svalof, under the direction of Dr. N. H. Nilsson. They are recommended for their remarkable uniformity of growth, their heavy yielding character, and the low nitrogen content of their kernels. Belonging to the two-rowed type of barley, they require to be kept longer on the growing floor or in the growing drum of the malt house, but in the opinion of European experts these pedigreed pure races of barley grow more uniformly and make a better quality of beer than the ordinary types of barley grown in America, which are all of mixed races. The different sorts represent practically pure types of Doctor Nilsson's various barley races and translations of his descriptions are given herewith." (Fairchild.)

10583. **Hordeum distichum nutans.**

**Primes.** 0105. Head relatively thick and broad, with somewhat separated kernels and spreading awns. Before ripening, yellowish. Kernel finely built, medium in size, full, on both sides unusually finely wrinkled, yellow, with a slightly whitish tint. Plant strong, of medium height, thickly leaved, very well stooled, with strong, relatively stiff stems; leaves somewhat high on the stem. Medium late, ripening a few days later than the Chevalier. Extraordinarily productive, especially suited for mild, moderately strong, not too heavy soils. As a brewing barley, especially high prized. Belonging to Doctor Nilsson's Alpha group.

10584. **Hordeum distichum nutans.**

**Chevalier II.** 0403. Head long, small, and loose, with kernels not divergent; never reddish colored. Kernel medium sized, full, and especially finely
10583 to 10586—Continued.

formed, finely wrinkled, and strongly yellow colored. Plant medium strong; leaves abundant, but placed low on the plants. Not very abundantly stoold, with somewhat weak culms. On account of this latter habit a variety especially suited to warm, light, not very heavy soils. Productivity, medium. Ripening time, not very early, but still a few days before the Princes. As a brewing sort, in suitable locations, much esteemed. Belonging to Doctor Nilsson’s Alpha group.

10585. Hordeum distichum nutans.

Hanchen. Head unusually thick for nodding barley; kernels not divergent and therefore the head is more compact, narrower, small, standing horizontally on the straight culm; light yellow in color before ripening. The awns are often thrown off. Kernel small, especially fine in form and color; light yellow, very finely wrinkled. Plant of peculiar habit, late starting into growth, but nevertheless very heavily stooling, with several equally strong, graceful, but hard and very stiff culms which have few leaves, and these are near the ground. Ripens very early, little later than the Stemwedge. Productiveness very good. Especially adapted for light, warm soils, and above all for high altitudes. Can stand well heavy manuring. As a brewing barley well qualified. It belongs to Doctor Nilsson’s Alpha group.

10586. Hordeum distichum erectum.

Primus. 0706. Head rather long and relatively small, somewhat loosely built, with awns slightly spreading. Head borne on the culm, which is bent above almost horizontally. Kernel good, medium large, especially finely formed and full, finely wrinkled, rich yellow. Plant strong, moderately stooled, with upright very strong culms. Ripens early, scarcely perceptibly later in maturing (a day or so) than the Hanchen. Productiveness especially good. Quite certainly, so far as quality is concerned, the highest grade yet known among the “Imperial” barleys. Especially suited to heavy, cold loams and clay soils, such as are to be found in middle Sweden. Bred in the region where the sort already—thanks to its strong culms and earliness—has opened quite new regions for the culture of brewing barley.

10587. Juglans hyb.

Walnut.

From Santa Ana, Cal. Received thru Mr. P. H. Dorsett, of Chico, Cal., April 18, 1904.

“I am sending you a tree which, as near as can at this time be determined, is a hybrid between the southern California black w h i n t and the native live oak. Native black-walnut seeds were planted as stocks, and these trees appeared in the rows. Walnut buds ‘take’ on these as readily as on the native stock, or even more readily.” (Dorsett.)

10588. Lolium perenne.

Rye-grass.

From The Hague, Holland. Presented by Mr. Berendsen, hortulanus of the Royal Zoological-Botanical Society. Received April 17, 1904.

Westerwoldicum. “A variety of rye-grass originated in the north of Holland, which has the reputation of being much superior in rapidity of growth and quantity of hay cut to that grown from the Scotch variety, which is sometimes planted here.” (Berendsen.)

10589. Phleum pratense.

Timothy.

From The Hague, Holland. Presented by Mr. Berendsen, hortulanus of the Royal Zoological-Botanical Society. Received April 17, 1904.

“According to Mr. Berendsen the timothy seed used in Holland is usually imported from Scotland. This may be of Scotch origin. Imported for the timothy experiments conducted at the Cornell University Agricultural Experiment Station, Ithaca, N. Y.” (Berendsen.)
### 10590 to 10597. Dioscorea spp. and Xanthosoma spp.

**Yam and yautia.**

From San Juan, P. R. Presented by Miss Jenny H. Ericson. Received April 19, 1904.

A collection of Porto Rico yams and yautias not identified botanically. Yam culture in the West Indies is one of the most profitable small-plant industries. The botanical nomenclature of the various species is an important question.

### 10598 to 10614.

From Askhabad, Trans-Caspian territory, Turkestan. Secured by E. A. Bessey from Mr. A. Bashmakoff. Received April 22, 1904.

A collection of seeds and cuttings as follows:

#### 10598 to 10609. Vitis vinifera. **Grape.**

<table>
<thead>
<tr>
<th>No.</th>
<th>Variety</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>10598</td>
<td>Kara Kischmisch, Shiburgani, or Black Kishmish.</td>
<td>Berry elongated oval, violet black, seedless, small, very sweet, producing a good red wine and also best Black Kishmish raisins; ripens in August.</td>
</tr>
<tr>
<td>10599</td>
<td>Hussein Kara, or Black Husæni.</td>
<td>Differs from No. 10604 in its black color; ripens in July.</td>
</tr>
<tr>
<td>10600</td>
<td>Hadili ak, or White Khalili.</td>
<td>Berry oval, conical, small, green covered with black dots, hard, of average taste; one of the earliest Asiatic sorts; ripens about the middle of June.</td>
</tr>
<tr>
<td>10601</td>
<td>Darla.</td>
<td>Berry spherical, or sometimes slightly elongated. Dark carmine with yellowish spots, sweet; a very early sort; ripens at Bairam Ali about the middle of June.</td>
</tr>
<tr>
<td>10602</td>
<td>Bagishy.</td>
<td>Berry large, spherical, very sweet, golden when ripe. This sort is good for table use and for jelly, etc.; is also a wine variety; ripens early in September.</td>
</tr>
<tr>
<td>10603</td>
<td>Taiji.</td>
<td>Berry elongated oval, obtuse at the apex, greenish color covered with dark carmine streaks and bloom, sweet; flesh very compact; when hung from the ceiling of a cool room it keeps the whole winter; has no superior for preserves and marmalade; ripens the middle of September.</td>
</tr>
<tr>
<td>10604</td>
<td>Husæni ak, or White Huscin.</td>
<td>Berry white, at the time of ripening wax-colored, long, very sweet and juicy; the best table sort; ripens in June and July. (See No. 10290.)</td>
</tr>
<tr>
<td>10605</td>
<td>Sahibi rosa, or Rosa Sakhabi.</td>
<td>(See No. 10305.)</td>
</tr>
<tr>
<td>10606</td>
<td>Schokar ak, or White Shokar.</td>
<td></td>
</tr>
<tr>
<td>10607</td>
<td>Schiburchani, or Shiburkhani.</td>
<td>Berry large, comprest, spherical, with one or two furrows at the stalk, at maturity golden color, giving a good table wine; also good for making raisins.</td>
</tr>
<tr>
<td>10608</td>
<td>Wassarga, or Vasarga.</td>
<td>Berry white, spherical, sometimes elongated, very large, reaching the size of a plum; used for the preparation of the best sorts of raisins; also for preserves; one of the most showy of the Central Asiatic sorts; ripens in July.</td>
</tr>
<tr>
<td>10609</td>
<td>Masita.</td>
<td>Berry white, spherical, sometimes elongated, very large, reaching the size of a plum; used for the preparation of the best sorts of raisins; also for preserves; one of the most showy of the Central Asiatic sorts; ripens in July.</td>
</tr>
</tbody>
</table>

#### 10610. Phaseolus radiatus. **Mung bean.**

Masch.
10598 to 10614—Continued.

10611. Triticeum Polonicum (?). Wheat.

Red Winter; unirrigated.

10612. Andropogon Sorghum (?). Sorghum.

Djyagara.


Kunach, or Kunak.


10615 to 10620. Persea Gratissima. Avocado.

From Honolulu, Hawaii. Presented by Mr. Donald MacIntyre, Moanalua Gardens, Honolulu. Received April 22, 1904.

10615. Large Purple.

Flesh thick, of good, nutty flavor, yellow, and fiberless; seed comparatively small, about one-fourth of fruit; crop medium; pear-shaped; length and diameter over standard (4 by 6 inches). (No. 1.)

10616. Small Green.

Flesh not thick and with no nutty flavor, but quite fiberless and rather sweetish; fruit roundish, length in diameter about 4 ½ inches; late, heavy bearer, constant cropper. (No. 4.)

10617. Large Green Round.

Flavor good but not nutty; length and diameter about 5 ½ by 5 inches; crop uncertain. (No. 3.)

10618. Large Green.

Best of all in flavor; flesh smooth, firm, and fiberless; seed small; decidedly bottle-necked; length 7 inches, diameter about 4 inches; late cropper, but crop fairly constant; ripening about middle of June; seed small. (No. 6.)

10619. Small Green.

A very early variety, not of best flavor, with fiberless fruit; seed large; not decidedly pear-shaped; good grower and constant cropper; ripening about May 25; earliest variety in Honolulu. (No. 5.)

10620. Large Green.

Flavor decidedly nutty and good; flesh yellow, fiberless; length and diameter of fruit about standard; crop light, ripening about the middle of June. (No. 2.)

10621. Phleum Pratense. Timothy.

From Sodermanland, Sweden. Presented by Prof. Jakob Eriksson, Experimentalfältet Albano, Stockholm. Received April 19, 1904.

"Sample of seed from crop of 1903 of Swedish timothy for the selection experiments carried on by Mr. John W. Gilmore at the Cornell University Agricultural Experiment Station." (Fairchild.)


From Japan. Presented by Prof. C. C. Georgeson, director of the Alaska Agricultural Experiment Station, Sitka, Alaska. Received April 18, 1904.


From Japan. Presented by Prof. C. C. Georgeson, director of the Alaska Agricultural Experiment Station, Sitka, Alaska. Received April 18, 1904.

Seed of Japanese morning-glories, which are known as being the most beautiful varieties in the world.
10624 to 10627.

From Moscow, Russia. Received from Inmer & Sons, seedsmen, thru Mr. E. A. Bessey, April 23, 1904.

Seeds, as follows:

10624. Avena sativa. Oat.

Beljak. A race of oat bred from the Steirop oat and especially valuable in regions of limited rainfall, where it gives large crops when other sorts fail.


Orechnyager. A low sort, especially bred for large yield in dry regions by the owner of a large estate. Not on the market. Obtained by Inmer & Sons from the breeder as a personal favor to them.


Red-clover seed from an estate at Kostroma, 150 miles north of Moscow, a region of very cold winters, almost at the edge of clover-seed production.

10627. Trifolium pratense. Red clover.

Red-clover seed from an estate in the northern part of Simbirsk government, a region of cold winters with little snow.


From Catania, Sicily. Received thru Mr. Alwin Berger, La Mortola, Ventimiglia, Italy. Received April 21, 1904.

"Sample of beet seed from the director of the Royal Botanic Gardens in Catania for the breeding experiments of Dr. C. O. Townsend and Mr. E. C. Rittue, of this Department." (Fairchild.)

10629 and 10630. Beta maritima.

From Sicily. Received thru Dr. Carl Sprenger, Vomero, near Naples, Italy, April 25, 1904.

"Sample of seed from two different localities in Sicily for the breeding experiments of Doctor Townsend and Mr. Rittue, of this Department. No. 10629 was marked 'I' and No. 10630 was marked 'II.' No further information." (Fairchild.)


Pods of the tannin shrub "algarobillo." This is a small tree found growing wild on the foothills of the Andes in Chile. It is said to occur in the driest portions of the arid coast and to produce large quantities of pods very rich in tannin. According to Dr. Louis E. Levi, of the Plister & Vogel Leather Company, of Milwaukee, Wis., "it is an excellent tanning material, but gives a very light yellow color to the leather, which is partially objectionable, yet I think in mixtures with quebracho, or the like, it would answer the purpose of the tanner. The same contains about 50 per cent of tannin. The tannin material has as yet not been used very much in the United States on account of its objectionable color and easily fermentable properties when in solution. I think this is not very objectionable, as an experienced tanner would be able to get around this fault."

Mr. C. A. Spencer, importer and dealer in tanning materials, 183 Essex street, Boston, Mass., says: "Regarding the value of this material as a tanning agent, we may say its use for the purpose is very limited. While it is very strong in tannin it does not have the filling properties that make it a desirable material for the manufacture of leather, although there is a limited quantity used in Great Britain and Europe, but from the best information we have been able to obtain, there are only about 1,000 tons yearly of this article available. As compared with other tanning materials grown in the United States, and with quebracho extract, gambier, etc., the price is somewhat higher, which no doubt accounts, to a certain extent, for its limited consumption. We formerly imported this article regularly, but the demand for it has grown much less during the past two years, and there are now practically but
two consumers in this country of any size who are using the article in the manufacture of what they call gambier extract."

Mr. William H. Krug, of A. Klipstein & Co., 122 Pearl street, New York, N. Y., says: "We are unable to give you a comparative statement as to the value of this material as compared with the other tanning materials you mention in your letter, as it has been only very recently introduced in this country and has not received more than a very limited application. We believe with you that algarobillo can no doubt be successfully grown in some regions of the United States, and with the growing scarcity of domestic tanning materials, its introduction should prove of considerable interest."

From Yokohama, Japan. Received thru the Yokohama Nursery Company April 25, 1904.

"Sent to replace the former quantity imported (see No. 9892), which failed to germinate." (Fairchild.)

10633. Quercus cornea. Oak.
From Hongkong, China. Presented by Mr. S. T. Dunn, superintendent of the Botanical and Afforestation Department. Received April 27, 1904.

"Acorns of an evergreen oak, said to be a very showy ornamental as grown on the island of Hongkong, but interesting particularly as bearing acorns as hard shelled as the nuts of the American hickory and which contain a kernel almost as sweet as the sweetest Spanish chestnut. These acorns are sold in the markets of Canton and Hongkong by the ton and are keenly relished not only by the Japanese but by Europeans. At the difficult to predict how hardy this species will be in America, it is worthy of trial in all regions where citrus fruits can be grown." (Fairchild.)


"These tubers are considered a great delicacy in France, where they are served in the best restaurants and command a good price. They are said to be more delicate than potatoes and are certainly worthy of a permanent place among the new vegetables of this country. They should be planted in rows a foot apart and 6 to 9 inches in the row as soon as all danger from frost is past. They mature their tubers in October, when they may be dug and stored in sand or earth in a cool place. They should be prepared by boiling, steaming, or roasting, and may be served either dry or with melted butter. Fried with salad oil they are considered to be especially delicious. Purchased by Mrs. Gibbs from Peter Barr, of London." (Fairchild.)

From Ward No. 3, Jansenville, South Africa. Received thru Messrs. Lathrop and Fairchild by arrangement with Dr. Charles P. Lounsberry and Mr. A. J. Davison, of the Department of Agriculture, Cape Town, South Africa, May 2, 1904.

"This fodder composite is considered of such great value by the sheep and cattle men of Cape Colony that a separate circular regarding it is being prepared. It is a low-growing, spreading bush which layers naturally when the tips of its branches arch over and touch the ground. In the eastern provinces of Cape Colony, where the rains occur in summer but where long, severe droughts are frequent, this Pentzia is one of the most valuable of all the Karroo plants for fodder purposes. It is especially good for sheep and goats, which eat it down almost to the ground. Tho tested unsuccessfully in Australia, the plant is of such great value that it deserves a thoro trial in the warmest parts of America and should be used in experiments on resuscitation of the barren island ranges of Hawaii." (Fairchild.)

10636 to 10669. Mangifera indica. Mango.
From Seharunpur, India. Presented by Mr. W. Gollan, superintendent of the Government Botanical Garden, to replace plants that died in transit last year. Received April 26, 1904.

7217—No. 97—07—3
Plants as follows (notes by Mr. Gollan):

10636. Arbuthnot.
   Something like Bombay Yellow, but a smaller fruit.

10637. Brindabani.
   Medium-sized, green-colored fruit. Quality only fair.

10638. Bombay Green.
   Something like Bombay Yellow, but fruit green when ripe.

10639. Bombay Yellow.
   The best mango here. Fruit of medium size and yellowish when ripe.

10640. Gopal Bhog.
   Medium-sized fruit. Keeps well. Flavor good.

10641. Khapariah.
   A longish, hooked, pointed fruit. Color yellow, shaded red.

10642. Salibunda.
   A large fruit. Subacid flavor. Color greenish yellow.

10643. Strawberry.
   A longish, hooked, pointed fruit. Flavor good.

10644. Calcutta Amin.
   A long fruit, hooked, pointed. Has a very thin stone. Flavor good.

10645. Faizin.
   A large, long fruit. Brownish green. Flavor good.

10646. Fijri Long.
   A large, longish fruit. Ripens late. Dark green when ripe.

10647. Fijri Round.
   Similar to above but of roundish shape.

10648. Hathi Jhol.
   A very large fruit. Flavor good.

10649. Kachmahua.
   A small fruit, but of good flavor.

10650. Kakaria.
   A large, long fruit. Dark green. Good flavor.

10651. Langra Haroi.

10652. Surkha.
   A stringy kind, but of very good flavor.

10653. Tamancha.
   A large fruit. Greenish yellow. Flavor good.

10654. Bhadouria.
   A small, dark-green fruit. Ripens in September–October.

10655. Punia.
   A medium-sized, stringy kind. Flavor very good.

10656. Kistaphal.
   A large fruit. Flesh highly colored and of good flavor.
10636 to 10639—Continued.

10657. Madros.
A small fruit. Stringy but of fine flavor.

10658. Romani.
A medium-sized fruit. Subacid, of very fine flavor.

10659. Nucka.
A long, hooked, pointed fruit. Slightly stringy, but flavor good.

10660. Chickee.
A medium-sized fruit. Light yellow, of good flavor.

10661. Daisy's Favorite.
A long, thin fruit. Yellow, shaded red.

10662. Gala.
A large, round, yellow fruit, of very good flavor.

10663. Pyosec.
A medium-sized fruit, of subacid flavor. Good.

10664. Langra Lang.
Similar to Langra Harford, but larger. Ripens late in August.

10665. Sandershah.
A long fruit. Stringy. Flavor peculiar and only liked by some people.

10666. Kala.

10667. Sandwith.
A small, long-shaped fruit. Stringy, but of fine flavor.

10668. Naaji Hahadi Amin.
A medium-sized, dark-green fruit. Ripens late.

10669. Sharhadi Black.
A large, round fruit. Dark green. Of very good flavor.

10670 to 10673. Nepheleium Litchi and Nepheleium Longana.

Litchi and longan.

From Hing-hua, Fuhkien, China. Received thru Rev. W. N. Brewster, Methodist Episcopal missionary, in the autumn of 1903.

Mr. Brewster says: "They were grafted probably some time in the year 1902. The trees were not more than two years old, I think. With regard to the culture, they are not propagated from the seed, but a ball of earth is tied around a joint of a branch, and when it throws roots out into this ball the branch is cut off on the side next to the trunk, and the little tree is planted. The trees are fertilized by night soil about the time that they are blossoming and also later when the fruits begin to form. When the leaves are too thick, as they generally are in the spring, there is severe pruning done. After the buds are out, these are also thinned; after the blossoms begin to form into fruit they are thinned again. This is very important in order to make a perfect fruit. They must be kept entirely free from frost, and should be planted in a deep soil, i.e., the soil should be soft down many feet below the surface. The litchi blossoms early and matures the latter part of July. It is shaped like a strawberry and has the strawberry color and appearance, only the skin is rough and thick and brittle. The seed of the grafted variety is sharp pointed and small, and shriveled up so that the meat is much more abundant than in the ungrafted variety. The meat is white and juicy and a little tart. The longan (another species of the same genus) ripens in September. It is round and smooth. It is sweeter than the litchi, but the meat has very much the same appearance."

"The other fruit which I brought, the longan, is not a variety of the litchi, but a
distinct fruit, different in color and taste, and matures several weeks later in the
season. Many people think it is equal to, and some think it far superior to, the litchi.
It is cultivated in the same way as the latter, so far as I have observed.”

10674. Hordeum tetraestichum.  
Four-row barley.

From Chicago, Ill. Received thru Wahl-Henius Institute of Fermentation, 
May 3, 1904.

“Minnesota barley which, according to Dr. Robert Wahl’s analysis, contains
the unusual percentage of 15 to 16 per cent of protein. Doctor Wahl believes that this
variety should be experimented with in connection with the testing of low-protein,
two-rowed barley. It is also of interest in connection with the experiments of Mr.
H. M. Cottrell, Odebolt, Iowa, on high nitrogen feeding barleys.” (Fairchild.)

10675 to 10723.

From Teneriffe, Canary Islands. Received thru Hon. Solomon Berliner, United
States consul at Teneriffe, May 4, 1904. Transmitted thru the Secretary of
State.

A collection of small samples of seeds, many of them indigenous to the Canary
Islands, as follows:

10675. Asphodelus ramosus.  
10676. Artemisia argentea.  
10677. Bosea yervamora.  
10678. Bystropogon origanifolius.  
10679. Centaurea calcitrapa.  
10680. Cineraria populifolia argentea.  
10681. Chrysanthemum frutescens.  
10682. Convolvulus althaeoides.  
10683. Convolvulus floridus.  
10684. Cytisus glabratus.  
10685. Cytisus palmensis.  
10686. Delphinium staphisagria.  
10687. Digitalis canariensis.  
10688. Draecaena draco.  
10689. Dracunculus canariensis.  
10690. Echium formosum.  
10691. Echium simplex.  
10692. Echium strictum.  
10693. Euphorbia canariensis.  
10694. Euphorbia regis-jubae.  
10695. Ferula linkii.  
10696. Galilea juncea.  
10697. Genista canariensis.  
10698. Genista monosperma.  
10699. Gladiolus neglectum.  
10700. Gonospermum fruticosum.  
10701. Gonospermum revolutum.  
10702. Hypericum floribundum.  
10703. Lavandula abrotanoides.  
10704. Leucophaeae candidissima.  
10705. Lotus canariensis floribunda.  
10706. Mesembryanthemum crystallinum.  
10707. Oenothera rosea.  
10708. Parietaria arborea.  
10709. Periploca laevigata.  
10710. Pinus canariensis.  
10711. Plocama pendula.  
10712. Psoralea bituminosa.  
10713. Ranunculus canariensis.  
10714. Rhamnus crenulata.  
10715. Rhodocistus herthelotianus.  
10716. Rubia fruticosa.  
10717. Rumex lunaria.  
10718. Sempervivum tabulareforme.  
10719. Staticia brassicafolia.  
10720. Staticia pectinata.  
10721. Tamus edulis.  
10722. Teucrium hyssofolicum.  
10723. Verbena bonariensis.
10724. **Vicia Faba.**

From Cairo, Egypt. Received thru Mr. George P. Foaden, secretary of the Khedivial Agricultural Society.

"Roots of this forage plant collected shortly before harvest time, dried in the shade, and mailed in tin mailing cases. For Doctor Moore’s experiments in the isolation of the micro-organism which causes the tubercles." (Fairchild.)

10725. **Medicago Orbicularis.**

From Algeria. Secured by Mr. Thomas H. Kearney in 1902. Turned over to this office by Mr. C. S. Scofield on May 5, 1904, to be numbered and sent to the Plant Introduction Garden at Chico, Cal., for propagation.

10726. **Phleum Pratense.**

From Helsingfors, Finland. Received thru Mr. C. T. Ward, Finnish Horticultural Society, May 6, 1904.

Sample of timothy seed grown in Finland.

10727 to 10750.

From Monte, Grand Canary. Presented by Mr. Alaricus Delmard. Received May 6, 1904.

A collection of small samples of seeds of interesting plants growing in the Canary Islands, as follows:

- **10727. Adenocarpus Franterioides.**
- **10728. Bacea Vervamora.**
- **10729. Bystropogon Origanifolius.**
- **10730. Crateronella Canariensis.**
- **10731. Chrysanthemum Frutescens.**
- **10732. Clethra Arborea.**
- **10733. Isolepis Canariensis.**
- **10734. Cytisus Palmensis.**
- **10735. Delphinium Staphisagria.**
- **10736. Digitalis Canariensis.**
- **10737. Galilea Juncea.**
- **10738. Gonospermum Revolutum.**
- **10739. Leucophae Candidissima.**
- **10740. Menembryanthemum Crystallinum.**
- **10741. Oenothera Boesia.**
- **10742. Parietaria Arborea.**
- **10743. Periploca Labivigata.**
- **10744. Rhodocistus Berthelotianus.**
- **10745. Ruha Fruticosa.**
- **10746. Statice Pectinata.**
- **10747. Tamus Edulis.**
- **10748. Tegrim Hyssopifolium.**
- **10749. Trixisgo Versicolor.**
- **10750. Verbena Bonariensis.**

10751. **Fragaria Sp.**

From Garrettsville, Ohio. Presented by the originator, Mr. George J. Streator, for testing, on condition that no distribution is made. Received May 9, 1904.

**Cardinal.**

10752. **Ervum Lens.**

From Cairo, Egypt. Received thru Mr. George P. Foaden, secretary of the Khedivial Agricultural Society, May 6, 1904.

**Saida.** "A variety of an important crop grown extensively in Upper Egypt." (Fairchild.)
10753. *Vicia faba.*  
**Horse bean.**

From Valetta, Malta. Received thru Dr. J. Borg, San Antonio Gardens, May 12, 1904.

Roots of a horse bean from the island of Malta, which, according to Doctor Borg, were from plants already in pod. Doctor Borg remarks that the nodules are not so plump as they were when the plant was just beginning to set fruit, and that the roots came from the best bean-producing lands in Malta, lands entirely free from orobanche, which is a bad weed in the bean fields and their worst enemy. "But for its ravages the bean would be the most profitable crop for agriculture." (Borg.)

10754. *Hordeum Tetrastichum.*  
**Four-row barley.**

Originally from the Agricultural Experiment Station at Madison, Wis. Received thru the Wahl-Henius Institute of Fermentology, Chicago, Ill., May 9, 1904.

Oderbrucker. "A variety of barley which, upon analysis, proves to contain 15 per cent of protein matter. Dr. Robert Wahl considers it essential that this type of barley with high nitrogen content be experimented with for beer-making purposes, and Mr. H. M. Cottrell, of Odebolt, Iowa, is interested in it as a type especially adapted for feeding purposes." (Fairchild.)

10755 and 10756. *Capsicum Annuum.*  
**Paprika pepper.**

From Budapest, Hungary. Received thru Hon. Frank D. Chester, United States consul at Budapest, May 4, 1904.

Seeds of the two varieties of *paprika* which were requested by the Botanical Drug Company, of Bridgeport, Ala.

10755. *Szeged rose.*

From Szeged, Hungary.

10756. *Hungarian.*

From near Debreczen, Hungary.

"It is worthy of note that the best varieties of paprika are not imported into this country and that the highest priced, called 'Edelsiiss,' brings 6 crowns a pound, while that generally imported into America is quoted at 1.65 crowns. There would seem to be a chance for the paprika industry in America." (Fairchild.)

10757 to 10958. *Phoenix Dactylifera.*  
**Date.**

From Biskra, Algeria. Purchased from Monsieur Colombo by correspondence conducted by Mr. W. T. Swingle. Plants paid for by Mr. E. A. Bessey, who superintended the packing and shipping to the United States. Received May 17, 1904.

10757 to 10832. *Deglet Noor.* From Ourlana oasis.

Among these palms there may be as many as four palms that are not *Deglet Noor,* since four lost their numbers and were confused with this lot of *Deglet Noor.* Nos. 10841, 10883, 10902, and 10904 are doubtful, and are probably *Deglet Noors.* The varieties of these four misplaced suckers are as follows: Tezerharit, Abd en noor, Sokria, and Icema. These varieties are mostly quite unlike the *Deglet Noor* and can probably be recognized when the offshoots get of some size.

10833. *Deglet Reida.* From Ourlana oasis.

10834. *Deglet Reida.* From Ourlana oasis.

10835. *Deglet Reida.* From Ourlana oasis.

10836. *Tenaseen.* From Ourlana oasis.


10841. (No label.)
10757 to 10958—Continued.

10842. Oreloo. From Ourlana oasis.
10843. Oreloo. From Ourlana oasis.
10844. Oreloo. From Ourlana oasis.
10845. Sayba Boo Dra. From Ourlana oasis.
10846. Sayba Boo Dra. From Ourlana oasis.
10847. Sayba Boo Dra. From Ourlana oasis.
10848. Sayba Boo Dra. From Ourlana oasis.
10849. Tafuzweent. From Ourlana oasis.
10850. Tafuzweent. From Ourlana oasis.
10851. Tafuzweent. From Ourlana oasis.
10852. Taoorkhet. From Ourlana oasis.
10853. Taoorkhet. From Ourlana oasis.
10854. Taoorkhet. From Ourlana oasis.
10855. Taty. From Ourlana oasis.
10856. Taty. From Ourlana oasis.
10857. Taty. From Ourlana oasis.
10858. Timjoohert. From Ourlana oasis.
10859. Timjoohert. From Ourlana oasis.
10860. Timjoohert. From Ourlana oasis.
10861. Temkhookh. From Ourlana oasis.
10862. Temkhookh. From Ourlana oasis.
10863. Temkhookh. From Ourlana oasis.
10864. Takudet. From Ourlana oasis.
10865. Takudet. From Ourlana oasis.
10866. Takudet. From Ourlana oasis.
10867. Taremoont. From Ourlana oasis.
10868. Taremoont. From Ourlana oasis.
10869. Taremoont. From Ourlana oasis.
10873. Adebet et Teen. From Ourlana oasis.
10874. Adebet et Teen. From Ourlana oasis.
10875. Adebet et Teen. From Ourlana oasis.
10876. Makelet el Leef. From Ourlana oasis.
10877. Makelet el Leef. From Ourlana oasis.
10878. Makelet el Leef. From Ourlana oasis.
10879. Nakhelet Feraoon. From Ourlana oasis.
10880. Nakhelet Feraoon. From Ourlana oasis.
10881. Nakhelet Feraoon. From Ourlana oasis.
10882. Abd en Noor. From Ourlana oasis.
10883. (No label.)
10884. Abd en Noor. From Ourlana oasis.
10885. Horra. From Fougala oasis.
1075’ to 10958—Continued.

10886. Horra. From Fougala oasis.
10887. Horra. From Fougala oasis.
10888. Rhazee. From Fougala oasis.
10889. Rhazee. From Fougala oasis.
10890. Rhazee. From Fougala oasis.
10891. Toory. From Fougala oasis.
10892. Toory. From Fougala oasis.
10893. Toory. From Fougala oasis.
10894. Oogbales. From Fougala oasis.
10895. Oogbales. From Fougala oasis.
10896. Oogbales. From Fougala oasis.
10897. Sokria. From Biskra oasis.
10898. Boo Halas. From Biskra oasis.
10899. Sokria. From Biskra oasis.
10900. Sokria. From Biskra oasis.
10901. Sokria. From Biskra oasis.
10902. (No label.)
10903. Iteema. From Biskra oasis.
10904. (No label.)
10905. M’Kentishee Degla. From Biskra oasis.
10906. M’Kentishee Degla. From Biskra oasis.
10907. M’Kentishee Degla. From Biskra oasis.
10908. Retbet Hafsia. From Biskra oasis.
10909. Retbet Hafsia. From Biskra oasis.
10910. Getara. From Biskra oasis.
10911. Getara. From Biskra oasis.
10912. Zoazia. From Biskra oasis.
10913. Retbet Regaya. From Biskra oasis.
10914. Retbet Regaya. From Biskra oasis.
10915. Retbet Regaya. From Biskra oasis.
10916. Muoor (male). From Filiache oasis.
10917. Retbet Haloo. From Filiache oasis.
10918. Retbet Haloo. From Filiache oasis.
10919. Retbet Haloo. From Filiache oasis.
10920. Halooa. From Biskra oasis.
10921. Halooa. From Biskra oasis.
10922. Halooa. From Biskra oasis.
10923. Zerza. From Biskra oasis.
10924. Zerza. From Biskra oasis.
10925. Zerza. From Biskra oasis.
10926. Boo Halas. From Biskra oasis.
10927. Boo Halas. From Biskra oasis.
10928. Boo Halas. From Biskra oasis.
10929. Khodey. From Biskra oasis.
10757 to 10958—Continued.

10930. Khodry. From Biskra oasis.  
10931. Khodry. From Biskra oasis.  
10932. Lookzy. From Filiache oasis.  
10933. Lookzy. From Filiache oasis.  
10934. Rhazze. From Filiache oasis.  
10935. Rhazze. From Filiache oasis.  
10936. Rhazze. From Filiache oasis.  
10937. Mnoor (male). From Filiache oasis.  
10938. Mnoor (male). From Filiache oasis.  
10939. Iteem Joher. From Filiache oasis.  
10940. Iteem Joher. From Filiache oasis.  
10941. Iteem Joher. From Filiache oasis.  
10942. Goondy. From Filiache oasis.  
10943. Goondy. From Filiache oasis.  
10944. Goondy. From Filiache oasis.  
10945. Lookzy. From Filiache oasis.  
10946. Ahmar Msab. From Chetma oasis.  
10947. Ahmar Msab. From Chetma oasis.  
10948. Ahmar Msab. From Chetma oasis.  
10949. Retbet Abdala. From Chetma oasis.  
10950. Retbet Abdala. From Chetma oasis.  
10951. Retbet Abdala. From Chetma oasis.  
10952. Sokria. From Chetma oasis.  
10953. Sokria. From Chetma oasis.  
10954. Sokria. From Chetma oasis.  
10955. Nesheen. From Chetma oasis.  
10956. Nesheen. From Chetma oasis.  
10957. Nesheen. From Chetma oasis.  
10958. (No label.)

From New Orleans, La. Received thru the J. Steckler Seed Company (Limited). Received May 10, 1904.  
"Fruits of the commercial variety common in New Orleans markets." (Fairchild.)

From Tahiti. Received April 26, 1904.  
"Seed of a fruit of a variety of mango brought by the captain of the steamer Mariposa to San Francisco. The captain declares it to be a superior variety, very free from fiber and very luscious. A fruit of this variety was eaten by Mr. George W. Oliver and he declares it an excellent variety. The captain says there are many trees of this variety in Tahiti. Owing to its large size and freedom from fiber it may prove valuable." (Fairchild.)

10961. (Undetermined.)  
From Arcelia, Guerrero, Mexico. Presented by Mr. Federico Chisolm. Received May 5, 1904.  
A small packet of flower seed. Flower described by Mr. Chisolm as follows: "Perennial blue flower, yellow center. Twelve inches to 20 inches. Blooms June, July, August, December, January, and February. Desirable for bedding."
10962. **Vicia faba.**  
**Horse bean.**

From Tunis, Tunis. Received thru Mr. R. Gagey, Agricultural College, Tunis, May 17, 1904.

"Roots of horse bean, dried in the shade, for material from which to secure the micro-organism which forms the nitrogen-collecting nodules." (Fairchild.)

10963. **Lilium neilgherrense.**  
**Neilgherry lily.**

From Utkamand, India. Presented by Mr. H. F. Macmillan, curator, Royal Botanic Garden, Peradeniya, Ceylon, thru Mr. Fairchild, May 20, 1904.

10964. **Gossypium tomentosum.**  
**Cotton.**

From Honolulu, Hawaii. Presented by Mr. Jared G. Smith, special agent in charge of the Agricultural Experiment Station, May 18, 1904.

10965. **Musa sapientum.**  
**Banana.**

From Grand Canary, Canary Islands. Received thru Mr. Alaricus Delmard, May 20, 1904.

"Suckers of the so-called 'Chinese' banana, commonly grown in the Canary Islands and shipped to England in large quantities. It is reported that this variety of banana brings a higher price on the London market than the Jamaican or Central American varieties." (Fairchild.)

10966. **Lilium philippinense.**

**Lily.**

From Manila, P. I. Received from Mr. Elmer D. Merrill, botanist of the Bureau of Government laboratories, Manila, thru Capt. George P. Ahern, May 28, 1904.

"Benguet lily, introduced especially for experiments in hybridizing lilies." (Fairchild.)

10967. **Furcraea foetida.**

**Maguey.**

From Port Luis, Mauritius. Presented by Mr. John W. Holway, United States vice-consul, to Mr. L. H. Dewey. Received May 10, 1904.

"My principal object in introducing them is to determine whether there is any difference between Porto Rico 'maguey' and Mauritius 'alser vert.'" (Dewey.)

10968. **Magnolia pumila.**

**Magnolia.**

From Canton, China. Presented by Mr. Thomas Griffith. Received May 23, 1904.

"Plants of an ornamental known in Canton as 'Yei-hap.' Said by Captain Bernadou, of the United States Navy, to be a great favorite among the Chinese, the flowers, which are fragrant, being used for boutonnieres. Occasionally cultivated in the South." (Fairchild.)

10969 to 10974.  
Presented by Mr. Frederick Cramer, thru Dr. L. O. Howard. Received May 23, 1904.

10969. (Undetermined.)  
**Cactus.**

From the City of Mexico, Mexico.

"A low-growing species of cactus, the small berry-like cactus fruit of which is said to be edible. Probably comes from Michoacan." (Fairchild.)

10970. **Citrus aurantium.**

**Orange.**

From Atotonilco, State of Jalisco, near Guadalajara, Mexico.

"Telon. Said to be the very best seedling orange raised in southern Mexico. Like a lemon but round like an apple. Sweet tasting." (Fairchild.)

10971.  
From the City of Mexico, Mexico.

A collection of seeds secured by Mr. Cramer from all over Mexico, mostly of ornamental flowers, shrubs, and trees.  

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10969 to 10974—Continued.

10972. (Undetermined.)
From Guadalajara, Mexico.
Seeds of a medicinal plant.

10973. **Cicer arietinum.**
From Mexico.

10974. **Cicer arietinum.**
From Jalisco.

"Grown on dry, arid lands in the hotter portions of Mexico without irrigation. The weevils which attack this chick-pea are said to be injurious to other cereals. These seed should be carefully fumigated. Raised in Mexico on heavy, dry, black soil." (Fairchild.)

10975. **Castilla sp. ( ?).**
From Chiapas, Mexico. Presented by Mr. James Maunder, thru Dr. L. O. Howard. Received May 23, 1904.
Mr. Maunder considers this a valuable variety.

10976 and 10977.
From Quito, Ecuador. Presented by Mr. Luis Sodiro, S. J., a botanist and student of Ecuador agriculture. Received May 25, 1904.

10976. **Festuca pabularis.**
10977. **Poa mulaleensis.**

"Mr. Sodiro remarks that Nos 10976 and 10977 are some of the most remarkable forage grasses of the mountain region of Ecuador. They are likely to prove of value in certain portions of this country." (Fairchild.)

10978. **Persea gratissima.**
Avocado.
From Guatemala. Presented by Hon. Alfred A. Winslow, consul-general, Guatemala, Central America. Received May 23, 1904.

10979 to 10999.
From Hsi-an, China. Presented by Mr. W. W. Simpson in exchange for seeds of American vegetables sent him in December, 1903. Received May 23, 1904.

Seed as follows:

10979. **Cannabis sativa.**
Hemp.

10980. A mixture, but labeled "Parsley."

10981. **Brassica pe-tsai.**
Pe-tsai cabbage.

10982. **Brassica alba.**
White mustard.

10983. **Brassica alba.**
White mustard.

10984. **Brassica pe-tsai.**
Pe-tsai cabbage.

10985. **Hordeum vulgare.**
Barley.

10986. **Pisum sp.**
Pea.

10987. **Pisum sativum.**
Pea.

10988. **Allium cepa.**
Onion.

10989. **Beta vulgaris.**
Beet.

10990. **Raphanus sativus.**
Spring radish.

10991. **Vicia faba.**
Broad bean.

10992. **Triticum vulgare.**
Winter wheat.
10979 to 10999—Continued.

10996. Lactuca sativa. Lettuce.
10998. Lactuca sativa. Lettuce.
10999. Lactuca sativa. Lettuce.

11000. Phleum pratense. Timothy.
From Tokyo, Japan. Received from Mr. T. Watase, president of the Tokyo Plant, Seed, and Implement Company, thru Dr. Oscar Loew, Imperial University, Tokyo, May 31, 1904.

"Seed from Hakkaido, the northern island of Japan." (Fairchild.)

From Sao Paulo, Brazil. Secured thru Dr. Horace M. Lane, president of the Mackenzie College. Received May 23, 1904.

Criolo.

11002. Pancratium sp.
From Arcelia, Guerrero, Mexico. Presented by Mr. Federico Chisolm. Received June 6, 1904.

11003. Phoenix dactylifera. Date.
From Biskra, Algeria. Received thru Monsieur Colombo by Mr. E. F. Chumard, of Imperial, Cal., Mr. E. A. Bessey, of this Department, acting as agent in the transaction, the previous correspondence having been conducted by Mr. Walter T. Swingle.

Deglet Noor.

11004 to 11009.
From Arcelia, Guerrero, Mexico. Received thru Mr. Federico Chisolm, June 15, 1904.

A collection of native Mexican seeds and bulbs as follows:

Strawberry-flavored guayabillas.
From fruits having at least four distinct flavors.
11008. Lilium sp. (?). Scarlet lily.
11009. (Unidentified.)

11010 to 11017.
From Sepacuile, Guatemala. Received thru Mr. O. F. Cook, June 6, 1904.

A spiny-leaved pineapple peculiar to this immediate neighborhood, where it grows and ripens at a higher and cooler elevation than any other sort. The leaves are very broad and drooping, giving a very characteristic appearance. The flesh is yellow, and of moderately good quality, inferior to the best hot-country sorts, but better than the latter when grown in these humid highlands. It might be of use in the mountains of Porto Rico, Hawaii, or the Philippines.
11010 to 11017—Continued.

11011. **ANANAS SATIVUS.**
*Pineapple.*
A smooth variety, not native here. Perhaps the Smooth Cayenne.

11012 to 11017. **CHAMAEDOREA spp.**
*Palm.*
A collection of small palms which will be identified later.

11018. **TRIFOLIUM PRATENSE.**
*Red clover.*
From Toledo, Ohio. Received thru S. W. Flower & Co., June 10, 1904.

11019. **TRIFOLIUM HYBRIDUM.**
*Alsike.*
From Toledo, Ohio. Received thru S. W. Flower & Co., June 10, 1904.

11020. **PRUNUS sp.**
*Plum.*
From Moody, Ala. Received thru Mr. D. S. Jones, June 9, 1904.

Yanner. "Bud sticks of a variety of wild plum which, according to Mr. Jones, ripens in Alabama about September 10. If house ripened the plums resemble in taste the Wild Goose, but are meaty. When taken from the tree they are bitter, but when mellowed they are excellent. This is a wild sort, probably of the family of the Wild Goose, and ripening so late that they are considered valuable for culinary purposes. Altho possibly known to other nurserymen, Mr. Jones does not find them cataloged by any nursery firm. The fruits are medium in size, deep red in color, and they are peculiarly free from disease, seldom being attacked by the curculio."

11021 to 11033.

From Buitenzorg, Java. Presented by Doctor Treub. Received June 15, 1904.

As follows:

11021. **CALOPHYLLUM HASSKARLI.**
11022. **CALOPHYLLUM KUNSTLERI LONGIFOLIUM.**
11023. **CALOPHYLLUM SPECTABILE.**
11024. **CALOPHYLLUM SPECTABILE CERAMICUM.**
11025. **CALOPHYLLUM SPECTABILE MIQUELLI.**
11026. **CALOPHYLLUM VENULOSUM.**
11027. **GARCINIA DIOICA.**
11028. **GARCINIA DULCIS PYRIFORMIS.**
11029. **GARCINIA DULCIS SYLVESTIS.**
11030. **GARCINIA FUSCA.**
11031. **GARCINIA LOUREIRI.**
11032. **GARCINIA XANTHOCHYMUS.**
11033. **MESUA FERREA.**

11034. **PRUNUS CERASUS.**
*Cherry.*
From Moscow, Russia. Received thru Mr. E. A. Bessey, June 15, 1904.

Vladimir. Two-year-old trees (seedlings) of this resistant variety of cherry from the trial gardens of Immer & Son, Moscow.

11035 to 11038. **NICOTIANA TABACUM.**
*Tobacco.*
From Sao Paulo, Brazil. Received thru Dr. Horace M. Lane, president of the Mackenzie College, June 9, 1904.
11035 to 11038—Continued.

Seed of four varieties of tobacco commonly grown in Brazil, as follows:

11035. *American fino*.
   Grown in the interior of Bahia. The original stock probably came from the United States.

11036. *Bahiano*.
   A native variety grown in Bahia, from which the celebrated Bahia leaf is made.

11037. *Santa Cruz*.
   A native tobacco grown in Rio Grande do Sul. This sort is highly esteemed.

11038. *Turco*.
   Grown around Sao Paulo for many years. The variety is of Asiatic origin.

11039 to 11119.

From Abyssinia, Africa. Received thru Hon. Robert P. Skinner, commissioner of the United States to Abyssinia, June 3, 1904.

"A collection of seeds made for Mr. Skinner, under his direction, by M. Eugène Carette Bouvet, of the Diré-Daoma, Voie de Djibouti, Côte Française des Somalis. This collection represents, in the main, crops cultivated by the Abyssinians." (Fairchild).

11039. *Triticum durum*.
11040. *Hordeum sp.*
11041. *Hordeum sp.*
11042. *Hordeum sp.*
11043. *Hordeum sp.*
11044. *Hordeum sp.*
11045. *Gossypium sp.*
11046. *Gossypium sp.*
11047. *Gossypium sp.*
11048. *Gossypium sp.*
11049. *Triticum sp.*
11050. *Triticum sp.*
11051. *Triticum sp.*
11052. *Triticum sp.*
11053. *Triticum sp.*
11054. *Triticum sp.*
11055. *Phaseolus vulgaris*.
11056. *Phaseolus vulgaris*.
11057. *Phaseolus vulgaris*.
11058. *Andropogon sorghum*.
11059. *Andropogon sorghum*.
11060. *Andropogon sorghum*.
11061. *Andropogon sorghum*.
11062. *Andropogon sorghum*.
11063. *Andropogon sorghum*.
11064. *Andropogon sorghum*.
11065. *Andropogon sorghum*.
11066. *Andropogon sorghum*.
11067. *Andropogon sorghum*.
11068. *Ricinus sp.*
11069. *Ricinus sp.*
11070. *Ricinus sp.*
11071. *Ricinus sp.*
11072. *Ricinus sp.*
11073. *Ricinus sp.*
11074. *Vigna sinensis*.
11075. *Vigna sinensis*.
11076. *Vigna sinensis*.
11077. *Coriandrum sativum*.
11078. *Coffea sp.*
11079. *Linum usitatissimum*.
11080. *Ervum lens*.
11081. *Brassica oleracea*.
11082. *Andropogon sorghum*.
11083. *Andropogon sorghum*.
11084. *Andropogon sorghum*.
11085. *Andropogon sorghum*.
11086. (Unidentified.)
11087. *Trigonella foenum-graecum*.
11088. *Trigonella foenum-graecum*.
11089. (Unidentified.)
11090. *Vigna sinensis*.
11091. *Vigna sinensis*.
11092. (Unidentified.)
11093. *Guizotia oleifera*. 
DECEMBER, 1903, TO DECEMBER, 1905.

11039 to 11119—Continued.

11094. TRITICUM DICOCCUM.  11107. Guizotia oleifera.
11098. Phaseolus radiatus.  11111. Pisum sp.
11099. TRITICUM DURUM.  11112. Pisum sp.
11100. Eleusine coracana.  11113. Linum usitatissimum.
11101. Coriandrum sativum.  11114. Centaurea sp.
11104. (Unidentified.)  11117. Eragrostis abyssinica.
11106. ZEA MAYS.  11119. Andropogon sorghum.

11120 to 11127.

From Santa Barbara, Cal. Received thru Dr. F. Franceschi, June 20, 1904.

A collection of plants for experimental work carried on in cooperation with Prof. Haven Metcalf, of the South Carolina Agricultural Experiment Station, Clemson, S. C.


11128. Phoenix dactylifera.  Date.

From Fayum, Egypt. Received thru Mr. H. A. Rankin, of the Egyptian Market Company (Limited), June 21, 1904.

Wahi.

11129 to 11236.

Miscellaneous seed on hand July 1, 1904. Numbered to facilitate the keeping of record of distribution.

From Northrup, King & Co., Minneapolis, Minn.


11132 to 11136. Andropogon sorghum.

11134. Folger.

White.

11138. Andropogon sorghum.  Milo.
White.

11139. Anthoxanthum odoratum.  Sweet vernal grass.
11129 to 11236—Continued.


Spanish. Received March 25, 1904.

11141. Arrhenatherum elatius. Tall meadow oat-grass.


Received from the California Experiment Station.

11143. Arrhenatherum elatius. Tall meadow oat-grass.

11144 to 11151. Avena sativa. Oat.

11144. Banner.

11145. Burt.

11146. California White.

11147. Dakota Gray.

11148. Green Mountain.

11149. Hopetown.

11150. Improved American.

11151. Swiss White.

11152 to 11163. Beta vulgaris. Sugar beet.

11152. Kleinwanzleben.

From Utah Sugar Refining Company, Lehi, Utah. (Seed Lab. No. 12846.)

11153. Kleinwanzleben.

From H. C. & J. B. Agnew, Agnew, Cal. (Seed Lab. No. 12848.)

11154.

From E. H. Morrison, Fairfield, Wash. (Seed Lab. No. 13007.)

11155. Kleinwanzleben Nachzucht.

From H. Bennecke & Son, Germany.

11156.

From the Alma Sugar Company, Alma, Mich.

11157.

From France.

11158. Kleinwanzleben.

11159. Mangel-wurzel.

11160. Kleinwanzleben. (Michigan grown.)

From Pennsylvania Sugar Refinery.

11161. Hoerning’s Improved Kleinwanzleben Special Elite.

11162.

From Utah Sugar Company, Lehi, Utah. Crop of 1901. (Seed Lab. No. 12756.)

11163.

From H. C. & J. B. Agnew, Agnew, Cal. (Seed Lab. No. 12790.)


Tennessee Evergreen.


Dwarf Essex.


From J. M. Thorburn & Co., 36 Cortlandt street, New York, N. Y.

11168. Chaetochloa italicca. German millet.


<table>
<thead>
<tr>
<th>No.</th>
<th>Plant Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>11171</td>
<td>Dactylis glomerata</td>
<td>Orchard grass</td>
</tr>
<tr>
<td>11172</td>
<td>Euchlaena mexicana</td>
<td>Teosinte</td>
</tr>
<tr>
<td>11173</td>
<td>Fagopyrum esculentum</td>
<td>Buckwheat</td>
</tr>
<tr>
<td>11174</td>
<td>Festuca elatior</td>
<td>Tall fescue</td>
</tr>
<tr>
<td>11175</td>
<td>Festuca heterophylla</td>
<td>Various-leafed fescue</td>
</tr>
<tr>
<td>11176</td>
<td>Festuca ovina</td>
<td>Sheep's fescue</td>
</tr>
<tr>
<td>11177</td>
<td>Festuca pratensis</td>
<td>Meadow fescue</td>
</tr>
<tr>
<td>11178</td>
<td>Festuca rubra</td>
<td>Red fescue</td>
</tr>
<tr>
<td>11179</td>
<td>Glycine hispida</td>
<td>Soy bean</td>
</tr>
</tbody>
</table>

**Early Black:**

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<th>Description</th>
</tr>
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<tbody>
<tr>
<td>11181</td>
<td>Glycine hispida</td>
<td>Soy bean</td>
</tr>
</tbody>
</table>

**Yellow:**

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<th>Plant Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>11181</td>
<td>Gossypium barbadense</td>
<td>Egyptian cotton</td>
</tr>
<tr>
<td>11182</td>
<td>Mit Aji</td>
<td>(Plant Breeding No. 56.)</td>
</tr>
<tr>
<td>11183</td>
<td>Jannoritch</td>
<td>(Plant Breeding No. 63.)</td>
</tr>
<tr>
<td>11184</td>
<td>Ashmuni</td>
<td>(Plant Breeding No. 59.)</td>
</tr>
<tr>
<td>11185</td>
<td>Mit Aji</td>
<td>(Plant Breeding No. 55.)</td>
</tr>
<tr>
<td>11186</td>
<td>Ashmuni</td>
<td>(Plant Breeding No. 61.)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No.</th>
<th>Plant Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>11187</td>
<td>Gossypium sp.</td>
<td>Cotton</td>
</tr>
<tr>
<td>11188</td>
<td>King</td>
<td>Upland</td>
</tr>
</tbody>
</table>

**11190**

<table>
<thead>
<tr>
<th>No.</th>
<th>Plant Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>11191</td>
<td>Helianthus annuus</td>
<td>Sunflower</td>
</tr>
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</table>

Received from the Division of Chemistry in 1901.

**11192**

<table>
<thead>
<tr>
<th>No.</th>
<th>Plant Name</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>11192</td>
<td>Hordeum vulgare</td>
<td>Barley</td>
</tr>
<tr>
<td>11193</td>
<td>Hordeum vulgare</td>
<td>Barley</td>
</tr>
</tbody>
</table>

**Manchurian.** From the Minnesota Agricultural Experiment Station. (Minn. No. 105.)

<table>
<thead>
<tr>
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<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>11194</td>
<td>Lathyrus stipularis</td>
<td>Bitter vetch</td>
</tr>
<tr>
<td>11195</td>
<td>Lathyrus azureus</td>
<td>Bitter vetch</td>
</tr>
<tr>
<td>11196</td>
<td>Lathyrus coccineus</td>
<td>Bitter vetch</td>
</tr>
</tbody>
</table>

Received from C. C. Morse & Co., Santa Clara, Cal.

<table>
<thead>
<tr>
<th>No.</th>
<th>Plant Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>11197</td>
<td>Lathyrus sativus</td>
<td>Bitter vetch</td>
</tr>
<tr>
<td>11198</td>
<td>Lathyrus sativus</td>
<td>Bitter vetch</td>
</tr>
<tr>
<td>11199</td>
<td>Lathyrus sativus</td>
<td>Bitter vetch</td>
</tr>
</tbody>
</table>

From Agricultural Experiment Station, Berkeley, Cal.

<table>
<thead>
<tr>
<th>No.</th>
<th>Plant Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>11200</td>
<td>Lathyrus tingitanus</td>
<td>Tangier scarlet pea</td>
</tr>
</tbody>
</table>

From C. C. Morse & Co., Santa Clara, Cal.

<table>
<thead>
<tr>
<th>No.</th>
<th>Plant Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>11201</td>
<td>Lespedeza striata</td>
<td>Japan clover</td>
</tr>
<tr>
<td>11202</td>
<td>Lolium italicum</td>
<td>Italian rye-grass</td>
</tr>
<tr>
<td>11203</td>
<td>Lolium perenne</td>
<td>Perennial rye-grass</td>
</tr>
<tr>
<td>11204</td>
<td>Lotus corniculatus</td>
<td>Bird's-foot trefoil</td>
</tr>
</tbody>
</table>

7217—No. 97—07—4
SEEDS AND PLANTS IMPORTED.

11205. Lupinus Affinis. Blue lupine.
11206. Lupinus Angustifolius. Blue lupine.
11207. Lupinus Luteus. Yellow lupine.

Turkestan. From Henry Nungesser & Co., New York, N. Y.

11212. Melilotus Alba. Sweet, or Bokhara, clover.
11214. Pennisetum Typhoideum. Pearl millet.

Winter.

11220. Chaetochloa Italic. Hungarian grass.
From C. C. Morse & Co., Santa Clara, Cal.

11222. Trifolium Hybrideum. Alsike.
11223. Trifolium Incarnatum. Crimson clover.
11225. Trifolium Repens. White clover.

11226 to 11229. Triticum Vulgare. Wheat.

From the Agricultural Experiment Station, Manhattan, Kans.

Inoculated April 16, 1904.


Warren. From Professor Newman, Agricultural Experiment Station, Fayetteville, Ark.

11237 to 11251. Beta Vulgaris. Sugar beet.
Seed from 1903 crop remaining on hand July 1, 1904, after the distribution made by Mr. J. E. W. Tracy. Previous distribution recorded under these numbers.

11237. Kleinwanzleben. From Klein Wanzleben Sugar Company, Klein Wanzleben, Germany. (Tracy's No. 12853.)
11238. Schreiber's Specialität. From G. Schreiber & Sons, Nordhausen, Germany. (Tracy's No. 12854.)
11237 to 11251—Continued.

11239. From Lehi Sugar Company, Lehi, Utah. (Tracy’s No. 12856.)

11240. **Elite Kleinwanzleben.**
From the Empire Sugar Company, Lyons, N. Y. Originally from Dippe Brothers, Quedlinburg, Germany. (Tracy’s No. 12857.)

11241. **Kleinwanzleben.**
From the Empire Sugar Company, Lyons, N. Y. Originally from F. Heine, Hadmersleben, Germany. (Tracy’s No. 12858.)

11242. **Kleinwanzleben.**
From the Empire Sugar Company, Lyons, N. Y. Originally from Kuhn & Co., Naarden, Holland. (Tracy’s No. 12859.)

11243. **Kleinwanzleben.**
From the American Beet Sugar Company, Grand Island, Nebr. (Tracy’s No. 12860.)

11244. **Kleinwanzleben.**
From the Sanilac Sugar Refining Company, Croswell, Mich. Originally from Orro Hoerning, Eisleben, Germany. (Tracy’s No. 12862.)

11245. **Kleinwanzleben.**
From the Sanilac Sugar Refining Company, Croswell, Mich. Originally from Henry Mette, Quedlinburg, Germany. (Tracy’s No. 12863.)

11246. **Joussch Victor.**
From the Sanilac Sugar Refining Company, Croswell, Mich. Originally from Gustav Jaensch, Aschersleben, Germany. (Tracy’s No. 12864.)

11247. **Krauter’s Mangold.**
From the Sanilac Sugar Refining Company, Croswell, Mich. Originally from M. Krauter, Grobers, Germany. (Tracy’s No. 12765.)

11248. **Adelstadt.**
From the Sanilac Sugar Refining Company, Croswell, Mich. Originally from M. Krauter, Grobers, Germany. (Tracy’s No. 12866.)

11249. **Kleinwanzleben.**
From the Menominee River Sugar Refining Company, Menominee, Mich. Originally from the Klein Wanzleben Sugar Factory, Klein Wanzleben, Germany. (Tracy’s No. 12867.)

11250. **Elite Kleinwanzleben.**
From the Menominee River Sugar Refining Company, Menominee, Mich. Originally from Otto Bruenstadt, Schladenam-Hartz, Germany. (Tracy’s No. 12868.)

11251. **Elite Kleinwanzleben.**
From Menominee River Sugar Refining Company, Menominee, Mich. Originally from C. Braune, Biendorf, Germany. (Tracy’s No. 12869.)

11252 to 11258.

Plants and seeds presented to or secured by Mr. P. H. Dorsett for planting at the Plant Introduction Garden, Chico, Cal.

11252. **Juglans californica × Quercus (?).**
Presented by Mr. S. M. Desher, Garden Grove, Cal.

“This is one of a number of trees from a planting made for grafting stock about two years ago.” (Dorsett.)

11253. **Juglans nigra.**
*Nuts from Mr. Ewing D. Johnson’s farm, near Rockbridge, southeast of Columbia, Mo.*

11254. **Hicoria sp.**
*Nuts from Mr. Ewing D. Johnson’s farm, near Rockbridge, southeast of Columbia, Mo. Secured in February, 1904.*

11255. **Amygdalus hyb.**
*Seeds from G. W. H. fruit ranch. Received October 22, 1903.*

Black walnut.

Hickory.

Peach almond.
Large hickory nuts from Wolfskill Ranch, Yolo County, Cal. Received October 10, 1903.

Nuts from Wolfskill Ranch, Yolo County, Cal. Received October 25, 1903.

Seed from an avenue of trees near Pasadena, Cal. Presented by Mr. C. R. Lukins, Pasadena, Cal.

11259 to 11262.

From Hacienda "La Trinidad," Aruelia, Guerrero, Mexico. Presented by Mr. Federico Chisolm. Received June 24, 1904.
A collection of unidentified Mexican bulbs.

From Valetta, Malta. Presented by Dr. Giovanni Borg. Received June 26, 1904.
Maltese. "Seed of the old Maltese cotton, which, according to Doctor Borg, has been cultivated in Malta since the times of the Phoenicians, three thousand years ago. This is an early-ripening sort, maturing its bolls in August or September. It is a very hardy sort, of low habit, and of flowers and sets with bolls when quite young. Doctor Borg says it should be sown rather thick and that it is a very productive sort. The fiber is rather short, although very strong and elastic. Introduced as of possible use in the experiments against the boll weevil because of its early-ripening habit." (Fairchild.)

11264 to 11268.

From Geneva, Idaho. Received thru Mr. F. W. Boehme, June 23, 1904.
A collection of grains adapted to high altitudes, as follows:

Beardless.

Beardless and hull-less.

Spring wheat.

11267. Linum usitatissimum. Flax.

Spring rye.

From Upper Egypt. Received thru Mr. T. H. Kearney, June 15, 1904.
"Botanically this is one of the most interesting palms in the world, as, unlike almost all others, it has a branching stem. It is suited to a frostless and exceptionally dry region and may succeed in the warmest and driest portions of this country. The fruits, which are produced in large clusters, are used for food by the poorer classes, the part eaten being the fibrous, mealy husk, which tastes something like gingerbread, and for this reason is called the "gingerbread tree" of Egypt. A drink called "coca" is also made from this fibrous husk and the large, yellowish brown, beautifully polished fruits of this palm." (Kearney.)

11270 to 11274.

From Jalapa, Mexico. Presented by Mr. Frank X. Meyer to Mr. G. W. Oliver. Received June 23, 1904.
Seeds of five wild Mexican plants, mostly unidentified.
11275. **Medicago sativa.**  \(\text{Alfalfa.}\)
From Chicago, Ill. Received thru the Albert Dickinson Company, June 28, 1904.
(Ordered by sample “Cabin.”)

11276. **Trifolium repens.**  \(\text{White clover.}\)
From Chicago, Ill. Received thru the Albert Dickinson Company, June 28, 1904.
(Ordered by sample “Boil.”)

11277 to 11341. **Phoenix dactylifera.**  \(\text{Date.}\)
From Orleansville, Algeria. Received thru Yahia ben Kassem, July 5, 1904.
Sixty-five date palms, all from the Mzab oasis.

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
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</tr>
</thead>
<tbody>
<tr>
<td>11277</td>
<td>Deglet Noor.</td>
<td>11306</td>
<td>Kseba.</td>
</tr>
<tr>
<td>11278</td>
<td>Deglet Noor.</td>
<td>11307</td>
<td>Kseba.</td>
</tr>
<tr>
<td>11279</td>
<td>Deglet Noor.</td>
<td>11308</td>
<td>Kerhoosh.</td>
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<tr>
<td>11280</td>
<td>Rhars.</td>
<td>11309</td>
<td>Kerhoosh.</td>
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<td>Rhars.</td>
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<tr>
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<td>11315</td>
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<td>Tadala (?).</td>
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</tr>
<tr>
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<td>Kseba.</td>
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<td>Kseba.</td>
<td>11336</td>
<td>Tazze'Coot.</td>
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<tr>
<td>11308</td>
<td>Kerhoosh.</td>
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<td>Tazze'Coot.</td>
</tr>
<tr>
<td>11309</td>
<td>Kerhoosh.</td>
<td>11338</td>
<td>Sebaa Loosif.</td>
</tr>
<tr>
<td>11340</td>
<td>(No label.)</td>
<td>11339</td>
<td>Sebaa Loosif.</td>
</tr>
</tbody>
</table>

11342. **Nephelium litchi.**  \(\text{Litchi.}\)
From Trinidad, British West Indies. Received July 2, 1904.
11343. **Gossypium barbadense.** Cotton

From Valetta, Malta. Presented by Dr. Giovanni Borg. Received July 5, 1904.

"An Egyptian variety which Doctor Borg has been trying to improve on the island of Malta. Introduced for the experiments in connection with the boll weevil." (Fairchild.)

11344. **Vigna sinensis.** Cowpea.

From West Branch, Mich. Received thru Edw. E. Evans Seed Company, July 8, 1904.

*Michigan Favorite.* Said by Mr. Evans to be the earliest sort known; ripens seed every year in Michigan.

11345 to 11353.

From Guerrero, Mexico. Received thru Mr. Federico Chisolm, July 9, 1904.

Native Mexican bulbs, not identified.

11354. **Coffea sp.** Coffee.

From Abyssinia, Africa. Presented by Hon. Robert P. Skinner, American consul-general at Marseille, France. Received July 11, 1904.

* Harrar.* Probably a wild variety from Abyssinia.

11355 to 11368. **Beta vulgaris.** Sugar beet.

Seed from 1903 crop remaining on hand July 1, 1904, after the distribution made by Mr. J. E. W. Tracy. Previous distribution recorded under these numbers.

11355. *Schreiber's Specialität.*

From the Menominee Sugar Refining Company, Menominee, Mich. Originally from G. Schreiber & Sons, Nordhausen, Germany. (Tracy's No. 12870.)

11356. **Kleinwanzleben.**

From H. C. & J. B. Agnew, Agnew, Cal. (Tracy's No. 12871.)

11357. **Kleinwanzleben.**

From Metz & Co., Strehlitz, near Berlin, Germany.

11358. From M. Knauer, Grobers, Germany. Marked 7300.

11359. From M. Knauer, Grobers, Germany. Marked 7301.

11360. **Kleinwanzleben.**

From Carl Schobert & Co.

11361. *Elite Kleinwanzleben.*

From G. Schreiber & Sons, Nordhausen, Germany.

11362. **Kleinwanzleben.**

From E. H. Morrison, Fairfield, Wash. Purchased in 1902 for the Congressional seed distribution.

11363. **Kleinwanzleben.**

From E. H. Morrison, Fairfield, Wash. (Tracy's No. 12855.)

11364. **Kleinwanzleben.**

From C. C. Morse & Co., Santa Clara, Cal. (Tracy's No. 12861.)

11365. (Tracy's No. 12844.) 11366. (Tracy's No. 12847.) 11367. (Tracy's No. 12849.) 11368. (Tracy's No. 12850.)
11369. **Mangifera indica.** *Mango.*

From the Government Botanic Gardens, Seharumpur, India. Presented by Mr. Robert Anderson, Lansdowne, Pa., for propagation. Received February 25, 1904.

Buds of the *Langra* mango.

11370 and 11371.

Seed on hand July 1, 1904, numbered for convenience of recording distribution.

11370. **Vigna sinensis.** *Cowpea.*

Iron. From Mr. T. S. Williams, Monetta, S. C.

11371. **Andropogon sorghum.** *Sorghum.*

Early Amber. From Mr. Seth Kenney, Morristown, Minn.

11372 to 11477. **Vitis sp.** *Grape.*

From Thomery, France. Received thru E. Salmon & Sons, and shipped direct to Niles, Cal.

11372. *Rupestris Martin.*


11374. *Pinot X Rupestris 1305.*

11375. *Rupestris de Semis 81-2.*

11376. *Mourvedre X Rupestris 1202.*

11377. *Riparia France.*


11379. *Monticola X Riparia 18804.*

11380. *Monticola X Riparia 18815.*

11381. *Chasselas X Berlandieri 41 B.*

11382. *Cabernet X Rupestris Ganzin 33 A.*

11383. *Bourisquon X Rupestris 4306.*

11384. *Monticola X Riparia 18808.*

11385. *Rupestris X Berlandieri 301 A.*


11388. *Riparia X Rupestris 3306.*

11389. *Viada.*

11390. *Bourisquon X Rupestris 3907.*

11391. *Berlandieri X Riparia 420 A.*

11392. *Rupestris X Berlandieri 219 A.*

11393. *Bourisquon X Rupestris 109-4.*

11394. *Bourisquon X Rupestris 4308.*

11395. *Viada X Riparia.*

11396. *Berlandieri X Riparia 420 B.*

11397. *Rupestris X Riparia 1615.*


11400. *Berlandieri X Riparia 33 E. M.*

The following vines were received at Niles, April 11, 1904:

11409. **Cordifolia × Riparia** 127-1 (').

11410. **Rupestris × Cinerea.**

11411. **Rupestris × Cordifolia** 107-11.

11412. **Rupestris × Hybrid Azemar** 215.

11413. **York × Rupestris Gauzin 204.**

11414. **York × Rupestris Gauzin 212.**

The following cuttings were received at Niles, March 22, 1904:

11415. **Pinot × Rupestris** 1301.

11416. **Rupestris Othello.**

11417. **Riparia × Rupestris-Aramon-Jaeger 201.**

11418. **Riparia × Berlandieri 161-39.**

11419. **Monticola × Riparia 18804.**

11420. **Chasselas × Rupestris** 301.

11421. **Oberhaut × Riparia** 2502.

11422. **Riparia Grand Glahre × Aramon-Rupestris 4110.**

11423. **Rupestris × Riparia** 1615.

11424. **Pinot Bouchet × Riparia 5001.**

11425. **Rupestris × Petit Bouchet-Jaeger 504.**

11426. **Berlandieri × Riparia 34 E. M.**

11427. **Monverdere × Rupestris 1202.**

11428. **Berlandieri × Riparia 34 E. M.**

11429. **Berlandieri × Riparia 420 A.**

11430. **Bonrisseau × Rupestris 604.**

11431. **Berlandieri × Riparia 420 B.**

11432. **Riparia × Cordifolia-Rupestris 106-8.**

11433. **Tisseraud.**

11434. **Riparia France.**

11435. **Monticola × Riparia 18815.**

11436. **Cabernet × Rupestris Gauzin 33 A.**

11437. **Riparia × Rupestris 3306.**

11438. **Riparia Martinac.**

11439. **Riparia × Rupestris Ramon.**

11440. **Rupestris Martin.**

11441. **Aramon × Riparia 143 A.**

11442. **Riparia × Rupestris 101-14.**

11443. **Rupestris × Berlandieri 301 A.**
11372 to 11477—Continued.

11444. Carignane × Rupestris 504.
11445. Rupestris × Riparia 108-16.
11446. Rupestris de Semis 81-2.
11447. Aestivalis-Calicola × Riparia-Rupestris 554-3.
11448. Monticola × Riparia 18808.
11450. Berlandieri No. 2.
11452. Berlandieri Lafond No. 9.
11454. Carignane × Rupestris 501.
11455. Rupestris × Berlandieri 301-37-152.
11456. Riparia × Rupestris 5009.
11457. Riparia × Rupestris de Jaeger.
11458. Viola × Riparia.
11459. Rupestris Mission.
11460. (Unidentified.)

The following cuttings were received at Niles, April 11, 1904:

11462. Bourisquou × Rupestris 603.
11463. Carignane × Rupestris 504.
11464. Rupestris × Cordifolia 107-11.
11465. Rupestris × Hybrid Asemav 215.
11466. Alicante Bourselet × Cordifolia 142 B.
11467. Aestiralis-Rupestris × Riparia 227.
11468. Cordifolia × Rupestris.
11469. Rupestris × Berlandieri 301 B.
11470. Bourisquou × Rupestris 4306.
11471. Bourisquou × Rupestris 4308.
11472. Carignane × Rupestris 501.
11473. Calicola × Aestiralis 13-205.
11474. York × Rupestris Gauzin.
11475. (Unidentified.)
11476. Strenua-Rupestris × Riparia 229.
11477. (Unidentified.)

11478. Garcinia morelIa.  
Gamboge.  
From Castleton Gardens, Jamaica. Received July 18, 1904.

11479. Lespedeza striata.  
Japan clover.  
From Augusta, Ga. Received thru the N. L. Willet Drug Company, July 19, 1904.

11480. Euchlaena mexicana.  
Teosinte.  
From Richmond, Va. Received thru T. W. Wood & Sons, July 20, 1904.
11481. Lolium perenne.  
English rye-grass.
From New York, N. Y. Received thru Henry Nungesser & Co., July 20, 1904.

11482. Festuca pratensis.  
Meadow fescue.
From New York, N. Y. Received thru Henry Nungesser & Co., July 20, 1904.

11483 and 11484.
From Ghent, Belgium. Received thru Mr. Louis Van Houtte, père, July 22, 1904.

11485 to 11489. Phoenix dactylifera.  
Date.
From Fayum, Egypt. Received thru Mr. H. A. Rankin, July 26, 1904.
11486. Sugar.  11489. Sugar (male)
11487. Sultana.

"These date offshoots were wrapt in palm fiber (\textit{lilf}) and held in place by cords. They were rather dry, but in general in fairly good condition. Most of the offshoots were small, some not weighing over 10 pounds and only some half dozen weighing over 50 pounds. However, considering the inaccessibility of the region, we ought to be glad to get almost any kind of an offshoot that will grow. I noticed that the variety \textit{Stally} has a large number of small offshoots attached to the sides of those sent, altho, as I stated above, the offshoots are only of medium size, averaging probably 30 to 40 pounds in weight. The collection of \textit{Fraakhe} consisted of one very large offshoot and three very small ones. The very large offshoot showed a remarkable peculiarity in that the palm fiber, or \textit{lilf}, was still intact, forming a cardboard-like tissue, especially on the right-hand border. If this peculiarity of the internodular sheets of fiber appears constant, this variety will have a very clear distinguishing mark."
(Swingle.)

11490. Vitis rhicmbifolia.  
Grape.
Received from the United States Botanical Gardens, Washington, D. C., in 1901. Plants originally came from the Botanic Garden in Glasgow.

11491. Vitis congylodes.  
Grape.
From St. Louis, Mo. Presented by Dr. William Trelease, superintendent of the Missouri Botanic Garden, to Dr. B. T. Galloway, in 1902.

11492. Vitis sp.  
Grape.
From Mexico. Received thru Dr. J. N. Rose, of the United States National Museum, in 1902. (Rose No. 286.)

11493. Vitis sp.  
Grape.
From Mexico. Received thru Dr. J. N. Rose, of the United States National Museum, in 1902. (Rose No. 749.)

11494. Phleum pratense.  
Timothy.
From Toledo, Ohio. Received thru W. D. Morehouse & Co., July 26, 1904.

11495. Panicum miliaceum.  
Broom-corn millet.
From Cincinnati, Ohio. Received thru J. M. McCullough's Sons, July 27, 1904.
11496. CHAKTOCHLOA ITALICA. German millet.

From Chicago, Ill. Received thru the Albert Dickinson Company, July 27, 1904.

“A Pellet” sample.

11497. NICOTIANA TABACUM. Tobacco.

From Cavala, Turkey. Presented by Mr. N. J. Pantelides, of Chios Island, Turkey. Received July 5, 1904.

“Seed of the famous Cavala tobacco, which forms one of the most important elements used in the blending of the cigarette filler of the famous Egyptian cigarettes. According to Mr. Pantelides’s letter of June 18, 1904, this seed was sent him by the governor of Cavala and is no doubt authentic and of first quality. Mr. Pantelides further remarks that the cultivation and harvesting of the Cavala tobacco require great experience. From the same plant one can pick leaves of a value of only 0.50 of a franc per kilogram and of a value of 15 to 20 francs a kilogram. The lance-shaped leaves found at the summit of the plant have a very fine aroma, and it is for this fine aroma that such high prices are paid. If during the process of picking the terminal bud is injured, the fine aroma of the leaves is lost and the leaves lose their value. The processes of drying and fermentation are those which give to the leaves their fine color and excellent flavor. The Ottoman Regie pays from one to two thousand francs monthly salary to good clarifiers (clarificateurs) and 250 to 300 francs a month to good cultivators. In his country Mr. Pantelides says the seed is sown in January, transplanted during February to a place protected from the cold, and in March transplanted again to permanent locations. Each plant is set out a meter each way from its neighbors. The best soil for the culture of this tobacco is said to be a red one mixt with stones of iron pyrites, and the best locations are those on the eastern slopes of hills.” (Fairchild.)

11498. NICOTIANA TABACUM. Tobacco.

From Sao Paulo, Brazil. Received thru Dr. Horace M. Lane, president of the Mackenzie College, July 25, 1904.

Bahiano tobacco seed, the variety from which the celebrated Bahia leaf is made.

11499. PRUNUS VIRGINIANA. Chokecherry.

“From Arden, near Dakota-Montana line. Presented by Prof. J. W. Blankinship, of the Montana Agricultural Experiment Station, Bozeman, Mont. Received August 1, 1904.

“Seeds of a free-flowering shrubby species of chokecherry which is perfectly hardy when the thermometer drops to — 30° F. in winter. From the description given by Professor Blankinship this must be a very showy plant in spring. The black fruits are used for jam or ‘cherry butter’ making.” (Fairchild.)

“A beautiful flowering tree, about 25 feet high.” (Blankinship.)

11500. PRUNUS VIRGINIANA. Chokecherry.

From Bozeman, Mont. Presented by Prof. J. W. Blankinship. Received August 1, 1904.

“Seeds of a large, red-fruited variety, whose fruits are considered better than the black. Large quantities of cherry butter are made in Montana, and this variety has possibilities for the breeder.” (Fairchild.)

11501. GARCINIA INDICA. Cotton.

From Trinidad, West Indies. Received thru Mr. J. H. Hart, superintendent of the Botanic Gardens, July 29, 1904.

11502. GOSSEPIUM SP. Cotton.

From San Luis Soyaatlan, Jalisco, Mexico. Received thru Senor Hilario Cuevas, July 21, 1904.

Cotton harvested in June from trees planted in September preceding at an altitude of 1,630 meters above the level of the sea. Sent at the request of Mr. L. H. Dewey.
11503. **Mucuna utilis.**  
*Velvet bean.*  
From Clareona, Fla.  Received thru Mr. H. Meislahn, August 3, 1904.

11504. **Coffee sp.**  
*Coffee.*  
From Abyssinia.  Received thru Hon. Robert P. Skinner, United States consul-general at Marseille, France, July 22, 1904.  
Wild *Harvar* coffee.

11505 to 11531.  
From London, England.  Received thru James Veitch & Sons (Limited), April, 1904.  
A collection of plants, as follows:

- 11505. **Rubus australis.**  
- 11506. **Rubus hispidus.**  
- 11507. **Rubus odoratus.**  
- 11508. **Rubus rosaeformis.**  
- 11509. **Rubus phoenicianus.**  
- 11510. **Rubus nigrobaccus.**  
  *Snyder.*
- 11511. **Rubus spectabilis.**  
- 11512. **Rubus deliciosus.**  
- 11513. **Rubus leucodermis.**  
- 11514. **Rubus occidentalis.**  
  *Newman’s Thoroless.*  
- 11515. **Rubus nigrobaccus.**  
- 11516. **Rubus hyb.**  
  *The Mahali.*
  
- 11517 and 11518. **Rosa spp.**  
  - 11517. *Alice Graham.*  
  - 11518. *Bessie Brown.*  
- 11519. **Rosa humilis.**  
- 11520 to 11531. **Rosa spp.**  
  - 11520. *Edith O’Connor.*  
  - 11521. *Florence Pemberton.*  
  - 11522. *Lady Marya Beauclere.*  
  - 11523. *Madame Antoine Mari.*  
  - 11525. *Marie Larilley.*  
- 11532. **Arachis hypogaea.**  
*Peanut.*  
From Sao Paulo, Brazil.  Received thru Dr. Horace M. Lane, president of the Mackenzie College, July 16, 1904.  
Pods of a peanut, said to be native, but which Doctor Lane thinks may be of African origin.  The pods are of fair size and nearly all contain two seeds.

11533. **Polianthes longiflora.**  
*Tuberose.*  
From Mexico.  Received thru Dr. J. N. Rose, of the United States National Museum, August 5, 1904.
11534. **Achras sapota.**

Sapodilla.

Plants propagated from large tree in Department conservatory; numbered for convenience in recording future distribution, August 1, 1904.

11535. **Richardia africana.**

Calla.

From Chicago, Ill. Received thru Vaughan's seed store, August 10, 1904.

Trade name, *Calla Aethiopica demaniensis.*

11536 to 11538. **Rosa sp.**

Rose.

From London, England. Received thru Barr & Sons, June, 1903.

11536. *Austrian Copper Brier.*

11537. *Harisoni Brier.*

11538. *Persian Yellow Brier.*

11539 to 11564.

From Feltham, Middlesex, England. Received thru Mr. Thomas S. Ware, Hale Farm Nurseries, August, 1903.

Plants, as follows:

11539 to 11563. **Clematis spp.**

11539. *Madame Edouard Andre.*

11540. *Grace Darling.*

11541. *Alexandra.*

11542. *Anderson Henry.*

11543. *Asconiensis.*

11544. *Beauty of Worcester.*

11545. *Duchess of Edinburgh.*


11547. *Earl of Beaconsfield.*

11548. *Enchantress.*

11549. *Nellie Moser.*

11550. *Fairy Queen.*

11551. *Fair Rosamund.*

11552. *Clematis fortunei.*

11564. **Ampelopsis veitchii purpurea.**

11565 to 11589. **Lilium spp.**

Lily.

From Yokohama, Japan. Received thru Suzuki & Iida, New York agents for the Yokohama Nursery Company, December, 1903.

Bulbs as follows:

11565. **Lilium batmanianae.**

11566. **Lilium concolor.**

11567. **Lilium concolor ohiine.**

11568. **Lilium concolor.**

11569. **Lilium concolor okihime.**

11570. **Lilium cordifolium.**

11571. **Lilium elegans.**

11572. **Lilium elegans.**

11573. **Lilium elegans atrosanguineum.**

11574. **Lilium elegans semipleno.**
11565 to 11589—Continued.

11575. *Lilium elegans incomparable.*

11576. *Lilium dahuricum.*

11577. *Lilium hansonii.*

11578. *Lilium japonicum.*

11579. *Lilium rubellum.*

11580. *Lilium brownii.*

11581. *Lilium leichtlinii.*

11582. *Lilium longiflorum.*

11583. *Lilium longiflorum eximium giganteum.*

11584. *Lilium medeoloides.*

11585. *Lilium speciosum rubrum.*

11586. *Lilium speciosum album.*

11587. *Lilium speciosum kretzera.*

11588. *Lilium speciosum melpomene.*

11589. *Lilium ukeyuri.*

11590 and 11591. *Lilium longiflorum eximium giganteum.* Lily.

Grown from S. P. I. No. 11583 in the Department greenhouse.

11590. Bulbs.

11591. Seeds.

11592 to 11602.

From Guadalajara, Mexico. Received thru Mr. Federico Chisolm, July 11, 1904.

Small lots of seeds of Guerrero plants, as follows:

11592. *Enterolobium cyclocarpum.* "Parota."

"One of the most admirable shade trees I have ever seen, a rapid grower, and valuable for the easily worked but durable lumber it yields, as well as for the seeds, which are largely eaten by the natives at this season and are greedily eaten by hogs. The measurements of a specimen shading the assay office at 'La Trinidad' were about as follows: Trunk, from ground to branches, 12 feet; diameter, 4 feet; from ground to top of tree, 59 feet; extreme spread of branches from tip to tip, measured thru trunk, 122 feet; the general outline similar to that of an umbrella. To me it seems a tree well worth introducing."

(Chisolm.)

11593 to 11602.

A collection of unidentified plants, mostly bulbs.

11603 to 11623.

From Fort Hays, Kans. Received thru Mr. J. G. Haney, superintendent of the Branch Agricultural Experiment Station, August 1, 1904.


11610. Turkey. Grown from C. I. No. 1558.


DECEMBER, 1903, TO DECEMBER, 1905.

11603 to 11623—Continued.

11618 and 11619. Triticum durum. Macaroni wheat.


11620 and 11623. Hordeum sps.


From Philadelphia, Pa. Received thru Thomas Meehan & Sons, 1903.

Plants purchased to test as stocks for the mango. The scions failed to unite.


From Tahiti. Received thru Captain Rennie, of the steamship Mariposa, August 11, 1904.

11626 and 11627. (Undetermined.) From Guadalajara, Mexico. Received thru Mr. Federico Chisolm, August 13, 1904.


From Washington, D. C. Received thru Mr. P. H. Dorsett, February, 1904.

From pecans purchased in the open market. Has the appearance of a hybrid between H:icoria pecan and Hicoria aquatica. Planted in the Plant Introduction Garden at Chico, Cal., May 31, 1904.

11629. Actinidia sp. "Yang-taw."

From the borders of Yunnan. Received thru Consul-General Wilcox, of Hankow, China, and Mr. Wilson, at the Plant Introduction Garden, Chico, Cal., July 8, 1904.

Fruit said to be very fine, has flavor of gooseberry, fig, and citron. Sometimes called "Yang-tao."

11630. Actinidia sp. "Yang-taw."

From the borders of Yunnan. Received thru Consul-General Wilcox, of Hankow, China, and Mr. Wilson, at the Plant Introduction Garden, Chico, Cal., July 8, 1904.

Possibly distinct from No. 11629, tho as yet undetermined.

11631. Eriobotrya japonica. Loquat.

From Orange, Cal. Collected by Mr. M. Payan, of Olive, Cal., from the orchard of Mr. C. P. Taft, Orange, Cal. Received at the Plant Introduction Garden, Chico, Cal., July 18, 1904.

11632. Achras sapota (?). Sapodilla.

From Jalapa, Vera Cruz, Mexico. Received thru Mr. Frank N. Meyer at the Plant Introduction Garden at Chico, Cal., June, 1904.

"A nice tasting fruit, in size and shape not unlike the eastern persimmon. The pulp is brownish and of a sweet, pleasant taste." (Meyer.)
11633. **Prunus armeniaca.**

From Jalapa, Vera Cruz, Mexico. Received thru Mr. Frank N. Meyer at the Plant Introduction Garden at Chico, Cal., June, 1904.

"These apricots are small in size but have sometimes a nice flavor. They seem to be all seedlings and vary, it is said, a great deal." (Meyer.)

11634. **Cicer arietinum.**

From Jalapa, Vera Cruz, Mexico. Received thru Mr. Frank N. Meyer at the Plant Introduction Garden at Chico, Cal., June, 1904.

"A vegetable which is eaten like green peas. On some markets they are sold roasted in the shell, and they taste well. Grown on dry but rich lands." (Meyer.)

11635. **Fraxinus sp.**

From Mexico. Received thru Mr. Frank N. Meyer at the Plant Introduction Garden at Chico, Cal., June, 1904.

"A very handsome shade tree, which grows to quite a size. These seeds are from a very spreading variety which grew on dry, rocky places near Guadalajara." (Meyer.)

11636. **Prunus sp.**

From Jalapa, Vera Cruz, Mexico. Received thru Mr. Frank N. Meyer at the Plant Introduction Garden at Chico, Cal., June, 1904.

"This is a cherry inferior in size and flavor to the ordinary cherry. The tree is evergreen and can be used as an ornamental shade tree." (Meyer.)

11637. **Lupinus sp.**

From Jalapa, Vera Cruz, Mexico. Received thru Mr. Frank N. Meyer at the Plant Introduction Garden at Chico, Cal., June, 1904.

"A rather ornamental small lupine, with blue spikes, which vary in color from whitish to indigo blue." (Meyer.)

11638. **Ricinus sp.**

From Jalapa, Vera Cruz, Mexico. Received thru Mr. Frank N. Meyer at the Plant Introduction Garden at Chico, Cal., June, 1904.

"A castor-oil bean with very showy red spikes. May prove to be an ornamental plant." (Meyer.)

11639. **Capsicum annuum.**

From Jalapa, Vera Cruz, Mexico. Received thru Mr. Frank N. Meyer at the Plant Introduction Garden at Chico, Cal., June, 1904.

*Yellow Chili.* "A handsome pepper, much sold in the market at Jalapa, a bright, showy yellow, quite pungent in taste." (Meyer.)

11640. **Agrostis alba.**

From New York, N. Y. Received thru Henry Nungesser & Co., August 16, 1904.

11641 to 11644.

From Nice, Alpes-Maritimes, France. Received thru Dr. A. Robertson-Prochowsky, August 1, 1904.

11641. **Arundinaria simoni.**

"A small bamboo, producing good, edible seeds. This small bamboo does not, as some others, die altogether after producing its seeds, but some rhizomes survive. Still perhaps it is too early to judge of the survival of such. As you will find, the large seeds are of very good taste, and evidently could be used
11641 to 11644—Continued.

as well as wheat, barley, and other grains. This bamboo is very resistant to
drought. Would it eventually be a plant of any other than ornamental use? Perhaps some of your active and enterprising correspondents in the United
States would care to try this plant.” (Proshovsky.)

11642.  JACARANDA OVALIFOLIA.

"The well-known tree of most striking beauty of foliage and flower. The
timber is very strong. Resists well in dry places.” (Proshovsky.)

11643.  ALOE DICHOTOMA.

"Forms a picturesque tree of medicinal value.” (Proshovsky.)

11644.  Pittosporum Macrophylum.

"This is a tree of very regular growth and striking beauty. Its leaves are
nearly as large as those of Magnolia grandiflora L. But its chief merit consists
in its beautiful creamy-white flowers, which exhale a perfume surpassing
that of any other plant I know, even the orange and lemon. I should think
that the extraction of this perfume would prove a paying undertaking.”
(Proshovsky.)

11645 and 11646.  MANGIFERA spp.

From Saigon, Cochin China. Received thru Mr. M. E. Haffner, director of
agriculture, August 20, 1904.

Seeds as follows:

11645.  MANGIFERA CAMBODIANA.          11646.  MANGIFERA MEKONGENSIS.

11647.  Musa sp.

Banana.

From Monte, Grand Canary. Received thru Mr. Alaricus Delmard, August 22,
1904.

11648.  MAMMEEA AMERICANA.

Mammee apple.

From Mayaguez, P. R. Received thru Mr. O. W. Barrett, Agricultural Experi-
ment Station, August 22, 1904.

For use in mangosteen experiments.

11649.  Lilium Neilgherrense.

Neilgherry lily.

From Utakamand, India. Received thru Mr. G. H. Cave, superintendent of
the Government Botanic Gardens, August 19, 1904.

11650.  Triticum Dicoccum.

Emmer.

From Paris, France. Received thru Vilmorin-Andrieux & Co., August 27, 1904.

11651 and 11652.  Medicago sativa.

Alfalfa.

From City of Mexico, Mexico. Received thru Mr. Felix Foëx, National School
of Agriculture, August 24, 1904.

11651.  Alfèo, from State of 11652.  Apulo, from State of

Pueblo. Guanajuato.

11653.  Calophyllum calaba.

From Honolulu, Hawaii. Received thru Mr. Gerrit P. Wilder, August 29, 1904.

For experiments in propagating the mangosteen.

11654.  Landolphia sp. (?).

From Africa. Presented thru Mr. G. N. Collins by Mr. Gilbert Christy.
Received August 31, 1904.

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66  SEEDS AND PLANTS IMPORTED.

11655. Avena sativa.  
Oat.  
From Statesville, N. C. Received thru Dr. B. W. Kilgore, of the North Carolina Agricultural Experiment Station, September 2, 1904.

11656. Theobroma cacao.  
Cacao.  
From Nicoya, Costa Rica. Received thru Mr. G. N. Collins, June, 1903. (G. & G. No. 3979.)

11657. Castilla nicoyensis.  
Central American rubber.  
From Nicoya, Costa Rica. Received thru Mr. G. N. Collins, June, 1903. (G. & G. No. 3980.)

11658. Hordeum vulgare.  
Barley.  
From Blacksburg, Va. Received thru Mr. John R. Fain, September 7, 1904.  
Tennessee Winter barley, shipped from Jefferson City, Tenn.

11659. Thevetia ovata (5).  
From Guadalajara, Mexico. Received from Mr. Federico Chisolm, September 3, 1904.

11660. Helianthus sp.  
Sunflower.  
From Bozeman, Mont. Received from the Montana Agricultural Experiment Station, August 29, 1904.

11661 to 11673. Citrus decumana.  
Pomelo.  
From Calcutta, India. Originally from Mr. David Prain, of the Royal Botanic Garden. Presented to the Department by Mr. Henry Phipps, 6 East Eighty-seventh street, New York, N. Y. Received September 8, 1904.

Plants as follows:

11661. “Large White-Fleshed,” from Seharumpur.
11663. “China,” from Seharumpur.
11668. “Large,” from Lucknow.
11669. “Small,” from Lucknow.
11673. “Royal Botanic Garden” variety, from Calcutta.

11674. Vitis coignetiae.  
Crimson glory vine.  
From New York, N. Y. Received thru Messrs. Henry & Lee, 97 Water street, September 9, 1904.

11675. Ananas sativus.  
Pineapple.  
Received September 9, 1904. (Mailed from some point in Liberia, but origin unknown.)

97
DECEMBER, 1903, TO DECEMBER, 1905.  

11676. Balsamorrhiza sp.  
Balsam root.  
From Bozeman, Mont. Received thru Mr. A. J. Pieters, August, 1904.

11677. *Vicia sativa.*  
Common vetch.  
From New York, N. Y. Received thru J. M. Thorburn & Co., 36 Cortlandt street, September, 1904.

11678. *Hordeum vulgare.*  
Barley.  
From St. Anthony Park, Minn. Received thru Prof. W. M. Hays, of the Agricultural Experiment Station, September, 1904.

11679. *Vicia sativa.*  
Common vetch.  
From Richmond, Va. Received thru T. W. Wood & Sons, September, 1904.

11680. *Vicia villosa.*  
Hairy vetch.  
From Richmond, Va. Received thru T. W. Wood & Sons, September, 1904.

11681. *Brucea sumatrana.*  
"Kosam."  
From Singapore, Straits Settlements. Received from the Botanic Gardens, thru the German consulate, September 12, 1904.  
The fruit of this plant is said to be an infallible remedy for dysentery.

11682. *Lippia repens.*  
Hop.  
From Santa Barbara, Cal. Received thru Dr. F. Franceschi at the Plant Introduction Garden, Chico, Cal., August 20, 1904.  
"Thrives in any soil, no matter how poor. Rapidly covers the ground with a very dense matting. Takes one-tenth as much water as any lawn; needs no mowing; will stand intense heat and several degrees of cold. Can be established in sloping ground." (Franceschi.) (See S. P. I. No. 4263.)

11683. *Humulus lupulus.*  
From Wheatland, Cal. Received at the Plant Introduction Garden, Chico, Cal., August 15, 1904.

11684. *Brassica napus.*  
Rape.  
From New York, N. Y. Received thru Henry Nungesser & Co., September 15, 1904.  
Dwarf Essex.

11685 to 11696.  
From Guadalajara, Mexico. Received thru Mr. Federico Chisolm, September 19, 1904.  
Miscellaneous seeds and bulbs, mostly unidentified.

11697. *Vicia faba.*  
Horse bean.  
From Ottawa, Canada. Received thru Graham Brothers, September 21, 1904.

11698 to 11713. *Manihot spp.*  
Cassava.  
From Sao Paulo, Brazil. Received thru Prof. Alberto Lofgren, director of the Botanic Gardens, September 24, 1904.
11698 to 11713 - Continued.

Cuttings, as follows:

11698. *Glôbo*.
11699. *Vermelha do Pinhal*.
11700. *Bonaca Brava*. (Poisonous.)
11701. *Tatu*.
11702. *Apipin Areârro*.
11703. *Vermelha*.
11704. *Branca*.
11705. *Mata Fome*.
11706. *Barra Bonita*.
11707. *Apipin Dour*.
11708. *Amarelo*.
11709. *Cambalho Brava*.
11710. *Mata Fome II*.
11711. *Rosa*.
11712. *São Têmidinho*. (Very poisonous.)
11713. *Rapina Brava*. (Poisonous.)

11714. **Triticum vulgare**. Wheat.

From Tempe, Ariz. Received thru Mr. John Jungerman, September 26, 1904.


11715. **Triticum durum**. Macaroni wheat.

From Tempe, Ariz. Received thru Mr. John Jungerman, September 26, 1904.


11716 and 11717. **Hordeum tetrastichum**. Four-row barley.

From Tempe, Ariz. Received thru Mr. John Jungerman, September 26, 1904.


11718 and 11719. **Liatriis scariosa**. Button snakeroot.

From Minneapolis, Minn. Presented by Prof. E. M. Freeman. Received September 22, 1904.

11718. Roots or corns.
11719. Seed.

11720. **Sicana odorifera**.

From Trinidad, British West Indies. Presented by Mr. J. H. Hart, superintendent of the Royal Botanic Gardens. Received September 20, 1904.

11721. **Garcinia celebica**.

From Buitenzorg, Java, Dutch East Indies. Presented by Doctor Treub, September 28, 1904.

11722. **Avena sativa**. Oat.

From Yancey, Ga. Purchased from Mr. H. Yancey, jr. Received September 28, 1904.

*Appier Rustproof*.

11723. **Ipomoea pes-caprae**.

From Durban, Natal. Presented by Mr. J. L. Elmore, agent and importer of American goods, Third avenue. Received September 30, 1904.

"These small seeds and pods grow here on the sand next to the seashore, and greatly retard the sand from blowing inland. They grow in runners as much as 30 feet in length, every few feet throwing up stems with large green leaves a foot above the sand, thus preventing the sand from shifting." (Elmore.)
11724. "Persea Gratissima."

From Durban, Natal. Presented by Mr. J. L. Elmore. Received September 30, 1904, in same package with No. 11723.

"These pears have only been introduced into this country for a few years, and are proving a source of great revenue. The trees are strong and healthy, and bear after about five years' growth—grow as well from seeds as grafted ones. When in season prices range here for the fruit from 50 cents to $2 per dozen. The fruit never ripens on the tree, but soon ripens after it is full grown and picked and laid aside for a few days. This fruit can be transported any distance, as it is perfectly hard when pulled down and does not soften for some days. After being laid aside for a few days they become soft and then are edible. The flesh is about one-half inch in thickness, and when ripe of a light yellow shading to a pea green next to the skin, and if eaten with a little sugar and milk is like rich cream. Some prefer salt and pepper and a little vinegar; others nothing at all. I know of people here who eat no meat when these pears are in season. The trees grow in a sandy soil to a good size, and I think they would grow in the Southern States and California." (Elmore.)

11725. "Garcinia Mangostana."

From Saigon, Cochin China. Presented by Dr. M. E. Hoffner, director of the Botanic Gardens. Received October 3, 1904.

11726. "Psidium Guajava."

From Trinidad, British West Indies. Presented by Mr. J. H. Hart, superintendent of the Royal Botanic Gardens. Received October 3, 1904.

A large red guava. Fruit of this variety is reputed to weigh at the rate of three to a pound. (Hort.)

11727. "Panicum Decompositum."

From Sydney, New South Wales. Presented by Mr. J. H. Maiden, director of the Botanic Gardens. Received October 4, 1904.

"From the dry interior of southwestern Queensland. The seed was collected by the blacks, who use it largely for food, while the grass itself is one of the best fodder grasses of Australia." (Maiden.) (See Maiden's Useful Native Plants of Australia, p. 97.)

11728 to 11730. "Lilium Longiflorum Eximeum."

From New York, N. Y. Received thru Henry & Lee, August 3, 1904.

11728. Bermuda-grown bulbs.
11729. Azores-grown bulbs.
11730. Japan-grown bulbs.

11731. "Triticum sp."

From Germany. Presented by Mr. A. Kirsche, Pfiffelbach, near Apolda, thru Mr. J. E. W. Tracy. Received September 30, 1904.

Original Winter Square Head.

11732. "Garcinia Mangostana."

From Singapore, Straits Settlements. Presented by Mr. R. Derry, assistant superintendent of the Botanic Gardens. Received November 18, 1904.

11733. "Asparagus Virgatus."

From Durban, Natal, South Africa. Presented by Mr. J. Medley Wood, curator of the Botanic Gardens. Received November 18, 1904.

"A native Natal asparagus, which is said to produce edible shoots of good quality. The plant does not require so much care as the cultivated asparagus, and may therefore prove of value for breeding purposes." (Wood.)
11734. **Carissa arduina.**  
From Natal, South Africa. Presented by Mr. J. Medley Wood, curator of the Botanic Gardens, Durban. Received August 8, 1904.

“A food plant of considerable importance in Natal, where it is found in large quantities on the market, and from which is made a very valuable jelly. The plant, grown in hedge form in and about the city of Durban, is a handsome thing; its large white flowers and crimson fruits stand out in beautiful contrast with the background of dark-green foliage.” (Fairchild.)

11735. **Secale cereale.**  
Rye.
From Steglitz, near Berlin, Germany. Received thru Metz & Co., October 6, 1904.

Original Professor Heinrich.

11736. **Eucalyptus corynocalyx.**  
Sugar gum tree.
From Pomona, Cal. Received thru Mr. G. W. Kuesthardt, November 11, 1904.

11737. **Poa pratensis.**  
Kentucky bluegrass.
From New York, N. Y. Received thru J. M. Thorburn & Co., October 10, 1904.

11738. **Vicia sativa.**  
Common vetch.
From New York, N. Y. Received thru J. M. Thorburn & Co., October 10, 1904.

11739. **Thysanolaena agrostis.**  
From Sibpur, near Calutta, India. Presented by the Royal Botanic Garden. Received August 3, 1904.

See S. P. I. No. 8445 for a description of this extremely ornamental flowering cane.

11740. **Pentzia virgata.**  
From Oatlands, South Africa. Received thru Messrs. Lathrop and Fairchild (No. 1138, March, 1903), August 1, 1904. (See No. 10635.)

11741 and 11742. **Capsicum annuum.**  
Paprika pepper.
From Bridgeport, Ala. Grown by the Botanic Drug Company. Received August 29, 1904.

11741. **Szeged Rose,** grown from S. P. I. No. 10755.
11742. Large, red, long Hungarian, grown from S. P. I. No. 10756.

11743 to 11757.  
From Melbourne, Australia. Presented by Mr. William Robert Guilfoyle, director of the Botanic Gardens. Received July, 1904.

Sample packets of seed as follows:

- **11743. Acacia longifolia.**
- **11744. Acacia pinnata.**
- **11745. Carpodetus serratus.**
- **11746. Euteleia arborescens.**
- **11747. Eucalyptus botryoides.**
- **11748. Eucalyptus longifolia.**
- **11749. Grevillea robusta.**
- **11750. Hymenosporum flavum.**
- **11751. Panax elegans.**
- **11752. Pittosporum buchanani.**
- **11753. Pittosporum undulatum.**
- **11754. Sterculia acerifolia.**
- **11755. Sterculia diversifolia.**
- **11756. Syncarpia laurifolia.**
- **11757. Tristania laurina.**
11758. **Ulex europaeus.**  
*Gorse, whin, or furze.*  
From Dublin, Ireland. Presented by Hogg & Robertson, seedsmen. Received in June, 1904.

"This plant is used extensively in northern France, England, and Ireland as a fodder plant. It is not cultivated there, however. Shredders are used for preparing it for stock, and, according to Mr. J. B. Blandy, of Funchal, Madeira, who uses it extensively, it is a most valuable plant for barren soils where other things will not grow." (Fairchild.)

11759. **Vicia faba.**  
*Horse bean.*  
From Montreal, Canada. Received thru Prof. W. T. Macoun, horticulturist, Central Experiment Farm, Ottawa, Canada, from William Ewing & Co., October 12, 1904.

11760. **Secale cereale.**  
*Rye.*  
From Waterloo, Kans. Received thru Mr. J. Elza Dodge, October 14, 1904. Grown from S. P. I. No. 1342.

11761 and 11762. **Allium cepa.**  
*Onion.*  
From Teneriffe, Canary Islands. Presented by United States Consul Solomon Berliner. Received October 6, 1904.

11761. **White.**  
11762. **Red.**

11763. **Vicia villosa.**  
*Hairy vetch.*  
From Augusta, Ga. Received thru the N. L. Willet Drug Company, October 15, 1904.

11764. **Vicia sativa.**  
*Common vetch.*  
From New York, N. Y. Received thru J. M. Thorbourn & Co., October 19, 1904.

11765. **Persea carolinensis.**  
*Red bay, or swamp bay.*  
From New Orleans, La. Presented by Mr. Edward Baker, superintendent of Audubon Park. Received October 17, 1904.

"In regions where the avocado (*Persea gratissima*) can be grown, but which are subject at long intervals to heavy, killing frosts, this relative of the latter may prove valuable as a stock on which to graft it. It may also be of use for breeding purposes." (Fairchild.)

11766 to 11768.  
From Honolulu, Hawaii. Presented by Mr. Gerrit P. Wilder. Received October 14, 1904.

Specimen fruits as follows:

11766. **Mangifera indica.**  
*Mango.*  
"Very fine specimen, grown on the premises of Mr. W. C. Parke, of Honolulu. Considered one of our best mangos here." (Wilder.)

11767. **(Unidentified.)**  
11768. **(Unidentified.)**

11769. **Cedrela odorata.**  
From Buenos Aires, Argentine Republic. Presented by Mr. Carlos Thays, director of the Jardín Botánico. Received October 22, 1904.

"This plant belongs to a group of trees which Dr. F. Franceschi, of Santa Barbara, Cal., has been studying for some time. He remarks in a letter of September 20, 1903, as follows: 'The Cedrela I consider among the most interesting of the trees which I have tried here, and remarkably so *C. fasciculata*, which makes a wonderful growth and
appears to be much hardier than its native habitat would warrant.’ The use of the
timber of this species of Cedrela for cigar boxes makes the plants of unusual interest
to southern California, where they will grow unusually well.’’ (Fairchild.)

11770. Gaillardia sp. Gaillardia.
From Big Stone City, S. Dak. Collected by Mr. A. J. Pieters, August, 1904.
‘‘Sample of seed of a Gaillardia with rose-purple rays. Low-growing perennial (?).
Flowers borne on peduncle arising from the base of the plant, and usually from a
foot to 18 inches high. ’’May be a good thing for crossing with other Gaillardias, but
not a sufficiently profuse bloomer by itself.’’ (Pieters.)

From Dawson, N. Dak. Collected by Mr. A. J. Pieters, August, 1904.
‘‘Found blooming at Dawson, N. Dak., and throughout that country during late
August, 1904. Calyx scales glutinous, flowers yellow.’’ (Pieters.)

11772. Liatris sp. Button snakeroot.
From near Fargo, N. Dak. Collected by Mr. A. J. Pieters, August, 1904.
‘‘Seed of a fine perennial for the herbaceous border. Grows 2 to 3 feet high and
bears a fine spike with purple flowers.’’ (Pieters.)

11773. Helianthus sp. Sunflower.
From Dawson, N. Dak. Collected by Mr. A. J. Pieters, August, 1904.
‘‘Practically the same type as that known in the trade as Stella. Varies in size
from 12 inches to 4 feet or more, depending on soil and moisture.’’ (Pieters.)

11774. Cucumis sp. Melon.
From province of Esmeraldas, Ecuador. Presented by Mr. George D. Hedian.
Received September 20, 1904.
‘‘Fruit grows to a size of 48 to 50 cm. in length; yellow when ripe, and pulp resem-
bles that of muskmelon. Has fragrant odor when ripening.’’ (Hedian.)

From province of Esmeraldas, Ecuador. Presented by Mr. George D. Hedian.
Received September 20, 1904.

From province of Esmeraldas, Ecuador. Presented by Mr. George D. Hedian.
Received September 20, 1904.
This cotton seed in bolls grows 8 feet high and buds in six months.

From Kashgar, Kashmir, British India. Presented by Rev. P. J. P. Hendriks.
Received October 24, 1904.
‘‘Collected in the latter part of July by Mr. Hendriks at Kashgar and forwarded
by parcel post. Mr. Hendriks remarks in his letter of July 23 that ’’they want a hot
but only a short summer, and as walnuts are ripening in Washington I am confident
that they will come all right. You may call them Crosby nectarines. ’’I am quite
sure they will make a fine acquisition to any orchard.’’
‘‘In compliance with the wish of the donor, if these nectarines prove in any way
remarkable they should be named in honor of Mr. O. T. Crosby, to whom we are
indebted for putting us in communication with Mr. Hendriks.’’ (Fairchild.)
11778. **Pistacia vera.**

From Kashgar, Kashmir, British India. Presented by Rev. P. J. P. Hendriks. Received October 24, 1904.

“These seeds were collected by Mr. Hendriks from the bazaar in Kashgar. He is afraid they will have lost their germinative power, but as they come from the hot valleys of Badakhshan, west of the Pamirs, they may prove a different strain from those introduced from the Levant and to be of unusual value. These were received by parcels post thru Latham & Co., of Bombay, India. Larger shipments must be sent by caravan from Kashgar to Ladak, thence by caravan to Kashmir, thence to Rawalpindi and by rail to Bombay. The costs of transit would be about 2 rupees per kilogram and the time required about two months.” (*Fairchild.*)

11779. **Mangifera indica.**


*Lathrop.* See description of No. 9969.

11780. **Hordeum vulgare.**

From McPherson, Kans. Received thru Mr. L. A. Fitz, October 25, 1904.

*Tennessee Winter.*

11781. **Sesbania macrocarpa.**

From Tucson, Ariz. Received thru Prof. R. H. Forbes, director of the Agricultural Experiment Station, October 25, 1904.

“I am convinced from its very shallow root system that it will probably only prove useful in a situation where it can be constantly and abundantly irrigated, although it is possible that its rooting habits may be modified by new cultural conditions.” (*Forbes.*)

11782. **Trifolium alexandrinum.**

From Cairo, Egypt. Received thru Mr. George P. Foaden, secretary of the Khedivial Agricultural Society, October 26, 1904.

*Fachl.*

11783. **Nuphar polysepalum.** Red-anthered yellow water lily.

From Bozeman, Mont. Presented by Dr. J. W. Blankinship. Received October 27, 1904.

“An unusual species of pond lily, with red anthers somewhat resembling large petals. As this has never, so far as we are aware, been brought under cultivation, it is thought by Mr. Peter Bisset, of “Twin Oaks,” Washington, D. C., to be of possible value for breeding purposes. Coming from the northern latitude of Montana, it will prove perfectly hardy in any part of the United States.” (*Fairchild.*)

11784. **Garcinia xanthochymus.**

From Peradeniya, Ceylon. Presented by Dr. John C. Willis, director of the Royal Botanic Gardens. Received October 29, 1904.

11785 to 11790. **Garcinia spp.**

From Peradeniya, Ceylon. Received thru Dr. John C. Willis, director of the Royal Botanic Gardens, October 31, 1904.

11785. **G. cambogia=G. cowa.**

11786. **G. mangostana.**

11787. **G. cambogia=G. cowa.**

11788. **G. xanthochymus.**

11789. **G. spicata.**

11790. **G. morella.**

11791. **Vicia sativa.** *Common vetch.*

From Corvallis, Oreg. Received thru Mr. John Whitaker, October 31, 1904.
11792. Caesalpinia Brevifolia. **Algarobillo.**

From Santiago, Chile. Presented by Señor Salvadore Izquierdo. Received September 19, 1904.

The tanning material, which exists in the form of a resinous substance permeating the seed pods of this plant, has recently attracted the serious attention of European tanners, and the imports of it into Germany have of recent years very considerably increased. It is said to be very quick in its action and to be used in the tanning of delicate leathers. American tanners are not familiar with this tanning substance as yet, but some of the principal importers in New York are interested in its introduction. The shrub which bears the pods should be of particular interest to the extremely arid regions of the Southwestern States from the fact that it comes from the high altitudes of the Andes of northern Chile, where the season's rainfall is extremely light and where long periods of hot, dry weather occur. The plant has a long taproot, which will make it difficult to transplant, and it is recommended by Señor Izquierdo that the seeds be planted out where the plants are expected to remain. According to Señor Izquierdo's estimate, 2,000 plants could be easily grown on an acre of soil. Trees 6 to 8 years old are said to yield from 6 to 8 pounds of pods, which sell at a price ranging from 4 to 6 cents a pound. It is said that the plant is injured by heavy spring frosts, but is otherwise a robust, vigorous growing species. (See S. P. I., 10631.)

11793. Andropogon Sorghum. **Sorghum.**

From Durban, Natal, South Africa. Presented by Mr. R. W. Beningfield. Received August 24, 1904.

Mr. Beningfield says that this sorghum was self-sown in his garden in Durban.

11794. Lilium Longiflorum Multiflorum. **Japanese lily.**

From New York, N. Y. Received thru Henry & Lee, November 9, 1904.

11795. Sapium Sebiferum. **Tallow tree.**

From China. Presented by Dr. C. L. Marlatt to Dr. B. T. Galloway. Planted in October, 1903.

Chinese name "Sa-men."

11796. Cucumis Melo. **Muskmelon.**

From California. Received in 1902. Exact source is not known.

Genuine Bidwell Casahta muskmelon seed, turned over to this Office by Mr. W. W. Tracy, sr.

11797. Macadamia Ternifolia. **Australian nut.**

From Sydney, New South Wales. Presented by Mr. J. H. Maiden, director of the Botanic Gardens. Received November 5, 1904.

11798. Papaver Somniferum X Bracteatum. **Hybrid poppy.**

From Santa Rosa, Cal. Presented by Mr. Luther Burbank. Received November 7, 1904.

11799. Thevetia Cuneifolia. **Trumpet flower.**

From Guadalajara, Mexico. Presented by Mr. Federico Chisolm. Received November 7, 1904.

11800. Panicum Maximum. **Guinea grass.**

From Mayaguez, P. R. Received thru Mr. O. W. Barrett, of the Agricultural Experiment Station, November 8, 1904.

"Tho it produces viable seeds, this famous grass is usually propagated by division of the root clumps." (Barrett.)
11801 to 11996. **Phoenix dactylifera.**

**Date.**

From Hohlui, El-Hasa, Turkish Arabia. Received thru Rev. S. M. Zwemer and secured by Mr. J. Calcutt Gaskin, of the British Assistant Political Agency, Bahrain Island, Persian Gulf, November 7, 1904.

According to Mr. Gaskin's letter, the following varieties were received: Khallas, Rezeiz, Shebibi, Klir, Hatun, Sheikh, Mehwi, Kheneizi, Teadjil, and Mejneiz. These names, however, did not agree with those found on the labels accompanying the plants, which were placed there by the Arabs and most of which were lost. In order to avoid confusion each sucker was given a separate number in hopes that they might be correctly identified from descriptions of these varieties when they come into bearing.

11997. **Sequoia Wellingtonia.**

Bigtree.

Origin unknown.

11998. **Vicia Faba.**

Horse bean.

From Gembloux, Belgium. Received thru Dr. Ach. Gregoivre, Institut Chimique et Bactériologique de l'État, March 10, 1905.

"Seed of the Holland variety of horse bean grown extensively in Belgium and Holland as a fodder crop. This bean in the cool summers of northern Europe makes a growth of several feet and produces a succulent fodder which is harvested after the beans have ripened, and run thru a chopping machine which prepares it for the stock. The analyses of Doctor Gregoire have shown that there is a material increase in the amount of nutritious substances in this bean late in the season, making it advisable to cut it only after the beans have fully matured. The small size of the bean of this Dutch variety makes it especially desirable for field experiments where the item of seed transport is an important one.

"These should be tried extensively in Alaska and the Northwestern States as an early summer crop. They are likely also to be of value as a cover crop for orchards in the Northern States. Experiments in Canada have proved this horse bean to be the best cover crop yet tried in that region. It holds snow, prevents drifting, and adds a large amount of humus to the soil. In Belgium these beans are drilled in about 6 or 8 inches apart and produce a thick stand some 3 or 4 feet in height." (Fairchild.)

11999 and 12000. **Nicotiana Tabacum.**

Tobacco.

From Constantinople, Turkey. Received thru Mr. Charles M. Dickinson, United States consul-general, March 9, 1905.

Seed from Xanthi district, as follows:

11999. Finest quality.

12000. Medium quality.

12001 to 12018.

From Fort Hays, Kans. Received thru Mr. J. G. Haney, superintendent of the Branch Experiment Station, November 7, 1904.

12001 to 12015. **Triticum Vulgare.**

Wheat.


12001 to 12018  Continued
12010.  *Cimicifuga.*
    Grown from seed originally imported in quantity of over 14,000 bushels from the Crimea in 1901 by the millers of Kansas and Oklahoma. (C. I. No. 1539.)

The best grade of this variety was grown near Halstead, Kans., from seed originally from the Crimea. A sample was planted in the experiment plots at Halstead in the autumn of 1901 for future experiment.

12016 to 12018.  *Panicum miliaceum.*  


12019.  *Garcinia xanthochymus.*
    From Honolulu, Hawaii. Presented by Mr. G. P. Wilder. Received October 31, 1904.
    "Fruits from a tree growing in the Government nursery of Honolulu. Sent for identification. This species is promising as a stock upon which to graft the mangosteen. Its fruits have an agreeable acid flavor." (Fairchild.)

12020.  *Portulacaria afra.*  

12021.  *Garcinia cochinichnensis.*
    From Durban, Natal. Received thru Messrs. Lathrop and Fairchild (No. 1097, February 8, 1903), November 9, 1904.
    "This tree is a more vigorous one and easier to adapt to cultivation than *G. mangostana,* the true mangosteen. It is also a heavier bearer, and it is valuable in connection with experiments on the cultivation of the mangosteen in Porto Rico and Hawaii. The fruit is a golden-yellow color, one-seeded, with characteristic acid-flavored pulp. Most people do not care for the taste of this fruit, but the writer found the fruits most refreshing, and Mr. Wood, of the Botanic Gardens in Durban, who kindly donated the seeds, says that a former governor of Natal was very fond of them. Trees of this species should be raised in gardens in Florida, Porto Rico, and Hawaii accessible for breeding and grafting experiments. It may prove a good stock for the mangosteen." (Fairchild.)
From Singapore, Straits Settlements. Presented by Mr. R. Derry, assistant superintendent of the Botanic Gardens. Received November 9, 1904.

From Fresno, Cal. Received thru Mr. George C. Roeding, December 22, 1904. White *Sorghum.* Grown from S. P. I. No. 7909.

12024 and 12025. *Sechium edule.* Chayote.
From Saltillo, Mexico. Presented by Mr. J. R. Silliman at the request of Dr. Edward Palmer. Received November 7, 1904.

"An unusually large and fine variety of the chayote, representing two doubtful subvarieties, the one a darker green in color than the other and considered a sweeter sort. This is considered one of the best, and is indeed one of the most commonly grown vegetables in Mexico and Central America. The particularly large size of these varieties makes them promising for introduction into the warmer regions of this country. Bulletin No. 28 of the Bureau of Plant Industry gives a full description of the methods of planting, etc." (Fairchild.)

From Saltillo, Mexico. Presented by Mr. J. R. Silliman. Received November 7, 1904.


"I am sending you four ears of genuine *Mexican June* corn grown by myself. This corn was planted in June and harvested about the 15th of October. The natives mix their seed very much and are not at all careful with it, so a great deal of the so-called *Mexican June* corn is not strictly such. Of the white variety there are two classes—one with white cob, the other with red cob. The grains are long and thin, the cob very small. It is a great drought resister and very sweet, the Mexican children chewing the stalks as they do sugar cane. Cattle are very fond of the green stalk and it produces a fine flow of rich milk in cows. The stalk reaches a height of 8 to 12 feet and is very slender; therefore we plant it quite thick. The dark variety, or *Maiz pintado,* is considered more hardy and better for resisting dry weather. It is shorter and more stocky in its growth. It is not so sweet. It will give a crop when all else fails. While not considered so fine for general use, it is equal to any for all stock." (Silliman.)

From Langport, Somerset, England. Received thru Messrs. Kelway & Son, November 12, 1904.

Peonies imported for testing on the grounds of the Department of Agriculture at Arlington, Va., 76 varieties, as follows:

12028 to 12103—Continued.

12050. *Kelway's Queen.*
12051. *Helena.*
12052. *Joan Salton.*
12054. *Princess of Wales.*
12055. *Lady Greyfriars Civil.*
12056. *Mrs. Asquith.*
12057. *Stanley.*
12058. *Prince George.*
12059. *Cognita.*
12060. *Duchess of Trel.*
12061. *Autumnus.*
12062. *Humei White.*
12063. *Summer Day.*
12064. *Moonbeam.*
12065. *Reine des François.*
12067. *Prince Prosper.*
12068. *Lady Carrington.*
12069. *Sir T. J. Lipton.*
12070. *Princess May.*
12071. *Queen Victoria.*
12072. *Miss Selway.*
12073. *Bunch of Perfume.*
12074. *Millsias.*
12075. *Tinted Venus.*
12076. *Miss Brice.*

12077. *Xanadu.*
12078. *Calliphon.*
12080. *Baroness Schroeder.*
12081. *The Bride.*
12082. *Ella Christine Kelway.*
12083. *Cyclops.*
12084. *Singin.*
12085. *Venus.*
12086. *Duchess of Sutherland.*
12087. *Mr. Manning.*
12088. *Queen of the May.*
12089. *Lady Cecilia Rose.*
12090. *Viscount Cross.*
12091. *Lydia.*
12092. *Water Lily.*
12093. *Princess Dhuleep Singh.*
12094. *Candillon.*
12095. *Alton Locke.*
12096. *Argus.*
12097. *Hesperus.*
12098. *Amiable.*
12099. *Lady Bramwell.*
12100. *Carallaria Rusticana.*
12101. *Emily.*
12102. *Colos.*
12103. *Opit.*

12104. **FREYCINETIA ARBOREA.**

From Honolulu, Hawaii. Received thru Mr. J. F. Higges, horticulturist, Agricultural Experiment Station, November 14, 1904.

12105 to 12107. **NICOTIANA TABACUM.**

Tobacco.

From Brazil. Presented by Mr. M. Caluron, secretary of Agriculture, Railways, Industry, and Public Works of the State of Bahia. Received October 31, 1904.

12105. From Santa Anna.
12106. From Maragigipe.
12107. From S. Gonçalo dos Campos.

12108. **CUCUMIS MELO.**

Muskmelon.

From Bairam Ali, Old Merv, Turkestan. Presented by Prof. R. W. Pumpelly. Received November 12, 1904.

12109. **CUCUMIS MELO.**

Muskmelon.

From Samarkand, Turkestan. Presented by Prof. R. W. Pumpelly. Received November 12, 1904.
12110. Calophyllum inophyllum.

From Honolulu, Hawaii. Received thru Mr. Gerrit P. Wilder, November 15, 1904.

"Imported for use as a possible stock on which to graft the mangosteen, Garcinia mangostana." (Fairchild.)

12111 and 12112.

From Nice, Alpes-Maritimes, France. Presented by Dr. A. Robertson-Proshovsky. Received November 14, 1904.

12111. Ficus glomerata. Cluster fig.

12112. Opuntia ficus indica. Prickly pear.

12113. Solanum commersonianum. Aquatic potato.

From Santa Rosa, Cal. Presented by Mr. Luther Burbank. Received November 18, 1904.

"Tubers produced from plants grown in Mr. Burbank's experimental grounds from imported tubers, S. P. I. No. 10324. First generation removed from importation." (Fairchild.)


From Khojend, Russian Central Asia. Received thru Mr. E. Valneff, November 15, 1904.


From Mexico. Received thru Dr. Edward Palmer, November 21, 1904.


From Milwaukee, Wis. Presented by Mr. G. G. Pabst, president of the Pabst Brewing Company. Received November 9, 1904.

Four samples of barley grown from seed furnished by this Department, originally purchased in Svalof, Sweden, from the General Swedish Seed-Breeding Institute, as follows:


From Milwaukee, Wis. Presented by Mr. August Uihlein, secretary of the Schlitz Brewing Company. Received November 21, 1904.

Barley samples, as follows:

12120 to 12129—Continued.

12121. Hordeum distichum.
Grown from S. P. I. No. 7992, originally from Munich, Bavaria.

12122. Hordeum hexastichum.
Grown from S. P. I. No. 8559, originally from Christiania, Norway.

12123. Hordeum vulgare.
Maren. Grown from S. P. I. No. 9877, originally from Cairo, Egypt.

12124. Hordeum sp.
Grown from California seed that was originally imported from Moravia.

12125. Hordeum distichum nutans.
Haana. Grown from S. P. I. No. 10402, originally from Austria.

12126. Hordeum distichum nutans.

12127. Hordeum distichum nutans.
Chevalier II. Grown from S. P. I. No. 10584, originally from Sweden.

12128. Hordeum distichum nutans.

12129. Hordeum distichum erectum.

From Calcutta, India. Received thru L. Henry Burkill, esq., M. C., officiating reporter on economic products to the government of India, Indian Museum, October 21, 1904.

Rekikesh paddy seed, said to be the most valuable rice in India; grown on the Ganges where it emerges from the hills. A lowland variety of rice, said to be worth twenty times the price of ordinary rice.

From Yokohama, Japan. Received thru the Yokohama Nursery Company, November 14, 1904.

12132 to 12134.

From Brighton, Utah. Received thru Mr. Ephraim Clawson, November 10, 1904.

12133. Avena sativa. Oat.
Grown from S. P. I. No. 10269, originally from Algeria.

Chul-bidai. Grown from S. P. I. No. 9131, originally from Russia.

From Santa Clara, Cal. Received thru Mr. C. C. Morse in 1904.

12136 and 12137.


12136. Euccommia ulmoides. Tu-chung.
"Tu-chung" is the name given by the Chinese to the tree which has been described by Professor Oliver in Hooker's Icons Plantarum as Euccommia
DECEMBER, 1903, TO DECEMBER, 1905.

**12136 and 12137—Continued.**

*Eucommia ulmoides.* The bark is the only part used, and is much esteemed by the Chinese as a drug, tonic and various other properties being assigned to it. It is described in nearly all Chinese works on materia medica and botany, the earliest mention of it being given in the Herbal of which the Emperor Shên-Nung is the reputed author, and which was committed to writing probably as early as the first century of our era.

"The tree is cultivated in small plantations in the mountainous regions of Szeechwan, Hupeh, and Shensi; and from these districts it is brought to Hankow, the great mart for drugs that are produced in the western provinces. From this port about 100 tons are annually exported by steamer to the other treaty ports.

"*Eucommia ulmoides* has been grown out of doors at Kew without any protection for the last six years. It is a vigorous, free-rooting plant, and bears transplanting well. It will, I believe, thrive in any soil of average quality, but seems to prefer a rich, light loam. In such a soil, at Kew, young trees struck from cuttings five years ago are now 6 feet high and make shoots 2 feet to 2½ feet long in one season.

"It can be propagated easily by means of cuttings, and with these two methods may be adopted. The quickest method is to take pieces of the current season's growth, about 0 inches long, in late July or early August, insert them in pots of very sandy soil (the usual mixture for cuttings), and then place the pots in a house or frame where slight bottom heat can be afforded. The cuttings should be made of shoots in what gardeners term a "half-woody" condition. They will take root in a few weeks and can then, after a "hardening-off" period, be planted in nursery beds. The second method is to make the cuttings of the leafless wood in November and dibble them in sandy soil in a cool frame or out of doors under a cloche, or hand light. They will take root the following spring. This method is not so quick as the other, nor have we found it so sure." (*Kew Bulletin* No. 1, 1904.)

**12137. Davidia involucrata.**

(See description of this beautiful tree under S. P. I. No. 16208.)

**12138. Mangifera indica.**

*Davidia.*

From Miami, Fla. Received thru P. H. Rollis, November 23, 1904.


**12139. Nicotiana sanderae.**

*Mango.*

From Philadelphia, Pa. Received thru Henry A. Dreer, Incorporated, November 25, 1904.

*Carmin tuberose-flowered.* Seed of a new hybrid Nicotiana raised in England. Described as forming bushy, much-branched plants 2 feet high, laden with flowers from base to summit. Flowers are a carmine red and fragrant, a single plant producing thousands. resembles *N. affinis* in form, but has a short, stout tube and does not close up in daytime. (See No. 12358 for history.)

**12140 to 12230.**

From Yokohama, Japan. Received thru the Yokohama Nursery Company at the Plant Introduction Garden, Chico, Cal., October 31, 1904.

**12140. Aralia cordata.**

*Moyashi udo.*

Two-year-old roots.

**12141. Citrus sp.**

*Orange.*

*Natsudaidai.*

**12142. Edgeworthia gardneri.**

*Mitsumata paper plant.*

**12143 to 12155. Lilium spp.**

**12143. Lilium alexandrae.**

**12145. Lilium batmaniae.**

**12144. Lilium auratum.**

**12146. Lilium brownii.**

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SEEDS AND PLANTS IMPORTED.

12140 to 12230—Continued.

12143 to 12155—Continued.

12147. *Lilium cordifolium.*

12148. *Lilium concolor.*

12149. *Lilium hansonii.*

12150. *Lilium krameri.*

12151. *Lilium leichtlinii.*

12152. *Lilium longiflorum.*

12153. *Lilium megaloides.*

12154. *Lilium speciosum album.*

12155. *Lilium tigrinum.*

12156. *Miscanthus condensatus.*

12157 to 12176. *Nelumbo speciosum.*

12157. *Tenjiku ren.*

12158. *Tenjiku madara.*

12159. *Hichiyo ren.*

12160. *Tsuikaku ren.*

12161. *Toka ren.*

12162. *Higo shibori.*

12163. *Shokko ren.*

12164. *Tama usagi.*

12165. *Shiro manman.*

12166. *Nikko ren.*

12156. *Lilium meเดอีส.*

12157. *Tenjiku ren.*

12158. *Tenjiku madara.*

12159. *Hichiyo ren.*

12160. *Tsuikaku ren.*

12161. *Toka ren.*

12162. *Higo shibori.*

12163. *Shokko ren.*

12164. *Tama usagi.*

12165. *Shiro manman.*

12166. *Nikko ren.*

12156. *Lotus.*

12157. *Giozan ren.*

12158. *Kayo ren.*

12159. *Hako botan.*

12160. *Sakura ren.*

12161. *Usayo ren.*

12162. *Seihaku ren.*

12163. *Shoshio ren.*

12164. *Beni botan.*

12165. *Kinshi ren.*

12166. *Asahi ren.*

12167. *Bamboo.*

12168. *Bamboo.*

12169. *Bamboo.*

12170. *Flowering cherry.*

12171. *Bamboo.*

12172. *Bamboo.*

12173. *Bamboo.*

12174. *Bamboo.*

12175. *Bamboo.*

12176. *Bamboo.*

12177. *Phyllostachys henonis.*

12178. *Phyllostachys mitis.*

12179. *Phyllostachys nigra.*

12180. *Phyllostachys quiliol.*

12181 to 12230. *Prunus pseudo-cerasus.*

12181. *Kashiogama.*

12182. *Yaye hizakura.*

12183. *Oshokumi.*

12184. *Hara arashi.*

12185. *Hara sau.*

12186. *Kurama yama.*

12187. *Higa shidare.*

12188. *Oshibayama.*

12189. *Beni gano.*

12190. *Kongasen.*

12191. *Shira taye.*

12192. *Botan sakura.*

12193. *Strogetsu.*

12194. *Aki irosakura.*

12195. *Ben den.*

12196. *Asagi sakura.*

12197. *Kumagai sakura.*

12198. *Nara (?) sakura.*

12199. *Kirigaya.*

12200. *Kasugan.*

12201. *Benihigan.*

12202. *Washi-no-O.*

12203. *Kiwaiji.*

12204. *Onaden.*

12205. *Ichiyo.*

12206. *Gigo.*

12207. *Meigetsu.*

12208. *Jouioi.*

12209. *Hizakura (single).*

12210. *Mikuruma yaishi.*

12211. *Hosokawa nioi.*

12212. *Horinji.*

12213. *Hata sakura.*

12214. *Ochochin.*

12215. *Yokishi.*

12216. *Shiogama sakura.*

12217. *Toyama sakura.*

12218. *Kokishimuden.*
12231. MEDICAGO SATIVA.  Alfalfa.

From Vernon, Tex. Received thru Mr. J. A. White, November 28, 1904.

12232. PISTACIA TEREBINTHIS.  Terebinth.

From Paris, France. Received thru Vilinin-Andrieux & Co., November 23, 1904.

12233. HYACINTHUS ORIENTALIS ALBUS.  Hyacinth.

From New York, N. Y. Received thru J. M. Thorburn & Co., November 29, 1904.

12234. PHLEUM PRATENSE.  Timothy.

From Tunis, Tunis. Presented by Prof. R. Gagey, of the Agricultural College. Received November 30, 1904.

12235. LILIUM PHILIPPINENSE.  Benguet lily.

From Manila, P. I. Presented by Mr. Elmer D. Merrill. Received November 15, 1904. Collected by Mr. R. S. Williams, collector for the New York Botanical Gardens in the province of Benguet, P. I.

12236 and 12237.

From Clearbrook, Whatcom County, Wash. Presented by Mr. George Gibbs. Received December 2, 1904.

12236. ACER MACROPHYLLUM.  Oregon maple.

"Handsome, roundheaded tree, remarkable for its large foliage. Not hardy in the North. In western Washington these maples grow from 2 to 5 feet the first year from seed. They are the finest of street shade trees, and stand any amount of wind. They grow 60 feet high at Clearbrook and reach 3 to 6 feet in diameter." (Gibbs.)

12237. THUJA GIGANTEA.  Giant arbor vitae.

12238. LANSIUM DOMESTICUM.  Doekoe.

From Buitenzorg, Java. Presented by Doctor Treub. Received December 5, 1904.

"One of the most refreshing fruits of the Dutch East Indies, which deserves to be well known in the Western Tropics, but which hitherto seems to have been quite overlooked." (Fairchild.)

"A low-growing tree of the East Indies which is cultivated to some extent for its fruit, which is known in Java and Malakka as 'Lanseh' fruit and is much esteemed for its delicate aroma. The pulp is of somewhat firm consistence and contains a cooling, refreshing juice." (Jackson in Trans. Linn. Soc., XIV, 1 (1823), 115.)

12239. AGAPANTHUS UMBELLATUS.

From Washington, D. C. Received thru the National Botanic Garden in 1902.
SEEDS AND PLANTS IMPORTED.

12240. **Mangifera indica.**
From Manatee, Fla. Received thru Mr. A. J. Pettigrew, December 7, 1904. 
*Peters No. 1.* Grown from S. P. I. No. 3706.

12241. **Mangifera indica.**
From Mangonia, Fla. Presented by Rev. E. E. Gale. Received December 7, 1904. 

12242. **Berberis fremontii.**
From Tucson, Ariz. Received thru Mr. D. G. Fairchild at the Plant Introduction Garden, Chico, Cal., September 10, 1904.

"Seeds from plants growing on the experiment station grounds. A beautiful desert form for breeding with *B. thunbergii.*" (Fairchild.)

12243. **Pistacia vera.**
From northern Syria. Received thru Mr. W. T. Swingle at the Plant Introduction Garden, Chico, Cal., October 6, 1904.

"These seeds were grown from trees grafted on *P. mutica* and were obtained from a Mr. Nazar, whose people graft the pistache on this species in the dry country near the Euphrates River." (Swingle.)

12244 to 12302.
A collection of bulbs secured for experimental work in the Department bulb garden.

12244 to 12265.
From Hillegom, Haarlem, Holland. Received thru Vander Schoot & Son, October, 1903.

12266 to 12276.

12277 to 12279.
From Clearbrook, Wash. Received thru Mr. George Gibbs, November, 1904.

12280 to 12298.
From Guernsey, England. Received from Hubert & Co., September, 1904. Purchased thru Mr. Nicholas Le Page, Mount Vernon, N. Y.

12299 to 12302.
From Ettrick, Va. Received thru Pont Brothers, October, 1904.

12303. **Avena sativa.**
From Brookings, S. Dak. Received thru Mr. H. I. Stearns, December 8, 1904. 

12304. **Sechium edule.**
From New Orleans, La. Presented by the J. Steckler Seed Company. Received November 23, 1904.

12305. **Mangifera indica.**
From West Palm Beach, Fla. Received thru Mr. John B. Beach, December 9, 1904. 
*Malgoba.*
12306. *Gossypium* sp.  
**Cotton.**

From the Philippine Islands. Presented by Dr. B. D. Halsted, Agricultural Experiment Station, New Brunswick, N. J. Received December 6, 1904.

*Kâki.* These seeds were collected by Mr. A. Ellicott Brown, of the Marine Corps, and sent to Doctor Halsted.

12307 to 12357. *Salix* spp.  
**Willow.**

From Ottawa, Canada. Presented by Dr. William Saunders, director of the Central Experimental Farm. Received December 14, 1902.

A collection of species and varieties of willow growing in the arboretum of the Central Experimental Farm at Ottawa. The nomenclature given is that recognized by the Experimental Farm.

12307. *Salix caesia pendula* Zabeli.
12308. *Salix nigricans prunifolia.*
12309. *Salix daphnoides pomeraniana femina.*
12311. *Salix purpurea scharfenbergensis.*
12312. *Salix casandra lanciafolia.*
12313. *Salix fragilis baspodiana.*
12314. *Salix rubra forbyana.*
12315. *Salix argentea aurita.*
12316. *Salix nigricans moabitica.*
12317. *Salix bataviae.*
12318. *Salix alba britzensis.*
12319. *Salix nigricans cotinifolia.*
12320. *Salix alba vitellina.*
12321. *Salix daphnoides femina.*
12322. *Salix petiolaris.*
12323. *Salix seringeana.*
12324. *Salix alba vitellina.*
12325. *Salix erdingeri.*
12326. *Salix nigricans ansoniana.*
12327. *Salix purpurea urabensis.*
12328. *Salix undulata.*
12329. *Salix viminalis.*
12330. *Salix daphnoides mascula.*
12358. **Nicotiana sanderae.** *Flowering tobacco.*
From New York, N. Y. Received thru J. M. Thorburn & Co., December 14, 1904.

*Carmine-flowered.* "This variety is the result of crossing the dwarf purple-flowered *N. forgetiana*, from Brazil, with *N. affinis*, the well-known, fragrant white-flowered garden annual." (Sander & Sons.)

12359. **Lathyrus odoratus.** *Sweet pea.*

12360. **Afzelia quanzensis.**
From Cape Town, Cape Colony, Africa. Received thru Dr. Peter MacOwan, government botanist, November 28, 1904.

12361. **Lathyrus sylvestris.** *Flat pea.*
From New York, N. Y. Received thru J. M. Thorburn & Co., November 21, 1904.

12362 and 12363. From Bangkok, Siam. Presented by His Excellency Phya Akharaj Varadhara, the Siamese minister, to Dr. B. T. Galloway. Received December 2, 1904.

12362. **Krawaw.** *(No name given.)*
12363.

12364. **Lilium giganteum.** *Lily.*
From New York, N. Y. Received thru Henry & Lee, December 13, 1904.

12365. **Panicum maximum.** *Guinea grass.*
From Mayaguez, P. R. Received thru the Agricultural Experiment Station, December 21, 1904.

12366. **Sechium edule.** *Chayote.*
From New Orleans, La. Received thru the J. Steckler Seed Company, December 16, 1904.

12367. **Dahlia sp.** *Dahlia.*
From "La Trinidad," Guerrero, Mexico. Received thru Mr. Federico Chisolm, December 13, 1904.

12368. **Gladiolus gandavensis.** *Gladiolus.*

12369. **Pachyrhizus sp.**
From Santa Maria del Rio, Mexico. Received thru Dr. Edward Palmer, December 21, 1904.

"There are two forms of this Pachyrhizus, one called *Agua* (water) and the other *Leche* (milk). These two forms have been long recognized, but not as separate species. At Santa Maria del Rio I saw several fields of this plant cultivated on ridges so that the plants might be irrigated. I was informed that both forms were grown in the same patch and could not be distinguished either by their foliage or flowers, and that
it was only by tasting the roots themselves that the difference could be detected. Both varieties are considered equally valuable. They are eaten raw, especially by travelers on long tours thru the drier portions of the country, as their watery character makes them valuable for quenching one's thirst. They are also considered nutritious and are said to make good pickles. It is possible that they may also be cooked as turnips are and could be cultivated in regions where the turnip will not thrive." (Palmer.)

12370. Iris sp.
   From Fairfield, Wash. Collected by Mr. A. J. Pieters, August 21, 1904.

12371 to 12393. Abyssinian seeds.
   From Abyssinia, Africa. Received thru Hon. Robert P. Skinner, commissioner of the United States to Abyssinia, December 15, 1904.

A collection of seeds made for Mr. Skinner under his direction by Mr. Eugène Carette Bouvet. This collection is supplementary to the collection received June 3, 1904, Nos. 11039 to 11119, from the same source. The names given are transcribed from those written upon the original packages.

12371. ANDROPOGON SORGHUM.  Sorghum.
12372. ANDROPOGON SORGHUM.  Sorghum.
12373. ANDROPOGON SORGHUM.  Sorghum.
12374. ANDROPOGON SORGHUM.  Sorghum.
12377. Triticum sp.  Wheat.
12378. ERAGROSTIS ABBYSSINICA.  Teff.
12380. Coffea sp.  Wild coffee.
12381. Coffea sp.  Harrar coffee.
12382. Coffea sp.  Cultivated coffee.
12383. ZEA MAYS.  Corn.
12384. ZEA MAYS.  Corn.
12385. ERAGROSTIS ABBYSSINICA.  Teff.
12386. ERAGROSTIS ABBYSSINICA.  Teff.
12387. SESAMUM INDICUM.  Sesame.
12391. Linum sp.  Chick-pea.

   From New York, N. Y. Received thru Mr. Albert Bohm, Wool Exchange Building, West Broadway and Beach streets, December 21, 1904.
   Said by Mr. Bohm to be more subject to outside influences than ordinary seed.

12395. Physalis sp.  Ground cherry.
   From Columbus, Ohio. Received thru the Livingston Seed Company, December 23, 1904.
   Ordered for Mr. Burbank's experiments.
88 SEEDS AND PLANTS IMPORTED.

12396. Physalis sp. Purple ground cherry.
From Columbus, Ohio. Received thru the Livingston Seed Company, December 24, 1904.

From Naples, Italy. Received thru Mr. Max Herb, successor to Herb & Wulle, 24-30 via Trivio, December 24, 1904.

Zinnia elegans, pl. pl. crispa, extra; described in volume 19 of Möller's Deutsche Gärtners-Zeitung, p. 475.

From Fort Collins, Colo. Received thru Mr. Peter Anderson, December 28, 1904.

12399 and 12400. Glycine hispida. Soy bean.
From Amherst, Mass. Received thru the Hatch Experiment Station, December 28, 1904.


12401. Ipomoea sp. A pink-flowered Ipomoea grown from seed secured by Professor Rolfs in Cuba or Jamaica.
From Miami, Fla. Received thru Prof. P. H. Rolfs, Subtropical Laboratory, December 23, 1904.

12402 and 12403. Opuntia ficus-indica gymnocarpa. Tuna.
From Nice, France. Received thru Dr. A. Robertson-Proschowsky, December 27, 1904.

"In a letter of December 12, Doctor Proschowsky remarks: 'The young joints of this species have small spines, but these fall off in the second year. As regards the fruits, it is three years that they have been produced in my garden, and they have always been absolutely spineless without any of those almost microscopic spicules which are the great objection to the fruits of Opuntia in general.' The present year only three fruits were developed, and the seeds sent, No. 12403, are from one of those fruits. As this small number of seeds represents the total number contained in the fruit it is evident that the variety, in addition to bearing spineless fruits, bears fruits with comparatively few seeds in them. Doctor Proschowsky further remarks that this Opuntia is the largest, quickest growing, and most picturesque of all of the Opuntias which he has ever seen." (Fairchild.)

12404. Cereus validus.
From Nice, France. Received thru Dr. A. Robertson-Proschowsky, December 27, 1904.

"A tall, picturesque plant, which produces fruit the size of a goose egg and of a beautiful magenta color. These fruits are absolutely without spicules and of very good taste. Doctor Proschowsky remarks that he knows of no other fruit which is so 'melting,' and it resembles much the 'snows' sold in Latin-American countries, consisting of real snow mixed with some fruit juice or sugar." (Fairchild.)

12405 to 12407.
From New York, N. Y. Received thru J. M. Thorburn & Co., December 28, 1904.

A forage grass of poor quality, but capable of growing well on dry soil.
DECEMBER, 1903, TO DECEMBER, 1905.

12405 to 12407—Continued.

   An annual plant of especial value on dry, sandy land.

   An annual legume for growing on dry, sandy land.

12408. Ulex europaeus. Gorse, whin, or furze.

   From Dublin, Ireland. Received thru Hogg & Robertson, December 29, 1904.
   "The cultivation of this plant is suited only to waste lands which are unfit for
   more profitable cultures. In portions of northern France, the Netherlands, England,
   and Ireland the plant is utilized successfully as fodder, being cut and passed
   thru a special shredding machine, which reduces the spines to a harmless pulp.
   In the Madeira Islands, J. B. Blandy informed me that it was very keenly relished
   by cattle and furnished an excellent fodder for milk-producing purposes. The plant,
   altho not a tender species, will probably not be hardy in the Northwest, but should
   be tried in regions with a climate similar to that of England and Ireland, on rocky,
   barren hillsides where other plants will not thrive."


   From Ogden, Utah. Received thru the C. A. Smurthwaite Produce Company,
   December 30, 1904.
   This seed was grown on the ranch of Mr. E. M. Brimall, Diamond Fork, Spanish
   Fork Canyon, Utah County, Utah, on land without irrigation, above water line in
   section 1, township 9 south, range 4 east. This land has grown alfalfa seed for
   nineteen years in succession, and this seed is from the nineteenth crop.

12410 to 12448.

Drug and medicinal seeds and plants ordered for the cooperative work conducted
by Dr. R. H. True, of this Department.

12410 to 12422.

   From Paris, France. Received thru Vilmorin-Andrieux & Co., 4 Quai de la Mégisserie, December 29, 1904.

12413. Lavandula vera. 12419. Satureja hortensis.

12423. Sage.

   Broad-leaved.

12424 and 12425. Echinacea angustifolia.

   From Manhattan, Kans. Received thru Mr. H. W. Baker, November 28, 1904.

SEEDS AND PLANTS IMPORTED.

12410 to 12448—Continued.

12426 to 12441.
From Erfurt, Germany. Received thru Haage & Schmidt, December 24, 1904.

12430. Lavandula vera. 12438. Rosmarinus officinalis.
12431. Carum ajowan. 12439. Satureja hortensis.

12442. Cassia angustifolia. Senna.
From Corpus Christi, Tex. Received thru Mr. H. H. Fisher, October 31, 1904.

12443 to 12446. Panax ginseng. Ginseng.
From Cuba, N. Y. Received thru Bates Ginseng Gardens, October 31, 1904.


12447. Monarda fistulosa. Wild bergamot.
From Rochester, Mich. Received thru Mr. Wilfred A. Brotherton, November 14, 1904.

From La Crosse, Wis. Received thru Dr. E. C. Swarthout, October 28, 1904.

From Guadalajara, Mexico. Received thru Mr. Federico Chisolm, December 27, 1904.

Seeds collected near Ixtlahuacan del Rio, Jalisco, Mexico, northwest from Guadalajara.


From Yokohama, Japan. Received thru the Yokohama Nursery Company, December 29, 1904.
(Described in detail in Bulletin No. 42 of the Bureau of Plant Industry.)

From Yokohama, Japan. Received thru the Yokohama Nursery Company, December 29, 1904.
(For description, see Bulletin No. 42 of the Bureau of Plant Industry.)
12453 to 12547. **Oryza sativa.**

"Samples of rice received in answer to requests made of the various persons furnishing same, for testing in connection with the efforts now being made for the purpose of finding a variety resistant to the disease known as rotten-neck, threatening the rice-growing industry in the Carolinas." (Fairchild.)

**Rice.**

12453 to 12463. Rice.

Samples of unhulled rice as follows:

12453. **Piemontese rice, Novarese.** One of the most valued for its yield and its quality. It is, however, grown in Lombardy on soil only which has carried a rice crop the previous season, as on fresh land it easily takes the disease called "brusone."

12454. **Piemontese rice, Bertone.** Usually grown on fresh land, is resistant to the "brusone," and the hulled rice is inferior to the Novarese.

12455. **Piemontese rice, Javanese.** Thrives on all kinds of land. It is pretty resistant to "brusone," but is very late, lacks quality and sheds its seeds too easily when being cut.

12456. **Piemontese rice, nostrano.** Takes too easily the disease "brusone," and is consequently little grown in Lombardy. It is somewhat used in the perpetual rice fields of the Po Valley, where it seems to be more resistant.

12457. **Piemontese rice, leoncino.** Very productive Japanese rice, of good quality, with a golden spike. Recommended for wet, compact, rich land.

12458. **Piemontese rice, fruncone.**

12461. **Egyptian rice, yamani.**

12459. **Egyptian rice, fino.**

12462. **Dry Mountain rice.**

12460. **Egyptian rice, satanic.**

12463. **Dry rice from Manchuria.**

12464 to 12478. Rice.

From Colombo, Ceylon. Presented by Dr. C. Drieberg, superintendent of School Gardens. Received October 21 and 24, 1904.

12464. **Kurusura paddy.** White grain in black husk. From Kegalle district.

12465. **Muttusamba paddy.** Superior variety for table use. From Kegalle district.

12466. **Kaiwusamba paddy.** From Kegalle district.

12467. **Kirinaran paddy.** From Bentota district.

12468. **Sudave paddy.** From Bentota district.

12469. **Val-tatu-hel paddy.** From high elevation, Uva Province.

12470. **Mudu-kiir-hel paddy.** From high elevation, Uva Province.

12471. **Ceylon Carolina paddy.** From Hanwella, 30 miles inland from Colombo.

12472. **Ceylon Carolina paddy.** From Mount Lavinia, 7 miles south of Colombo.


12474. **Ingresse we.** From Elakake, 4 miles inland from Bentatte, about halfway from Colombo to Galle.

12475. **Kuru-vi paddy.** From Madampe, Northwestern Province.
12453 to 12547—Continued.

12464 to 12478—Continued.


12477. *Puluk-kamban* paddy. From Kegalle district.

12478. *Rot-kei* paddy. Up-country grain, inclined to be white, the husk is rather dark.

12479 to 12488. Rice.
From Singapore, Straits Settlements. Presented by Mr. K. Derry, assistant superintendent of the Botanical Gardens. Received November 9, 1904.

12479. *Arong* paddy. Used for making flour, and when cooked is hard and white. Always used by the natives.

Mr. Derry uses the term “paddy” to signify wet-land rice, and the term “pulot” to indicate dry-land rice.

12480. *Krencho* (or *Kroncho*) paddy. Used same as 12479; price same also.

12481. *Cheenara-patri* paddy. Used same as 12479; price same also.

12482. *Seri-bumi* paddy. First-class flour for making cakes; pure white when cooked.

12483. *Sroopce* paddy. First-class flour for cakes and for the natives.

12484. *Radin* paddy. Used for rice by the natives.

12485. *Banga-melang* pulot. Used for making cakes of any kind, but when cooked is hard and white.

12486. *Srong-ulor* pulot. Use and price same as 12485.

12487. *Mevah* pulot (or paddy). Use and price same as 12485.


12489 to 12512. Rice.
From Georgetown, Demerara, British Guiana. Presented by Mr. B. Howell Jones. Received in August, 1904.

12489. Rice of the kind usually grown in British Guiana.

12490 to 12511.
Samples experimentally grown at the Georgetown Botanical Gardens from imported Ceylon rice. They are distinguished by number only. Nos. 12490 to 12503 are “Ordinary rice.” Nos. 12504 to 12511 are what are known as “Hill rice.”

12512. From the Berbice River district.

12513 to 12515. Rice.
From Bulkeley, Ramleh, Egypt. Presented by Hon. Lionel Sandars. Received during the summer of 1904.

12513. *Yaban* (or *Yapani*) paddy. From Daira Draucht Pasha, Kafr-el-Dawar.

12514. *Sooltani* (or *Soltani*) paddy. Same source as 12513.

12515. *Sabaini* (or *Sabaian*) paddy. Same source as 12513.

12516 to 12518. Rice.
From Siam. Presented by the Arracan Company, of Bangkok, thru Dr. T. Heywood Hays, of that place. Received October 21, 1904.

12516. *Naichonchisee* paddy. Usually considered the finest quality in Bangkok.

12517. *Sakakeung* paddy. Good quality; long grain.

DECEMBER, 1903, TO DECEMBER, 1905.

12453 to 12547—Continued.

12519 to 12520. Rice.
From Italy. Presented by Messrs. Dannmann & Co., San Giovanni a Teduccio, near Naples. Received October 3, 1904.
12519. Italian. No special name given.
12520. Italian. No special name given; probably the same kind as 12519.

12521. Thesaly. Rice.
From Greece. Presented by Mr. S. Xanthopoulo, Station Agricole, Patras. Received in August, 1904.

12522. From Brazil. Presented by Consul Louis H. Aymé, Pará. Received in August, 1904.

12523 and 12524. Rice.
From German East Africa. Presented by Mr. Udo von Katte, Plantage Kigome, Bezirk Tanga. Received October 5, 1904.

12525 to 12547. Rice.
From Java. Presented by Mr. Charles A. Franc, Soerabaya, Java, Dutch East Indies. Received November 17, 1904.

12548. CRATAEGUS sp. (?)
From City of Mexico, Mexico. Received from Mr. G. Clark, thru Mr. G. Onderdonk, of Nursery, Tex., December 31, 1904.

This species of Crataegus is used in different parts of Mexico as a stock upon which the European and American type of pears are grafted. In a letter of May 30, 1904, Mr. Onderdonk describes the use of this stock as follows: "While there is to be found an occasional young tijocate growing in a cultivated lot with intention of being made a stock for pears by grafting where it stands, yet no nurseries of it exist. It grows wild in the most forbidding situations. The earliest fruits begin to ripen about the last of July, while the largest number mature about October or November. I saw many fine old pear trees in different parts of Mexico on tijocate stock, and for the European and American type of pears there can be no better stock than tijocate."

12549. MEDICAGO SATIVA. Alfalfa.
From Buenos Aires, Argentina. Received thru Mr. Ronaldo Tidblom, August 12, 1905.

12550. POA PRATENSIS. Kentucky bluegrass.
From Winchester, Ky. Received thru Mr. D. S. Gay, December 2, 1904.

12551. (Undetermined.)
From Central Africa. Presented by Mrs. Anita N. McGee, 1620 P street, Washington, D. C. Received thru Mr. David Fairchild, December 31, 1904.

A single plant, said to be the first of its kind ever brought to America and to belong to the order Scitamineae. The plant was introduced by Mr. Vernon, who brought the Pigmies to the Louisiana Purchase Exposition. (Fairchild.)

From Niles, Cal. Received thru the California Nursery Company, January 4, 1905.

Jordan. "These trees are from stock introduced by Mr. John Rock, seed of which was submitted to the United States consul in Malaga, and pronounced the true Jordan type. They are not from trees of stocks introduced by this Department." (Fairchild.)

12553 to 12556. Terminalia sp. Myrobalan.

From New York, N. Y. Received thru A. Klipstein & Co., 122 Pearl street, July 11 and August 1, 1904.


"The fruits of the myrobalan contain one of the best tanning substances in the world. Large quantities of myrobalans are exported from India to England, and it is believed that the cultivation of these trees, of which there are evidently several species, may be a lucrative one in parts of California. The tree is known to be a drought-resistant species and suited to extremely hot climates. Some of the species are trees and, consequently, may withstand the slight cold to which they will be subjected in California." (Fairchild.)

12557 and 12558. Zea Mays. Sweet corn.

Selected seed corn for use in a series of experiments to determine the effect of soil, location, etc., on standard varieties of sweet corn, the idea being to distribute this seed to reliable parties in different localities, and to secure from them samples of the product for examination and further distribution.

12557. Received from Mr. A. N. Clark, Milford, Conn., March 25, 1904. Stowe's Evergreen.
12558. Received from Mr. A. N. Clark, Milford, Conn., March 25, 1904. Early Crosby.

12559 to 12561. Zea Mays. Sweet corn.

From Falls Church, Va. Received thru Mr. Upton Galligher, March 25, 1904.
12560. Malakof. Selected ears.
12561. Malakof. Grown in 1903 from S. P. I. No. 9356


From Auburn, N. Y. Received thru Mr. G. W. Boynton, May 6, 1904.
Malakof. Seed from selected amber ears, probably from same lot as S. P. I. No. 10401.


From Garrettsville, Ohio. Received thru Mr. George J. Streator, May 6, 1904.
Malakof. Seed from selected ears.

12564. Dahlia sp. Dahlia.

From Guadalajara, Mexico. Received thru Mr. Federico Chisolm, December 30, 1904.

12565. Lilium sp. Lily.

From Guadalajara, Mexico. Received thru Mr. Federico Chisolm, January 4, 1905.
12566 to 12576.
From Tunis, North Africa. Secured by Mr. Thomas H. Kearney during his exploration of Tunis. Received January 4, 1905.

A collection of economic plants as follows:

12566 to 12568. *Punica granatum.* Pomegranate.
From the premises of M. Robert, Kalaâ Srita, Susa.

12566. Red fruited.
12567. Chelfi, White fruited.
12568. White-fruited variety from Gabes.

"These pomegranates are the best sorts grown in Tunis. The first two seem to be peculiar to Susa." (Kearney.)

12569 to 12573. *Olea europaea.* Olive.
From the premises of M. Robert, Kalaâ Srita, Susa.

12569. Baroumi (fruit mucronate).
12570. Baroumi (fruit not mucronate).

"This is the largest olive in the country, and M. Robert’s is about the only place where it can be secured." (Kearney.)

12571. Zarazi (?).

"This is a medium-sized olive and is the most-generally planted preserving olive in the country, being common even to the oases of the Jerid. It is probably a hardy sort, and one easily adapted to a variety of conditions. As soon as I see M. Minangoin I shall find out definitely if it is actually the Zarazi that I have obtained." (Kearney.)

12572. Bidh Hammam.

This is one of the largest olives of Tunis.

12573. Chemlali. From Sfax, Tunis.

"It is doubtful if this is a desirable sort, as the oil produced from it is said to contain too much margarin." (Kearney.)

12574 to 12576. *Mesembryanthemum* spp.
From Sfax, Tunis.

12574. With yellow flowers.
12575. With rose-colored flowers.
12576. With rose-violet flowers.

"The first two kinds are used here as border plants, and also for holding banks at roadsides, while the last is made use of in the Jardin Public as a lawn plant. These grow well in this dry soil without attention after the first two weeks after planting." (Kearney.)

From New York, N. Y. Received thru J. M. Thorburn & Co., January 5, 1905.

12578 to 12668. *Solanum tuberosum.* Potato.
From Europe. Secured by Prof. L. R. Jones, of the University of Vermont, during a trip thru the potato-growing regions of Europe in 1904. Notes by Professor Jones.

12578 to 12596. From Berlin, Germany. Received thru the Potato Culture Station, December 14, 1904.


Recommended by Professor Eckenbrecher and independently by his foreman, Mr. Goese, as showing a high degree of disease resistance and being a good general-purpose potato.
12578 to 12668—Continued.
12578 to 12596—Continued.

12579.

**Sophie.** (L. R. Jones's No. 2.) Originated by Cimbal. White skin, yellowish-white flesh. (See description in Berichte Deutsch. Kart.-Kult.-Stat., 1903, pp. 37 and 53.)
Recommended by Professor Eckenbrecher as one of the most productive of table varieties. Fairly resistant to disease; suited to various soils.

12580.

**Dahersche.** (L. R. Jones's No. 3.) Originator unknown. Skin pale red, flesh white-yellowish. (For further notes, see any of reports of Deutsch. Kart.-Kult.-Stat., e. g., 1903, pp. 34 and 53.)
This was ordered because it is the standard table variety in the trials of the German station. It is one of the most widely cultivated food potatoes in Germany; an old variety. Professor Eckenbrecher reports it as most liable to scab and liable to rot.
Sorauer says that it is suited to sandy soils. Foreman Goese says it is not suitable for heavy soils. Doctor Appel finds it one of the most resistant to "Schwarzeblkeit."

12581.

**Richter's Imperator.** (L. R. Jones's No. 4.) Originated by Richter. Skin white, flesh white. (For description, see any report of the Deutsch. Kart.-Kult.-Stat., e. g., 1903, pp. 35 and 52.)
Chosen for two reasons: (1) It is one of the most uniformly resistant to scab of the varieties reported upon by Professor Eckenbrecher for a long series of years. (2) It is taken at this German station as the typical heavy yielding factory potato. It is also a fair table variety. Not especially resistant to disease except scab; suited to all except wetter soils.

12582.

**Magnum Bonus.** (L. R. Jones's No. 5.) Originated by Sutton. Skin white, flesh white; a medium late variety which is a standard table potato of north central Europe. (See further description in Berichte Deutsch. Kart.-Kult.-Stat., 1903, pp. 43 and 53.)
Prunet, Frank, Sorauer, and others report this to be the most resistant to Phytophthora of any variety. Suted to all soils, according to Foreman Goese.

12583.

**Irene.** (L. R. Jones's No. 6.) Originated by Paulsen. Skin red, flesh white. (See further description in Berichte Deutsch. Kart.-Kult.-Stat., 1903, pp. 39 and 43.)
A medium late variety which has been found in the trials of this station second only to Mohort in resistance to diseases (rots, etc.). It is also very resistant to scab. According to Foreman Goese, suited to good soils but not to light sands.

12584.

**Professor Maerker.** (L. R. Jones's No. 7.) Originated by Richter. Flesh white. (See further description in Berichte Deutsch. Kart.-Kult.-Stat., 1897, p. 29; 1903, pp. 42 and 52.) This is a medium late variety, exceedingly productive, and a favorite sort in Germany for factory purposes, as well as a good table variety. It has shown good scab resistance, and was recommended by Foreman Goese and Professor Eckenbrecher for general disease resistance. Foreman Goese says that it is suited to all soils.

12585.

**Silesia.** (L. R. Jones's No. 8.) Originated by Cimbal. Flesh and skin white. (See further description in Berichte Deutsch. Kart.-Kult.-Stat., 1899, p. 52; 1903, p. 42.)
A very late variety. Very heavy yielder and high percentage of starch, therefore one of the highest in total starch product. Only fairly resistant to disease, but included upon recommendation of Professor Eckenbrecher. Foreman Goese says that it is suited to all soils.

12586.
Max Euth. (L. R. Jones's No. 9.) Originated by Cimbal. This is a late potato, of good quality and starch content, described in the Berichte Deutsch. Kart.-Kult.-Stat.

Ordered because Foreman Goese stated that he considered this the most resistant variety toward Phytophthora, and added that it is suited to all soils.

12587.
Moholt. (L. R. Jones's No. 10.) Originated by Dolkowski. White skin, white flesh. (See further description in Berichte Deutsch. Kart.-Kult.-Stat., 1903, pp. 37 and 42.)

Selected because reported (1903, etc.) as the most highly resistant to diseases (rot, etc.) of any variety tested; also fairly resistant to scab. Excellent table variety; high yielder; high starch content. Foreman Goese says that it is suited to all soils.

12588.
Gustold. (L. R. Jones's No. 11.) Originated by Dolkowski. White skin, white flesh, middle late. (See further description in Berichte Deutsch. Kart.-Kult.-Stat., 1903, pp. 35 and 42.)

Selected because next to President Krüger this appears to be the most productive variety they have. Fair degree of general disease resistance. Esteemed alike for table and factory. Foreman Goese says that it is suited to all soils.

12589.
President Krüger. (L. R. Jones's No. 12.) Originated by Cimbal. White skin, white flesh, late variety. (See further description in Berichte Deutsch. Kart.-Kult.-Stat., 1903, pp. 35, 42, and 52.)

Selected because it has proved to be an enormous yielder, leading all varieties in most trials. It is of rather low starch content and recommended only for factory purposes. Foreman Goese says that it is suited to all good soils.

12590.
Professor Wohltmann. (L. R. Jones's No. 13.) Originated by Cimbal. Skin red, flesh white. (See further description in Berichte Deutsch. Kart.-Kult.-Stat., 1900, p. 35; 1903, pp. 43 and 52.) Late variety.

Selected because reported as highly resistant to scab. Large yielder and high starch content. Esteemed both for factory and table purposes. Foreman Goese says it needs a good, rich soil.

12591.

According to reports a good disease-resistant sort, good yielder, rich in starch, suitable for table and factory use.

Selected because Doctor Appel observed in 1902 that this showed the highest degree of resistance to Phytophthora of any variety in his fields. (See his article, "Die diesjährige Phytophthora-Epidemie," Deutsche Landw. Presse, XXIX, 685.) Foreman Goese says that it is suited to all soils.

12592.
Bonca. (L. R. Jones's No. 16.) Originated by Dolkowski. Skin red, flesh white, medium late. (See further description in Berichte Deutsch. Kart.-Kult.-Stat., 1901, p. 30; 1903, p. 42.)
This is not a very large yielder, but is very rich in starch (excelled all others in 1901); a very good table variety. According to 1901 reports it is most highly resistant to disease (rots, etc.) and also resistant to scab. Selected because of this. Mr. Goese says that it is suited to all soils.

**12593.**

*Leo.* (L. R. Jones's No. 17.) Originated by Pfügl. Skin white, flesh white, medium late. (See further description in Berichte Deutsch. Kart.-Kult.-Stat., 1902, p. 35; 1903, pp. 42 and 52.)

This is not especially disease resistant, but was included upon recommendation of Professor Eckenbrecher, since it is one of the heaviest yielding varieties of high starch content and therefore very high total starch product on the average.

Medium late. Especially a factory variety, but also a good table potato. Mr. Goese says that it is similar to Richter's *Imperator,* and suited to all except moist soils.

**12594.**

*Ford Bismarck.* (L. R. Jones's No. 18.) Originated by Cimbal. Skin red, flesh white, late. (See further description in Berichte Deutsch. Kart.-Kult.-Stat., 1901, p. 37; 1903, p. 43.)

Exceedingly rich in starch and fair yielder. Recommended both for factory and table use. Professor Eckenbrecher has found this especially free from rot (Berichte, 1899), and it is included upon his recommendation for disease resistance. Mr. Goese says that it is suited for all good soils, but not for sand.

**12595.**

*Apollo.* (L. R. Jones's No. 19.) Originated by Paulsen. Skin white, white-yellowish. (See further description in Berichte Deutsch. Kart.-Kult.-Stat., 1901; also 1903, pp. 36 and 53.)

Highly productive for starch content; recommended first for factory use, but also as a table variety. Here included upon the personal recommendation of Professor Eckenbrecher, who has found, during three years' trials, that it is highly resistant to disease (rots, etc.) and fairly resistant to scab. Mr. Goese says that it is suited to all soils.

**12596.**

*Gelbgefiischige Speis Kartoffel.* (L. R. Jones's No. 20.) Originated by Cimbal. Skin white, flesh yellowish, rather late ripening. (See further description in Berichte Deutsch. Kart.-Kult.-Stat., 1903, pp. 40 and 53.)

This is a medium yielder, not recommended at all for factory purposes but as an excellent yellow-fleshed table potato. Included for this reason. It is reputed as rather susceptible to diseases. Mr. Goese says that it is suited to all soils.

**12597 to 12601.**

From Groningen, Holland. Received thru Mr. U. J. Mansholt, rijksbouwleeraar, November 30, 1904.

**12597.**

*Eigenheimer.* (L. R. Jones's No. 31.) Recommended by Mr. Mansholt as an early yellow-fleshed variety, good for table use, and resistant to Phytophthora.

**12598.**

*Landsbloom.* (L. R. Jones's No. 32.) Recommended by Mr. Mansholt as a middle early white-fleshed potato, good for table use, and resistant to Phytophthora.

**12599.**

*Ferd.* (L. R. Jones's No. 33.) Recommended by Mr. Mansholt as a middle early variety for factory rather than table use, and resistant to Phytophthora.
DECEMBER, 1903, TO DECEMBER, 1905.

12578 to 12668—Continued.
12597 to 12601—Continued.

12600.
Malador. (L. R. Jones's No. 34.) Recommended by Mr. Mansholt as a late, yellow-fleshed, good table variety, and resistant to Phytophthora.

12601.
Daisy. (L. R. Jones's No. 35.) Recommended by Mr. Mansholt as a late factory variety and resistant to Phytophthora.

12602 to 12607.
From Paris, France. Received thru Vilmorin-Andrieux & Co., September 22, 1904.

12602.
Belle de Fontenay. (L. R. Jones's No. 36.) Recommended by Vilmorin-Andrieux & Co. as a very early variety of high vigor and productiveness. Tubers oblong, skin and flesh yellow. Esteemed one of the best early potatoes; the standard in the Paris market. Stands shipment well and esteemed for "French fried" potatoes; prefers a fairly moist soil in France; recommended especially for trial in the South.

12603.
Brendale. (L. R. Jones's No. 37.) Recommended by Vilmorin-Andrieux & Co. as a very early variety with oblong tubers, yellow skin and yellow flesh, and worthy of trial in Florida.

12604.
Early Rose. (L. R. Jones's No. 38.) This is very extensively grown as an early potato in France, and is the only white-fleshed early potato Vilmorin-Andrieux & Co. could recommend. They consider it of high vigor and productiveness.

12605.
Clare (Shaw). (L. R. Jones's No. 39.) This is a standard French variety, round tubers, yellow flesh, and yellow skin. Recommended by Vilmorin-Andrieux & Co. as of high vigor and productiveness and worthy of trial in our Southern States.

Doctor Delacroix considers this the most resistant of the French varieties to Phytophthora and similar in this respect to Magna Bonum among the English varieties.

12606.
Belle de Juillet. (L. R. Jones's No. 40.) Second early. Oblong tubers, skin and flesh yellow. Recommended for trial, especially in the South, by Vilmorin-Andrieux & Co. as an especially vigorous and productive variety. "I found what I take to be the same variety to be the favorite potato grown at Florence (Experiment Farm), for the northern export and trade. It is also grown and highly esteemed in Germany." (Jones.)

12607.
Quatorzaine de la Hallle. (L. R. Jones's No. 42.) This was described as a medium-early variety of high vigor and productiveness, recommended for trial culture in Florida, etc. Oblong tubers, skin and flesh yellow.

12608 to 12613.
From Reading, England. Received thru Sutton & Sons, December 31, 1904.

12608.
May Queen. (L. R. Jones's No. 51.) Sutton's origination. Very early; kidney shape, shallow eyes, yellow skin, a very handsome potato,
and reputed as of high quality and fair yield for so early a variety. Recommended by Sutton and various others as worthy of trial in Florida. Mr. Scarlett advises to plant whole tubers and rather close together, as tops are small.

12609.

**Nyetyield.** (L. R. Jones's No. 52.) Originated by Sutton. "First early;" white skin and flesh. Good kidney shape but not quite so uniform and handsome as *May Queen*, and eyes somewhat deeper. Rated a better cropper. A good authority states "one of heaviest croppers among the first earliest; therefore profitable to grow, although quality is not of best." Opinions differ as to disease resistance. Various persons recommend this for trial in Florida, etc.

12610.

**Epicure.** (L. R. Jones's No. 53.) Originated by Sutton. A "second early" variety; bronzy red skin; flesh white; recommended highly by Sutton, but this is not indorsed by all others consulted. Secured especially for trials in South.

12611.

**Supreme.** (L. R. Jones's No. 54.) Originated by Sutton & Sons. A "second early," but a little earlier than *Epicure*. White. This makes a small top and is not altogether promising. It was, however, recommended by the Suttons for trial, especially in the South. It seemed comparatively free from "Schwarzeinigkeit," as seen at Cambridge, England.

12612.

**Windsor Castle.** (L. R. Jones's No. 55.) A "second early" variety; yellow skin, white flesh, roundish, recommended by the Suttons as highest quality for table. It was also indorsed by others as worthy of trial, especially in the South.

12613.

**Discovery.** (L. R. Jones's No. 56.) This is one of Sutton's latest originations. It is medium late, yellow skin, white flesh, kidney shape, excellent quality and strong yieider. Sutton's people rate it as their greatest production, and the opinion of unbiased potato experts so far as consulted is that this is the most promising disease-resistant potato in England to-day.

12614 to 12619.

From Edinburgh, Scotland. Received thru Mr. T. A. Scarlett, December 31, 1904.

12614.

**Sir John Llewellyn.** (L. R. Jones's No. 57.) This is recommended most highly of all early potatoes in England.

Recently introduced by Harris, Wales; season is "first early;" white skin, white flesh, flattish-oval kidney shape, fine appearance and strong yieider. Said to have a tendency to develop sports. This is noteworthy, since it may prove more promising for selection of disease-resistant plants.

12615.

**King Edward VII.** (L. R. Jones's No. 58.) This is one of recently originated varieties. Sent out by Butler. Late second early. Pink skin, flesh white, said to yellow somewhat when cooked. Said to be productive but not of highest quality. Ordered on recommendation of W. P. Wright, secretary of the National Potato Society. Most other opinions given were adverse to its value as a disease resister.
DECEMBER, 1903, TO DECEMBER, 1905.

12578 to 12668—Continued.

12614 to 12619—Continued.

12616.

_Cranond Blossom._ (L. R. Jones's No. 59.) Of recent origin in the Scotch village of Cranond. Season, "late second early." Oval. Recommended for our trials as a disease-resistant variety by W. P. Wright, secretary of the National Potato Society, but this opinion was not concurred in by several others. Mr. Scarlett finds it liable to disease; so also do the Suttons and Middleton.

12617.

_Charles Fidler._ (L. R. Jones's No. 60.) Recent origin, sent out by Fidler. This is a late potato, white, said by Mr. Lasham to be practically the same as the German variety _Imperator_, if not identical with that sort. Recommended as worthy of trial for disease resistance both by Mr. W. P. Wright, secretary of the National Potato Society and by men at the Cambridge University farm.

12618.

_Factor._ (L. R. Jones's No. 61.) This is one of the newer varieties sent out by Dobbie. It is late; very well spoken of by all. Closely resembles the popular standard _Up-to-Date_, but said to be of slightly better quality. Recommended for our trial by W. P. Wright, secretary of the National Potato Society; also by men at the Cambridge University farm, etc.

12619.

_Duke of York._ (L. R. Jones's No. 62.) This is one of the highly esteemed earlier varieties, recommended especially by the Cambridge University farm authorities. Also well spoken of by Mr. Scarlett.

12620 to 12642.

In addition to Jones's Nos. 57 to 63, ordered from Mr. Scarlett, the latter was authorized to include various others of the most promising Scotch potatoes which he judged worthy of trial. In accordance therewith, he included the following 23 varieties:

12620. _Langworthy._
12621. _Turk Kidney._
12622. _Table Talk._
12623. _Dalney Kidney._
12624. _Crafter._
12625. _Scottish Queen._
12626. _Premier._
12627. _Northern Star._
12628. _Pink Blossom._
12629. _Peace maker._
12630. _Dalney Red._
12631. _Dalney Early._
12632. _Sharpe Express._
12633. _Maltlochan Early._
12634. _Southern Queen._
12635. _Wilton Early._
12636. _White Blossom._
12637. _Red Kidney._
12638. _Moneymaker._
12639. _Sir Thomas Lipton._
12640. _Rudima._
12641. _Acme._
12642. _Heather Blossom._

12643 to 12668.

From Cambridge, England. Received thru Mr. II. Henshaw, of Cambridge University farm, December 14, 1904.

12643. _Sutton's Discovery._
12644. _Sutton's Supreme._
12645. _Sutton's Ideal._
12646. _Sutton's Flour Ball._
12647. _Sutton's Ninety-fold._
12648. _Findlay's Everybody._
12649. _Findlay's Good-fellow._
12578 to 12668—Continued.

12643 to 12668—Continued.

12650. Findlay's Up-to-Date.
12651. Findlay's Northern Star.
12652. Findlay's British Queen.
12653. Fuller's Seedling.
12654. Charles Fuller.
12655. Carter's Snowball.
12657. Kerr's Duchess Model.
12658. Kerr's Duchess of Cornwall.

12659. Dobbie's Factor.
12660. Dobbie's Improved Kidney.
12661. Butler's King Edward VII.
12663. Cranwood Blossom.
12664. Langworthia.
12665. Duke of Rothesay.
12666. Royal Kidney.
12668. Empress Queen.


12670. Ulex europaeus. Gorse, whin, or furze.

From Dublin, Ireland. Received thru Hogg & Robertson, January 6, 1905.

"Fresh roots covered with root tubercles, imported in cooperation with the Laboratory of Plant Physiology for the purpose of getting cultures of the microorganism of these tubercles to be used in experiments in the introduction of the plants, the seed of which was introduced under No. 12408." (Fairchild.)


From Lawrence, Kans. Received thru F. Barteldes & Co., January 6, 1905.

12672 to 12677. Olea europaea. Olive.

From Tunis, North Africa. Secured by Mr. Thomas H. Kearney. Received January 6, 1905. A collection of olive cuttings from the premises of M. Robert, Kalâa Sîra, Susa.

12672. Souabe el Alfia. An oil olive. Rather a small yielder, according to Minangoin.
12673. Chaibi. An uncommon but heavy yielding variety of oil olive that succeeds best in northern Tunis.
12674. Seami (butter). An olive which remains yellow green even when ripe; gives oil of very light color but of finest quality.
12676. Kalb es Serdouk (cock's heart). A small oil olive like Chemhali, yielding very heavily, adapted to dry lands.


From Havana, Cuba. Received thru José Sagarminaga, seedsman, Obispo 66, January 7, 1905.
12679. Oryza sativa.  
**Rice.**  
From Yokohama, Japan. Received thru the Yokohama Nursery Company, January 5, 1905.

_Sekai-ichi,_ meaning the "World's No. 1," grown in Iyo, Shikoku Province, which received the first prize in the last Osaka exposition and is recommended as the best and nearest quality to the _Carolina Golden_ by Mr. Kenzo Ikeda, the president of the Agricultural Society of Japan. (Fairchild.)

12680. Lilium pardalinum.  
**Lily.**  
From Ukiah, Cal. Received thru Mr. Carl Purdy, January 5, 1904.

This lily is native to the Coast Range of mountains in California and Oregon. It is found at elevations varying from 1,000 to 5,000 feet. In its native state it is seen at its best growing along the edges of marshy valleys and in moist soil bordering springs and mountain streams. Under favorable conditions _Lilium pardalinum_ increases from year to year, producing several new bulbs annually. Well-grown plants are quite as floriferous as the well-known St. Joseph's lily (_L. candidum_).

The flowers are arranged on long pedicels in an open raceme; the prevailing color is red or crimson, with the lower parts of the segments orange colored, and spotted with purple; the segments are much reflexed. There are, however, several varieties found in a wild state, varying from each other principally in the color of the flowers.

12681. Castanea vesca.  
**Chestnut.**  
From San Giovanni a Teduccio, near Naples, Italy. Received thru Daniman & Co., January 7, 1905.

12682. Gladiolus hyb.  
**Gladiolus.**  
From Chicago, Ill. Received thru Vaughan's Seed Store, January 7, 1905.

_Princeps._

12683. Nicotiana tabacum.  
**Tobacco.**  
From Wethersfield, Conn. Received thru Comstock, Ferre & Co., December 5, 1904.

_Connecticut Seed Leaf._

12684 to 12692.

From Zaouia du Mornag, about 20 kilometers from Tunis, Tunis. Collected by Mr. T. H. Kearney, December 24, 1904, in the garden of M. Giraud, president of the Horticultural Society. Received January 9, 1905.

12684. Olea europaea.  
**Olive.**  
_Riad el Hammam._ "The second largest olive of Tunis, and, according to Marzac, the best." (Kearney.)

12685. Olea europaea.  
**Olive.**  
_Saiali Maglot._ "One of the best of the medium-sized olives. According to Minangoin it is not a heavy yielder, but I did not get the impression that it is inferior in this respect to the large table olives. Probably Minangein criticized it in this respect as an oil olive, but it is said to be excellent for the table." (Kearney.)

12686. Citrus limonum.  
**Lemon.**  
_Quatre Saisons._ According to M. Giraud the best and the most widely grown lemon in Tunis; largely exported.

12687. Citrus aurantium.  
**Orange.**  
_Maltaise_ (No. 1). A smooth-skinned, deep-colored orange.

12688. Citrus aurantium.  
**Orange.**  
_Maltaise_ (No. 2). A smooth-skinned, large-leaved orange.
12684 to 12692—Continued.

12689. *Citrus aurantium.*
   *Maltaise* (No. 3). Seedling.

12690. *Citrus aurantium.*
   *Blood,* native variety.

12691. *Citrus bigaradia.*
   A smooth-skinned bigarade (*bergamot*?), said to be the best variety for
   making preserves.

12692. *Citrus aurantium.*
   *Trabelsi* (Tripoli). The most abundant orange of Tunis.

12693. *Garcinia morella.*
   From Kingston, Jamaica. Received thru Prof. William Fawcett, January 11,
   1905.
   "Seeds of the tree producing the true gamboge of commerce, which is procured
   principally from Siam and is used as a pigment for dyeing silks and other fabrics.
   The rind of the fruit is also used for tanning purposes. Introduced for the purpose
   of testing as a stock upon which to graft the mangosteen (*G. mangostana*). The
   gamboge has a hardier root system and is a very vigorous growing tree, and for this
   reason may prove of value as a stock." (Fairchild.)

12694 to 12696. *Medicago sativa.*
   *Alfalfa.*
   From Paris, France. Received thru Vilmorin-Andrieux & Co., January 7, 1905.
   12695. Grown in Poitou.

12697. *Zea mays.*
   *Sweet corn.*
   From Philadelphia, Pa. Received thru Henry F. Michell Company, January 11,
   1905.
   *Sugar Leaf.*

12698. *Pisum sativum.*
   *Pea.*
   From New York, N. Y. Received thru J. M. Thorburn & Co., January 12, 1905.
   *Thomas Laxton.*

12699 to 12701.
   Drug and medicinal seeds ordered for the cooperative work conducted by the
   Office of Drug Plant Investigations.
   12700. *Foeniculum dulce.*

12702. *Medicago sativa.*
   *Alfalfa.*
   From Sherman, Tex. Received thru Mrs. R. E. Smith, January 13, 1905.

12703. *Allium fistulosum.*
   *Welsh onion.*
   From Santa Clara, Cal. Received thru C. C. Morse & Co., January 14, 1905.

12704 to 12707.
   A collection of vegetable seeds for special tests.
12708. **Musa textilis.** Manila hemp.

From Manila, P. I. Grown from seed received by Mr. G. W. Oliver, from Prof. W. S. Lyon, Insular Bureau of Agriculture, January 29, 1904.

12709. **Hordeum tetraestichum.** Four-row barley.

From Bozeman, Mont. Received thru Prof. F. B. Linfield, Agricultural Experiment Station, January 12, 1905.

*Hull-less.*

12710. **Cyperus papyrus.** Papyrus.

From Paris, France. Received thru Vilmorin-Andrieux & Co., January 14, 1905.

12711 to 12715. **Oryza sativa.** Rice.

From Yokohama, Japan. Presented by the Yokohama Nursery Company. Received January 12, 1905.


12712. *Kairio.* From Shin-no-yen, Kasia Gun, Harima, 30 miles west of Kobe.

This "Kairio" seed quality is reported to be very strong against any diseases and endures injurious attacks. Produce of Hiogo Ken.


All of the above-named rices require only the ordinary rice cultivation practiced in Japan. They must have plenty of water from time of sowing till the ears are well formed.

12716. **Psidium molle (†).** Guayabillo.

From Guadalajara, Mexico. Received thru Mr. Federico Chisolm, January 14, 1905.

Packet of mixed seeds of strawberry and fig-flavored sorts collected at "La Trinidad," Guerrero, Mexico.

12717 to 12732.

A collection of vegetable seeds secured from various seedsmen for special testing purposes.

12733. **Begonia sp.** Begonia.

From Mount Vernon, N. Y. Received thru Mr. H. E. Le Page (representing Hubert & Co., Guernsey and Jersey, England), January 17, 1905.

Tuberous rooted.

12734. **Rhamnus purshiana.** Cascara sagrada.

From Olympia, Wash. Received thru Mr. A. W. McMurray, January 16, 1905. Seedlings for cooperative work being conducted by the Office of Drug Plant Investigations.

12735. **Atriplex semibaccata (†).** Saltbush.

From Tulare, Cal. Received thru Prof. A. V. Stubenrauch, January 17, 1905.

12736. **Phaseolus vulgaris.** Bean.

From New York, N. Y. Received thru Peter Henderson & Co., January 16, 1905.

*Bush Bountiful* (green-podded).
12737. **Sechium edule.**

Chayote.

From Dallas, Tex. Received thru Texas Seed and Floral Company, January 18, 1905.

12738. **Dahlias Merckii.**

Dahlia.

From Edinburgh, Scotland. Received thru Prof. Bayley Balfour, regius keeper, Royal Botanic Garden, January 18, 1905.

This species is hardy at Edinburgh.

12739 to 12742. **Saccharum officinarum.**

Sugar cane.

From Kingston, Jamaica. Received thru Mr. William Fawcett, director of Hope Gardens, January 16, 1905.

12739. **Bourbon.**

12740. **B. 306.**

12741. **D. 39.**

12742. **D. 115.**

12743. **Phaseolus vulgaris.**

Bean.

From Columbus, Ohio. Received thru the Livingston Seed Company, January 18, 1905.

*Kenney's Rostless Golden Ball.*

12744. **Beta vulgaris.**

Sugar beet.

From Santa Clara, Cal. Received thru C. C. Morse & Co., January 19, 1905.

"Grown on C. C. Morse & Co.'s farm at Gilroy, Cal., for the general trade. Not the product of chemically analyzed roots, but rather from roots selected according to shape, size, etc., judged by their external appearance." (J. E. W. Tracy.)

12745. **Beta vulgaris.**

Sugar beet.

From Fairfield, Wash. Received thru Mr. E. H. Morrison, January, 1905. Crop of 1904.

"Grown on E. H. Morrison's farm at Fairfield, Wash., for the general trade, from roots selected according to shape, size, etc., judged for their external appearance only." (J. E. W. Tracy.)

12746. **Pistacia vera.**

Pistache.

From Tashkend, Russian Central Asia. Received thru Mr. H. W. Dürrschmidt, January 20, 1905.

12747. **Medicago sativa.**

Alfalfa.

From Billings, Mont. Received thru Mr. I. D. O'Donnell, January 19, 1905.

12748. **Medicago sativa.**

Alfalfa.

From Paris, France. Received thru Villoorin-Andrieux & Co., January 20, 1905. Seed grown in the state of Hesse, Germany, and is known as *Eifeler Laxerne* in the Rhine Province.

12749 and 12750. **Cucurbita sp.**

Squash.

From Garrett Park, Md. Received thru Mr. D. S. Bliss, January 21, 1905. Grown from S. P. I. No. 9481 during the season of 1904.

12749. **Large cylindrical sort.**

12750. **Crook-neck.**

"The seeds of the large sort are from the first fruit that formed before any blossoms showed on any other vines, and, so far as I know, there were no other vines nearer than half a mile. The seeds of the smaller fruits are from a dozen mixed." (Bliss.)
12751. (Undetermined.)
From Barberton, Africa. Received thru Hon. W. Stanley Hollis, United States consul at Lourenco Marquez, Africa, January 14, 1905. "A very fine, edible ‘plum,’ which grows in the mountains near Barberton on trees about 6 feet high." (Hollis.)

12752. DOLICHOS UNIFLORUS. "Kulthi."
From Quard Hitlow Koppa, Mysore Province, India. Received thru Mr. W. Maxwell Maynard, January 20, 1905. "According to Mr. Maynard this legume is grown extensively in India and fed to horses and working bullocks and is also considered valuable for using in the coffee estates. Sent by Mr. Maynard to Dr. George T. Moore for the purpose of interesting him in the cultivation of the micro-organism which forms the nodules on this as well as other leguminous plants." (Fairchild.)

12753 and 12754. OLEA EUROPAEA. Olive.
From Sousse, Tunis. Collected by Mr. T. H. Kearney. Received January 21, 1905.

12755. CORNUS KOUSA. Bamboo.
From New York, N. Y. Received thru Henry Lee, 97 Water street, January 25, 1905.

12756. BRASSICA NIGRA. Black mustard.

12757. BAMBUSA STRIATA. Bamboo.
From Niles, Cal. Received thru the California Nursery Company, January 25, 1905.

12758. CYPHOMANDRA BETACEA. Tree tomato.
From Kingston, Jamaica. Received thru Mr. G. N. Collins, January, 1905. "This is a species of South American shrub from the mountainous regions of Brazil, adjacent to Peru. Cultivated occasionally for the egg-shaped, reddish-brown, faintly striped fruits. Fruits about 2 inches long on slender stalks, 2-celled, seedy, musky acid and tomato-like in flavor; agreeable to those who like tomatoes." (Bailey.) Bears the second or third year from seed under glass. This tomato has been successfully introduced into Jamaica, Ceylon, and other mountainous regions of the Tropics, and in many places is considered a valuable addition to the list of garden vegetables. It would, in all probability, thrive in Porto Rico. (Cook and Collins, Contr. Nat. Herb., VIII, p. 132.) "Succeeds best with a mean annual temperature of 68° F. Can be propagated readily from seed in warm countries." (Bailey’s Forcing Book.)

12759 and 12760. ORYZA SATIVA. Rice.
From Buitenzorg, Java. Received thru Doctor Treub, of the Botanical Gardens, December 5, 1904.

12761 to 12765. ORYZA SATIVA. Rice.
From Yokohama, Japan. Presented by the Yokohama Nursery Company. Received December 12, 1904. Unhulled rice as follows:

97
12766 to 12768.
From Wonsan, Korea. Received thru Mr. C. F. S. Bilbrough, Chosen Holme, January 21, 1905.

12766. **Oryza sativa.**
Rice.

12766. **Oryza sativa.**
With a light husk.

12767. **Oryza sativa.**
Rice.

12767. **Oryza sativa.**
With dark-brown husk.

12768. **Clerodendron** sp.

12769. **Delphinium** sp.
Larkspur.

From Holland, Mich. Received thru Mrs. H. Kremers, January 25, 1905.

12770. **Cucumis melo.**
Muskmelon.

From Augusta, Ga. Received thru Alexander Seed Company, January 21, 1905.

12771. **Citrullus vulgaris.**
Watermelon.

From Philadelphia, Pa. Received thru Mr. William Henry Maule, January 21, 1905.

*Harris's Earliest.*

12772. **Medicago sativa.**
Alfalfa.

From Dell, Oreg. Received thru Mr. M. D. Kelloy, January 26, 1905.

12773. **Cassiea crenata.**
Japanese chestnut.

From New York City. Presented by Mr. F. W. Bruggerhof, president of the J. M. Thorburn Company, 36 Cortlandt street. Received January 25, 1904.

12774. **Linum usitatissimum.**
Flax.

From Pskoff, Russia. Received thru Malcolm & Co., January 21, 1905.

12775. **Phaseolus radiatus.**
Mung bean.

From Calhoun, S. C. Received thru Mr. C. C. Newman, January 27, 1905.

12776. **Dodecatheon meadia.**
Shooting-star.

From Takoma Park, D. C. Received thru Mr. A. J. Pieters in the autumn of 1904.

12777 to 12779.
From Murtee Station, Wilcannia, New South Wales, Australia. Presented by Mr. E. W. Davis. Received January 28, 1905.

Seeds of native plants.

12777. **Atriplex nummularia.**
Old-man saltbush.

12778. **Atriplex holocarpa.**
Annual saltbush.

12779. **Tetragonia expansa.**
New Zealand spinach.

12780 and 12781.
From Cape Town, South Africa. Presented by Prof. J. Burtt Davy, government agrostologist and botanist. Received January, 1905.
12780 and 12781—Continued.

12780. **Ficus sp.**

"From southern Rhodesia. Well worth cultivating; very large tree; suitable for southern California, Florida, and Louisiana." (Davy.)

12781. **Acacia sp.**

"From southern Rhodesia. Well worth cultivation in southern California and southern Florida." (Davy.)

12782 and 12783. **Pistacia vera.**

From Bronte, Sicily. Collected by Mr. Thomas H. Kearney. Received January 30, 1905.

12782. Staminiate cuttings.

12783. Carpellate cuttings.

12784. **Medicago sativa.**

**Alfalfa.**

From Ogden, Utah. Received thru the C. A. Smurthwaite Produce Company, January 30 and March 9, 1905.

This seed was raised in Emery County, Utah, on land that is irrigated. The land has been crop for forage for fifteen years, and in 1904 it was crop for seed for the first time. This seed was taken from second growth.

12785. **Papaver rhoesas.**

**Shirley poppy.**

From Santa Clara, Cal. Received thru C. C. Morse & Co., January 30, 1905.

Santa Rosa, a new variety originated by C. C. Morse & Co.

12786 to 12789. **Saccharum officinarum.**

**Sugar cane.**

From Trinidad, British West Indies. Received thru Mr. J. H. Hart, superintendent of the Botanical Gardens, January 29, 1905.

12786. T. 105.

12788. T. 223.

12787. T. 215.

12789. T. 230.

12790 to 12800.

From New South Wales, Australia. Received thru Mr. H. W. Potts, principal of the Hawkesbury Agricultural College, February 1, 1905.

A collection of seeds as follows:

12790. **Acacia baileyana.**

Cootamundra wattle.

12791. **Acacia elongata.**

"Sally" wattle.

12792. **Acacia linearis.**

Wattle.

12793. **Acacia lunata.**

"Golden Glory" wattle.

A handsome shrub with dense masses of golden-yellow flowers rising 4 to 5 feet.

12794. **Acacia trinervata.**

Mountain wattle.

12795. **Bossiaea rhombifolia.**

A native, rigid, small shrub, the pods characteristically attacked by an Aecidium.

12796. **Casuarina suberosa.**

A tree pinelike in appearance, with leafless, jointed branches.

12797. **Dodonaea viscosa.**

A shrub rising to from 4 to 6 feet.
12790 to 12800—Continued

12800. *Kennedya rubicunda.* A scarlet-flowered creeper.

12801. **Medicago sativa.** Alfalfa.
From Mulock, Tex. Received thru Mr. J. M. Simmons, February 1, 1905.

12802. **Alnus maritima japonica.** Alder.
From New York, N. Y. Received thru Suzuki & Iida, February 2, 1905.

"A deciduous tree growing in wet places, attaining a height of 20 to 30 feet. In spring it produces male and female flowers separately before it sprouts. The male flowers hang down from the branches in the form of a catkin, and the female flowers yield round fruits with scales. In the autumn when the fruits fully ripen, being about 1 inch in length, they are collected and dried for dyeing." (Useful Plants of Japan.)

"This plant is considered essential in the cultivation of the Japanese paper plant, mistumata. It is used as a 'shelter' plant and is invariably planted on the plantation of the paper plant. It is doubtful if the effect accredited to this plant, viz, shade and shelter, is the real reason for its culture.

"It has been suggested by Mr. W. T. Swingle that since the genus Alnus has root system bearing root nodules which store up nitrogen that this plant, enriches the soil in which the paper plants are grown. This plant should be carefully studied relative to this particular point." (Fairchild.)

12803. **Medicago sativa.** Alfalfa.
From Setif, Algeria. Received thru Mr. G. Ryf, Setif, February 2, 1905.

"Getuda. "This variety of alfalfa is said by Mr. Ryf, who has devised a most ingenious method of cultivating alfalfa and wheat on the same land at the same time, to be more drought resistant than the ordinary French lucem, and it is believed that this variety may prove of special value in experiments in the arid regions of our Southwest." (Fairchild.)

12804. **Juncus effusus** (†). Matting rush.
From Chico, Cal. Received thru Mr. P. H. Dorsett, Plant Introduction Garden, February 13 and 20, 1905.

"Plants of the California rush for experiments in the culture of the matting rush." (Fairchild.)

12805. **Humulus lupulus.** Hop.
From Nuremberg, Germany. Received thru S. B. Bing Sons, hop merchants, September 30, 1904.

Saaz City.

12806. **Humulus lupulus.** Hop.
From Puyallup, Wash. Received thru Mr. W. H. Lawrence, assistant at the Agricultural Experiment Station, November 14, 1904.

12807. **Humulus lupulus.** Hop.
From Germany. Received November, 1904.
DECEMBER, 1903, TO DECEMBER, 1905.

12808. *Oryza sativa.* 
**Rice.**

From Colombo, Ceylon. Presented by Dr. C. Drieberg, superintendent of School Gardens. Received January 28, 1905.

Grown in the Hambantote district.

12809. *Anacardium occidentale.* 
**Cashew nut.**

From Salisbury, Rhodesia, South Africa. Received thru Mr. George M. Odium, Department of Agriculture, February 3, 1905.

From wild trees in Portuguese East Africa that seem to bear more freely than those cultivated in the West Indies and may prove hardier.

12810 and 12811.

From Portuguese East Africa. Presented by Hon. Stanley Hollis, United States consul, Lourenco Marquez, thru the Assistant Secretary of State. Received January 28, 1905.

12810. (Undetermined.) Matundulaku.

Fruits of a sour "plum" sent to Mr. Hollis by Mr. A. E. Graham-Lawrence, of Barberton.

12811. *Garcinia livingstonii.* 
**Pimbe.**

A Lourenço Marquez wild "plum."

12812. (Undetermined.)

From Hankow, China. Presented by Dr. L. S. Wilcox, United States consul-general. Received January 31, 1905.

12813. *Brassica oleracea.* 
**Cabbage.**

From Norton, N. C. Received thru Mr. R. Norton, February 2, 1905.

*North Carolina Bawcombe.*

12814. *Arachis hypogaea.* 
**Peanut.**

From Marseille, France. Received thru Hon. Robert P. Skinner, United States consul-general, February 3, 1905.

"A sample of 'Arachides' from the province of Sine in Senegal. These are the very best nuts known in this market for the manufacture of oil." (Skinner.)

12815. *Pistacia vera.* 
**Pistache.**

From near Caltanissetta, Sicily. Received thru Mr. T. H. Kearney, February 4, 1905.

*Tribouletta.*

12816. *Medicago sativa.* 
**Alfalfa.**

From Chinook, Mont. Received thru the Thomas O'Hanlon Company, February 6, 1905.

Grown by Mr. F. T. Reser, 1 mile west of Chinook.

12817. *Phaseolus vulgaris.* 
**Bean.**

From Leroy, N. Y. Received thru Mr. A. N. Jones, February 25, 1905.

*Golden Crown Wax.*

12818. *Phaseolus vulgaris.* 
**Bean.**

From Chaumont, N. Y. Received thru Roger Brothers, February 25, 1905.

*Golden Carmine-Podded Horticultural.*
12819. **Lippia repens.**
From Santa Barbara, Cal. Received thru Dr. F. Franceschi, February 10, 1905.

12820. **Medicago sativa.** *Alfalfa.*
From Clearwater, Nebr. Received thru Mr. G. E. Miller, February 7, 1905.

12821. **Psidium molle.** *"Guayabillo."*
From Guadalajara, Mexico. Received thru Mr. Federico Chisohn, February 4, 1905.

12822 to 12831. **Amygdalus communis.** *Almond.*
From Girgenti, Sicily. Received thru Mr. T. H. Kearney, February 6, 1905.
Varieties of almond cuttings selected by Mr. Casá from his collection of 25 varieties.

- 12822. Sweet; big fruit.
- 12823. Sweet; long fruit.
- 12824. Sweet; fruit dark red.
- 12825. Sweet; fruit double.
- 12826. Bitter.
- 12827. Sweet, with "a point at one side" (end).
- 12828. Tender, sweet; good for table.
- 12829. Early flowering; sweet, hard-shelled.
- 12830. Not frost resistant.
- 12831. Late flowering; resistant to frost.

12832 to 12842.
From Catania, Sicily. Received thru Mr. T. H. Kearney, February 8, 1905.

12832 to 12835.
Received from Salvatore Leanza, nurseryman, Catania, Sicily.

- 12832. **Eriobotrya japonica.** *Loquat.*
  "A valuable and distinct, semiseedless grafted variety, which may be especially recommended. Fruit especially large, pear-shaped, with a fleshy, juicy, sugary pulp; with a few small seeds, which are in some cases extremely small according to the modification produced by their surroundings, whether in pots or in open ground with a ball of earth." (Kearney.)

- 12833 and 12834. **Corylus avellana.** *Filbert.*
  *Castiglione.*

- 12835. **Pistacia vera.** *Pistachio.*
  *Bronte.*

12836 to 12842. **Opuntia spp.** *Prickly pear.*
Presented by Doctor Cavara, of the Catania Botanical Gardens, Sicily.

- 12836. **Opuntia tomentosa.**
  A variety of opuntia that holds its fruit all winter. (Doctor Cavara's No. 5.)

- 12837. **Opuntia ficus indica.**
  "Fructu albo, vulgo 'Zuccherina.'" (Doctor Cavara's No. 2.)

- 12838. **Opuntia ficus indica.**
  "Fructu albo, vulgo 'Sipala.'" (Doctor Cavara's No. 1.)

- 12839. **Opuntia ficus indica.**
  "Fructu flavo, vulgo 'Figu d'India.'" (Doctor Cavara's No. 4.)

- 12840. **Opuntia ficus indica.**
  "Fructu rubro, vulgo 'Sanguigna.'" (Doctor Cavara's No. 3.)
12832 to 12842—Continued.

12841. **Opuntia ficus indica.**

"Fructu flavo-carne, compacta, vulgo 'Brontese.'" (Doctor Cavara’s No. 7.)

12842. **Opuntia ficus indica.**

"Fructu albo-venosa." (Doctor Cavara’s No. 6.)

12843 to 12845. **Cucurbita sp.** Squash.

From Yokohama, Japan. Received thru the Yokohama Nursery Company, February 7, 1905.


12844.  *Chilimen* (early).

12846 to 12848.

From Tunis. Received thru Mr. T. H. Kearney, December 28, 1904.

12846. **Medicago sativa.** Alfalfa.

*Oasis.* From Kebili.

12847. **Medicago sativa.** Alfalfa.

*Tripoli.* From Gabes.

12848. **Pistacia vera.** Pistache.

From Sfax. Nuts from the 1904 crop.

12849. **Cannabis sativa.** Hemp.

From Nicholasville, Ky. Received thru W. L. Steel & Co., February, 1904.

12850. **Feltia sellowiana.**

From Sao Paulo, Brazil. Presented by Mr. Alberto Löfgren, Botanic Gardens, Received March 11, 1905.

"A plant belonging to the guava family. Plants of this new fruit have been grown by Mr. Taft and Doctor Franceschi in southern California, and small immature fruits have been borne by single plants grown by these parties. The plant has been successfully cultivated on the Riviera, where there are several specimens of considerable size which have borne excellent fruit. Doctor André, who has paid special attention to this fruit, pronounces it, in flavor, something exceptionally delicious. The fruits are about the size of a large English walnut, green in color and covered with blunt protuberances. Little is known at the present time in this country regarding the actual flavor of the fruit. The fruit is of a character which enables it to be plucked from the bush before ripening. It is believed that this plant can be grown successfully in all the frostless regions of the Southwest. It is well worthy of serious consideration by all those interested especially in subtropical fruit culture." (Fairchild.)

12851. **Pennisetum typhoideum.** Pearl or cat-tail millet.

From Augusta, Ga. Received thru the N. L. Willet Drug Company, March 13, 1905.

12852. **Oryza sativa.** Rice.

From Augusta, Ga. Received thru the N. L. Willet Drug Company, March 13, 1905.

12853. **Triticum dicoccum.** Emmer.

From Lawrence, Kans. Received thru F. Barteldes & Co., February 22, 1905.

7217—No. 97—07—8
From Geneva, Idaho. Received thru Mr. F. W. Boehme, March 15, 1905.

From Geneva, Idaho. Received thru Mr. F. W. Boehme, March 15, 1905.

12856 to 12861.
From Vomero, Naples. Presented by Dr. Carl Sprenger thru Mr. F. A. Bessey. Received January, 1905.
Package of mixed varieties.
"One of the finest flowering shrubs."
12858. Rhamnus alaternus calabrica.
12859. Morus alba. White mulberry.
China.

12862 to 12864.
From Paris, France. Received thru Vilnorin-Andrieux & Co., February 10, 1905.
Large flat Brittany.
12864. Sanvitalia procumbens flore pleno.

12865 to 12871. Oryza sativa. Rice.
From Calcutta, India. Presented by I. H. Burkill, esq., M. A., officiating reporter on economic products to the government of India, Indian Museum, 1 Sudder street. Received February 9, 1905.
12865. Masina gharia. From Bengal Province.
12866. Bhadai gharia, red. From Bengal Province.
12867. Thosar Bhadai gharia, white. From Bengal Province.
12868. Pakhasali Bhadai. From Bengal Province.
12869. Auga Bhadai. From Bengal Province.
12870. Small red variety. From Bengal Province.
12871. Takmara ghiyga. From Bengal Province.

This paddy was grown by the Lepchas and Bhootias.

12872. Chrysanthemum anethifolium. Chrysanthemum.
From Merrifield, N. Dak. Presented by Mrs. H. E. Bancroft. Received February, 1905.

Mrs. Bancroft writes that this is a perennial there, but blossoms early the first year from seed. The largest blossoms are the early ones, being three times as large as those sent, which were gathered on November 13, 1904.

From Merrifield, N. Dak. Presented by Mrs. H. E. Bancroft. Received February, 1905.

Mrs. Bancroft writes that by constant selection she has developed a strain of California poppy with flowers much larger than the ordinary, which continue in bloom much later than the common kind.
12874 to 12876. Oryza sativa. Rice.
From Canton, China. Presented by Mr. T. E. Griffith. Received January 28, 1905.
Samples of Chinese rice, as follows:

12874. “Shie-Miu.” (No. 1.)
12876. “Laer-Chap.” (No. 3.)
12875. “Ai-Miu.” (No. 2.)

As to the local manner of planting this rice, a seed bed some 30 yards square is prepared alongside of the large rice fields about the month of August. This seed bed is composed of softish mud, and the grain is scattered over the surface, which is kept wet enough to cause it to sprout. In about three weeks' time the mass of seedlings are about 10 inches in height, when they are taken up and planted out in the rice fields in bunches of 20 or so seedlings together, at intervals of a foot between bunches.

“The soil of the fields is a bluish alluvial mud, and, after planting, it is kept constantly inundated with water from the numerous creeks which intersect the country. In about one hundred days from planting out the grain is ripe, and is then gathered in.” (Griffith.)

12877 to 12895.
From New Zealand. Presented by the government of New Zealand thru Mr. M. A. Carleton. Received February 11, 1905.
A collection of grains, etc., from the New Zealand exhibit at the Lousiana Purchase Exposition, St. Louis, Mo., 1904.

12877 to 12882. Avena sativa. Oat.
12877. Danish.
12878. Dan.
12879. Sparrowbill.

12883 to 12886. Triticum vulgare. Wheat.
12883. Pearl.
12884. (No label.)

12887 to 12889. Pisum sativum. Pea.
12887. Brown. (Marked “B.”)
12888. Green. (Marked “G.”)

12890. Trifolium repens. White clover.

12892. Lolium italicum. Italian rye-grass.
12894. Phleum pratense. Timothy.

12895. Dactylis glomerata. Orchard grass.

From Utakamund, India. Received thru Mr. G. H. Cave, superintendent of the Government Botanic Gardens, February 14, 1904.

12897 to 12899.
From Durban, Natal. Presented by Mr. J. Medley Wood, director of the Botanic Gardens. Received February 14, 1905.

12897. Coffea zanguebariae (?). Coffee.
“According to a letter of January 12, 1905, from Mr. Wood, this species of Coffea, regarding the identification of which he is doubtful, is quite immune
12897 to 12899—Continued.

...to attacks of the *Hemileia vastatrix.* It is grown in the Botanic Gardens within a few feet of Coffea plants covered with this fungus, and Mr. Wood has endeavored to inoculate the plant with it but has been unsuccessful. He further states that it is a handsome shrub, in addition to its value for hybridizing purposes for *Coffea arabica* or other species. His idea is, further, that it might be used as a stock upon which to graft the Arabian Coffea.” (Fairchild.)

12898. Asparagus virgatus.

“According to Mr. Wood this species is cultivated in Natal and is considered to have a distinct flavor of its own and to be a desirable vegetable. This same species has been in cultivation in America for some time as an ornamental.” (Fairchild.)

12899. Passiflora edulis.

“In Natal one of the commonest fruits on the market is this passion fruit. Its cultivation requires very little attention and it seems to be a very productive vine. This could be cultivated to advantage in the frostless regions of California and Florida, and attempts should be made to cross it with the Maypop, which is a common species of Passiflora growing in the Carolinas. In New Zealand and Australia the fruit has become a popular one on the market.” (Fairchild.)

12900 to 12908.

From Washington, D. C. Grown on the Potomac Flats under the direction of Dr. R. H. True, Physiologist in Charge of Drug and Medicinal Plant Investigations. Received February 5, 1905.

A collection of drug and medicinal plant seeds, as follows:

12900. *Atropa belladonna.* Belladonna.


12903. *Coriandrum sativum.* Coriander.


12905. *Satureja hortensis.* Summer savory.


A white-seeded opium poppy.


A blue-seeded opium poppy.


12909. *Sechium edule.* Chayote.

From New Orleans, La. Received thru the J. Steckler Seed Company, February 11, 1905.

12910. *Olea europea.* Olive.

From Tunis, North Africa. Received thru Mr. T. H. Kearney, February 13, 1905.

*Chitosi.* “This is the principal and best oil variety of northern Tunis, but is said not to do so well in drier and hotter parts.” (Kearney.)

12911 to 12917.

From Brookings, S. Dak. Received thru Prof. N. E. Hansen, Agricultural Experiment Station, January 18, 1905.

A collection of ornamentals, as follows:

12911. (Undetermined.) “Siberian sand thorn.”
12911 to 12917. Continued.

12912. Caragana microphylla.  
12913. Caragana arborescens.  
12914. Salix sp.  
12915. Rosa rugosa.  
12916. Salix sp.  
12917. Salix viminalis regalis.

12918. Beta vulgaris.  
Sugar beet.

From Fort Collins, Colo. Received thru the Colorado Experiment Station, February 14, 1905.  
*Kleinmannschen.*

12919. Raphanus sativus.  
Radish.

From Fairfield, Wash. Received thru Mr. E. H. Morrison, February 13, 1905.  
*Crimson Giant Farming.* Grown from S. P. I. No. 9487.

12920. Nicotiana tabacum.  
Tobacco.

From Washingtonboro, Lancaster County, Pa. Received thru Mr. Frank C. Wittmer, February 14, 1905.

12921 to 12926.

From Sfax, Tunis, North Africa. Received thru Mr. T. H. Kearney, February 17, 1905.

12921. Olea europaea.  
Olive.

"The Chemali variety, being probably the best adapted of all olives to a dry, hot climate, will be useful as a stock even if it does not succeed with us as an oil variety." (*Kearney.*)

12922. Pistacia vera.  
Pistache.

White-skinned variety.

12923. Pistacia vera.  
Pistache.

Red-skinned variety.

12924. Pistacia vera.  
Pistache.

Male.

"Through the kindness of Mr. Leonardi, British vice-consul, I was able to visit a garden here (Sfax) belonging to two Italian Jews, where there are 16 pistache trees (one male). The gardeners told me there are three kinds of pistaches here, all with green kernels, but one having a white, one a red, and one a red-and-white streaked skin. The first is considered the best, and from a tree of this kind, said to bear very heavily, was taken most of the grafting wood (12922). Grafting can be done successfully here up to the end of February." (*Kearney.*)

12925. Punica granatum.  
Pomegranate.

"Pomegranate cuttings taken from a single bush, said to be a very fine, large, red-fruited one. Here it is propagated by cutting off the vigorous root shoots where they are about a half inch thick and sticking them into the ground so that the main stem is horizontal and is covered with earth, while the stiff, divergent branches stick up vertically. In this way a good-sized bush, bearing well, is obtained in two years." (*Kearney.*)

12926. (Undetermined.)
118 SEEDS AND PLANTS IMPORTED.

12927 to 12929. **Trifolium sp.** Clover.

From Corfu, Greece. Received thru Mr. C. S. Scofield in 1901. Seeds gathered on the place of Mr. Antonio Colla.

12927. **Trifolium maritimum.** 12929. **Trifolium procumbens.**

12928. **Trifolium polystachyum.**

12930 and 12931. **Mangifera indica.** Mango.

From Honolulu, Hawaii. Presented by Mr. G. P. Wilder. Received February 20 and 21, 1905.

12930. Russel. 12931. (Not named.)

12932. **Carum gairdneri (?)**.

From Winslow, Wash. Received thru Mr. John L. Hubbard, March 6, 1905.

"This plant grows throughout eastern Washington, Oregon, and Idaho, and is called by the Indians on the Umatilla Reservation, in eastern Oregon, Sow-itk. This plant is similar in foliage to the carrot, is a hardy perennial with a root similar to the sweet potato, and is very pleasant to the taste, either raw or cooked. When it is raw the meat is about the consistency of a raw potato, of a sweet taste; when cooked it becomes mealy, like a baked sweet potato. It was used extensively as a food staple by the Indians throughout the Northwest before the advent of the white people, and is used by them to some extent yet.

"That the plant is susceptible of material development is proven by its being found to grow much larger in plowed fields or cultivated soil, where the roots have not been destroyed by such cultivation. I believe that if your Department would give this matter your attention a new and valuable vegetable would be added to the food products of the country." (Letter dated January 30, 1905, from Mr. Hubbard.)

Mr. F. V. Coville, botanist, in a letter dated March 16, 1905, gives the following information: "The plant is widely used for food among the Northwestern Indians. The late Major Bendire, of the United States Army, considered it one of the most delicious vegetables he had ever tasted. I shall be very glad, indeed, to see Mr. Oliver take up its culture with a view to its domestication. It would be a vegetable somewhat of the type of the sweet potato. You will be interested to know that, by reason of the summer drought prevalent in the regions where the plant grows, the growing period of the species is short, a fact which will be very advantageous in connection with its proposed domestication."

12933 to 12937. **Persea gratissima.** Avocado.

From Miami, Fla. Propagated by Prof. P. H. Rolfs, pathologist in charge of Subtropical Laboratory. Numbered February 21, 1905.

12933. **Baldwin.** "Tree a vigorous grower, with strong central stem; branches rather rigid; light bloomer, but heavy cropper. Blooms in February and March. Fruit at best in August; drops in September. Ripens uniformly. Shape of fruit approaching oblong, 4 by 6 inches, not regular; color green, with a few yellowish streaks; rind smooth, thin; stem small; meat deep cream, one-fourth green, firm; flavor excellent. Seeds are rather large, firm in cavity. Buds do not take readily. Named for Mr. Baldwin, of Miami, Fla., who owns the original tree." (Rolfs.)

12934. **Chappelow.** "Tree grows vigorously; branches diffuse, slender, inclined to droop; bark of young branches shiny, greenish yellow. Good cropper and abundant bloomer. Blooms in January and February; fruit ripens in June and July.

"Shape of fruit, bottle-necked, 2½ by 4½ inches; color dull purple; skin thin, leathery; meat greenish near rind, whitish toward seed; seed medium; firm in cavity; edible qualities good, but different from other type. The buds take readily and the tree stands more cold than other varieties planted. Most useful for home consumption. Named for Mr. William Chappelow, Monrovia, Cal. Buds secured thru Mr. William A. Taylor." (Rolfs.)
12933 to 12937—Continued.

12935.  
**Family.** "A strong growing tree of spreading habits, being an abundant bloomer and moderate cropper. Blooms in late February and during March. Ripens fruit during July, August, September, and into October.

"Shape of fruit variable, from pear-shaped to long oblong, nearly banana-shaped; size, variable from 6 by 3½ to 3½ by 1½ inches; color purple, with scarlet streaks, very attractive; skin medium thick, smooth; stem large; meat yellow, free from fiber; flavor good, seed small, loose in cavity.

"The principal merit of this variety lies in extending its period of ripening over so long a time, being distinctly useful for family purposes, but should not be planted for commercial purposes, as the extended ripening period necessitates several pickings. Buds take readily." (Rolfs.)

12936.  
**Pollock.** "Tree moderate grower, heavy bearer, profuse bloom, limbs rigid; blooms in February and March; ripens in September and October. Upright grower with strong central stem.

"Fruit pear-shaped, being about 6½ by 4½ inches; weight up to 3½ pounds; color greenish; rind medium; meat yellowish; flavor good; seed medium. Buds take readily, and this variety is desirable on account of very large fruits. Named for Mr. Pollock, of Miami, Fla., who owns the original tree." (Rolfs.)

12937.  
**Trapp.** "Tree upright grower with strong central stem; not a vigorous grower. Produces abundant bloom late in February and March. A heavy cropper, maturing in October and November, some of the fruits remaining on the trees until the Christmas holidays.

"Shape of fruit rather between round and oblong, about 4½ by 3½ inches, regular; color greenish with yellowish streaks; thin rind; small stem; meat rather deep yellow; seed variable, sometimes very large and firm in cavity, and again very small and loose in cavity.

"The special merit of this variety lies in the fact that the fruit remains on the tree until late in the season. Named for Mrs. Trapp, Cocoaanut Grove, Fla., who owns the original tree." (Rolfs.)

12938.  
**Gossypium sp.**  
Cotton.

From Peru, South America. Received thru W. R. Grace & Co., 1 and 2 Hanover square, New York, N. Y., February 13, 1905.

"Full rough" Catacaos seed. Represents the seed of the full rough Peruvian cotton, which is grown in the Piura and the surrounding districts in the northern part of Peru.

This "Full rough" cotton is exported to New York and Liverpool markets. There are two crops every year: "San Juan" and "Navidad." The former is largest and is gathered in August to September, while the latter is ready for shipment from the end of January thru April. We would say that the average annual crop was 18,000 bales of 200 pounds.

Many experiments have been made to plant this seed and grow the same grade of cotton in other localities but without success, because soil similar to that of the Piura districts (where it seldom rains) is yet to be found. Every attempt to transplant this grade to any other place in Peru was either a complete failure or the cotton degenerated into "Moderate rough."

12939.  
**Zea Mays.**  
Corn.

From Montgomery, Ala. Received thru Charles & Nelson, No. 8 Commerce street, February 11, 1905.

Mexican June.

12940 to 12957.  
**Vitis spp.**  
Grape.

From Thomery, France. Received thru Etienne Salomon & Sons, February 24, 1905.

12940. **Alicante Bouschet × Riparia 141-1.**  
12941. **Berlandieri × Riparia 357-11.**
12940 to 12957—Continued.

12942. Berlandieria × Riparia 4-20-B.
12943. Berlandieria Lafont No. 9.
12944. Bourgignoun × Rupestris 3907.
12945. Carignane × Rupestris 508.
12946. Riparia × Rupestris-Aramon-Jaeger 211.
12947. Riparia Raman.
12948. Rupestris Mission.
12949. Riparia Grand Glabre × Aramon-Rupestris 4110.
12951. Rupestris × Berlandieria 301-37-152.
12952. Riparia Colorado.
12953. Solonis × Riparia 1615.
12954. Viala.
12955. Aramon × Riparia 143-1.

12958. Ipomoea sp.
From Cuba. Received thru Prof. P. H. Rolfs, Subtropical Laboratory, Miami, Fla., February 23, 1905.
Seeds of a variety of Ipomoea that is found in Cuba. Said to have yellow flowers.

12959. (Undetermined.) Matundulaku.
"Evidently a plum-like fruit with a very large stone and little meat." (Fairchild.)

From Lourenço Marquez, Portuguese East Africa. Presented by Hon. W. Stanley Hollis, United States consul. Received February 23, 1905.

12961. Hydrangea scandens.
From Philadelphia, Pa. Received thru Thomas Meehan & Sons, February 23, 1905.

12962. (Undetermined.)
From Lourenço Marquez, Portuguese East Africa. Presented by Hon. W. Stanley Hollis, United States consul. Received February 23, 1905.
A Lourenço Marquez fruit tree.

12963 to 12970.

12971 to 12987.
From New York, N. Y. Received thru J. M. Thorburn & Co., February 17, 1905. Flower seeds for stock purposes.

From Fairfield, Wash. Received thru Mr. E. H. Morrison, January 3, 1905.

From Santa Clara, Cal. Received thru C. C. Morse & Co., January 10, 1905.
12990. **Kochia scoparia.**  
From Detroit, Mich. Received thru Mr. William McRobbie, gardener of the Palmer Park Gardens, November 7, 1904.

12991. **Medicago sativa.**  
**Alfalfa.**  
From Excelsior, Minn. Received thru Mr. A. B. Lyman, February 24, 1905.  
*Grinn.* A variety attracting attention in the Northwest. (See Bulletin (press), No. 20, University Exp. Sta., St. Anthony Park, Minn., March, 1904, on Hardy Alfalfa in Minnesota.)

12992. **Medicago sativa.**  
**Alfalfa.**  
From Bassorah, Arabia. Secured thru H. P. Chalk, esq., American consular agent. Received February 27, 1905.  
"From preliminary tests of this alfalfa, made from a previous importation, under S. P. I. No. 8806, it seems probable that this particular strain will make a more rapid growth than the ordinary varieties cultivated in this country and may prove especially valuable for certain regions in southern California and Arizona. These preliminary experiments have been carried on at the Pomona substation in California, where this variety, together with the ordinary and the Turkestan varieties, planted side by side at the same time, exhibited most unusual rapidity of growth." (Fairchild.)

12993. **Hordeum distichum nutans.**  
**Two-row barley.**  
From Minneiska, Minn. Received thru Mr. H. L. Whitman, February 23, 1905.  
*Hanna.*

12994. **Anemone alpina sulphurea.**  
From Carsethorn, Dumfries, Scotland. Presented by Mr. Samuel Arnott. Received February 25, 1905.

12995 and 12996. **Pinguicula** spp.  
From Mexico. Presented by Dr. J. N. Rose. Received February 15, 1905.  
12995. **Pinguicula sp.**  
12996. **Pinguicula cauduta.**

12997. **Sprekelia formosissima.**  
From Mexico. Presented by Dr. J. N. Rose. Received February 15, 1905.  
"This is an old garden favorite, but is especially interesting, as it comes from the high mountains of central Mexico. The home of this species is usually given as South America or Guatemala. Only one species of Sprekelia is recognized by J. G. Baker and other writers on this group, but there are certainly two, if not more, very distinct species. This plant has flowered in Washington several times. The flowers are large, nearly 4 inches long, and deep crimson. It differs only slightly from descriptions. The bulb scales are black, not brown, as usually given. Bulbs were collected in a shallow mountain swamp of central Mexico in 1903 (No. 813)." (Rose.)

12998 and 12999. **Punica granatum.**  
**Pomegranate.**  
From Degach (El Oudiane), Tunis. Received thru Mr. T. H. Kearney, March 7, 1905.  
12998. **Gabsi.**  
A variety having large, pale-red fruit. "The Gabsi is very likely the same ‘variety from Gabes,’ of which I sent cuttings (S. P. I. No. 12566) in December from Susa." (Kearney.)  
12999. **Tunisi.**  
"A variety smaller than the preceding and having deep-red fruit. Both varieties were obtained at Degach (El Oudiane), the oasis of the Jerid most renowned for its pomegranates, oranges, and olives, while Tozer is celebrated for its figs. These are the two most widely grown kinds here (Tozer). The pomegranates of Gafsa are even more celebrated." (Kearney.)

From Copenhagen, Denmark. Received thru Mr. A. Hansen, seedsmen, February 27, 1905.

Dwarf Broccoli.

13001. Lycopersicum esculentum. Tomato.

From Danville, Ky. Received from Mrs. W. B. Thomas, thru Mr. H. Giannini, of the United States Treasury Department, March 1, 1905.

Sample of tomato seed grown from seed distributed by the Department of Agriculture in 1891.

13002 to 13006. Citrus hyb.

From Glen St. Mary, Fla. Propagated by Mr. G. L. Taber, for distribution by the Office of Seed and Plant Introduction and Distribution. Received December 16, 1904.

Hybrid citrus fruits developed by Dr. H. J. Webber, in charge of the Department Plant Breeding Laboratory. Of these hybrids two are called hardy and two are tender. None are true oranges except the two tangerines, Wask and Trimble. The hardy varieties constitute a new group designated by Doctor Webber as citranges. They are the Wask and the Trimble.

The fifth of the lot is a representative of a new group called the "tangelo," being a hybrid between the tangerine and the pomelo. The variety has been called the Sampson.

Doctor Webber describes the varieties as follows:

13002.

The Wask citrange (P. B. No. 716) is a hybrid between the common sweet orange (female parent) and the trifoliate orange (male parent). The tree resembles that of the trifoliate orange in character, having trifoliate leaves which are much larger than those of the ordinary trifoliate. It is very productive and bears a small fruit about 2 to 2 1/2 inches in diameter, which is somewhat similar to the tangerine. The fruit is nearly seedless, having only one seed to two fruits, and is very juicy, yielding a much larger quantity of juice than the best lemons of the same size. It makes a very pleasant citrangeade, and can be used for making pies, marmalades, jellies, and for other culinary purposes. Eaten with sugar, it is a very desirable breakfast fruit.

13003.

The Trimble citrange (P. B. No. 777) is a hybrid between the trifoliate orange (female parent) and the common sweet orange (male parent), being thus the reciprocal hybrid of the Wask citrange. The tree, as in the case of the Wask, is similar to the trifoliate, but with much larger leaves, and it is semi-evergreen. The fruit is nearly seedless, having an average of only one seed to about four fruits. The fruit is slightly larger than the Wask, the largest being about 2 1/2 inches in diameter. The pulp is of a different color from the Wask, being a lemon yellow. The flavor is also much more acid. The fruit is valuable for making citrangeade, pies, marmalades, jellies, and for other culinary purposes. It is too acid to be eaten out of hand.

13004.

This is one of our new hybrid citrus fruits, produced by crossing the tangerine and pomelo. The fruit differs from either parent, but combines the qualities of both. Differing from any other type of citrus fruit, it has been referred to a new group termed the "tangelo" group, and this particular variety has been designated the Sampson. The "Sampson tangelo" (P. B. No. 1316) forms a tree resembling in all essential characters the ordinary orange, and is as easily injured by cold. The fruit is about the size of the navel orange but of lighter color, being intermediate in size and color between the tangerine and pomelo. The flavor is sprightly acid, like the grapefruit, but with a slight suggestion of the bitter of that fruit. A striking and highly desirable characteristic is its easily removable rind, derived from the tangerine parent, so that it might be called a "kid-glove" pomelo. It is a tender tree and adapted to distribution in the present citrus-growing regions of Florida and California.
13002 to 13006—Continued.

13005 and 13006. New tangerine oranges.

No. 13005 (P. B. No. 628) has been named the Weshart, and No. 13006 (P. B. No. 627) has been named the Trimble.

A large number of hybrids have been made in the course of the investigations between the tangerine and various varieties of the sweet orange, with the object of producing an orange having the quality and character of the sweet orange with the loose, easily removable rind of the tangerine. Among the different hybrids which have thus far fruited, two have produced fruits which in all respects resemble true tangerines but are two weeks earlier than the earliest tangerines, and are larger, richer in color, and of rather superior quality.

13007 to 13026.

From Philadelphia, Pa. Received thru Henry A. Dreer (Incorporated), February 28, 1905.

A collection of flower seeds to be grown for stock.

13027 to 13034. Solanum tuberosum. Potato.

From Auchtermuchty, Scotland. Received thru Prof. L. R. Jones, of the Vermont Experiment Station, March 3, 1905.

A collection of European potatoes for breeding purposes, as follows:

13027.

British Queen. (L. R. Jones’s No. 43.) Originated by Findlay. Second early; white skin and flesh; kidney; quality reputed excellent and yield good. “Best second early in cultivation in England to-day,” according to one high authority. Mr. Findlay claims that it is highly disease resisting, but others do not so consider it. Especially recommended for trial in Florida, etc.

13028.

Royal Kidney. (L. R. Jones’s No. 44.) Originated by Findlay, 1901. Late second early; white; quality excellent; yield good. Mr. Findlay claims this to be one of the hardest disease-resisting varieties he has sent out. Recommended for trial both in the North and South, as well as in Colorado.

13029.

Empire Kidney. (L. R. Jones’s No. 45.) One of Findlay’s recent varieties, and especially recommended by him as disease resisting and worthy of trial. Heavy yielder; good quality; said to be best on fertile loam. Selected especially for trial in the North and West, rather than in the South.

13030.

Evergood. (L. R. Jones’s No. 46.) Originated and sent out by Findlay, about 1899. Medium late; white; oval; high quality; heavy cropper. Characterized by prolonged autumnal growth if the season favors. Recommended by Mr. Findlay and others as disease resisting. Selected especially for trial in the North and West.

13031.

Goodfellow. (L. R. Jones’s No. 47.) Originated by Mr. Findlay. Medium late; white skin and flesh; round; quality fine; yield good. Characterized by Mr. Findlay and others as disease resisting. Selected especially for trial in the North and West.

13032.

Up-to-Date. (L. R. Jones’s No. 48.) One of Findlay’s varieties sent out many years ago and now one of the standard main crop varieties of England. Recommended as still in a fair degree disease resisting, altho past its prime in this respect. Medium late; white; excellent quality; strong yielder. Recommended especially for trial in the North and West.
13027 to 13034—Continued.

13033.

Northern Star. (L. R. Jones's No. 49.) Medium late; white; round; quality and yield reputed excellent. One of Mr. Findlay's most promising recent introductions (first sent out in 1902). He says "the most disease-resisting potato I have ever known." Some others who have tried it are less optimistic as to this. Commended especially for trial in the North and West.

13034.

Eldorado. (L. R. Jones's No. 50.) Findlay's introduction (1903), and the most advertised potato in England to-day. Sold last year at rate of £200 sterling per pound weight. Medium late; white; elongated oval. Reputed of high quality and yield. Commended most highly by Mr. Findlay as disease resisting, but some others who have watched it are less hopeful of any remarkable characteristics in this direction.


From Formosa. Presented by the Agricultural Department of the Formosan Government, thru Mr. Fred. Fisher, United States consul at Tamsui, Formosa. Received March 2, 1905.

The first 20 numbers of this collection are "first crop" and the remainder are "second-crop" samples.

13035. Ch'ing Yu.

From Kirai Sho, Kokansho Seichuri, Ako Prefecture. Clayish soil.

13036. Pei Cham.

From Shinsho Shisho, Daichikuri, Hozan Prefecture. Sandy clay soil.

13037. Ch'ing Yu.

From Saitosho, Koryungairi, Hozan Prefecture. Sandy clay soil.

13038. O Kaku.

From Ryosan jusho, Rankoho, Taielu Prefecture. Sandy soil.

13039. Tso Tom Ho.

From Sunkaitusho, Emmukabo, Shoka Prefecture. Sandy soil.

13040. O Kaku.

From Eihansho Kochokuho, Taihoku Prefecture. Clayish soil.

13041. Kari Kau Otowa.

From Gynhosho, Chikuhoku Itsupo, Shinhuku Prefecture. Sandy soil.

13042. Pei Bei Fan.

From Dorawan Sho, Biokitsu Prefecture. Sandy soil.

13043. Son Soi.

From Shinsho, Hokutoho, Nanto Prefecture. Sandy soil.

13044. O Ch'ing Ko.

From Tosei Kosho, Dabyo Nanho, Kagi Prefecture. Sandy soil.

13045. Pa Tei Don.

From Chuhosho Kagi Toho, Kagi Prefecture. Clayish soil.

13046. Non Key.

From Chinshi, Manrikisho, Enzanoho, Gulan Prefecture. Sandy soil.

13047. An Ku Tzu.

From Saitosho, Koryungairi, Hozan Prefecture. Sandy clay.

13048. Pei Gyu Nam.

From Ryo Sanjusho, Rankoho, Taichu Prefecture. Sandy soil.
DECEMBER, 1903, TO DECEMBER, 1905. 125

13035 to 13076—Continued.

13049. Cheek Sheg.
   From Kokashe Shiran Sampo, Taihoku Prefecture. Lavitic mixt with clayish soil.

13050. Jipon Tsu.
   From Gynhosho, Chikuho, Itsupa, Shinchiku Prefecture. Sandy soil.

13051. Ban Hoe.
   From Lanrisho, Bioritsu Niho, Bioritsu Prefecture. Sandy soil.

13052. Pei.
   From Horishagai, Horishaho, Nanto Prefecture. Clayish soil.

13053. Ban Hoe Tsu.
   From Shanshi Kyakusho, Dabyo Nanho, Kagi Prefecture. Sand and loam.

13054. Ban Hoe.
   From Iketsusho, Shiiho, Gilan Prefecture. Clayish soil.

13055. Tsu Piau.
   From Kailhosho, Seichuri, Akoku, Ako Prefecture. Sandy soil.

13056. Pa Chiam.
   From Shintosen Sho, Seikari, Hozan Tsuku, Hozan Prefecture. Sandy soil.

13057. 0 Kaku.
   From Gokosho, Daichikuri, Hozan Prefecture. Sandy clay.

13058. Pei Kaku.
   From Hyoshitoyo Daimokukori, Tainan Prefecture. Sandy soil.

13059. Go Ki Tsan.
   From Horishagai, Horishoho, Nanto Prefecture. Clayish soil.

13060. 0 Kaku.
   From Nantogai, Nantoho, Nanto Prefecture. Clayish soil.

13061. U Kyo.
   From Nantogai, Nantoho, Nanto Prefecture. Clayish soil.

13062. Shou Tsai Ban.
   From Sotosho, Hokutoho, Nanto Prefecture. Clayish soil.

13063. Shi Kiu Tsai.
   From Shikyotosho, Shushuho, Nanto Prefecture. Clayish soil.

13064. Chino.
   From Shikyotosho, Shushuho, Nanto Prefecture. Clayish soil.

13065. O Ku Hoe Bai.
   From Dakusunisho, Sarenkahio, Nanto Prefecture. Clayish soil.

   From Shinsho, Hokutoho, Nanto Prefecture. Clayish soil.

13067. Chien Yu.
   From Shinkogai, Siiho, Kagi Prefecture. Clayish soil.

13068. O Kau.
   From Chuutosho, Kagicho, Kagi Prefecture. Clayish soil.

13069. Tsau Tsu.
   From Boryo, Boryoshio, Tokari, Ako Prefecture. Loamy soil.

13070. Tsau Tsu.
   From Shinsho Shisho, Daichikuri, Hozan Prefecture. Sandy clay soil.
SEEDS AND PLANTS IMPORTED.

13035 to 13076—Continued.

13071. *Pei Tsu.*  
From Gokosho, Daichikuri, Hozan Prefecture. Sandy clay soil.

13072. *Cha Ah Tsu.*  
From Sankai Tsusho, Emmukaho, Shoka Prefecture. Sandy soil.

13073. *Tao Ro.*  
From Shojibokuko, Naisho Shisho, Gai Shinka Nanri, Tainan Prefecture. Clayish soil.

13074. *Hon Hoc.*  
From Nairokusho, Nanto, Nanto Prefecture. Clayish soil.

13075. *Gya Loom.*  
From Nairokusho, Nanto, Nanto Prefecture. Clayish soil.

13076. *Pei Tsu.*  
From Kobo Suido, Dabyo Xanho, Kagi Prefecture. Sandy soil.

Note.—In the above list, Nos. 13035 to 13046 and 13055 to 13068 were marked "Oryza utilis," while Nos. 13047 to 13054 and 13069 to 13076 were labeled "Oryza glutinosa."

13077. *Kochia scoparia.*  
From Takoma Park, D. C. Grown by Mr. A. J. Pieters during the season of 1904 for stock purposes.

13078. *Agaricus sp.*  
**Mushroom.*  
From Tokyo, Japan. Received thru Mr. T. Watase, president of the Tokyo Plant, Seed, and Implement Company, March 7, 1905.

"Shiitake." "Spawn of the edible species of Japanese mushroom, which is cultivated on an immense scale in the forests of Japan. It is a tree-inhabiting fungus and the Japanese have developed a special system of culture by means of which they can produce immense quantities at little expense. This spawn was introduced especially for the experiments of Dr. B. M. Duggar, of the Agricultural Experiment Station, Columbia, Mo., and is well worth calling to the attention of the mushroom growers of America, who should be given a chance to test this in comparison with the ordinary *A. comestris,* which is grown almost exclusively on beds of manure. This variety of Agaricus is keenly relished, not only by Japanese but by Europeans living in Japan." (Fairchild.)

13079. *Gossypium sp.*  
**Cotton.*  
From Lourenço Marquez, East Africa. Presented by Hon. W. Stanley Hollis, United States consul. Received March 3, 1905.

"From the slopes of the Lebombo Mountains, in the district of Lourenço Marquez." (Hollis.)

13080 to 13083. *Ipomoea hederacea.* **Japanese morning-glory.*  
From Yokohama, Japan. Received thru the Yokohama Nursery Company, March 6, 1805.

13080. Common single.  
13082. Giant.  
13081. Double.  
13083. Single fringed.

13084. *Sechium edule.*  
**Chayote.*  
From Mayaguez, P. R. Received thru Mr. O. W. Barrett, of the Agricultural Experiment Station, March 8, 1905.

Fruits secured from Mr. S. van L. Lippitt, of Mayaguez, P. R.
13085. **Xanthosoma sagittifolium.** Yautia.

From Mayaguez, P. R. Received thru Mr. O. W. Barrett, of the Agricultural Experiment Station, February 27, 1905.

Rollick. Tubers of the native Porto Rican Yautia "No. 1," from selected plants showing no sign of any fungous disease and growing in new soil. (For description, see No. 15417.)

13086. **Colocasia sp.** Taro.

From Mayaguez, P. R. Received thru Mr. O. W. Barrett, of the Agricultural Experiment Station, February 27, 1905.

Tubers of the *Duchena* Colocasia from Trinidad, British West Indies. (For description, see No. 15395.)

13087. **Pyrus malus.** Apple.

From Amassia, Asia Minor. Presented by Mr. H. Caramanian. Received March 11, 1905.

Misket. "We found it to be a sweet apple of very firm texture and of rather ordinary quality. We do not consider it equal in quality to such varieties as *Lady Street, Winter Paradise*, Victoria, *Green Sweet,* or *Tolman.* It may have value for warm climates, however, and on this account I think it would be well to place scions of it for fruiting as quickly as possible by top-working on bearing trees at some representative southern points." (W. J. Taylor.)

13088. **Allium cepa.** Onion.

From Santa Clara, Cal. Received thru C. C. Morse & Co., March 15, 1905.

Grown from S. P. I. No. 9318.

13089. **Rheum officinale.** Rhubarb.

From Paris, France. Received thru Vilmorin-Andrieux & Co., March 15, 1905.

13090. **Avena sativa.** Oat.

From Lincoln, Nebr. Received thru Prof. T. L. Lyon, Agricultural Experiment Station, March 10, 1905.

*Kheran.*

13091. **Avena sativa.** Oat.

From Brandon, Wis. Received thru Mr. F. E. Jones, March 16, 1905.

*Swedish Select.* Grown from S. P. I. No. 2788. In the spring of 1899 Mr. David Jones, Brandon, Wis., planted an ounce of No. 2788. Thirty-two seeds grew, and from this little plot he and his neighbors raised 200,000 bushels of oats in 1904.

13092. **Agropyron tenerum.** Slender wheat-grass.

From Brandon, Manitoba. Received thru A. E. McKenzie & Co., March 16, 1905.

13093. **Rheum palmatum tanghuticum.** Rhubarb.


13094. **Gossypium hirsutum.** Cotton.

From Guatemala. Received thru Mr. O. F. Cook, March 17, 1905.

*Rabinal.* "Cultivated by the Quiche Indians of Rabinal and other neighboring places of the dry plateau region of central Guatemala. A variety of the Upland type, grown as an annual crop, tho really a perennial. The stalks are cut back to
the ground every year. The new shoots set flowers and fruit with great promptness, which, with the assistance of the native turkeys, enable a crop to be secured in spite of the presence of the boll weevil.

"This variety may be of interest in southern and south-western Texas, either as a perennial or an annual. Even in the first year it is likely to be an early-maturing sort." (Cook.) (No. 1.)

13095. GOSSYPIUM HIRSUTUM. Cotton.

From Guatemala. Received thru Mr. O. F. Cook, March 17, 1905.

Kekehi. "Grown by the Indians at Secanquim, Cajabon district, Alta Vera Paz, Guatemala, the original locality of the weevil-eating kekehs. This variety is of dwarf habit. It begins fruiting while still very young, and matures a crop in six months even in a humid tropical climate where other kinds of cotton would probably require a much longer time. It is expected that in the United States this will prove to be an extra-early variety, tho two or three years of acclimatization may be required. Of the varieties now in the United States the Kekehi cotton most nearly resembles the King, but it seems to possess the desirable qualities of that variety to an even greater degree and the lint is longer and of better quality." (Cook.) (No. 2.)

13096. GOSSYPIUM HIRSUTUM. Cotton.

From the market of Coban, Alta Vera Paz, Guatemala. Received thru Mr. O. F. Cook, March 17, 1905.

"Supposed to have been grown in the valley of the Polochic River. Probably similar to the Kekehi cotton, tho the Indians belong to another tribe." (Cook.) (No. 3.)

13097. GOSSYPIUM HIRSUTUM. Cotton.

From Retalhuleu, Guatemala. Received thru Mr. W. R. Maxon, March 17, 1905.

Pachon. "The variety most extensively grown in the western part of Guatemala, where a considerable cotton industry exists. Mr. Maxon was informed that this variety was originally introduced into Guatemala from Peru, but an examination of specimens shows that it is an Upland form similar to the Kekehi cotton and with the same weevil-resisting adaptations. It is said to mature a crop in five months." (Cook.) (No. 4.)

13098. GOSSYPIUM HIRSUTUM. Cotton.

From Retalhuleu, Guatemala. Received thru Mr. W. R. Maxon, March 17, 1905.

Ixcaeco. "A brown cotton of the Upland type, similar to the brown form of the Kekehi cotton. The cotton brings the same price as the Pachon and is thought to have a stronger lint." (Maxon.) (No. 5.)

13099. GOSSYPIUM HIRSUTUM. Cotton.

From Retalhuleu, Guatemala. Received thru Mr. W. R. Maxon, March 17, 1905.

"Seeds of a supposed hybrid between Pachon and Ixcaeco cotton. A single boll of this type was found on a plant the other bolls of which were white and apparently pure Pachon." (Maxon.) (No. 6.)

13100. GOSSYPIUM HIRSUTUM. Cotton.

From Retalhuleu, Guatemala. Received thru Mr. W. R. Maxon, March 17, 1905.

"A smooth-seeded variation of Pachon cotton said to occur sporadically in the fields of the hairy-seeded form. The fiber is said to be not quite so long as the regular Pachon. This form is popularly believed to be that originally cultivated by the Indians in this locality." (Maxon.) (No. 7.)
13101. **Gossypium hirsutum.**

Cotton.

From Cucanha, near Tucura, Guatemala. Received thru Mr. O. F. Cook, March 17, 1905.

"A cotton similar to *Kekchi* grown in the valley of Polochic River." (Cook.)

No. 8.

13102. **Mesembryanthemum geminatum (?).**

From Sfax, Tunis. Received thru Mr. T. H. Kearney, March 17, 1905.

"Cuttings of a variety of *Mesembryanthemum* that is used for making lawns on land that is so alkaline that deposits of white alkali may be seen beneath the mat of the plant. I believe this will be valuable as a cover for alkaline soils." (Fairchild.)

13103. **Carica papaya.**

Papaw.

From Esmeraldas, Ecuador. Presented by Mr. George D. Hedian. Received March 16, 1905.

13104. **Aleurites cordata.**

Tung-shu or wood-oil tree.

From Hankow, China. Presented by Consul-General L. S. Wilcox and received at Chico, Cal., March 18, 1905.

"The fruit of this tree is the source of "wood oil," which is being imported in large quantities by this country, where it is used in the manufacture of paints, fine varnishes, and soaps. The tree itself is of stately appearance, with green, smooth bark and spreading branches, making it one of the finest of shade trees. It has been styled, and worthily so, "the national tree of China." The Tung-shu flourishes throughout the Yangtze Valley in latitude 25° to 34° N. It is said not to bear when subjected to temperatures as low as 25° F., although it will stand any degree of heat. The trees are raised from seed in a bed and transplanted when about a foot high, and seem to do well in almost any kind of soil. The Tung-shu is also propagated by cuttings. It is a rapid grower and will come into bearing in from three to six years, much depending upon the fertility of the soil. The yield of nuts from an average tree may be put at anywhere from 20 to 50 pounds, while the percentage of oil obtained from the nut is 40 per cent. The Chinese find a great many other uses for the oil of this tree; also for its wood and the refuse from the wood oil nut after extraction of the oil. Persons growing the wood oil tree should be cautioned against allowing the oil to come in contact with the skin, as it is extremely poisonous." (Wilcox.)

13105. **Solanum commersoni.**

Aquatic potato.

From Burlington, Vt. Presented by Prof. William Stuart, Agricultural Experiment Station, thru Mr. W. A. Orton. Received March 21, 1905.

13106. **Lilium hyb.**

Lily.

Seedlings resulting from pollinating flowers of *Lilium longiflorum eximium giganteum* (S. P. I. No. 11583) with *Lilium harrisii*. Crossing done by Mr. G. W. Oliver in the Department greenhouse during 1904.

13107. **Papaver somniferum.**

Poppy.


Opium seed from Asia Minor.

13108 to 13115. **Rosa hyb.**

Rose.


13108  **Conrad F. Meyer.**

13109  **Fimbriata.**

13110  **Mrs. Anthony Waterer.**

13111  **Rose Apples.**

7217—No. 97—07—9
13116 to 13129. **Rosa hyb.** Rose.

From Herts, England. Received from William Paul & Son, Waltham Cross, March 23, 1905.

- 13116. *Etoile de France.*
- 13117. *Countess Cairns.*
- 13118. *Earl of Warwick.*
- 13119. *Irene.*
- 13120. *Mrs. A. Byass.*
- 13121. *America.*
- 13122. *Atropurpurea.*
- 13123. *Belle Poitevine.*
- 13124. *Blanc Double de Coubert.*
- 13125. *Calocarpa.*
- 13126. *Chedane Guinoiseau.*
- 13127. *Mercedes.*
- 13128. *New Century.*
- 13129. *Rugosa Regliana.*

13130 and 13131. **CástanEA spp.** Chestnut.

Received from Mr. T. E. Steele, Palmyra, N. Y., March 24, 1905.

- 13130. *CASTANIA CRENATA.* Seedling Japanese chestnut.
- 13131. *CASTANIA SATIVA.* Seedling Spanish chestnut.

13132. (Undetermined.) **Matondo.**

From Melsetter, Rhodesia, South Africa. Presented by Mr. W. M. Longden. Received March 23, 1905.

A fruit by the name of "Matondo," described by Mr. Longden as follows: "The tree is a large, evergreen one, casting a dense shade. It grows to a height of about 60 feet, has a spreading habit, and is a prolific bearer. Fruit oval in shape, with a smooth skin and faint veins; color when ripe, yellow; dark green when unripe. Size up to 3 inches by 2 inches in diameter. Peel tough and thick, not edible; exudes milky fluid, very bitter and distasteful. Flesh edible, jelly-like in appearance, sweet and pleasant to taste. It grows in the Sabi Valley principally, at an altitude of about 1,800 feet, where the climate is very warm and there is comparatively no frost."

"This fruit should be experimented with in Porto Rico, Hawaii, and southern California." *(Fairchild,)*

13133. **Vitis sp.** Grape.

From Algeria, North Africa. Presented by Dr. L. Trabut and forwarded by Mr. T. H. Kearney. Received March 27, 1905.

*Boufarik* (table). A desert-resistant grape.

13134. **Agaricus sp. (?)** Mushroom.

From Yokohama, Japan. Received thru Yokohama Nursery Company, March 27, 1905.

13135. **Garcinia mangostana.** Mangosteen.

From Buitenzorg, Java. Received thru Doctor Treub, March 24, 1905

13136 to 13142.

From Melsetter, Rhodesia, South Africa. Presented by Mr. W. M. Longden. Received March 27, 1905.

A collection of fruit trees, with descriptions by Mr. Longden, as follows:

13136. (Undetermined.) **Ivory nut.**

"It (the nut) grows on a palm tree, which sometimes reaches a height of 60 feet. The natives eat the spongy substance between the skin and kernel. The vegetable ivory is, I think, an article of commerce."
13136 to 13142—Continued.

   “Edible. Tree very much resembles the domestic variety; fruit has a
delightful flavor.”

13138. Ficus sp. Fig.
   “Edible. Grows on the river banks. These have a sweet flavor. There
is also another variety larger, perhaps, than any domestic fig. They are
comparatively flavorless.”

13139. (Undetermined.) “Wild plum.”
   “Edible. Tree very similar to your persimmon. Natives also eat the ker-
nel, which has a nutty flavor with a touch of almond, and contains a large
percentage of oil, which the natives extract.”

13140. Euphorbia sp. (?) “Footah.”
   “Fruit is used by the natives for making a pleasant drink by soaking the
ripe seeds in water, which turns milky when stirred. Seeds are also crust-
for oil, of which they contain a large quantity. Tree grows to a height of
about 50 feet; dense, shiny, dark-green foliage giving immense shade.”

13141. (Undetermined.) “Mutwzwa.”
   “Edible. Flavor somewhat similar to damson. Grows in stony ground;
bush about 7 feet in height.”

13142. (Undetermined.) “Eecha.”
   “Species of nut. May be eaten raw, but is usually roasted by the natives.
It is only to supplement food supplies in lean years.”

13143 to 13153. Zea mays. Sweet corn.
   First generation from S. P. I. Nos. 12557 and 12558. Distributed during
the season of 1905 for further trial to test the effects of soil, location, etc.

   13143. Received from Prof. J. C. Whitten, Columbia, Mo., February,
1905.
   13144. Received from Mr. J. C. Robinson, Waterloo, Nebr., Febru-
ary, 1905.
   13145. Received from Prof. R. A. Emerson, Lincoln, Nebr., February,
1905.
   13146. Grown on the Arlington Farm during the summer of 1904.
   13147. Received from A. Mitchelson & Son, Tariffville, Conn., Feb-
ruary, 1905.

   13148. Received from Prof. C. P. Ball, Minneapolis, Minn., February,
1905.
   13149. Received from Prof. R. A. Emerson, Lincoln, Nebr., Febru-
ary, 1905.
   13150. Received from A. Mitchelson & Son, Tariffville, Conn., Feb-
ruary, 1905.
   13151. Received from Mr. J. C. Robinson, Waterloo, Nebr., Febru-
ary, 1905.
   13152. Received from Prof. J. C. Whitten, Columbia, Mo., February,
1905.
   13153. Grown on the Arlington Farm during the summer of 1904.

13154. Pistacia sp. Pistache.
   From Aintab, Turkey. Presented by Rev. A. Fuller thru Mr. Walter T. Swingle.
   Received March 27, 1905.
13155. *Rhus copallina*.  
**Sumac.**  
From Austin, Tex.  
Presented by Mr. F. T. Ramsey.  
Received March 27, 1905.

13156 to 13158.  
From Amassia, Turkey.  
Presented by Mr. H. Caramanian.  
Received March 29, 1905.

13156. *Pyrus malus.*  
**Apple.**

13157. *Prunus domestica.*  
**Plum.**

13158. *Cydonia* sp.  
**Quince.**

13159 to 13236.  
**Iridaceae.**

From Yokohama, Japan.  
Received thru Suzuki & Iida, New York, N. Y., March 25, 1905.

13159 to 13226.  
**Iris kaempferi.**

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<td>Shiiga-no-uranami.</td>
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<td>13188</td>
<td>Kagaribi.</td>
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<td>13189</td>
<td>Kosui-no-iro.</td>
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<td>13190</td>
<td>Konomchi-gama.</td>
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<td>13191</td>
<td>Kakujakuro.</td>
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<td>13192</td>
<td>Momiji-no-taki.</td>
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<td>13193</td>
<td>Shichinkawa.</td>
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<td>13194</td>
<td>Yedo-kagami.</td>
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<td>13195</td>
<td>Uji-no-hotaru.</td>
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<td>13196</td>
<td>Shimoyo-no-tanki.</td>
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<td>13197</td>
<td>Tsunagi-no-mai.</td>
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<td>13198</td>
<td>Iso-no-nami.</td>
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<td>13199</td>
<td>Oyodo.</td>
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<td>13200</td>
<td>Banbui-no-nami.</td>
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<td>13201</td>
<td>Wakamurasuki.</td>
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<td>13202</td>
<td>Kyodaisan.</td>
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<td>13203</td>
<td>Kigen-no-misao.</td>
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<td>13204</td>
<td>Koki-no-iro.</td>
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<td>13205</td>
<td>Sunidare.</td>
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<td>13206</td>
<td>Tora odorii.</td>
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<td>13207</td>
<td>Tsuru-no-keyoromo.</td>
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<td>13208</td>
<td>Datedogu.</td>
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<td>13209</td>
<td>Ayame-gawa.</td>
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<td>13210</td>
<td>Ho-dai.</td>
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<td>13211</td>
<td>Nishiki-hitone.</td>
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<td>13212</td>
<td>Riabi.</td>
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<td>13213</td>
<td>Reijo-no-tama.</td>
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<td>13214</td>
<td>Yono-zakura.</td>
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<td>13215</td>
<td>Shiige-no-yuki.</td>
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<td>13216</td>
<td>Asa-kagura.</td>
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<td>13217</td>
<td>Sunida-gawa.</td>
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</table>
13159 to 13236—Continued.
13159 to 13226—Continued.
13218. Tsutsu-izutsu.
13219. Rūpo.
13220. Chitose-dsuru.
13221. Risho-no-tama.
13227 to 13235. Iris spp.
13227. Iris ALBO-PURPUREA.
13228. Iris ALBO-PURPUREA.
13229. Iris raphiolepis.
13230. Iris raphiolepis variegata.
13231. Iris gracilipes.
13232. Iris sibirica.
13233. Iris laevigata.
13234. Iris laevigata semperflorens.
13235. Iris laevigata alba.
13236. Belamcanda punctata.

From Chinook, Mont. Received thru the Thomas O’Hanlon Company, March 30, 1905. Grown by George Davidson, near Chinook, in Milk River Valley, under irrigation.

13238 to 13240.
From Lourenço Marquez, Portuguese East Africa. Presented by Hon. W. Stanley Hollis, United States consul. Received March 27, 1905.
“Native East African cotton seed, which was got for me from the slopes of the Lebombo Mountains by the Bishop of Lebombo.” (Hollis.)
“The ‘Martingula,’ which is highly esteemed here for eating fresh, as well as for making preserves.” (Hollis.)
13240. (Undetermined.)
“I have to report that William F. Upshur, esq., of Barrene, Inhambane, has been good enough to furnish me with a small quantity of specimens of a new tree oil seed that is being exploited in the Inhambane district. In Inhambane these oil seeds are called ‘Maferera’ ; in Mozambique, where they grow wild in great profusion, they are called ‘Umtizi’ ; and in Lourenço Marquez, where they are eaten by the natives, they are called ‘Ungushu.’” (Hollis.)

13241. Ulex europaeus. Gorse, whin, or furze.
From Dublin, Ireland. Received thru Hogg & Robertson, March 29, 1905.

13242. Cotoneaster angustifolia. From Orleans, France. Received thru M. Léon Chénault, Route d’Olivet, 79, March 27, 1905.

13243 to 13255. Rosa sp. Rose.
13243. Madam George Bruant.
13244. Rugosa Alba.
13245. Rugosa, fl. pl.
13246. Madam Charles Worth.
13247. Rugosa Compte D’Empreuned.
13243 to 13255—Continued.

13248. **Bugosa Rosea.**
13249. **Bugosa Rubra.**
13250. **Austrian Copper.**
13251. **Austrian Yellow.**
13252. **Harisoni.**
13253. **Persian Yellow.**
13254. **Souv. de Pierre Notting.**
13255. **Marechal Niel.**

13256. **Zea Mays.**

*From North Pomfret, Vt.* Received thru Mr. S. Hewitt, February, 1905.


13257. **Olea Europaea.**

*From Mustapha, Algeria, North Africa.* Presented by Dr. L. Trabut. Received March 30, 1905.

*Grosse Aberkan.* Cuttings.

13258. **Nepheleium Lappaceum.**

*From Buitenzorg, Java.* Presented by Doctor Treub. Received March 31, 1905.

13259. **Medicago Sativa.**

*From Milburn, Nebr.* Received thru Mr. C. A. Snyder, April 1, 1905.

Seed grown in 1904 on Sec. 13, T. 20, R. 21, Custer County, Nebr., without irrigation, where it is 240 feet to water.

13260 to 13262. **Zea Mays.**

*From Sao Paulo, Brazil.* Presented by Prof. A. Lofgren, Horto Botanico. Received March 25, 1905.

13260. **White.**
13262. **Red.**
13261. **Amber.**

13263 to 13265.

*From Yokohama, Japan.* Received thru Yokohama Nursery Company, April 3, 1905.

13263. **Citrus sp.**

*Natsu daidai.* (See S. P. I. No. 8903.)

13264. **Juncus effusus.**

13265. **Scirpus triqueter.**

13266 to 13285.

*From Sultepec, Mexico.* Presented by Mr. Federico Chisolm, Hacienda “Cabajal.” Received March 28, 1905.

A collection of unidentified plants.

13286 to 13290.

*From Philadelphia, Pa.* Received thru Henry A. Dreer, Incorporated, April 3, 1905.

Flower seeds for growing seed.

13291. **Medicago Sativa.**

*From Fayetteville, N. Y.* Received thru Mr. F. E. Dawley, April 1, 1905.

97
13292. **Persea Gratissima.** Avocado.

From Coban, Guatemala. Received thru Mr. G. X. Collins and Mr. C. B. Doyle, March, 1905.

"This thick-skinned type of avocado is very distinct from the varieties commonly found on the markets and from those grown in Florida, the West Indies, and Mexico. It is believed that they will stand shipping much better than the thinner-skinned sorts, and as the quality is fine they should be a valuable acquisition for Porto Rico and Hawaii." (Collins.)

13293 to 13297. **Caladium Esculentum.** Taro.

From Magnolia, N. C. Received thru the Newberry Bulb Company, March 30, 1905.

13298. **Punica Granatum.** Pomegranate.

Received March 29, 1905, without advices, thru the Georgetown custom-house. Arrived in New York via steamship Umbria.

13299. **Stuartia Pentagyna.**

From Morrisville, Pa. Received thru Mr. S. C. Moon, April 4, 1905.

13300 to 13303. **Phalaris Canariensis.** Canary grass.

From Marseille, France. Received thru Hon. Robert P. Skinner, United States consul-general, April 5, 1904.

- 13300. Cleaned seed from Rodosto, Turkey.
- 13301. Cleaned seed from Plata, Argentina.
- 13302. Ordinary seed from Rodosto, Turkey.
- 13303. Ordinary seed from Plata, Argentina.

"The exporters of canary seed (*Phalaris canariensis*) of Marseille handle only the imported grades, the best of which reach this city from Rodosto (Turkey). The Rodosto seed is richest and has scarcely any grain. The Plata seed has at times a better aspect than the Rodosto seed, but is much lighter, contains straw in excessive quantities, and the kernels are generally decorticated." (Skinner.)

13304 and 13305.

From Mustapha, Algeria. Presented by Dr. L. Trabut, government botanist. Received April 7, 1905.

- 13304. **Sapindus Utilis.** Soapberry.
- 13305. **Narcissus Pachybolus.** Narcissus.

A vigorous species from western Algeria and Morocco, having 40 or 50 small flowers in clusters. Doctor Trabut thinks this will be interesting to cross with large-flowered varieties.

13306 to 13312. **Lathyrus Odoratus.** Sweet pea.

From Algiers, Algeria. Presented by Mr. Arkwright F. Telemly. Received April 7, 1905.

Early-maturing sweet peas, as follows:

- 13306. Blue and red.
- 13307. Blue.
- 13308. Rose and white.
- 13309. Lilac.
- 13310. Purple and bronze.
- 13311. Purple.
- 13312. Red.
13313 to 13315. **Chrysanthemum leucanthemum** hyb., *Shasta daisy.*

From Santa Rosa, Cal. Received thru Mr. Luther Burbank, April 7, 1905.


13316 to 13318.

From Lawrence, Kans. Received thru F. Barteldes & Co., April 7, 1905.

13316. **Andropogon sorghum.** *Sorghum.*

*Amber.*

13317. **Andropogon sorghum.** *Kafir corn.*

White.

13318. **Andropogon sorghum.** *Kafir corn.*

Red.

13319. **Asparagus duchesnii.**

From Brussels, Belgium. Received thru Mr. H. Schuster, 66 Rue du Luxembourg, April 8, 1905.

13320 to 13337. **Rosa sp.** *Rose.*

From Newtownards, County Down, Ireland. Received thru Alex. Dickson & Sons (Limited), Royal Irish Nurseries, April 8, 1905.

13320. *Dean Hole.*

13321. *Dr. J. Campbell.*

13322. *Hugh Watson.*

13323. *Lady Ashdown.*

13324. *Mrs. Conway Jones.*


13326. *Irish Engineer.*

13327. *Irish Harmony.*


13329. *Baron Lade.*

13330. *Annie Marie Souper.*

13331. *George Laine Paul.*

13332. *Le Progrès.*

13333. *Rayonnante.*

13334. *Sœur de Pierre Leperdrier.*

13335. *Schneeklecht.*

13336. *Audekoh Job Diering.*


13338. **Mangifera indica.** *Mango.*

From Lucknow, India. Received from the Royal Botanical Gardens, thru Mr. Robert Anderson, Lansdowne, Pa., April 11, 1905.

13339. ** Lolium italicum.** *Italian rye-grass.*

From New York, N. Y. Received thru J. M. Thorburn & Co., April 8, 1905.

13340. **Meconopsis integrifolia.** *Tibetan poppy.*

From Chelsea, England. Received thru James Veitch & Sons (Limited), August 14, 1905.

"English saved seed. A hardy yellow-flowered poppy from Tibet; hardy, biennial. The plant thrives on the north side of a hedge or wall and grows and flowers freely in open borders. The soil should be open and friable, with a large proportion of peat and sand. Good drainage and ample moisture are required. The seed germinates freely either in a cold frame or out of doors in a few weeks from the time of sowing. Any attempt at any time to protect the plants is quite fatal." (Veitch & Sons.)
DECEMBER, 1903, TO DECEMBER, 1905.

13341 to 13345. Cucumis melo. Musskmelon.
From Detroit, Mich. Received thru D. M. Ferry & Co., April 8, 1905.

13343. Bay View.

From Jena, Germany. Received from Doctor Broili, thru the Wahl-Henius Institute of Fermentology, Chicago, Ill., April 10, 1905.
Frankish Brewing. Presumably a high-grade pedigreed sort.

From Gloucester, Mass. Received thru Mr. R. P. Ireland, April 13, 1905.

From Seharunpur, India. Received thru Mr. W. Gollan, superintendent of the Government Botanical Gardens, April 13, 1905.
Bombay Yellow. Plants.

13349. Garcinia xanthochymus.
From Honolulu, Hawaii. Presented by Mr. Gerrit P. Wilder, April 13, 1905.

13350. Opuntia ficus-indica (?). Prickly pear.
From Nice, France. Presented by Dr. A. Robertson-Proschowsky. Received April 10, 1905.
"Cuttings of a seedling cactus grown by Doctor Proschowsky from seeds received probably from Mexico. This variety has never been fruited, but is so nearly spineless that it may be of interest as a forage plant." (Fairchild.)

13351 to 13353. Barberry.
From Ottawa, Canada. Presented by Prof. William Saunders, director of the Central Experimental Farm. Received April 10, 1905.

13352. Berberis sinensis.

From Karachi, India. Presented by Mr. I. L. F. Beaumont, of the Municipal Gardens and Farm Committee. Received April 10, 1905.

From Lakin, Kans. Received thru Mr. William Logan, January 26, 1905.
Rocky Ford.

From New Era, Oreg. Received thru Mr. Henry Gilbrich, April, 1905.
White. Said to have been bred by selection from the common type.

From Winooski, Vt. Received thru Mr. M. E. Douglass, March 3, 1905.
Malakof. Grown from S. P. I. No. 9449. Second generation. "No other early corn nearer than 1 mile either in 1903 or 1904." (D. S. Bliss.)
SEEDS AND PLANTS IMPORTED.

13358. **Medicago sativa.**  
*Alfalfa.*  
From Agricultural College, N. Dak. Received from the North Dakota Agricultural Experiment Station, thru Mr. C. J. Brand, October 28, 1904.  
*Grimm.*

13359 to 13566.  
Seeds transferred April 15, 1905, from the Office of Grass and Forage Plant Investigations to the Office of Seed and Plant Introduction and Distribution.

13359. **Anthoxanthum odoratum.**  
*Sweet vernal grass.*  
From Germany, 1904. (Agrost. 2384). From the Louisiana Purchase Exposition, 1904.

13360. **Cephalaria tatarica.**  
Grown in U. S. D. A. grass garden, 1902. (Agrost. 307.)

13361. **Cephalaria tatarica.**  

13362 to 13369. **Cicer arietinum.**  
*Chick-pea.*  
13362. Grown at Arlington Farm, 1902. (Agrost. 970-1.)
13363. From Parma, Italy. (Agrost. 2456.)
13364. From Voghera, Italy. (Agrost. 2457.)
13365. From Voghera, Italy. (Agrost. 2458.)
13366. From Avellino, Italy. (Agrost. 2459.)
13367. From Italy. (Agrost. 2460.)
13368. From Italy. (Agrost. 2461.)
13369. From Italy. (Agrost. 2462.)

13370. **Bromus marginatus.**  
From Seattle, Wash. Received thru Mr. Henry N. Leckenby. (Agrost. 1886.)

13371 to 13376.  
Received from Mr. S. W. Mollison, Inspector-General of Agriculture for India.

13371. **Dolichos biflorus.**  
*Kulthi.* From United Provinces of Agra and Oudh, India. (Agrost. 1646.)

13372. **Dolichos biflorus.**  
*Kulthi.* From Bombay Presidency, India. (Agrost. 1647.)

13373. **Dolichos lablab.**  
*Hyacinth bean.*  
*Popat.* From Nagpur, Central Provinces, India, 1903. (Agrost. 1648.)

13374. **Dolichos lablab.**  
*Hyacinth bean.*  
*Sem.* From United Provinces of Agra and Oudh, India, 1903. (Agrost. 1649.)

13375. **Dolichos lablab.**  
*Hyacinth bean.*  
*Val.* From Bombay, India, 1903. (Agrost. 1650.)

13376. **Dolichos lablab.**  
*Hyacinth bean.*  
*Val.* From Bombay, India, 1903. (Agrost. 1651.)

13377. **Holcus lanatus.**  
*Velvet grass.*  
Received thru the C. H. Lilly Company, Seattle, Wash., 1904. (Agrost. 2094.)
13359 to 13556—Continued.

13378. **Lathyrus sativus.**
   Bitter vetch.
   From Catania, Italy, 1904. From Italian exhibit, Louisiana Purchase Exposition. (Agrost. 2389.)

13379. **Lathyrus cicer.**
   Winter flat pea.
   From Catania, Italy, 1904. From Italian exhibit, Louisiana Purchase Exposition. (Agrost. 2406.)

13380. **Phaseolus calcaratus.**
   Bean.
   From the Alabama Agricultural Experiment Station. (Agrost. 2126.)

13381. **Phaseolus calcaratus.**
   Bean.
   Grown at Arlington Farm, 1903, from S. P. I. No. 6564. (Agrost. 941-1 a 1.)

13382. **Phaseolus calcaratus.**
   Bean.
   A selection grown at Arlington Farm, 1903, from S. P. I. No. 6564. (Agrost. 941-1 c 1.)

13383. **Phaseolus calcaratus.**
   Bean.
   A selection grown at Arlington Farm, 1903, from S. P. I. No. 6564. (Agrost. 941-1 d 1.)

13384. **Phaseolus angularis.**
   Bean.
   Grown at Arlington Farm, 1903. (Agrost. 969-1 a 1.) Seeds yellow to light orange.

13385. **Phaseolus angularis.**
   Bean.
   Grown at Arlington Farm, 1903. (Agrost. 969-1 b 1.)

13386. **Phaseolus angularis.**
   Bean.
   Grown at Arlington Farm, 1903. (Agrost. 969-1 c 1.)

13387. **Phaseolus angularis.**
   Bean.
   Grown at Arlington Farm, 1903. (Agrost. 969-1 e 1.)

13388. **Phaseolus angularis.**
   Bean.
   Grown at Arlington Farm, 1903. (Agrost. 969-1 f 1.)

13389. **Phaseolus angularis.**
   Bean.
   Grown at Arlington Farm, 1903. (Agrost. 969-1 g 1.)

13390. **Phaseolus angularis.**
   Bean.
   Grown at Arlington Farm, 1903. (Agrost. 969-1 h 1.)

13391. **Phaseolus angularis.**
   Bean.
   Grown at Arlington Farm, 1903. (Agrost. 1190-1.)

13392. **Phaseolus sp.**
   Bean.
   Grown at Arlington Farm, 1903. (Agrost. 1191.)

13393. **Phaseolus sp.**
   Bean.
   Special selection with large seeds grown at Arlington Farm, 1903. (Agrost. 1191-1.)

13394. **Phaseolus radiatus.**
   Mung bean.
   Grown at Arlington Farm, 1903. (Agrost. 968.)

13395. **Phaseolus radiatus.**
   Mung bean.
   From Clemson College, S. C., 1903. (Agrost. 1112.)
   Newman.
13359 to 13556—Continued.

13396 and 13397.

Received from Mr. S. W. Mollison, Inspector-General of Agriculture in India.

13396. **Phaseolus radiatus.** Mung bean.

From United Provinces of Agra and Oudh, India, July 8, 1903. (Agrost. 1639.)

13397. **Phaseolus radiatus.** Mung bean.

From Nagpur, Central Provinces, India, 1903. (Agrost. 1640.)

13398. **Phaseolus radiatus.** Mung bean.

From Cedartown, Ga., November, 1904. (Agrost. 2130.)

13399 to 13403.

Received from Mr. S. W. Mollison, Inspector-General of Agriculture in India.

13399. **Phaseolus radiatus.** Mung bean.

Katikha. From United Provinces of Agra and Oudh, India, 1903. (Agrost. 1641.)

13400. **Phaseolus max.** Mung bean.

Bhadela. From United Provinces of Agra and Oudh, India, 1903. (Agrost. 1642.)

13401. **Phaseolus max.** Mung bean.

Jathia (\textit{?}), or Jettira. From United Provinces of Agra and Oudh, India, 1903. (Agrost. 1643.)

13402. **Phaseolus max.** Mung bean.

\textit{Udid}. From Bombay Presidency, India, 1903. (Agrost. 1644.)

13403. **Phaseolus max.** Mung bean.

\textit{Udid}. From Nagpur, Central Provinces, India, July 8, 1903. (Agrost. 1645.)

13404. **Phaseolus retusus.** Metcalf bean.

From Silver City, N. Mex., April 28, 1903. (Agrost. 1176.)

13405. **Phaseolus angularris.** Bean.

Grown at Arlington Farm, 1903. (Agrost. 941\textsuperscript{3/4}.)

13406. **Vicia sp.** Vetch.

From Argentine exhibit, Louisiana Purchase Exposition. (Agrost. 2327.)

13407. **Vicia sp.** Vetch.

From German exhibit, Louisiana Purchase Exposition. (Agrost. 2455.)

13408. **Vicia sp.** Vetch.

Grown at Arlington Farm, 1902. (Agrost. 965; S. P. I. 6553.)

13409. **Vicia sp.** Vetch.

Grown at Arlington Farm, 1902. (Agrost. 942–1.)

13410. **Vicia ervilia.** Black bitter vetch.

From Italian exhibit, Louisiana Purchase Exposition, 1904. (Agrost. 2403.)

13411. **Vicia faba.** Horse bean.

From Naples, Italy, 1904. From Italian exhibit, Louisiana Purchase Exposition. (Agrost. 2415.)

13412. **Vicia sativa.** Common vetch.

From Argentine exhibit, Louisiana Purchase Exposition. (Agrost. 2314.)

13413 to 13431. **Vicia sativa.** Common vetch.

From Italian exhibit, Louisiana Purchase Exposition.

13413. From Italy. (Agrost. 2388.)
13359 to 13556—Continued.

13413 to 13431—Continued.

13414. From Reggio nell' Emilia, Italy. (Agrost. 2390.)
13415. From Rome, Italy, 1904. (Agrost. 2391.)
13416. From Fabriano, Italy, 1904. (Agrost. 2392.)
13417. From Italy, 1904. (Agrost. 2394.)
13418. From Pistoja, Italy, 1904. (Agrost. 2395.)
13419. From Milan, Italy, 1904. (Agrost. 2398.)
13420. From Italy, 1904. (Agrost. 2399.)
13421. From Fabriano, Italy, 1904. (Agrost. 2400.)
13422. From Fabriano, Italy, 1904. (Agrost. 2402.)
13423. From Potenza, Italy, 1904. (Agrost. 2404.)
13424. From Macerata, Italy, 1904. (Agrost. 2405.)
13425. From Ancona, Italy, 1904. (Agrost. 2408.)
13426. From Ancona, Italy, 1904. (Agrost. 2409.)
13427. From Tusla, Italy, 1904. (Agrost. 2410.)
13428. From Parma, Italy, 1904. (Agrost. 2411.)
13429. From Perugia, Italy, 1904. (Agrost. 2413.)
13430. From Foggia, Italy, 1904. (Agrost. 2414.)
13431. From Italy, 1904. (Agrost. 2432.)

13432. Vicia uniluca (?). Vetch.
From Japan, March 18, 1903. (Agrost. 1140.)

From Argentine exhibit, Louisiana Purchase Exposition. (Agrost. 2317.)

13434. Themeda ciliata.
From Palghar, Thana, India. Received thru Latham & Co., Bombay, India, January 20, 1904.

Bondoni, a small kind of "Ful" grass. "One of the best sorts of grass; for grazing." (Agrost. 1787.)

Received from Henry Nungesser & Co., New York, N. Y., April 20, 1904.
Turkestan. (Agrost. 1957.)

Received from Steele, Briggs Seed Co., Toronto, Canada, December 8, 1904.
(2131.)

Received from F. Barteldes & Co., Lawrence, Kans., 1904.
Arizona grown. (Agrost. 2518.)

Received from F. Barteldes & Co., Lawrence, Kans., 1904.
Minnesota grown. (Agrost. 2531.)

Kansas grown. (Agrost. 2530.)

Kansas grown. (Agrost. 2531.)
13359 to 13556—Continued.

13441. AGROPYRON OCCIDENTALE. From Hays, Kans. (Agrost. 1942.)
13444. BROMUSCARINATUS HOOK-ERIANUS. From Seattle, Wash. (Agrost. 1887.)
13442. AGROPYRON OCCIDENTALE. From Harlem, Mont. (Agrost. 1982.)
13445. BROMUSCARINATUS HOOK-ERIANUS. From Union, Oreg. (Agrost. 2097.)
13443. AGROPYRON OCCIDENTALE. (Agrost. 1001.)

13446. BROMUS INERMISS. Smooth brome-grass. From Brandon, Mass. Received thru Brandon Seed House. (Agrost. 1996.)

13447. BROMUS MARGINATUS. From Union, Oreg. (Agrost. 2094.)

13448. BROMUS POLYANTHUS PANICULATUS. (Agrost. 1177.)

13449. CALAMAGROSTIS HYPERBOREA. (Agrost. 841.)

13450. ELYMUS CONDENSATUS. Giant rye-grass. From Union, Oreg. (Agrost. 2092.)

13451. ELYMUS TRITICOIDES. (Agrost. 2096.) Wild wheat.

13452. ELYMUS VIRGINICUS SUBMUTICUS. From Union, Oreg. (Agrost. 1800.)

13453. FESTUCA PRATENSIS. Meadow fescue. From Union, Oreg. (Agrost. 1799.)

13454 to 13477. VIGNA SINENSIS. Cowpea.


DECEMBER, 1903, TO DECEMBER, 1905.

13359 to 13556—Continued.

13454 to 13477—Continued.

13461.

Iron. Grown by Mr. J. P. Dunlap, Dwight, Nebr., from seed of Congressional distribution, presumably from Monetta, S. C. Received from Mr. Dunlap, October, 1904. (Agrost. 2109.)

13462.

Iron. Received from Mr. S. M. Byrd, Cedartown, Ga., January 11, 1905. Grown in 1904 from seed of Congressional distribution, presumably from Monetta, S. C. (Agrost. 2130.)

13463.

Iron. Received from Mr. W. J. Edwards, Willshire, Ohio, March 6, 1905, and from Mr. J. A. Ritchie, Wapakoneta, Ohio, March 20, 1905. Grown from seed of Congressional distribution, presumably from Monetta, S. C. (Agrost. 2217.)

13464.

Iron. Received from four men in central Kentucky and southern Illinois, who grew it in 1904 from seed of Congressional distribution, presumably from Monetta, S. C. (Agrost. 2260.)

13465.

Iron. Received in March, 1905, from Mr. Han Abild, Wakonda, Clay County, S. Dak., who grew it in 1904 from seed of Congressional distribution, presumably from Monetta, S. C. (Agrost. 2310.)

13466.

Iron. Received from Mr. Charles G. Diament, Bridgeton, N. J., March 8, 1905. Grown from seed of Congressional distribution, presumably from Monetta, S. C. (Agrost. 2386.)

13467.


13468.


13469.

Wonderful. From T. W. Wood & Sons, Richmond, Va., April 2, 1904. (Agrost. 1903.)

13470.

Warren's Extra Early. Grown on Arlington Farm, 1904. Obtained in March, 1902, from Arkansas station, where it was grown for four years, and changed materially in size, color, and shape from the original seed procured from Maule, of Philadelphia. (Agrost. 1218–3.)

13471.


13472.


13473.


13474.

Michigan Favorite. Received in March, 1905, from Mr. Han Abild, Wakonda, Clay County, S. Dak. Grown from seed of Congressional distribution, presumably from Monetta, S. C. (Agrost. 2309.)
13359 to 13556—Continued.

13454 to 13477—Continued.

13475.

13476.
Taylor. Grown on Arlington Farm, 1904. From Alabama Station, March, 1902. (Agrost. 1248-3.)

13477.

13478 to 13487. Medicago sativa.

13478.
Received from F. Barteldes & Co., Lawrence, Kans., April 22, 1904. (Agrost. 1968.)

13479.

13480.
Grown in Meade County, Kans. Received from F. Barteldes & Co., Lawrence, Kans., April 22, 1904. (Agrost. 1970.)

13481.

13482.

13483.
Grown in Utah. Received from C. A. Smurthwaite Produce Company, Ogden, Utah, April 25, 1904. (Agrost. 1983.)

13484.
Grown in Colorado. Received from F. Barteldes & Co., Lawrence, Kans., April 20, 1904. (Agrost. 1967.)

13485.
Grown in Kansas. Received from F. Barteldes & Co., Lawrence, Kans., April 20, 1904. (Agrost. 1969.)

13486.
Grown in Utah. (Agrost. 2532.)

13487.
Grown in Texas. (Agrost. 2533.)

13488. Medicago media.


13489. Medicago sativa.

Alfalfa. Grown in Wyoming. Received from the A. Dickinson Company, Chicago, Ill., 1903. (Agrost. 1885.)

13490. Trifolium pratense.

Red clover. Received from T. W. Wood & Sons, Richmond, Va., April 18, 1904. (Agrost. 1952.)
13359 to 13556—Continued.

    *White Blooming.* Received from T. W. Wood & Son, Richmond, Va., April 18, 1904. (Agrost. 1953.)


    Grown in Italy. Received from Henry Nungesser & Co., New York, N. Y., April 20, 1904. (Agrost. 1962.)

    Received from F. Barteldes & Co., Lawrence, Kans., April 22, 1904. (Agrost. 1955.)

    Grown in Barry County, Mo. Received from F. Barteldes & Co., Lawrence, Kans., April 22, 1904. (Agrost. 1966.)


    Received from T. W. Wood & Sons, Richmond, Va., February 19, 1903. (Agrost. 1113.)


    *Ogema.* Received from Mr. Edward Evans, West Branch, Mich., May, 1904. (Agrost. 1992.)

    Grown at Arlington Farm, 1904. (Agrost. 912-3.)

13504. *Agropyron occidentale.*
    Received from Thomas Everett, Harlem, Mont., April, 1905.

13505. *Bromus marginatus.*
    Collected by Mr. J. S. Cotton, in the Wenache Mountains, Washington, in 1904. (Agrost. 2008.)

    Grown at Gap, French Alps, France. (Agrost. 2218.)

    Grown at Mysoke, Myto, Bohemia. (Agrost. 2219.)

    Grown at Neu Bydzow, Bohemia. (Agrost. 2220.)

7217—No. 97—07—10
13509. Trifolium pratense.
   *Zelenec.* Grown at Neu Bydzow, Bohemia. (Agrost. 2221.)

13510. Trifolium hybridum.
       Grown at Neu Bydzow, Bohemia. (Agrost. 2222.)

13511. Trifolium repens.
       Grown at Alt Bydzow, Bohemia. (Agrost. 2223.)

13512. Trifolium repens.
       Grown at Podolia, Russia. (Agrost. 2224.)

13513. Trifolium pratense.
       Grown at Goteborg, Sweden. (Agrost. 2225.)

13514. Trifolium hybridum.
       Grown at Goteborg, Sweden. (Agrost. 2226.)

13515. Trifolium pratense.
       Grown in Chile. (Agrost. 2227.)

13516. Trifolium pratense.
       Grown at Gelderland, Holland. (Agrost. 2228.)

13517. Trifolium pratense.
       Grown at Brabant, Holland. (Agrost. 2229.)

13518. Trifolium repens.
       Grown near Arnhem, Holland. (Agrost. 2230.)

13519. Medicago sativa.
       Grown at Saragossa, Spain. (Agrost. 2231.)

13520. Medicago sativa.
       Grown at Pfalz, Palatinate, Germany. (Agrost. 2232.)

13521. Medicago sativa.
       Grown in Oran Province, Algeria. (Agrost. 2233.)

13522. Trifolium pratense.
       Grown at Toulouse, Garonne, France. (Agrost. 2234.)

13523. Trifolium pratense.
       Grown at Charente-Inferieure, Poitou, France. (Agrost. 2235.)

13524. Trifolium pratense.
       Grown at Nantes, Anjou, France. (Agrost. 2236.)

13525. Trifolium pratense.
       Grown at Troyes, Champagne, France. (Agrost. 2237.)

13526. Trifolium pratense.
       Grown at St. Malo, Bretagne, France. (Agrost. 2238.)

13527. Trifolium pratense.
       Grown at Albeville, Picardy, France. (Agrost. 2239.)

13528. Trifolium alexandrinum.
       Grown at Alexandria, Egypt. (Agrost. 2240.)

13529. Trifolium repens.
       Grown at Milan, Lodi, Italy. (Agrost. 2241.)

13530. Trifolium repens.
       Grown at Lorraine, France. (Agrost. 2242.)
13359 to 13556—Continued.

13531. **Trifolium repens.**
  Grown at Lorraine, France. (Agrost. 2243.)

13532. **Trifolium filiforme.**
  Grown at Poitiers, France. (Agrost. 2244.)

13533. **Trifolium fragiferum.**
  Grown at Paris, France. (Agrost. 2245.)

13534. **Trifolium hybridum.**
  Grown at Beauce, France. (Agrost. 2246.)

13535. **Trifolium hybridum.**
  Grown at Champagne, France. (Agrost. 2247.)

13536. **Trifolium pannonicum.**
  Grown at Paris, France. (Agrost. 2248.)

13537. **Trifolium incarnatum.**
  Grown at Poitou, France. (Agrost. 2249.)

13538. **Trifolium incarnatum.**
  Grown at Beauce, France. (Agrost. 2250.)

13539. **Trifolium incarnatum.**
  Grown at Beauce, France. (Agrost. 2251.)

13540. **Trifolium incarnatum.**
  Grown at Beauce, France. (Agrost. 2252.)

13541. **Medicago sativa.**
  Grown at Gard, France. (Agrost. 2253.)

13542. **Medicago sativa.**
  Grown at Orange, Provence, France. (Agrost. 2254.)

13543. **Medicago sativa.**
  Grown at Charente, Poitou, France. (Agrost. 2255.)

13544. **Medicago sativa.**
  Grown at Anjou, Pays, France. (Agrost. 2256.)

13545. **Medicago sativa.**
  Grown at Nord, France. (Agrost. 2257.)

13546. **Medicago sativa.**
  From Turkestan, Asia. (Agrost. 2258.)

13547. **Medicago sativa.**
  Grown at Bologna, Italy. (Agrost. 2259.)

13548. **Trifolium pratense.**
  Grown at Warwickshire, England. (Agrost. 2256.)

13549. **Trifolium pratense.**
  Grown at Hampshire, England. (Agrost. 2257.)

13550. **Trifolium repens.**
  Grown at Norfolkshire, England. (Agrost. 2258.)

13551. **Trifolium hybridum.**

13552. **Medicago denticulata.**
  From T. W. Wood & Sons, Richmond, Va., March 16, 1903. (Agrost. 1129.)

White clover.

Alsike.

Hungarian clover.

Crimson clover.

Alfalfa.

Red clover.

White clover.

Alsike.

Bur clover.
13553. Atriplex bracteosa.
From Phoenix, Ariz. Collected by Dr. D. Griffiths, October 16, 1903. (Agrost. 1824.)

13554. Atriplex bracteosa.
From Tucson, Ariz. Collected by Dr. D. Griffiths, October 11, 1903. (Agrost. 1825.)

13555. Atriplex bracteosa.
From San Rita Mountains, Arizona. Collected by Dr. D. Griffiths, October 10, 1903. (Agrost. 1826.)

13556. Atriplex confertifolia.
Collected by Dr. D. Griffiths, 1903. From valley of the Little Colorado, Arizona. (Agrost. 1828.)

13557. Atriplex bracteosa.
From Santa Rita Mountains, Arizona. Collected by Dr. D. Griffiths, May 23, 1903. (Agrost. 1827.)

13558. Melilotus sylvatia.
From Algeria, October, 1903. (Agrost. 1161.)

13559. Melilotus spectrosa.
From Shao-king, Chekiang Province, China. Received February 12, 1904. Presented by Mr. Cyril F. Pomeroy.

"The Chinese mainly use its heavy, rank growth for fertilizing the soil previous to sowing rice." (Agrost. 1806.)

13560. Trifolium longipes. Mountain clover.
From Wenache Mountains, Washington, at altitude of 5,000 feet. Collected by Mr. J. S. Cotton, October, 1904. (Agrost. 2108.)

From A. Lecoq & Co., Darmstadt, Germany, March 28, 1903. Turkestan. (Agrost. 2208.)

Received June 28, 1904. (Agrost. 263.)

13563. Panicum maximum.
From Barbados, West Indies.

From Mollendo, Peru. Collected by Mr. Enrique Meier in 1903. (Agrost. 2168.)

13565. Andropogon sorghum. Milo maize.
Purchased from Mr. W. W. Hutchens, Chillicothe, Tex., in the autumn of 1904. (Agrost. 2090.)

Received from Mr. James K. Metcalfe, Silver City, N. Mex., February 26, 1904. (Agrost. 1889.)

From Tunis, North Africa. Received from Mr. Louis Fidelle, thru Mr. T. H. Kearney, April 20, 1905.

"Chemlali. 'This is an olive with very small fruit, very rich in oil, and a heavy yielder, adapted to the driest, hottest region known in which olive culture flourishes, the rainfall at Sfax, in southern Tunis, where it is the only variety grown extensively, averaging about 10 inches yearly, and sometimes falling to 5 or 6 inches as the average for several successive years. Notwithstanding this small rainfall, the orchards are never irrigated at Sfax except during the first two or three summers after plant-
In some orchards the cuttings are irrigated only a single time, receiving about 6 gallons each. Extraordinary precautions are taken to preserve the soil moisture near the surface, the olive being a shallow-rooting tree. The trees are planted from 65 to 80 feet apart each way, the wider planting giving seven trees per acre. The ground between is kept entirely clean, not even grain crops being grown after the tree begins to bear. The surface of the soil is always kept in a well-pulverized condition to reduce evaporation. Three or four plowings a year are given, and as many cultivations as are necessary to keep out weeds. Manuring is practiced only to a very limited extent. The orchards at Sfax are always created with pieces of wood from the base of very old trees, such as those sent you. The cuttings are generally set out in the fall (but sometimes in the spring) in the bottom of holes that are 2 feet deep and 2 feet square. These are filled up as the tree grows, until in about two years they are entirely filled. It is often the practice to keep a shallow basin, 6 inches or so deep, around the base of the tree during the rainy season (winter), the diameter of the basin being about equal to that of the spread of the foliage. In summer the ground is plowed up to the bases of the trees. The soil around Sfax is a reddish sandy loam to a depth of 2 or 3 feet or more, below which hardpan is often encountered.

"The trees are pruned during the harvest every other year, beginning when 3 years old. The average yields obtained at Sfax from trees respectively 10, 15, 20, and 25 years old appear to be about 2, 6, 10, and 12\(\frac{1}{2}\) quarts of oil per tree. In good years twice as much is obtained. The percentage of oil in the fruit, as well as the quantity of fruit produced, increases rapidly as the tree grows older." (Kearney.)

13568. **Musa sapientum.**

*Banana.*

From Gabes, Tunis, North Africa. Received thru Mr. T. H. Kearney, April 20, 1905.

13569. **Pistacia vera.**

*Pistache.*

From Calaminisetta, Sicily. Received thru Mr. T. H. Kearney, from Signor Deleo, April 20, 1904.

13570. **Zea mays.**

*Sweet corn.*

From Riverside Farm, Nashua, N. H. Received April 17, 1905. 

*Crosby.* Said to be the result of eighteen years' selection.

13571. **Nephelium lappaceum.**

*Rambutan.*

From Buitenzorg, Java. Received thru Doctor Treub, April 22, 1905.

Native of south India and Malay Islands, and furnishes a fruit similar to the Litchi, namely, the Rambutan or Ramboestan fruit. All species of Nephelium seem to require rather a moist, mild, forest climate than great atmospheric heat. The fruit is of a bright-red color, about 2 inches long, of an oval form, and slightly flattened, and covered with long, soft, fleshy spines or thick hairs. Like the other Nepheliums it contains a pleasant acidulous pulp very grateful in tropical countries.

13572. **Garcinia mangostana.**

*Mangosteen.*

From Buitenzorg, Java. Received thru Doctor Treub, April 17, 1905.

13573. **Juglans regia.**

*Persian walnut.*

From Kashgar, eastern Turkestan, Asia. Presented by Rev. P. J. P. Hendriks. Received April 11, 1905.

13574. **Glycyrrhiza glabra.**

*Licorice.*


13575. **Althaea rosea.**

*Hollyhock.*

From New York, N. Y. Received from Henry & Lee, importers, March, 1905.

*Japanese.*
13576 to 13582.

From Christiania, Norway. Presented by Mr. C. Doxrud, thru Miss Carrie Harrison, of this Department. Received April 13, 1905.

13576. Avena sativa. Oat.
White. Cultivated in 1898 under the Arctic Circle.

13577. Avena sativa. Oat.
Black. Cultivated at northern latitude of 64°.

13578. Hordeum vulgare (?). Barley.
Cultivated in 1898 under the Arctic Circle.

Cultivated at northern latitude of 63°.

13580. Phleum pratense. Timothy.
Cultivated at northern latitude of 63°.

13581. Trifolium pratense. Red clover.
Cultivated at northern latitude of 63°.

Cultivated at northern latitude of 63°.

"We are informed that these seeds have been collected within the Arctic Circle, and it is probable that they represent very short-seasoned types, which are likely to be of unusual value in northern Alaska and possibly in portions of our Northern States." (Fairchild.)

13583 to 13585. Gossypium sp. Cotton.

From Peru. Received thru W. R. Grace & Co., New York, N. Y., April 19, 1905.

13583. Vitarte. Smooth cotton seed from Vitarte; represents the seed of cotton grown in the valleys of Peru. This cotton is similar to Egyptian and is known as "Egyptian" cotton. It is used by the various cotton mills in this country in the manufacture of "domestics." The surplus is shipped to Liverpool, where it finds a market at a price a little over American cotton, say 0.40¢ per pound. There is one crop of this cotton every year, the same as with American cotton. The seed is planted in September or October and the cotton is gathered in May or August the following year. The annual crop is about 7,500,000 pounds.

13584. Palpa.

13585. Nazca. Palpa, Nazca, and Ica (No. 14801) represent seed of Peruvian cotton grown in these different places, which are in the southern part of Peru. Here the crop is twice a year, same seasons as the "Full rough." Crop varies from 6,000 bales (of 100 pounds) in a dry year to 15,000 bales in a good year. The cotton seed of the "Full rough" (No. 12958) and "Moderate rough" (Palpa, Nazca, and Ica) is exported to England, while the seed of the "Egyptian" is prest here and the cotton-seed cake, known as "Pasta," is shipped to Liverpool. The oil is sold here chiefly for use in mines, and portions of it as Italian salad oil.

13586. Phalaris canariensis. Canary grass.

From Patras, Greece. Presented by Mr. S. Xanthopoulo, of the Station Agricole. Received April 19, 1905.

In his letter of April 1, Mr. Xanthopoulo stated that this seed was procured by him from Turkey.

13587 to 13599.

From Chelsea, England. Received thru James Veitch & Sons, March 28, 1905. Flower seeds.
DECEMBER, 1903, TO DECEMBER, 1905. 151

13600 to 13620.
From Reading, England. Received thru Sutton & Sons, about March 3, 1905. Flower seeds.

13621 and 13622. Matting rush.
From Tokyo, Japan. Presented by Prof. J. Matsumura, Imperial University. Received April 24, 1905.
13621. JUNCUS EFFUSUS DECIPiens. 13622. JUNCUS Setchuensis effusoides.

13623 to 13636.

13637 to 13647.
From New York, N. Y. Received thru J. M. Thorburn & Co., about February 17, 1905. Flowering perennials.

13648. MEDICAGO CANCELLATA.
From Rostoff on Don, Russia. Received from Mr. George R. Martin, thru the American consular agency, September 21, 1905.

13649 to 13663.
From Erfurt, Germany. Received thru Mr. Ernst Benary, March 16, 1905. Flower seeds.

13664 to 13693.

13694 and 13695.
From Marblehead, Mass. Received thru James J. H. Gregory & Son, February 27, 1905. Flower seeds.

13696 to 13698.

13699 to 13703.
From Naples, Italy. Received thru Mr. Max Herb, in the spring of 1905. Flower seeds.

13704. RUDBECKIA SPECIOSA BICOLOR.
From Philadelphia, Pa. Received thru W. A. Burpee & Co., February 17, 1905.

13705 to 13707.
13708 to 13711.

13712 to 13714.
From Ottawa, Ontario, Canada. Presented by Mr. J. B. Lewis, C. E., 126 Sparks street. Received February 21, 1905.
Flower seeds.

13715 to 13718.
From Erfurt, Germany. Received thru Mr. F. C. Heinemann, in the spring of 1905.
Flower seeds.

13719 to 13721.
From Erfurt, Germany. Received thru Haage & Schmidt, in the spring of 1905.
Flower seeds.

13722 and 13723. AQUILEGIA sp. Columbine.
From Wordsley, Stourbridge, England. Received thru Webb & Sons, in the spring of 1905.

13724. PAPAVER ORIENTALE hyb. Poppy.

13725 to 13727.
(Origin and date of receipt uncertain.) Flower seeds.

13728. LANSIUM DOMESTICUM. Doekoe.
From Buitenzorg, Java. Presented by Doctor Treub. Received April 29 and May 4, 1905.

13729 to 13731. PERSEA GRATISSIMA. Avocado.
From Miami, Fla. Presented by Mr. George B. Cellon to the Subtropical Laboratory thru Mr. S. B. Bliss. Received April 12, 1905.
13730. Hadex.

13732. MORAEA IRIDIODES.
From Cape Town, South Africa. Presented by Prof. P. MacOwan, Department of Agriculture. Received April 24, 1905.
A native South African plant, growing 2½ feet high; flowers iris-like.

13733 to 13794.
Seeds transferred from the Office of Grass and Forage Plant Investigations to the Office of Seed and Plant Introduction and Distribution, May 1, 1905.

13733 to 13771.
From the Louisiana Purchase Exposition.
13733. BRASSICA NAPUS. Rape.
From Milan, Italy. (Agrost. 2476.)
<table>
<thead>
<tr>
<th>Number</th>
<th>Plant Name</th>
<th>Location</th>
<th>Collection Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>13734</td>
<td><em>Trifolium pratense</em></td>
<td>From Voghera, Italy.</td>
<td>Agrost. 2477.</td>
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<tr>
<td>13735</td>
<td><em>Trifolium pratense</em></td>
<td>From Padova, Italy.</td>
<td>Agrost. 2478.</td>
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<tr>
<td>13736</td>
<td><em>Trifolium pratense</em></td>
<td>From Asti, Italy.</td>
<td>Agrost. 2479.</td>
</tr>
<tr>
<td>13737</td>
<td><em>Trifolium pratense</em></td>
<td>From Lodi, Italy.</td>
<td>Agrost. 2480.</td>
</tr>
<tr>
<td>13738</td>
<td><em>Medicago sativa</em></td>
<td>From Milan, Italy.</td>
<td>Agrost. 2481.</td>
</tr>
<tr>
<td>13739</td>
<td><em>Medicago sativa</em></td>
<td>From Padova, Italy.</td>
<td>Agrost. 2482.</td>
</tr>
<tr>
<td>13740</td>
<td><em>Trifolium pratense</em></td>
<td>From Lomino, Italy.</td>
<td>Agrost. 2483.</td>
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<tr>
<td>13741</td>
<td><em>Trifolium pratense</em></td>
<td>From Agnola, Italy.</td>
<td>Agrost. 2484.</td>
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<tr>
<td>13742</td>
<td><em>Medicago lupulina</em></td>
<td>From Como, Italy.</td>
<td>Agrost. 2485.</td>
</tr>
<tr>
<td>13743</td>
<td><em>Medicago sativa</em></td>
<td>From Treviso, Italy.</td>
<td>Agrost. 2486.</td>
</tr>
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<td>13744</td>
<td><em>Medicago sativa</em></td>
<td>From Parma, Italy.</td>
<td>Agrost. 2487.</td>
</tr>
<tr>
<td>13745</td>
<td><em>Medicago sativa</em></td>
<td>From Triora, Italy.</td>
<td>Agrost. 2488.</td>
</tr>
<tr>
<td>13746</td>
<td><em>Trifolium pratense</em></td>
<td>From Triora, Italy.</td>
<td>Agrost. 2489.</td>
</tr>
<tr>
<td>13747</td>
<td><em>Trifolium pratense</em></td>
<td>From Verona, Italy.</td>
<td>Agrost. 2490.</td>
</tr>
<tr>
<td>13748</td>
<td><em>Trifolium pratense</em></td>
<td>From Pesaro, Italy.</td>
<td>Agrost. 2491.</td>
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<td>13749</td>
<td><em>Trifolium pratense</em></td>
<td>From Pario, Italy.</td>
<td>Agrost. 2492.</td>
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<tr>
<td>13750</td>
<td><em>Lotus corniculatus</em></td>
<td>From Genoa, Italy.</td>
<td>Agrost. 2493.</td>
</tr>
<tr>
<td>13751</td>
<td><em>Medicago lupulina</em></td>
<td>From Treviso, Italy.</td>
<td>Agrost. 2494.</td>
</tr>
<tr>
<td>13752</td>
<td><em>Trifolium pratense</em></td>
<td>From Ferrara, Italy.</td>
<td>Agrost. 2495.</td>
</tr>
<tr>
<td>13753</td>
<td><em>Medicago sativa</em></td>
<td>From Pisa, Italy.</td>
<td>Agrost. 2496.</td>
</tr>
<tr>
<td>13754</td>
<td><em>Medicago sativa</em></td>
<td>From Triora, Italy.</td>
<td>Agrost. 2497.</td>
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<tr>
<td>13755</td>
<td><em>Medicago sativa</em></td>
<td>From Verona, Italy.</td>
<td>Agrost. 2498.</td>
</tr>
</tbody>
</table>

Red clover.

Alfalfa.

Yellow trefoil.

Bird’s-foot trefoil.
### SEEDS AND PLANTS IMPORTED. 

#### 13733 to 13794—Continued.  
13733 to 13771—Continued.  

<table>
<thead>
<tr>
<th><strong>13733</strong></th>
<th><strong>TRIFOLIUM PRATENSE.</strong></th>
<th><strong>13756.</strong></th>
<th>Red clover.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>From Treviso, Italy.</td>
<td>(Agrost. 2499.)</td>
<td></td>
</tr>
<tr>
<td><strong>13757.</strong></td>
<td><strong>MEDICAGO SATIVA.</strong></td>
<td>Alfalfa.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>From Milan, Italy.</td>
<td>(Agrost. 2500.)</td>
<td></td>
</tr>
<tr>
<td><strong>13758.</strong></td>
<td><strong>MEDICAGO SATIVA.</strong></td>
<td>Alfalfa.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>From Voghera, Italy.</td>
<td>(Agrost. 2501.)</td>
<td></td>
</tr>
<tr>
<td><strong>13759.</strong></td>
<td><strong>MEDICAGO SATIVA.</strong></td>
<td>Alfalfa.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>From Ales, Italy.</td>
<td>(Agrost. 2502.)</td>
<td></td>
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<tr>
<td><strong>13760.</strong></td>
<td><strong>TRIFOLIUM PRATENSE.</strong></td>
<td>Red clover.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(No label.) (Agrost. 2503.)</td>
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</tr>
<tr>
<td><strong>13761.</strong></td>
<td><strong>TRIFOLIUM PRATENSE.</strong></td>
<td>Red clover.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(No label.) (Agrost. 2504.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>13762.</strong></td>
<td><strong>MEDICAGO DENTICULATA.</strong></td>
<td>Bur clover.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>From Argentina. (Agrost. 2505.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>13763.</strong></td>
<td><strong>TRIFOLIUM PRATENSE.</strong></td>
<td>Red clover.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>From Argentina. (Agrost. 2506.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>13764.</strong></td>
<td><strong>TRIFOLIUM INCARNATUM.</strong></td>
<td>Crimson clover.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>From Argentina. (Agrost. 2507.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>13765.</strong></td>
<td><strong>TRIFOLIUM HYBRIDUM.</strong></td>
<td>Alsike.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>From Argentina. (Agrost. 2508.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>13766.</strong></td>
<td><strong>TRIFOLIUM PRATENSE.</strong></td>
<td>Red clover.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>From Argentina. (Agrost. 2509.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>13767.</strong></td>
<td><strong>MEDICAGO SATIVA.</strong></td>
<td>Alfalfa.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>From Argentina. (Agrost. 2510.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>13768.</strong></td>
<td><strong>MEDICAGO SATIVA.</strong></td>
<td>Alfalfa.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>From Argentina. (Agrost. 2511.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>13769.</strong></td>
<td><strong>MEDICAGO SATIVA.</strong></td>
<td>Alfalfa.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>From Argentina. (Agrost. 2512.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>13770.</strong></td>
<td><strong>TRIFOLIUM PRATENSE.</strong></td>
<td>Red clover.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>From Treviso, Italy.</td>
<td>(Agrost. 2513.)</td>
<td></td>
</tr>
<tr>
<td><strong>13771.</strong></td>
<td><strong>TRIFOLIUM PRATENSE.</strong></td>
<td>Red clover.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>From Italy. (Agrost. 2514.)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### 13772 to 13775.  
From Reading, England. Received from Sutton & Sons, March, 1903.  

<table>
<thead>
<tr>
<th><strong>13772.</strong></th>
<th><strong>TRIFOLIUM PRATENSE PERENNE.</strong></th>
<th>Red clover.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Agrost. 2156.)</td>
<td></td>
</tr>
<tr>
<td><strong>13773.</strong></td>
<td><strong>TRIFOLIUM REPENS PERENNE.</strong></td>
<td>White clover.</td>
</tr>
<tr>
<td></td>
<td>(Agrost. 2157.)</td>
<td></td>
</tr>
<tr>
<td><strong>13774.</strong></td>
<td><strong>TRIFOLIUM PRATENSE.</strong></td>
<td>Red clover.</td>
</tr>
<tr>
<td></td>
<td>(Agrost. 2158.)</td>
<td></td>
</tr>
<tr>
<td><strong>13775.</strong></td>
<td><strong>TRIFOLIUM HYBRIDUM.</strong></td>
<td>Alsike.</td>
</tr>
<tr>
<td></td>
<td>Sutton's giant hybrid cow clover. (Agrost. 2159.)</td>
<td></td>
</tr>
<tr>
<td><strong>13776.</strong></td>
<td><strong>TRIFOLIUM PRATENSE.</strong></td>
<td>Red clover.</td>
</tr>
<tr>
<td></td>
<td>From Reading, England, March 20, 1903. (Agrost. 2162.)</td>
<td></td>
</tr>
</tbody>
</table>
13733 to 13794—Continued.

13777. Trifolium repens. Wild white clover.
From Dickson, Chester, England, May 5, 1903. (Agrost. 2179.)

From Missouri Seed Company, 1903. (Agrost. 2180.)

13779. Vicia faba. Broad bean.
From Naples, Italy. Collected for World’s Fair. (Agrost. 2417.)

13780. Vicia faba. Broad bean.
From Italy, 1904. (Agrost. 2418.)

13781. Vicia faba. Broad bean.
From Caserta, Italy, 1904. Collected for World’s Fair. (Agrost. 2419.)

13782. Vicia faba. Broad bean.
From Caserta, Italy, 1904. Collected for World’s Fair. (Agrost. 2420.)

13783. Vicia faba. Broad bean.
From Italy, 1904. (Agrost. 2421.)

13784. Vicia faba. Horse bean.
From Caserta, Italy, 1904. Collected for World’s Fair. (Agrost. 2422.)

13785. Vicia faba. Horse bean.
From Rome, Italy, 1904. Collected for World’s Fair. (Agrost. 2423.)

13786. (Unidentified legume.) (Agrost. 2464.)

13787 to 13793. Brassica napus. Rape.
From the Louisiana Purchase Exposition. European varieties.

13787. (Agrost. 2467.) 13791. (Agrost. 2471.)
13788. (Agrost. 2468.) 13792. (Agrost. 2472.)
13789. (Agrost. 2469.) 13793. (Agrost. 2473.)
13790. (Agrost. 2470.)

From Argentina. (Agros. 2475.)

From Pueblo, Colo. Received thru Keen Bros., April, 1905.

This seed is from a good crop grown under conditions of unusual drought and high
temperature. It may therefore be valuable in extending the range of this plant
further south.

13796. Vicia angustifolia (?). Vetch.
From Augusta, Ga. Received thru the N. L. Willet Drug Company, April, 1905.
Said to be the most valuable vetch grown in the vicinity of Augusta, Ga.

13797. Lolium bonaerensis. From Argentina. Received from Argentine exhibit, Louisiana Purchase Exposition, spring of 1905.

13798 to 13800.
From Buitenzorg, Java. Presented by Doctor Treub. Received May 4, 1905.

13801 and 13802.
From London, England. Received thru James Veitch & Son, April 21, 1905.
13801. ACER MYABEI. 13802. MAGNOLIA STELLATA ROSEA.

13803. AGAPANTHUS UMBELLATUS.
From Berlin, Germany. Received thru L. Spath in 1902.

13804. (Undetermined.)
From Argentina. Received thru Dr. R. T. Galloway in 1902.
Seeds of a tree probably belonging to the family Myrtaeae.

13805. HESPERALOE FUNIFERA.
From Cerritos, Mexico. Received August, 1903. Grown under G. & G. No. 3995 and numbered in May, 1905.

While the plant is used to a considerable extent for the production of fiber in Mexico, I think it is doubtful whether it could be used for this purpose profitably in this country with our present facilities for cleaning fiber. It is a rather striking ornamental plant, with its large open panicle of pinkish or purplish flowers, followed by pear-shaped, dark-purple seed pods. I would recommend it especially for planting in dry situations in parks and in the Southern States. In the northern part of its range in Mexico it must endure winter temperatures down to zero, and if planted in well-drained soils and protected by a mulch in winter, it will doubtless survive out of doors in the parks of the Southern States.” (Dewey.)

13806. PSIIDIUM GUAIJAVA POMIFERUM. Guava.
From Argentina. Received thru Dr. R. T. Galloway in 1902. Grown under G. & G. No. 358 and numbered in May, 1905.

13807. HIPPEASTRUM hyb.
From Washington, D. C. Numbered May 7, 1905.
A seedling with double flowers, produced by Mr. G. W. Oliver by crossing.

13808. CINNAMOMUM CAMPHORA. Camphor.
From Huntington, Fla. Collected by Mr. W. O. Richtmann, of Drug and Medicinal Plant Investigations, from a tree on the grounds of Dr. George E. Walker, April, 1905.

13809 to 13818.
From Laguna, Cal. Collected by Dr. R. T. Galloway, in the vicinity of Laguna, and sent to Mr. G. W. Oliver for use in breeding. Received May 7, 1905.
13809. MEDICAGO sp. 13811. LESPEDEZA JAPONICA.
13810. TRIFOLIUM sp. 13812. AVENA sp.
13812. AVENA sp.

“Thousands of acres of this wild oat are being harvested for hay. Good thing for hybridizing. Grown on soil with 10 inches of rain. Cuts 4 to 5 tons per acre.” (Galloway.)

13813. (Undetermined.) Grass.
13814. (Undetermined.) Grass.
13815. (Undetermined.) Grass.
13816. ECHINOCYSTIS sp. 13818. BLOOMERIA AUREA.
(NO. 1.)
13817. ECHINOCYSTIS sp. 13818. BLOOMERIA AUREA.
(NO. 2.)
**13819 to 13851. Diospyros kaki.** **Japanese persimmon.**

A collection of plants of named varieties secured for the use of Mr. G. W. Oliver in breeding work. Received in January, 1905.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Origin</th>
<th>Date of Receipt</th>
</tr>
</thead>
<tbody>
<tr>
<td>13819</td>
<td>Maru gata.</td>
<td>January, 1905</td>
</tr>
<tr>
<td>13820</td>
<td>Muye tan.</td>
<td></td>
</tr>
<tr>
<td>13821</td>
<td>Dai-dai maru.</td>
<td></td>
</tr>
<tr>
<td>13822</td>
<td>Goshi gaki.</td>
<td></td>
</tr>
<tr>
<td>13823</td>
<td>Hachiya.</td>
<td></td>
</tr>
<tr>
<td>13824</td>
<td>Tsuro noko.</td>
<td></td>
</tr>
<tr>
<td>13825</td>
<td>Yemon.</td>
<td></td>
</tr>
<tr>
<td>13826</td>
<td>Costata.</td>
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<tr>
<td>13827</td>
<td>Okane.</td>
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<tr>
<td>13828</td>
<td>Taber’s No. 23.</td>
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<tr>
<td>13829</td>
<td>Taber’s No. 129.</td>
<td></td>
</tr>
<tr>
<td>13830</td>
<td>Tane mashi.</td>
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<tr>
<td>13831</td>
<td>Triumph.</td>
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</tr>
<tr>
<td>13832</td>
<td>Tsara.</td>
<td></td>
</tr>
<tr>
<td>13833</td>
<td>Yedo ichi.</td>
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<tr>
<td>13834</td>
<td>Zengi.</td>
<td></td>
</tr>
<tr>
<td>13835</td>
<td>Dai-dai maru.</td>
<td></td>
</tr>
<tr>
<td>13836</td>
<td>Daisanamoko.</td>
<td></td>
</tr>
<tr>
<td>13837</td>
<td>Goboshi.</td>
<td></td>
</tr>
<tr>
<td>13838</td>
<td>Gosho.</td>
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</tr>
<tr>
<td>13839</td>
<td>Hachiya.</td>
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<tr>
<td>13840</td>
<td>Kozuru.</td>
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<tr>
<td>13841</td>
<td>Kuro kama.</td>
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<tr>
<td>13842</td>
<td>Manegaki.</td>
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<tr>
<td>13843</td>
<td>Minozaru.</td>
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<tr>
<td>13844</td>
<td>Mashirazu.</td>
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<tr>
<td>13845</td>
<td>Mizigaki.</td>
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</tr>
<tr>
<td>13846</td>
<td>Shakuuni.</td>
<td></td>
</tr>
<tr>
<td>13847</td>
<td>Shibagemon.</td>
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</tr>
<tr>
<td>13848</td>
<td>Tane mashi.</td>
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</tr>
<tr>
<td>13849</td>
<td>Zenji maru.</td>
<td></td>
</tr>
<tr>
<td>13850</td>
<td>(Unnamed.)</td>
<td></td>
</tr>
<tr>
<td>13851</td>
<td>(Unnamed.)</td>
<td></td>
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</tbody>
</table>

**13852. Cephalaria tatarica.**


<table>
<thead>
<tr>
<th>Variety</th>
<th>Origin</th>
<th>Date of Receipt</th>
</tr>
</thead>
<tbody>
<tr>
<td>13853</td>
<td>Trifolium repens.</td>
<td></td>
</tr>
<tr>
<td>13854</td>
<td>Yellow Glencoe.</td>
<td></td>
</tr>
<tr>
<td>13855</td>
<td>Black Don.</td>
<td></td>
</tr>
<tr>
<td>13856</td>
<td>Velvet Don.</td>
<td></td>
</tr>
<tr>
<td>13857</td>
<td>From Simbirsk, Russia.</td>
<td></td>
</tr>
<tr>
<td>13858</td>
<td>From Kharkof, Russia.</td>
<td></td>
</tr>
</tbody>
</table>

**13859 to 13851.**

**13852. Cephalaria tatarica.**


<table>
<thead>
<tr>
<th>Variety</th>
<th>Origin</th>
<th>Date of Receipt</th>
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<td>Black Don.</td>
<td></td>
</tr>
<tr>
<td>13856</td>
<td>Velvet Don.</td>
<td></td>
</tr>
<tr>
<td>13857</td>
<td>From Simbirsk, Russia.</td>
<td></td>
</tr>
<tr>
<td>13858</td>
<td>From Kharkof, Russia.</td>
<td></td>
</tr>
</tbody>
</table>

**13857 and 13858. Medicago sativa.** **Alfalfa.**

From Paris, France. Received thru Vilmorin-Andrieux & Co., May 8, 1905.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Origin</th>
<th>Date of Receipt</th>
</tr>
</thead>
<tbody>
<tr>
<td>13857</td>
<td>From Simbirsk, Russia.</td>
<td></td>
</tr>
<tr>
<td>13858</td>
<td>From Kharkof, Russia.</td>
<td></td>
</tr>
</tbody>
</table>
13859. **Allium cepa.**

Onion.

From Paris, France. Presented by Vilmorin-Andrieux & Co. Received May 6, 1905.

_Sainte Marie._ "This onion is remarkable for its great earliness. It is flat in shape, with a very fine neck, and produces, as quickly as the _White Queen_ onion, marketable bulbs of a larger size than those of the latter. It seems to us that it might be a desirable variety for truck farmers in the Southern States." (Vilmorin-Andrieux & Co.)

13860. **Stipa tenacissima.**

Esparto grass.


13861. **Nephelium mutabile.**

Kapoelesan.

From Buitenzorg, Java. Presented by Doctor Treub. Received May 12, 1905.

13862. **Clitoria ternatea (?).**

Butterfly pea.

From Porto Rico. Grown from seed presented by the Governor. Plants numbered May 6, 1905.

13863. **Clematis davidiana.**

Clematis.


13864. **Hydrastis canadensis.**

Golden-seal.

From Mantua, Ohio. Received thru Mr. A. W. Russel, at the request of Mr. W. W. Stockberger, May 15, 1905. Seed for use in connection with experiments being carried on by Dr. R. H. True.

13865 to 13924.

From Pretoria, South Africa. Presented by Mr. G. Baylis, Division of Botany, Transvaal Department of Agriculture, thru Prof. W. J. Spillman. Received May 1, 1905.

A collection of native grass seeds as follows (the numbers in parentheses are Mr. Baylis's):

13865. **(Natal red top.)**

(239/05.)

13866. **(Native grass.)**

(240/05.)

13867. **Eragrostis sp.**

(241/05.)

13868. **Eragrostis sp.**

(242/05.)

13869. **(Native grass.)**

(243/05.)

13870. **(Native grass.)**

(244/05.)

13871. **Eragrostis chlorocephala.**

(245/05.)

13872. **(Native grass.)**

(247/05.)

13873. **Andropogon contortus.**

(248/05.)

13874. **(Native grass.)**

(249/05.)

13875. **Eragrostis sp.**

(250/05.)

13876. **Eragrostis sp.**

(251/05.)

13877. **Agrostis sp.**

(252/05.)

13878. **Caphriola dactylon.**

(253/05.)

13879. **Aristida sp.**

(254/05.)

13880. **Andropogon sp.**

(255/05.)

13881. **Elionurus argentatus.**

(256/05.)

13882. **Andropogon sp.**

(257/05.)

13883. **Eragrostis plana.**

(258/05.)

13884. **Eragrostis lappula digava.**

(259/05.)

13885. **Eragrostis sp.**

(260/05.)
13865 to 13924—Continued.

13886. Arundinella ecklonii. (261/05.)
13887. Chaschochloa sp. (262/05.)
13888. (Native grass.) (263/05.)
13889. Andropogon eucnemos. (264/05.)
13890. (Native grass.) (265/05.)
13891. (Native grass.) (277/05.)
13892. Aristida sp. (278/05.)
13893. Tricholaena rosea. (279/05.)
13894. Panicum colunum. (281/05.)
13895. Chloris virgata. (282/05.)
13896. Eragrostis sp. (285/05.)
13897. Eragrostis sp. (286/05.)
13898. (Native grass.) (287/05.)
13899. Aristida sp. (288/05.)
13900. Eragrostis sp. (289/05.)
13901. Chloris virgata. (290/05.)
13902. (Native grass.) (291/05.)
13903. (Native grass.) (292/05.)
13904. Eragrostis sp. (293/05.)
13905. (Native grass.) (294/05.)

13906. Eragrostis sp. (295/05.)
13907. (Native grass.) (296/05.)
13908. (Native grass.) (297/05.)
13909. (Native grass.) (298/05.)
13910. Chaschochloa aurea. (299/05.)
13911. Chaschochloa sp. (300/05.)
13912. Chaschochloa nigrirostris (?) (301/05.)
13913. Panicum isachne. (302/05.)
13914. Chaschochloa penneisetum (?) (303/05.)
13915. (Native grass.) (305/05.)
13916. (Native grass.) (306/05.)
13917. (Native grass.) (307/05.)
13918. (Native grass.) (308/05.)
13919. Chaschochloa sp. (309/05.)
13920. (Native grass.) (310/05.)
13921. Eragrostis major megastachya. (311/05.)
13922. Panicum sulcatum. (312/05.)
13923. (Native grass.) (313/05.)
13924. (Native grass.) (315/05.)

13925 to 13946. Clematis spp.


13925. Clematis flammula (Rubra marginata).
13926. Clematis indivisa.
13927. Clematis coccinea.

13928 to 13945. Clematis spp.

13928. Anderson Henryi.
13929. Boskoop Seedling.
13930. Fairy Queen.
13931. Duchess of Edinburgh.

13932. Gipsy Queen.
13933. Jackmani.
13934. Jackmani Superba.
13935. Lilacina Floribunda.
SEEDS AND PLANTS IMPORTED.

13925 to 13946—Continued.

13928 to 13945—Continued.

13936. M. Koster.
13937. Mme. Baron Veiland.
13938. Mme. Van Houtte.
13939. Miss Bateman.
13940. Standish.

13946. Clematis integrifolia Durandi.

13947 to 13949. Phalaris canariensis.  
Canary grass.

From Monte, Grand Canary.  Presented by Mr. Alaricus Delmard, Hotel Santa Brigada. Received April 24, 1905.

"Phalaris canariensis, as a matter of fact, is hardly grown in the islands and mostly comes from the Province of Alicante, in Spain. But one person grows it here, and I will forward you a packet of the seed. Again I regret that I can only discover one variety as grown here. It may have been grown as a crop for the sale of seed in former times in these islands, but certainly is so no longer. The seed I now have comes from Morocco and Buenos Aires, and also from Seville; that from the former two places costs 0.2 pesetas for 100 kilos, and from Seville 0.5 pesetas." (Delmard.)

13948. Grown in Monte.  
13949. Grown in Morocco.

13950 and 13951. Phalaris spp.  

From San Giovanni a Teduccio, Italy. Received thru Dammann & Co., April 25, 1905.

13950. Phalaris canariensis.  
Canary grass.  
13951. Phalaris arundinacea.  
Reed canary grass.

13952 to 13966. Beta vulgaris.  
Sugar beet.

Sugar-beet seeds planted at Fairfield, Wash., in the spring of 1905, by Mr. Joseph F. Reed, assistant in sugar-beet experiments, from selected roots.

13952. Kleinwanzleben; tested 23 per cent sugar.  
Roots selected from Mr. E. H. Morrison's general stock in 1903. Seed raised in 1904.

13953. Kleinwanzleben; tested 23 per cent sugar.  
Roots selected from No. 12846 (Lehi seed) in 1903. Seed raised in 1904.

13954. Kleinwanzleben; tested 22 per cent.  
Roots selected from Mr. E. H. Morrison's general stock in 1903.

13955. Kleinwanzleben; tested 21 per cent.  
Roots selected from Mr. E. H. Morrison's general stock in 1903.

13956. Kleinwanzleben; tested 20 per cent.  
Roots selected from Mr. E. H. Morrison's general stock in 1903.

13957. Kleinwanzleben; tested 19 per cent.  
Roots selected from Mr. E. H. Morrison's general stock in 1903.

13958. Kleinwanzleben; tested 19 per cent.  
Roots selected from No. 12846 (Lehi seed) in 1903.

13959. Kleinwanzleben; tested 18 per cent.  
Roots selected from Mr. E. H. Morrison's general stock in 1903.
13952 to 13966—Continued.

13960. *Kleinwanzleben*; tested 18 per cent.
Roots selected from No. 12849 (Morrison seed), 1903.

13961. *Kleinwanzleben*; tested 18 per cent.
Roots selected from No. 12846 (Lehi seed) in 1903.

13962. *Kleinwanzleben*; tested 17 per cent.
Roots selected from Mr. E. H. Morrison’s general stock in 1903.

13963. *Kleinwanzleben*; tested 16 per cent.
Roots selected from Mr. E. H. Morrison’s general stock in 1903.

13964. *Dippe Elite Kleinwanzleben*; tested 16 per cent.
Roots selected from *Dippe Kleinwanzleben*, 1903.

13965. *Kleinwanzleben*; tested 15 per cent.
Roots selected from Mr. E. H. Morrison’s general stock in 1903.

13966. *Kleinwanzleben*; tested 15 per cent.
Roots selected from Mr. E. H. Morrison’s general stock in 1903. The outside seed stalks were cut out, allowing more nourishment to the stalks produced from the inner or sugar rings of the beet.

13967. **Carissa Arduina.**

From Cape Town, South Africa. Presented by Prof. P. MacOwan, government botanist, Department of Agriculture, Cape of Good Hope. Received April 24, 1905.

“A handsome apocynaceous shrub which may make an ornamental hedge plant in your Southern States. The glittering green of the foliage and the curious rectangular mode of branching catch the eye, but, like some other African Sepiariae, it requires the severest discipline with the shears, and, I must say, submits to it well. “Even the Apple-of-the-Kei, now spread over the warmer world, is not more destined to the steel than is this Carissa. The flowers are borne in small umbels, brilliantly white, scented, and succeeded by lots of scarlet ovoid fruits, the beloved ‘num-nums’ of natives and kids generally. I hope you will push it into notice among amateurs. They can make cones or pyramids of it, if they like, in the antique topiary fashion.” (MacOwan.)

13968 to 13975.

From Pretoria, Transvaal, South Africa. Presented by Prof. J. Burtt Davy, government agrostologist and botanist, Transvaal Department of Agriculture. Received May 15, 1905.

“Small samples of local varieties of wheat, oats, Nepaul barley, and maize. For your guidance in their disposal I may say that this is a region of hot days and cool nights (frosty in winter), with summer rains, and a long, cool, rainless winter. The rainfall runs from 20 to 30 inches, but is discounted by six or seven months of practical drought.” (Davy.)

13968. *Avena sp.*

*Boer.* (283/05.) Oat.

13969. *Hordeum sp.*

*Tibet.* (217/05.) Barley.

13970. *Zea Mays.*

*Egyptian.* (990/04.) Corn.

13971. *Zea Mays.*

*North American.* (992/04.) Corn.

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13968 to 13975—Continued.

    *White Bohman Mealie.* (604/04.)

    *Klein Kurein.* (284/05.)

    *Tibet.* (216/05.)

    *Wol Korn.* (498/04.)

13976 to 13985. Berberis sp. Barberry.

From St. Petersburg, Russia. Presented by Messrs. Regel and Kesselring, of the Royal Botanical Gardens. Received May 11, 1905.

13976. *Berberis sinensis.*

13977. *Berberis thunbergii maximowiczii.*

13978. *Berberis thunbergii.*

13979. *Berberis vulgaris.*

13980. *Berberis vulgaris subcata.*

13981. *Berberis vulgaris amurensis.*

13986 to 13988.

From Buitenzorg, Java. Received thru Doctor Treub, May 20, 1905.


13988. *Nephelium mutabile.* Kapoelasan.

13989 to 13992.

From New York, N. Y. Received thru J. M. Thorburn & Co., May 12, 1905.

13989. *Hedysarum coronarium.* Sulla.


13991. *Onobrychis onobrychis.* Sainfoin.


13993 to 13998.

From Westbury Station, Nassau County, N. Y. Received thru Isaac Hicks & Son, May 25, 1905.

Ornamental plants as follows:

13993. *Acer carpinifolium.*

13994. *Cornus mackophylla.*

13995. *Cornus mackophylla.*

13996. *Viburnum dilatatum.*

13997. *Quercus cuspisata.*

13998. *Stuaria pseudo-camellia.*


From Ogden, Utah. Received thru Mr. P. A. Nebeker, May 23, 1905.

*Turkestan alfalfa,* grown on unirrigated land from imported seed (probably S. P. I. No. 991) furnished Mr. Nebeker in 1900.
DECEMBER, 1903, TO DECEMBER, 1905. 163

14000 to 14005. GLADIOLUS spp. Gladiolus.

From New York, N. Y. Received from Mr. W. Van Fleet, April 5, 1905.

14000. GLADIOLUS CHUENTUS.
14003. GLADIOLUS PSIITACINUS.
14001. GLADIOLUS PURPUREO-AURATUS.
14004. GLADIOLUS SAUNDERSII.
14002. GLADIOLUS DRACOCHILUS.
14005. GLADIOLUS LEIGHTLINI.

14006 to 14072. GLADIOLUS spp. Gladiolus.

From Floral Park, N. Y. Received thru Mr. John Lewis Childs, April 8, 1905.

14006 to 14034. GLADIOLUS CHILDISH.

14035 to 14061. GLADIOLUS GANDAVENSIS.

14073 to 14087. GLADIOLUS spp. Gladiolus.

From Berlin, N. Y. Received thru Mr. Arthur Cowee, April 12, 1905.

14088 to 14155. GLADIOLUS spp. Gladiolus.

From Nancy, France. Received thru V. Lemoine & Son, May 4, 1905.

14156 to 14259. GLADIOLUS spp. Gladiolus.

From Paris, France. Received thru Vilmorin-Andrieux & Co., May 10, 1905.

14260 to 14267. GLADIOLUS spp. Gladiolus.

From Erfurt, Germany. Received thru Haage & Schmidt, May 10, 1905.

14268 to 14412. GLADIOLUS spp. Gladiolus.

From Somerset, England. Received thru Kelway & Sons, Langport, May 12, 1905.

(See the circular of the Bureau of Plant Industry entitled "A Variety Collection of Gladiolus," 1905.)

14413 to 14418.

From Sultepec, Mexico. Presented by Mr. Federico Chisolm. Received May 12, 1905.

A small collection of unidentified plants.

14419. TULIPA sp. Tulip.

From Dedham, Mass. Received thru Mr. A. W. Cheever, August 25, 1905.

14420 and 14421. NICOTIANA TABACUM. Tobacco.

From Sao Paulo, Brazil. Presented by Dr. H. M. Lane, Mackenzie College. Received May 25, 1905.

14420. Fumo Creolo. Seed from near Cotia, State of Sao Paulo, Brazil.
14421. Seed from Pirassununga, State of Sao Paulo, Brazil.

14422 to 14431.

From Honolulu, Hawaii. Presented by Mr. Ralph S. Hosmer, superintendent of forestry, Hawaiian Bureau of Agriculture and Forestry. Received May 31, 1905.

14422. RAUWOLFIA SANDWINCENSIS.

Native name Ihuo. A small, milky tree.
14422 to 14431—Continued.

14423. *Ceriopineon gaudichaudii.*

Native name *Olapa.* A tree 30 to 50 feet high. The natives prepare a blue dye from the bark and leaves.

14424. *Maca sandwicensis.*

Native name *Lama.* Grows to a height of from 20 to 40 feet.

14425. *Caesalpinia kauaiaensis.*

Native name *Uhihi.* A low shrub 3 to 4 feet

14426. *Erythrina monosperma.*

Native name *Wiliwili.* An ornamental tree 20 to 25 feet high, with short, thick trunk and spreading crown. The tree loses its leaves in late summer, and in the spring before the new leaves are out scarlet flowers appear. The wood is soft and corklike.

14427. *Dracaena aurea.*

Native name *Halahepe.* A glabrous tree 20 to 25 feet high, from the wood of which the natives used to carve their idols.

14428. *Myrsine laessertiana.*

Native name *Kolea.* A tree 20 to 50 feet high. The natives used to extract a red dye from the bark.

14429. *Alphonsona ponderosa.*

Native name *Kauaia.* A tall tree, often attaining 50 to 83 feet. The wood is remarkable for close grain, hardness, and heavy weight, on which account the natives preferred it for making spears, mallets for beating kapa, and other tools; turns black with age.

14430. *Dodonaea viscosa.*

Native name *Aitii.*

14431. *Myoporum sandwicensis.*

Native name *Nuu. English name 'bastard sandalwood.' Tree 20 to 30 feet high. The wood of this tree, most so the roots, becomes fragrant on drying, with an odor resembling that of sandalwood, whence its English name. After the exhaustion of the true sandalwood it was exported for some time to China as a substitute.” (Hillebrand.)

14432. *Gehbera jamesoni.*

*Barbenton daisy.*

From Lourenço Marquez, East Africa. Presented by Mr. A. E. Graham-Lawrence, thru Hon. W. Stanley Hollis, United States consul. Received July 14, 1905.

14433. (Undetermined.)

*Lemoncito.*

From Manila, P. I. Received thru Capt. George P. Ahern, chief of the Bureau of Forestry, Manila Bureau of Agriculture, July 17, 1905.

"This is a small plant, the height of which does not exceed one and one-half of that of a man, and is known only by the name of 'lemoncito.' It usually has about five very leafy branches. Its trunk is nearly 20 centimeters in diameter, of a light-yellow color, with blackish spots hardly perceptible, and of a fine fibrous texture. It is not very well known by the common people. Its branches are slender and produce leaves in groups of three, the middle one being the largest; in the growth of the leaves are found thorns somewhat pronounced; the groups of leaves are arranged in alternating order on either side of the branch up to the end. Its trunk has no odor, but its fruit has an agreeable odor somewhat like maraschino. They appear between the groups of leaves at the time of opening of the calyx of a flower from which they come, and are sometimes found in clusters and sometimes single. In the month of May this plant produces fruit in abundance and they ripen in a few days.
They have an oval form with a pronounced fiery color, are aromatic and edible with a somewhat acid yet sweet taste.

"Commonly people who have lemoncito trees make sirup from the ripened fruit and also preserve them." (Ahern.)

14434 to 14463.

From Mexico. Secured by Prof. P. H. Rolfs, in charge of the Subtropical Laboratory, Miami, Fla., while traveling in Mexico as agricultural explorer of the Office of Seed and Plant Introduction in April, May, and June, 1905.

14434. Prunus sp. "Ceruella."

"A form of native Prunus, resembling the peach in color, about the size of a damson plum. Secured at Jalapa, Mexico. This plum grows in that neighborhood; consequently it is possible that seedlings from it will be able to maintain themselves in extreme southern Florida and Porto Rico. (Lab. No. 289.)" (Rolfs.)


"A small quantity of bud wood secured from a tree that blooms in January and ripens fruit in May. The special value of this particular tree lies in the fact that it ripens in so short a time after blooming. The fruit, altho delicious and otherwise good, is too small to prove of value on the market. Its special value, however, lies in the fact that when it comes into bearing it can be used for hybridizing with the early forms that do have marketable fruit, and consequently the introduction is very desirable. (Lab. No. 295.)" (Rolfs.)

14436. Cucurbita sp. Squash.

"This is a peculiar native (?) squash that is grown to some extent for the market, and it is possible that it would be of use in the Southern States for a summer vegetable on account of its extremely hard outer skin. (Lab. No. 296.)" (Rolfs.)

14437. Caesalpinia sp. C. "This is a flowering shrub found at Papantla, State of Vera Cruz. It resembles to some extent a plant already grown in Florida and known as the dwarf Poinciana (Caesalpinia pulcherrema). It differs from this, however, in producing a much greater abundance of flowers and growing about twice the height. It is a distinct species from that mentioned. (Lab. No. 297.)" (Rolfs.)

14438. Ficus sp.

"A number of ripe fruits of this tree were secured from the public garden at Papantla. The fruits are about the size of black walnuts, and are inedible, tho not of unpleasant flavor; but the tree is very decorative. In general character of the tree and look of the leaves, this species would classify near Ficus carica. (Lab. No. 298.)" (Rolfs.)

14439. Hibiscus sp.

"An Hibiscus that appears to be a native, bearing a very dark maroon-colored bloom. Quite showy and striking. (Lab. No. 299.)" (Rolfs.)

14440. Vanilla sp. "Pompon."

"This species is a very strong-growing vanilla. Produces the largest pods and in considerable quantity. Secured near Papantla, Vera Cruz. (Lab. No. 308.)" (Rolfs.)

14441. Vanilla planifolia (?). Vanilla.

"This number appears to be the true V. planifolia, but could not be identified. It, however, is one of the vanilla-producing species. (Lab. No. 309.)" (Rolfs.)


"This was secured from a vanillary some 10 or 12 miles from Papantla. It is probably the true V. planifolia. It is from this species that most of the commercial material is produced in this section. (Lab. No. 310.)" (Rolfs.)
14434 to 14463—Continued.

14443. **Vanilla** sp.

"The exact status of this number can not be learned until the flowers and fruit shall have been studied. It is, however, not *V. planifolia*. (Lab. No. 311.)" (Rolfs.)

14444. **Vanilla** sp.

"This is rather a weak-growing species of the vanilla genus, but I have been told that it produces beans of unusual strength. Secured on the Isthmus of Tehuantepec. (Lab. No. 312.)" (Rolfs.)

14445. **Vanilla** sp.

"This is a very narrow-leaved species. It is not a vigorous grower, but is said to be of considerable value. Secured on the Isthmus of Tehuantepec. (Lab. No. 313.)" (Rolfs.)

14446. **Vanilla** sp.

"Quite similar to 313 and may prove to be the same species, but in the field it showed considerable difference, due to the place where it was growing. Secured on the Isthmus of Tehuantepec. (Lab. No. 314.)" (Rolfs.)

14447. **Bamusa vulgaris** (?). Bamboo.

"This gigantic-growing bamboo was seen all along the way from a few miles below Teziutlan to Papantla. It has become rather thoroly established, and would appear to be a native of this region. A small quantity of good seed was obtained from fruiting specimens. (Lab. No. 316.)" (Rolfs.)

14448. **Mangifera indica**. Mango.

"Seed of what is commonly called Manila mango. This is probably the same mango that is called the *Philippine* mango in Cuba. Very little fiber. Fruit very long, about 5 inches, sometimes longer than this, about 3 inches broad at its broadest, about ½ to 2 inches thick. Delicious flavor, free from turpentine, and the best varieties can be eaten with a spoon, it being possible to cut the fiber with an ordinary teaspoon. (Lab. No. 317.)" (Rolfs.)

14449. **Carica papaya**. Papaw.

"A very handsome specimen of this fruit was purchased for the seed. (Lab. No. 318.)" (Rolfs.)

14450. **Castilla elastica**. Rubber.

(Lab. No. 319.)

14451. **Lycopersicum esculentum**. Tomato.

"A small tomato, which is said to be a native of Mexico and one that occurs very commonly, especially on the Isthmus of Tehuantepec. (Lab. No. 320.)" (Rolfs.)

14452. **Ananas sativus**. Pineapple.

"Known as the *Guatemala Spinless White*. This variety has a number of points that would commend it for our use—spinless, ripens early, is delicious, and apparently a good shipper. (Lab. No. 323.)" (Rolfs.)

14453. **Cicer arietinum**. Chick-pea.

"This is a legume which in some respects resembles the English pea, and is used very largely in preparing soups and dishes of that kind. It is not generally used in this country, but if it should prove to do well the Spanish market would use all that could be furnished for some time. (Lab. No. 327.)" (Rolfs.)

14454. **Casimiroa edulis**. White sapota.

(Lab. No. 328.)

14455. "**Haba.**"

"A legume to be found on most of the markets. (Lab. No. 329.)" (Rolfs.)
14434 to 14463—Continued.

14456. **Prunus sp.**

"Ceruella."

"This species is said to be a native of Mexico and to grow very luxuriantly in the regions where oranges are produced. If this could be grown in Florida and Porto Rico it would be a very desirable acquisition. (Lab. No. 331.)" (Rolfs.)

14457. **Musa ensete.**

"Seed secured in Mexico City. (Lab. No. 332.)" (Rolfs.)

14458. **Bactris major.**

"Very ornamental palm from the Isthmus of Tehuantepec. (Lab. No. 333.)" (Rolfs.)

14459. **Zea mays.**

"Corn that grows along the Isthmus of Tehuantepec. It has some qualities that may adapt it for growth in the extreme southern part of the United States. (Lab. No. 334.)" (Rolfs.)

14460. **Haba.**

"Seed of another species of legume, which occurs commonly on the various markets in Cuba. (Lab. No. 335.)" (Rolfs.)

14461. **Bayo.**

"Seed of another legume. Secured in the Vera Cruz market. (Lab. No. 337.)" (Rolfs.)

14462. **Ervum Lens.**

"Appears to be a lentil, as grown in Europe. Secured in the Vera Cruz market. (Lab. No. 338.)" (Rolfs.)

14463. **Seed of the tree referred to under 'No. 295.' (Lab. No. 339.)" (Rolfs.)

14464. **Cinnamomum camphora.**

Camphor.

This number (14464) was assigned to camphor plants distributed by Mr. E. M. Byrnes, superintendent of gardens and grounds, in order to keep a record of the distribution.

The seeds from which the plants were grown came from various sources.

14465. **Zea mays.**

Corn.

From Houston, Tex. Received thru Dr. S. A. Knapp, July 14, 1905.

*Laguna.* Secured by Doctor Knapp from Mexico. "This is a new variety. Was grown in Texas. In the latitude of north Texas this could be planted as late as the first of August." (Knapp.)

14466. **Trifolium incarnatum.**

Crimson clover.

From Richmond, Va. Received thru T. W. Wood & Son, July 20, 1905.

Late.

14467. **Vicia villosa.**

Hairy vetch.

From Richmond, Va. Received thru T. W. Wood & Son, July 20, 1905.

14468. **Vicia faba.**

Horse bean.

From Montreal, Canada. Received thru William Ewing & Co., July 20, 1905.

14469. **Gossypium sp.**

Cotton.

From Chicago, Ill. Received thru Mr. I. L. Hauser (?), 225 Dearborn street, July 17, 1905.
14470. **ERAGROSTIS ABYSSINICA.**

From San Giovanni a Teduccio, near Naples, Italy. Received thru Dannemann & Co., July 21, 1905.

14471. **XANTHOSOMA SAGITTIFOLIUM.**

From Mayaguez, P. R. Received from the Agricultural Experiment Station, July 24, 1905.

"This variety is in many respects the best of all the yautias cultivated in tropical America. It yields 3 to 5 pounds to the hill, and can be grown on a great variety of soils. It requires about ten months to mature.

"This variety is known as 'Rolliza' in Porto Rico. It is also grown in Trinidad, Venezuela, and Balize, British Honduras. The fresh roots contain 20 per cent to 28 per cent of starch, with very little fiber. 'No. 1,' of P. R. Exp. Station."

(Barrett.)

14472 and 14473.

From Manila, P. I. Received thru Capt. George P. Ahern, chief of the Bureau of Forestry, July 24, 1905.

14472. **CRANIA PITILIPPINENSIS.**

"A palm indigenous to the Philippine Islands." (Ahern)

14473. **PANDANUS LUZONENSIS.**

"A plant indigenous to the Philippine Islands, found at elevations up to 600 meters above sea level. Apparently closely related to Pandanus sylvestris Bory, from the island of Reunion, differing in its larger size, longer leaves, etc. Described in Bulletin No. 17, Bureau of Government Laboratories, Manila, P. I., 'New or Noteworthy Philippine Plants, II,' by Botanist Elmer D. Merrill." (Ahern.)

14474. **VIGNA SINENSIS.**

From Grovetown, Ga. Received thru Mr. W. W. Hamilton, July 26, 1905.

14475. **SOLANUM COMMERSONI.**

From Montevideo, Uruguay. Received thru Dr. J. Clyde Macartney, July 25, 1905.

14476. **OPUNTIA sp.**

This number (14476) was assigned to about 500 seedling cacti sent by Mr. Luther Burbank, Santa Rosa, Cal., to Dr. S. A. Knapp, San Antonio, Tex., for planting on the Government demonstration farm.

14477 to 14479.

From City of Mexico, Mexico. Received thru Dr. J. N. Rose, of the United States National Museum, July 28, 1905.

A collection of unidentified plants.

14480. **IPOMOEA BATATAS (?).**

From Bordeaux, France. Received thru Hon. Albion W. Tourgee, United States consul, July 31, 1905.

This plant "is a native of Dahomey and very prolific. The leaves of the plant can be used as a substitute for spinach, and the tubers, containing a higher percentage of sugar than beets, are fine flavored and make exceptionally good food for live stock."

(Tourgee.)

14481. **LILIUM LONGIFLORUM EXIMEUM.**

From Washington, D. C. Received July 31, 1905. Selected bulbs grown in the Department greenhouses.
14482. JUNCUS EFFUSUS. Matting rush.
From California. Collected under the direction of Prof. A. V. Stubenrauch. Roots secured from California marshes for work on the matting-rush industry.

14483. CYPERUS sp.
From Kobe, Japan. Received thru Mr. A. G. Boyer, at North Galveston, Tex., April, 1904.

14484 and 14485. CAPSICUM ANNUUM. Pepper.
From Malaga, Spain. Received thru Hon. D. R. Birch, United States consul, July 31, 1905.
14484. *Chile.*
14485. *Large red sweet coin.*
“This pepper is the most common variety on sale here, and the fruits are usually about 8 inches in length.” (Birch.)

14486. SCHOENOCAULON OFFICINALE (?). “Cebadilla.”
From San Luis Potosi, Mexico. Received thru Dr. Edward Palmer from Dr. Gregorio Borroeta, July 31, 1905.
An insecticide wash for cattle infected with ticks is said to be prepared from these plants. Related to the fly-killer (*Amiranthium muscatonicum*) and to the green hellebore (*Veratrum*). Imported for experiments in Cuba.

14487. PRUNUS SIBIRICA. Siberian apricot.
From Jamaica Plain, Mass. Received thru the Arnold Arboretum, July 28, 1905.
This variety is said to be perfectly hardy in Massachusetts.

14488. BIDENS HETEROPHYLLA. “Malpe” tea.
From Guadalajara, Mexico. Received thru Mr. Federico Chisolm, August 1, 1905.
“A great part of the stuff sold as ‘tea’ in Mexico is the rolled leaves of this plant.” (Chisolm.)

14489. (Undetermined.)
“Plant said to be used by the Indians as a cure for ‘mountain fever;’ fruits are edible.” (Le Duc.)

14490. SOLANUM TUBerosUM. Potato.
From Edinburgh, Scotland. Secured by Prof. L. R. Jones, of the Vermont Experiment Station, from T. A. Scarlett, and sent direct to Burlington, Vt.
*El Dorado.* “A potato that is of peculiar prominence for disease resistance. In 1904 speculation forced the price as high as $16 a pound.” (Jones.) (See No. 13034.)

14491. NARCissUS Poeticus Alba fl. pl.
From Edinburgh, Scotland. Received thru the Royal Botanical Gardens, August 7, 1905.

14492. PANICUM MAXIMUM. Guinea grass.
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SEEDS AND PLANTS IMPORTED.

14493 to 14497.  
From Paris, France. Received thru Vilmorin-Andrieux & Co., May 26, 1905.

Clover and alfalfa seeds:

Trefle, violet de Russie.

14494. Trifolium incarnatum.  Crimson clover.
Trefle, incarnat de Russie.

14495. Trifolium repens.  White clover.
Trefle, blanc de Russie.

Luzerne de Pessas (Simbirsk).

Luzerne de Charcoo.

14498. Persea indica.  
From Monte, Grand Canary. Presented by Mr. Alaricus Delmar. Received June 1, 1905.

Seeds from Teneriffe. “Procured for the purpose of growing stocks upon which to graft seedling avocado (Persea gratissima) for planting in localities which require a more hardy stock than the latter.” (Fairchild.)

From Richmond, Va. Received thru T. W. Wood & Sons, June 1, 1905. Wonderful.

14500 to 14775. Andropogon sorghum.  Sorghum.
From Bombay Presidency, India. Received by the Office of Grass and Forage Plant Investigations, April 27, 1903, from Hon. J. W. Mollison, Inspector-General of Agriculture in India. Turned over to the Office of Seed and Plant Introduction and numbered in the spring of 1905.

A collection of sorghums obtained from Surat Farm, Bombay Presidency.

14502. Garia Yellow.  14518. Akada (C).
14504. Gare.  14520. Garia Dhavla.
14510. (Variety from Sampgaon.)  14526. Gari.
14512. Sadagar.  14582. Duk-i.
14500 to 14775—Continued.

14533. Akada.
14534. Mergari.
14535. Meldeni.
14536. Fulgar (A).
14537. Nadial.
14538. Jorula.
14539. Akada (E).
14540. Adola.
14542. Akada Khandesh.
14543. Garia or Dharla.
14544. Kondi.
14545. Adola.
14546. Gid-Gidyempu.
14547. Fulgar Karajgi.
14548. Mumdigal.
14549. (Sampguaon variety No. 2)
14550. Pandharpuri Ramker.
14551. Deola.
14552. Sophet.
14553. Lohi.
14554. Hatdi.
14555. Picali Wani.
14556. Narli Wani.
14557. Ushira.
14558. Kalbondi.
14559. Edna.
14560. Dukri or Tulap.
14561. Chavoli Wani.
14562. Dukri.
14563. Doner.
14564. Bammati.
14565. Lokhandi.
14566. Deolari.
14567. Argar.
14568. Bagle or Supte.
14569. Kunga.
14570. Motichur.
14571. Badgonda.
14572. Baidria.
14573. Deola (A).
14574. Ganer.
14575. Mohwani.
14576. Bani.
14577. Pawana Nadi.
14578. Baidra (A).
14579. Lal Ganja.
14580. Patasi Juar.
14581. Motichur.
14582. Sholapuri.
14583. Nadylal.
14584. Jnare.
14585. White Dumaroon.
14586. Guneri.
14587. Dukri.
14588. Durga.
14589. Bana of Jalaan.
14590. Bhavan of Jhanji.
14591. Lat.
14592. Jharloo.
14593. Doliga.
14594. Bania.
14595. Latiya.
14596. Sisjeta.
14597. Kombrav.
14598. Pyaria Ikavi Banda.
14599. Ikavi Banda.
14600. Pyaria.
14601. Safed Dupta Banda.
14602. Atpuri.
14603. Dukri.
14604. Dugadia Zard.
14605. Ikkavi.
14606. Purbi Magha.
14608. Gugadia Safed.
14609. Jogia.
14610. Domni.
14611. Chatka.
14612. Bangra.
14613. Lalha.
14614. Belaer.
14615. Gugadia.
14616. Gogla.
14617. Purbi Murabad.
14618. Deshi.
14619. Ganga Janmi.
14500 to 14775—Continued.

14620. Jamnapur.
14621. Juar of Bijnore.
14622. Baninia Dadri.
14623. Pirbahi Lucknow.
14624. Pirbahi Unao.
14625. Dadri of Unao.
14626. Red of Ajangarh.
14627. Baninia.
14628. Jhalaria.
14629. Panadia.
14630. Dadhia.
14631. Jhangaria.
14632. Jhadria.
14633. Baninia of Sitapur.
14634. Palechka.
14635. White of Ray Borely.
14636. Natva.
14637. Lagwa.
14638. Red.
14639. White.
14640. Mailiki.
14641. Ganga Jadi.
14642. Udghiya.
14644. Baninia of Cairnpur.
14645. Nandiyal.
14646. Kalgar.
14647. Lohor.
14648. Yennigar.
14649. Manadpur Gidd.
14650. Vilayati or Kempugidd.
14651. Kalia Gandicha Vilayati.
14652. Mad Shedgar.
14653. Khabba Shedgar.
14654. Vibhuti Gand.
14655. Kala Gand.
14656. Moti Jondhala.
14657. Paramushi.
14658. Udaa Maldani.
14659. Gidd Maldani.
14660. Bilegar.
14661. Gand.
14662. Bile Nandiyal.
14663. Amaldani.

14664. Baswampad.
14665. Shedgar.
14666. Shalu.
14667. Makchandri.
14668. Holgi.
14669. Hundi.
14670. Zamli.
14671. Kagi Moti.
14672. Mangar.
14673. Khaibondi.
14674. Duhar Maski.
14675. Bundri.
14676. Gidddhvai.
14677. Lakdi.
14678. Shalu.
14679. Nilva.
14680. Goa.
14681. Nirwati.
14682. Gari.
14683. Ellitchpur.
14684. Khondi Chandor.
14685. Lakadia Juar.
14686. Dukri.
14687. Duder.
14688. Khonde Malegaon.
14689. Shalu.
14690. Lagwa (A).
14691. Daydi.
14692. Red (erect-headed of No. 14638).
14693. Juar Nandgaon.
14694. Shalu.
14695. Argad.
14696. Dukri.
14697. Hundi.
14698. Gidd-Gapp.
14699. Waradi Juar.
14700. Hundi.
14701. Jondhala.
14702. Maldani.
14703. Tambdi.
14704. Gudadi.
14705. Jagadi.
14706. Dadia.
### 14500 to 14775—Continued.

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<td>14708</td>
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<td>14709</td>
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<td>14711</td>
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<td>14716</td>
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<td>14720</td>
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<tr>
<td>14737</td>
<td>Nihva Poona (not ordinary).</td>
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<td>14738</td>
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<td>14751</td>
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<td>14752</td>
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<td>14760</td>
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<td>14763</td>
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<td>14767</td>
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<td>Darker (A).</td>
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<td>14769</td>
<td>Sundhia Jawar (Poona Farm).</td>
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<td>14770</td>
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<td>14773</td>
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<td>14774</td>
<td>Ameria Sundhia (Nadiad Farm).</td>
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<tr>
<td>14775</td>
<td>Farfara.</td>
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</tbody>
</table>

#### 14776. Panicum maximum.  
**Guinea grass.**

From Sydney, New South Wales. Presented by Anderson & Co., George street. Received June 3, 1905.

#### 14777. Opuntia ficus-indica.  
**Prickly pear.**

From Honolulu, Hawaii. Presented by Mr. C. C. Conradt. Received June 3, 1905.
14778. **JUNCUS EFFUSUS CONGLOMERATUS.** Matting rush.
From Cat Island, S. C. Collected by Mr. J. H. Tull, June 1, 1905.

14779 to 14785. **ORYZA SATIVA.** Rice.
From Nagpur, India. Presented by Hon. J. W. Mollison, Inspector-General of Agriculture. Received June 3, 1905.

14779. **Budshah Bhog.**
“A fine-scented variety grown in Bengal Presidency. Grows best on clay or sandy loam, and requires ample water till the variety comes into ear.” (Mollison.)

14780. **Welch i.**
“A coarse variety grown in Bombay Presidency. Requires black soil and ample water till ripening.” (Mollison.)

14781. **Kamotl.**
“A fine-scented variety grown in Bombay Presidency. Grows on black or light soil, and requires ample water till ripening.” (Mollison.)

14782. **Basmati.**
(See remarks on No. 14779.)

14783. **Dud Khani.**
(See No. 14779, with the exception that this is not a scented variety.)

14784. **Ambe Mohar.**
“A fine-scented variety grown in Bombay Presidency. Requires black soil and ample water till ripening.” (Mollison.)

14785. **Kutri Bhog.**
(See remarks on No. 14783.)

14786. **MEDICAGO SATIVA.** Alfalfa.
From Tashkend, Turkestan. Received thru Mr. H. W. Dürrschmidt, June 3, 1905.

14787. **Opuntia sp.** Prickly pear.
From San Luis Potosi, Mexico. Received from Dr. Edward Palmer, thru Dr. J. N. Rose, of the United States National Museum, June 9, 1905.
*Tuna Tapona de Castilia.*

14788. **FREESIA sp.**
From Burnett, Cal. Received thru Rees & Compere, June 12, 1905.

14789. **NERINE sp.**
From Raleigh, N. C. Received thru Prof. W. F. Massey, Agricultural Experiment Station, June 12, 1905.

14790. **HYACINTHUS ORIENTALIS.** Roman hyacinth.
From Burnett, Cal. Received thru Rees & Compere, June 13, 1905.
*Albulus.* From S. P. I. No. 12233. Received from J. M. Thorburn & Co. in the autumn of 1904.

14791 to 14798. **ZEA MAYS.** Corn.
From Richmond, Va. Received thru T. W. Wood & Sons, June 13, 1905.
Recommended to be the best varieties of corn for feeding green to stock; to be tested on sandy land near Washington, D. C.

14791. **Cooke’s Prolific.**
14792. **White Columbia.**
14793. **Hickory King.**
14794. **Mammoth Shoe Peg.**

14795. **Holt’s Strawberry.**
14796. **Eureka.**
14797. **Virginia Ensilage.**
14798. **Blount’s Prolific.**
14799. Freesia sp.
From Great Neck, Long Island, N. Y. Received thru Mr. Rudolph Fischer, June 13, 1905.

Purity.

From Elmira, N. Y. Received thru Prof. L. R. Jones from Mr. C. F. Vanderhoff, Oak Grove fruit farm, May 18, 1905.
Blightproof. "Recommended as remarkably resistant to disease (blight) and also excelling in yield, size, uniformity, and compactness of tuber development in the hills." (Jones) (L. R. Jones's No. 64.)

From Lima, Peru. Received thru W. R. Grace & Co., New York, N. Y., June 7, 1905.
Seed of Peruvian cotton grown at Ica, in the southern part of Peru.

14802 to 14805.
From Pfiffelbach, near Apolda, Germany. Received thru Mr. A. Kirsche, June 8, 1905.

14802. Avena sativa. Oat.

14806 to 14810. Opuntia ficus indica. Prickly pear.
From Malta. Received thru Dr. G. Borg, of San Giovanni, June 12, 1905.

14806. Small, yellow-fruited, seedless.
14809. Reddish yellow fruited, seedless.
14807. White-fruited.
14810. Yellow-fruited.
14808. Red-fruited.

14811. Polianthes tuberosa. Tuberose.
From Austin, Tex. Presented by Mr. F. T. Ramsey. Received June 16, 1905.


14813 and 14814.
From Manila, P. I. Received thru Prof. William S. Lyon, horticulturist in charge of seed and plant introduction, Bureau of Agriculture, Manila, P. I., June 6, 1905.

14813. Eriodendron anfractuosum.
"The lint with us is a better color than some of the kapok that comes from Java, and commands a better price in this market. It is, I think, perhaps due more to climatic or soil influences than to any varietal difference." (Lyon.)

14814. Orania philippinensis.
"Pericarp rich in starch—24 per cent. Very ornamental." (Lyon.)
14815. **Nepheleum mutabile.**

From Buitenzorg, Java. Presented by Doctor Treub, director of the Department of Agriculture. Received June 19, 1905.

14816 to 14821. **Opuntia ficus indica.**

From Palermo, Sicily. Received thru Dr. A. Borzi, director of the Botanic Gardens, June 10, 1905.

14816. *Zuccarina.*
14817. *Frutti Sanguinei.*
14818. *Senza Chiupi.*
14819. *Rossi.*
14820. *Bianchi.*
14821. (Miscellaneous; unlabeled.)

14822 to 14839. **Opuntia spp.**

From San Luis Potosi, Mexico. Received from Dr. Edward Palmer, thru Doctor Rose, of the National Museum, June 19, 1905.

14822. *Blanca Crystalina.* (Doctor Rose’s No. 580/05.)
14823. *Redonda Colorado.* (581/05.)
14824. *Pachona.* (582/05.)
14825. *Cueja.* (583/05.)
14826. *Joconesile.* (595/05.)
14827. *Duraznillo Blanco.* (597/05.)
14828. *Navanceda.*
14829. *Cueja Arantidea.* (600/05.)
14830. *Manza Colorado.* (600/05.)
14831. *Caalota Blanca.* (604/05.)
14832. *Camessa or Camessa.* (606/05.)
14833. *Tuna Blanca.* (607/05.)
14834. *Xoconochti Agre.* (608/05.)
14835. *Joconesile Cambria.* (609/05.)
14836. *Camessa Color de Rose.* (610/05.)
14837. *Amereu Mansa.* (612/05.)
14838. *San Miguel Lania.* (617/05.)
14839. *Nopalea.* (661/05.)

"An opuntia found in the dense wood to the height of 20 or more feet. Where found alone exposed it has a neat, rather compact top, with a naked stem of 7 to 9 feet and from 6 to 8 inches in diameter, with bunches of thorns up the stem. The fruits are small." (Palmer.)

14840 to 14869.


A collection of grass and forage crop seeds:

14840. *Agrostis asperula.*
14841. *Avena planiculmis.*
14842. *Bromus andinus.*
14843. *Dactylis ascherisoniana.*
14844. *Elymus chubutensis.*
14845. *Elymus sabulosus.*
14846. *Phleum michelii.*
14847. *Poa attica.*
14848. *Triticum cristatum.*
14849. *Triticum dasyanthum.*
14850. *Triticum desertorum.*
14851. *Triticum intermedium.*
14852. *Triticum violaceum.*
14853. *Medicago carstiensis.*
14854. *Mellilotus elegans.*
14855. *Mellilotus sulcata.*
14856. *Mellilotus tommasinii.*
14857. *Trifolium alpestre.*
14858. *Trifolium badium.*
14859. *Trifolium montanum.*
14840 to 14869—Continued.

14860. **Trifolium ochroleu-
cum.**

14861. **Trifolium rubens.**

14862. **Vicia alpis-sima.**

14863. **Vicia calcarata.**

14864. **Vicia dasycarpa.**

14865. **Vicia disperma.**

14866. **Vicia ducetorum.**

14867. **Vicia grandiflora ki-
tabeliana.**

14868. **Vicia pisiformis.**

14869. **Vicia sepium.**

14870. **Gossypium sp.**  
Cotton.  
From Cartavio, Peru. Presented by Mr. T. F. Sedgwick, of the Cartavio Sugar Company. Received June 14, 1905.

14871 to 14878. **Nicotiana tabacum.**  
Tobacco.  
From Sao Paulo, Brazil. Presented by Dr. H. M. Lane, Mackenzie College. Received June 20, 1905.

Brazilian tobacco seed:

14871. **Georgia.** From Descalvado, State of Sao Paulo.

14872. From Pirassununga, State of Sao Paulo. Not named, but highly esteemed in the locality.

14873. *Busauaba.* From near the city of Sao Paulo, State of Sao Paulo.

14874. **Ciona.** From Santa Rita, State of Sao Paulo.

14875. *Forno Bahia.*

14876. **George Grande.** From the State of Rio de Janeiro.


14878. *Goyana.* White, from the State of Goyaz. Doctor Lane says that both the yellow and the white *Goyana* are famous throughout the country.

14879. **Zephyranthes sp.**  
From San Luis Potosi, Mexico. Presented by Dr. Edward Palmer, thru Dr. J. N. Rose. Received June 19, 1905.

14880 and 14881. **Vicia faba.**  
Horse bean.  
From Paris, France. Received thru Vilmorein-Andrieux & Co., June 22, 1905.


14882. **Zizyphus sp. (?)**  
From Bulsar, India. Presented by Rev. W. R. Miller, 466 Jackson boulevard, Chicago, Ill. Received June 23, 1905.

14883. **Medicago sativa.**  
Alfalfa.  
From Logan, Mont. Received thru Mr. William Carpenter, June 24, 1905.

14884. **Cinnamomum camphora.**  
Camphor.  
From Yokohama, Japan. Received thru L. Boehmer & Co., June 24, 1905.

14885 to 14887. **Gossypium spp.**  
Cotton.  
From Sydney, New South Wales, Australia. Received thru Mr. J. H. Maiden, director of the Botanic Garden, July 7, 1905.

Cotton seed and samples of lint secured on request from Mr. David Thomatis, Caravonica, Cairns, North Queensland, Australia, April 21, 1905.

14885. *Caravonica I.* (Wool cotton.) 14887. *Caravonica II.* (Silk cotton.)

14886. *Peruvian Kidney.*

7217—No. 97—07——12
14888. **Nephelium litchi.**

*Litchi.*

From Honolulu, Hawaii. Received from Mr. G. P. Wilder, thru Mr. James Mills, Arlington Heights Fruit Company, Riverside, Cal., July 10, 1905.

"The tree which bore these fruits is one of the two or three mature trees of this species in Hawaii and is the property of Mrs. Afong. The price of these fruits is about 3 cents each on the retail market of Honolulu. Seeds from Mrs. Afong's trees are being extensively planted in the islands; the demand is likely to be much greater than the supply for many years. It is believed the variety comes fairly true from seed, but in China, where about six distinct sorts are recognized, grafting or inarching is relied upon for best results.

"The yellowish, sweet, pulpy arillus of this fruit is highly esteemed in China, Cochin China, and the Philippines. It also fruits in East Australia, and it can undoubtedly be grown with profit in Porto Rico, south Florida, and California.

"The fruit resembles a strawberry or large acorn in size and shape but has a shell-like, rough skin; the pulp is white, very juicy, and of a peculiar sweet and sour flavor, the taste for which does not have to be acquired." (Wilder.)

14889 and 14890. **Persea gratissima.**

*Avocado.*

From City of Mexico, Mexico. Presented by the American ambassador. Received July 13, 1905.


14891. **Solanum muricatum (?).**

*Pepino.*

From Port of Spain, Trinidad. Received thru Mr. Eugene Andrè, July 7, 1905.

14892. (Undetermined.)

From Kongo Free State, Africa. Presented by the director of the Botanical Garden at Eala, thru the Department of Finances, Brussels, Belgium. Received July 17, 1905.

A wild ornamental recently discovered in the Kwango Oriental district of the Lower Kongo, Kongo Free State.

14893 and 14895. **Solanum tuberosum.**

*Potato.*

From Quito, Ecuador. Presented by Mr. L. Martines, chief of the Department of Public Instruction, Section of Agriculture.

Seed potatoes.

14893. *Chola.*

From the "El Obraje" estate, Señor Luis F. López Ortega, proprietor, parish of Chillogallo, Province of Pichincha, 2,900 meters above sea level. (No. 1.)

14894. *Uchu-rumi.*

From the "Carrion" estate, Señor Carlos Mateus, proprietor, parish of Lloa, Province of Pichincha, 2,900 meters above sea level. Grown in alluvial soil. (No. 2.)

14895. *Chola.*

Grown on same estate as preceding, at the base of Pichincha volcano, 2,900 meters above sea level, in dark, heavy soil. (No. 3.)

14896 to 14906.

From Richmond, New South Wales. Presented by Mr. H. W. Potts, principal of the Hawkesbury Agricultural College. Received June 26, 1905.

14896. **Andropogon affinis.**

14894. **Eragrostis brownii interrupta.**

14898. **Eragrostis leptostachya.**

14899. **Eragrostis pilosa.**

14900. **Sterculia diversifolia.**

14901. **Ehliarta stipoides.**

14902. **Panicum effusum.**

14903. **Panicum sanguinale.**

14904. **Paspalum brevipilum.**

14905. **Chaschochloris glauca.**

14906. **Stipa tuckeri.**
DECEMBER, 1903, TO DECEMBER, 1905.

14907. **Citrus decumana.**

Pomelo.

From Oneco, Fla. Received thru Reasoner Brothers, July 3, 1905.

Stick’s Tresca Red.

14908. **Physalis edulis.**

Cape gooseberry.

From Cape Town, South Africa. Presented by Prof. C. P. Lounsbury, government entomologist, Cape of Good Hope Department of Agriculture. Received June 26, 1905.

"The mother plantation is at Wynberg, here in the Cape Peninsula. The plant with us is a perennial, but the frost will cut it down. In some districts it fruits well; in others, scarcely at all. It seems to do best on the border of woodlands. A species of Tetranynchus is its one great pest in South Africa. Mr. Malley tells me that his brother has tried it in Texas without success." (Lounsbury.)

14909 to 14921. **Zea mays.**

Popcorn.

From Santiago, Chile. Presented by Señor Salvador Izquierdo, Santa Ines, near Santiago. Received June 23, 1905.

"Samples of popcorn used in Chile for the manufacture of ‘llalli.’ Samples were without names or specific data other than the above." (Fairchild.)

14922. **Thysanolaena agrostis.**

Tuna.

From Calcutta, India. Presented by A. Gage, officiating superintendent, Royal Botanic Garden, Sibpur, near Calcutta. Received June 24, 1905. See S. P. I. No. 8445, for a description of this unusually beautiful ornamental cane.

14923 to 14944. **Opuntia sp.**

Tuna.

From San Luis Potosi, Mexico. Received from Dr. Edward Palmer thru Dr. J. N. Rose, of the United States National Museum, June, 1905.

14923. **Pachona.**

14924. **Pastrada Lisa.**

14925. **Naranja Lisa (spineless).**

14926. **San Juanara Manzana, blanca.**

14927. **Carmeza Lisa.**

14928. **Tuna Blanca Seca.**

14929. (No label.)

14930. **Morala.**

14931. (Spineless.)

14932. (No label.)

14933. (No label.)

14934. (No label.)

14935. (No label.)

14936. (No label.)

14937. (Doctor Rose’s No. 613.05.)

14938. (Doctor Rose’s No. 614.05.)

14939. **Rançhera (Doctor Rose’s No. 643.05).**

14940. **Cuja (Doctor Rose’s No. 644.05).**

14941. (Doctor Rose’s No. 646.05.)

14942. **Carnosa Prisco (Doctor Rose’s No. 673.05).**

14943. **Manosa Color de Rosa (Doctor Rose’s No. 674.05).**

14944. **Cristalina Blanca (Doctor Rose’s No. 675.05).**

14945 and 14946. **Gossypium sp.**

Cotton.

From Payta, Peru. Received thru Duncan, Fox & Co., July 3, 1905.

14945. Brown seed.

14946. White seed.

14947. **Cucurbita melanosperma.**

From San Luis Potosi, Mexico. Presented by Dr. Edward Palmer. Received June 22, 1905.

"One fruit called ‘Cila callote’ from a vine that is very productive. The fruit keeps several months. Fine preserves are made from it—one from the interior after
the seeds are removed, another in the ordinary way, the third a hard marmalade.
If the seeds are sent to some suitable experiment station with long seasons, they will
be as useful as in Mexico.”  (Palmer.)

14948.  *LAPAGERIA ROSEA.*

Chilean bellflower.

From Coronel, Chile.  Presented by Mr. Teodoro Finger, of La Compania de
Araneo (Limited).  Received July 3, 1905.

“The plant is a creeper, evergreen and lasting, growing up the highest trees and
covering the same entirely with its foliage, and in winter the most beautiful scarlet-
red big bell-like blossoms make it the favorite Chilean flower for the sight and decora-
tion when no other flowers are blooming.  It has given to the Chilean forests a
peculiarly attractive and beautiful appearance, being mentioned by almost every
traveler.  It grows on any soil, preferring heavy red-clay soil.  It requires fair water-
ing.  It always climbs up a bushy shrub or on a tree.  You can sow it in spring,
and it stands a light frost without danger.  It is entirely an ornamental plant.  The
roots go down very deep and form a potato at the end, which causes the death of
the plant if it is cut off at transplanting.  The plants have been taken to Europe,
and especially are they grown in hothouses and winter gardens in England.  It has
causèd attention that the plants transplanted to Europe, giving once red blossoms,
will never give red blossoms again, but only white ones.  It is very difficult to get
ripe seeds in the virgin forests, as the birds are very fond of them.  The seeds are
covered with a small cucumber-like and a little sourish-tasting mass, which the
natives like to eat.  I find no pleasant taste in them at all.”  (Finger.)

14949 to 14951.  *OPUNTIA* spp.

Tuna.

From San Luis Potosi, Mexico.  Received from Dr. Edward Palmer, thru Mr.
W. E. Safford, of the Bureau of Plant Industry, June, 1905.

14949.  *Tunana.*  Red, globular 14951.  (An unnamed variety; has thick, tuberculated
fruit.

14950.  *Cardonita.*  Yellow fruit.

14952 to 14962.

From Shanghai, China.  Presented by Mr. Edward S. Little.  Received in May,
1905.

14952.  *GLYCINE HISPIDA.*

Soy bean.

14953.  *GLYCINE HISPIDA.*  Black.

Soy bean.

14954.  *GLYCINE HISPIDA.*  Large yellow.

Soy bean.

14955.  *PANICUM MILLACEUM.*  Small yellow.

Broom-corn millet.

14956.  *PANICUM MILLACEUM.*  Red.

Broom-corn millet.

14957.  *BRASSICA CHINENSIS.*

Chinese rape.

14958.  *SESAMUM INDICUM.*  Black.

Sesame.

14959.  *SESAMUM INDICUM.*  White.

Sesame.

14960.  *PHASEOLES RADIATUS.*

Mung bean.

14961.  *ARACHIS HYPOGAEA.*  Small.

Peanut.

14962.  *ARACHIS HYPOGAEA.*  Large.

Peanut.
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From Kobe, Japan. Presented by Mr. K. Ojuni, custom-house, Kobe, Japan. Received April 17, 1905.

14964 to 14971.
From Kashmir, India. Received thru the Office of Farm Management Investigations, July 8, 1905. Seeds collected by Messrs. Ellsworth Huntington and R. L. Barrett.

"Barley from Sonamarg, in the Sind Valley, Kashmir. Altitude, 8,500 feet; rainfall, probably 50 inches." (Huntington.)

"Hull-less. "From Dras, in the Indus Valley, India. Altitude, 10,100 feet; rainfall, probably about 30 inches, mostly as snow. Irrigation is practised. Snow was 6 feet deep April 13, and lasts till well into May." (Huntington.)

14966. Lathyrus sp. From Dras, in the Indus Valley, India.

"From Kund, in the Sind Valley, Kashmir, India. Elevation, 6,800 feet. The climate of this region is so severe that on April 7, 1905, after an unusually hard winter, the ground was still well covered with snow. The rainfall of the region is perhaps 40 to 50 inches, well distributed throughout the year."

"From Kulan in the Sind Valley, Kashmir, India. Altitude, 7,200 feet. Precipitation, about 40 inches. Snow lasts till April." (Huntington.)

"Hindustani 'truma,' from Kund, in the Sind Valley, Kashmir, India. Altitude, 6,800 feet. The climate of this region is such that on April 7, 1905, after an unusually severe winter, the ground was still well covered with snow. This grain is said to make good bread, tho slightly bitter. The rainfall of the region is perhaps 40 inches or more, well distributed throughout the year."

"From Tashgam, Indus Valley, India. Rainfall from 25 to 30 inches, mostly as snow. Irrigation necessary. Snow lasts till middle of April." (Huntington.)

"From Kund, in the Sind Valley, Kashmir, India. Altitude, 6,800 feet. The rainfall of the region is perhaps 40 to 50 inches, well distributed throughout the year. The climate of this region is such that on April 7, 1905, after an unusually severe winter, the ground was still covered with snow."

14972 and 14973.
From Quito, Ecuador. Presented by L. Martines, chief of the Department of Public Instruction, Section of Agriculture. Received July 13, 1905.

From Guanando district, Province of Chimborazo, 2,400 meters above sea level.

"Chucuva. White and black. Early variety from Hacienda Magdalena, Province of Imbabura, 2,225 meters above sea level.
14974 and 14975.

From Sao Paulo, Brazil. Presented by Dr. H. M. Lane, July 25, 1905.

14974. Phaseolus lunatus.

Grown in Batataes. Doctor Lane says that these are the most wonderfully prolific pole beans he ever saw.

14975. Nicotiana tabacum.

Seed from Goyaz. Doctor Lane is afraid it is a mixt lot, as the friend who sent it wrote: “It contains the best varieties grown in the State. The White, Yellow, and Giant can easily be distinguished in the plants.”

14976 to 14979. Nicotiana tabacum.

From Cachoeira, Bahia, Brazil. Received from Mr. W. A. Waddell, July 28, 1905. Sent at the request of Dr. H. M. Lane, of Sao Paulo.

14976. Seed from Santa Estevao.
14977. Seed from Outeiro Redendo.
14978. Seed from Cabeças de Murityba.
14979. Seed from Cruz das Almas.

14980 to 14983. Opuntia spp.

From Tunis, North Africa. Received thru the director of the Tunisian Department of Agriculture and Commerce, July 28, 1905.

14980. Opuntia ficus-indica.
14981. Opuntia tuna.
14982. Opuntia ficus-indica inermis.
14983. Opuntia robusta.

14984 to 14989.

From Cape Town, South Africa. Received thru the Smithsonian Institution, from Mr. H. J. Chalvin, superintendent of the Municipal Gardens, July 29, 1905.

14984. Asparagus crispus.
14985. Freesia refracta alba.
14986. Sparaxis bulbifera.
14987. Sparaxis purpurea.
14988. Synnotia bicolor.
14989. Tritonia fenestrata.

14990 and 14991.

From Paris, France. Received thru Vilmorin-Andrieux & Co., August 10, 1905.

14990. Vicia villosa.
14991. Hedysarum coronarium.

14992. Zea mays.

From Amboina, Dutch East Indies. Presented by Mr. Roskott. Received August 9, 1905.

14993. Citrus australasica.

From Queensland, Australia. Presented to Prof. W. M. Hays, St. Anthony Park, Minn., by Mr. James Pink, of Wellington Point, near Brisbane. Received August 11, 1905.

“It is a fruit which I think capable of great improvement. Nothing has ever been attempted with it here, and I send you a few dried fruits which, I have no doubt, contain good seeds. The plant is a large shrub, very limited in its distribution.

“The fruit when well grown is from 3 to 4 inches long, of a bright orange-crimson color, and of excellent flavor.” (Pink.)

14994. Trifolium incarnatum.

From New York, N. Y. Received thru Henry Nungesser & Co., August 11, 1905.
14995. **Dahlia imperialis.**  
*From Queenstown, Cape Colony. Received thru Mr. F. Beswick, secretary of the Queenstown Public Gardens, August 14, 1905.*

14996 to 14998.  
*From Mexico. Received thru Dr. J. N. Rose, of the United States National Museum, August 14, 1905.*  
14996. **Schoenocaulon** sp.  
14997. **Juglans** sp.  
14998. **Pinguicula** sp.  

14999. **Eupatorium portoricense.**  
*From Mayaguez, P. R. Received thru Mr. O. W. Barrett, from the Agricultural Experiment Station, August 15, 1905.*  
"A shrub, 1 to 3 meters high, found in a semicultivated state in the western part of Porto Rico. The dried leaves have a strong vanilla-like fragrance and are used in scenting the better grades of Porto Rican tobacco. Tho a perennial, this plant will probably fruit in the latitude of Connecticut; it is a very rapid grower." (Barrett.)

15000 to 15210. **Phoenix dactylifera.**  
*From Tunis, North Africa. Received thru Mr. Thomas H. Kearney, agricultural explorer, who secured them during his explorations in the winter of 1904-5 in the oases of southern Tunis.*  
"The nomenclature is that secured by Mr. Kearney from the Arabs from whom he bought the suckers, and the descriptions were made partly in Tunis and partly after his return to this country. See his bulletin on the date palms of Tunis." (Fairchild.)

15000. **Ammary.**  
A third-class "soft" variety; fruit 1 1/2 to a little over 1 3/4 inches long, about one-half as wide, generally ovoid, square at the base, rounded at the apex, keeping its shape fairly well when preserved, dark-brown purple when ripe; the flesh 1 1/2 lines thick, very soft and dark colored; the seed about two-thirds as long as the fruit, about two-fifths as wide as long, blunt at both ends. The stalks and branches of the fruit clusters are orange colored.  
The earliest maturing variety in Tunis, ripening in August and September. Said to give a very good crop every year and to be very productive.

15001. **Augoo.**  
A second-class "dry" variety; fruit barely 1 inch long, about seven-tenths as wide, sometimes broadest below, sometimes above the middle; bright bay-colored when ripe, much of the skin becoming loosened in large blisters, the flesh a little over 1 line thick, becoming firm and dry, the white central portion thicker than the dark-colored outer zone; the seed about two-thirds as long as the fruit, about one-half as wide as long, light-drab brown. The stalks of the fruit clusters are lemon yellow.  
The smallest fruited of the Tunisian varieties. Despite its diminutive size and thin flesh, this little date is one of the most attractive of the "dry" type. Because of its moderately sweet, wholesome, nutty flavor it can be eaten in large quantities without cloying, and should be a healthful food. Ripens in midseason.

15002. **Arrosly.**  
A first-class "soft" variety; fruit 1 1/2 to 2 1/4 inches long, one-half to two-thirds as wide, slightly larger above than below the middle, broad and rounded at the apex, light bay or hazel brown when ripe; the flesh 2 1/2 to 3 lines thick, firm but tender; the seed about one-half as long as the fruit, rather thick, irregularly roughened. The stalks and branches of the fruit clusters are light orange. The foliage of this variety is rather light and the leaves drooping.  
One of the largest dates grown in Tunis. The fruit is generally egg-shaped, ripening about the middle of October. The flavor of the thoroly ripe fruit is agreeable, although not very remarkable, wholesome, nut-like, and not easily cloying. The flesh becomes quite firm and the ripe fruit keeps its shape well when preserved.
15003. Baydh Hammam.

A second-class "soft" variety; fruit 1½ to 1¾ inches long, three-eighths to five-eighths as wide, egg-shaped, broadest near the middle, rather conspicuously blunt-pointed at apex, not keeping its shape well, dark chestnut brown with a tinge of maroon when ripe; the flesh very soft and dark colored, about 2 lines thick; the seed one-half to five-eighths as long as the fruit, one-third to two-fifths as wide as long; dark brown. The stalks and branches of the fruit clusters are orange colored. The foliage is of a rather delicate aspect and the leaves numerous.

This is a handsome, dark-brown date with very soft, dark-colored flesh. It is always eaten fresh, not being conservable. It is exceedingly sweet. The flavor of the perfectly ripe fruit is agreeable and very characteristic. It ripens rather late, hardly before November.

15004. Bayjoo, or Badjou.

A third-class "dry" date; fruit 1¾ inches long, about two-thirds as wide, ovoid, purplish maroon or bay colored when ripe; the flesh 1¾ lines thick; the seed nearly two-thirds as long as the fruit, one-half as wide as long; light brown. The stalks and branches of the fruit clusters are pale orange colored. The small, dense bunches of fruit hang down on long curved stalks.

Flavor nutty, agreeable but not very characteristic, typical of the "dry" date class. Matures in October.

15005. Bent Segny.

A third-class "soft" variety; fruit 1½ to 1¾ inches long, about one-half as wide, obovoid, square at base, rounded at apex, keeping its shape poorly when preserved, very dark purplish brown (almost black) when ripe; the flesh 1½ lines thick, very dark colored and very soft; the seed about one-half as long as the fruit, two-fifths to one-half as wide as long, rounded at both ends. The stalks and branches of the fruit clusters are deep orange colored.

A very soft, sirupy date, with a pleasant but not remarkable flavor. Ripens about the end of October.

15006. Besser Haloo, or Biara Haloua.

A second-class "soft" variety; fruit 1½ to 1¾ inches long, about two-thirds as wide, broadest at or above the middle, rounded at the apex, keeping its shape poorly when preserved, very dark purplish brown (almost black) when ripe; the flesh 1¾ lines thick, very dark colored and very soft; the seeds a little more than one-half as long as the fruit, cinnamon brown. The stalks and branches of the fruit clusters are so short that the small bunches are nearly hidden by the foliage. The leaves are short and rather stiff, with comparatively short stalks and wide leaflets.

A small, light-colored date, with thick, comparatively firm flesh. It is very sweet and has an agreeable flavor, somewhat intermediate between that of Lagoo and that of Horra. The natives seem to prefer it when not perfectly ripe. It matures early in October. One of the six most productive varieties. Among the four most salt-resistant varieties.

15007. Boo Aflaw.

A first-class "soft" date; fruit about 2 inches long and five-ninths to three-fifths as wide, conspicuously wider above than below the middle, but narrowed to the blunt apex, bright purplish maroon when ripe; the flesh 3 to 3½ lines thick, tender yet firm; the seeds a little more than one-half as long as the fruit, cinnamon brown. The stalks and branches of the fruit clusters are deep orange. The foliage is said to be heavy and the leaves wide and very green.

The fruit is remarkable not only for its large size, thick flesh, and delicious flavor, but for its beautiful coloring; ripens rather late. The flesh is tender, yet rather firm, and is very sweet and full of sugar. The skin, even of the ripe fruit, is fairly clean and dry.

15008. Boo Fagoos; also spelled Bou Fagous, or Feggouss.

A first-class "soft" type; fruit 1½ to 1¾ inches long, considerably more than one-half as wide, constricted near the middle and widest toward the apex, maroon to prune purple when ripe; the flesh 2½ lines thick; the seed
15000 to 15210—Continued.

five-ninths to five-eighths as long as the fruit, rather slender. The orange-colored stalks of the fruit clusters are sharply curved, and so short that the rather small bunches hardly extend beyond the leafstalks.

The foliage of this, as of several other of the finest varieties, is of a light and delicate aspect, due in this case to the relatively few leaves and the narrowness of the leaflets. The leaves themselves are large and wide, curving downward very noticeably.

The large fruit is remarkable for its unusual shape, somewhat like that of a fiddle or of some of the varieties of gherkins, to which it doubtless owes its Arabic name. The flesh is thick and rather firm, yet tender. It is very sweet and has a very distinctive and highly attractive flavor. It ripens late in October.

15009. Deglet Boree.

Fruit said to be "soft," round, and nearly black. It is described as a soft date that preserves very well.

15010. Deglet Gaid.

Fruit coral red before maturity, and black when ripe; said to he conservable only for a short time. Reported to be a fine variety and to ripen early in September.

15011 and 15012. Deglet Xoor.

A first-class "soft" date; fruit \( \frac{1}{4} \) to a little over 2 inches long and about one-half as wide, ovoid oblong in shape, generally widest at or near the middle and blunt pointed at the apex, often narrowed also at the base, maroon colored when ripe; the flesh 2 to 3 lines thick, translucent; the seed about five-ninths as long as the fruit, conspicuously pointed, and dark chestnut brown in color. The stalks and branches of the fruit clusters are bright yellow (not orange), with stalks long and slender, sharply curved near the base, so that the bunches hang down far below the crown of foliage.

The Deglet Noor presents a combination of characteristics—fine flavor, sweetness, attractive appearance, cleanliness, good keeping qualities—that can be rivaled by no other variety that is widely grown. It requires a high sum total of temperature to bring it to perfect maturity; begins to ripen in quantity toward the end of October, slower in coming into full bearing than most varieties, the palms generally not giving a good crop until they are 10 years old, producing largely only every second or third year.

15013. Deglet Semutga.

A "soft" date; fruit 37.5 to 40 mm. long, 17.5 mm. wide, oblong, somewhat pointed at the apex, bright chestnut brown when ripe, surface shining, skin much loosened and folded; flesh soft, dark colored; seed large, dark brown; very sweet; flavor distinctive (suggesting burnt sugar) and rather agreeable, but not very pronounced. It is said to keep well.

15014. Dowar. (Early, male.)

15015. Dowar. (Medium, male.)

15016. Dowar. (Late, male.)

15017. Dowar, or Dewar.

A second-class "soft" date; fruit a little over 1 \( \frac{1}{2} \) inches long, six-tenths to seven-tenths as wide, egg-shaped, broadest near the base, dull dark purplish maroon when ripe; the flesh \( \frac{1}{4} \) to 2 lines thick, firm white, central portion nearly as thick as the dark outer zone; seeds small and thick (only about one-half as long as the fruit and about one-half as wide as long), narrowed at both ends. The stalks and branches of the fruit clusters are light orange.

A dark-colored, rather small date, with moderately soft, dark-colored flesh and with a clean, dry skin. It is very sweet and of a fine flavor, suggesting that of Deglet Noor.

15018. Fasemy, or Fasimi.

A first-class "soft" date; fruit 1 \( \frac{1}{2} \) to 2 inches long, about one-half as wide, oblong, slightly narrowed at both ends, dark purplish maroon when ripe, the surface shining, the flesh soft and sirupy, about 2 lines thick, the seed about
15000 to 15210—Continued.

five-ninths as long as the fruit, slender. The foliage is luxuriant, and the numerous leaves are long, wide, and crowded with long, broad leaflets. In color they are decidedly bluish, owing to the presence of a heavy, white bloom.

Altho inferior in flavor to the Deglet Noor this is unquestionably an excellent variety, greatly excelling the Deglet Noor in vigor, rapid growth, early productiveness, and large yields. The oblong fruit, when ripe, is of fine reddish purple color, very rich in flavor, extremely sweet, and so soft and sirupy as to melt in the mouth when fresh. It can not be eaten in great quantity, however, without cloying. It becomes very sticky and is therefore less satisfactory as a dessert fruit than the Deglet Noor. This variety is considered one of the most productive, giving a good crop every year. It is a late ripening variety, its fruit beginning to mature in quantity at the same time as the Deglet Noor, about November 1. It ranks among the four most alkali-resistant varieties.

15019. Gasby.

A third-class "soft" variety; fruit 1/2 to a little over 2 inches long, about two-fifths as wide, oblong, often conspicuously curved, very dark prune purple, with a conspicuous bloom when ripe, the surface dull, the skin rather tough, russet brown where loosened from the flesh; the flesh 1 line thick, dark colored, remaining rather soft; the slender seed five-ninths to three-fifths as long as the fruit, two-sevenths to one-third as wide as long, russet brown, often curved. The stalks and branches of the fruit clusters are deep orange colored.

Ripens very early. A handsome, long, dark-colored, generally curved date. Flavor is of the Lagoo type, rather attractive, suggesting that of raisins. It is said to keep very well.

15020. Gash Haloo.

Fruit said to resemble Kenteeshy in color; described as sweeter and better flavored than Gasby.

15021. Guern-el-Rhezal.

 Said to be a long, slender, curved date, with a stone unusually large and a thin flesh.

15022. Goondy.

A third-class “soft” variety; fruit about 1/2 inches long, about one-half as wide, obovoid-oblong, keeping its shape fairly well when preserved, bay to maroon colored when ripe; the flesh about 1/2 lines thick, dark colored, remaining rather soft, the seed five-eighths as long as the fruit, about one-third as wide as long. The stalks and branches of the fruit clusters are bright orange colored. Said to ripen as early as September 15.

Sweet and agreeable, but not of pronounced flavor; of the Lagoo type.

15023. Halooa Bayda; also Halownia.

A second-class “dry” date; fruit 1 1/2 to 2 inches long, about one-half as wide, elliptical in outline, not conspicuously narrowed at the apex, widest near the middle, dull purplish bay when ripe; the flesh 1 to 3 lines thick, becoming very firm and dry; the seed about seven-tenths as long as the fruit and one-third to two-fifths as wide as long. The branches of the fruit clusters are pale orange.

Much like the Lemsy, but the fruit is even smaller. It ripens rather early and is generally eaten fresh, becoming hard and dry when preserved.

15024. Halownia.

15025. Hamra, or Hamraia.

A third-class “dry” date; fruit 1 1/2 to 2 inches long, about one-half as wide, ovoid, tapering from near the base to the rounded apex, bright purplish maroon when ripe; the flesh 1 to 3 lines thick, becoming quite firm, the dark-colored outer zone thicker than the white central portion; the seed two-thirds to four-fifths as long as the fruit, generally about two-fifths as wide as long, sometimes with strongly developed winglike ridges on the sides. The stalks and branches of the fruit clusters are orange colored.

One of the largest and most showy of the "dry" dates. Much resembles Horra.
and surpasses it in brightness of color, but is decidedly inferior to it in flavor. Ripens in the latter part of October and the beginning of November. Said to keep well.

15026. *Hourra.*

The name is also spelled "Hourra," "Harra," and "Herra."

A first-class "dry" date; fruit about 2 inches long, about one-half as wide, ovate, narrowed from the base to the rounded apex, rather dull purplish maroon when ripe, the flesh 2 to 2½ lines thick, with its white central zone much thicker than the dark outer portion, the seed usually about one-half as long as the fruit. The stalks and branches of the fruit clusters are orange yellow. The leaves are large, with very numerous slender leaflets.

The fruit is the largest and finest produced by any variety of the "dry" class. The flesh becomes quite solid in the ripe fruit, but is never extremely hard and dry. It has the characteristic nutty flavor of the dry dates, but is much richer than most of them. It is at its best only when perfectly mature and is one of the best keeping varieties. A medium-early sort, ripening in October.

15027. *Ireema,* or *Ytima.*

A third-class "soft" variety; fruit slightly over 2 inches long, about one-half as wide, widest at or near the middle, rounded at the base, somewhat pointed and conspicuously unsymmetrical at apex, not keeping its shape well when preserved, chestnut brown, with a slight purple tinge when ripe, the surface shining, the flesh over 2 lines thick, extremely soft, the seed nearly one-half as long as the fruit, about two-fifths as wide as long, chestnut colored. A very handsome date, with sirupy, translucent flesh, extremely sweet, rather insipid in flavor. Early ripening sort. Is eaten fresh.

15028. *Karooi.*

A third-class "soft" variety; fruit 1½ inches long, about one-half as wide, ovoid, narrowed from near the base to the rounded apex, keeping its shape fairly well when preserved, bay colored when ripe; skin, where loose, olive brown; the flesh about 1½ lines thick, rather tough; the seed about five-eighths as long as the fruit, about one-third as wide as long. The branches and stalks of the fruit clusters are orange colored.

Flesh rather tough, moderately sweet, flavor agreeable, similar to that of the "dry" dates.

15029. *Konta.*

A first-class "dry" date, fruit 1¼ to 1½ inches long, about one-half as wide, narrowed from the middle or above it to the broad apex, dull bay colored when ripe, much of the skin loosened in large blisters in the ripe fruit, the flesh 1½ to 2 lines thick, the seed four-sevenths to five-eighths as long as the fruit; rounded at both ends, light brown.

The leaves of this variety are rather broad, with numerous long, narrow leaflets. The light-orange stalks of the fruit clusters are stout and horizontal or ascending, and so short that with the bunches they do not equal the leafstalks. The clusters themselves are short, thick, and densely crowded with fruit.

One of the most highly esteemed and widely grown of the dry dates found in Tunis. The fruit is of medium size, the flesh rather thin, becoming quite firm, altho not very dry. The surface is clean and dry even when the fruit is quite ripe. It is not sirupy, altho pleasantly sweet, and can be eaten in quantity without cloying. The flavor is very agreeable, wholesome, and of the nutty quality characteristic of most dry dates. One of the best of the dry dates in keeping quality. Is a comparatively early-ripening variety, maturing about the middle of October and perhaps earlier. One of the two most productive varieties, said to give an abundant crop every year. Said to be the most salt-resistant variety in high-lying, well-drained land.
seeds about two-thirds as long as the fruit, one-third to two-fifths as wide as long, broad and rounded at both ends. The stalks and branches of the fruit clusters are dull orange. The stalks are curved, forming nearly a semicircle, but do not hang down below the foliage.

Fruit is small, thin of flesh, and becomes hard and dry almost before it has lost its astringency. It ripens toward the end of October and beginning of November. Moderately sweet and rather tasteless. Yields heavily, being one of the most productive varieties found in Tunis, and is said to give a good crop every year. Reputed to be very alkali resistant.

15031. Khadmany.

A "dry" date; fruit 35 to 40 mm. long, 17.5 mm. wide, oblong, narrowed at the apex, bright orange before maturity, dull light brown when ripe; seed large, light brown. Branches of fruit clusters bright orange. Very sweet, with a pleasant flavor. Ripens in October.

15032. Khalt (?).

15033. Khalt Boo Fagoos.

A "soft" date; very similar to Boo Fagoos, 42.5 mm. long, 25 mm. wide, generally more or less obovoid, maroon colored when ripe, skin much folded; flesh very firm; seed large. Branches of fruit clusters light orange.

Moderately sweet, with a fine flavor of the Horra type.

15034. Khalt Degloana.

A second-class date of the "soft" type; fruit 1⅛ to 1⅜ inches long, about one-half as wide, egg-shaped, narrowed from about the middle to the rounded apex, keeping its shape well when preserved, dark maroon purple when ripe, much of the skin loosened into soft blisters; the flesh about 2 lines thick, firm yet tender; the seed about two-fifths as long as the fruit, about one-third as wide as long, cinnamon brown. The stalks and branches of the fruit clusters are light yellow.

The fruit is rather small, with fairly thick, firm flesh. The fine flavor suggests that of Deglet Noor, which it resembles also in the shape of the fruit and the maize-yellow color of the branches of the clusters.

15035. Khalt Gama.

"Gama" means wheat, and is said to refer to the color of the fruit.

15036. Khalt Hamood.

A third-class "soft" variety; fruit 1⅓ inches long, about one-half as wide, ellipsoidal, generally slightly narrowed at both ends, keeping its shape well when preserved, bright maroon when ripe; the flesh 1½ lines thick, rather firm, not very sugary; the seed smooth, five-eighths as long as the fruit, about two-fifths as wide as long, widest above the middle.

15037. Khalt Harmano.

A second-class "soft" date; fruit 1⅛ to over 2 inches long, narrowed from near the base to the somewhat pointed apex, keeping its shape well when preserved, dark-maron purple when ripe; the flesh 2 to 3 lines thick, firm yet tender, very sugary; the seed one-half to five-ninths as long as the fruit, about one-third as wide as long. The branches of the fruit clusters are orange colored. The crown of foliage is well developed, the leaves large, and the leaflets long and numerous.

The large, handsome fruit somewhat resembles that of Horra, both in appearance and flavor. The flesh is copious, firm yet tender, and contains a great deal of sugar.

15038. Khalt Kebeer.

A fine, large, reddish brown "soft" date, with small seed, preserving admirably; flavor excellent.

15039. Khalt Kentuonia.

Occurs in the Jerid; apparently not uncommon at Tozer.
15000 to 15210—Continued.

15040 Khali Mooashem.

A second-class “soft” date; fruit 1½ to 1¾ inches long, about one-half as wide, egg-shaped, narrowed from about the middle to the rounded apex, keeping its shape perfectly when preserved; dark purplish maroon when ripe, the skin mostly adhering very closely to the flesh, conspicuously marked with transverse and longitudinal scars; the flesh about 2 lines thick, firm yet tender; the seed about one-half as long as the fruit, nearly one-half as wide as long, broadest near the middle, light brown, rough. The branches of the fruit clusters are bright orange.

The excellent fruit is characterized by its dark purplish color, curiously scarred skin, copious soft flesh, and very sweet, highly attractive flavor. Apparently keeps perfectly.

15041. Kharoobi, or Kharrubi.

A third-class “soft” variety; fruit about 2 inches long, less than two-fifths as wide, oblong, often somewhat wider near the apex than elsewhere, between bay and maroon colored when ripe, the surface shining; the skin conspicuously loosened and remaining light yellow; the flesh 1 to 2 lines thick, rather soft and dark colored; the seed nearly three-fifths as long as the fruit, one-third as wide as long, generally somewhat curved. The stalks and branches of the fruit clusters are orange colored.

Flesh of the ripe fruit of the consistency of jelly, moderately sweet, agreeable in flavor, resembling Lagoo. Said to preserve well. Ripens in October.

15042. Kseba, or (?) Kessbi.

A second-class “dry” variety; fruit about ¾ inches long, two-thirds as wide, ovoid or oblong-ovoid, widest below the middle, purplish maroon or bay when ripe; the flesh 2 to 2½ lines thick, firm but tender; the seed very nearly two-thirds as long as the fruit, two-fifths as wide as long, russet brown. The branches of the fruit clusters are deep orange. The foliage is characterized by having few spines and these are slender and weak.

The fruit, which preserves well, is very sweet and well flavored, in the latter respect being intermediate between Horra and Lagoo. Its fruits ripen in October.

15043. Layou.

A second-class “soft” date; fruit nearly 2 inches long, four-ninths as wide, oblong, tapering slightly to the apex, more or less curved, bay to light maroon colored when ripe, the surface somewhat shining, the flesh about 2 lines thick, rather tough, dark colored; the seeds slender, three-fifths to two-thirds as long as the fruit, two-fifths to one-third as wide as long, russet brown, its surface roughened with fine wrinkles. The stalks and branches of the fruit clusters are orange colored, the crown of foliage is rather small, the leaves short and rather thick, with long, rather wide leaflets.

One of the earliest kinds; said to ripen by the middle of September. The fruit is of medium length, narrow, and dark colored when ripe. The flesh is rather thin, but soft, very sweet, and of an agreeable, characteristic flavor, somewhat resembling Rhars. It keeps well.

15044. Lemuy.

A second-class “dry” date; fruit 1½ to 1¾ inches long, about one-half as wide, elliptical in outline, not conspicuously narrowed toward the apex, often slightly curved, dull purplish maroon when ripe; the flesh 1 to 2 lines thick, becoming very firm and dry; the seed about two-thirds as long as the fruit, generally one-third as wide as long. The branches of the fruit clusters are orange colored.

This is a small, thin-fleshed dry date, sometimes preserved, but usually eaten fresh and even before it is perfectly ripe, as the flesh soon becomes dry and hard. It is deliciously sweet and has a fine flavor, tasting somewhat like chestnuts. Said to mature at the end of August.

15045. Memakher.

A first-class date of the “soft” type; fruit 2 to 2½ inches long, about one-half as wide, oblong, broad, and rounded at both ends, keeping its shape well when preserved; brownish maroon when ripe; the flesh 2 to 2½ lines thick;
190  SEEDS AND PLANTS IMPORTED.

15000 to 15210—Continued.

the seed broad at both ends, about one-half as long as the fruit, one-half as wide as long, very rough.

The leaves are long and broad, and rather stiff and heavy, crowded with very numerous long leaflets, and their stalks are armed almost throughout their length with long, stout spines. The fruit clusters are short and dense, their stalks bright yellow, rather short, stout, and only moderately curved, so that the bundles do not hang down below the leaves as in the Deglet Noor, but are almost hidden by the foliage.

This produces fruit that is thought by many of the natives, and even by some of the few Europeans who have tasted it, to surpass the Deglet Noor; is at least equal in quality to the Deglet Noor, which it considerably resembles in flavor. In size Menakher dates are \( \frac{1}{2} \) to nearly 2 times as large as those of the Deglet Noor variety; in color they are generally darker. The seed, tho thick, is short in proportion to the length of the fruit. It is very different in appearance from that of the Deglet Noor. The thick, translucent flesh, altho soft and sirupy, becomes firm when preserved, just as does that of the Deglet Noor. If preserved with any care Menakher dates keep their shape admirably. The skin does not become sticky but remains dry and clean, which is a very desirable property in a dessert fruit. An objectionable feature is the strong development of the white, stringy core. This diminishes perceptibly, however, in thoroly ripe fruit. The consensus of opinion is that in point of appearance, cleanness of skin, keeping quality, and delicacy of flavor the Menakher dates surpass the Deglet Noor, while the latter are superior in the crisper texture of the flesh and small development of the stringy core, or "rag."

This variety ripens its fruits in the latter part of October. It is said to yield little during the first few years after the offshoots are planted, but afterwards surpasses the Deglet Noor in yield, one palm producing sometimes 220 pounds of dates.

15046.  
Mokh Begre, or Moukii Begri.

A second-class "soft" variety; fruit 1\( \frac{1}{2} \) to 1\( \frac{1}{3} \) inches long, about three-fourths as wide, broadest at the base, and narrowed thence to the broad, rounded apex, flattened on the sides, bright bay colored when ripe; the flesh very soft, about 1 line thick, rather dark colored, translucent; the seed light brown, one-half to two-thirds as long as the fruit, about twice as long as wide, rounded at both ends. The stalks and branches of the fruit clusters are light orange.

The trees are said not to bear heavily. The dates are rather small and have an unusual shape. The translucent flesh is very soft, but the fruit is said to preserve well. It is very sweet and of delicious flavor, resembling and perhaps equaling the Deglet Noor. Fruit ripens in the latter part of October.

15047.  
Okht Amman.

Said to resemble Ammery, but to be larger. Reported to ripen at the end of September and not to keep well.

15048.  
Okht Fteemy.  (French, Oukht Ftimi.)

A second-class "soft" date; fruit 2 to 2\( \frac{1}{2} \) inches long, about two-fifths as wide, oblong, straight, somewhat pointed at the apex, deep purplish maroon when ripe, the surface shining; the flesh 2\( \frac{1}{2} \) to 3 lines thick, soft; the seed slender, about one-half as long as the fruit, only two-sevenths as wide as long; dark brown. The stalks and branches of the fruit clusters are rich orange. The many fruit clusters are short-stalked and almost hidden by the foliage.

The very handsome fruit is longer and more slender than that of Fteemy, and is often brighter colored, but is otherwise very similar. In regard to flavor, no difference could be detected. Altho very soft and sirupy, the fruits preserve well. Okht Fteemy palms give a good crop every year and are very productive. These dates are not generally ripe before November. Among the most alkali-resistant varieties.

15049.  
Reema.

A third-class "dry" date; fruit 1\( \frac{1}{2} \) to 1\( \frac{3}{4} \) inches long, about one-half as wide, oblong, somewhat pointed at the apex, generally distinctly constricted a little above the base, dark maroon colored when ripe; the flesh about 1 line thick, rather tough; the seed one-half to two-thirds as long as the fruit,
15000 to 15210—Continued.

Flesh firm, moderately sweet, with an agreeable flavor resembling that of Thaby. Said to ripen early.

15050. **Rhiars.** (Sometimes known as **Rhiars** or **Ghars** or **Cheress) Mettioui.**

A second-class tho well-known date of the "soft" type; fruit 1\(\frac{3}{4}\) to over 2 inches long, two-fifths to four-ninths as wide, oblong or inversely egg-shaped, bay colored when ripe, its surface somewhat shining; the flesh 2 to 4 lines thick, very soft; the slender seed five-eighths to three-fifths as long as the fruit, two-sevenths to one-third as wide as long, broad and rounded at both ends. The ripe fruit does not keep its shape well when preserved. The stalks and branches of the fruit clusters are bright orange.

One of the earliest. Said to begin to ripen as early as the end of July. The fruit is large, bay colored when ripe, with copious soft, sirupy, translucent flesh, very sweet and rich-flavored. Not one of the best-keeping sorts.

15051. **Shu Arowt.**

Said to be rare and of fairly good quality. Reported to be a long, slender date, ripening in October and not keeping well.

15052. **Styblet Boo Deb.**

A third-class "soft" variety; fruit 2 to over 2\(\frac{1}{2}\) inches long, about three-sevenths as wide, oblong, somewhat pointed at the apex, usually curved; prune purple when ripe; the surface rather dull; the flesh 3 and \(\frac{3}{4}\) lines thick, rather firm; the slender seed about one-half as long as the fruit, one-half to two-thirds as wide as long. The stalks and branches of the fruit clusters are bright orange colored.

The largest of the Tunisian varieties. Flesh thick, rather tough. Flavor agreeable, suggesting Boo Fagous. Ripens about the end of October.

15053. **Tafazireen.** (Also **Tafazaouine**, or **Tafezoireen.**)

A first-class "soft" date; fruit 2 to 2\(\frac{1}{4}\) inches long, about two-fifths as wide, oblong, tapering slightly from base to apex, bright bay colored when ripe; the skin conspicuously marked with short linear scars; the flesh 1\(\frac{1}{2}\) to 2 lines thick; the slender seed about three-fifths as long as the fruit.

The handsome fruit is easily recognized by its long, narrow shape, bright-bay color, and curiously marked skin. It is said to ripen in October. The flesh is soft and translucent, like that of the Deglet Noor. It is very sweet, and of excellent flavor.

15054. **Tantaboosh, or Tantaboucht.**

A third-class "soft" date; fruit nearly spherical, usually somewhat wider than long, 1 to 1\(\frac{1}{2}\) inches in greatest diameter, usually widest above the middle, slightly depressed at apex, not keeping its shape well when preserved, very dark brown purple (almost black) when ripe; the flesh 3 to 5 lines thick, very soft and dark colored; the large seed two-thirds to four-fifths as long as the fruit, one-half to two-thirds as wide as long; smooth. The stalks and branches of the fruit clusters are deep orange colored.

A date remarkable for its round shape and very soft, almost black flesh. Flavor peculiar and characteristic, even perfectly ripe fruit retaining a certain amount of astringency.

15055. **Tanaseen.** (French orthography, **Tanessin,** or **Tenassine.**)

A third-class "soft" variety; fruit 1\(\frac{3}{4}\) to 1\(\frac{1}{2}\) inches long, about one-half as wide, oblong, not keeping its shape well when preserved, black when ripe; the flesh very soft, nearly black; the seed five-ninths to five-eighths as long as the fruit, about one-third as wide as long, rather dark brown.

The flavor of the very sweet, soft, dark-colored flesh suggests Tozer Zaid Safra, but is more agreeable. Is said to ripen in October.

15056. **Thaby, or Dzaabi.**

A second-class "dry" variety; fruit 1\(\frac{1}{2}\) inches long or slightly longer, about one-half as wide; oblong, often slightly constricted a little above the base, some-
what pointed at apex; bright reddish brown when ripe; the flesh 1 to 1 1/2 lines thick, rather tough, the dark-colored outer zone apparently much thicker than the white inner portion. Seed about three-fifths as long as the fruit, rather slender. The stalks and branches of the fruit clusters are rich orange colored.

It is one of the handsomest of the "dry" dates, and one of the most attractive when preserved, keeping perfectly its shape and its beautiful, warm reddish brown color. It has an agreeable, wholesome flavor, and can be eaten in quantity without cloying. It matures in October.

15057. Towadant.
Fruit said to be very large and long, yellow, and of good flavor, ripening at the same time as Fteemy and keeping well.

15058. Tozer Zaid Khala.
A third-class "soft" variety; fruit 1 1/2 to 1 3/4 inches long, three-fifths to two-thirds as wide; oblong or oblong egg-shaped, widest near the middle, broad and rounded at apex, not keeping its shape well when preserved; black when ripe; the flesh 1 1/2 lines thick, very soft and sirupy, nearly black; the seed about two-fifths as long as the fruit, about two-fifths as wide as long; dark brown.

Less common than Tozer Zaid Safra, which it very closely resembles in appearance and flavor.

15059. Tozer Zaid Safra.
A third-class "soft" date; fruit 1 1/2 to 1 3/4 inches long, generally four-sevenths to two-thirds but sometimes only one-half as wide as long; oblong or oblong egg-shaped, widest near the middle, broad and rounded at apex, not keeping its shape well when preserved; the flesh 1 1/2 lines thick, extremely soft and sirupy; nearly black; the relatively large seed about one-half as long as the fruit, two-fifths to one-half as wide as long, light brown.

Flavor characteristic, much appreciated by the natives. Generally eaten fresh, but sometimes preserved for a short time. Yields heavily. Fruit ripens in the latter part of October. Said to be one of the four salt-resistant varieties.

15060. Trouja, or Trouadja.
A first-class "soft" date; fruit perfectly round, or nearly so, 1 1/2 to nearly 2 inches in greatest diameter; maroon to prune purple when ripe; the flesh 4 to 5 lines thick, very sugary yet firm; the seed very thick, six-tenths to seven-tenths as long as the fruit and about three-fifths as long as wide; much furrowed. The foliage is dense, the leaves wide, crowded with leaflets, and drooping gracefully at the ends.

The fruit, which ripens in October, is remarkable for its large size, the thickness of its flesh, and its globular shape. The short, very thick seed is also characteristic. The flesh is very firm and even somewhat tough, extremely sweet and very rich flavored, the flavor suggesting that of the Fteemy. Trouja dates can not be eaten in large quantities, as their richness soon cloys, but as a dessert fruit they are very promising.

15061. Zra.
Fruit said to resemble Deglet Noor in color.

15062. Zekry.
A second-class "soft" date; fruit 1 1/2 to near 1 3/4 inches long, about one-half as wide, obvoid, keeping its shape fairly well when preserved, bay to maroon when ripe; the flesh about 1 1/2 lines thick, moderately soft; the seed about four-sevenths as long as the fruit, about two-fifths as wide as long. The stalks and branches of the fruit clusters are orange colored.

When perfectly ripe the flesh, altho rather thin, is soft and very sweet. The flavor is characteristic, suggesting both chestnuts and persimmons. Said to yield heavily.

15063. Memakhir (?).
15064. Memakhir (?)
15065 to 15210.
One hundred and forty-six unidentified palms of Mr. Kearney's shipment, which were planted in the Date Garden at Mecca, Cal.
DECEMBER, 1903, TO DECEMBER, 1905. 193

15211. Phoenix dactylifera. Date.
From Winters, Cal. Received thru Prof. A. V. Stubenrauch in the spring of 1904. A large male date palm.

15212. Phoenix dactylifera. Date.
From Pomona, Cal. Secured by Prof. A. V. Stubenrauch, from the substation at Pomona, Cal., and transplanted to the Date Garden at Mecca, Cal., in 1904 and 1905.

15213 to 15224. Phoenix dactylifera. Date.
From Siwah Oasis, Egypt. Received thru Mr. H. I. Rankin, Fayum, Egypt, March 23, 1905, in New York.
A collection of date suckers secured by Mr. Rankin, who made a trip to the oasis of Siwah in February, 1905, to get them. The Arab names are those secured by Mr. Rankin.

15214. Frahee. 15218. Azawy, or Widy.

"Dried dates from the Oasis of Siwah. According to Cailliaud they are the third in quality of the Siwah dates. While fresh these are packed in baskets to be exported and sold in Egypt." (Rankin.)

15221 to 15224. (Numbers assigned to four palms of this shipment which arrived without labels.)

15225 to 15313. Phoenix dactylifera. Date.
From Bassorah, Arabia. Received thru Mr. H. P. Chalk, American consular agent, Bassorah, June 7, 1905.
A collection of 209 date suckers purchased from the Arabs by Mr. Chalk in Bassorah. The Arab names are those sent in by Mr. Chalk.


15231 to 15313. (Numbers assigned to 83 palms which lost their labels in transit.)

15314. Phoenix dactylifera. Date.
From Marseille, France. Received thru Champagne Brothers (Limited), August 5, 1905.
Deglet Noor. Seed.

15315 to 15332. From Tokyo, Japan. Received thru J. Ikeda & Co., seed growers, Waseda, August 14, 1905.

15315 to 15320. Brassica rapa. Turnip.
15315 to 15332—Continued.

15321. Nervia Maruihiri.

15322. Nervia Shihiboso.

15323. Nervia Chunaga Marushiri.

15324. Miyashige.

15325. Horyo.

15326. Extra Early Ku-nichi.

15333 to 15371.

From Pretoria, Transvaal. Presented by Prof. J. Burtt Davy, government agrostologist and botanist, Transvaal Department of Agriculture. Received August 14, 1905.

Forage grasses. The numbers in parentheses are those assigned by Professor Davy.

15333. (Natal redtop.) From Natal. (291/05)

15334. Aristida sp. From Natal. (288/05)

15335. (Native grass.) From Natal. (305/05)

15336. (Natal redtop.) From Natal. (289/05)

15337. Chloris Virgata. From Natal. (290/05)

15338. Eragrostis sp. From Natal. (289/05)

15339. (Native grass.) (292/05)

15340. Chloris Virgata elegans (?). (233/05)

15341. Setaria sp. (300/05)

15342. Eragrostis sp. (285/05)

15343. (Native grass.) (386/05)

15344. Setaria aerea. From Natal. (299/05)

15345. (Native grass.) (297/05)

15346. (Native grass.) (389/05)

15347. (Native grass.) (423/05)

15348. (Native grass.) (520/05)

15349. (Native grass.) (306/05)

15350. (Native grass.) (471/05)

15351. (Native grass.) (467/05)

15352. (Native grass.) (469/05)

15353. (Native grass.) (298/05)

15354. (Native grass.) (464/05)

15355. Chloris sp. (403/05)

15356. (Native grass.) (472/05)

15357. (Native grass.) (466/05)

15358. Eragrostis sp. From Natal. (289/05)

15359. Eragrostis sp. (390/05)

15360. (Native grass.) (429/05)

15361. (Native grass.) (396/05)

15362. Paspalum sp. (234/05)

15363. (Native grass.) (232/05)

15364. Eragrostis curvula valida. (307/05)

15365. (Native grass.) (425/05)

15366. Setaria sulcata. From Natal. (312/05)

15367. (Native grass.) (388/05)

15368. (Native grass.) (387/05)

15369. (Native grass.) From Natal. (315/05)

15370. (Native grass.) (308/05)

15371. (Native grass.) (296/05)

“Several of the species of Setaria and Eragrostis are valuable forage grasses. *Setaria sulcata* (S. P. I. No. 15366) is one of our best forage grasses, but requires a warm climate. It will stand some frost, however, as the roots have not been killed with a temperature of about 18° F. *Setaria aerea* (S. P. I. No. 15344) is a valuable hay grass. S. P. I. No. 15340 and S. P. I. No. 15337, forms of *Chloris virgata*, the annual, are of great value here, making an excellent and sweet hay. This grass ought to be tried in Arizona, New Mexico, and southern California, and I am sending seed to the Arizona and California stations.” (Davy.)
15372. **Colocasia antiquorum esculentum.** 

From Mayaguez, P. R. Received thru Mr. H. C. Henricksen, Agricultural Experiment Station, August 15, 1905.

"This is one of the 40(?) varieties of taro cultivated in Hawaii. Roots of this variety, called *Japanese*, were sent from the Hawaiian Experiment Station to the Porto Rico Experiment Station in 1903. It does not compare favorably in Porto Rico with the Trinidad taro of the same type." (Barrett.)

15373. **Colocasia antiquorum esculentum.** 

From Mayaguez, P. R. Received thru Mr. H. C. Henricksen, Agricultural Experiment Station, August 15, 1905.

"This variety is known as the *Royal* taro in Hawaii. It is one of the few true taros having purplish roots. The Porto Rico Experiment Station received this variety in 1903 from the Hawaiian Experiment Station, but it did not grow satisfactorily in the testing plats at Mayaguez, P. R." (Barrett.)

15374. **Arracacia esculenta.** 

From Ponce, P. R. Received thru Mr. J. W. van Leenhoff, August 15, 1905.

"Tho this plant is not cultivated in Porto Rico so widely as in Venezuela, it always sells for a good price in the local market. It grows better in elevated districts, preferring a cool, moist situation. Partial shade seems to be beneficial at low elevations. It should be treated like carrots." (Barrett.)

15375. **Pyrus sp.** 

From Shanghai, China. Received thru Rev. J. M. W. Farnham, August 16, 1905.

15376. **Rubus sp.** 

From Shanghai, China. Received thru Rev. J. M. W. Farnham, August 16, 1905.

"A berry growing wild on the mountains about 150 miles southwest of Shanghai. The fruit is a little larger than the red raspberry which grows in New England, and has not quite so strong a raspberry flavor." (Farnham.)

15377 to 15422.

From Mayaguez, P. R. Received from Mr. H. C. Henricksen, of the Porto Rico Experiment Station, thru O. W. Barrett, August 15, 1905.

These varieties comprise a large part of the collection made by Mr. O. W. Barrett while botanist of that station.

15377. **Xanthosoma sp.** 

*Guayamero Verde.* "A dwarf yautia with pink tubers of first quality; not widely cultivated." (Barrett.)

15378. **Caladium sp.** 

*Brau.* "A weed in fields. Leaves have a coppery luster. The grated yellow corn is used to kill maggots in sores on cattle." (Barrett.)

15379. **Xanthosoma sp.** 

*Orqueta.* "A small yautia with whitish petioles and pale leaves; the tuber is hard, yellow, and of second quality; cultivated in but few districts in Porto Rico." (Barrett.)

15380. **Xanthosoma sp.** 

"A yautia received from the Botanic Gardens, Aburi, Gold Coast, West Africa; it is apparently identical with one of the Jamaican varieties and was very probably introduced into Africa from the West Indies." (Barrett.)

15381. **Colocasia sp.** 

*Malanga 2.* "Presented to the Porto Rico Experiment Station by Mr. E. Andre, of Trinidad." (Barrett.)
SEEDS AND PLANTS IMPORTED.

15377 to 15422—Continued.

15382. Colocasia sp. Taro.

*Malanga.* “Presented to the Porto Rico Experiment Station by Mr. E. Andre, of Trinidad.” (Barrett.)

15383. Xanthosoma sp. Yautia.

“A yautia received from Trinidad, where it is known as the *Jamaica Taro*; this variety, however, was not received in the collection from Jamaica.” (Barrett.)

15384. Xanthosoma sp. Yautia.

“A semicultivated yautia sent from Guatemala by Mr. O. E. Cook; it appears distinct from any other known sort, but of little value as a crop.” (Barrett.)

15385. Xanthosoma sp. Yautia.

*Martinica.* “A first-class yautia widely cultivated in Porto Rico, tho not observed in collections from other West India islands. It has the petioles blotched with rose, maroon, and cream, and the blades are dark green; the smallish tubers are oblong, yellow, and of a firm texture when cooked. Called *Quintal* and *Hosco* in some localities.” (Barrett.)

15386. Xanthosoma sp. Yautia.

A first-class yautia obtained in Caracas, Venezuela, in 1906 by Mr. O. W. Barrett. “It attains a height of 5 feet and the largest tubers weigh from 1 to 2 pounds. This is a form of No. 15417 of Porto Rico, Trinidad, Belize, and Cuba; it may be considered the best of all known yautias.” (Barrett.)

15387. Xanthosoma sp. Yautia.

*Amurilla.* “A common yautia in Porto Rico, prized for its drought-resisting and keeping qualities and highly nutritious yellow tubers; it is a small variety and very liable to fungous attacks.” (Barrett.)

15388. Xanthosoma sp. Yautia.

*Grapihilla.* “A second-class yautia from the Arcoibo district of Porto Rico; the long, slender, pinkish tubers are of fair quality; it is one of the varieties of the peculiar flat-leaved *Manola* type.” (Barrett.)

15389. Xanthosoma sp. Yautia.

*Laguito.* “A yautia probably identical with No. 15417; cultivated at Cidra, P. R.” (Barrett.)

15390. Xanthosoma sp. Yautia.

*Isla.* “A second-class yautia, not well known; it resembles No. 15388, but has short tubers and a different stooling habit. No. 32 of the Porto Rico Station’s collection.” (Barrett.)

15391. Xanthosoma sp. Yautia.

Malanga *Amurilla.* “A yautia received from the Cuban Agricultural Experiment Station; No. 5206 of said station’s plant list.” (Barrett.)

15392. Xanthosoma sp. Yautia.

*Fin.* “A dwarf yautia, widely cultivated in Porto Rico; the pink or purplish tubers are of excellent quality for table use but are not produced in sufficient quantity to be found on the market.” (Barrett.)

15393. Xanthosoma (?) sp. Yautia.

*Conama.* “An apparently undescribed species growing in ravines in Porto Rico; it flowers, but probably does not produce seed. The grated corons are used to kill maggots in sores on cattle or horses. (See No. 15578)” (Barrett.)

15394. Xanthosoma sp. Yautia.

*Conama* *Colomodo.* “A common first-class yautia, apparently peculiar to Porto Rico; the mauve or purplish petioles and leaf veins distinguish this sort from all others except No. 15404. The elongated pink tubers are of good size and excellent quality. The leaves attain 6 feet in good soil.” (Barrett.)
15377 to 15422—Continued.

15395. **Colocasia sp.**

_B. decora._ A species of Colocasia, probably undescribed; brought from Trinidad in 1903 by Mr. O. W. Barrett. "This proves a most promising economic, since the tubers are ripened in six to nine months; it can be grown on a variety of soils; the yield in good soil is from 2 to 4 pounds to the hill. It resembles Nos. 15372 and 15373 in producing true tubers like a yautia instead of a large rhizome like a true taro." (Barrett.)

15396. **Xanthosoma sp.**

iners. "Sent by Mr. E. Andre, Port of Spain, Trinidad." (Barrett.)

15397. **Xanthosoma sp.**

"An excellent yautia sent by the Jamaica Department of Agriculture. (No. 2, Jamaica.)" (Barrett.)

15398. **Xanthosoma sp.**

_Amarilla._ "A small Cuban yautia sent by the Estacion Central Agronomica, Santiago de las Vegas, Cuba. Probably identical with No. 15387, but perhaps more resistant to fungous attacks." (Barrett.)

15399. **Xanthosoma sp.**

"A yautia sent by the Estacion Central Agronomica, Santiago de las Vegas, Cuba." (Barrett.)

15400. **Xanthosoma sp.**

"A yautia identical with No. 15394, but purchased from Reasoner Brothers, Oneco, Fla., as _Aloeasia bataiensis._" (Barrett.)

15401. **Xanthosoma sp.**

"A yautia purchased from Reasoner Brothers, Oneco, Fla., as _Aloeasia marshallii._ It yields a good-sized, edible tuber of the 'Rolliza' type." (Barrett.)

15402. **Xanthosoma sp.**

_Malanga Blanca._ "A yautia received from the Estacion Central Agronomica, Santiago de las Vegas, Cuba." (Barrett.)

15403. **Xanthosoma sp.**

"A fine yautia received thru the Jamaica Department of Agriculture. (No. 4, Jamaica.)" (Barrett.)

15404. **Xanthosoma sp.**

_Prieta._ "A first-class yautia resembling No. 15394 as regards leaf coloring, but the tubers are orange yellow; a highly prized table variety, but not very productive." (Barrett.)

15405. **Xanthosoma sp.**

_Manoala, or Rolliza Acuba._ "A flat-leafed yautia not well known; the tuber is firm and yellow, but rather small." (Barrett.)

15406. **Xanthosoma sp.**

"An excellent variety received from the Jamaica Department of Agriculture. (No. 5, Jamaica.)" (Barrett.)

15407. **Xanthosoma sp.**

_Punyera._ "Probably identical with No. 15392." (Barrett.)

15408. **Xanthosoma sp.**

_Dominica._ "A very choice variety of the _Amarilla_ type, grown on the north side of Porto Rico; the tuber is in some respects the finest flavored and richest of all yautias." (Barrett.)

15409. **Xanthosoma sp.**

"A first-class yautia received from the Jamaica Department of Agriculture. (No. 1, Jamaica.)" (Barrett.)
15377 to 15422—Continued.

15410. XANTHOSOMA SP. Yautia.

*Isleña de Ponce.* "A strong-growing yautia resembling No. 15392, but of two to three times the size. The tuber is of good flavor, pink, and is produced in fair quantity. Overstooling seems to be the principal fault of this variety." (Barrett.)

15411. XANTHOSOMA SP. Yautia.

*Ysleña.* "Received from the Estacion Central Agronomica, Santiago de las Vegas, Cuba. (No. 5207 of the Cuba station's list.)" (Barrett.)

15412. XANTHOSOMA SP. Yautia.

*Belembe.* "A wild or semicultivated yautia, probably Xanthosoma hastifolium. The young leaves of this species are preferred by the natives of Porto Rico for use (boiled) as a spinach. This plant flowers freely; it produces no tubers; height, 18 feet 2 inches." (Barrett.)

15413. ALOCASIA MACROBHHIZA.

"This is semicultivated in some districts as a pig food; the large rhizomes are boiled to destroy the raphides." (Barrett.)

15414. XANTHOSOMA SP. Yautia.

*Polma.* "The largest of known Xanthosomas, tho of no great importance horticulturally. Urban considers this *X. violaceum*, but that species is usually considered as comprised by the purple-leaved forms, like Nos. 15394 and 15404. The nearly tuberless rhizome attains a length of 1 to 3 feet and a diameter of 3 to 6 inches. It is used for feeding pigs and poultry when boiled." (Barrett.)

15415. XANTHOSOMA SP. Yautia.

"A fine yautia, received from the Jamaica Department of Agriculture. (No. 6, Jamaica.)" (Barrett.)

15416. XANTHOSOMA SP. Yautia.

*Quindal.* "Probably identical with No. 15385. Named from its believed ability to produce 100 pounds of tubers per plant when very heavily fertilized. The rhizome is frequently eaten, tho not of so delicate a flavor and texture as the tubers." (Barrett.)

15417. XANTHOSOMA SP. Yautia.

*Rolliza.* "This is the best variety native to Porto Rico. It may be grown on a variety of soils. The yield is 2 to 4 pounds per hill. The tubers are of large size, white, meaty, and smooth. The rhizome is also eaten. This is undoubtedly *Xanthosoma sagittifolium* Schott. It occurs in Belize, Trinidad, and Cuba. A very similar form produces larger (?) tubers in Venezuela." (Barrett.)

15418. XANTHOSOMA SP. Yautia.

"A choice yautia, received from the Jamaica Department of Agriculture. (No. 3, Jamaica.)" (Barrett.)

15419. XANTHOSOMA SP. Yautia.

*Blanca.* "A second-class yautia, resembling No. 15417, but not so productive nor so early. The rhizome is poisonous, because of its content of calcium oxalate raphides. The tubers are more slender and rougher than those of the *Rolliza*, No. 15417." (Barrett.)

15420. XANTHOSOMA SP. Yautia.

"A yautia from Belize, probably identical with No. 15417." (Barrett.)

15421. XANTHOSOMA SP. Yautia.

"A yautia introduced into Porto Rico from Trinidad by the writer in 1903. It is very similar to No. 15417, but the tubers appear to vary slightly from yellowish white to pinkish white instead of being of the even white of *Rolliza*." (Barrett.)

15422. XANTHOSOMA SP. Yautia.

*Red Eddoe.* Presented by Mr. E. André, Port of Spain, Trinidad. (Barrett.)
DECEMBER, 1903, TO DECEMBER, 1905.

   From Santa Cruz, Cal. Received thru Mr. E. Leedham, of the Leedham Bulb
   Company, August 16, 1905.

   From Lucknow, India. Received thru Mr. Robert Anderson, Lansdowne, Pa.,
   August 21, 1905.

15425 to 15427. Bombay (?).
   From Bellingham, Wash. Received thru Mr. H. E. Juenemann, of this Depart-
   ment, August 21, 1905.
   15425. Rosa sp.
   15426. Rosa sp.
   15427. Rubus spectabilis.

15428 and 15429. Vicia faba. Horse bean.
   From Naples, Italy. Received thru Dammann & Co., August 18, 1905.
   15428. Vesse fevevele des Champs.
   15429. Vesse fevevele petite.

15430 to 15445.
   From Bellingham, Wash. Received thru Mr. J. W. M. Smith, August 22, 1905.
   15430 to 15434. Hyacinthus sp.
   15441 and 15442. Crocus sp.
   15443 to 15445. Tulipa sp.

15446 to 15458.
   From Clearbrook, Wash. Received thru Mr. George Gibbs, August 21, 1905.
   15446 to 15456. Narcissus spp.
   15457 and 15458. Hyacinthus sp.

15459. Narcissus tazetta alba.
   From Alameda, Cal. Received thru Mr. George Rosmarin, Encinal Nursery,
   August 22, 1905.

15460 to 15474. Mexican plants.
   From City of Mexico, Mexico. Received from Dr. J. N. Rose, August 25, 1905.
   The numbers in parentheses are those of Doctor Rose's notes, which give the
   exact localities where the various plants were secured.
   15460. (No. 1178/05.)
   15461. (No. 1179/05.)
   15462. (No. 1180/05.)
   15463. (No. 1182/05.)
   15464. (No. 1183/05.)
   15465. (No. 1184/05.)
   15466. (No. 1185/05.)
   15467. (No. 1186/05.)
   15468. (No. 1187/05.)
   15469. (No. 1188/05.)
   15470. (No. 1189/05.)
   15471. (No. 1190/05.)
   15472. (No. 1194/05.)
   15473. (No. 1202/05.)
   15474. (No. 1205/05.)

15475 to 15477.
   From Paris, France. Received thru Vilmorin-Andrieux & Co., August 26, 1905.
   15476 and 15477. Trifolium incarnatum. Crimson clover.
   15476. Extra Early Red.
   15477. Early White.
15478. **Lilium Longiflorum Eximeum.** *Easter lily.*
Seed grown in the Department greenhouse by Mr. G. W. Oliver. Numbered September 2, 1905.

15479. **Lilium Longiflorum Eximeum Giganteum.** *Lily.*
Seed grown in the Department greenhouse by Mr. G. W. Oliver. Numbered September 2, 1905.

15480 to 15583. **Oryza Sativa.** *Rice.*
From Tanga, German East Africa. Presented by Prof. Dr. A. Zimmermann, of the Kaiserliche Biologische Landwirtschaftliche Institut, Amani, in the spring of 1905.

A collection of native rice varieties. The notes are those given by Doctor Zimmermann.

15480.
From Pangani, in the hills, 700 meters high.

15481.
Plant from January to March. Grown in Pangani, Mgera, northerly; 1,000 meters high; river valley of the Luhisgura (?)..

15482.
From Pangani, Mohomorra, northward of Useguha Mountains; 400 meters high.

15483.
From Pangani Buguru, west of Useguha; altitude 600 meters; river valley of Msangazi.

15484.
From Pangani Bondei; altitude 300 meters.

15485. *Basangga* mixt with *Kwindimba.*
Glumes of *Basangga* are brown yellow; of *Kwindimba,* grey white. Kernel of *Basangga* is white; of *Kwindimba,* brown. From Lindi.

15486. *Kwindimba.*
From Lindi.

15487. *Namaria.*
From Lindi. Mixt with *Kwindimba.* Glumes brown; strong thick awn; kernel white with a reddish tinge.

15488. *Mkmuzuri.*
From Lindi. Slender awn, white kernel. Glumes yellow gold.

15489. *Mponguru.*
From Lindi. Glumes lighter than *Namaria* and *Mkmuzuri.* Kernel white and large. Nos. 15485 to 15489 can be distinguished in cooking by specific odors. No one variety of soil is suitable for all conditions. In the valleys they are planted on moist or on sandy soils. In the high altitudes they are sown upon newly cleared land, but are uncertain and are dependent upon the rainfall.

15490. *Nondo.*
From Tanga district. Likes water.

15491. *Sijala.*
From Tanga district. Requires much water.

15492. *Nzurinwendo.*
From Tanga district. Requires much water.

15493. *Sona.*
From Tanga district. Requires much water.
<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Origin</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>15494</td>
<td>Ruwi</td>
<td>Tanga district</td>
<td>Requires much water.</td>
</tr>
<tr>
<td>15495</td>
<td>Magoja</td>
<td>Tanga district</td>
<td>Likes water.</td>
</tr>
<tr>
<td>15496</td>
<td>Gundimba</td>
<td>Mikindani</td>
<td></td>
</tr>
<tr>
<td>15497</td>
<td>Sungala</td>
<td>Mikindani</td>
<td>Plant during December or January in black moist soil in valleys.</td>
</tr>
<tr>
<td>15498</td>
<td>Ralimalia</td>
<td>Matumbi Marivve, Kilwa district</td>
<td>Plant in heavy soil, giving much water and little sun. Matures in four and a half months after sowing.</td>
</tr>
<tr>
<td>15499</td>
<td>Bungala</td>
<td>Matumbi Marivve, Kilwa district</td>
<td>Plant in black soil, with much water and little sun. Matures in five months after sowing.</td>
</tr>
<tr>
<td>15500</td>
<td>Seim</td>
<td>Matumbi, near Mohora, Kilwa district</td>
<td>Plant in black soil, with plenty of water and little sun. Matures in five and a half months after sowing.</td>
</tr>
<tr>
<td>15501</td>
<td>Majeya Konoa</td>
<td>Matumbi, near Kiswera, Kilwa district</td>
<td>Requires good soil, much sun, and little water. Matures in three months.</td>
</tr>
<tr>
<td>15502</td>
<td>Gundimba</td>
<td>Matumbi, near Kiswera, Kilwa district</td>
<td>Requires good soil, much sun, little water. Matures in three months.</td>
</tr>
<tr>
<td>15503</td>
<td>Shinda no</td>
<td>Matumbi, near Kiswera, Kilwa district</td>
<td>Requires good soil, much sun, little water. Matures in three months.</td>
</tr>
<tr>
<td>15504</td>
<td>Ambari</td>
<td>Tanga district</td>
<td>Likes water.</td>
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<tr>
<td>15505</td>
<td>Mkarafun</td>
<td>Tanga district</td>
<td>Likes water.</td>
</tr>
<tr>
<td>15506</td>
<td>Mbanga Nunda</td>
<td>Tanga district</td>
<td>Likes water.</td>
</tr>
<tr>
<td>15507</td>
<td>Guniga</td>
<td>Tanga district</td>
<td>Likes water.</td>
</tr>
<tr>
<td>15508</td>
<td>Monadja Uniko</td>
<td>Tanga district</td>
<td>Likes water.</td>
</tr>
<tr>
<td>15509</td>
<td>Mchusi</td>
<td>Tengra, near Saadani</td>
<td>Plant in November in sandy loam.</td>
</tr>
<tr>
<td>15510</td>
<td>Majeya Fundi</td>
<td>Tengra, near Saadani</td>
<td>Plant in November in sandy loam.</td>
</tr>
<tr>
<td>15511</td>
<td>Majeya Fundi</td>
<td>Tengra, near Saadani</td>
<td>Plant in November in sandy loam.</td>
</tr>
<tr>
<td>15512</td>
<td>Kijepi</td>
<td>Tengra, near Saadani</td>
<td>Plant in November in sandy loam.</td>
</tr>
<tr>
<td>Seed/Plant Name</td>
<td>Details</td>
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<tr>
<td>15513 to 15545</td>
<td>(No data.)</td>
<td></td>
<td></td>
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<tr>
<td>15546</td>
<td>Plant in wet soil. Grows after rainy season.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15547</td>
<td>Inferior quality. Requires wet soil. Grows after the rainy season.</td>
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<tr>
<td>15548</td>
<td><em>Bangala.</em> Grown after rainy season in moist soil.</td>
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<tr>
<td>15549</td>
<td><em>Kilimali, Akilimali, Halamaria, Tandika, Nyampenda, Habimbunda.</em> Grown on lowlands, and with much rain will grow on the hills; from Mohora district, Rufiji.</td>
<td></td>
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<tr>
<td>15550</td>
<td><em>Sena Kilbwali.</em> Hill-land rice from Mohora district, Rufiji.</td>
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<tr>
<td>15551</td>
<td><em>Sejada Bakianka Mbwego.</em> Hill-land rice from Mohora district, Rufiji.</td>
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<tr>
<td>15552</td>
<td><em>Kapora Najiza Kungwa Zarakupa Mpongamuwe.</em> Hill-land rice from Mohora district, Rufiji.</td>
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</tr>
<tr>
<td>15553</td>
<td><em>Bangala.</em> From Mohora district, Rufiji. Lowlands.</td>
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<tr>
<td>15554</td>
<td><em>Kaweno Kanenora.</em> From Mohora district, Rufiji. Hills and dry lowlands.</td>
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<tr>
<td>15555</td>
<td><em>Nyangenyangi.</em> From Mohora district, Rufiji. Lowlands, without irrigation.</td>
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</tr>
<tr>
<td>15556</td>
<td><em>Kijicho.</em> From Mohora district, Rufiji; lowlands or hills.</td>
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<tr>
<td>15557</td>
<td><em>Ngengenyangi.</em> Lowlands, Mohora district, Rufiji.</td>
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<tr>
<td>15558</td>
<td><em>Schindano.</em> Wet lowlands, Mohora district, Rufiji.</td>
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<tr>
<td>15559</td>
<td><em>Harula.</em> Lowlands, Mohora district, Rufiji.</td>
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<td>15560</td>
<td><em>Kibaba Rapic.</em> Lowlands, Mohora district, Rufiji.</td>
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<tr>
<td>15561</td>
<td><em>Mbeerke.</em> Lowlands, Mohora district, Rufiji.</td>
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</tr>
<tr>
<td>15562</td>
<td><em>Manjano.</em> Hills and lowlands, Mohora district, Rufiji.</td>
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</tr>
<tr>
<td>15563</td>
<td><em>Kensi.</em> Lowlands, Mohora district, Rufiji.</td>
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<tr>
<td>15564</td>
<td><em>Sivula.</em> Lowlands, Mohora district, Rufiji.</td>
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<tr>
<td>15565</td>
<td><em>Kuku.</em> Lowlands, Mohora district, Rufiji.</td>
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</tbody>
</table>
DECEMBER, 1903, TO DECEMBER, 1905.

15480 to 15583—Continued.

15566. *Ngohe.*
Hills and lowlands. Becomes vigorous. Often planted at the edge of the field.

15567. *Borakapata.*
From Morogoro. Opening of the rainy season is sown in damp soil.

15568. *Melia.*
From Morogoro. Plant at the commencement of the rainy season in moist lowlands or marshy places.

15569. *Malua* and *Maruka.*
From Morogoro. Plant at the commencement of the rainy season in moist lowlands or marshy ground.

15570. *Sena.*
From Morogoro. Plant in moist ground at the commencement of the rainy season.

15571. *Rafaji.*
From Mahenge. Plant in rainy season in heavy, black, wet soil. From five to six months to mature.

15572. *Rigubaza.*
From Mahenge. Plant in rainy season in heavy, moist, black soil. Matures in five to six months.

15573 to 15583. From Mahenge. Mature in five to six months. Plant in rainy season in heavy, moist, black soil.

15578. *Kikalati.*

15584. *Lilium longiflorum eximeum giganteum.* Lily.
Seedlings raised in the Department of Agriculture greenhouses. Numbered September 1, 1905.

15585 to 15593. *Narcissus* sp. Narcissus.
From Guernsey, England. Received thru W. Mauger & Son, Brookdale Nurseries, August 21, 1905.

15594 to 15654. From Haarlem, Holland. Received thru Mr. C. G. van Tubergen, jr., Zwanenburg Nurseries, September 5, 1905.

Miscellaneous bulbs.

15595 to 15645. *Tulipa* spp.

15655. *Avena sativa.* Oat.
From Sherman, Tex. Received thru Mr. W. F. Sheldon, September 5, 1905.

From Miami, Fla. Received thru Col. G. B. Brackett, from Prof. P. H. Rolfs, September 5, 1905.
15657. Narcissus tazetta.  
Narcissus.  
From Santa Cruz, Cal.  Received thru T. Thompson, florist, September 5, 1905.

15658 to 15667. Narcissus spp.  
Narcissus.  
From Leyden, Holland.  Received thru De Graaf Brothers (Limited), wholesale bulb growers, September 6, 1905.

15668 and 15669.  
From Chicago, Ill.  Received thru the A. Dickinson Co., September 6, 1905.
15668. Dactylis glomerata.  
Orchard grass.
15669. Phleum pratense.  
Timothy.

15670 to 15672.  
From Budapest, Hungary.  Received thru Mr. Frank Benton, of the Bureau of Entomology, September 7, 1905.
15670. Cucurbita sp.  
Squash.
"Large, green, very warty squash. Odd looking. Flesh yellow. Seed taken from squash on sale in market of Venice, Italy, August, 1905." (Benton.)
15671. Cucurbita sp.  
Squash.
"Small, grayish-green, flat squash on sale in market of Venice, Italy, August, 1905." (Benton.)
15672. Cucumis melo.  
Muskmelon.
"Muskmelon from market at Trieste, Austria, August, 1905. Probably brought up from Dalmatia. Sold under the name Zuc. Medium to large-sized greenish yellow melon of fairly good quality; very warty, or covered with knobby excrescences." (Benton.)

15673 to 15682.  
From the Office of Gardens and Grounds, turned over to the Office of Seed and Plant Introduction, September 8, 1905.
15673. Monstera delicosa.  
15674. Smilax medica.  
15675. Sansevieria cylindrica.  
15676. Clivia miniata.  
15677. Maranta lineata rosca.  
15678. Alocasia cuprea.  
15679. Dieffenbachia seguine.  
15680. Homeria discolor.  
15681. Pier nigrem.  
15682. Xanthosoma lindenii.

15683 to 15697.  
From Sydney, New South Wales.  Presented by Mr. J. H. Maiden, director and government botanist, Botanic Gardens.  Received September 7, 1905.
15683. Acacia cunninghamii.  
15684. Acacia cultriformis.  
15685. Acacia nerifolia.  
15686. Callitris calcarata.  
15687. Callitris robusta.  
15688. Casuarina stricta.  
15689. Casuarina torulosa.  
15690. Cordylines australis.  
15691. Cordylines obtecta.  
15692. Cordylines stricta.  
15693. Ficus rubiginosa.  
15694. Podocarpus elata.  
15695. Sterculia acrifolia.  
15696. Telopia speciosissima.  
15697. Macadamia ternifolia.

15698 to 15744.  
From Hillegom, Holland.  Received thru R. Van der Schoot & Son, September 11, 1905.
15698 to 15709. Narcissus spp.  
15710 to 15738. Tulipa spp.  
15739 to 15743. Iris hispanica.  
15744. Narcissus sp.
15745. Physalis sp.  Ground cherry.
   From Lima, Peru. Received thru W. R. Grace & Co., September 11, 1905.
   
15746. Lilium longiflorum eximeum.  Easter lily.
   From Tarrytown, N. Y. Received thru F. R. Pierson & Co., September 11, 1905.
   
15747 to 15749. Theobroma cacao.  Cacao.
   From Trinidad, British West Indies. Received thru Prof. J. H. Hart, Trinidad
   Botanical Gardens, September 11, 1905.
   15748. Foresterio.
   
15750. Pisum sp.  Pea.
   From Gyantse, Tibet. Received from Captain O'Connor, of the British Indian
   army, thru Mr. M. A. Carleton, cerealist, September 8, 1905.
   
15751. Beschorneria bracteata.
   From Nice, France. Received thru Mr. A. Robertson-Proeschowsky, September
   15, 1905.
   
15752.
   From Richmond, Va. Received thru T. W. Wood & Sons, September 15, 1905.
   Wood's Grain Pasture Mixture, said to be a mixture of wheat, barley, rye, winter
   turf oats, and hairy vetch.
   
15753 to 15758.
   From Shanghai, China. Received thru Rev. J. M. W. Farnham, September 15,
   1905.
   Seeds obtained 150 miles southwest of Shanghai, except 15753.
   15753. Amygdalus persica.  Peach.
   15754. Amygdalus persica.  Peach.
   
15759 to 15761. Oryza sativa.  Rice.
   From Kobe, Japan. Presented by Mr. Thomas F. McGrath, of the China and
   Japan Trading Company, of Kobe, Japan, thru Dr. W. H. McGrath, Delaware
   avenue and Market street, Camden, N. J., and Mr. T. F. Townsend, United
   States Weather Bureau, Philadelphia, Pa. Received August 1, 1905.
   15759. Early glutinous rice. "Tastes better than ordinary rice." (Mc-
   Grath.)
   15760. Later glutinous rice.
   15761. Early ordinary rice.
   
15762 and 15763.
   From the greenhouses of the Department of Agriculture. Received September
   18, 1905.
   15762. Homalomena wallisi.
   15763. Dieffenbachia sp.
15764 to 15766.
From Hungary and Bulgaria. Secured by Mr. Frank Benton, of the Bureau of Entomology, and received September 19, 1905.

15764. **Citrus vulgaris.** Watermelon.
From Godollo. Small, round melon; dark green, with red flesh, thin rind, and brown seeds; small; quality excellent; quite sweet and juicy. Collected August 24, 1905. (No. 6.)

15765. **Cucumis melo.** Muskmelon.
From Budapest. Small, yellowish green, closely netted, quite aromatic. Flesh green, quite juicy, tender, and of excellent quality. Seed from melon purchased on the market. (No. 7.)

15766. **Citrus vulgaris.** Watermelon.
From Sophia, Bulgaria. Yellow-cored, medium-sized, good quality. Flesh lemon yellow or light greenish yellow. (No. 9.)

15767 to 15772. **Narcissus** spp.
From Ettrick, Va. Received thru Post Brothers, September 19, 1905.

15773 and 15774. **Narcissus** spp.
From Santa Cruz, Cal. Received thru Mr. E. Leedham, of the Leedham Bulb Company, September 21, 1905.

15775. **Zea mays.** Corn.
From Adrianople, Turkey. Received thru Mr. Frank Benton, of the Bureau of Entomology, September 21, 1905.

"Small, orange-yellow flint corn, said to withstand drought well. Stalks grow about 4 feet tall. The region about Adrianople is a very dry one." (Benton.)

15776. **Cucumis melo.** Muskmelon.
From Constantinople, Turkey. Received thru Mr. Frank Benton, September 21, 1905.

"Smooth skin, yellow outside; rather large, oval form; flesh greenish white, juicy and excellent flavor." (Benton.)

15777. **Opuntia gymnocarpa.** Prickly pear.
From Nice, France. Received thru Dr. A. Robertson-Proschowsky, September 22, 1905.

15778. **Oryza sativa.** Rice.
From Macassar, Celebes. Received thru Mr. Karl Auer, United States consular agent, September 5, 1905.

15779. **Capriola dactylon.** Bermuda grass.

15780. **Diospyros lotus.** Black jube.
From Jamaica Plain, Mass. Received from the Arnold Arboretum, September 28, 1905.

15781. **Adonis amurensis.**
15782 to 15787. Arachis hypogaea. Peanut.
From Marseille, France. Received thru Hon. Robert P. Skinner, United States consul-general, September 28, 1905.

- 15782. First-class Java.
- 15783. Pondicherry.
- 15784. Java.
- 15785. Gambia.
- "One of the best of the edible oil nuts from the West Coast of Africa." (Skinner.)
- 15786. Raffispa.
- "One of the best of the edible oil nuts from the West Coast of Africa." (Skinner.)
- 15787. Chinese.
- "A low-grade nut for industrial oil only." (Skinner.)

From Fort Collins, Colo. Received thru Mr. O. B. Underwood, February, 1905.

15789 to 15796.
From Gotha, Orange County, Fla. Received thru Mr. H. Nehrling, Palm Cottage Experiment Gardens, September 30, 1905.

- 15789. Alocasia sp. (?).
- 15790. Xanthosoma maculatum. Yautia.
- 15791. Colocasia euchlora (?). Taro.
- 15792. Xanthosoma sp. Yautia.
- From Florida; said to have been cultivated by the Seminoles; common in old Florida gardens.
- 15793. Xanthosoma robustum (?). Yautia.
- 15794. Alocasia violacea (?). Taro.

15797 to 15802.
From Fairoaks, Cal. Received thru Mr. F. McMillan, October 2, 1905.


15803 to 15805.
From Mayaguez, P. R. Received thru the Agricultural Experiment Station, October 3, 1905.

- 15803. Xanthosoma sp. (?). Yautia.
  "Probably identical with No. 15414." (Barrett.)
15804. Xanthosoma sagittifolium. Yautia.
"From the Alia Vera Paz district of Guatemala. The yellow tubers seem to distinguish this from all other known sorts having reddish petioles." (Barrett.)

15805. Dracaenium asperum. "Guapa."
"Resembles Amorphophallus, which was discovered on the upper Amazon and which appears to occur only in Porto Rico and Brazil. The large corm, when well matured, is cooked by the natives, and may be compared to squash in appearance, but has a strong flavor not usually relished at the first taste. The single leaf attains a height of 8 feet. The fetid effluvium of the flower is poisonous." (Barrett.)

From Boston, Mass. Received thru R. & J. Farquhar & Co., October 2, 1905.

15807 and 15808.
From Palm Springs, Cal. Received from Dr. Welwood Murray, thru Mr. T. H. Kearney, October 2, 1905.
An ornamental shrub for desert regions.
15808. Parkinsonia sp. Palo verde.
An ornamental desert shrub.

15809 to 15817.
From Hiroshima, Japan. Presented by Mr. J. T. Meyers. Received September 29, 1905.
15809. Eriobotrya japonica. Loquat.
"These (15809 and 15810) are both nursery plants, the 'Usura' (15810) probably thriving under such treatment as would be given young cherry trees." (Meyers.)
15811. Brassica sp. Turnip.
Shogo.
15813. Brassica sp. Turnip.
Mammoth Red.
15814. Raphanus sp. Radish.
Sakura.
15815. Raphanus sp. Radish.
Morigncha.
15816. Cucurbita sp. Squash.
Tropical.
15817. Cucurbita sp. Squash.
Kyoto.

15818 to 15820. Feltia sp. "Guayabilla."
From Buenos Aires, Argentina. Received thru Dr. Carlos Spegazzini, botanist of the Department of Agriculture, October 5, 1905.
15818. Large.
15820. Small or Winter.
15819. Smooth or Manzana.
DECEMBER, 1903, TO DECEMBER, 1905.

15821 to 15824.

From Trebizond, Asiatic Turkey. Secured by Mr. Frank Benton, of the Bureau of Entomology. Received October 2, 1905.

Seeds obtained from Mr. Dem. Ch. Papathopoulos, of Samsoun, Asiatic Turkey.


"Said to be of superior quality; not used as a forage crop, and the grain exported for use in the manufacture of beer, being especially suited for this."

(No. 12.)

15822 to 15824. Papaver somniferum. Opium poppy.

15822. White-seeded.

Grown near Samsoun, on the south coast of the Black Sea, Turkey in Asia. (No. 13.)

15823. Mixt.

Grown near Samsoun, Turkey in Asia. (No. 14.)

15824. Blue-seeded.

Grown near Samsoun, Turkey in Asia. (No. 15.)

15825. Andropogon sorghum. Milo.

From Mecca, Cal. Received thru Brauckman Brothers, August 7, 1905.

15826. Festuca gigantea.

From Agricultural College, Mich. Received thru Dr. W. J. Beal, September 20, 1905.


From St. Louis, Mo. Grown by Mr. W. J. Magee in 1904. Received September, 1905.

"The grain of the Ainu Japanese people. This sample was grown from Ainu seed." (Magee.)

15828. Schoenocauleon officinale (?). "Cebadilla."

From Vera Cruz, Mexico. Received thru Hon. William W. Canada, United States consul, October 5, 1905.


From Manhattan, Kans. Received thru Mr. A. M. Ten Eyck, October 6, 1905. Tennessee Winter.


From Westminster, Md. Received thru Mr. H. L. Rhinehart, October 6, 1905. Tennessee Winter.


From Grazalema, near Ronda, Spain. Received thru Mr. David Fairchild, October 9, 1905.

"This almond, a single tree of which stands in the ‘huerta’ of Señor Félix Enríquez, is, altho small, the highest-priced almond raised in the region, and conforms in shape and texture to the Jordan almond of Malaga. Its unusually thin shell and especially delicate kernel should make it of special value in California, where the tendency of these introduced hard-shelled almonds seems to be to become larger and coarser. This almond may develop in California into a larger sized superior type of Jordan almond."

(Fairchild.)

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15832. **Amygdalus communis.** Almond.

From Ubrique, near Villa Martin, Spain. Received thru Mr. David Fairchild, October 9, 1905.

“A thin-skinned, fine type, of which few trees exist in Ubrique.” (Fairchild.)

15833 to 15837. **Amygdalus communis.** Almond.

From Grazalema, near Ronda, Spain. Received thru Mr. David Fairchild, October 9, 1905.

Almonds in the shell, purchased of Señor Félix Enríquez. “These five types, coming probably from seedling trees, are valuable for the production of seedlings, which may be better adapted to Californian conditions than the Jordan almond previously imported.” (Fairchild.)

15838. **Tacca pinnatifida.** Fiji arrowroot.

From Oneco, Fla. Received thru Reasoner Brothers, Royal Palm Nurseries, October 9, 1905.

15839 to 15843. **Opuntia spp.** Prickly pear.

From Seville, Spain. Received thru Mr. Ambrosio Eschauzier, October 9, 1905.

15839. **Españoles.**

“A variety said to yield abundantly fruits of good flavor; not so well suited for fences as the more spiny varieties.” (Eschauzier.)

15840. **Americanos.**

15841. **Moscated, or Malagueños.**

15842. **Tintillas, or Viejas.**

15843. **Franceses.**

“Nos. 15842 and 15843 are used for hedges more than for fruit, on account of their large size and spininess.” (Eschauzier.)

15844 to 15848. **Narcissus spp.** Narcissus.

From Santa Cruz, Cal. Received thru the Leedham Bulb Company, October 7, 1905.

15849. **Cochlearia officinalis.** Scurvy grass.

From London, England. Received thru Barr & Sons, October 9, 1905.

The famous scurvy grass, which is one of the cruciferous order to which the cresses belong, is found in England in three varieties. Its habit is to grow near the seashore; consequently, it is almost the first plant which a suffering crew would find ready to hand on landing. It is seen along the muddy banks of rivers and on seashores, especially near Lymington, in parts of Wales, and in Cumberland. One variety grows on the Scotch mountains. It is not a “grass” in any sense, but an upright plant with spoon-shaped leaves and large bunches of white and rather pretty flowers. The small species found on the Scotch hills is the Greenland scurvy grass.

15850. **Opuntia ficus indica.** Prickly pear.

From Catania, Sicily. Received thru Charles Beek, esq., manager for the Duke of Bronte, Castel di Maniace, October 10, 1905.

Reputed at Catania to be the best sort grown in Sicily; fruit very sweet; seed small, probably abortive; color, pale yellow.
15851. CYTISUS SCOPARIUS. Scotch broom.
From New York, N. Y. Received thru J. M. Thorburn & Co., October 10, 1905.

15852. CENTROSEMA PLUMIERI.
From Mayaguez, P. R. Received thru Mr. H. C. Henricksen, horticulturist of the Agricultural Experiment Station, October 10, 1905.

From a vine grown from seed brought from St. Vincent, British West Indies, in 1903, by Mr. O. W. Barrett, botanist and entomologist of the Porto Rico Experiment Station. "This plant is giving excellent results as a cover crop in both Porto Rico and Hawaii, and is worthy of trial in the Southern States." (Barrett.)

15853 to 15874.
From McPherson, Kans. Received thru Mr. L. A. Fitz, October 6, 1905.

15853. TRITICUM MONOCOCCUM. Einkorn.
Fourth crop from German seed. (C. I. No. 1781.)

15854. TRITICUM MONOCOCCUM. Einkorn.
Fourth crop from seed found mixt with oats, S. P. I. No. 3676. (C. I. No. 2226.)

15855. TRITICUM MONOCOCCUM. Einkorn.
First crop from S. P. I. No. 10474. (C. I. No. 2433.)

15856 to 15864. AVENA SATIVA. Oat.

15856. Berl.
Second crop from seed from Virginia Agricultural Experiment Station, Blacksburg, Va. (C. I. No. 293.)

15857. Sixty-Day.
Third crop from S. P. I. No. 5938. (C. I. No. 165.)

15858. Red Algerian.
Second generation from S. P. I. No. 10269. (No. C. I. 337.)

15859. Texas Red.
From Agricultural Experiment Station seed, Manhattan, Kans.

15860. Danish.
First generation from New Zealand seed, S. P. I. No. 12877.

15861. Dun.
First generation from New Zealand seed, S. P. I. No. 12878.

15862. Sparrowbill.
First generation from New Zealand seed, S. P. I. No. 12879.

15863. Canadian.
First generation from New Zealand seed, S. P. I. No. 12880.

15864. White Tartar.
First generation from New Zealand seed, S. P. I. No. 12881.

15865. TRITICUM SPELTA. Spelt.
Fourth generation from seed from Agricultural Experiment Station, Pullman, Wash. (C. I. No. 1772.)

15866. HORDEUM VULGARE. Barley.
Tennessee Winter. First generation from S. P. I. No. 11780. (C. I. No. 2577.)

15867. HORDEUM DISTICHUM NUTANS. Two-row barley.
Hanna. Third generation from S. P. I. No. 9133. (C. I. No. 226.)
SEEDS AND PLANTS IMPORTED.

15853 to 15874—Continued.

Fourth generation from Russian seed, obtained at the Paris Exposition.
(C. I. No. 13.)

Fourth generation from Russian seed obtained at the Paris Exposition.
(C. I. No. 1.)

15870 to 15874. Triticum vulgare. Wheat.

15870. Kharkof.
Fourth generation from S. P. I. No. 7467. (C. I. No. 1583.)

15871. Turkey.
Fourth generation from seed from Harvey County, Kans. (C. I. No. 1558.)

15872. Ultra.
Fourth generation from S. P. I. No. 5638. (C. I. No. 1439.)

15873. Crimea.
Fourth generation from S. P. I. No. 5636. (C. I. No. 1437.)

15874. Kharkof.
Fourth generation from S. P. I. No. 5641. (C. I. No. 1442.)

15875. Bromus pacificus.
From Sitka, Alaska. Received thru Prof. C. C. Georgeson, Agricultural Experiment Station, October 13, 1905.

15876 to 15879. Musa spp. Banana.
From Manila, P. I. Received thru Mr. William S. Lyon, Bureau of Agriculture, October 10, 1905.

15876. Carinosa.
15877. La Gloria.
15878. Locatari.
15879. Bananam.

15880. Tamarindus indica. Tamarind.
From Manila, P. I. Received thru Mr. William S. Lyon, Bureau of Agriculture, October 16, 1905.

From Port of Spain, Trinidad. Received thru Prof. J. H. Hart, Trinidad Botanical Department, October 21, 1905.

15882. Kunzea pomerina.
Received by the Office of Grass and Forage Plant Investigations without definite information as to the sender, October 17, 1905.

"Dense, prostrate, sand-binding plant. Grows only on sand hammocks, near the seacoast (in South Australia). Bears large quantities of edible berries in clusters of five or six. "Maories of natives; nice apples of whites. Fruits have the odor and taste of apples."

From Santa Cruz, Cal. Received thru Mr. George J. Streator, October 17, 1905.

From Chicago, Ill. Received thru Mr. A. Dickinson, October 16, 1905.
15885. *Hevea* sp. 
Para rubber.

From Amherst, Lower Burma. Received thru Mr. G. N. Collins, of the Bureau of Plant Industry, October 19, 1905.

"These plants were grown from seed sent by Mr. W. S. Todd, Amherst, Lower Burma. The trees from which the seed came were doubtless grown from seed distributed throughout India by the British Government many years ago." (Collins.)

15886. *Durio zibethinus.* 
Durian.

From Singapore, Straits Settlements. Presented by Mr. G. O. Blacker. Received October 19, 1905.

15887. (Undetermined.) 
Bean.

From Chehkiang, China. Presented by Dr. S. P. Barchet, of the American consulate, Shanghai. Received October 21, 1905.

Stock feed bean. "This bean is found on the market in the west of Chehkiang Province, and is worth further investigation. It is sown broadcast in rice fields about the time they are being drained, two or three weeks before harvesting. Horses and cattle are fond of this plant, i.e., they eat it greedily, green or cured, with or without the bean." (Barchet.)

15888. *Panicum frumentaceum.* 
Millet.

From Kin-hua-fu, Chehkiang, China. Presented by Dr. S. P. Barchet. Received October 21, 1905.

"A valuable variety of small glutinous grain millet grown in the western part of Chehkiang. Used as fodder and for brewing a beer tasting like wine." (Barchet.)

15889. *Alocasia* sp.

From Mayaguez, P. R. Received thru Mr. D. W. May, of the Agricultural Experiment Station, October 24, 1905.

"A fine ornamental, having the leaves (both sides) and petioles of a shining-purple shade. Height, 3 to 5 feet. Rhizome very poisonous by reason of its rhaphides." (Barrett.)

15890 to 15925.

From Ukiah, Cal. Received thru Mr. Carl Purdy, October 23, 1905.


15896 to 15904. *Hyacinthus* sp.

15926. *Phaseolus radiatus.* 
Mung bean.

From Augusta, Ga. Received thru the N. L. Willet Drug Company, October 21, 1905.

15927. *Cytisus proliferus albus.* 
Tagasaste.

From the Canary Islands. Presented by Capt. Rosendo Torres, Brunswick, Ga., thru Hon. W. G. Brauntley. Received October 20, 1905.

15928. *Pinus parviflora.* 
Pine.

From Washington, D. C. Received October 24, 1905.

Seed collected from a tree growing in the grounds of the United States Department of Agriculture.

15929. *Citrullus vulgaris.* 
Watermelon.

From Dzansoul, Caucasus, Russia. Received thru Mr. Frank Benton, of the Bureau of Entomology, October 24, 1905.

"Grown at an altitude of 4,000 feet. Large, yellow-cored, slightly oval, with light-green skin and thin rind. (No. 16.)" (Benton.)
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15930. CITRULLUS VULGARIS. Watermelon.
From Dzansoul, Caucasus, Russia. Received thru Mr. Frank Benton, October 24, 1905.
"Alternate stripes of dark and light green, round, good quality. Small, yellow-cored. Grown at altitude of 4,000 feet. (No. 17.)" (Benton.)

15931. PHYSALIS sp. Ground cherry.
From Bortschka, Caucasus, Russia. Received thru Mr. Frank Benton, October 24, 1905.
"Found growing wild on the south side of Tschoroch River some miles above Bortschka, southwestern Caucasus. Elevation about 2,000 feet. Fruit not edible but quite ornamental, being bright crimson in color, with large crimson seed pods, while leaves of plant are still green. (No. 18.)" (Benton.)

15932. ACER CIRCINATUM. Maple.
From Clearbrook, Wash. Received thru Mr. George Gibbs, October 21, 1905.

15933 to 15940.
From Shanghai, China. Received thru Rev. J. M. W. Farnham, of the China Tract Society, October 26, 1905.
15933. LILIUM sp.
15934. (Undetermined.)
15935. AMYGDALUS PERSICA.
15936. (Undetermined.)
15937. CUCURBITA sp.
15938. (Undetermined.)
15939. (Undetermined.)
15940. (Undetermined.)

15941. COLOCASIA ANTIQUORUM ESCULENTUM. Taro.
From Gotha, Fla. Presented by Mr. H. Nehrling. Received October 26, 1905. Wild taro, erroneously called "Tanyah."

15942 and 15943. LILIUM LONGIFLORUM hyb. Lily.
From Bellingham, Wash. Received thru Mr. John W. Macrae Smith, October 11, 1905.
15942. LILIUM LONGIFLORUM EXIMIUM (iKiANTEi M.
Grown in one year from S. P. I. No. 11591.
15943. LILIUM LONGIFLORUM MULTIFLORUM.
Grown in one year from S. P. I. No. 11794.

15944. LILIUM CANDIDUM. Lily.
From Olympia, Wash. Received thru Mr. B. F. Denton, September 14, 1905.

15945 and 15946. CYNARA SCOLUMUS. Artichoke.
From Paris, France. Received thru Vilmorin-Andrieux & Co., October 27, 1905.
15945. Large Flat Brittany.
15946. Large Globe, or Paris.

15947 to 15954.
From Hamel, West Australia. Received thru Mr. George F. Berthoule, director of the State farm, October 26, 1905.
15947. ATRIPLEX HOCOLCARPA.
15948. ATRIPLEX LEPTOCARPA.
15949. ANDROPOGON SERICEUS.
15950. ASTREBLA TRITICOIDES.
15951. MICROLAENA STIPOIDES.
15952. DANTHONIA SEMIANNU-LARIS.
15953. CYLANTHUS DAMPIERII.
15954. SWAINSONA MACCULLOCHIA.
15955. **ELYMUS CANADENSIS.**  
*Wild rye.*  
From Manistee, Mich. Received thru Mr. Stephen Cahill, October 26, 1905.

15956 to 16128. **BROMUS spp.**  
*Brome-grass.*  

Sample packets of the following varieties of Bromus gathered from various parts of the world:

15956. *Bromus sp.*, Switzerland, 1902. (186)
15957. *Bromus sp.*, St. Petersburg, 1903. (229)
15958. *Bromus sp.*, St. Owens Bay, Jersey. (240)
15959. *Bromus sp.*, St. Owens Bay, Jersey, 1903. (241)
15960. *Bromus adinoides*, Kew, 1902. (9)
15961. *Bromus alopecurus*, Lisbon, 1903. (216)
15962. *Bromus altissimus*, H. & S., 1903. (230)
15963. *Bromus andinus*, Stockholm, 1904. (252)
15964. *Bromus angustifolius*, Berlin, 1902. (10)
15965. *Bromus angustifolius*, Heidelberg, 1903. (215)
15966. *Bromus arvensis*, II. & S., 1902. (11)
15968. *Bromus ardensis*, Schroeter, 1903. (13)
15969. *Bromus ardensis*, Brussels, 1902. (184)
15970. *Bromus ardensis villosus*, Brussels, 1902. (185)
15971. *Bromus arenarius*, Sydney, 1902. (210)
15972. *Bromus arvensis*, Sutton, 1901. (128)
15973. *Bromus asper*, Coe Fenn., Cambridge, 1901, A. H. (1)
15974. *Bromus biebersteinii*, Schroeter, 1902. (14)
15975. *Bromus brachystachys*, Upsala, 1902. (16)
15976. *Bromus breviaristatus*, Rocky Mountains, 1902. (15)
15977. *Bromus breviaristatus*, Kew, 1902. (150)
15978. *Bromus brizafermis*, Sutton, 1901. (129)
15979. *Bromus canadensis*, Hamburg, 1902. (28)
15980. *Bromus canadensis*, Glasnevin, 1902. (29)
15981. *Bromus canadensis*, St. Petersburg, 1902. (30)
15982. *Bromus canadensis*, Sutton, 1901. (130)
15983. *Bromus canadensis*, Naples, 1904. (247)
15984. *Bromus carinatus*, Kew, 1902. (151)
15985. *Bromus ciliatus*, Cracow, 1902. (19)
15986. *Bromus ciliatus*, Schroeter, 1902. (21)
15987. *Bromus ciliatus*, Kew, 1902. (22)
15988. *Bromus ciliatus*, II. & S., 1902. (23)
15990. *Bromus ciliatus*, Vienna, 1902. (26)
15991. *Bromus ciliatus*, B. G. C., 1901. (170)
15992. *Bromus ciliatus*, B. G. C., 1901. (171)
15993. *Bromus ciliatus*, J. Fletcher, 1902. (187)
BROMUS CILIATUS (glabrous var.), Bonn, 1902. (20)
BROMUS COMMUTATUS, Schroeter, 1902. (23)
BROMUS COMMUTATUS, Madingley, 1903, A. H. (239)
BROMUS CONDENSATUS, Hack., Schroeter, 1902. (34)
BROMUS CONFLICTUS, Glasnevin, 1902. (35)
BROMUS CONGESTUS, Glasnevin, 1902. (36)
BROMUS CRINITUS, St. Petersburg, 1901. (152)
BROMUS DANTHONIAE, St. Petersburg, 1902. (38)
BROMUS DIANDRUS, Glasnevin, 1902. (37)
BROMUS ERECTUS, Schroeter, 1902. (40)
BROMUS ERECTUS LAXUS, Strassburg, 1903. (218)
BROMUS ERECTUS TRANSYLVANICUS, H. & S., 1902. (42)
BROMUS ERECTUS VILLOSUS (?), Cherryhinton, 1903, A. H. (214)
BROMUS FIBROSUS, Hack., Schroeter, 1902. (41)
BROMUS FIMBRIATUS VIOLACEUS, H. & S., 1902. (43)
BROMUS FIMBRIATUS VIOLACEUS, H. & S., 1903. (219)
BROMUS GIGANTEUS, Cherryhinton, 1901, A. H. (45)
BROMUS GIGANTEUS TRIFLORUS, S. II. Beckham, 1903. (211)
BROMUS GROSSUS, H. & S., 1902. (44)
BROMUS GUSSONI, Glasnevin, 1902. (45)
BROMUS GUSSONI, Benary, 1902. (46)
BROMUS HOOKERIANUS, Vienna, 1902. (48)
BROMUS HORDEACEUS, St. Petersburg, 1902. (50)
BROMUS HORDEACEUS GLABRESCENS, St. Petersburg, 1902. (49)
BROMUS INERMIS, Schroeter, 1902. (42)
BROMUS INERMIS, Sutton, 1901. (137)
BROMUS INERMIS, B. G. C., 1901. (126)
BROMUS INERMIS (awned var.), St. Petersburg, 1902. (51)
BROMUS INERMIS (viviparous form), Schroeter, 1902. (52)
BROMUS INTERMEDIUS, B. G. C., 1901. (53)
BROMUS INTERRUPTUS, Sutton, 1901. (136)
BROMUS JAPONICUS, St. Petersburg, 1902. (54)
BROMUS JAPONICUS, Tokyo, 1903. (236)
BROMUS KALMII, Paris, 1902. (55)
BROMUS KALMII, Kew, 1901. (58)
BROMUS KRAUSEI, St. Petersburg, 1902. (59)
BROMUS KRAUSEI, Oxford, 1903. (234)
BROMUS LABEVIPES, St. Petersburg, 1902. (67)
BROMUS LABEVIPES, Hamburg, 1902. (220)
BROMUS LAXUS, Glasnevin, 1902. (65)
BROMUS LAXUS, Sutton, 1902. (168)
BROMUS LAXUS, Vienna, 1902. (191)
BROMUS LONGIFLORUS, Paris, 1902. (61)
BROMUS LONGIFLORUS, Glasnevin, 1902. (62)
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16038. Bromus longiflorus, Upsala, 1902. (63)
16039. Bromus macranthus, Naples, 67, 1904. (253)
16040. Bromus macrostachys, Sutton, 1901. (140)
16041. Bromus macrostachys, Coimbra, 1901. (173)
16042. Bromus macrostachys lanuginosus, Palermo, 1902. (190)
16043. Bromus madritensis, Mrs. Gregory, 1904.
16044. Bromus madritensis, Old Walls, Carrick on Luir, Tipperary, 1902. (242)
16045. Bromus madritensis, Sutton, 1901. (139)
16046. Bromus madritensis delilei, B. G. C, 1901. (100)
16047. Bromus marginatus, St. Petersburg, 1902. (75)
16049. Bromus maximus gussoni, Palermo, 1903. (233)
16050. Bromus mollis, Sutton, 1901. (138)
16051. Bromus mollis (deformed fls.), Grumpington Road, August 27, 1902, A. H. (235)
16052. Bromus mollis glabratus, Hayle, Cornwall, 1902. (212)
16053. Bromus mollis lloydianus, Lizard, 1902. (206)
16054. Bromus mollis thominii, B. G. C, 1902. (160)
16055. Bromus multiflorus, Schroeter, 1902. (72)
16056. Bromus parviflorus, Schroeter, 1902. (79)
16057. Bromus patulus, Benary, 1902. (87)
16058. Bromus patulus, Hills Avenue, 1902, A. H. (204)
16059. Bromus patulus nanus, Benary, 1902. (90)
16060. Bromus pendulus, Lyons, 1902. (96)
16061. Bromus pitensis, St. Petersburg, 1902. (95)
16062. Bromus pitensis, Quito, 1903. (232)
16064. Bromus pubescens, Berlin, 1902. (86)
16065. Bromus pumpellianus, Saunders, 1902. (97)
16066. Bromus pumpellianus, Wawanesa, 1902. (192)
16067. Bromus pungens (33.01), B. G. C., 1901. (162)
16068. Bromus pungens ciliatus (?), B. G. C. (37), 1901. (160)
16069. Bromus pungans, Glasnevin, 1902. (81)
16070. Bromus pungans, Hamburg, 1902. (82)
16071. Bromus pungans, Kew, 1902. (83)
16072. Bromus pungans, Lemberg, 1902. (85)
16073. Bromus pungans (41), B. G. C., 1901. (164)
16074. Bromus pungans, B. G. C., 1901. (175)
16075. Bromus purpurascens, Hamburg, 1902. (93)
16076. Bromus purpurascens, Glasnevin, 1902. (94)
16077. Bromus racemosus, near Madingley Chalk Pit, A. H., 1902. (213)
16078. Bromus racemosus, Hamburg. (221)
16079. Bromus racemosus, Kew, 1903. (222)
16080. Bromus racemosus, Breslau, 1903. (223)
### Seeds and Plants Imported

#### 15956 to 16128—Continued.

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<td>Bromus racemosus, Madingley, 1903, A. H. (238)</td>
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<td>Bromus stenophyllus, Glasnevin, 1903. (225)</td>
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<td>16110</td>
<td>Bromus tectorum, U. S. Dept. Agr., 1902. (197)</td>
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<td>16111</td>
<td>Bromus trini, Kew, 1905.</td>
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<td>16112</td>
<td>Bromus unioloides, Stockholm, 1902. (121)</td>
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<td>16113</td>
<td>Bromus unioloides, Schroeter, 1902. (122)</td>
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<td>16114</td>
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<td>16115</td>
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<td>Bromus unioloides, B. G. C, 1901. (156)</td>
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<td>Bromus unioloides, B. G. C, 1901. (161)</td>
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<td>16120</td>
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<td>16121</td>
<td>Bromus unioloides, Penzance, 1902, A. H. (208)</td>
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<td>16122</td>
<td>Bromus unioloides, Quito, 1903. (231)</td>
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<td>16123</td>
<td>Bromus unioloides willdenowii, U. S. Dept. Agr., 1902. (196)</td>
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<td>16124</td>
<td>Bromus valdivianus, H. &amp; S., 1902. (126)</td>
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15956 to 16128—Continued.

16125. Bromus variegatus. Vienna, 1902. (125)
16126. Bromus vestitus. Grieswald, 1903. (228)
16127. Bromus visniscus. Benary, 1902. (124)

16129. Phaseolus max. Mung bean.
From New Orleans, La. Received thru Mr. R. E. Blouin, assistant director, Louisiana Sugar Experiment Station, Audubon Park, November 8, 1905.

16130. Pisum arvense. Canada field pea.
From Chicago, Ill. Received thru A. Dickinson & Co., November 8, 1905.

From Heneratgoda, Ceylon. Received thru J. P. William & Bros., November 10, 1905.
"For experiments in grafting on a more resistant stock." (Fairchild.)

16132. (Undetermined.) Aroid.

From Funchal, Madeira. Presented by Mr. J. B. Blandy. Received November 9, 1905.
"A species related to the avocado of commerce; for breeding purposes and as a stock." (Fairchild.)

16134. (Undetermined.) Sweet clover.
From Guadalajara, Mexico. Received thru Mr. A. W. Geist, November 10, 1905.
"A quick-growing hardwood tree used for live posts for wire fences." (Geist.)

16135. Melilotus alba. Black medick, or yellow trefoil.
From Augusta, Ga. Received thru the N. L. Willet Drug Company, November 8, 1905.

From Billings, Mont. Received thru Mr. I. D. O’Donnell, October 31, 1905.

16137. Lathyrus silurus. Black medick, or yellow trefoil.
From Salonica, Turkey. Received thru Mr. J. Henry House, October 30, 1905.
"Extensively used as food for cattle. When burned like coffee it is said to make very good cereal coffee—better than barley." (House.)

16138. Medicago lupulina. Black medick, or yellow trefoil.
From New York, N. Y. Received thru J. M. Thorburn & Co., October 30, 1905.

16139. Xanthosoma sp. Yautia.
From Tepatitlan, Jalisco, Mexico. Received thru Mr. W. E. Safford, from Mr. C. V. Mead, October 31, 1905.
"This yautia apparently belongs to a type distinct from the West Indian forms; the petioles are purplish but the rhizome, tho of two seasons' growth, shows no indications of having produced tubers. This plant is prized by the natives, who sometimes call it "Papa de Colomo." The water in which the rhizomes are boiled should be changed several times." (Barrett.)
16140. **Swainsona maccullochiana.**

From Sydney, New South Wales. Presented by Mr. J. H. Maiden, director of the Botanic Gardens. Received October 30, 1905.

"This is one of the most horticulturally valuable of all Swainsonas." (Maiden.)

16141 to 16159.

Presented by Dr. J. N. Rose, of the United States National Museum, having been collected by him during the summer of 1905, while in Mexico. Received October 30, 1905. The numbers in parentheses are those of Doctor Rose.

16141. **Amaryllidaceae.**

From "Pedregal," near Tlalpam, Valley of Mexico. (1013/05.)

16142. **Hymenocallis sp.**

From limestone hillsides, Tula, Hidalgo. (1036/05.)

16143. **Anthericum sp.**

From limestone hillsides, Tula, Hidalgo. (1037/05.)

16144. (Undetermined.)

From limestone hillsides, Tula, Hidalgo. (1038/05.)

16145. (Undetermined.)

From limestone hillsides, Tula, Hidalgo. (1039/05.)

16146. (Undetermined.)

From limestone hillsides, Tula, Hidalgo. (1040/05.)

16147. **Hymenocallis sp.**

From limestone hillsides, Yauutepec, Morelos. (1066/05.)

16148. **Amaryllidaceae.**

In barranca of Rio Aqueduct to near Santa Fe. D. P. (1087/05.)

16149. **Sparkeila sp.**

From mountains near Pachuca. (1108/05.)

16150. **Zephyranthes sp.**

From mountains near Pachuca. (1109/05.)

16151. **Milla biflora.**

From limestone hills near Ixmiquilpan. (1161/05.)

16152. (Undetermined.)

From limestone hillside near Ixmiquilpan. (1162/05.)

16153. (Undetermined.)

From stony hillsides near San Juan del Rio, Quer. (1214/05.)

16154. **Echeandia sp.**

From stony hillsides near San Juan del Rio, Quer. (1216/05.)

16155. (Undetermined.)

From between Cadereyta and Visaron. (1264/05.)

16156. (Undetermined.)

From between Cadereyta and Visaron. (1270/05.)

16157. (Undetermined.)

From hills near El Riego. (1312/05.)

16158. **Talinum sp.**

From hills near El Riego. (1317/05.)

16159. **Agave sp.**

From near Cuernavaca, Morelos. (1350/05.)
16160. **Polypterus texana.**  
From Kosse, Tex. Collected by Mr. A. J. Pieters in October, 1905.  
Very brilliant rose-colored flowers.

16161. **Arachis hypogaea.**  
**Peanut.**  
From Paris, France. Received thru Vilmorin-Andrieux & Co., October 28, 1905.

16162 to 16164. **Arachis hypogaea.**  
**Peanut.**  
From St. Louis, Mo. Secured by Mr. M. A. Carleton at the Louisiana Purchase Exposition, 1904.  
16162. **Napoli.** From Italy.  
16163. **Salerno.** From Italy.  
16164. (Unnamed sample from Argentina.)

16165. **Zizania aquatica.**  
**Wild rice.**  
From Port Hope, Canada. Received thru Mr. Charles Gilchrist, November 2, 1905.

16166 to 16168. **Vigna sinensis.**  
**Cowpea.**  
From St. Louis, Mo. Obtained by Mr. M. A. Carleton in the summer of 1904, at the Louisiana Purchase Exposition.  
16166. **Black-eyed.** Labeled Co-  

eauza.  
16167. **Black-eyed.**  

Probably from Italy.  
16168. Same as 16167, but labeled *Caserta.*

16169 and 16170. **Persea spp.**  
From Monte, Grand Canary. Received thru Mr. Alaricus Delnard, Hotel Santa Brigida, November 2, 1905.  
16169. **Persea indica.**  
16170. **Persea gratissima.**  
**Avocado.**

16171 to 16174. **Bromus inermis.**  
**Smooth brome-grass.**  
From Dwight, Nebr. Received thru Mr. J. P. Dunlap, November 1, 1905.  
16171. **Yellow.**  
"Best of all the varieties."  
16172. **Hansen's.**  
"Much like the yellow, but heads show less pink color when ripening and blades show more purple when dying. Field generally shows less yellow color; nearly as tall as yellow, but less stout in sod. Originally from South Dakota Experiment Station."  
16173. **Colorado.**  
"Dark purplish heads; nearly as dark as the darkest kinds, but fading as the heads ripen. Blades nearly as light as those of the Yellow. Not so large a grower as the Yellow or Hansen. Has been experimented with at the Colorado Experiment Station. From Keen Brothers, Pueblo, Colo."  
16174. **Large Dark.**  
"Very dark-colored heads when ripening, turning to a reddish brown. Barely equals other kinds in amount of feed; quality not quite so good. On hard land does not stand as well as the others. From R. Rabler, Leigh, Nebr."
SEEDS AND PLANTS IMPORTED.

16175 to 16188. Ipomoea Batatas. Sweet potato.
From the Arlington Farm of the United States Department of Agriculture. Received November 1, 1905.
Fourteen of the best varieties, selected by Mr. W. R. Beattie.

16175. Florida.
16176. McCoy.
16177. Hamburg.
16178. White Yam.
16179. Miles Yam.
16180. " Early General Grant.
16181. " Big Stem Jersey.
16182. Red Nansemond.
16183. Red Jersey.
16184. Bermuda Red.
16185. Van Nest Red.
16186. Early Red Carolina.
16187. Bronze Spanish.
16188. Southern Queen.

From Kiangsu Province, China. Presented by Dr. S. P. Barchet, of Shanghai, China. Received November 4, 1905.
"Doctor Barchet states that the glutinous rice of China brings a higher price and has a better flavor than ordinary rice. He personally prefers it to the latter and advises a mixture of the glutinous with the ordinary rice, claiming that it adds distinctly to the flavor of the dish. This is not the red rice which is considered by our planters as a weed, but is a distinct variety." (Fairchild.)

From Leman, Caucasus, Russia. Received thru Mr. Frank Benton, of the Bureau of Entomology, November 2, 1905.

16191 to 16193.
From the Bulgarian exhibit at the Louisiana Purchase Exposition, 1904. Received November 7, 1905.

From Madras, India. Received thru G. Rajah Gopal Naidu, agricultural inspector, June 26, 1903. Numbered November 10, 1905.

16195. Zingiber sp.
(Origin in doubt.) Received in November, 1905.

16196. Curcuma Longa. Turmeric.
From Mayaguez, P. R. Presented by Mr. H. C. Henricksen, horticulturist of the Agricultural Experiment Station. Received November 7, 1905.
"This plant was introduced from the Orient many years ago and has escaped from cultivation and become a troublesome weed in pastures in the western portion of Porto Rico. It flowers freely, but spreads only from the roots. It is one of the two or three commercial turmerics, but has no sale in this country because the special process by which it is prepared in the Orient is unknown here." (Barrett.)

16197 to 16207.
From Dr. J. N. Rose, of the United States National Museum, Washington, D. C. Received November 7, 1905.
16197. Yucca sp.
Lower California, 1905. (E. W. Nelson No. 7129.)
16197 to 16207—Continued.

16198. *Agave* sp.
Lower California, 1905. (E. W. Nelson No. 7151.)

16199. (Undetermined.)
Lower California, 1905. (E. W. Nelson No. 7157.)

16200. *Ibervillea sonorae*.
Lower California, 1905. (E. W. Nelson No. 7182.)
A large cucurbit vine; lives in dry regions and forms a large, bulbous root.

16201. *Ibervillea* sp.
Lower California, 1905. (E. W. Nelson No. 7182.)

16202. (Undetermined.)
Laredo, Tex., June 27, 1905. (J. N. Rose No. 1013.)

16203. (Undetermined.)
"Bulb" from Haciendo Ciervo, Mexico, 1905. (J. N. Rose No. 1266.05.)

16204. *Zephyranthes* sp.
From mountains near Pachuca, Mexico, 1905. (J. N. Rose 1109.05.)

16205. *Dasylihion* sp. nov.
Limestone hills west of El Riego, Tehuacan, Puebla, Mexico, 1905. (J. N. Rose No. 10009.)

16206. *Agave* sp.
El Riego, Tehuacan, Puebla, Mexico, 1905. (J. N. Rose No. 10006.)

16207. *Amphiphlygium* sp.
Near Tonnellin, Oaxaca, Mexico, 1905. (J. N. Rose No. 10096.)

16208. *Davidia involucrata*.  
Davidia.

From London, England. Received thru J. Veitch & Sons, November 2, 1905.

In the whole vegetable kingdom there is not a more striking object than a tree of Davidia when covered with its pure white bracts, which make it conspicuous at a great distance. It is a handsome tree, growing to a height of 60 to 70 feet, with foliage much resembling that of our common linden or basswood. When in full flower it is said to be a marvelous sight, owing to the alternate white and green caused by the large bracts intermingling with the leaves. The flowers themselves are polygamo-dioecious, all borne in heads inside a pair of large, white bracts about 3 inches long, with conspicuous red-anthered stamens and a long, bottle-shaped gynoecium. Botanically, the plant is allied to the dogwoods.

Growing at an elevation of 6,000 to 7,000 feet in central China, where the minimum temperature is about 5° F., there ought to be little doubt as to its hardiness in the greater part of the United States. Trees set out in France have survived the winters at Paris, while others in England have withstood 15 degrees of frost unprotected. Until well established, however, some protection in very severe weather is recommended. New plants are readily obtained by cuttings or by layering, and should be planted in a rich soil, with some protection from too much sunshine.

16209. *Medicago sativa*.  
Alfalfa.

From Chicago, Ill. Received thru the A. Dickinson Company, November 8, 1905.

16210 and 16211. *Phaseolus radiatus*.  
Mung bean.

From Chillicothe, Tex. Received thru Mr. A. B. Conner, November 7, 1905.


16212. (Undetermined.)

From Newcastle, New South Wales. Received thru Dr. Frederic W. Godling, United States consul, November 8, 1905.
16213. **Medicago maculata.**

*Bur clover.*

From Abbeville, S. C. Received thru Mr. Arthur Parker, November 11, 1905.

16214. **Musa textilis.**

*Manila hemp.*

From Manila, P. I. Received thru Mr. W. S. Lyon, Insular Bureau of Agriculture, November 13, 1905.

16215 to 16222. **Erodium spp.**

From Geneva, Switzerland. Received thru Mr. H. Correvon, November 13, 1905.

- 16215. **Erodium hymenodes.**
- 16216. **Erodium chelidonifolium.**
- 16217. **Erodium pelargonifolium.**
- 16218. **Erodium daucoides.**

16215. **Erodium hymenodes.**

16216. **Erodium chelidonifolium.**

16217. **Erodium pelargonifolium.**

16218. **Erodium daucoides.**

16223. **Carum gairdneri.**

From Pendleton, Oreg. Received thru Mr. W. H. Bleakney, November, 1905.

“This plant was formerly a staple article of food among the Umatilla and other Indian tribes of the Pacific Northwest. The roots may be eaten either raw or cooked. They have a delicious flavor.” (Coville.) (See also No. 12932.)

16224. **Blighia sapida.**

*Akee.*

From Kingston, Jamaica. Received thru Mr. G. N. Collins, November, 1905.

“Unless fully matured, the white fleshy arillus of this excellent fruit is regarded as poisonous by the natives of Jamaica.” (Collins.)

16225 and 16226. **Xanthosoma spp.**

*Yautia.*

From Floral Park, Long Island, N. Y. Received thru Mr. John Lewis Childs, November 17, 1905.

- 16225. **Xanthosoma sagittifolium.**
- 16226. **Xanthosoma sp.**

16227. **Eucalyptus goniocalyx.**

*Eucalypt.*

From Guadalajara, Mexico. Received thru Mr. Federico Chisolm, November 17, 1905.

16228. **Poa pratensis.**

*Kentucky bluegrass.*

From Winchester, Ky. Received thru Mr. D. S. Gay, November 17, 1905.

16229. **Vigna sinensis.**

*Cowpea.*

From Bristol, Conn. Received thru Mr. Herman Ockels, November 10, 1905.

16230. **Paspalum dilatatum.**

*Large water grass.*

From Biloxi, Miss. Received thru Mr. S. M. Tracy, November 18, 1905.

16231. **Aralia racemosa.**

*Spikenard.*

From North Clarendon, Vt. Received thru Mr. James Barrett, November 21, 1905.

Roots and berries of the wild spikenard are used in the preparation of a remedy for catarrhal affections. For use in breeding with *Aralia cordata*, the Japanese "udo."
16232. Tecoma capensis (?).
From Lourenco Marquez, Portuguese East Africa. Received thru Hon. W. Stanley Hollis, United States consul, November 21, 1905.
"Seeds of a native African shrub that is much used in making hedges. Might be advantageously used in the warmer parts of the United States." (Hollis.)

16233 to 16236. Arachis hypogaea. Peanut.
From Sydney, New South Wales. Received thru Mr. Walter S. Campbell, director of agriculture, Department of Mines and Agriculture, November 22, 1905.
16233. Mammoth Bush.
16234. Improved Large.

16237 to 16243. Nephelium litchi. Litchi.
From Canton, China. Secured thru Dr. John M. Swan, of the Medical Missionary Hospital, and forwarded by the Yokohama Nursery Company, Yokohama, Japan. Received at Berkeley, Cal., October, 1905.
"This fruit tree, represented by many varieties, is worthy of thorough trial in Porto Rico, Hawaii, southern California, and Florida. It is one of the most delicious fruits in the world." (Fairchild.)
16237. (Without labels.)
16238. (No. 1.)
16239. Hak Ip.
A favorite early sort, ripening in the fifth month.
16240. Xue Mai.
A large-fruited, small-seeded variety extremely sweet. Ripens in the fifth or sixth month.

16244. Festuca ovina ingrata.
From Wenache Mountains, Washington, at an altitude of 6,000 feet. Collected by Mr. J. S. Cotton, of the Department of Agriculture, September, 1904. Received November, 1905.

16245 to 16247.
From New York, N. Y. Received thru Henry Nungesser & Co., November 21, 1905.
16245. Arrhenatherum elatius. Tall meadow oat-grass.
16246. Onobrychis onobrychis. Sainfoin.

16248 to 16253. Solanum tuberosum. Potato.
From Portsmouth, Va. Grown under the direction of Mr. W. A. Orton, of the Department of Agriculture, during the summer of 1905, from seed potatoes introduced from Ecuador, July, 1905.
16248. Round white potatoes.
Grown from S. P. I. No. 14973; first type. (P. B. No. 679b.)
16249. Round or elongated red potatoes.
Grown from S. P. I. No. 14973; second type. (P. B. No. 679c.)
16250. Elongated white potatoes.
Grown from S. P. I. No. 14973; third type. (P. B. 679d.)
16251. Round dark-red potatoes.
Grown from S. P. I. No. 14893. (P. B. No. 676.)
16252. Round white potatoes.
Grown from S. P. I. No. 14894. (P. B. No. 677.)
16253. Oval white potatoes.
Grown from S. P. I. No. 14895. (P. B. No. 678.)
SEEDS AND PLANTS IMPORTED.

16254 to 16275.
From Karlsruhe, Germany. Received thru the Botanic Gardens, November 17, 1905.

16254. Aegilops squarrosa.  
16255. Arrhenatherum elatius.  
16256. Brachypodium pinnatum.  
16257. Elymus toesus.  
16258. Erodium gruinum.  
16259. Erodium stephanianum.  
16260. Medicago ciliaris.  
16261. Medicago echnites.  
16262. Medicago elegans.  
16263. Medicago sativa x fallcata.  
16264. Medicago minima.  

16265. Medicago orbicularis.  
16266. Medicago radiata.  
16267. Medicago scutellata.  
16268. Melilotus altissima.  
16269. Melilotusitalica.  
16270. Trigonella coerulaea.  
16271. Trigonella corniculata.  

16276 to 16302.
From Strassburg, Germany. Received thru the Botanic Gardens, November 21, 1905.

16276. Aegilops speltoides.  
16277. Avena brevis.  
16278. Avena hirsuta.  
16279. Avena ludoviciana.  
16280. Avena orientalis.  
16281. Avena planiculmis.  
16282. Avena strigosa.  
16283. Bromus erectus.  
16284. Erodium gruinum.  
16285. Lappago racemosa.  
16286. Medicago Gerardii.  
16287. Medicago terebellum.  
16288. Medicago terebellum.  
16289. Melilotus alba.  
16290. Phaseolus caffer

16291. Pisum jomardii.  
16292. Triticum boeoticum.  
16293. Triticum boeoticum thoudar.  
16294. Triticum dicoccum.  
16295. Triticum giganteum.  
16296. Triticum monococcum.  
16297. Triticum monococcum hornemanni.  
16298. Triticum polonicum.  
16299. Triticum rigidum.  
16300. Vigna glabra.  
16301. Pisum elatius.  
16302. Phaseolus multiflorus.

16303 to 16335.
From Kashgar, Chinese Turkestan. Received from Mr. Ellsworth Huntington, Kashgar, Chinese Turkestan, via Baku, Russia, thru the Chinese Amban of Khotan, and Mr. Macartney, British political agent at Kashgar, November 17, 1905.

"Khotan is a large, well-watered oasis, at an elevation of about 4,500 feet, at the foot of the Kuen Lun Mountains. Longitude 80°, latitude 37° N. In general, the climate is typically midcontinental. It may be likened to that of Colorado, tho drier and more extreme." (Huntington.)

16303. Vigna sinensis.  
16304. Brassica napus (?).  
16305. (Undetermined.)

Cowpea.  
Turnip.

Lobia. A white bean.  
Chamgu.
DECEMBER, 1903, TO DECEMBER, 1905.

16303 to 16335—Continued.

16306. **Citrullus vulgaris.**
   *Turbuz.*

16307. **Coriandrum sativum.**
   *Gesnich.*

16308. **Allium sp.**
   *Kula.*

16309. **Foeniculum dulce (?)**.
   *Siadana.*

16310. **Brassica sp.**
   *Kichi.*

16311. **Sesamum indicum.**
   *Kunjat.*

16312. **Brassica oleracea (?)**.
   *Bashe.*

16313. **Allium cepa (?)**.
   *Piazi.*

16314. **Panicum miliaceum.**
   *Tarckh.*

16315. **Atriplex graveolens.**
   *Chingseg.*

16316. **Agriophyllum gobicum.**
   *Palak.*

16317. **Medicago sativa.**
   *Beda.*

16318. **Daucus carota.**
   *Zardek.*

16319. **Cucumis melo.**
   *Kagham.*

16320. **Cicer arietinum.**
   *Narkhot.*

16321. **Linum usitatissimum.**
   *Zighar.* A variety of flax used only for oil.

16322. **Cucumis sativus.**
   *Khonga.*

16323. **Phaseolus radiatus.**
   *Mash, or Dal pea.*

16324. **Carthamus tinctorius.**
   *Zarangzeh.*

16325. **Brassica sp.**
   *Zagham.* Extensively cultivated for oil.

16326. **Pisum sp.**
   *Parchek.*

16327. **Triticum vulgare.**
   *Bagdai.*

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Watermelon.
Coriander.
Onion.
Fennel.
Mustard.
Sesame.
Cabbage.
Onion.
Millet.
Celery.
Sulhir.
Alfalfa.
Carrot.
Muskmelon.
Chick-pea.
Flax.
Cucumber.
Mung bean.
Safflower.
Mustard.
Pea.
Wheat.
228 SEEDS AND PLANTS IMPORTED.

16303 to 16335—Continued


16331. Cucurbita sp. Squash (?).

16332. Lagenaria vulgaris (?). Gourd.


16334. Iris essata fabularia. Iris.

Chapter 2. "A species of iris said to grow in the dry desert sand or almost anywhere if once it gets rain enough to cause it to sprout. It is reported to be a good forage plant, both green and dry. Sheep are very fond of it, and other animals do not object to it." (Huntington.)


16336 to 16470.

From Pullman, Wash. Received thru Mr. Byron Hunter, assistant agrostologist of the Department of Agriculture, November 14, 1905.

Seeds grown at the Agricultural Experiment Station at Pullman, Wash., together with others collected from various sources.

16336. Agropyron sp. A promising grass.


Collected in August, 1904, on the Moscow Mountains.


Collected June 29, 1905, at Wawawai, Wash. (Agrost. No. 579.)


Collected August 4, 1904, at Wawawai, Wash. (Agrost. No. 675.)


Grown at Harlem, Mont.


16351. Avena orientalis. Oat.

16360. **Bromus marginatus.**
Crop of 1904.

16361. **Bromus marginatus.**
"Eight-dollar Grass." Grown at Selma, Oreg.

16362. **Bromus marginatus.**
Grown in 1905 from Portland, Oreg., seed.

16363. **Bromus marginatus.**
Crop of 1905.

16364. **Bromus marginatus elatior.**

16365. **Bromus marginatus maritimus.**
Crop of 1905. (Agrost. No. 2261.)

16371. **Dactylis glomerata.**
Purchased from the C. H. Lilly Company, Seattle, Wash.

16372. **Dactylis glomerata.**
Crop of 1905.

16373. **Deschampsia caespitosa.**
Crop of 1904.

16374. **Elymus canadensis.**

16375. **Elymus virginicus submuticus.**
Crop of 1902. (Agrost. No. 328.)

16376. **Elymus virginicus submuticus.**

16377. **Festuca arundinacea.**

16378. **Festuca elatior.**
Grown from Kansas seed.

16379. **Festuca hyb.**
A hybrid from Mr. A. B. Leckenby, Union, Oreg.

16380. **Festuca pratensis.**

16381. **Festuca reflexa.**

16382. **Lathyrus azureus.**

16383. **Lathyrus cocineus.**

16384. **Lathyrus ochrus.**
Crop of 1905.
280 SEEDS AND PLANTS IMPORTED.

16336 to 16470—Continued.

16385. *Lathyrus sativus.*

16386. *Lathyrus sativus.*

16387. *Lathyrus sativus.*

16388. *Lathyrus tingitanus.*

16389. *Lathyrus tingitanus.*

16390. *Lotus bonariensis.*
Grown in 1905 from Agrost. No. 2321.

16391. *Lolium perenne.*
From E. J. Bowen, San Francisco, Cal.

16392. *Lolium perenne.*
Grown in 1905 from seed secured in Holland.

16393. *Lolium perenne.*

16394. *Lolium perenne.*

16395. *Lotus americanus.*
From Cusick, Wash.

16396. *Lotus americanus.*
From Wenatchee, Wash.

16397. *Lotus corniculatus.*

16398. *Lotus tetragonolobus.*

16399. *Medicago media.*
Crop of 1904.

16400. *Medicago media.*
Crop of 1905.

16401. *Medicago sativa.*
Grown by Mr. E. W. Downen, Pullman, Wash., in 1904.

16402. *Medicago sativa.*

16403. *Medicago sativa.*
Turkestan alfalfa. Grown in 1905 at Pullman, Wash., from seed obtained from Mr. M. Evans.

16404. *Melilotus indicus.*

11406. *Melilotus sulcata.*
Grown from Agrost. No. 1161.

16405. *Melilotus macrostachys.*
Grown from Agrost. No. 1553.

16407. *Melica californica.*
DECEMBER, 1903, TO DECEMBER, 1905.

16336 to 16470—Continued.

16408.  
Panicum sp.  
Crop of 1905.  

16409.  
Panicum sp.  
Grown in 1905 from Agrost. No. 2355.

16410.  
Panicum crus-galli.  
Grown from Agrost. No. 1682.

16411.  
Panicum crus-galli.  
Crop of 1905.

16412.  
Panicum miliaceum.  

16413.  
Panicum miliaceum.  

16414.  
Panicum miliaceum.  

16415.  
Panicum miliaceum.  
Grown from Agrost. No. 2626.

16416.  
Panicum miliaceum.  

16417.  
Panicum miliaceum.  

16418.  
Panicum miliaceum.  

16419.  
Panicum miliaceum.  
Grown in 1905 from seed obtained at Cusick, Wash.

16420.  
Panicum miliaceum.  
White. Grown from seed obtained in Germany.

16421.  
Panicum miliaceum.  
Grown from Austrian seed.

16422.  
Panicum miliaceum.  
Austrian seed.

16423.  
Panicum miliaceum.  
Grown in 1904 at Usk, Wash.

16424.  
Pennisetum spicatum.  
Pearl millet.  
Grown at Biggenden, Queensland. (Agrost. No. 2110.)

16425.  
Phalaris arundinacea.  
Reed canary grass.  
Grown from seed obtained from J. M. Thorburn & Co., New York City, N. Y.

16426 to 16432.  
Phalaris canariensis.  
Canary grass.

16426.  

16427.  
Grown from Agrost. No. 2331.

16428.  
Grown from Agrost. No. 2332.

16429.  

16430.  

16431.  

16432.  
From Genoa, Italy. Obtained at the Louisiana Purchase Exposition in 1904. (Agrost. No. 2361.)
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16336 to 16470—Continued.

16433. Phleum pratense.
   Early.

16434. Phleum pratense.
   Stewart's Mammoth.

16435. Phleum pratense.
   Pasture.

16436. Pulsatilla arvense.
   Grown from S. P. I. No. 1486.

16437. Pulsatilla arvense.
   Grown from S. P. I. No. 1487.

16438. Plantago fastigiata.
   Grown from seed originally obtained in Arizona.

16439. Plantago fastigiata.
   Crop of 1904.

16440. Poa trilora.
   Grown at Cusick, Wash.

16441. Spartina sp.
   Grown at Cusick, Wash.

16442. Spartina cynosuroides.

16443. Stipa tenacissima.
   Grown from seed obtained from J. M. Thorburn & Co., New York, N. Y.
   (Agrost. No. 2216.)

16444. Trifolium pannonicum.
   Grown from S. P. I. No. 9817.

16445. Trifolium pratense.
   Grown in 1904 by Mr. C. R. Widmer, Albany, Oreg.

16446. Trigonella foenum-graecum.
   Fenugreek.

16447. Vicia sp.
   A variety similar to pearl vetch. Grown from Agrost. No. 2452.

16448. Vicia sp.
   Grown from S. P. I. No. 11200.

16449. Vicia sp.
   Grown at Ray, Wash.

16450. Vicia sp.
   Grown from S. P. I. No. 11199.

16451. Vicia sp.
   Grown from Agrost. No. 2454.

16452. Vicia atropurpurea.
   Grown from S. P. I. No. 12135.

16453. Vicia bithynica.
   Grown from S. P. I. No. 11230.

16454. Vicia cracca.
   Grown from S. P. I. No. 10283.

16455. Vicia cracca.
   Grown from Chinese seed.

16456. Vicia egyptica.

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16336 to 16470—Continued.

16457. *Vicia faba.*
Grown from Agrost. No. 2463.

16458. *Vicia fulgens.*
Grown from S. P. I. No. 11231.

16459. *Vicia gigantea.*
Grown in 1904 at Clatskanie, Oreg. (Agrost. No. 613.)

16460. *Vicia hirsuta (?).*
Grown from S. P. I. No. 9237.

16461. *Vicia hirta.*

16462. *Vicia lutea.*
Grown from Algerian seed.

16463. *Vicia micrantha.*
Grown from Agrost. No. 999.

16464. *Vicia narbonnensis.*
Grown from S. P. I. No. 11232.

16465. *Vicia sativa alba.*
Pearl vetch.

16466. *Vicia sativa.*
Common vetch.
Grown at Corvallis, Oreg.

16467. *Vicia sativa alba.*
Pearl vetch.
Grown from seed from Mr. Henry Gilbrich, New Era, Oreg.

16468. *Vicia sicula.*
Vetch.
Crop of 1904.

16469. *Vicia sicula.*
Vetch.
Grown from Algerian seed.

16470. *Vicia villosa.*
Hairy vetch.
Seed from Mr. Elliott.

16471. *Andropogon halepensis.*
Johnson grass.
From St. Louis, Mo. Received thru D. J. Bushnell & Co., November 25, 1905.

16472 and 16473.
From Durban, Natal, South Africa. Received thru the Botanic Gardens, November 25, 1905.

16472. *Arachis hypogaea.*
Peanut.

16473. *Voandzeia subterranea.*
Woandzu.

16474. *Lespedeza striata.*
Japan clover.
From Richmond, Va. Received thru T. W. Wood & Son, November 29, 1905.

16475. *Lespedeza striata.*
Japan clover.
Received from the Office of Grass and Forage Plant Investigations of the Department of Agriculture, November, 1905. (Agrost. No. 1115.)

16476. *Cucurbita sp.*
Pumpkin.
From Pretoria, South Africa. Received thru Prof. J. Burtt Davy, of the Transvaal Department of Agriculture, November 27, 1905.
SEEDS AND PLANTS IMPORTED.

16477 to 16480. **Garcinia** spp.
From Sagua la Grande, Cuba. Received thru J. S. Montero & Bros., December 1, 1905.

- 16477. *Garcinia cochinchinensis*.
- 16478. *Garcinia ferra*.
- 16479. *Garcinia hamburyi*.
- 16480. *Garcinia indica*.

16481. **Iberivillea** sp. (?)
From Mexico. Received thru Dr. J. N. Rose, of the United States National Museum, who collected the seed in the summer of 1905.

"A very interesting, attractive vine, which grows in very dry districts. Fruit red." (Rose.)

16482. **Calyptrogyne dulcis**.
From Santiago de las Vegas, Cuba. Received thru Departamento de Botánica, Estación Central Agronómica, November 28, 1905.

16483 to 16485. **Arachis hypogaea**. Peanut.
From Cat Island, S. C. Grown by Mr. J. H. Tull, special agent of the Department of Agriculture. Received November 20, 1905.

- 16484. Grown from S. P. I. No. 9406. From Sao Paulo, Brazil.

16486. **Arachis hypogaea**. Peanut.
From Japan. Received thru the Botanic Gardens, Durban, Natal, South Africa, December 2, 1905.

16487. **Diospyros ebenum**. Sapote negro.
From Manila, P. I. Received thru Mr. Thomas L. Lyon, of the Insular Bureau of Agriculture, December 2, 1905.

"Wood reputed good, but variable in color. One of the most attractive of our broad-leaved evergreens. Fruits astringent." (Lyon.)

16488. **Vicia sativa alba**. Pearl vetch.
From New Era, Oreg. Received thru Mr. Henry Gelbrich, December 5, 1905.

16489. **Melilotus alba**. Sweet clover.
From Birmingham, Ala. Received thru the Amzi Godden Seed Company, December 4, 1905.

16490 to 16494. **Juncus** spp. Matting rush.
Collected by Mr. J. H. Tull, special agent of the Department of Agriculture. Received December 5, 1905.

- 16490. *Juncus effusus*.
- 16491. *Juncus effusus conglomeratus*.
- 16492. *Juncus effusus conglomeratus*.
- 16493. *Juncus effusus conglomeratus*.
- 16494. *Juncus effusus conglomeratus*.
16495 to 16505.  
From the White House Propagating Gardens, Washington, D. C. Received December 5, 1905.

A collection of ornamentals.

16495. Calathea ornata majestica.  
16496. Xanthosoma lindenii.  
16497. Calathea pulchella.  
16498. Calathea vandenbeckel.  
16499. Calathea intermedia.  
16500. Calathea warscewiczii.  
16501. Ischnosiphon hirsuta.  
16502. Maranta wallisi.  
16503. Maranta amabilis.  
16504. Homalomena wallisi.  
16505. Calathea (?) sp.

16506. Aralia cordata.  
Udo. 
From Waseda, Tokyo, Japan. Received thru J. Ikeda & Co., December 5, 1905.

16507. Panicum sp.  
From Pretoria, South Africa. Received thru Prof. J. Burtt Davy, of the Transvaal Department of Agriculture, December 5, 1905.

16508. Medicago sativa.  
Alfalfa.  
From Amasia, Turkey. Received thru Mr. H. Caramanian, November 25, 1905.

16509 to 16540.  
From Nancy, France. Received thru Victor Lemoine & Son, December 4, 1905.

16509. Anemone japonica.  
16510. Anemone japonica.  
16511. Deutzia myriandra.  
16512. Deutzia villosae.  
16513. Philadelphus Lemoinei.  
16514 to 16540. Phlox decussata.  
Perennial phlox.  
Named varieties.

16541 to 16762. Paeonia spp.  
Peony.  
From Chenonceaux (Indre-et-Loire), France. Received thru Monsieur A. Dessert, December 2, 1905.

16541 to 16642. Named varieties of the Chinese herbaceous section.  
16643 to 16659. Named varieties of the European herbaceous section.  
16660. Paeonia anomala (or Paeonia tenuifolia Smothi).  
16662. Paeonia tenuifolia flore pleno.  
16661. Paeonia tenuifolia.  
16663 to 16759. Paeonia moutan. Named double varieties.  
16760 to 16762. Paeonia moutan. Named single varieties.  
16763 and 16764.  
From the Office of Gardens and Grounds, Department of Agriculture. Received December 8, 1905.

16763. Calathea sp.  
Rough-pubescent petiole basal; green thruout.  
16764. Maranta sp.  
Near Maranta arundinacea, but with side shoots on culms.
16765 to 16769. 
From the White House greenhouse, Public Buildings and Grounds, Washington, D. C. Received December 8, 1905.

16765. Maranta splendida.
16766. Calathea arrecta.
16767. Calathea makoyana.
16768. Calathea roseo-picta.
16769. Calathea undulata.

16770. Zea mays. 
Sweet corn.
From North Clarendon, Vt. Received thru Mr. D. Dana Hewitt, December 11, 1905.
White Malakof. Grown from S. P. I. No. 13256. (Lot "A" selected from No. 16772.)

16771. Medicago denticulata. 
Bur clover.
From San Francisco, Cal. Received thru the Jessup-Wheelan Company, December 11, 1905.

16772. Zea mays. 
Sweet corn.
From North Clarendon, Vt. Received thru Mr. D. Dana Hewitt, December 11, 1905.

16773 to 16780. 
From St. Louis, Mo. Received thru Mr. Fred Mueller, of the Missouri Botanical Gardens, December 11, 1905.

16773. Alocasia macrorhiza variegata. 
From Ceylon.
16774. Alocasia odora. 
From East Indies.
16775. Colocasia sp. 
From Mexico.
16776. Colocasia antiquorum eucilia. 
From India.
16777. Colocasia indica. 
16778. Xanthosoma sp. 
From Cuba.
16779. Xanthosoma violaceum. 
From West Indies.
16780. (Undetermined.)

16781 to 16784. Zea mays. 
Sweet corn.
From North Clarendon, Vt. Received thru Mr. D. Dana Hewitt, December 11, 1905.
White Malakof.

16785. Hibiscus sabdariffa. 
Roselle.
From Mayaguez, P. R. Received thru the Porto Rico Experiment Station, December, 1905.

16786. Eucalyptus corymbosa. 
Bloodwood.
From Bowen, North Queensland, Australia. Received thru Mr. William Pettigrew, of the Queensland Acclimatization Society, December 6, 1905.

"One of the numerous species of Australian eucalyptus. A tree of medium size, with persistent flaky bark, often reported as stunted or shrubby in appearance, but
frequently attaining a height of 150 feet and a trunk diameter of 3 feet. It is restricted to the warmer and moister coast regions of northeast Australia, and, to judge by its absence in the interior, could hardly be expected to grow in a region subject to frost or extremes of dryness. The tree furnishes a wood that is easily worked when fresh, but exceedingly hard when dry. The presence of kino makes it unsuitable for lumber or fuel, but also serves to make it very durable underground and resistant to white ants; hence it is very valuable for railroad ties, posts, culverts, for paving, and for other uses in underground situations. Fence posts of this material are reported to have lasted for forty years in Australia. The bark yields 28 per cent tannic acid and the leaves about 18 per cent. The creamy white flowers of this tree contain a large amount of nectar and are much visited by bees. The tree is also one of the sources of the kino of commerce.” (McClatchie.)

From Riu Kin Islands, Japan. Received thru Mr. H. E. Amoore, December 11, 1905.
“An ideal wind-break.” (Amoore.)

From Morrinhos, State of Goyaz, Brazil. Selected by Mr. Antonio Borges Sam-patio, of Ubueraba, Minas-Geraias, and sent in by Dr. H. M. Lane, of Sao Paulo, Brazil. Received December 15, 1905.
“The famous Morrinhos tobacco. The tobacco grown in Sao Paulo and Goyaz is probably from seed brought from the Orient by the early Portuguese settlers, who took great pains to keep it pure. Goyaz is located in the mountainous region of Brazil, about 700 miles northwest of Rio de Janeiro, in latitude 16° S., where the mean annual temperature is 80°, with a maximum of 104° and a minimum of 25°.” (Lane.)

16789 to 16796.
From Hangchow, China. Received thru Mr. Frederick D. Cloud, United States vice-consul, December 15, 1905.

Yellow. An oil bean.

Black. An excellent table bean.

16791. Phaseolus sp. Bean.


16793. Phaseolus radiatus. Mung bean.

16794. Vigna sesquipedalis (?). "Grow with long pod and bear well. Used as a vegetable." (Cloud.)

16795. Vigna sinensis (?). Cowpea.
“Very different from preceding. More prolific, shorter pod, and a better eating bean.” (Cloud.)

Black.
“All of these varieties are largely grown in China and, as in the case of the yellow soy bean, are very valuable. The black soy bean is extensively grown in the north for forage purposes and constitutes the principal article of food for horses, donkeys, and cattle. It is also a good table bean. This bean mixed with 'kaoliang' (sorghum) seed, chopped grass, or straw, with a little bran, makes the very best horse feed. Perhaps the 'kaoliang' is the most highly prized of all forage plants grown in China. No part of the plant goes to waste. Two or three weeks before the plant matures and the seed is ripe the farmer strips nearly all the blades from the plant, ties them in bundles, allows them to cure in the sun for a few days, and then stacks them away
16789 to 16796—Continued.

indoors. All thru the winter these blades are keenly relished by horses and donkeys. Then the seeds are gathered, combed out, and marketed. Several varieties of alcohol and wines are made from these seeds, and the deadly native drink 'sam-shu'—at least one variety of it—is made from 'kaoliang' seed. The seed makes excellent feed for stock of all kinds. The long stalks are thrown on the thrashing floor, rolled flat by heavy stone rollers, carefully cleaned of all particles of pith, and woven into a great variety of mats and matting, suitable for use on floors, for window shades, or for the roofs of native houses and sheds. These stalks are also extensively used for fuel by the farming class. It is a most valuable crop and may be found thru-out all the northern provinces. Not grown much as far south as Hang-chow.

"The yellow bean (16789) is the 'bean-cake' bean so extensively grown in the Manchurian provinces and is a most valuable crop. May be grown southward, but flourishes best in colder latitudes." (Cloud.)
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Alyssum maritimum, 12964.

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Amygdalus communis, 10338, 10558 to 10562, 12822 to 12831, 15831 to 15837, hyb., 11255.

Anacardium occidentale, 12809.

Andropogon sp., 13880, 13882.

Ammophyllum, 16297.

Amygdalus communis, 10338, 10558 to 10562, 12822 to 12831, 15831 to 15837, hyb., 11255.

Anacardium occidentale, 12809.

Andropogon sp., 13880, 13882.

Althaea rosea, 13575, 13594, 13603, 13604.

Alyssum maritimum, 12964.

Amaryllidaceae, 16141, 16148, 16202.

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Amygdalus communis, 10338, 10558 to 10562, 12822 to 12831, 15831 to 15837, hyb., 11255.

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Asphodelus ramosus, 1067.

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Atriplex hortensis, 12778, 15947.

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Willow. See Salix spp.
Wineberry. See Ribes spp.
Woad. See Voundiea subterranea.
Wood oil. See Alnus cordata.
Xanthosoma sp., 10594 to 10597, 15378, 15380, 15383 to 15392, 15417, 15804, 16225.
violascina, 15794, 16779.
Xanthosoma piperitum, 12131.
Yam (Hawaii), 10311 to 10314.
(Porto Rico), 10590 to 10597.
See also Diocorea spp. and Smilax sandwicensis.
Yang-taw. See Actinidia spp.
Yautia. See Xanthosoma spp.
Yeli-bap. See Magnolia pumila.
Yava. sp., 16197.
Zeaiways, 10401, 10401, 1106, 12028, 12027, 12383, 12384, 12557 to 12563, 12697, 12839, 13143 to 13153, 13256, 13260 to 13262, 13354, 13357, 13570, 13970 to 13972, 14459, 14465, 14791 to 14798, 14909 to 14921, 14971, 14992, 15175, 16190, 16330, 16770, 16772, 16781 to 16784.
Zephyranthes, 14897, 16150, 16204.
Zingiber officinale, 11086.
Zizania elegans, 12397, 12982 to 12985.
Zizania aquatica, 16165.
Zizyphus sp., 14882.
Jafuha, 12926.
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<th>No.</th>
<th>Title</th>
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<tr>
<td>47</td>
<td>The Description of Wheat Varieties</td>
<td>1903.</td>
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<td>48</td>
<td>The Apple in Cold Storage</td>
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<td>49</td>
<td>Culture of the Central American Rubber Tree</td>
<td>1903.</td>
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<td>50</td>
<td>Wild Rice: Its Uses and Propagation</td>
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<td>51</td>
<td>Miscellaneous Papers: I. The Wilt Disease of Tobacco and Its Control</td>
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<td></td>
<td>II. The Work of the Community Demonstration Farm at Terrell, Tex.</td>
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<td>III. Fruit Trees Frozen in 1904.</td>
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<td></td>
<td>IV. The Cultivation of the Australian Wattle</td>
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<td>V. Legal and Customary Weights per Bushel of Seeds</td>
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<td>VI. Golden Seal</td>
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<td>52</td>
<td>Wither-Tip and Other Diseases of Citrus Trees and Fruits Caused by</td>
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<td>Colletotrichum Gloeosporioides</td>
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<td>The Date Palm</td>
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<td>Persian Gulf Dates</td>
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<td>The Dry Rot of Potatoes</td>
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<td>Nomenclature of the Apple</td>
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<td>Methods Used for Controlling Sand Dunes</td>
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<td>The Vitality and Germination of Seeds</td>
<td>1904.</td>
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<td>Pasture, Meadow, and Forage Crops in Nebraska</td>
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<td>A Soft Rot of the Calla Lily</td>
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<td>Notes on Egyptian Agriculture</td>
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<td>Investigations of Ruts</td>
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<td>A Method of Destroying or Preventing the Growth of Algae and Certain</td>
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<td>Seeds and Plants Imported</td>
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<td>Range Investigations in Arizona</td>
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<td>North American Species of Agrostis</td>
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<td>Fields. II. The Salt Water Limits of Wild Rice. III. Extermination</td>
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<td>IV. Inoculation of Soil with Nitrogen-Fixing Bacteria</td>
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<td>Prickly Pear and Other Cacti as Food for Stock</td>
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<td>Improving the Quality of Wheat</td>
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<td>The Variability of Wheat Varieties in Resistance to Toxic Salts</td>
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<td>The Seeds of the Bluegrasses</td>
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<td>Agriculture without Irrigation in Sahara Desert</td>
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<td>Seed. II. The Crown-Gall and Hairy-Root Diseases of the Apple Tree</td>
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<td>III. Peppermint. IV. The Poisonous Action of Johnson Grass</td>
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<td>The Control of Apple Bitter-Rot</td>
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<td>Farm Practice with Forage Crops in Western Oregon and Western Wash-</td>
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<td>96</td>
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