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PLANT IMMIGRANTS

Descriptive notes, furnished mainly by Agricultural Explorers and Foreign Correspondents relative to the more important introduced plants which have arrived during the month at the Office of Foreign Seed and Plant Introduction of the Bureau of Plant Industry of the Department of Agriculture. These descriptions are revised and published later in the Inventory of Plants Imported.

No. 101. September 1914.

Genera Represented in This Number.

Acrista	39188	Madhuca	39182-183
Aeria	39189	Malus	39145
Balanites	39196	Passiflora	39223-226
Bolusanthus	39300	Persea	39173
Calathea	39190	Prunus	39175
Chloris	39177	Rosa	39186
Claucena	39176	Saccharum	39165
Diospyros	39174	Salix	39191
Holcus	39264-282	Securidaca	39298
Juniperus	39185	Sterculia	39221
Macadamia	39144	Triticum	39227

Plates:

Ginkgo Avenue, Washington, D. C.
Tamarind Avenue, Rio de Janeiro, Brazil.
Chinese Osage Orange, *Cudrania tricuspidata*.
Chinese Flowering Plum, *Prunus triloba*.
Bean Vermicelli from China.
Plant Material Showing Packing Methods.

Applications for material listed in these multigraphed sheets may be made at any time to this Office. As they are received they are filed, and when the material is ready for the use of experimenters it is sent to those on the list of applicants who can show that they are prepared to care for it, as well as to others selected because of their special fitness to experiment with the particular plants imported. Do not wait for the Autumn Catalogue.

One of the main objects of the Office of Foreign Seed and Plant Introduction is to secure material for plant experimenters, and it will undertake as far as possible to fill any specific requests for foreign seeds or plants from plant breeders and others interested.

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Permission to publish on application only.

Ampelopsis aconitifolia dissecta (Carr.) Koehne. (Vitaceae.) 39434. Seeds from Ping yang fu, Shansi, China. "A variety of Ampelopsis, with finely-cut foliage, of light green hue and bearing dull-yellow berries. Very ornamental when covering a wall or trained over some lattice work. Of value as a porch, arbor and pergola-vine, especially in semi-arid climates." (Meyer's introduction.)

Amygdalus sp. (Amygdalaceae.) 39428. Seeds of a wild peach from Sianfu, Shensi, China. "Stones of the real wild peach, growing in the mountains, one day's journey south of Sianfu. The fruits are small, hard and sourish, but there is considerable variation in them as regards size and taste. They are apparently all freestones and while some have red flesh near the stone, others are white throughout. The Chinese eat these fruits out of hand, but to the white races they do not appeal as such, although they might be utilized when preserved as they possess the real peach flavor. Local name Ying tao, meaning 'Cherry peach.'" (Meyer's introduction.)

Annona glabra L. (Annonaceae.) 39388. Seeds of a pond-apple from San Juan Bautista, Tabasco, Mexico. Presented by Mr. G. Itié, Director, Agricultural Experiment Station. "*Corcho*. Grows in abundance on the margins of the lakes around San Juan Bautista. The pulp of the fruit, of an orange color, is very fragrant. Eaten at times by the inhabitants. Sometimes used as a stock in grafting other Annonas." (Itié.)

Brassica pekinensis (Lour.) Skeels. (Brassicaceae.) 39467. Seeds of a Chinese cabbage from China. Presented by Miss Paula Ritter, Chicago. One of a collection of about twenty Chinese vegetables including turnips, cabbage, lettuce, cucumber, egg plant and beets.

Gynopogon ilicifolius (Muell.) K. Schuman. (Apocynaceae.) 39463. Seeds from Wellington Point, near Brisbane, Queensland, Australia. Presented by Mr. James Pink. "A shrub growing about six feet high, having white flowers and producing a profusion of berries of a bright orange scarlet. It should make a valuable ornamental plant for decorative purposes." (Pink.)

Holcus sorghum L. (Poaceae.) 39440-442. Heads of kaoliangs from Shensi and Shansi, China. One form especially interesting (No. 39440) grown on reclaimed mud flats along the Yellow River, near Ta ching kuan, Shensi, where the fields are often inundated for several weeks at a time. These plants grow extraordinarily tall, specimens 15 feet in height not being rare. (Meyer's introductions.)

Passifloris maliformis L. (Passifloraceae.) 39383. Seeds of a curubá from Bogota, Colombia. Presented by Mr. Henry Coronado, Columbian Bureau of Information, Washington, D. C., through Mr. W. E. Safford. "Fruit depressed spheroid, hard shelled, suitable for shipping. Pulp of fine flavor used for making sherbets." (Safford.)

Prinsepia sinensis (Oliver) Schneider. (Amygdalaceae.) 39432. Seeds from near Fu cheng, Shansi, China. "A spiny shrub, having many long branches, growing from 3 to 5 feet in height and of spreading habits. Foliage lanceolate and serrate, resembling that of a Rhamnus. Flowering early in May with pale-rosy flowers, produced in great masses. In July the fruits ripen which are of a dark-red color and resemble small cherries in general appearance. They are quite juicy but sour; however they vary a good deal as regards size, degree of juiciness and acidity, some being edible out of hand, while others are very acrid. By selection, strains could be obtained no doubt, which could be cultivated as garden fruits. The shrubs love a well-drained situation and thrive quite well even on rocky debris. Of value as an ornamental spring-flowering bush and as a prospective fruiting shrub, especially for the dryer parts of the United States, where the winters are not too severe. Local Chinese name *Tzu yu*, meaning 'spiny elm.'" (Meyer's introduction.)

Prunus armeniaca L. (Amygdalaceae.) 39429-430. Seeds of apricots from Pekin, China. Two forms, one "a large apricot of soft yellow color and of mango shape, which is a very unusual form among apricots, said to come from the vicinity of Paotingfu, Chili," the other "with fruits as large as small apples, of whitish-yellow color with some blush on one side, of fresh and sweet taste, said to come from the same vicinity" (Meyer's introductions.)

Prunus armeniaca L. (Amygdalaceae.) 39439. Seeds of wild apricots, from near Lien ma, Shansi, China. "Wild apricots grow in great profusion here and there on the mountain sides at elevations between 3000 and 5000 feet above sea. Trees of medium size, fruits generally small and sourish, but often most beautifully colored. The natives collect these fruits for their kernels, which are pickled in brine after the skin has been removed and which are eaten as appetizers with 'snacks' or before meals. They are also used in high-class confectionery, like almonds, which the Chinese do not have, strange to say. Chinese name *Shan hsing*, meaning 'mountain apricot.' For trial in such northern sections as Colorado, Utah, Wyoming, etc." (Meyer's introduction.)

Prunus simonii Carr. (Amygdalaceae.) 39437-438. Seeds of plums from Pao tien, Shansi, and Ho dien, Honan, China. Large varieties of green plums, one having a small stone, the other with somewhat hard flesh, and apparently a good shipper. (Meyer's introductions.)

Prunus sp. (Amygdalaceae.) 39436. Seeds of a dwarf plum from Yun cheng, Shansi, China. "A variety of wild Chinese dwarf plum, with fruits as large as good sized cherries, but of sour flavor. Said to grow here and there in the mountains near Yun cheng. Chinese name *Soo li*, meaning 'sour plum.'" (Meyer's introduction.)

Rhamnus sp. (Rhamnaceae.) 39433. Seed from Ku lo, Shansi, China. "A tall, shrubby Rhamnus, often growing into a small tree. Of spreading habit, leaves slender, lanceolate and serrate, looking not unlike slender *davidiana* peach leaves. This shrub is apparently rare; it is found here and there in loess cliffs and on old grave mounds. It seems to be able to withstand a good deal of alkali. Of value as a park shrub and possibly as a hedge plant, especially for the drier sections of the United States. The purplish-black berries possess a sickening sweet taste and are apparently not eaten by the Chinese." (Meyer's introduction.)

Spathodea campanulata Beauv. (Bignoniaceae.) 39415. Seeds from Peradeniya, Ceylon. Presented by Mr. H. F. Macmillan, Superintendent Royal Botanic Gardens. "This seems to be the only species of Spathodea generally known in the East. The tree flowers profusely at Peradeniya almost throughout the year, except in the dry season, but seldom or never bears fruit here. It produced, however, fruit and seeds in our former garden at Anuradhapura, now abandoned, where the climate is much drier than at Peradeniya, the rainfall being limited to three months of the year." (Macmillan.) Seedlings grown from seed collected by Dr. B. T. Galloway in Java are now twenty feet tall in the Miami Gardens, Florida. (Fairchild.)

Xanthoceras sorbifolia Bunge. (Sapindaceae.) 39431. Seed from Tchao yu, Shansi, China. "A shrub, occasionally growing into a small sized tree, found in loess cliffs. The shiny pinnate foliage reminds one of an ash, but the drooping racemes of white flowers, with yellow stamens, produced in great masses in early summer, give the shrub quite a distinct appearance. The Chinese eat the kernels of the fruits and call the plant *Mu kua hua*, meaning 'quince flower,' on account of the large fruits resembling those of the Japan quince (*Choenomeles japonica*). This

"A Chinese wild peach, (*Amygdalus davidiana*) growing on the Pekin city wall, showing the real xerophytic nature of this remarkable stone fruit. The seed was probably deposited there by one of the crows which carry about many things in China". This wild peach has proven in China to be a remarkably valuable stock for stone fruits. In America it is being tested extensively both because of its drought resistance and resistance to cold. Photo No. 989, by F. N. Meyer, Peking, China, May 8, 1914.

Winter view through a Chinese Jujube plantation located on one of the loess terraces near Lingpau in the Honan province of China. In the background is a Buddhist temple surrounded by old arbor vitae trees. The Jujube (*Zizyphus jujuba*) is grown for its fruits which when preserved resemble dates. It has proven hardy where the temperature goes to 22° F. Photo No. A 38, by F. N. Meyer, Lingpau, Honan, China.

shrub, closely related to the horse-chestnut, is decidedly ornamental and of special value as a garden shrub for those semi-arid sections of the United States where the winters are not too severe." (Meyer's introduction.)

NOTES FROM CORRESPONDENTS ABROAD.

Palestine. Jerusalem. Mr. John D. Whiting writes January 19, "I am gratified to learn that the jellies and preserves sent you were found not only delicious, but that the hawthorn has aroused special interest. We have three species of hawthorn trees that grow here. The variety used for this jelly is the *Crataegus azarolus* L. The fruit, which is about three-fourths of an inch in diameter, is bright yellow when ripe, and eaten raw by the natives who like the acidity of the juice. They do not ripen till mid-summer, which would be the earliest they could be sent. To make the jelly the fruit is covered with water so that in the kettle there is clear water above the fruit a little less than one-third of the fruit below. This is boiled till the hawthorn is thoroughly cooked. The juice is strained off and an equal quantity, by measure, of granulated sugar is added and boiled until properly jellied. For large quantities, as we make it, about an hour's boiling is required. Small amounts take less time."

Algeria. Algiers. Dr. L. Trabut writes January 12, 1915, "I have received in a collection the Moroccan varieties of orange. I have one orange from Tetuan, one from Tanger, and two from eastern Morocco. But nothing so very remarkable. These oranges have been recommended too highly, inasmuch as those, by whom the oranges have been tasted, have found them during the hot seasons in the mountain gorges and at that moment all oranges appear excellent. I have not thought I needed to send you cuttings because I thought that you would not have use for any varieties much inferior to those which you have. The Algerian Navel shows itself to be very interesting. It is a seedling. The fruit is large, depressed, very juicy and with a pronounced navel. It is at present the only interesting local type of this group. You have had it already. If you wish it I will send you a new shipment. The Algerian navel is two months later than the Washington navel. It is superior having a more juicy, more melting pulp."

China. Pekin. Mr. D. F. Higgins writes, March 26, 1915: "I have had the pleasure of several interesting conversations with Mr. Meyer. He is certainly a hard worker. I was disappointed to learn from him of his difficulties

in Kansu. But I was pleased to learn that he seems to have at last found a really wild type of North China peach. This seems to settle the matter of the origin of *P. persica*. His other discoveries are almost of equal interest, notably of the hardy species of Citrus, and of the giant hazel tree. I understand that Mr. Meyer may be going to the States this June, but that he may visit Siao wu Tai Shan before he goes. I myself am planning to revisit that interesting locality if possible this spring. Under separate cover I am sending Korean 'da-reh' seeds and photographs. The seeds are in rather small fruits on account of the lateness of the season when they were gathered. They were secured through the kindness of Mr. P. C. Kang, of Hol Kol, Korea, a Korean friend of mine. It is characteristic of the spirit of the Koreans, that the coolies, which he sent had to go about eight miles, over a pass which required an ascent and descent of more than two thousand feet and then received but twenty sen (a little less than ten cents U. S. currency) apiece for their day's work because they could not secure first class specimens of the 'da reh' fruit. I tell you this little fact because of the spirit against the Koreans which has been bred for years in the United States through the colored press reports from the East."

Extensive plantation of the "Ta hong tsao" or "large red jujube", (*Ziziphus jujuba*). The jujube thrives well on these loess table-lands of Honan province and suggests its culture on our own soils of similar wind-formed character which occur in Iowa, Nebraska, Missouri and other of the Middle Western states. Photo No. A 39, by F. N. Meyer, Lingpau, Honan, China, Dec. 24, 1914.

"Another Ghoorma persimmon, *Diospyros lotus*, on which a kaki variety has been grafted, growing at the very edge of a loess plantation." In China the Oriental persimmon or kaki (*Diospyros kaki*) is generally grafted upon another species of persimmon called the Ghoorma (*Diospyros lotus*). The illustration shows one of these grafted trees growing on the very edge of one of the peculiar perpendicular walls of a ravine through the loess soil occurring commonly in the Honan Province. This stock should be tested on the loess soils of the United States. Photo No. A 32, by F. N. Meyer, near Lingpau, Honan, China, Dec. 23, 1913.

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