

# UNITED STATES DEPARTMENT OF AGRICULTURE



## INVENTORY No. 124



Washington, D. C.

Issued January, 1940

### PLANT MATERIAL INTRODUCED BY THE DIVISION OF PLANT EXPLORATION AND INTRODUCTION, BUREAU OF PLANT INDUSTRY, JULY 1 TO SEPTEMBER 30, 1935 (Nos. 111858 to 112306)

#### CONTENTS

	Page
Introductory statement.....	1
Inventory.....	3
Index of common and scientific names.....	21

#### INTRODUCTORY STATEMENT

This inventory, No. 124, records the plant material (Nos. 111858 to 112306) received by the Division of Plant Exploration and Introduction during the period from July 1 to September 30, 1935.

In order to assist Department pathologists who are attempting to develop disease-resistant tobacco varieties for the United States, W. A. Archer spent several months traveling through Mexico, collecting seeds of all available types of cultivated tobacco from many widely separated sections in that country.

A special collection of desert shrubs and perennials (Nos. 112043 to 112051) from the Repetek Sand Desert Station, sent in as the result of the agricultural explorations of H. L. Westover and C. R. Enlow, are for testing by specialists in the Soil Conservation Service of this Department.

Mrs. Ynes Mexia,<sup>1</sup> to whom the Department has been indebted for a number of rare plants from eastern Ecuador, was still carrying on botanical explorations in that country during the autumn of 1935. Included in four shipments of seeds sent in by Mrs. Mexia were two lots of local alfalfa varieties (*Medicago sativa*, Nos. 111968 and 112216) and several rare ornamentals.

Ten shipments of peanut varieties, introduced from Brazil, Uruguay, and the Union of South Africa, and representing local strains developed in those countries, are intended for the use of plant breeders who are attempting to develop better oil-producing varieties.

From Auckland, New Zealand, H. R. Wright sent in to the Department plants of 13 fruit varieties, including new local forms of peach,

<sup>1</sup> Died July 11, 1938.

apple, pear, oriental persimmon, and mandarin orange (Nos. 112053-112065). These, of course, are destined for trial in the Southern States and the Pacific coast, where some of Mr. Wright's earlier introductions have already become successfully established.

The tropical hibiscus, one of the characteristic ornamental plants of the warmer parts of both the Old World and the New World, succeeds outdoors throughout most of Florida, where it is one of the most popular dooryard plants. It is of special interest to Florida gardeners, therefore, to record the introduction of a collection of 28 hibiscus varieties from Puerto Rico (Nos. 111886-111913). These are the results of crosses made by T. B. McClelland while at the Puerto Rico Agricultural Experiment Station at Mayaguez.

The botanical determinations of seeds introduced have been made and the nomenclature determined by Paul Russell, who has had general supervision of this inventory.

B. Y. MORRISON,  
*Principal Horticulturist, in Charge.*

DIVISION OF PLANT EXPLORATION AND INTRODUCTION,  
*Washington, D. C., March 15, 1939.*

## INVENTORY<sup>2</sup>

**111858. COFFEA ZANGUEBARIAE LOUR.**  
Rubiaceae.

From Cuba. Seeds presented by Robert M. Grey, Superintendent, Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos, through F. G. Walsingham. Received July 15, 1935.

Introduced for Department specialists.

A small erect tree, 6 feet or more high, with ovate-lanceolate leaves and ovoid-oblong, red berries. Native to the Zanzibar coast and Mozambique, Africa.

**111859. CORTADERIA SELLOANA (Schult.)**  
Aschers. and Graebn. Poaceae.  
Pampasgrass.

From New Zealand. Plants presented by Alexander McClean, Weiteraruru, Hauraki Plains, Auckland, at the request of the Director-General of Agriculture, Wellington. Received July 24, 1935.

Introduced for Department specialists.

A perennial reedlike grass with stout culms; up to 10 feet high. Native to Brazil and Argentina.

**111860. CITRUS LIMONIA Osbeck.** Ruta-  
ceae. Lemon.

From the Soviet Union. Seeds presented by the Dry Subtropical Station, Tashkent. Received August 2, 1935.

Introduced for Department specialists.

**111861. EUPHORIA DIDYMA Blanco.** Sa-  
pindaceae.

From Puerto Rico. Seeds collected by H. P. Traub at the Agricultural Experiment Station, Mayaguez. Received August 1, 1935.

Introduced for Department specialists.

*Alpay* or *alupag*. A small attractive tree, up to 50 feet high, with pinnate leaves made

**111861—Continued.**

up of prominently veined, leathery, lanceolate leaflets and compact terminal clusters of green warty edible fruits. These are an inch in diameter with a shell-like rind and juicy sweet translucent pulp of good flavor, enclosing a large seed. Native to the Philippine Islands.

For previous introduction see 106101.

**111862 to 111868. ARACHIS HYPOGAEA L.**  
Fabaceae. Peanut.

From the Union of South Africa. Seeds presented by Jacq. Sellschop, School of Agriculture and Experiment Station, Potchefstroom, through W. A. Carver, experiment station, Gainesville, Fla. Received July 23, 1935.

Introduced for Department specialists.

**111862.** *Java 15 AP.*

**111863.** *Natal Common*, a local variety.

**111864.** *Red* × *Rio de Janeiro.*

**111865.** *Rustenburg.*

**111866.** *Virginia bunch (71-4).*

**111867.** *Potchefstroom No. 570 (Yellow* × *Rio de Janeiro).*

**111868.** Native peanuts grown by the aborigines of the Transvaal.

**111869. ZEPHYRANTHES SESSILIS Herb.**  
Amaryllidaceae. Zephyrlily.

From Mexico. Seeds and bulbs presented by Dr. José Figueroa, Instituto Biotecnico, Distrito Federal. Received July 26, 1935. Introduced for Department specialists.

A Mexican zephyrlily with three to six narrow linear leaves up to 1 foot long and an equally long scape bearing a showy white flower tinged with red.

For previous introduction see 111430.

<sup>2</sup> It should be understood that the names of varieties of fruits, vegetables, cereals, and other plants used in this inventory are those under which the material was received when introduced by the Division of Plant Exploration and Introduction, and, further, that the printing of such names here does not constitute their official publication and adoption in this country. As the different varieties are studied, their entrance into the American trade forecast, and the use of varietal names for them in American literature becomes necessary, the foreign varietal designations appearing in this inventory will be subject to change with a view to bringing the forms of the names into harmony with recognized horticultural nomenclature.

It is a well-known fact that botanical descriptions, both technical and economic, seldom mention the seeds at all and rarely describe them in such a way as to make possible identification from the seeds alone. Many of the unusual plants listed in these inventories are appearing in this country for the first time, and there are no seed samples or herbarium specimens with ripe seeds with which the new arrivals may be compared. The only identification possible is to see that the sample received resembles seeds of other species of the same genus or of related genera. The responsibility for the identification, therefore, must necessarily often rest with the person sending the material. If there is any question regarding the correctness of the identification of any plant received from this Division, herbarium specimens of leaves and flowers should be sent in so that definite identification can be made.

**111870 to 111875. EUCALYPTUS spp.**  
Myrtaceae.

From Australia. Seeds presented by F. H. Baker, Richmond, Victoria. Received July 23, 1935.

Introduced for Department specialists.

**111870. EUCALYPTUS CAESIA** Benth.

A small tree with the branches and foliage pale glaucous to nearly white. The ovate-lanceolate leaves are rather thick and generally about 3 inches long. Native to Western Australia.

**111871. EUCALYPTUS CRUCIS** Maiden.

A small tree 25 feet or less high, glaucous throughout, with small thick ovate to lanceolate leaves over an inch long. Native to Western Australia.

**111872. EUCALYPTUS ERTHROCORYS** Muell.

Usually a shrub 8 to 10 feet high, but sometimes a tree up to 30 feet. The broadly linear, rigid leaves are 6 inches long, and the large flowers, in axillary clusters, have bright-red, fleshy caps over the buds; the long stamens are yellow. The ribbed, hemispherical fruits are 1 to 2 inches long. It is native to Western Australia.

For previous introduction see 106337.

**111873. EUCALYPTUS MACROCARPA** Hook.

A stout shrub or small tree up to 15 feet high, with thick rigid cordate glaucous leaves 6 inches long and large solitary, brilliant orange or crimson flowers. Native to Western Australia.

For previous introduction see 104169.

**111874. EUCALYPTUS PREISSIANA** Schauer.

A shrubby eucalyptus about 8 feet high, with rigid branchlets, shining-green, oblong-elliptic leaves nearly 4 inches long, and small yellowish flowers in axillary clusters. Native to Western and South Australia.

For previous introduction see 106342.

**111875. EUCALYPTUS PYRIFORMIS** Turcz.

*Red Mallet.* A shrub or small tree, found in Western and South Australia, where it attains a height of 8 to 10 feet. The very thick, narrow leaves are rarely more than 3 inches long, and the large flowers are red when fresh. The yellowish-white wood is hard, heavy, and durable.

For previous introduction see 106343.

**111876. ASTREBLA LAPPAGEA** (Lindl.)  
Domin. Poaceae.

Hook Mitchell grass.

From Australia. Seeds purchased from Arthur Yates & Co., Ltd., Sydney, New South Wales. Received July 23, 1935.

Introduced for Department specialists.

A tall perennial grass with broad succulent leaves. Native to Australia, where it is considered an excellent pasture grass.

For previous introduction see 75697.

**111877. PHOENIX PALUDOSA** Roxb. Phoenicaceae. Date palm.

From India. Seeds presented by the Royal Botanic Gardens, Sibpur, near Calcutta. Received July 20, 1935.

**111877—Continued.**

Introduced for Department specialists.

A small tree found in the estuarine regions along the coast of India from Bengal to Burma and in the Andaman Islands. It is a typical mangrove plant which forms alternating bands of associations with another mangrove palm, *Nipa fruticans*.

For previous introduction see 32822.

**111878 and 111879.**

From Puerto Rico. Seeds presented by Claud L. Horn, Agricultural Experiment Station, Mayaguez. Received July 26, 1935.

Introduced for Department specialists.

**111878. ABRIA ATTENUATA** O. F. Cook.  
Phenicaceae. Palma de coyor.

Locally known also as the *coyure*. The tallest of the Puerto Rican palms, it reaches a height of 60 to 100 feet. Its pinnate foliage resembles that of the royal palm, but is shorter; the trunk never exceeds 6 to 8 inches in diameter. This palm is found only on limestone hills and usually feeds upon nothing but the humus collected in the cracks of these rocks. The large bunches of orange-red berries, which are the size of a small cherry, are very attractive and are fed to chickens and hogs.

For previous introduction see 39189.

**111879. EUPHORBIA DIDYMA** Blanco. Sapindaceae.

For previous introduction and description see 111861.

**111880 to 111885. ARACHIS spp.** Fabaceae. Peanut.

From Brazil. Seeds presented by the Director, Instituto Agronomico, Campinas São Paulo. Received July 26, 1935.

Introduced for Department specialists.

**111880 and 111881. ARACHIS HYPOGAEA** L.

111880. *Amarello*.

111881. *Commum*.

**111882. ARACHIS NAMBYQUARAE** Hoehne.

Listed as *Arachis hypogaea* var. *Nhambiquara*; changed for taxonomic reasons. A native variety, cultivated by the Indians; seeds large and variable in color.

**111883 to 111885. ARACHIS HYPOGAEA** L.

111883. *Porto-Alegere*.

111884. *Rasteiro*.

111885. *Rozo*.

**111886 to 111913. HIBISCUS.** Malvaceae.

From Puerto Rico. Cuttings presented by Atherton Lee, Director, Puerto Rico Agricultural Experiment Station, Mayaguez. Received August 1, 1935.

A collection of hibiscus varieties, largely the results of crosses, many of them between varieties of hybrid or uncertain origin, made at Mayaguez by T. B. McClelland, formerly director of the Puerto Rico Agricultural Experiment Station.

Introduced for Department specialists.

**111886. *Christine*.** A dwarf, small-flowered yellow variety.

111886 to 111913—Continued.

111887. *Dr. N. L. Britton*. A pale-yellow flower, 6 inches or more in diameter, flushed with red in the center with a lighter reddish flush extending along the veins. The long silky, slightly narrow petals suggest those of a lily.
111888. *Flame*. A scarlet hibiscus, which is a cross between a red-centered yellow hybrid variety from St. Thomas, Virgin Islands, and the common large Puerto Rican red.
111889. *Jean Whittemore*. A carrot-red flower, 6 inches across, with full crinkly petals.
111890. *Lily*. A lilylike white flower with a pink center.
111891. *Mary McClelland*. A cross between a white with a red eye and a self-colored yellow. The flower is 5 inches across, with rounded petals of crepe-like texture, snow white in effect; the leaves are dark glossy green.
111892. *Minnie Troutman*. A self-colored yellow flower; a cross between a white flower with a red eye and a self-colored yellow.
111893. *P. R. No. 1142*. Female parent, a yellow with red center, from St. Thomas, Virgin Islands.
111894. *P. R. No. 1422*. Female parent, a yellow with red center, from St. Thomas, Virgin Islands.
111895. *P. R. No. 1435*. A soft pink flower with salmon shading; a cross between Hawaiian variety No. 205: 2 and *Hibiscus schizopetalus*.
111896. *P. R. No. 1443*. A cross between Hawaiian variety No. 205: 2 and *Hibiscus schizopetalus*.
111897. *P. R. No. 1929*. A beautiful lively pink flower; a cross between Hawaiian variety No. 205: 2 and *Hibiscus schizopetalus*.
111898. *P. R. No. 1946*. One of the most attractive pinks obtained from the cross between Hawaiian variety No. 205: 2 and *Hibiscus schizopetalus*.
111899. *P. R. No. 2029*.
111900. *P. R. No. 2030*.
111901. *P. R. No. 2130*.
111902. *P. R. No. 2228*. A cream-colored flower.
111903. *P. R. No. 2232*.
111904. *P. R. No. 2413*. Female parent, *Laurita Sherman*.
111905. *P. R. No. 2631*.
111906. *P. R. No. 2673*. Female parent, Hawaiian variety, No. 100: 1.
111907. *P. R. No. 2968*. A cross between Hawaiian variety No. 205: 2 and *Hibiscus schizopetalus*.
111908. *P. R. No. 2971*. A cross between Hawaiian variety No. 205: 2 and *Hibiscus schizopetalus*.
111909. *P. R. No. 3160*.
111910. Hawaiian variety No. 205: 2.
111911. *No. P-1*. A variety received in Puerto Rico from Panama.

111886 to 111913—Continued.

111912. *No. P-11*.
111913. A large-flowered, handsome pink flower with darker center. Origin unknown.
111914. **SACCHARUM SPONTANEUM L.**  
**Poaceae.** Grass.  
From New Guinea. Cuttings collected by Percival H. Leigh, Port Moresby, Papua. Received August 2, 1935.  
A grass closely related to sugarcane; introduced for Department specialists.  
For previous introduction see 111347.
111915. **LITCHI CHINENSIS Sonner.** Sapindaceae. Lychee.  
From China. Seeds collected by a Mr. Lee in the market at Canton, and presented through Ira D. Condit, University of California. Received August 6, 1935.  
Introduced for Department specialists.  
A mixture of two varieties; mostly *Waaif Oh!*, with a few *Chan Oh!*. Received as seedlings.  
For previous introduction see 109768.
- 111916 to 111931.  
From Australia. Plants purchased from F. Ferguson & Son, Hurstville and Camden, New South Wales. Received August 7, 1935.  
Introduced for Department specialists.
- 111916 to 111922. **AMYGDALUS PERSICA L.** Amygdalaceae. Peach.  
111916. *Uamden Golden*.  
111917. *Downing*.  
111918. *Early Newington*.  
111919. *George IV*.  
111920. *Kirshler Prize*.  
111921. *Lewis Chung*.  
111922. *Newington*.
- 111923 to 111926. **AMYGDALUS PERSICA NECTARINA Ait.** Amygdalaceae. Nectarine.  
111923. *Ben's Rick*.  
111924. *Mrs. Dr. Chisholm*.  
111925. *Newington*.  
111926. *Precoce de Croncels*.
- 111927 and 111928. **PRUNUS ARMENIACA L.** Amygdalaceae. Apricot.  
111927. *Campbellfield's Seedling*.  
111928. *Red Mascutine*.
- 111929 to 111931. **PRUNUS AVIUM L.** Amygdalaceae. Sweet cherry.  
111929. *Bigarreau Trcyford*.  
111930. *Burgdoff's Seedling*.  
111931. *Chapman*.
- 111932 to 111934. **ARACHIS SPP.** Fabaceae. Peanut.  
From Brazil. Seeds presented by F. C. Hoehne, Chefe de Serviço Científico, Serviço de Botânica e Agronomia, São Paulo. Received August 8, 1935.

## 111932 to 111934—Continued.

Native varieties of peanuts introduced for Department specialists.

111932 and 111933. *ARACHIS HYPOGAEA* L.

111932. *Forma Grande*.

111933. *Forma Jumbo*.

111934. *ARACHIS NAMBYQUARAE* Hoehne.

A Brazilian relative of the peanut, which is a much-branched, prostrate or ascending plant. The pod is 2 to 3 inches long, with usually two seeds, which are edible and very oily.

For previous introduction see 68831.

111935 and 111936. *TRIFOLIUM SUBTERRANEUM* L. Fabaceae.

Subterranean clover.

From Australia. Seeds purchased from F. H. Brunning, Melbourne. Received August 2, 1935.

Introduced for Department specialists.

111935. *Dwalganup*. An extra early maturing strain.

111936. *Midseason* or *Mount Barker* strain.

111937. *BRASSICA RAPA* L. Brassicaceae.

Turnip.

From China. Seeds purchased from Dr. J. F. Rock, Yunnanfu, Yunnan. Received August 6, 1935.

Introduced for Department specialists.

Received under the varietal name "depressa," for which a place of publication has not been found.

111938 to 111940. *ARACHIS HYPOGAEA* L. Fabaceae.

Peanut.

From Brazil. Seeds presented by J. C. Bela Lisboa, Director, Escola Superior de Agricultura e Medicina Veterinaria, Vigosa, Minas Geraes. Received July 26, 1935.

Introduced for Department specialists.

111938. *Hespanhol*.

111939. *Porto-Alegre*.

111940. *Rowo*.

111941. *ARCHONTOPHOENIX ALEXANDRAE* (F. Muell.) Wendl. and Drude. Phoenicaceae.

Palm.

From Mexico. Plants collected by W. E. Sexton, of the McKee Jungle Gardens, Vero Beach, Fla., and presented through the Bureau of Entomology and Plant Quarantine. Received July 18, 1935.

For previous introduction see 110823.

111942. *CITRUS MYRTIFOLIA* Raf. Rutaceae.

From the Belgian Congo. Seeds presented by Rev. J. Gillet, Kisantu. Received July 26, 1935.

Introduced for Department specialists.

A small unarmed tree with narrow leaves that bears small, flattened, very sour oranges. Native to China.

111943. *ALLIUM CEPA* L. Liliaceae.

Onion.

From Australia. Seeds presented by Dr. H. Wenholz, Department of Agriculture, Syd-

## 111943—Continued.

ney, New South Wales. Received July 20, 1935.

Introduced for Department specialists.

McKimm strain of *Hunter River Brown*.

111944 to 111946. *IRIS* spp. Iridaceae.

From the Soviet Union. Roots presented by N. I. Sharapov, Head of the Department of New Cultures and Introduction, Leningrad, at the request of the Subtropical Introduction Garden, Sukhum, Transcaucasia. Received July 17, 1935.

111944. *IRIS LYCOTIS* Woron.

An iris of the *Oncocyclus* section, closely related to *Iris paradoxa*.

111945. *IRIS PARADOXA* Stev. Velvet iris.

A dwarf, linear-leaved *Oncocyclus* iris 2 to 6 inches high, with large lilac or white flowers. Native to northern Iran (Persia) and Asia Minor, where it grows in dry situations.

For previous introduction see 68166.

111946. *IRIS* sp.

Received under the name "vavilovii," for which a place of publication has not been found.

111947 and 111948. *PHOENIX* spp. Phoenicaceae.

Palm.

From Africa. Seeds collected by J. F. Ward and presented by the Agricultural Department of Samaru, Zaria, Northern Provinces, Nigeria. Received July 13, 1935.

The wild date is practically always confined to swamps and banks of streams and is commonly found in broad grassy swampy glades growing on old decomposed anthills. These hills, being raised above the surrounding level, do not get flooded. Introduced for Department specialists.

111947. *Wamba*, 624. From Wamba I, Southern Division, Plateau Province.

111948. *Ukum*, 623. From Ukum district of Tiv Division, Benue Province.

111949. *LITCHI CHINENSIS* Sonner. Sapindaceae.

Lychee.

From China. Seeds presented by the Lingnan University, Canton, at the request of Dr. G. Weidman Groff, and shipped by Ira J. Condit, visiting professor at Lingnan University, 1934-35. Received July 15, 1935.

Introduced for Department specialists.

111950 to 111956. *CITRUS* spp. Rutaceae.

From Spain. Budsticks presented by D. Manuel Herrero, Ingeniero-Director, Estación Naranjera de Levante, Valencia. Received July 10, 1935.

Introduced for Department specialists.

111950 to 111954. *CITRUS SINENSIS* (L.) Osbeck.

Orange.

111950. *Cadenera*.

111951. *Sangre Fina*.

111952. *Torregrosa*.

111953. *Valencia Común*.

111954. *Washington Sangre*.

111950 to 111956—Continued.

111955. CITRUS NOBILIS DELICIOSA (Ten.) Swingle. Mandarin orange.  
111956. CITRUS LIMONIA Osbeck. Lemon.

111957 to 111965. ARACHIS spp. Fabaceae. Peanut.

From Brazil. Seeds presented by A. Correa Meyer, Director, Estação Experimental de Cana de Assucar e Plantas Oleaginosas, Piracicaba, São Paulo. Received July 5, 1935.

A collection of peanut varieties, introduced for Department specialists.

- 111957 to 111963. ARACHIS HYPOGAEA L.  
111957. *Comum*.  
111958. *Jambo*.  
111959. *Java Graudo*.  
111960. *Java Miudo*.  
111961. *Porto Alegre*.  
111962. *Preto*.  
111963. *Roxo*.  
111964. ARACHIS NAMBYQUARAE Hoehne. *Nhambiquara*.  
111965. ARACHIS HYPOGAEA L. *Rasteiro*. A prostrate perennial peanut, native to Brazil.

111966 to 111968.

From Ecuador. Seeds and bulbs collected by Mrs. Ynes Mexia, Bureau of Plant Industry. Received July 3, 1935.

Introduced for Department specialists.

111966. URCEOLINA PERUVIANA (Presl) Macbr. Amaryllidaceae.  
No. 7355. Cerro del Panecillo, Quito, at 9,800 feet altitude. Seeds and bulbs of a tender plant, with wide oblong leaves 1 foot long and a solitary scape with an umbel of four to six nodding yellow to orange-red flowers. Native to the Andes of Peru.  
111967. LUPINUS sp. Fabaceae.

No. 7357-A (Archer No. 3431). A shrub collected June 1, 1935, near Quito, Provincia Pinchincha, at about 10,000 feet altitude by W. A. Archer and sent in by Mrs. Mexia. Seeds.

111968. MEDICAGO SATIVA L. Fabaceae. *Alfalfa*.

No. 7356-A. From Hacienda La Chine, near Guaranda, Canton San Miguel, Provincia Bolivar. Seeds presented by Sr. Regulo de More, through Dr. Luis Boya.

111969 to 111981.

From the Soviet Union. Seeds presented by the Director, Botanical Garden of the Academy of Sciences, Leningrad. Received July 5, 1935.

Introduced for Department specialists.

- 111969 to 111977. FESTUCA spp. Poaceae. *Fescue*.  
111969. FESTUCA AMETHYSTINA L.  
111970. FESTUCA ELATOR L. *Meadow fescue*.

111969 to 111981—Continued.

111971. FESTUCA ELATOR ARUNDINACEA (Schreb.) Wimm.  
111972 and 111973. FESTUCA OVINA L. *Sheep fescue*.  
111974. FESTUCA OVINA GLAUCA (Lam.) Koch.  
111975. FESTUCA OVINA SULCATA Hack.  
111976. FESTUCA OVINA VALLESIIACA (Schleich.) Link.  
111977. FESTUCA sp.  
111978 to 111981. IRIS spp. Iridaceae.  
111978. IRIS SPURIA HALOPHILA (Pall.) Dykes.

A variety from central Asia, distinguished by numerous relatively short stems and very narrow perianth segments. The flowers vary in color from white veined with yellow to dull yellow or gray purple.

For previous introduction see 76346.

111979. IRIS PRISMATICA Pursh. *Cubeseed iris*.  
111980. IRIS SPURIA HALOPHILA (Pall.) Dykes.  
See 111978 for description.  
111981. IRIS sp.

111982 and 111983.

From Mexico. Seeds and plants presented by C. A. Purpus, Zacuapam, Huatusco, Veracruz. Received July 9, 1935.

Introduced for Department specialists.

111982. DIOON sp. Cycadaceae.  
A plant received as *Dioon pinios*, for which a place of publication has not been found.  
111983. PRUNUS CAPULI Cav. Amygdalaceae. *Capulin*.

Seeds of a small tree closely related to the wild black cherry of the eastern United States (*Prunus serotina* Ehrh.). It is native to the highlands of Mexico and South America, and the black globose cherries are usually about one-half inch in diameter.

For previous introduction see 98346.

111984. PACHYRHIZUS TUBEROSUS (Lam.) Spreng. Fabaceae. *Jicama*.

From Mexico. Seeds presented by Prof. A. L. Herrera, Laboratorio de Plasmogonia, Mexico, D. F. Received July 9, 1935.

A twining herbaceous vine up to 20 feet long, with a large edible tuberous root. Native to tropical America.

111985 and 111986. AGROSTIS TENUIS Sibth. Poaceae.

From New Zealand. Seeds presented by A. S. Patterson & Co., Ltd., Dunedin. Received July 10, 1935.

Introduced for Department specialists.

For previous introduction see 101101.

111985. *Blue, Certified Browntop*.  
111986. *Harvey, Certified Browntop*.

**111987. CASUARINA RUMPHIANA Miquel.**  
Casuarinaceae.

From Java. Seeds presented by the Director, Botanic Garden, Buitenzorg. Received July 6, 1935.

Introduced for Department specialists.

A rather scraggly tree with very slender, delicate green, pendent branches and cones having few seeds. It is native to Java.

For previous introduction see 92374.

**111988 to 111991. CASUARINA spp.** Casuarinaceae.

From Australia. Seeds presented by C. A. Gardner, Government Botanist, Perth, Western Australia. Received July 9, 1935.

Introduced for Department specialists.

**111988. CASUARINA ACUARIA F. Muell.**

A leafless shrub with erect rigid branches and numerous deciduous branchlets; these are erect, slender, but rigid, and each consists of but two internodes. The cones, globular and solitary or in small clusters, are about 1 inch in diameter. Native to Western Australia.

For previous introduction see 105789.

**111989. CASUARINA GREVILLEOIDES Diels.**

A low bushy shrub about 1 foot high, with the branches and branchlets much-jointed and the younger joints white tomentose. Native to Western Australia.

For previous introduction see 105795.

**111990. CASUARINA HELMSII Ewart and Gordon.**

A Western Australian tree 5 feet high, with slender terete branchlets 4 to 5 inches long. The nearly smooth cones are 1 inch long and about half an inch in diameter.

For previous introduction see 93789.

**111991. CASUARINA TRICHODON Miq.**

An erect leafless shrub about 8 feet high with branchlets usually pendulous; closely resembling *Casuarina stricta*. Native to rocky places in Western Australia.

**111992. ARACHIS HYPOGAEA L.** Fabaceae. Peanut.

From Brazil. Seeds presented by the Director, Instituto de Biologia Vegetal, Rio de Janeiro. Received July 12, 1935.

Introduced for Department specialists.

**111993. CITRUS SINENSIS (L.) Osbeck.** Rutaceae. Orange.

From Spain. Budsticks presented by D. Manuel Herrero, Ingeniero-Director, Estación Naranja de Levante, Valencia. Received July 17, 1935.

*Macetra*. Introduced for Department specialists.

**111994 to 111997. PHALARIS spp.** Poaceae. Canary grass.

From Australia. Seeds presented by the Waite Agricultural Research Institute, Adelaide University, Glen Osmond, South Australia. Received July 9, 1935.

Introduced for Department specialists.

**111994. PHALARIS COERULESCENS Desf.**

Gb. 414. A cespitose perennial grass.

**111994 to 111997—Continued.**

For previous introduction see 88726.

**111995 to 111997. PHALARIS TUBEROSA L.**  
Toowoomba canary grass.

A forage grass which has proved successful at the Waite Agricultural Research Institute.

For previous introduction see 104988.

**111995. Gb. 299. 111997. Gb. 421.**

**111996. Gb. 409.**

**111998 and 111999. CARICA PAPAYA L.**  
Papayaceae. Papaya.

From California. Seeds presented by Col. James Stewart, Ardsheal Ranch, La Habra Heights. Received July 13, 1935.

Introduced for Department specialists.

**111998. A Tahitian variety with large fruit.**

**111999. A South African variety with smaller fruit.**

**112000 to 112012. PISTACIA VERA L.** Anacardiaceae. Pistachio.

From the Soviet Union. Seeds presented by the Dry Subtropical Station, Tashkent. Received August 3, 1935.

Introduced for Department specialists.

**112000. No. O-2815. 112007. No. O-2822.**

**112001. No. O-2816. 112008. No. O-2823.**

**112002. No. O-2817. 112009. No. O-2824.**

**112003. No. O-2818. 112010. No. O-2837.**

**112004. No. O-2819. 112011. No. O-2838.**

**112005. No. O-2820. 112012. No. O-2839.**

**112006. No. O-2821.**

**112013 to 112016. COIX LACRYMA-JOBI L.**  
Poaceae. Jobs-tears.

From the Philippine Islands. Seeds presented by the College of Agriculture, University of the Philippines, Los Baños, Laguna. Received August 5, 1935.

Introduced for Department specialists.

**112013. A cultivated glutinous variety.**

**112014. Lokfao. A cultivated variety.**

**112015. A wild variety.**

**112016. A wild variety.**

**112017. RUBUS MACROCARPUS Benth.**  
Rosaceae. Colombian blackberry.

From Colombia. Seeds collected by Guevera Amortegui Baltasar, Fusagasuga, and presented by Dr. W. R. Maxon, Smithsonian Institution, Washington, D. C. Received August 12, 1935.

Introduced for Department specialists.

For previous introduction see 74553.

**112018 and 112019. PERSEA AMERICANA Mill.** Lauraceae. Avocado.

From Costa Rica. Budsticks presented by Dr. Oton Jimenez, San José. Received August 14, 1935.

Introduced for Department specialists.

**112018. A large-fruited variety with small seeds.**

**112019. A seedless variety.**



**112020. CITRUS GRANDIS (L.) Osbeck.**  
**Rutaceae. Grapefruit.**

From Plant Introduction Garden, Glenn Dale, Md. Plant growing under C. P. B. No. 10696; numbered August 19, 1935.

*Song Ma Yau.*

**112021. ALLIUM SATIVUM L. Liliaceae.**  
**Garlic.**

From China. Bulblets presented by T. Y. Wang, Head of Horticultural Department, the Sun Yat-Sen Tomb and Memorial Park Commission, Nanking. Received August 20, 1935.

Introduced for Department specialists.

**112022 to 112025. SOLANUM TUBEROSUM L. Solanaceae.**

From Buenos Aires, Argentina. Tubers received August 20, 1935.

Introduced for Department specialists.

**112022. Bocha.**

**112023. Chaguena.**

**112024. Limon.**

**112025. No. 1. North American Blanco Larga.**

**112026. GARCINIA MANGOSTANA L. Clusiaceae.**  
**Mangosteen.**

From the Canal Zone. Seeds presented by J. E. Higgins, Director, Canal Zone Experiment Gardens, Summit. Received August 20, 1935.

Introduced for Department specialists.

For previous introduction see 106110.

**112027 and 112028. PHLEUM PRATENSE L. Poaceae.**  
**Timothy.**

From Sweden. Seeds presented by E. Akerberg, Weibullsholm Plant Breeding Institute, Landskrona. Received August 13, 1935.

Introduced for Department specialists.

**112027. W: s. Orig. Kämpe II.**

**112028. W: s. Orig. Kämpe.**

**112029. MELINIS MINUTIFLORA Beauv. Poaceae.**  
**Molasses grass.**

From Venezuela. Seeds presented by Ernesto Stelling, Valencia, through W. A. Archer, Bureau of Plant Industry. Received August 15, 1935.

Introduced for Department specialists.

No. 3112. *Yaragua*. A cultivated forage grass, collected on the farm of Ernesto Stelling, Valencia, February 26, 1935.

For previous introduction see 110192.

**112030. DELPHINIUM LIKIANGENSE Franch. Ranunculaceae.**  
**Larkspur.**

From China. Seeds collected by Dr. Joseph F. Rock, Yunnanfu, Yunnan. Received August 15, 1935.

One of the finest larkspurs, with stems 4 to 8 inches high, and dark-green, glossy leaves in cushionlike rosettes. The large rich-blue flowers are an inch across, and there are several spikes on a plant at one time. It is endemic in Yunnan and peculiar to the Likang Snow Range, where it grows in wet

**112030—Continued.**

gravelly soil at the foot of glaciers and in mountain meadows at 13,000 feet altitude.

For previous introduction see 103216.

**112031. PRUNUS SIMONII Carr. Amygdalaceae.**  
**Simon plum.**

From the Soviet Union. Scions presented by N. I. Sharapov, Head of Department of New Cultures and Introduction, Leningrad. Received March 8, 1935. Numbered in August 1935.

Introduced for Department specialists.

A locally grown variety from middle Asia.

For previous introduction see 91527.

**112032 to 112040.**

From India. Plants purchased from the Government Botanical Garden, Saharanpur. Received February 28, 1934. Numbered in August 1935.

Introduced for Department specialists.

**112032 to 112035. AMYGDALUS PERSICA L. Amygdalaceae.**  
**Peach.**

**112032. Saharanpur No. 1.**

**112033. Saharanpur No. 2.**

**112034. Saharanpur No. 6.**

**112035. Shanghai freestone.**

**112036 to 112040. PRUNUS spp. Amygdalaceae.**

**112036. Botanky plum.**

**112037. Dwarf early yellow plum.**

**112038. Early round plum.**

**112039. Katanky plum.**

**112040. Shirosumomo plum.**

**112041. RUBUS GLAUCUS Benth. Rosaceae.**  
**Andes raspberry.**

From Java. Seeds presented by A. M. Cramer, Wonosobo. Received June 1, 1934. Numbered in August 1935.

Introduced for Department specialists.

A red-fruited raspberry with canes 6 feet high.

For previous introduction see 101218.

**112042. PRUNUS ARMENIACA L. Amygdalaceae.**  
**Apricot.**

From the Soviet Union. Plants presented by the Institute of Plant Industry, Leningrad. Received March 19, 1935. Numbered in August 1935.

No. 6. Introduced for Department specialists.

**112043 to 112051.**

From the Soviet Union. Seeds presented by the Repetek Sand Desert Station, Turkmenistan, through H. L. Westover and C. R. Enlow, Bureau of Plant Industry. Received August 15, 1935.

The field numbers are those of the Westover and Enlow series.

Introduced for Department specialists.

**112043. ASTRAGALUS sp. Fabaceae.**

No. 1651.

## 112043 to 112051—Continued.

112044 to 112047. CALLIGONUM spp. Polygonoaceae.

112044. CALLIGONUM ARBORESCENS Litv.

No. 1652. A drought-resistant shrub 10 feet high.

For previous introduction see 108887.

112045. CALLIGONUM CAPUT - MEDUSAE Schrenk.

No. 1654. A leafless shrub, native to northern and central Asia, where it is used as a sand binder.

112046. CALLIGONUM COMOSUM L'Her.

No. 1653. A densely branched shrub 10 to 15 feet high, with minute subulate leaves and small ovate, densely spiny, nutlike fruits. Native to the eastern Mediterranean region.

For previous introduction see 108890.

112047. CALLIGONUM SETOSUM Litv.

No. 1655. A leafless shrub, native to the Caspian region, where it is used as a sand binder.

For previous introduction see 108893.

112048. FERULA LITWINOWIANA K.-Pol. Apiaceae.

No. 1659. A low hairy herbaceous perennial with numerous small triangular pinnately cut leaves and inconspicuous flowers in compound umbels. Native to the Transcaspian region.

For previous introduction see 98214.

112049. JURINEA DERDERIOIDES C. Winkl. Asteraceae.

No. 1662. A hardy herbaceous perennial about 3 feet high, with gray oblong-lanceolate leaves and small heads of purple flowers. Native to Turkistan.

112050. RHEUM TURKESTANICUM Janischew. Polygonaceae.

No. 1667. A wild rhubarb from the Transcaspian region, over 2 feet high, with a large thick rhizome and a short, thickened, densely leafy stem. The cordate-reniform leaves, up to 8 in number, are about a foot wide.

For previous introduction see 108953.

112051. ULMUS FOLIACEA Gilib. Ulmaceae. Smoothleaf elm.

No. 1668. A slender pyramidal tree with corky branches. The leaves are obliquely oval or ovate, doubly toothed, and up to 4 inches long. Native to Europe and western Asia.

For previous introduction see 38491.

112052. CARICA PAPAYA L. Papayaceae. Papaya.

From California. Seeds presented by Col. James Stewart, Ardsheal Ranch, La Habra Heights. Received August 26, 1935.

Sandwich Island papaya; introduced for Department specialists.

## 112053 to 112065.

From New Zealand. Plants presented by H. R. Wright, Auckland. Received August 22, 1935.

Introduced for Department specialists.

## 112053 to 112065—Continued.

112053. ACTINIDIA CHINENSIS Planch. Dilleniaceae. Yangtao.

A form with very large fruits.

For previous introduction see 111427.

112054 and 112055. AMYGDALUS PERSICA L. Amygdalaceae. Peach.

112054. *Gray's seedling*. An early semicling with white flesh of superb flavor; an *Elberta* seedling.

112055. *Gus Friedrich*. A large, highly colored peach of superb flavor.

112056. PRUNUS. Amygdalaceae.

A peach-plum hybrid which makes an ornamental tree.

112057 to 112059. CITRUS spp. Rutaceae.

112057. CITRUS sp.

A new grapefruit, grapefruit-orange hybrid, preferred to our New Zealand grapefruit or *Poorman's* orange, being less bitter.

112058. CITRUS GRANDIS (L.) Osbeck. Grapefruit.

The Chinese pomelo, much prized by white people in China.

112059. CITRUS NOBILIS DELICIOSA (Ten.) Swingle. Mandarin orange.

*Richard's Special Mandarin*. The tree produces an abundance of large fruits.

112060 and 112061. DIOSPYROS KAKI L. f. Diospyraceae. Kaki.

112060. *Purple Splendor*. Fruit non-astringent even when hard.

112061. *Tricolor*.

112062. MALUS SYLVESTRIS Mill. Malaceae. Apple.

A red sport of *Cox Orange Pippin*.

112063. PRUNUS sp. Amygdalaceae.

A Japanese plum, *Lock's Purple*; a *Purple King* seedling.

112064 and 112065. PYRUS COMMUNIS L. Malaceae. Common pear.

112064. *Garber* seedlings.

112065. *Packham Late*. A very large and very late pear of fine flavor.

## 112066 to 112076.

From Puerto Rico. Plants collected by H. P. Traub, Bureau of Plant Industry. Received August 21, 1935.

Introduced for Department specialists.

112066. ANANAS COMOSUS (L.) Merr. Bromeliaceae. Pineapple.

*Mayaguez No. 1*.

Nos. 112067 to 112076 were collected in Luquillo National Forest.

112067. ANTHURIUM sp. Araceae.

112068. (Undetermined.)

112069. (Undetermined.)

A bromeliad.

112070. (Undetermined.)

A terrestrial orchid.

112071. (Undetermined.)

An orchid.

112066 to 112076—Continued.

112072. (Undetermined.)  
An orchid.
112073. PIPER sp. Piperaceae.
112074. (Undetermined.)  
A fern.
112075. (Undetermined.)  
An ornamental grass.
112076. SELAGINELLA sp. Selaginellaceae.

112077 and 112078. ARACHIS HYPOGAEA  
L. Fabaceae. Peanut.

From Uruguay. Seeds presented by the Director, Granja Modelo del Instituto Nacional de Agronomia. Received August 19, 1935.

Introduced for Department specialists.

112077. *Salteña* No. 1.

112078. *Salteña* No. 2.

112079. SACCHARUM. Poaceae.  
Sugarcane.

From the Netherland East Indies. Cuttings presented by a Mr. Douglas. Received August 29, 1935.

Introduced for Department specialists.

112080. SEMIARUNDINARIA FASTUOSA  
(Marl.) Makino. Poaceae.  
Narihira bamboo.

Plants growing at the Barbour Lathrop Plant Introduction Garden, Savannah, Ga. Re-numbered August 1935.

One of the handsomest and hardiest of all bamboos; culms up to 20 feet or more in height are ultimately produced where the minimum temperature is not lower than about  $-3^{\circ}$  F. The smaller culms are densely clothed from near the ground up with dark-green leaves borne on short ascending branches. Native to Japan. Previously carried under P. I. No. 38913, but as this bamboo is not the same species originally listed and described there, this new number is assigned. The original source of the plants is uncertain.

112081 to 112091.

From Cuba. Seeds presented by Robert M. Grey, Superintendent, Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos, through F. G. Walsingham. Received August 24, 1935.

112081. CALPURNIA AUREA (Lam.) Benth.  
Fabaceae.

From Kenya Colony, Africa. A tall leguminous shrub, very rarely tree-like, with large, evergreen, odd-pinnate leaves and showy racemes of yellow flowers, much like those of Laburnum, but which appear in the winter.

For previous introduction see 42829.

112082. CASSIA SURATTENSIS Burm. f. Caesalpinaceae.

From the Botanic Gardens, Buitenzorg, Java. A tropical leguminous shrub or small tree up to 15 feet high, with pale-green compound leaves and clusters of pale-yellow flowers. Native to the East Indies.

For previous introduction see 106918.

112081 to 112091—Continued.

Nos. 112083 to 112091 were collected by the Forest Department of Kenya Colony, Africa, and sent to the Atkins Institution.

112083. CASUARINA SUBEROSA Otto and Dietr. Casuarinaceae.

A species with very large fruits ( $1\frac{1}{2}$  inches) and long coarse pendent branchlets, very distinct from *Casuarina equisetifolia*. It is native to Australia.

For previous introduction see 92485.

112084. CUPRESSUS GLABRA Sudw. Pinaceae. Smooth cypress.

A tree from 25 to 30 feet high, with thin, smooth, dark purple-red bark, upright branches, and bright blue-green foliage. Native to southern Arizona.

For previous introduction see 41690.

112085. CUPRESSUS TORULOSA Don. Pinaceae. Bhutan cypress.

A pyramidal tree up to 150 feet high, short horizontal branches, slender drooping branchlets, and bright-green or bluish-green leaves. Native to the Himalayas at altitudes ranging from 5,000 to 9,000 feet.

112086. DOYYALIS ABYSSINICA (A. Rich.) Warb. Flacourtiaceae.

A bushy shrub, 3 to 10 feet high, with ovate, glabrous leaves, small white flowers, and yellow edible astringent berries about 1 inch in diameter, with a sweetish taste resembling that of persimmons. Native to Ethiopia.

112087. DURANTA REPENS L. Verbenaceae. Skyflower.

A shrub up to 15 feet high, armed with stiff sharp thorns. Its pale-blue flowers, borne in clusters 3 or 4 inches long, are followed by golden berries less than an inch in diameter. Native to the West Indies.

For previous introduction see 52575.

112088. MELALEUCA ARMILLARIS (Soland.) J. E. Smith. Myrtaceae.

A tall shrub with gracefully drooping branchlets, narrowly linear leaves less than an inch long, and cylindrical spikes, 2 inches long, of small white flowers. It is native to Australia.

For previous introduction see 90712.

112089. MILLETIA OBLATA Durm. Fabaceae.

A tree about 90 feet high, with large, pale-green leaves and showy lavender flowers in fascicled racemes. Native to eastern tropical Africa.

112090. SPATHODEA NILOTICA Seem. Bignoniaceae.

A shrubby tree up to 20 feet high; native to the northern part of tropical Africa. The leaves, which are opposite, are composed of 9 to 15 leathery leaflets and are covered, beneath with dense short hairs, and the scarlet flowers, about 3 inches long, are in short terminal clusters. Both the leaves and flowers resemble those of *Spathodea campanulata*.

For previous introduction see 102617.

## 112081 to 112091—Continued.

112091. *SYNCARPIA GLOMULIFERA* (J. E. Smith) Niedenzu. Myrtaceae.

A tall slender evergreen tree, native to Australia, with broadly ovate leaves 2 to 3 inches long, appearing as if in whorls from two pairs being close together. The small white flowers are in globular clusters of 6 to 10 on short peduncles at the base of the new shoots. The wood is valuable for posts and for underground construction work.

For previous introduction see 90861.

## 112092 to 112099.

From Jamaica Plain, Mass. Seeds collected by Dr. Edgar Anderson on the Arnold Arboretum Balkan expedition and presented by the Arnold Arboretum. Received August 22, 1935.

Introduced for Department specialists.

112092. *EPHEDRA DISTACHYA* L. Gnetaceae. Common jointfir.

No. 72. From the Danube delta, Rumania. A low-growing, rigid, tufted shrub, with erect green leafless branches and small red fruits. Native to Europe and Asia.

For previous introduction see 77619.

112093. *FRAXINUS HOLOTRICHA* Koehne. Oleaceae. Ash.

A small tree with leaves about 8 inches long, composed of 9 to 13 leaflets; of unknown origin.

For previous introduction see 109409.

112094. *HESPERIS* sp. Brassicaceae.

No. 152.

112095 and 112096. *LIGUSTRUM VULGARE* L. Oleaceae. European privet.

Collected on the edge of the steppe in situations where practically no other shrubs can survive.

112095. From Cluj, Rumania.

112096. From Fanata, Cluj, Rumania.

112097 to 112099. *SORBUS AUCUPARIA* L. Malaceae. European mountain-ash.

For previous introduction see 98156.

112097 and 112098. From Sofia, Bulgaria.

112099. No. 66-35. From Mount Vitsasha, near Sofia, Bulgaria.

112100. *CEROXYLON ANDICOLA* Humb. and Bonpl. Phoenicaceae. Wax palm.

From Ecuador. Seeds collected by Mrs. Ynes Mexia, Bureau of Plant Industry. Received August 22, 1935.

No. 7501-A. *Palma de cera*. From Los Olivos, Canton Tulcan, Provincia Carchi, July 11, 1935.

112101. *ARACHIS HYPOGAEA* L. Fabaceae. Peanut.

From Brazil. Seeds presented by Mario Pereira Ramos, Sub-Assistente, Ministerio da Agricultura, Campo de Sementes de Fumo de S. Gonçalo dos Campos, Bahia.

Seeds from seedling plants, collected in the region of Bahia; introduced for Department specialists.

112102 to 112108. *SACCHARUM*. Poaceae. Sugarcane.

From Tahiti, Society Islands. Cuttings collected by E. W. Brandes, Bureau of Plant Industry. Received September 3, 1935.

Introduced for Department specialists.

112102. No. T-1. 112106. No. T-5.

112103. No. T-2. 112107. No. T-6.

112104. No. T-3. 112108. No. T-7.

112105. No. T-4.

## 112109 to 112112.

From India. Bulbs purchased from Mrs. P. Kohli, Baramula, Kashmir. Received September 4, 1935.

Introduced for Department specialists.

112109. *COLCHICUM LUTEUM* Baker. Melanthiaceae.

A spring-blooming colchicum with few fleshy strap-shaped leaves about 9 inches long and one to three golden-yellow flowers over an inch across. Native to the temperate Himalayas from 4,000 to 7,000 feet altitude.

112110. *CROCUS SATIVUS* L. Iridaceae. Saffron.

Received as "cashmerianus," a geographic form.

For previous introduction see 47577.

112111. *LILIUM THOMSONIANUM* (D. Don) Lindl. Liliaceae. Thomson lily.

A lily of unusual appearance, suggesting in habit *Fritillaria*, *Ornithogalum*, and *Hosta*. The erect stem is over a foot high, and the narrow grasslike leaves are mostly crowded at the base of the stem. The pale-mauve or rosy bell-shaped drooping flowers with deep-purple anthers are over an inch long and in a terminal raceme containing 8 to 10 flowers. This lily is native to mild-wintered regions of the Himalayas from western China to northern India.

For previous introduction see 58490.

112112. *STERNBERGIA FISCHERIANA* (Herb.) Roem. Amaryllidaceae.

A spring-blooming *Sternbergia* with strap-shaped leaves about a foot long and one to four bright-yellow flowers, the segments over an inch long. Native to the Caucasus region.

112113 and 112114. *PISTACIA WEINMANNIFOLIA* Poiss. Anacardiaceae.

From China. Seeds presented by Dr. J. F. Rock, Yunnanfu, Yunnan. Received September 4, 1935.

Introduced for Department specialists.

A handsome evergreen tree up to 60 feet high, with shining dark-green, pinnate leaves about 6 inches long and red fruits the size of peas. Native to southwestern China at altitudes of 3,000 to 5,000 feet.

112113. From Ta Ku district, Likiang, eastern slope of the northern end of the Likiang Snow Range, a hot dry place that in the summer gets plenty of rain.

112114. From the Yangtze Valley, a 3-day journey west of Likiang on the western slopes of the Likiang Snow Range.

**112115. NICOTIANA TABACUM L. Solanaceae. Common tobacco.**

From Honduras. Seeds collected by Raymond Stadelman, Bureau of Plant Industry. Received September 5, 1935.

Introduced for Department specialists.

*Chichicaste.* From Portillo Grande, Yorito, Departamento Yoro; June 1935 at 4,100 feet altitude.

**112116. ULMUS PUMILA PILOSA Rehder. Ulmaceae. Chinese elm.**

From China. Seeds presented by Dr. Albert N. Steward, College of Agriculture and Forestry, Nanking University, Nanking. Received April 28, 1934. Numbered in September 1935.

F. 110. From Chung Shen Park, Kwei Ling Kian. A variety of the Chinese elm with the young branchlets densely pilose and reddish brown and the leaves pubescent.

**112117 to 112119.**

From Cuba. Seeds presented by Robert M. Grey, Superintendent, Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos, through F. G. Walsingham. Received September 22, 1935.

Introduced for Department specialists.

**112117. HARRISIA ERIOPHORA (Pfeiff.) Britton. Cactaceae.**

A tall subcylindrical-stemmed cactus, native to Cuba. The large white flowers are nocturnal.

For previous introduction see 87512.

**112118. KALANCHOE BLOSSFELDIANA Poellnitz. Crassulaceae.**

Received from the Parks Department of Port Elizabeth, South Africa.

**112119. STACHYTARPHETA INDICA (L.) Vahl. Verbenaceae.**

Received from the Agri-Horticultural Society of Madras.

**112120 to 112122.**

From France. Seeds presented by R. Salgues, Directeur de Station Botanique de Brignoles. Received September 14, 1935.

Introduced for Department specialists.

**112120. CALYCOTOME SPINOSA (L.) Link. Fabaceae.**

A low spiny shrub, about 5 feet high, with trifoliate leaves, hairy beneath, and yellow flowers about three-fourths of an inch long. Native to the Mediterranean region.

For previous introduction see 101411.

**112121. CENTAUREA CONIFERA L. Asteraceae.**

A white-woolly perennial about 1 foot high, with large heads of purple or purple-brown flowers. Native to southern Europe.

**112122. DIANTHUS BALBISII Ser. Silenaceae.**

A herbaceous perennial 2 feet or less in height, with flat straight linear-lanceolate leaves about 3 inches long and rosy or purple flowers in small heads. Native to southern Europe.

For previous introduction see 105016.

**112123 to 112125. SACCHARUM. Poaceae. Sugar cane.**

From the Cook Islands. Cuttings collected at Rarotonga Island by E. W. Brandes, Bureau of Plant Industry. Received September 16, 1935.

Introduced for Department specialists.

**112123.** No. T-1. **112125.** No. T-3.

**112126 to 112194. NICOTIANA TABACUM L. Solanaceae. Tobacco.**

From Mexico. Seeds collected by W. A. Archer, Bureau of Plant Industry. Received September 13, 1935.

Introduced for Department specialists.

**112126 to 112128. Bonanza.**

**112126.** No. 3438. Collected August 23, 1935, at Santiago Ixcuintla, Nayarit.

**112127.** No. 3443. Collected August 24, 1935, at El Nuevo, Nayarit.

**112128.** No. 3456. Collected August 31, 1935, at Santiago Ixcuintla, Nayarit.

**112129.** No. 3445. *Burley huero.* Collected August 24, 1935, at El Nuevo, Nayarit.

**112130.** No. 3447. *Burley negro.* Collected August 24, 1935, at El Nuevo, Nayarit.

**112131.** No. 3458. *Cash.* Collected August 31, 1935, at Santiago Ixcuintla, Nayarit.

**112132 to 112165. Córdoba type tobacco,** collected in August 1935. Furnished by El Aguila cigarette factory of Mexico City.

**112132.** No. 3457. From Santiago Ixcuintla, Nayarit.

Nos. 112133 to 112165 were collected in the State of Veracruz in August 1935.

**112133.** No. 3467. From Tecama.

**112134.** No. 3468. From Monte Blanco.

**112135.** No. 3469. *Mata de caña.* From San Juan de la Punta.

**112136.** No. 3470. From Hacienda La Capilla.

**112137.** No. 3471. From Tecamilla.

**112138.** No. 3472. From Tecama.

**112139.** No. 3473. From Cuautlapa.

**112140.** No. 3474. From Monte Blanco.

**112141.** No. 3475. From San Lorenzo.

**112142.** No. 3476. From Monte Blanco.

**112143.** No. 3477. From Coapichapa.

**112144.** No. 3478. From Hacienda Buenavista.

**112145.** No. 3479. From Cerro La Totola.

**112146.** No. 3480. From El Gallego.

**112147.** No. 3481. From Cerro La Totola.

**112148.** No. 3482. From Coapichapa.

**112149.** No. 3483. From Sumidero.

**112150.** No. 3484. From Cerro La Totola.

**112151.** No. 3485. From El Gallego.

**112152.** No. 3486. From Sumidero.

**112153.** No. 3487. From Lagunilla.

## 112126 to 112194—Continued.

112154. No. 3488. From Barranca, San Miguel.
112155. No. 3489. From Tecamilla.
112156. No. 3490. From Sumidero.
112157. No. 3491. From Coapichapa.
112158. No. 3492. From La Cumbre, Escamela.
112159. No. 3493. From the Trapiche Mesa, San Juan de la Punta.
112160. No. 3494. From Dos Caminos, San Juan de la Punta.
112161. No. 3495. From San Juan de la Punta.
112162. No. 3496. From San Juan de la Punta.
112163. No. 3497. From San Juan de la Punta.
112164. No. 3498. From San Juan de la Punta.
112165. No. 3499. From San Juan de la Punta.
- 112166 and 112167. *Oriollo*, collected August 19, 1935, at La Piedad, Michoacan.
112166. No. 3433. 112167. No. 3435.
- 112168 to 112170. *Jamaica*. Collected in the State of Nayarit.
112168. No. 3441. From Santiago Ixcuintla, August 24, 1935.
112169. No. 3448. From El Nuevo, August 24, 1935.
112170. No. 3459. From Santiago Ixcuintla, August 31, 1935.
112171. No. 3466. *Negro apilador*. From San Antonio, Gutierrez-Zamora, Veracruz, August 29, 1935.
112172. No. 3444. *Orinoco*. Collected August 24, 1935, at El Nuevo, Nayarit.
112173. No. 3455. *Orinoco*. From Navolato, Sinaloa, August 30, 1935.
112174. No. 3439. *Orinoco blanco*. Collected August 23, 1935, at Santiago Ixcuintla, Nayarit.
112175. No. 3460. *Orinoco hoja ancha*. Collected August 31, 1935, at Santiago Ixcuintla, Nayarit.
112176. No. 3446. *Orinoco huero*. Collected August 24, 1935, at El Nuevo, Nayarit.
- 112177 and 112178. *Orinoco negro*. Collected August 23, 1935, at Santiago Ixcuintla, Nayarit.
112177. No. 3437. 112178. No. 3440.
112179. No. 3449. Cultivated at Tuxpan, Nayarit, August 26, 1935. A mixed sample containing *Orinoco negro*, *Vallejano*, *Oubano*, and perhaps others.
112180. No. 3462. *San Andres Tuatla*. Collected August 29, 1935, at Los Tuxtlas, Veracruz.
112181. No. 3500. *Tabaco mulato*. Collected August 20, 1935, at San Juan de La Punta, Veracruz.
112182. No. 3436. *Tabaco corriente*. From Guadalajara, Jalisco, August 20, 1935.
112183. No. 3454. *Vallejano*. From Puerto Vallarta, Jalisco, August 30, 1935.

## 112126 to 112194—Continued.

- 112184 to 112186. *Vena amarilla*. Collected August 29, 1935, in the State of Veracruz.
112184. No. 3463. From Gutierrez-Zamora.
112185. No. 3464. From Joloapan.
112186. No. 3465. From Puerto Rico.
- 112187 to 112189. *Virginia*.
112187. No. 3442. Collected August 24, 1935, at Santiago Ixcuintla, Nayarit.
112188. No. 3450. Collected August 27, 1935, at Acaponeta, Nayarit.
112189. No. 3461. Collected August 31, 1935, at Cuicatlan, Oaxaca.
112190. No. 3451. Collected August 27, 1935, at Tecuala, Nayarit.
112191. No. 3432. A commercially cultivated variety, collected August 17, 1935, at Morelia, Michoacan.
112192. No. 3434. A volunteer plant from La Piedad, Michoacan, August 19, 1935.
- 112193 and 112194. Mixed samples of locally grown seed from Tecuala, Nayarit, August 27, 1935.
112193. No. 3452. 112194. No. 3453.
- 112195 and 112196. *EUPHORBIA INTISY* Drake. Euphorbiaceae.
- From Madagascar. Plants presented by Miss Bargyla Rateaver, Fort Dauphin. Received September 18, 1935.
- Introduced for Department specialists.
- An arborescent succulent about 12 feet high, native to southern Madagascar. It has gray bark, dichotomous or somewhat whorled branches, and minute scattered leaves. The small and inconspicuous greenish flowers are in very short cymes near the tips of the branches.
- For previous introduction see 99378.
- 112197 to 112199. *MEDICAGO SATIVA* L. Fabaceae. Alfalfa.
- From Italy. Seeds presented by Dr. E. Pantanelli, Director, Stazione Agraria Sperimentale, Bari. Received September 13, 1935.
- Introduced for Department specialists.
112197. *Bengasina*.
112198. *Emiliana C. R.*
112199. *Molisana*.
- 112200 to 112209. *NICOTIANA TABACUM* L. Solanaceae. Tobacco.
- From Mexico. Seeds collected by W. A. Archer, Bureau of Plant Industry. Received September 17, 1935.
- Introduced for Department specialists.
112200. No. 3502. Cordoba type. Collected September 5, 1935, on the Hacienda Zonquimixtia, Tezuitlan, Puebla.
- 112201 to 112203. Collected September 9, 1935, at Ojiltlan, Oaxaca.
112201. No. 3509. *Criollo*.
112202. No. 3508. *Habanero blanco*.
112203. No. 3510. *Habanero legitimo*.

## 112200 to 112209—Continued.

112204. No. 3504. *Valle nacional*. Collected August 31, 1935, at Tuxtepec, Oaxaca.
112205. No. 3501. *Vena amarilla*. From Martinez de La Torre, Veracruz, September 5, 1935.
112206. No. 3507. From Escamela, Veracruz, September 9, 1935.
112207. No. 3505. *Tlapacoyan*. From Martinez de La Torre, Veracruz, September 9, 1935.
112208. No. 3506. From Merida, Yucatan, September 9, 1935.
112209. No. 3503. From San Andres, Veracruz, September 9, 1935.

## 112210 to 112219.

From Ecuador. Seeds collected by Mrs. Ynes Mexia, Bureau of Plant Industry. Received August 22, 1935.

Introduced for Department specialists.

112210. *ANAGALLIS ARVENSENSIS CAERULEA* (Schreb.) Ledeb. Primulaceae.

No. 7397-A. From Ibarra Canton, Provincia Imbabura, June 30, 1935.

112211. *BOMAREA* sp. Amaryllidaceae.

No. 7431-A.

112212. *LADENBERGIA MACROCARPA* (Vahl) Klotzsch. Rubiaceae.

No. 7459-A. *Cascarilla amarilla*. July 11, 1935. From Los Olivos, Canton Tulcan, Provincia Carchi. A small tree related to the cinchonas, with leathery, oblong-elliptic leaves about 2 inches long and terminal panicles of small fragrant white flowers. Native to Colombia.

112213 and 112214. *LAPLACEA INTERMEDIA* Benth. Theaceae.

*Roja*. An evergreen shrub, allied to *Gordonia*, with obovate-elliptic leaves and white flowers about 1 inch across. Native to Ecuador.

112213. No. 7460.

112214. No. 7460-A.

112215. *LYCOPERSICON ESCULENTUM* Mill. Solanaceae. Tomato.

No. 7404-A. July 1, 1935. Near Salinas, Canton Ibarra, Provincia Imbabura, at 5,000 feet altitude. A wild tomato with small crimson fruits, the size of marbles, borne in clusters like grapes.

112216. *MEDICAGO SATIVA* L. Fabaceae. Alfalfa.

No. 7406-A. June 30, 1935. Ibarra, Canton Ibarra, Provincia Imbabura, at about 7,000 feet altitude. Locally grown alfalfa presented by José Felix Tamayo.

112217. *PASSIFLORA* sp. Passifloraceae.

No. 7405-A. *Tacso*. June 28, 1935. Hacienda La Victoria, Canton Ibarra, Provincia Imbabura, at about 7,000 feet altitude. A granadilla with rose-pink flowers followed by oval yellow fruits.

112218. *URCEOLINA* sp. Amaryllidaceae.

No. 7450-A. Northeast of Angel, Canton Angel, Provincia Carchi, at about 7,000 feet altitude. An erect plant with orange flowers found growing among grass on the bank of a stream.

## 112210 to 112219—Continued.

112219. *OPUNTIA* sp. Cactaceae.

No. 7380-A.

112220 and 112221. *SACCHARUM*. Poaceae. Sugarcane.

From South Africa. Cuttings presented by H. H. Dodds, South African Sugar Association, Mount Edgecombe, Received September 20, 1935.

Introduced for Department specialists.

112220. *Striped Uba*.

112221. *Striped Co*. 281.

112222. *ILEX* sp. Aquifoliaceae. Holly.

From China. Seeds presented by Dr. Albert N. Steward, College of Agriculture and Forestry, Nanking University, Nanking. Received April 28, 1934. Numbered in September 1935.

Introduced for Department specialists.

No. F. 47. From Ta Tseh Tsuen, Yung Hsien.

112223. *CLEMATIS BOJERI* Hook. Ranunculaceae.

From Madagascar. Plant presented by Miss Bargyla Rateaver, Fort Dauphin. Received September 18, 1935.

Introduced for Department specialists.

An erect herbaceous clematis with pinnate leaves or the upper ones ternate and large terminal creamy-white flowers, marked with violet red. Native to Madagascar.

112224. *CARYOCAR NUCIFERUM* L. Caryocaraceae. Sawarri nut.

From South America. Seeds presented by Dr. J. Stahel, Landbouw-Proefstation, Paramaribo, Surinam. Received September 10, 1935.

Introduced for Department specialists.

From the Nickerie district, Paramaribo. A lofty tree, eventually 100 feet high, with trifoliate leaves and large purple flowers with very numerous white stamens. The large fruit, several inches in diameter, contains two to four flat kidney-shaped nuts with edible white almondlike meat. Native to British Guiana.

For previous introduction see 106370.

112225. *NEOMAMMILLARIA* sp. Cactaceae.

From Mexico. Plants collected by Dr. Donald Reddick, Cornell University, and Max Souviron, Bureau of Plant Industry. Received November 19, 1930. Numbered in September 1935.

Collected southeast of Real del Monte. A globular cactus, about 2 inches in diameter, with three or four stout pale-brown central spines and about 20 bristly white radical spines from each areola.

112226 to 112231. *NICOTIANA* spp. Solanaceae. Tobacco.

From Mexico. Seeds collected by W. A. Archer, Bureau of Plant Industry. Received September 25, 1935.

Introduced for Department specialists.

## 112226 to 112231—Continued.

112226 to 112229. *NICOTIANA TABACUM* L.

Collected September 12 and 13, 1935, at Oaxaca, Oaxaca.

112226. No. 3511. A volunteer plant with white flowers.

112227. No. 3512. A volunteer plant 8 feet high with pink flowers.

112228. No. 3513. *Tabaquillo*. A wild tobacco used to make cigarettes, but of poor quality.112229. No. 3514. *Tabaquillo*. A volunteer plant 8 feet high; a common tobacco of this region; grows in gardens, waste places, or even on house-tops.112230. *NICOTIANA* sp.

No. 3515. September 12, 1935, Oaxaca, Oaxaca. Plants 6 to 8 inches high, growing in the streets of the city.

112231. *NICOTIANA* sp.No. 3516. *Tabaco monteís*. Mitla, Oaxaca, September 13, 1935. Plants 12 to 18 inches high, common in this section especially on Mitla ruins.112232. *PHLEUM PRATENSE* L. Poaceae. Timothy.

From Sweden. Seeds presented by Dr. G. Nilsson Leissner, Allmänna Svenska Ut-sädesaktiebolaget, Svalöf. Received September 23, 1935.

Introduced for Department specialists.

*Svalöf No. 968.*112233. *CAPSICUM ANNUM* L. Solanaceae. Common redpepper.

From Spain. Seeds purchased through Samuel R. Thompson, American consul, Valencia. Received September 23, 1935.

Introduced for Department specialists.

A large sweet Spanish pepper.

112234 to 112243. *NICOTIANA TABACUM* L. Solanaceae. Tobacco.

From Mexico. Seeds collected by W. A. Archer, Bureau of Plant Industry. Received September 26, 1935.

Introduced for Department specialists.

112234 and 112235. Collected August 29, 1935, at El Verde, Sinaloa.

112234. No. 3520. 112235. No. 3524.

112236. No. 3523. *Bonanza*. Collected August 14, 1935, at Santiago Ixcuintla, Nayarit.112237. No. 3521. *Cash*. Collected August 14, 1935, at Santiago Ixcuintla, Nayarit.112238. No. 3526. *Orinoco*. Collected August 30, 1935, at Acaponeta, Nayarit.112239. No. 3522. *Orinoco blanco*. Collected August 14, 1935, at Santiago Ixcuintla, Nayarit.112240. No. 3528. *Orinoco claro*. Collected September 7, 1935, at Puerto Vallarta, Jalisco.112241. No. 3525. *Orinoco negro*. Collected August 30, 1935, at Acaponeta, Nayarit.

## 112234 to 112243—Continued.

112242. No. 3529. *Orinoco oscuro*. Collected September 7, 1935, at Puerto Vallarta, Jalisco.112243. No. 3527. *Virginia*. Collected August 30, 1935, at Acaponeta, Nayarit.112244. *HEVEA BRASILIENSIS* (H. B. K.) Muell. Arg. Euphorbiaceae.

Para rubber tree.

From Cuba. Seeds presented by Robert M. Grey, Superintendent, Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos, through F. G. Walsingham. Received September 25, 1935.

Introduced for Department specialists.

112245. *PACHYRHIZUS EROSUS* (L.) Urban. Fabaceae. Yam bean.

From Mexico. Tubers collected by W. A. Archer, Bureau of Plant Industry. Received September 25, 1935.

Introduced for Department specialists.

No. 3519. *Jicamo*. From the market at Oaxaca de Juarez, Oaxaca, September 12, 1935.

For previous introduction see 22971.

112246. *TERMINALIA OKARI* C. T. White. Combretaceae. Okari nut.

From the Society Islands. Seeds presented by Harrison W. Smith, Papeari, Tahiti. Received September 23, 1935.

Introduced for Department specialists.

Collected in Sangara, Territory of Papua, Australia. A tall evergreen tree, native to New Guinea, with large reddish purple edible nuts that are said to be excellent, either raw or cooked.

## 112247 and 112248.

From Cuba. Seeds presented by F. G. Walsingham, Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos. Received September 7, 1935.

Introduced for Department specialists.

112247. *CEREUS HEXAGONUS* (L.) Mill. Cactaceae.

A tall columnar cactus up to 45 feet high, branching at the base, the joints usually six-angled. The flowers are 8 to 10 inches long, with the outer segments purple and the inner ones white. The ovoid edible fruits, 3 to 6 inches long, have white or pinkish pulp. It is native to the West Indies and the northern part of South America.

For previous introduction see 101491.

112248. *VERNONIA* sp. Asteraceae.

From the Horticultural Section, Giza, Egypt.

112249. *SESAMUM RADIATUM* Schum. Pedaliaceae.

From Africa. Seeds presented by the Directeur, Jardin Botanique D'Éala, Coquilhatville, Belgian Congo. Received September 20, 1935.

An erect oil-producing species, closely related to the sesame of commerce; introduced for Department specialists.

For previous introduction see 100991.



**112250. ARACHIS HYPOGAEA L. Fabaceae. Peanut.**

From Brazil. Seeds presented by the Director, Instituto de Biologia Vegetal, Jardim Botânico, Rio de Janeiro. Received September 27, 1935.

*Amendoim*; introduced for Department specialists.

**112251. PHELEUM PRATENSE L. Poaceae. Timothy.**

From Wales. Seeds purchased from the Welsh Plant Breeding Station, Aberystwyth. Received September 28, 1935.

*S. 50, Extreme pasture strain*; introduced for Department specialists.

**112252 to 112257. CAMPANULA CARPATICA Jacq. Campanulaceae. Carpathian bellflower.**

From England. Plants purchased from Pritchard & Sons, Christ Church, Hants. Received September 30, 1935.

Introduced for Department specialists.

112252. *Elegant.*

112253. *Harmony.*

112254. *Harvest Moon.*

112255. *Princess.*

112256. *Viscountess Byng.*

112257. *White Star.*

**112258 to 112262. ARACHIS HYPOGAEA L. Fabaceae. Peanut.**

From Uruguay, South America. Seeds presented by the Director of the Jardin Botánico, Montevideo. Received September 28, 1935.

A collection of native varieties introduced for Department specialists.

112258. *Bunch.*

112259. *Jumbo.*

112260. From the Departamento de Rivera.

112261. From Brazil.

112262. *Valencia.*

**112263. FEROCACTUS COVILLEI Britt. and Rose. Cactaceae.**

From Arizona. Seeds presented by F. J. Crider, Boyce Thompson Arboretum, Superior. Received April 9, 1932. Numbered in September 1935.

Introduced for Department specialists.

A globular or short-cylindric cactus about 5 feet high, with 20 to 30 thin high ribs and stout straight or hooked annulate spines 2 to 3 inches long, varying from red to white. The flowers, about 3 inches long, vary in color from yellow to crimson. Native to the southwestern United States and northern Mexico.

**112264 and 112265.**

From Mexico. Seeds collected by W. A. Archer, Bureau of Plant Industry. Received September 25, 1935.

Introduced for Department specialists.

**112264 and 112265—Continued.**

**112264. DAHLIA COCCINEA Cav. Asteraceae.**

No. 3517. A wild dahlia, collected September 12, 1935, at Monte Albán, Oaxaca. A species with small single orange flowers.

**112265. ZINNIA sp. Asteraceae.**

No. 3518. A wild zinnia, collected September 12, 1935, at Monte Albán, Oaxaca.

**112266. CALAMUS ORNATUS Blume. Phoenicaceae. Rattan.**

From the Philippine Islands. Seeds presented by Arthur Fischer, Director of Forestry, Manila. Received September 26, 1935.

Introduced for Department specialists.

**112267 to 112292.**

From Manchuria. Seeds collected by the Asiatic Expedition. Received September 30, 1935.

Introduced for Department specialists.

**112267 and 112268. ACONITUM KUSNEZOFFII Reichenb. Ranunculaceae. Monkshood.**

An erect hardy herbaceous perennial, native to northeastern Asia, with terminal clusters of bluish flowers.

For previous introduction see 110479.

112267. No. 13. IV. From Barim, September 27, 1934.

112268. No. 14. IV. From Barim, September 30, 1934.

**112269. ALLIUM SENESCENS L. Liliaceae. No. 7. IV. From Barim.**

**112270. ASTRAGALUS sp. Fabaceae.**

No. 17. IV. September 4, 1934. Collected along the road from Hallar to Ganjour Monastery, Barga District.

**112271 and 112272. CIMICIFUGA DAHURICA (Turcz.) Huth. Ranunculaceae.**

From Barim. A tall hardy perennial with large decomposed leaves and paniculate racemes of small white flowers. Native to central Asia.

112271. No. 11. IV. September 28, 1934.

112272. No. 12. IV. October 1, 1934.

**112273. CLEMATIS GLAUCA ANGUSTIFOLIA Ledeb. Ranunculaceae.**

No. 10. IV. Barim, September 28, 1934. A slender woody climber with the leaflets three-parted into narrowly linear-lanceolate segments. The nodding, bell-shaped yellow flowers, 1 to 2 inches across, are borne in few-flowered, axillary cymes. Native to Mongolia.

For previous introduction see 92773.

**112274. CONVALLARIA MAJALIS L. Convallariaceae. Lily-of-the-valley.**

No. 2. IV. From Barim, October 2, 1934.

**112275. CORYLUS HETROPHYLLA Fisch. Betulaceae. Hazelnut.**

No. 9. IV. From Barim, September 30, 1934. A hardy shrubby hazel up to 12 feet high, with nuts about one-fourth of an inch long. Native to northeastern Asia.

For previous introduction see 69884.

## 112267 to 112292—Continued.

112276. *EPHEDRA* sp. Gnetaeaceae.

No. 1. IV. August 8, 1934. From sand dunes, vicinity of Khankai-nur, Barga District.

112277. *HYPERICUM ASCYRON* L. Hypericaceae. St. Johnswort.

No. 20. IV. October 1, 1934. From the shore of the Yal River near Barim.

112278. *IRIS DICHOTOMA* Pall. Iridaceae. Vesper iris.

No. 8. IV. Near Barim, October 28, 1934. An iris with flower stems up to 2 feet tall and fugitive flowers which vary from white to lavender, produced freely in late summer.

For previous introduction see 90154.

112279 and 112280. *LILIUM CONCOLOR* Salisb. Liliaceae. Morningstar lily.

Collected near Barim.

For previous introduction see 69020.

112279. No. 5. IV. October 2, 1934.

112280. No. 6. IV. September 30, 1934.

112281. *LINUM PERENNE* L. Linaceae. Perennial flax.

No. 18. IV. Near Barim, September 29, 1934.

112282. *PARNASSIA PALUSTRIS* L. Saxifragaceae. Grass-of-Parnassus.

No. 15. IV. October 1, 1934, in the vicinity of Harbin.

112283. *PEDICULARIS* sp. Scrophulariaceae.

No. 22. IV. Near Barim, October 2, 1934.

112284. *PRUNUS PADUS* L. Amygdalaceae. European bird-cherry.

No. 16. IV. September 13, 1934. From the valley of the Bain-gol River along the road from Hailar to Khandagai.

112285. *RHAMNUS DAVURICA* Pall. Rhamnaceae. Dahurian buckthorn.

No. 19. IV. From Khandagai, Barga District, September 10, 1934. A large spreading shrub or small tree up to 20 feet high, with oblong leaves 2 to 4 inches long, greenish flowers, and black berries less than half an inch in diameter. Native to northeastern Asia.

For previous introduction see 69889.

112286. *SWERTIA DILUTA* (Turcz.) Benth. and Hook. f. Gentianaceae.

No. 21. IV. Near Barium, September 29, 1934. A low herbaceous perennial about a foot high, with lanceolate leaves and small pale-blue flowers in a dense fastigiate umbel. Native to eastern Asia.

112287 and 112288. *TARAXACUM* spp. Cichoriaceae.

Collected September 28 and 29, 1934, near Barim.

112287. No. 24. IV.

112288. No. 25. IV.

112289 and 112290. *VERATRUM NIGRUM* L. Melanthiaceae. False-hellebore.

## 112267 to 112292—Continued.

A hardy herbaceous perennial up to 3 feet high, with broad leaves about 1 foot long and small blackish-purple flowers in terminal panicles. Native to Europe and Asia.

112289. No. 3. IV. September 28, 1934, near Barim.

112290. No. 4. IV. September 30, 1934, near Barim.

112291. *VIBURNUM SARGENTI* Koehne. Caprifoliaceae. Sargent cranberrybush.

No. 23. IV. September 29, 1934. In the vicinity of Barim. A strong-growing shrub 12 to 15 feet high, somewhat resembling *Viburnum opulus*, with broadly ovate, three-lobed leaves and heavy clusters of attractive bright-red fruits.

For previous introduction see 101909.

112292. (Undetermined.)

No. 26. IV. Near Barim, October 1, 1934.

112293. *NIEREMBERGIA GRACILIS* Hook, Solanaceae.

From Egypt. Seeds presented by the Horticultural Section, Giza, through F. G. Walsingham, Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos, Cuba. Received September 7, 1935.

Introduced for Department specialists.

A tufted perennial with slender ascending stems about 6 inches high, small narrow linear leaves, and showy light-lavender flowers, darker near the center and yellow in the throat, about 1 inch across. Native to Argentina.

112294. *LITCHI CHINENSIS* Sonner. Sapindaceae. Lychee.

From China. Plants presented by Col. Clyde S. Ford, United States Postal Agency, Shanghai. Received July 24, 1923. Numbered in September 1935.

Introduced for Department specialists.

No. 10.

For previous introduction see 111949.

## 112295 to 112304.

From Colombia and Ecuador. Seeds collected by Mrs. Ynes Mexia, Bureau of Plant Industry. Received September 18, 1935.

Introduced for Department specialists.

112295 to 112297. *BOMAREA* spp. Amaryllidaceae.112295. *BOMAREA* sp.

No. 7551-A. Near the village of Toño, on the north flank of the Volcan de Chiles, Departamento Nariño, Colombia, July 29, 1935, at 11,000 feet altitude. A vine found growing in hedgerows; flowers not seen.

112296. *BOMAREA* sp.

No. 7637-A. *Pecca*. Along the road from Pun to Tulcan, Canton Tulcan, Provincia Carchi, Ecuador, August 15, 1935, at 9,800 feet altitude. A twining plant with crimson flowers, the inner segments shading to orange with no flecks.

## 112295 to 112304—Continued.

## 112297. BOMAREA sp.

No. 7553-A. *Peca*. From Santa Rosa, Canton Espejo, Provincia Carchi, Ecuador, July 29, 1935, at 6,000 feet altitude. A twining plant growing over shrubs. The flowers are orange to yellow on the outside and pale yellow inside.

## 112298. CHAMAEDOREA sp. Phoenicaceae.

No. 7556-A. *Moquillan*. Along the trail from Mayasquer to Santa Rosa beside the Rio Chilma Canton Espejo, Provincia Carchi, Ecuador, July 29, 1935, at 6,500 feet altitude. A small palm about 10 feet high found growing in the undergrowth of dense forest on the mountain-side.

## 112299. LADENBERGIA MACROCARPA (Vahl) Klotzsch. Rubiaceae.

No. 7575-A. *Cascarilla cimaruna*. Along the trail from Mayasquer to Cascarilla to Tambo, Distrito Nariño, Colombia, in a forest at 10,000 feet altitude, August 12, 1935.

For previous introduction and description see 112212.

## 112300. DATURA ROSEI Safford. Solanaceae.

No. 7438-A. South of Angel, Canton Angel, Provincia Carchi, Ecuador, July 6, 1935. *Gwanto*. A small tree or shrub found in hedgerows between fields. The flowers are dark red with green veins; commonly cultivated as an ornamental by the Indians of the highlands of Ecuador.

For previous introduction see 58362.

## 112295 to 112304—Continued.

## 112301. FUCHSIA UMBROSA Benth. Onagraceae.

No. 7561-A. Collected July 31, 1935, at Santa Rosa, Provincia Carchi, Ecuador.

## 112302. LAPLACEA INTERMEDIA Benth. Theaceae.

No. 7460-A. *Cascarilla rosa*. From Los Olivos, Canton Tulcan, Provincia Carchi, Ecuador, July 11, 1935.

For previous introduction and description see 112214.

## 112303. PHASEOLUS LUNATUS L. Fabaceae. Lima bean.

No. 7425-A. *Frejol torta*. From Hacienda La Victoria, Canton Barya, Provincia Imbabura, Ecuador, July 3, 1935. A vine with white flowers and spotted seeds, collected at 7,000 feet altitude.

## 112304. URCEOLINA sp. Amaryllidaceae.

No. 7450-A. From Ecuador. (Received without further notes.)

## 112305 and 112306.

From Africa. Seeds presented by R. Anderson, Yapata Estate, Kitale, Kenya Colony. Received September 23, 1935.

Introduced for Department specialists.

## 112305. ASCLEPIAS sp. Asclepiadaceae.

## 112306. GALACTIA sp. Fabaceae.

A vine with yellow flowers.



## INDEX OF COMMON AND SCIENTIFIC NAMES

*Aconitum kusnezoffii*, 112267, 112268.  
*Actinidia chinensis*, 112053.  
*Aeria attenuata*, 111878.  
*Agrostis tenuis*, 111985, 111986.  
 Alfalfa. See *Medicago sativa*.  
*Allium cepa*, 111943.  
     *sativum*, 112021.  
     *senescens*, 112269.  
*Amgdalus persica*, 111916-111922, 112032-112035, 112054, 112055.  
     *persica nectarina*, 111923-111926.  
*Anagallis arvensis caerulea*, 112210.  
*Ananas comosus*, 112066.  
*Anthurium* sp., 112067.  
 Apple. See *Malus sylvestris*.  
 Apricot. See *Prunus armeniaca*.  
*Arachis hypogaea*, 111862-111868, 111880, 111881, 111883-111885, 111932, 111933, 111938-111940, 111957-111963, 111965, 111992, 112077, 112078, 112101, 112250, 112258-112262.  
     *nambiquarae*, 111882, 111934, 111964.  
*Archontophoenia alexandrae*, 111941.  
*Asclepias* sp., 112305.  
 Ash. See *Fraxinus holotricha*.  
*Astragalus* spp., 112043, 112270.  
*Astrelia lappacea*, 111876.  
 Avocado. See *Persea americana*.  
  
 Bamboo, Narihira. See *Semiarundinaria fastuosa*.  
 Bean, lima. See *Phaseolus lunatus*.  
 Bellflower, Carpathian. See *Campanula carpatica*.  
 Blackberry. Colombian. See *Rubus macrocarpus*.  
*Bomarea* spp., 112211, 112295-112297.  
*Brassica rapa*, 111937.  
 Buckthorn, Dahurian. See *Rhamnus davurica*.  
  
*Calamus ornatus*, 112266.  
*Calligonum arborescens*, 112044.  
     *caput-medusae*, 112045.  
     *comosum*, 112046.  
     *setosum*, 112047.  
*Calypurnia aurea*, 112081.  
*Calycotome spinosa*, 112120.  
*Campanula carpatica*, 112252-112257.  
*Capitium annuum*, 112233.  
 Capulin. See *Prunus capuli*.  
*Carica papaya*, 111998, 111999, 112052.  
*Caryocarp nuciferum*, 112224.  
*Cassia surattensis*, 112082.  
*Casuarina acuarina*, 111988.  
     *grevilleoides*, 111989.  
     *helmsti*, 111990.  
     *rumphiana*, 111987.  
     *suderosa*, 112083.  
     *trichodon*, 111991.  
*Centaurea confisera*, 112121.  
*Cereus heaegonus*, 112247.  
*Ceroaylon andicola*, 112100.  
*Chamaedorea* sp., 112298.  
 Cherry, European bird. See *Prunus padus*.  
     sweet. See *P. avium*.  
*Cimicifuga dahurica*, 112271, 112272.  
*Citrus* sp., 112057.  
     *grandis*, 112020, 112058.  
     *limonia*, 111860, 111956.  
     *myrtifolia*, 111942.  
     *nobilis delictosa*, 111955, 112059.  
     *sinensis*, 111950-111954, 111993.

*Olematis bojerti*, 112223.  
     *glauca angustifolia*, 112273.  
 Clover, subterranean. See *Trifolium subterraneum*.  
*Coffea zanguebariae*, 111858.  
*Cois lacryma-jobi*, 112018-112016.  
*Colchicum luteum*, 112109.  
*Convallaria majalis*, 112274.  
*Cortaderia selloana*, 111859.  
*Corylus heterophylla*, 112275.  
 Cranberrybush, Sargent. See *Viburnum sargentii*.  
*Crocus sativus*, 112110.  
*Cupressus glabra*, 112084.  
     *torulosa*, 112085.  
 Cypress, Bhutan. See *Cupressus torulosa*.  
     smooth. See *C. glabra*.  
  
*Dahlia coccinea*, 112264.  
*Datura rosei*, 112300.  
*Delphinium Hkianseense*, 112030.  
*Dianthus barbatus*, 112122.  
*Dioon* sp., 111952.  
*Diospyros kaki*, 112060, 112061.  
*Dovyalis abyssinica*, 112086.  
*Duranta repens*, 112087.  
  
 Elm, Chinese. See *Ulmus pumila pilosa*.  
     smooth leaf. See *U. foliacea*.  
*Ephedra* sp., 112276.  
     *distachya*, 112092.  
*Eucalyptus caesia*, 111870.  
     *crucis*, 111871.  
     *erythrocorys*, 111872.  
     *macrocarpa*, 111873.  
     *preissiana*, 111874.  
     *pyriformis*, 111875.  
*Euphorbia antisy*, 112195, 112196.  
*Euphorbia aldaya*, 111861, 111879.  
  
*Ferocactus covillei*, 112263.  
*Ferula litwinowiana*, 112048.  
 Fescue. See *Festuca* spp.  
     meadow. See *F. elatior*.  
     sheep. See *F. ovina*.  
*Festuca* sp., 111977.  
     *amethystina*, 111969.  
     *elatior*, 111970.  
     *elatior arundinacea*, 111971.  
     *ovina*, 111972, 111973.  
     *ovina glauca*, 111974.  
     *ovina sulcata*, 111975.  
     *ovina vallesiaca*, 111976.  
 Flax, perennial. See *Linum perenne*.  
*Fraxinus holotricha*, 112093.  
*Fuchsia umbrosa*, 112301.  
  
*Galactia* sp., 112306.  
*Garcinia mangostana*, 112026.  
 Garlic. See *Allium sativum*.  
 Grapefruit. See *Citrus grandis*.  
 Grass. See *Saccharum spontaneum*.  
     canary. See *Phalaris* spp.  
     hook Mitchell. See *Astrelia lappacea*.  
     molasses. See *Melinis minutiflora*.  
     -of-Parnassus. See *Parnassia palustris*.  
     pampas. See *Cortaderia selloana*.  
     Toowoomba canary. See *Phalaris tuberosa*.  
  
*Harrisia eriophora*, 112117.  
 Hazelnut. See *Corylus heterophylla*.  
 Hellebore, false. See *Veratrum nigrum*.

- Hesperis* sp., 112094.  
*Hevea brasiliensis*, 112244.  
*Hibiscus*, 111886-111913.  
 Holly. See *Ilex* sp.  
*Hypericum ascyron*, 112277.  
  
*Ilex* sp., 112222.  
*Iris* spp., 111946, 111981.  
   *dichotoma*, 112278.  
   *lycotis*, 111944.  
   *paradoxa*, 111945.  
   *prismatica*, 111979.  
   *spuria halophila*, 111978, 111980.  
*Iris*, cubeseed. See *Iris prismatica*.  
   velvet. See *I. paradoxa*.  
   vesper. See *I. dichotoma*.  
  
*Jicama*. See *Pachyrhizus tuberosus*.  
 Jobs-tears. See *Cola weryma-jobi*.  
 Jointfir, common. See *Ephedra distachya*.  
*Jurinea darderioides*, 112049.  
  
*Kaki*. See *Diospyros kaki*.  
*Kalanchoe blossfeldiana*, 112118.  
  
*Ladenbergia macrocarpa*, 112212, 112299.  
*Laplacea intermedia*, 112213, 112214, 112302.  
 Larkspur. See *Delphinium likiangense*.  
 Lemon. See *Citrus limonia*.  
*Ligustrum vulgare*, 112095, 112096.  
*Lilium concolor*, 112279, 112280.  
   *thomsonianum*, 112111.  
 Lily, morningstar. See *Lilium concolor*.  
 Lily-of-the-valley. See *Convallaria majalis*.  
   Thomson. See *Lilium thomsonianum*.  
*Linum perenne*, 112281.  
*Litchi chinensis*, 111915, 111949, 112294.  
*Lupinus* sp., 111967.  
 Lychee. See *Litchi chinensis*.  
*Lycopersicon esculentum*, 112215.  
  
*Malus sylvestris*, 112062.  
 Mangosteen. See *Garcinia mangostana*.  
*Medicago sativa*, 111968, 112197-112199,  
   112216.  
*Melaleuca armillaris*, 112088.  
*Melinis minutiflora*, 112029.  
*Millettia oblata*, 112089.  
 Monkshood. See *Aconitum kusnezoffii*.  
 Mountain-ash, European. See *Sorbus aucu-*  
   *paria*.  
  
 Nectarine. See *Amygdalus persica nectarina*.  
*Neomammillaria* sp., 112225.  
*Nicotiana* sp., 112230, 112231.  
   *t a b a c u m*, 112115, 112126-112194,  
   112200 - 112209, 112226 - 112229,  
   112234-112243.  
*Nierembergia gracilis*, 112293.  
  
 Okari nut. See *Terminalia okari*.  
 Onion. See *Allium cepa*.  
*Opuntia* sp., 112219.  
 Orange. See *Citrus sinensis*.  
   mandarin. See *C. nobilis deliciosa*.  
  
*Pachyrhizus erosus*, 112245.  
   *tuberosus*, 111984.  
 Palm. See *Archontophoenix alexandrae* and  
   *Phoenix* spp.  
   date. See *Phoenix paludosa*.  
   wax. See *Ceroxylon andicola*.  
 Palma de coyof. See *Aeria attenuata*.  
 Papaya. See *Carica papaya*.  
*Parnassia palustris*, 112282.  
*Passiflora* sp., 112217.  
 Peach. See *Amygdalus persica*.  
 Peanutt. See *Arachis hypogaea*.  
 Pear. See *Pyrus communis*.  
  
*Pedicularis* sp., 112283.  
*Persea americana*, 112018, 112019.  
*Phalaris coerulescens*, 111994.  
   *tuberosa*, 111995-111997.  
*Phaseolus lunatus*, 112303.  
*Phleum pratense*, 112027, 112028, 112232,  
   112251.  
*Phoenix* spp., 111947, 111948.  
   *paludosa*, 111877.  
 Pineapple. See *Ananas comosus*.  
*Piper* sp., 112073.  
 Pistachio. See *Pistacia vera*.  
*Pistacia vera*, 112000-112012.  
   *weinmannifolia*, 112113, 112114.  
 Plum, Simon. See *Prunus simonii*.  
 Potato. See *Solanum tuberosum*.  
 Privet, European. See *Ligustrum vulgare*.  
*Prunus* spp., 112036-112040, 112056, 112063.  
   *armeniaca*, 111927, 111928, 112042.  
   *avium*, 111929-111931.  
   *capuli*, 111983.  
   *padus*, 112284.  
   *simonii*, 112031.  
*Pyrus communis*, 112064, 112065.  
  
 Raspberry, Andes. See *Rubus glaucus*.  
 Rattan. See *Calamus ornatus*.  
 Redpepper, common. See *Capsicum annum*.  
*Rhamnus davurica*, 112285.  
*Rheum turkestanicum*, 112050.  
 Rubbertree, Para. See *Hevea brasiliensis*.  
*Rubus glaucus*, 112041.  
   *macrocarpus*, 112017.  
  
*Saccharum*, 112079, 112102-112108, 112123-  
   112125, 112220, 112221.  
   *spontaneum*, 111914.  
 Saffron. See *Orocus sativus*.  
 St. Johnswort. See *Hypericum ascyron*.  
 Sawarri nut. See *Caryocarp nuciferum*.  
*Selaginella* sp., 112076.  
*Semiarundinaria fastuosa*, 112080.  
*Sesamum radiatum*, 112249.  
 Skyflower. See *Duranta repens*.  
*Solanum tuberosum*, 112022-112025.  
*Sorbus aucuparia*, 112097-112099.  
*Spathodea nilotica*, 112090.  
*Stachytarpheta indica*, 112119.  
*Sternbergia fischeriana*, 112112.  
 Sugarcane. See *Saccharum*.  
*Ncertia diluta*, 112286.  
*Syncarpia glomulifera*, 112091.  
  
*Taraxacum* spp., 112287, 112288.  
*Terminalia okari*, 112246.  
 Timothy. See *Phleum pratense*.  
 Tobacco. See *Nicotiana tabacum*.  
 Tomato. See *Lycopersicon esculentum*.  
*Trifolium subterraneum*, 111935, 111936.  
 Turnip. See *Brassica rapa*.  
  
*Ulmus foliacea*, 112051.  
   *pumila pilosa*, 112116.  
 Undetermined, 112068-112072, 112074,  
   112075, 112292.  
*Urceolina* spp., 112218, 112304.  
   *peruviana*, 111966.  
  
*Veratrum nigrum*, 112289, 112290.  
*Vernonia* sp., 112248.  
*Viburnum sargentii*, 112291.  
  
 Yam bean. See *Pachyrhizus erosus*.  
 Yangtao. See *Actinidia chinensis*.  
  
*Zephyranthes sessilis*, 111869.  
 Zephyrilly. See *Zephyranthes sessilis*.  
*Zinnia* sp., 112265.