INTRODUCTORY STATEMENT

Inventory No. 128 is a record of the plant material (Nos. 116966 to 118410) received by the Division of Plant Exploration and Introduction during the period from July 1 to September 30, 1936.

It records the first shipments of seeds and bulbs from H. L. Westover and F. L. Wellman, who left in the spring of 1936 for Turkey and Iran. The colder mountainous regions of these two countries, where agriculture has been the chief occupation for countless generations, offer a promising field for the collection of native strains of vegetables and fruits, especially in the markets and gardens of the more isolated villages and towns. Also included in these shipments were a number of grasses and forage plants from the semiarid parts of these countries.

The three agricultural explorers whose activities were discussed in the introductory statement of the preceding inventory (No. 127), Walter Koelz, W. A. Archer, and Raymond Stadelman, continued to send in material, during this period, from India, Brazil, and western South America, respectively. As before, the nature of the plant material received from them reflects the special needs of plant breeders and geneticists working with important crop plants.

The Department is again indebted to H. R. Wright, Auckland, New Zealand, who, during the past two decades, has presented material of new and little-known fruit varieties from his Avondale nursery. This shipment consists of plants of 25 different varieties of fruits (Nos. 117462 to 117486), including peaches, apples, plums, and several forms of citrus fruits, most of which have not been introduced before into this country.

Those concerned with ornamentals will be served by a rather small but unusual collection of seeds (Nos. 116983 to 116995) presented by Cheverton Buller, Stellenbosch, Union of South Africa. These represent native South African plants, mostly belonging to the Iridaceae and Proteaceae.

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., June 14, 1940.

247648—41—1
INVENTORY

Note.—This inventory is a historical record of plant material introduced for Department and other specialists. It is not to be considered as a list of plant material for distribution.

116966 to 116978.

From Turkey. Seeds collected by H. L. Westover and F. L. Wellman, Bureau of Plant Industry. Received July 6, 1936.


116966. No. 205. From the Konya bazar, April 18, 1936.

116967. No. 123. From the Ankara bazar, April 16, 1936.


No. 200. From the Konya bazar, April 18, 1936.

116969. Cistus sp. Cistaceae.

No. 400. Collected 25 km. northwest of Mersin, April 23, 1936.

116970. Clematis sp. Ranunculaceae.

No. 324. From 70 km 1° northwest of Adana, April 24, 1936. A wild plant.


No. 206. From the Konya bazar, April 18, 1936.


Nos. 116972 to 116974 were from the Ankara bazar, April 15, 1936.


116973. No. 130. Katmersiz.

116974. No. 126.

116966 to 116978—Continued.

116975. No. 170. From Konya, April 18, 1936.

116976. No. 150. From Afyon, April 17, 1936.

116977. No. 237. From Tarsus, April 26, 1936.

116978. No. 458. From Kayseri, May 7, 1936.

116979. Nerine flexuosa (Jacq.) Herb. Amaryllidaceae.

From the Union of South Africa. Seeds purchased from the Winton Nurseries, Bonnie Vale, Cape Province. Received July 31, 1936.

A South African bulbous perennial with four to six bright-green linear leaves a foot long and a scape 2 to 3 feet high, bearing an umbel of 10 to 20 pale-pink flowers an inch long.


From Chile. Seeds purchased from Raymond Du Belloy, Santiago. Received July 29, 1936.

Native-grown Chilean alfalfa.


From Peru. Seeds collected by Raymond Stadelman, Bureau of Plant Industry. Received July 14, 1936.

Collected May 21, 1936, at Huaras, Ancash, at 3,000 m. altitude.

1 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 first 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.
116982. VACCINIUM ACTOSTAPHYLOS L. Vaccinaceae.
Caucasian whortleberry.
From the Union of South Africa. Seeds presented by Cheverton Buller, Stellenbosch, Cape Province. Received August 8, 1936.
A deciduous shrub up to 10 feet high, native to the Caucasus region. The oblong-ovate, finely toothed leaves are 2 to 4 inches long and turn purple red in the autumn. The small bell-shaped flowers are borne in racemes 2 inches long and are white with a purple tinge. The globose purple edible berries are nearly one-half inch in diameter.
For previous introduction see 101929.

116988 to 116995.
From the Union of Soviet Socialist Republics, Institute of Agriculture, Moscow, through Dr. G. L. Slate, New York Experiment Station, Geneva, N. Y. Received August 8, 1936.
A collection of plants native to southern Africa.

116993. GLADIOLUS ALATUS L.
A gladiolus with flowers of a delightful fragrance not unlike that of the sweet briar. The three upper petals are bright orange scarlet and the three lower ones are yellowish tipped with orange scarlet. The bulbs are not larger than ordinary peas and cannot survive long out of the ground.
For previous introduction see 106736.

116984. GLADIOLUS BLANDUS Ait.
A species with sword-shaped leaves somewhat shorter than the stem, which is from 6 inches to 24 inches and bears 3 to 10 white or reddish-tinted scentless flowers, each over an inch long.
For previous introduction see 113567.

116985. GLADIOLUS PSITTACINUS Hook. Parrot gladiolus.
A gladiolus with a stout stem 3 feet or more in length and usually 4 rigid sword-like leaves up to 2 feet long. The many-flowered spike reaches a foot or more in length. The flowers are a rich yellow, grained and overlain with red, particularly about the margins of the segments.
For previous introduction see 110831.

116986. MIMETES HIRTA (L.) Knight. Proteaceae.
A very striking shrub 3 to 4 feet high, with leathery ovate-elliptic to ob lanceolate leaves about 1 inch long and showy, bright-carmine bracts.

A bulbous plant with lanceolate leaves up to a foot long and white or yellow flowers in a dense raceme on a scape a foot or more high.
For previous introduction see 115827.

116988 to 116994. PROTEA spp. Proteaceae.

116993 to 116995—Continued.

116998. PROTEA BARRIGERA Meisn.
An evergreen shrub up to 9 feet high with oblong-lanceolate leaves 3 to 7 inches long, smile flower heads about 6 inches across, with conspicuously bearded involucral bracts, the whitish hairs about 2 inches long.

116999. PROTEA COMPACTA R. Br.
A shrub with strongly imbricated, ovate-lanceolate, coriaceous leaves 3 to 5 inches long and sessile flower heads 4 inches long and 2 inches broad. The outer bracts have a dense fringe of woolly hairs, the inner are flesh-colored to carmine, and the flowers are tawny to purplish tomentose with the stamens densely covered with long light-golden hairs.
For previous introduction see 102799.

116990. PROTEA CYNAROIDEIS L.
This is, perhaps, the finest of all the proteas and becomes 6 feet tall. The leaves vary from nearly orbicular to ovate, are 2 to 6 inches long, and have petioles from 2 to 5 inches long. The glabrous surfaces are finely and reticulately veined on both sides. The sessile flower heads are 5 to 8 inches long and broad, and the ovate-lanceolate bracts in this form are clear pink and dove gray.
For previous introduction see 102800.

116991. PROTEA GRANDIFLORA Thumb. Sugarbush.
A shrub or small tree 3 to 10 feet high, with oblong sessile shining leaves and large white flower heads which resemble a globe orchid in appearance.
For previous introduction see 25847.

116992 and 116993. PROTEA MELLIFERA Thumb. Sugarbush.
A glabrous shrub or small tree with narrowly lanceolate and rather blunt leaves. The whitish flower head is cup-shaped, 4 inches long and 3 inches wide. The inner bracts are rather longer than the pistils and the outer ones are short and wide, all very viscid and usually rosy pink. During the time of flowering the involucre is filled with sweet watery liquor which is an allurement to bees and to a host of other insects.
For previous introduction see 26207.

116992. A form with white bracts.

116993. A form with rose-pink bracts.

116994. A form with rose-pink bracts.

116995. PROTEA sp.
A form with rose-pink, black-hairy bracts.

Variety alba. A watsonia with stiff en siform leaves up to 3 feet high and simple dense spikes of about as tall with many pure-white flowers.

116996 and 116997. ZEPHYRANTHES spp. Amaryllidaceae.
From Mexico. Bulbs purchased from Dr. C. A. Purpus, Zacapam, Huatusco, Veracruz. Received August 11, 1936.

116996. Collected at 600 m. altitude near Zacapam.
PLANT MATERIAL INTRODUCED

116996 and 116997—Continued.

116997. Collected at 2,000 m. altitude, Salto de Agua.

116998. CHAMAELAUCIUM UNCINATUM Schauer. Myrtaceae.
From California. Plant presented by Eric Walslair, Golden Gate Park, San Francisco. Received July 29, 1936.

An erect bushy heathlike shrub with opposite hook-shaped linear leaves less than an inch long and small terminal corollas of cream-colored flowers. Native to Western Australia.

For previous introduction see 86710.

116999. ARISTOLOCHIA PAULISTANA Hoehne. Aristolochiaceae.
From Brazil. Seeds presented by the Biological Institute of Sao Paulo, through F. G. Walsingham, Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos, Cuba. Received July 23, 1936.

A high-climbing tropical vine with triangular-cordate leaves, obtuse at the apex, 3 to 6 inches long. The flower, yellowish purple spotted with blackish purple, has an ovate lip that is narrowed into a linear limb up to 8 inches in length. Native to Sao Paulo, Brazil.

117000. SACCHARUM. Poaceae.

Sugarcane.
From Trinidad, British West Indies. Cuttings presented by the Imperial College of Tropical Agriculture. Received July 3, 1936.

No. B. 2935.

117001 to 117004. ELAEAGNUS spp. Elaeagnaceae.

From Brazil. Seeds presented by the Biological Institute of Sao Paulo, through F. G. Walsingham, Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos, Cuba. Received July 23, 1936.

A high-climbing tropical vine with triangular-cordate leaves, obtuse at the apex, 3 to 6 inches long. The flower, yellowish purple spotted with blackish purple, has an ovate lip that is narrowed into a linear limb up to 8 inches in length. Native to Sao Paulo, Brazil.

117000. SACCHARUM. Poaceae.

Sugarcane.
From Trinidad, British West Indies. Cuttings presented by the Imperial College of Tropical Agriculture. Received July 3, 1936.

No. B. 2935.

117001 to 117004. ELAEAGNUS spp. Elaeagnaceae.

From the Union of Soviet Socialist Republics. Cuttings presented through Dr. I. M. Vavilov, Chief, Institute of Plant Industry, Leningrad. Received July 6, 1936.

117001. No. 24.
117002. No. 92. Bepa.
117003. No. 93. Abahfapa.
117004. No. 94.

117005 to 117012. IPOMOEA BATATAS (L.) Lam. Convolvulaceae. Sweetpotato.

From Australia. Tubers presented by Dr. H. Wenholz, Director of Plant Breeding, New South Wales Department of Agriculture, Sydney. Received July 9, 1936.

A collection of locally grown varieties from Hawkesbury Agricultural College.

117005. Ashburn.
117006. Early Butter.
117007. Farmer's Special.
117008. H. H. C. Pink.
117009. Quaker.
117010. Rosella.
117011. White Maltese.
117012. Wannop.

117013 to 117015. MEDICAGO SATIVA L. Fabaceae. Alfalfa.

From Turkey. Plants collected by H. L. Westover and F. L. Wollman, Bureau of Plant Industry. Received July 11, 1936.

117013. No. 891-A. Wild alfalfa collected in the hills near Gemlik, June 20, 1936.
117014. No. 892. Wild alfalfa collected 25 km. north of Bursa, June 20, 1936.
117015. No. 893. Wild alfalfa collected 10 km. south of Bursa on the slopes of Mount Olympus, June 19, 1936.

117016. PUCCINELLA KENGIANA Ohwi. (Puccinella stricta Keng). Poaceae.

Grass.
From China. Seeds presented by Y. L. Keng, Academia Sinica, National Research Institute of Biology, Nanking. Received July 1, 1936.

From Luho Ku, Kiangsu Province, May 23, 1936. Seeds collected in wheatfields by Charles E. DeVol. A loosely tufted, erect or decumbent annual grass about 18 inches tall. Native to Kiangsu Province, China.


From Australia. Seeds presented by the American consulate, Melbourne, Victoria, through the Secretary of State, Washington, D. C. Received July 13, 1936.

Fair average quality Victorian wheat.

117019. OCHROMA BICOLOR Rowlee. Bombacaceae.

From Mexico. Seeds presented by Prof. M. Martinez, Mexico, D. F. Received July 1, 1936.

A tall tree, native to Costa Rica; one of the sources of the balsa wood of commerce.

117020 to 117040. NICOTIANA spp. Solanaceae. Tobacco.

From Peru. Seeds collected by Raymond Stadelman, Bureau of Plant Industry. Received July 14, 1936.

Nos. 117020 to 117028 were collected in the Departamento Ancash.

117020 and 117021. NICOTIANA GLUTINOSA L.

117020. No. 142. May 25, 1936. From the Canon del Pato, Rio Santa, between 1,500 and 1,800 m. altitude.
117021. No. 143. From Mayucayan at 1,400 m. altitude May 25, 1936.

117022 to 117039. NICOTIANA TABACUM L.

Common tobacco.

Nos. 117022 and 117023 were collected at Huaras, May 21, 1936, at 3,025 m. altitude.

117022. No. 135.
117023. No. 136.
117024. No. 137. From Sacramentopampa, near Huaras, May 22, 1936, at 3,000 m. altitude.
117025. No. 138. From Huaras, May 22, 1936, at 3,025 m. altitude.
117026. No. 139. From Parisa Huancas, May 24, 1936, at 2,800 m. altitude.
117040. **ABISTEA** sp. Iridaceae.

Originally from near St. Lucia Bay, Zululand. A low growiner and erect herb with long narrow, stiff, and erect leaves. Native to tropical Africa.

117041. **CRINUM** sp. Amaryllidaceae.


117042. **ARISTEA** sp. Iridaceae.

From Florida. Seeds presented by Hamilton P. Truemp, American Amaryllis Society, Orlando. Received July 8, 1936. Originally from near St. Lucia Bay, Zululand. A variety with beautiful small blue flowers produced in wide sprays; an excellent bedding plant.

117043 to 117045—Continued.

117043. **LALLEMANTIA IBERICA** (Bieb.) Flach. and Mey. Menthaceae.

No. 3508. A blue-flowered, herbaceous perennial native to semiarid regions in Asia Minor and Syria, whose seeds yield what is said to be a high-grade drying oil.

For previous introduction see 115193.

117046. **ALBIZIA SASSA** (Willd.) Macbride. Mimosaceae.

Presented by the Agricultural Research Station, Tanganyika Territory, Africa. A large handsome tree with attractive bipinnate foliage and numerous fascicled heads of white flowers with crimson-tipped stamens. Native to tropical Africa.

117047. **ALBIZIA sp.** Mimosaceae.

Presented by the Agricultural Research Station, Tanganyika Territory, Africa.

117048. **CORDIA HOLSTII** Gurke. Boraginaceae.

Presented by A. Bircher, El Saff, Egypt. A catalpalike tree with broad leaves and very delicate, catkin-like white flowers. The tree is used for planting along avenues.

For previous introduction see 51551.

117049. **MARKHAMIA HILDEBRANDTII** (Baker) Sprague. Bignoniaceae.

Presented by A. Bircher, El Saff, Egypt. A shrub or small tree with plunate leaves 6 to 10 inches long and showy yellow flowers about 1 1/2 inches long, in terminal and axillary panicked. Native to eastern tropical Africa.

117050 to 117081.

From Japan. Seeds presented by Dr. T. Nakai, Director, Botanic Garden of the University of Tokyo. Received July 1, 1936.

117050 to 117054. **BETULA spp.** Betulaceae.

Birch.

117051. **BETULA ERMANI COMMUNIS** Regel.

A variety differing from the type by its broad ovate leaves. Native to Japan.

117052. **BETULA SCHMIDTII** Regel.

A Japanese tree 65 feet high, with a trunk 3 to 7 feet in diameter, and black bark which falls off in thick, rather small plates. The finely-serrate leaves are short-stemmed, and the catkins are narrow, stiff, and erect.

For previous introduction see 76052.

117053. **BETULA MANDSHURICA JAPONICA** (Miq.) Bend.

A variety differing from the type by its longer cones. Native to Japan.

117054. **BETULA SCHMIDTII** Regel.

A hardy ornamental birch native to Japan, up to 75 feet high with broadly oval leaves.

For previous introduction see 82066.
ovate to ovate-oblong, broadly wedge-shaped, 1 to 3 inches long. Native to Japan and Manchuria.

For previous introduction see 104908.

117055. HOMIOCELTIS ASPERA (Thunb.) Blume. Ulmaceae.

An ornamental deciduous tree up to 60 feet high, with slender branches forming a dense head. The leaves are serrate ovate to ovate-oblong, broadly wedge-shaped at the base, long-acuminate, 2 to 3½ inches long. This tree is easily distinguished from Celtis sinensis, with which it is often confused, by the leaves with straight veins ending in the teeth. The small black drupes are inconspicuous.

Native to Japan.

For previous introduction see 41391.

117056 to 117058. HOSTA spp. Liliaceae.

117056. HOSTA GLAUCa (Miq.) Stearn.

A perennial herb, native to Japan, with very glaucous cordate leaves 10 to 15 inches long. The slender pale-green drooping flowers are borne on short stalks usually shorter than the leaves.

For previous introduction see 98325.

117057. HOSTA JAPONICA TARDIFLORA (Lelchlin) Bailey.

A form of the narrow-leaved plantainily with dark-green, long-pointed leaves on short, margined petioles and light-purple flowers appearing in autumn in branched racemes sometimes bearing as many as 50 flowers.

For previous introduction see 101781.

117058. HOSTA VENTRICOSA (Salisb.) Stearn.

A plantainily with broad cordate-ovate leaf blades about 10 inches long and lavender-purple flowers about 2 inches long, in elongated racemes on scapes up to 3 feet tall. Native to China.


A tree, native to China and Japan, which grows to a height of 60 feet. The broadly ovate leaves, 2 to 4 inches long, are cordate at the base and acuminate at the apex, with serrate-dentate margins. The solitary dull orange-red fruits are borne on stalks about as long as the petioles.

For previous introduction see 92047.


A slender-branched ornamental Japanese shrub, with deciduous ovate leaves which turn yellow in autumn, and bright red berries on slender pendulous stalks.

For previous introduction see 77165.

117061 to 117062. IRIS KAEMPFERI Sleb. Japanese iris.

For previous introduction see 81669.

117063. IRIS LAVIGATA Fisch. Rabbit-ear iris.

For previous introduction see 114509.

117064. IRIS SIBIRICA SANGUINEA (Donn) Ker.

Received as Iris nertichinska.

117065. IRIS SETOSA Pall. Arctic iris.

For previous introduction see 106559.

117066 to 117076. RHODODENDRON spp. Ericaceae.

117066. RHODODENDRON ALBRECHTI Maxim.

A shrub 3 to 5 feet high with ovobate to oblanceolate membranous leaves which turn yellow in autumn. The rotate-campanulate, red-purple flowers, 2 inches alolate, in clusters of three to five, appear with the leaves. It is somewhat like Rhododendron schlippenbachii and is native to Japan.

For previous introduction see 114671.

117067. RHODODENDRON DEGRONIANUM Carr.

A native Japanese species, differing from Rhododendron metternichii in having a five-lobed corolla. R. metternichii is an evergreen shrub up to 4 feet high with oblong leaves 3 to 6 inches long, covered with rusty tomentum beneath. The campanulate, rose-colored, usually seven-lobed flowers are 1 to 2 inches across, spotted with purple and borne in clusters of 5 to 15.

For previous introduction see 98136.

117068. RHODODENDRON FAURIAE Franch.

A shrub 5 to 10 feet high, native to Japan, the branchlets clothed with thin loose white floccose tomentum. The oblong leaves are 3 to 6 inches long, and the funnel-campanulate flowers, 1 inch long, borne in racemes of 12 to 15, are white or cream with a pink flush on the median lines of the petals and spotted inside with numerous green spots.

For previous introduction see 101228.

117069. RHODODENDRON PENTAPHYLLUM Maxim. Fiveleaf azalea.

A deciduous shrub up to 25 feet high, with, usually, five elliptic-lanceolate leaves at the ends of the branches. The rose-pink flowers, 1 to 2 inches across, are solitary or in twos, appearing before or with the leaves, which turn orange or crimson in the autumn. Native to Japan.

For previous introduction see 101961.

117070. RHODODENDRON PULCHRUM Sweet.

A handsome shrub with spreading hairy branches, elliptic leaves densely hairy beneath, and two or three terminal rose-purple flowers 2 inches or more across. A hybrid between Rhododendron ledifolium and R. indica.

For previous introduction see 78541.

117071. RHODODENDRON QUIJQUEFOLIUM Biss. and Moore. Cork azalea.

A deciduous shrub or small tree up to 25 feet high, with broad-elliptic to

117070 to 117081—Continued.
117050 to 117081—Continued.

ovate leaves about 2 inches long and white, green-spotted campanulate flowers about 2 inches across. Native to Japan.

For previous introduction see 114674.

117072. RHODODENDRON SEMIPARUM Maxim.

A deciduous shrub 2 to 10 feet high, with oval to ovate lanceolate leaves up to 2 inches long and solitary red-spotted white flowers about 1 inch across. It is related to Rhododendron albiflorum and is native to Japan.

117073. RHODODENDRON W. Y. RICHII Maxim.

A deciduous shrub up to 15 feet high, native to Japan and China. The broadly ovate to rhombic leaves, 1 to 3 inches long, are in clusters of 2 or 3 at the tips of the branchlets and turn vinous purple in autumn. The rotate-tubular red flowers, 1 to 3 inches across, appear before or with the leaves.

For previous introduction see 102741.

117074. RHODODENDRON SUBIRASCULUM Miq.

An azalea, allied to Rhododendron poukhanense, with narrow elliptic to obovate-lanceolate leaves up to 2 inches long and funneliform, rosy-red to crimson flowers about 3 inches across. Native to Japan.

117075. RHODODENDRON TSCHONOSKII Maxim.

A forest shrub, native to Japan, with flaky bark, elliptic leaves one-third of an inch long, and heads of one to four small white flowers.

For previous introduction see 114675.

117076. RHODODENDRON RETICULATUM D. Don.

A much-branched deciduous Japanese shrub up to 25 feet high, with yellow-brown branchlets and reticulate, broadly ovate leaves 2 to 3 inches long, in clusters of two to three. The slightly two-lipped rotate campanulate flowers are rosy-purple to magenta and appear before the leaves. There are two forms, the ordinary form with 10 stamens, the so-called Rhododendron rhombaicum, and a form with 5 stamens, the so-called R. dilatatum.

For previous introduction see 97401.

117077. ROMULEA PARLATORII Todaro. Iriseae.

A crocus-like plant with narrow leaves and few small bright-lilac flowers. Allied to Romulea ramiflora. Native to the Mediterranean region.

117078. ROSA UCHIYAMANA Makino. ROSACEAE.

A densely branched shrub about 6 feet high, with four to six leaflets and short few-flowered corymbose clusters of pink flowers about 2 inches across. It is related to Rosa multiflora. Native to Japan.


A handsome tree, native to Japan, 50 feet high, with erect branches and red bark. The thickish obovate-lanceolate leaves are bright green, and the large white flowers are borne in summer.

For previous introduction see 102262.

117080. SYTRA S. IRAKIANA Makino. STYRACEAE.

A small tree with coarsely dentate, orbicular-ovate to rhombic-ovulibar leaves 2 to 3 inches long and showy white tubular flowers about two-thirds of an inch long in small crowded racemes. Native to Japan.

117081. ULMUS PARVIFLORA Maxim. Ulmaceae. Leatherleaf elm.

Received as Ulmus sieboldii, which is now referred to U. parviflora.

117082 to 117084.


117082. AMYGDALUS PERSICA L. Amygdalaceae. Peach.


117085. STATESMAN. 117084. Warrior.

From the Union of Soviet Socialist Republics. Seeds presented by Miss Vera Gorbunova, Institute of Plant Industry, Leningrad. Received July 17, 1936.

Seeds collected in gardens of the Apsheron Peninsula, Caucasus region, by Miss Vera Gorbunova.


117086. No. 132. 117091. No. 171.

117087. No. 133. 117092. No. 177.

117088. No. 146. 117093. No. 186.

117089. No. 165. 117094. No. 188.

117095 to 117297.

From Turkey. Seeds collected by H. L. Westover and F. L. Wellman, Bureau of Plant Industry. Received July 2, 1936.


117096. No. 551. B a m y a, From the Eskisehir bazar, April 16, 1936.

117097. No. 120. B a m y a, From the Ankara bazar, April 15, 1936.


117098 to 117108. ALLIUM spp. Liliaceae.

117098 to 117103. ALLIUM CEF A L. Liliaceae.

117098. No. 163. S o g a n. F r o m Afyon, April 17, 1936.


117095 to 117297—Continued.

117101. No. 293. From Kayseri, May 6, 1936.
117102. No. 96. From the Ankara bazar, April 15, 1936.
117103. No. 181. From Konya, April 18, 1936.
117104 and 117105. ALLIUM PORRUM L. Leek.
117105. No. 111. Pirasa. From the Ankara bazar, April 15, 1936.
Nos. 117106 to 117108 were collected near Gaziantep, May 2, 1936.
117106. ALLIUM sp. No. 465-A.
117107. ALLIUM sp. No. 480-A.
117108. ALLIUM sp. No. 487-A.
117109 to 117112. APIUM GRAVEOLENS L. Apiaceae. Celery.
117109. No. 87. 117110. No. 131.
117111. No. 239. From Tarsus, April 26, 1936.
117112. No. 267. From Gaziantep, April 20, 1936.
117114. No. 247. From Tarsus, April 26, 1936.
117115. No. 281. From Gaziantep, April 20, 1936.
117116 and 117117. From Kayseri bazar, May 6, 1936.
117116. No. 296. 117117. No. 299.
117118 to 117126. BRASSICA spp. Brassicaceae.
117118 and 117119. BRASSICAoleracea CAPITATA L. Cabbage.
117118. No. 255. From Gaziantep, April 30, 1936.
117120 to 117126. BRASSICA RAPA L. Turnip.
117121 to 117123. From Konya, April 18, 1936.
117121. No. 166.
117122. No. 173.
117123. No. 182. A red turnip.
117124. No. 208. From the Adana bazar, April 20, 1936.

117125. No. 292. From Kayseri, May 6, 1936.
117126. No. 148. From Afyon, April 17, 1936.
117127 to 117142. CAPIRicum ANNUUM L. Solanaceae. Common red pepper.
117127 and 117128. From the Ankara bazar, April 15, 1936.
117127. No. 97. A large pepper.
117128. No. 121. A long pepper.
117129 and 117130. From Afyon, April 17, 1936.
117129. No. 146. A long green pepper.
117130. No. 149. A large pepper.
117131 and 117132. From Konya, April 18, 1936.
117131. No. 178. A large pepper.
117133 and 117134. From the Adana bazar, April 20, 1936.
117133. No. 211. A white pepper.
117135. No. 240. From the Tarsus bazar, April 26, 1936.
117136 and 117137. From Gaziantep, April 30, 1936.
117136. No. 275.
117137. No. 290. A large pepper.
117138 and 117139. From Kayseri, May 6, 1936.
117138. No. 294. A large red pepper.
117139. No. 310. A small pencil pepper.
117140. No. 392. From Afyon, April 17, 1936.
117141 and 117142. From the Eskisehir bazar, April 16, 1936.
117142. No. 536. Dolmalik biber.
117143. No. 550. From the Eskisehir bazar, April 16, 1936.
117144 to 117156. CITRULLUS VULGARIS Schrad. Cucurbitaceae. Watermelon.
117144. No. 102. A melon with black seeds.
117145. No. 105. A melon with white seeds.
117147 to 117149. From Afyon, April 17, 1936.
117147. No. 143. A white watermelon.
117148. No. 151. A melon stored for winter use.
117149. No. 152. A melon with black seeds.
117095 to 117297—Continued.

117150 and 117151. From Konya, April 18, 1936.

117152. No. 223. From the Adana bazar, April 20, 1936.

117153. No. 246. From Tarsus, April 26, 1936.

117154. No. 271. From Gaziantep, April 30, 1936.

117155. No. 188. From Konya, April 18, 1936.

117156. Karpua. From the Eskisehir bazar, April 16, 1936.

117157 to 117185. CUCUMIS spp. Cucurbitaceae.

117157. No. 547. From the Eskisehir bazar, May 16, 1936.


117159. No. 147. Kirkagag or kaoun.


117162. No. 209. A sweet melon from Adana, April 20, 1936.


117165 to 117167. From Gaziantep, April 18, 1936.


117166. No. 259. Acı kaoun.


117168. No. 517. From the Eskisehir bazar, April 16, 1936.

117169 to 117172. CUCUMIS SATIVUS L. Cucumber.


117176. No. 224. 247648—41—2

117200 to 117204. DAUCUS CAROTA L. Apiaceae. Carrot.

117200. No. 115. From the Ankara bazar, April 15, 1936.
PLANT MATERIAL INTRODUCED

117095 to 117297—Continued.

117201. No. 300. From the Kayseri bazar, May 5, 1936.
117202. No. 180. From Konya, April 18, 1936.
117203. No. 207. From the Adana bazar, April 20, 1936.


117205. No. 300. From the Kayseri bazar, May 5, 1936.
117202. No. 180. From Konya, April 18, 1936.
117203. No. 207. From the Adana bazar, April 20, 1936.


117205. No. 300. From the Kayseri bazar, May 5, 1936.
117202. No. 180. From Konya, April 18, 1936.
117203. No. 207. From the Adana bazar, April 20, 1936.


117205. No. 300. From the Kayseri bazar, May 5, 1936.
117202. No. 180. From Konya, April 18, 1936.
117203. No. 207. From the Adana bazar, April 20, 1936.

Obtained in a restaurant in Mersin, April 27, 1936.

117206. *Fragaria* sp. No. 413. A strawberry with pink flesh.

117207. *Ipomoea* sp. Convolvulaceae. No. 134. From the Ankara bazar, April 15, 1936.


117208 to 117210. From the Ankara bazar, April 15, 1936.
117208. No. 90.
117209. No. 100.
117210. No. 112. A curly lettuce.

117211. No. 179. From Konya, April 18, 1936.
117212. No. 226. From the Adana bazar, April 20, 1936.
117213. No. 242. From Tarsus, April 26, 1936.
117214 and 117215. From the Eskisehir bazar, April 16, 1936.

117216. No. 308. From Kayseri, May 6, 1936.


117219. No. 266. From Gaziantep, April 30, 1936.


117222. No. 110. From the Ankara bazar, April 15, 1936. A red tomato.
117223. No. 128. From the Ankara bazar, April 15, 1936.
117224. No. 140. From Afyon, April 17, 1936.

117225. No. 245. From Tarsus, April 26, 1936.
117226. No. 190. From Konya, April 18, 1936.
117227. No. 289. From Gaziantep, April 30, 1936.
117228. No. 295. From Kayseri, June 6, 1936.


117232 to 117258. *Phaseolus* vulgaris L. Common bean.

117232 to 117238. From the Eskisehir bazar, April 16, 1936.
117232. No. 522. *Yildis fasulyasi.*
117233. No. 528. *Sari bodur fasulya.*
117234. No. 537. *Aise kadidin fasulyasi.*
117235. No. 542. *Bar bu n y a fasulya.*
117236. No. 543. *Sert fasulyasi.*
117237. No. 544. *S a r i kilik se z u n fasulya.*
117238. No. 552. *Beyaz fasulya.*

117239 to 117244. From Gaziantep, April 30, 1936.
117239. No. 251. *Ay skeptical.*
117240. No. 251-A. *Ay skeptical.*
117241. No. 251-B. French beans.
117242. No. 251-C. White beans.
117243. No. 251-D. Bush beans.
117244. No. 251-E. *Waun.*

117245. No. 291. From Kayseri, May 6, 1936.

117246 to 117248. From the Ankara bazar, April 15, 1936.
117246. No. 94.
117247. No. 104.
117248. No. 106. White beans.

117249 to 117254. From Afyon, April 17, 1936.
117250. No. 138-A.
117251. No. 138-B.
117252. No. 138-C.
117253. No. 138-D.

117255. No. 185. From Konya, April 18, 1936.
117095 to 117297—Continued.

117195. No. 216. From the Adana bazar, April 20, 1936.

117296. No. 217. From the Adana bazar, April 20, 1936.

117296. No. 132. From the Ankara bazar, April 15, 1936.

117296 to 117297. *Pisum elatius* Bleb. Fabaceae. *Pisum*

117299. No. 218. From Adana, April 20, 1936.

117300. No. 321. From Adana, April 20, 1936.

117301. No. 385. From the Cotton Experiment Station, Adana, April 28, 1936. A form with yellow flowers.


117304. No. 320. From Adana, April 20, 1936.

117305. No. 325. From a garden 5 km. north of Adana, April 21, 1936.

117306. No. 215. From the Adana bazar, April 20, 1936.

117307. No. 174. From Konya, April 18, 1936.

117308. No. 244. From Tarsus, April 26, 1936.

117309. No. 391. Konya pea. From the Cotton Experiment Station, Adana, April 28, 1936.

117310. No. 459. From the market at Kayseri, May 7, 1936.


117312. No. 222. From the Adana bazar, April 20, 1936.

117313. No. 223. From the Angara bazar, April 15, 1936.


117316. No. 227. From the Adana bazar, April 20, 1936.

117317. No. 234. 117318. No. 236.

117319. No. 332. From Adana, April 19, 1936.


117321. No. 519. *Ispanak*. From the Eskisehir bazar, April 16, 1936.


117326. For previous introduction see 22666.


From Venezuela and Peru. Seeds collected by Raymond Stadelman, Bureau of Plant Industry. Received August 4, 1936.

117328. No. 155. *Cola de Gallo*; *pinar del Rio*; *pata pelona*.

117329. No. 156. *Cola de Gallo*; *pinar del Rio*.


117331. No. 158. *Cola de Gallo*; *pata pelona*.

Nos. 117302 to 117305 were collected at Ocunare del Tuy, Miranda, at 1,000 m. altitude, July 15, 1936.
117398 to 117318—Continued.

117399. No. 159. Seed originally from Altagracia.
117400. No. 160.

117402. No. 162. Enano.

117403. No. 163. From Yare, Miranda, July 16, 1936.

Nos. 117308 to 117314 were collected at El Consejo, Aragua, July 17, 1936.
117405. No. 165. Mixed seeds.
117406. No. 166. Mixed seeds.
117409. No. 169. Virginia, imported seed.
117411. No. 172. From El Hatillo, Miranda.


Nos. 117317 and 117318 were collected at Eten, Peru.
117414. No. 175. Gacerio de Cojal.

117319 to 117438—Continued.


No. 386. From the Cotton Experiment Station, Adana, April 28, 1936. A tufted perennial grass native to Europe.

117320. ANTIRRHINUM MAJUS L. Scrophulariaceae. Common snapdragon.

No. 534. Aralan agzi. From the Es-kisehir bazar, April 16, 1936. For previous introduction see 104949.


No. 454. From Gaziantep, May 2, 1936.

117322. ASTRAGALUS sp. Fabaceae.

No. 346. Collected 6 miles north of Adana, April 21, 1936.

117323. ASTRAGALUS sp. Fabaceae.

No. 356. From Adana, April 20, 1936.

117327. CANAVALIA GLADIATA (Jacq.) DC. Fabaceae. Swordbean.

No. 214. From the Adana bazar, April 20, 1936.

117328. CANNABIS SATIVA L. Moraceae. Hemp.

No. 95. Keudye. From the Ankara bazar, April 15, 1936.

117329. CICER ARIETINUM L. Fabaceae. Chickpea.

No. 277. From Gaziantep, April 30, 1936.

117330. CORONILLA sp. Fabaceae.

No. 341. From Adana, April 22, 1936.

117331. CORONILLA sp. Fabaceae.

No. 406. Collected 35 km. west of Mersin, April 26, 1936.

117332. CORONILLA sp. Fabaceae.

No. 399. Collected 40 km. west of Mersin, April 26, 1936.

117333. CORONILLA sp. Fabaceae.


117334. CROTALARIA sp. Fabaceae.

No. 314. From Adana, April 20, 1936.

117335. CROTALARIA sp. Fabaceae.

No. 382. From Adana, April 20, 1936.

117336. FORNICALUM VULGARE Hill. Apiaceae. Fennel.

No. 113. From the Ankara bazar, April 15, 1936.

117337. HIPPOCREPIS sp. Fabaceae.

No. 343. From Adana, April 20, 1936.

117338. HIPPOCREPIS sp. Fabaceae.

No. 426. From 40 km. east of Gazian-tep, May 3, 1936.

117339. KOELERIA PHLEOIDES (Vill.) Pers. Poaceae.

No. 403. From 25 km. west of Mersin, April 26, 1936. For previous introduction see 107065.

117340 to 117349. HORDEUM spp. Poaceae.

117340. HORDEUM BULBOSUM L. Barley.

No. 286. No. 258. From Konya, April 18, 1936. A mixed sample.

117341 to 117349. HORDEUM VULGARE L. Barley.

117341 and 117342. From Konya, April 30, 1936.

117341. No. 286. Black winter barley.

117342. No. 258. From Kayseri bazar, May 6, 1936.

117343 to 117345. From Konya, April 18, 1936.


117344. No. 194. A mixed sample.

117345. No. 184. White barley.

117346. From the Ankara bazar, April 15, 1936.

117347 and 117348. From Konya, April 18, 1936.

No. 176. A mixed sample.

117349. No. 160. From Afyon, April 17, 1936.
JULY 1 TO SEPTEMBER 30, 1936

117319 to 117438—Continued.

117350. LAGURUS OVATUS L. Poaceae. Rabbittail grass.
No. 407. Collected 40 km. west of Mersin, April 26, 1936.


117352. LATHYRUS GOBGONI Part. Fabaceae. No. 287. From the Gaziantep bazar, April 30, 1936. Used as stock feed.

117353 and 117354. LATHYRUS ANNUUS Hojer. Fabaceae. Pea.
117354. No. 414. From Mersin, April 27, 1936.

117355. LINUM USITATISSIMUM L. Linaceae. Flax.
No. 161. From Afyon, April 17, 1936. Flax grown for oil.


117360 to 117375. MEDICAGO spp. Fabaceae. Medick.
117360. MEDICAGO ARABICA (L.) All. No. 329. From Adana, April 21, 1936.
117362 to 117369. MEDICAGO SATIVA L. Alfalfa.
117362. No. 256. From Mersin, April 27, 1936.
117363. No. 329. From Adana, April 21, 1936.
117364. No. 301. From Kayseri, May 6, 1936.
117365. No. 304. From Kayseri, May 6, 1936.
117366. No. 302. From Kayseri, May 6, 1936.
117367 and 117368. From Konya, April 18, 1936.
117367. No. 192-A. From Konya, April 18, 1936.
117368. No. 169. From Konya, April 18, 1936.
117369. No. 137. Yanca. From Afyon, April 17, 1936.

117370. MEDICAGO SCUTELLATA (L.) Mill. Snail medick.
No. 384. From Adana, April 20, 1936.

For previous introduction see 90027.

117319 to 117438—Continued.


117372. MEDICAGO sp. No. 405. From 15 km. northwest of Mersin, April 27, 1936.

117373. MEDICAGO sp. No. 351. From Adana, April 20, 1936.

117374. MEDICAGO sp. No. 418. From 40 km. east of Gaziantep, May 3, 1936.

117375. MEDICAGO sp. No. 338. From Adana, April 20, 1936.

117376. MELICA MINUTA L. Poaceae. Grass.
No. 352. Collected 6 km. north of Adana, April 21, 1936. A tufted perennial grass up to about 1 foot high. Native to the Mediterranean region.

117377. MELICA sp. Poaceae. Grass.
No. 357. From 60 km. northwest of Adana, April 23, 1936.


117379. ONOBRYCHIS CAPUT-GALLI (L.) Lam. Fabaceae.
No. 319. From Adana, April 20, 1936.

117380 to 117384. ORYZOPSIS COERULESCENS (Desf.) Hack. Poaceae.
117380. No. 401. Collected 15 km. northwest of Mersin, April 27, 1936.
117381. No. 374. From a rocky slope near Geyhan, April 22, 1936.
117383. No. 333. Collected 9 km. north of Adana, April 21, 1936.
117384. No. 348. Collected 7 km. north of Adana, April 21, 1936.

No. 523. Mapdanoz. From the Eskişehir bazar, April 16, 1936.

117386. PHALARIS TUBEROSEA L. Poaceae.
No. 382. From the Cotton Experiment Station, Adana, April 28, 1936.

117387 to 117389. PHASEOLUS spp. Fabaceae. Bean.
117387. PHASEOLUS sp. No. 389. From the Cotton Experiment Station, Adana, April 28, 1936.
117388. PHASEOLUS COCCINEUS L. Scarlet runner bean.
No. 162. From Afyon, April 17, 1936.
117389. PHASEOLUS sp. No. 360. Elasiz bean (mung type). From the Cotton Experiment Station, Adana, April 28, 1936.
117319 to 117438—Continued.


117394. No. 377. From Geyhan, April 22, 1936.


117401 to 117407. *Trifolium* spp. *Fabaceae.* Clover. Nos. 117408 to 117410 were collected between 25 km. and 40 km. west of Mersin, April 26, 1936.

117408. *Trifolium* sp. No. 404.

117409. *Trifolium* sp. No. 409.

117410. *Trifolium* sp. No. 411.

117411. *Trifolium* sp. No. 432.

117412. *Trifolium* sp. No. 436.

117413. *Trifolium* sp. No. 442.


117415. *Trifolium* sp. No. 419. From Gaziantep, May 1, 1936.


117417. *Trifolium* sp. No. 443. From 20 km. south of Narle, May 4, 1936.


117420 to 117423 were collected at Gaziantep, April 30, 1936.

117420. No. 269. White Harran wheat.

117421. No. 263. Summer wheat.


117426. No. 383. *Bulgarian No. 3.*

117427. No. 381. *Bulgarian No. 5.*

117428. No. 379. *Bulgarian No. 1.*

117429. No. 387. *Bulgarian No. 4.*

117430. No. 388. *Bulgarian No. 4.*

From India and Afghanistan. Seeds and received as seeds from India.


117439 to 117459—Continued.

117439. **Bauhinia variegata** L. Caesalpinaceae. No. 927. From Oot, Mandi State, May 30, 1936 at 3,500 feet altitude. A small ornamental tree whose leaves are pinnately three-lobed, with leaves 3 to 4 inches wide and five-petaled flowers 4 inches across in short racemes, the lowest petal of each strongly marked with crimson. The rose-colored veins are variegated with red and yellow. The pod is 1 to 2 feet long. Native to India.

117440. **Bombax** sp. Bombacaceae. No. 906. **Gundung ghul.** From Kabul, Afghanistan, at 600 feet altitude. May 17, 1936. A plant 5 feet high, with or without broad green rib lines; ribs more or less conspicuous; flesh three-fourths of an inch thick; salmon, rather acid but agreeable.

117441. **Holarrhena antidysenterica** (Andrews) Focke. Rosaceae. No. 911. Variety Pathankat. Said to have come from Montgomery, Punjab. Fruit smooth, not ribbed, 7 by 5 inches, yellow, fragrant; flesh three-fourths of an inch thick; salmon, rather acid but agreeable.

117443. **Ougeinia dalbergioides** Benth. Fabaceae. No. 925. From Oot, Mandi State, May 30, 1936. A small tree, covered in early spring with large pink flowers. The leaves are pinnately three-lobed, with rigid, leathery rounded leaflets. Native to northern India up to 4,000 feet altitude.


117446. **Ficus** sp. Moraceae. No. 918. **Jangli anjir.** From Baljnath, Kangra Valley, Punjab, at 3,000 feet altitude, May 22, 1936. An ornamental tree with large soft leaves; fruit large, 2 inches long, rose purple, insipid, and borne on the trunk.


117449. **Holarrhena antidyssenterica** (Roth) Wall. Apocynaceae. No. 921. From Baljnath, Kangra Valley, Punjab, at 3,000 feet altitude May 23, 1936. A small ornamental tree whose leaves are fed to cattle. Flowers white to cream-colored, very fragrant. Native throughout India.

For previous introduction see 61807.

117450. **Morus alba** L. Moraceae. White mulberry. No. 904. **Tut.** From Nimle, Afghanistan, May 17, 1936. Tree 2% feet in diameter, attractive form and foliage; fruit nearly an inch long, white, some carpels tinted pink purple, exceedingly sweet.

117451. **Narcissus** sp. Amaryllidaceae. No. 932. **Bhothe phul.** From Kulu, Punjab, June 1, 1936. Bulbs of a plant with attractive heads of yellow-cupped, fragrant white flowers, borne abundantly in November in the lower limits of the range, in March in the upper range; will not stand freezing.

117452. **Oquinnia dalbergioides** Bent. Fabaceae. No. 929. From Oot, Mandi State, May 30, 1936. A small tree, covered in early spring with large pink flowers. The leaves are pinnately three-lobed, with rigid, leathery rounded leaflets. Native to northern India up to 4,000 feet altitude.

117453. **Papaver** sp. Papaveraceae. No. 908. From Nimle, Afghanistan, May 17, 1936. A plant 5 feet high, with pink, very double flowers 4 inches in diameter; collected in a garden.
117454. PRUNUS ARMIENICA L. Amygdalaceae.

No. 929. Sharra. From Kulu, Kulu, Punjab, at 4,000 feet altitude, May 31, 1936. Tree up to 30 feet high, vigorous and productive; fruit usually about 1 inch in diameter.

117455 to 117457. RUBUS spp. Rosaceae.

From Baljmath, Kangra Valley, Punjab, at 3,000 feet altitude, May 22 and 23, 1936. A shrub 4 feet high with upright cylindric stems to about 9 feet high and large white funnelform flowers borne singly near the ends of the branches. Native to Cuba.


No. 916. From Baljmath, Kangra Valley, Punjab, at 4,000 feet altitude. May 31, 1936. A compact scandent shrub some 4 inches thick at base, 10 feet high, much branched at the base, with very small, blackish fruits rather insipid in flavor. From New Zealand. Plants presented by H. R. Wright, Avondale, Auckland. Received August 19, 1936.


No. 913. A compact scandent shrub 10 feet high, which bears large numbers of golden-yellow fruits about three-eighths of an inch in diameter; these are small-seeded, subacid, not strongly fragrant, but very pleasant. The plant tolerates light frost and is found in the Himalayas from about 3,000 to 5,000 feet altitude.

For previous introduction see 115987.

117460. RUBUS SPECIOSUS J. E. Smith.

No. 915. A scandent shrub sometimes 30 feet tall, with very small, blackish fruits rather insipid in flavor. Native to the temperate Himalayas from 3,000 to 7,000 feet altitude.

For previous introduction see 32450.

117461. RUBUS sp.

No. 920. Fruits very small, black-purple, of good flavor but not freely borne.

117462 to 117463. CITRUS spp. Rutaceae.

117462. From New Zealand. Plants presented by H. R. Wright, Avondale, Auckland. Received August 19, 1936.

117463. CITRUS NOBILIS DULCISOSA (L.) Osbeck. Grapefruit.

117466. CITRUS SINENSIS (L.) Osbeck. Orange.

117467. CITRUS NOLIS DELICIOSA (Ten.) Swingle. Mandarin orange.

117468 and 117469. CITRUS SINENSIS (L.) Osbeck. Orange.

117470. CITRUS sp.

Yuzu. Originally from Japan.

117471. CITRUS sp.

Daidai. Originally from Japan.

117472. CITRUS sp.

Yanoka. Originally from Taiwan.

117473. CITRUS sp.

Mediterranean Blood. Originally from India.

117474. CITRUS sp.

Dehra Dun. Originally from India.

117475. CITRUS sp.

Excelior. Originally from India.

117476. CITRUS sp.

Butaca. Originally from India.

117477. CITRUS sp.

Chinese Everbearing. Originally from India.

117478. CITRUS sp.

Colombia. Originally from India.

117479 to 117484. MALUS SYLVESTRIS Mill. Malaceae.

117479. No. 1. Three-blooded Delicious seedling from New Zealand, first Spy x Ribstone Pip, then back on Delicious.
117462 to 117486—Continued.

117480. Paradise on aphis-proof stock from Australia.


117484. Irish apple. Originally from Ireland.


From India. Seeds collected by Walter Koelz, Bureau of Plant Industry. Received August 14, 1936.

From Canada. Budsticks presented by Howard Fisher, Dulverton Fruit Farm, Queenston, Ontario. Received August 22, 1936.

Howard Fisher. A sport of the Valiant peach.

117488. Amygdalus Perssioa L. Amygdalaceae. Peach.

From Canada. Budsticks presented by Howard Fisher, Duiverton Fruit Farm, Queenston, Ontario. Received August 22, 1936.

Howard Fisher. A sport of the Valiant peach.


From Australia. Seeds grown at the Glen Innes Experiment Farm and presented through Dr. H. Wenholz, Director of Plant Breeding, Department of Agriculture, Sydney, New South Wales. Received August 26, 1936. A collection of wheats which have proved resistant to leaf rust at the Glen Innes Experiment Farm.

117490. Argentine C 8681.

117491. Argentine C 9656.

117492. Argentine K 33, C 9655.

117493. Argentine K 40, C 9658.

117494. Ceres X Hope X Florence C 10038.

117495. Greek 10, C 7335.

117496. Greek 18, C 7142.

117497. Minor C 9412.

117498. Morro C 9693.

117499. Portuguese 65, C 7897.

117500. Portuguese 90, C 7921.

117501. San Martin C 9657.

117502. San Martin C 9658.

117503. Uruguayan C 10835.

117504. Uruguayan C 10836.

117505. Varnonne C 6146.

117506. Vencedor C 9654.

247648—41—3

117507 to 117510. Mangifera indica L. Anacardiaceae. Mango.

From Jamaica. Budsticks presented by Miss Zora Neale Hurston, Kingston. Received August 28, 1936.

117507. Calcutta.

117508. Governor.

117509. Paw Paw.

117510. St. Julian. A very sweet, highly flavored variety which begins to bear at an early age.


From China. Seeds presented by H. K. Fu, Director, Botanic Garden, the Sun Yat-Sen Tomb and Memorial Park Commission. Received August 22, 1936. A tall subscandent Japanese bramble with slender branches, trifoliolate leaves 5 to 7 inches long, and small pink flowers. The ovoid-oblong fruits are scarlet, three-fourths of an inch long, and edible but without much flavor. For previous introduction see 92300.


From Australia. Seeds grown at the Glen Innes Experiment Farm and presented through Dr. H. Wenholz, Director of Plant Breeding, Department of Agriculture, Sydney, New South Wales. Received August 26, 1936.


117513. Federation X Hope S. U. C. 9545.

117514. Federation X Webster S. U. C. 9458.

117515. R L. 723 X H. Federation F6, G 4–1–1–0.


117517. Hope X Currawa X Dundee F7, G 310–33–0–c2–e3–0, 428E3–0.

117518. Hope X Currawa X Dundee F6, G 310–22–2–0.

117519. Hope X Currawa X Dundee F6, G 310–23–2–0.

117520. Hope X Currawa X Dundee F6, G 319–0–c2–g0–0–0.

117521. Hope X Waratah F6, C5–G7–0–0–c1–E0.

117522. Hope X Waratah F6, C5–G3–0–0–c1–G0.

117523. Hope X Waratah F6, G 306–0–0–0–c3–G0.

117524. Hope X Yandilla King F6, C2–g1–2–1–c2–d0.

117525. Hope X Yandilla King F6, C2–g1–2–0–c2–e0.

117526. Kenya C 9658.

117527. Kenya C 10554.


117529. Kenya C 10563.
PLANT MATERIAL INTRODUCED

117530 to 117532.
From Burma. Seeds from the Tavoy District, presented by C. E. Parkinson, Forest Botanist, Forest Research Institute, Dehra Dun. Received August 6, 1936.

Tabindaing bamboo.

Kyatwa bamboo. A clump bamboo similar to Gephalostachyum pergracile, but larger. The deep rich green, erect culms are more than 40 feet tall. Native to Burma.


117533 to 117573.
From Brazil. Seeds collected at Rio de Janeiro by W. A. Archer, Bureau of Plant Industry. Received August 17, 1936.

117533 to 117573—Continued.
117545. AVENA SATIVA L. Poaceae. Oats. 

117546 to 117567.
From Brazil. Seeds introduced by C. E. Parkinson, Forest Botanist, Forest Research Institute, Dehra Dun. Received August 6, 1936.

117546. BRASSICA CAMPESTRIS L. Rutabaga. 

117547. BRASSICA RAPE L. Turnip. 

117548. BRASSICA CAMPESTRIS L. Rutabaga. 

117549. BRASSICA sp. 

117550. FRAGARIA VESCA L. Rosaceae. 
No. 3465. A cultivated strawberry of good flavor; said to be grown in the Federal District. From a seed store in Rio de Janeiro, July 23, 1936.

117551 and 117552. BRASSICA spp. Brassicaceae. 
Purchased in a seed store, July 23, 1936.

117551. BRASSICA OLERACEA BOTRYTIS L. Broccoli. 
No. 3496. Couve brocolo. A cultivated broccoli.

117552. BRASSICA PEKINENSIS (Lour.) Rupr. 

117553. CANAVALIA ENSIFORMIS (L.) DC. Fabaceae. Jackbean. 
No. 3475. Feijão mucuna branco. Used as a forage plant. From a seed store in Rio de Janeiro, July 23, 1936; originally from Peru.

From a seed store in Rio de Janeiro, July 23, 1936.

117555. MELANOCARPUS BAKABA. 

117556 and 117557. CUCUMIS ANGURIA L. Cucurbitaceae. West Indian gherkin. 
No. 3447. Feijão cucuru. Used as a forage plant. From a seed store in Rio de Janeiro, July 23, 1936; originally from Peru.

117557. CUCUMIS MELO L. Cucurbitaceae. 

117558. MELIA. 
No. 3468. Melão.

117559. MELIA cavillon.
117533 to 117573—Continued.


117561. No. 3471. Pepinos.


117563. No. 3464. São Paulo. A common and popular red variety resembling a plum, irregularly globose and bilocular.

117564. No. 3472. Tomate grande.


117566. No. 3489. Tomate garrafinha.

117567. No. 3491. Tomate Paulista Japonês.


117569. No. 3506. São Gonzalo. Presented by the Brazilian Department of Agriculture in Rio de Janeiro, July 29, 1936. Seed originally from the State of Bahia where the best grades of tobacco are grown.

117570 and 117571. PISUM SATIVUM L. Fabaceae. Pea. Eruvilha. From the general market, Rio de Janeiro, July 23, 1936. Pods flat, twice as large as ordinary green peas; when half mature the pods are cooked as a vegetable.

117570. No. 3466. 117571. No. 3467.


117574 to 117585.

From South America. Seeds and bulbs collected by Mrs. Ynez Mexia, Bureau of Plant Industry. Received August 27, 1936. Unless otherwise stated, the material collected was seeds.

117574 to 117585—Continued.


117575. ARACAHIA SP. PINACEAE. No. 8024–A. From Arequipa, Peru, April 29, 1936, at 2,400 m. altitude. A tree about 18 m. high found on a rocky hill in the garden of the old observatory.

117576. CYPELLA HERRERAE Diels. Iridaceae. No. 8025–A. Michel-Miché. Supay-Titio. May 1936. From the fortress Sacsahuaman, Departamento Cuzco, Peru, between 3,600 and 3,800 m. altitude. A cypella with stiff stems up to 1 m. high, long linear leaves, and violet-blue flowers. Native to Peru.

117577. CYPELLA SP. Iridaceae. No. 8079–A. May 16, 1936. From Cerro Macedo-Pichu, Provincia Urubamba, Peru, at 3,200 m. altitude. A perennial herb 4 to 6 dm. high. Flowers not seen.

117578. DESCHAMPSIA PULCHRA RUSI and MAV. Poaceae. Grass. No. 7984–A. April 9, 1936. From the Last Hope Inlet, Territoria Magallanes, Chile, on a marshy flat at the foot of Mount Dorothy. A tall tufted grass native to Chile.


117581. MIKANIA SP. ASTERACEAE. No. 7871–A. February 13, 1936. Departamento Curico, Chile, on the road to Argentina beyond Los Quenes, Departamento Curico, Chile, at 1,200 m. altitude. A common plant with crimson flowers fading to green at the base.

117582. MUCUNA SP. Fabaceae. No. 8037–A. AGUACENGA. From Hela, on the Rio Sembray, La Selva Valley, Provincia La Convencion, Peru, at 1,500 m. altitude. A vine with huge clusters of gorgeous scarlet flowers.

117583. URCOLINA SP. AMARYLLIDACEAE. No. 7871–A. February 13, 1936. Bulbs collected on the road from Curico to Argentina beyond Los Quenes, Departamento Curico, Chile, at 1,200 m. altitude. A scented shrub with pink, slightly fragrant flowers.

117584. (Undetermined.) No. 7994–A. April 9, 1936. From the Last Hope Inlet, Territoria Magallanes, Chile, at the base of Mount Dorothy. A perennial herb said to have pink, very fragrant flowers.
117574 to 117585—Continued.

117585. (Undetermined.)
No. 7945-A. March 18, 1936. From via Monte, south of Calo Penas, east coast of Tierra del Fuego, Argentina. A perennial herb with yellow flowers found in a meadow near a pond at 20 m. altitude.

117586. CITRUS sp. Rutaceae.
From Egypt. Budwood presented by Thomas W. Brown, Horticultural Section, Ministry of Agriculture, Giza. Received September 10, 1936.
Persian seedless lime.

117587. Gossypium barbadense L. Malvacae.
Seeds collected by H. L. Leath. From the British West Indies. Seeds presented by F. L. Wellman, Bureau of Plant Industry. Received August 24, 1936. Strain A N. (Selfed seed.)

117588 and 117589.
From Argentina. Seeds presented by the Director of Agriculture, Buenos Aires, through Samuel J. Record, Yale University, New Haven Conn. Seeds received September 5, 1936.

Maytenus boaria Molina. Maytenaceae.

For previous introduction see 522591.

117590. Lalemeania brecha (Biebr.) Fisch. and Mey. Menthaceae.
From the Union of Soviet Socialist Republics. Seeds presented by the Director, Botanic Garden, Kiev, Ukraine. Seeds received September 9, 1936.

For previous introduction and description see 117045.

Breadfruit.
From Puerto Rico. Cuttings presented by F. L. Wellman, Bureau of Plant Industry. Received September 16, 1936.
A tree, native to the East Indies, 30 to 40 feet high, with viscous milky juice and leathery ovate leaves 3 feet long, entire at the base but divided above into three to nine lobes. The large fruits, 4 to 6 inches in diameter, are often seedless, but when seeds are present they are much the size, shape, and flavor of chestnuts.

For previous introduction see 105735.

117592 to 117595.
From Turkey. Seeds collected by H. L. Westover and F. L. Wellman, Bureau of Plant Industry. Received September 4, 1936.

117592. Fritillaria sp. Liliaceae.
No. 903-A. From Birlujek, July 22, 1936

117593. Gagea sp. Liliaceae.
No. 908-A. From 10 km. southeast of Gaziantep.

117592 to 117595—Continued.

117594. Muscari sp. Liliaceae.
No. 928-A. From 44 km. northeast of Malatya, July 17, 1936.

117595. (Undetermined.)

117596. Vitis vinifera L. Vitaceae.
European grape.
From the Union of South Africa. Cuttings presented by J. C. van Jaangvelt, Government Viticultural Station, Paarl, Cape Province, through Prof. A. I. Perold, Stellenbosch University, Cape Colony. Received September 19, 1936.
Bonnet De Retord.

117597. Hippeastrum psittacinium (Ker.) Herb. Amaryllidaceae.
From Brazil. Bulbs collected by W. A. Archer, Bureau of Plant Industry. Received September 19, 1936.

No. 3560. Collected August 14, 1936, at Rio de Janeiro. A hippeastrum with six to eight leaves over 1 foot long and a stout scape 2 to 3 feet long, bearing an umbel of two to four flowers with oblong undulate perianth segments 4 to 5 inches long, green with crimson stripes and edges. Native to Brazil.

117598. Curuma colophylla O. F. Cook. Phoenicaceae.
Palm.
From Puerto Rico. Seeds presented by Atherton Lee, Superintendent, Puerto Rico Agricultural Experiment Station, Mayaguez. Received September 16, 1936.

A spiny palm, endemic to the limestone hills of northern Puerto Rico, a region of about 70 inches rainfall. The trunk grows 20 to 30 feet tall with a diameter of 5 or 6 inches. The pinnae of the leaves are broad and truncate as in Timilia, but are evenly set along the rachis instead of being clustered. The fruits, borne in large clusters, are round and red like cherries, with a red acid pulp surrounding the hard black seeds.

117599. Combretum sp. Combretaceae.
From China. Seeds presented by A. N. Steward, Department of Botany, College of Agriculture and Forestry, University of Nanking. Nanking. Received April 30, 1934. Numbered in September 1936.

F. 59. Collected at Chang An, Yung Hsien.

117600 to 117653.


117601. Federation × Hope S. U. C 9545.

117602. Federation × Webster S. U. C 9458.

117603. Ford.

117604. Geerallying × Kenya, 2053.

117605. Greek 10, C 7135.

From Australia. Seeds presented by Dr. H. Wenholz, Director of Plant Breeding, Department of Agriculture, Sydney, New South Wales. Received August 28, 1936.

From the Union of South Africa. Cuttings presented by J. C. van Jaangvelt, Government Viticultural Station, Paarl, Cape Province, through Prof. A. I. Perold, Stellenbosch University, Cape Colony. Received September 19, 1936.
Bonnet De Retord.

From Brazil. Bulbs collected by W. A. Archer, Bureau of Plant Industry. Received September 19, 1936.

No. 3560. Collected August 14, 1936, at Rio de Janeiro. A hippeastrum with six to eight leaves over 1 foot long and a stout scape 2 to 3 feet long, bearing an umbel of two to four flowers with oblong undulate perianth segments 4 to 5 inches long, green with crimson stripes and edges. Native to Brazil.

A spiny palm, endemic to the limestone hills of northern Puerto Rico, a region of about 70 inches rainfall. The trunk grows 20 to 30 feet tall with a diameter of 5 or 6 inches. The pinnae of the leaves are broad and truncate as in Timilia, but are evenly set along the rachis instead of being clustered. The fruits, borne in large clusters, are round and red like cherries, with a red acid pulp surrounding the hard black seeds.

Combretum sp. Combretaceae.

From China. Seeds presented by A. N. Steward, Department of Botany, College of Agriculture and Forestry, University of Nanking. Nanking. Received April 30, 1934. Numbered in September 1936.

F. 59. Collected at Chang An, Yung Hsien.
L. solanacea. Common tobacco.

From Brazil. Seeds collected by W. A. Archer, Bureau of Plant Industry. Received August 28, 1936.

Nos. 117654 to 117674 were collected in the State of Minas Geraes in August 1936.

117654. No. 3617. From Lagoa Santa. Volunteer tobacco, 8 feet tall; leaves slightly viscid; corolla margins dark red.

117655. No. 3618. From Venda Nova. Volunteer tobacco, 8 feet tall; leaves slightly viscid; corolla greenish below, dirty white above.

117656. No. 3619. From Venda Nova. Volunteer tobacco, 8 feet high, leaves slightly viscid; corolla greenish at first and then pink-lipped.

117657 to 117671. From Bello Horizonte, August 3, and 8, 1936. Cultivated tobacco presented by Abelardo de Albuquerque Sarmaneto, Chief of the Servico de Fomento do Fumo, Secretaria de Agricultura do Estado de Minas Geraes.

117657. No. 3620. Caethe.

117658. No. 3621. Matta.


117660. No. 3623. Descalvado.

117661. No. 3624. Azul.


117663. No. 3626. Ouro.


117667. No. 3630. Cruz das Almas. Originally from Bahia.


117669. No. 3632. Goyano. One of the more important and well-known types.

117670. No. 3633. Mariense. One of the more important and well-known types.

117671. No. 3634. Paracente. One of the more important and well-known types.
22 PLANT MATERIAL INTRODUCED

117672. No. 3663. Oh Inez. Introduced from China; the cured leaf is bright yellow.

117673. No. 3664. Amarelinho. Leaves bright yellow when cured.

117674. No. 3665. Samsum. Turkish tobacco. The cured leaf is bright yellow.

117675. No. 3671. Mata garrapata. From Cajeo do Sol, Serra de Cip6, August 5, 1936. A plant 5 feet tall with narrow lanceolate leaves; corolla whitish below, cerise above; leaves slightly viscid, young fruits and stems very viscid. This volunteer tobacco is used for smoking by the country people.

117676. No. 3672. Mata garrapata. From Caieo do Sol, Serra do Cipo, August 5, 1936. A volunteer tobacco 5 to 7 feet tall with leaves broader than No. 3671; young fruits and stems very viscid, leaves only slightly so; corolla green above, pink below.

117677. No. 3507. Volunteer tobacco from a dooryard in Quintino Bocaiuva, a station on the interurban railway between Rio de Janeiro and Belém, July 29, 1936.


117679 to 117682. From the Union of Soviet Socialist Republics. Scions presented by N. I. Sharapov, Department of New Cultures, Institute of Plant Industry. Received March 15, 1932. Numbered in September 1936.


117681. Badeni Erik, 2556.

117682. Black Alexander.


117684 to 117702—Continued.


117686. Directeur.

117687. Grosse Elvirghâde.

117688. Antoine Giroux.


117690 to 117696. Malus sylyestris Mill. Malaceae. Transparente de Zurich.

117691. Rambour d'Allemagne.

117692. Comite d'Orloff.

117693. Belle de Mai.

117694. Jaune hâtif.

117695. St. Germain.

117696 to 117702. Prunus armeniaca L. Apricot.

117697. Precoce espèren.

117698. Muscat pèche.

117699. Peliasier.

117700. Rouge du Roussillon.

117701. Grosse St. Jean.

117702. Guiditta Langione.


117704 to 117711. From Egypt. Seeds presented by Thomas W. Brown, Director, Horticultural Section, Ministry of Agriculture, Giza. Received September 28, 1936.

117705. Antigonon leptopus Hook. and Arn. Polygonoaceae. Rossa-de-montana. A handsome summer-blooming climber, native to Mexico, and adapted for greenhouse culture or for growing out-of-doors in the far south. The flowers, with rose-pink sepals, are in many-flowered racemes. For previous introduction see 111207.


117709 to 117711. Solanum spp. Solanaceae.

117710. Solanum indicum L. A much-branched, prickly undershrub up to 8 feet high, with shiny leaves and oval leaves 3 to 6 inches long and lateral racemes of many blue flowers with corollas about 1 inch across. Native to tropical India.
From Australia. Seeds presented by Dr. H. Wenholz, Director of Plant Breeding, Department of Agriculture, Sydney, New South Wales. Received September 2, 1936.

117712 to 117739—Continued.

117712. **Kenya** × **Florence** × **Dundee**. No. 5135.

117713. **Kenya** × **Florence** × **Dundee**. No. 5144.

117714. **Kenya** × **Florence** × **Dundee**. No. 5147.

117715. **R. I. 595** × **Florence**. No. 3264b.

117716. **R. I. 595** × **Florence**. No. 3263a.

117717. **R. I. 723** × **Hard Federation**. No. 3222a.

117740 and 117741.

From Jamaica, British West Indies. Seeds presented by Miss Zora Neale Hurston, Kingston. Received September 25, 1936.


An erect perennial bunch grass 4 to 6 feet high, with open spreading panicles of spikelets. It is native to Africa and has been introduced into tropical America, where it is cultivated for forage, furnishing pasture and green feed.

For previous introduction see 87464.

117741. **SOLANUM SP.** Solanaceae. 

**Susoomba**.

117742 to 117749.

From China. Seeds presented by Y. K. Yang, Agronomy Department, National Szechwan University, Ch'angtu. Received September 24, 1936.

117742 to 117745. **SOJA MAX** (L.) Piper. Fabaceae.

117746. **S. A. B.** 129.

117747. **S. A. B.** 128.

117748. **S. A. B.** 77.

117749. **S. A. B.** 63.

117750 to 117808. **TRITICUM AESTIVUM L.** Poaceae. Common wheat.

From Australia. Seeds presented by Dr. H. Wenholz, Director of Plant Breeding, Department of Agriculture, Sydney, New South Wales. Received September 3, 1936.

117750. **Currawa** × **Dundee** × **Marquillo**. No. 5244.

117751. **Currawa** × **Hope**. No. 7099.

117752. **Currawa** × **Hope**. C. 9545.

117753. **Ford**.

117754. **Clarendon** × **Hope**. No. 1629.

117755. **Clarendon** × **Hope**. No. 3085.

117756. **Clarendon** × **Hope**. No. 3081.

117757. **Currawa** × **Dundee** × **Dundee**. No. 5126.

117758. **Hope** × **Clarendon**. No. 428 E.

117759. **Hope** × **Clarendon**. No. 5517.

117760. **Hope** × **Waratah**. No. 2716.

117761. **Hope** × **Waratah**. No. 5510.

117762. **Hope** × **Waratah**. No. 7113.

117763. **Hope** × **Yandilla King**. No. 433 E.

117764. **Hope** × **Yandilla King**. No. 508 D.

117765. **Kenya** × **Florence** × **Dundee**. No. 273 D.
24

PLANT MATERIAL INTRODUCED

117750 to 117808—Continued.

117778. *Hope × Currawa × Dundee.* 428 E.
117780. *Hope × Currawa × Dundee.* No. 5517.
117782. *Hope × Waratah.* No. 1216.
117783. *Hope × Waratah.* No. 5550.
117784. *Hope × Waratah.* No. 5550 H.*
117785. *Hope × Yandilla King.* No. 508 d.
117786. *Hope × Yandilla King.* 493 E.
117787. *Kenya × Florence × Dundee.* 257 D.
117788. *Kenya × Florence × Dundee.* 264 D.
117789. *Kenya × Florence × Dundee.* 273 D.
117790. *Kenya × Florence × Dundee.* 494 E.

117750 to 117808—Continued.

117807. *Portugal C 7897.*
117808. *Tree Seas C 5870.*

117809 to 117837. *ALLIUM* spp. Liliaceae.

From Turkey. Bulbs and seeds collected by H. L. Westover and F. L. Wellman, Bureau of Plant Industry. Received in July 1936.

Unless otherwise stated, this material was received as bulbs.

117809. *ALLIUM* sp.
117810. *ALLIUM* sp.
   (No field number.) From north of Adana.
117811. *ALLIUM* sp.
   No. 478. From Arystef, 40 km. east of Gaziantep, May 3, 1936.
117812. *ALLIUM* sp.
   No. 480. From 35 km. south of Gaziantep, May 1, 1936.
117813. *ALLIUM* sp.
   No. 483. From 20 km. south of Gaziantep, May 1, 1936.
117814. *ALLIUM* sp.
   No. 487. Bulbs and seeds from 25 km. northwest of Gaziantep, May 2, 1936.
117815. *ALLIUM* sp.
   No. 506. From Ali Dag, near Talas, May 7, 1936.
117816. *ALLIUM* sp.
   No. 508—A. From 10 km. west of Gaziantep.
117817. *ALLIUM* sp.
   No. 553. From along the road to Urgub, May 7, 1936.
117818. *ALLIUM* sp.
   No. 828. From dry hills, 30 km. east of Milas, May 26, 1936.
117819. *ALLIUM* sp.
   No. 840. From 10 km. south of Denizil, May 30, 1936.
117820. *ALLIUM PULCHELLUM* Don.
   No. 844. From 15 km. east of Milas, May 26, 1936.
117821. *ALLIUM* sp.
   No. 845. From 35 km. north of Antatya.
117838 to 117967—Continued.

117839 to 117843. **ALLIUM CEPA** L. Liliaceae. Onion.

117839. No. 3528. Cebola branca, a white onion.

117840. No. 3538. Cebola amarela das Canarias, a yellow onion.

117841. No. 3557. Cebola rózsa, a red onion.

117842. No. 3564. Cebola amarela, a yellow onion.

117843. No. 3565. Cebola branca Italiana, an Italian white onion.

117844. **ALLIUM GRAVEOLENS** L. Liliaceae. Leek.

No. 3524. Aipo branco.

117845 to 117850. **ARACHIS** spp. Fabaceae. Peanut.

117845. **ARACHIS** L. Apiaceae. Celery.

No. 3524. Aipo branco.

117851. **ALLIUM PORRUM** L. Liliaceae. Leek.

No. 3554. Alho porro.


No. 3525. Asparagos.

117853 to 117871. **BRASSICA** spp. Brassicaceae.

117853. **BRASSICA CAMPESTRIS** L. Rutabaga.


117855. No. 3516. Mostarda lisa, a smooth mustard.


117858. No. 3540. Mostarda crespa, a curly mustard.


117859. No. 3516. Mostarda lisa, a smooth mustard.


117862. No. 3540. Mostarda crespa, a curly mustard.

From Brazil. Seeds collected by W. A. Archer, Bureau of Plant Industry. Received August 28, 1936.

A collection of cultivated vegetables from the seed stores at Bello Horizonte, State of Minas Gerais, August 1, 1936.
PLANT MATERIAL INTRODUCED

117838 to 117967—Continued.


117838 to 117967—Continued.

117912 to 117914. **RAPHANUS SATIVUS** L. Brassicaceae. Radish.


117915. **RUMEX ACETOSA** L. Polygonaceae. *Azedinha*. Cultivated as greens in Brazil. For previous introduction see 55605.

117916 to 117918. **SOLANUM MELONGENA** L. Solanaceae. Eggplant.


117920. No. 3545. *Espinafre perpetual*. For previous introduction see 110898.


117924. **ACRQCOMIA** Phoenicaceae. *SCLEROCARPA* Mart. Macauba palm. No. 3669. *Coco macauhba*. A beautiful palm 40 feet high, with a very spiny trunk, particularly when young. The finely pinnate leaves are graceful and drooping, and the large bunches of fruit, green with brown scurfy hairs at the basal portion, are valued for the oil they produce.

For previous introduction see 98483.


For previous introduction see 98841.

117927. **Crotalaria retusa** L. No. 3553. Cultivated as forage and for its fiber.

For previous introduction see 107463.

117928. **Crotalaria striata** DC. No. 3652. Cultivated for forage.


117930. **Crotalaria sp.** No. 3637. Forage crop, native to Brazil.

117931. **Dahlia**. Asteraceae. No. 3561. A hybrid dahlia of unknown parentage, with single flower heads of various color combinations.


117934. **ERIOSEMA BENTHAMIANUM** Mart. Fabaceae. No. 3610. A shrubby legume 2 to 3 feet high, native to Brazil.

117935. **Euchlaena mexicana** Sch r a d. Poaceae. No. 3614. Cultivated as forage.
28 PLANT MATERIAL INTRODUCED

117838 to 117967—Continued.

117944. No. 3651. Girasol branco; a selected strain cultivated for the oil of the seed.
117945. No. 3847. Girasol preto. Cultivated for the oil of the seed, but considered not so good as No. 3651. [P. I. 117944.]

117947. No. 3648. Girasol preto. Cultivated for the oil of the seed, but considered not so good as No. 3651.


117949. No. 3584. Tremoço. From Argentina.

117950. No. 3670. Coqueiro.Native to the northeastern part of the State of Minas Gerais. This is one of the so-called ivory-nut palms. The fruit is spherical, about the size of a small apple, and covered with smooth reticulated scales. The spadix, loaded with fruit, is of immense weight, often more than two men can carry.

For previous introduction see 98522.

117951. No. 3592. Triângulo.


117958. No. 3602. Milho indígeno (Milho alho).

117959. No. 3606. Milho crystal. This strain bears four full-sized ears on each stalk.

117968 to 117987. From Turkey. Seeds and bulbs collected by H. L. Westover and F. L. Wellman, Bureau of Plant Industry. Received September 4, 1936.

117970. Allium sp. No. 3592. Triângulo.

117975. No. 3694. Capim murum murum or capim colônia. Native to the northeastern part of the State of Minas Gerais.


117959 and 117960. Trimeza junctifolia (Klatt) Bentham and Hook. Iridaceae. From Serra de Clipó, State of Minas Gerais. An iris-like plant with one to three rigid cylindrical leaves 1 to 2 feet high and a shorter leafless stem with a single cluster of bright-yellow, fugitive flowers about an inch long. Native to Brazil, where it grows in sandy rocky soil.

117957. No. 3602. Milho indígeno (Milho alho).

117958. No. 3606. Milho crystal. This strain bears four full-sized ears on each stalk.

117968 to 117986. From Turkey. Seeds and bulbs collected by H. L. Westover and F. L. Wellman, Bureau of Plant Industry. Received September 4, 1936.

Nos. 117968 to 117978 were received as bulbs.

117968 to 117985. Allium spp. Liliaceae.

117971. Allium sp. No. 914. From 50 km. southwestern Elaziz, July 14, 1936.


117974. Allium sp. No. 912. From 50 km. north of Malatya, July 17, 1936.

117975. Allium sp. No. 922. From 45 km. north of Nigde, July 26, 1936.

From Brazil. Seeds and plants collected by W. A. Archer, Bureau of Plant Industry.

Non. 924-B. From 10 km. northwest of Buruyek, July 23, 1936.

Non. 925-C. From 10 km. northwest of Buruyek, July 23, 1936.

Non. 926-D. From 10 km. northwest of Buruyek, July 23, 1936.

Nos. 117970 to 117987 were received as seeds.

Non. 911-A. From southeast of Elaziz, July 13, 1936.


Non. 913-A. From 30 km. southeast of Elaziz, July 15, 1936.

Non. 914-A. From 52 km. southwest of Elaziz, July 14, 1936.

Non. 916-A. From 50 km. north of Malatya, July 17, 1936.


Non. 922-A. From 45 km. north of Nigde, July 26, 1936.

Non. 923-A. From 10 km. northwest of Buruyek, July 23, 1936.

Non. 910. From 5 km. east of Buruyek, July 6, 1936.

Non. 918. From 5 km. east of Buruyek, July 6, 1936.

Non. 924-B. From 10 km. northwest of Buruyek, July 23, 1936.

Non. 925-C. From 10 km. northwest of Buruyek, July 23, 1936.

Non. 926-D. From 10 km. northwest of Buruyek, July 23, 1936.

Non. 911-A. From southeast of Elaziz, July 13, 1936.


Non. 913-A. From 30 km. southeast of Elaziz, July 15, 1936.

Non. 914-A. From 52 km. southwest of Elaziz, July 14, 1936.

Non. 916-A. From 50 km. north of Malatya, July 17, 1936.
118001—Continued.

For previous introduction see 67745.

118002 to 118004. FRAGARIA VESCA L. Rosaceae. Strawberry.
From Switzerland. Seeds presented by Emil Mauser. Samenhandlung, Rathausbrocke, Zürich. Received September 28, 1936.


118005 and 118006. ALLIUM spp. Liliaceae.
From Turkey. Bulbs and seeds collected by H. L. Westover and F. L. Wellman, Bureau of Plant Industry. Received September 4, 1936.

118005. ALLIUM sp. No. 900. (Bulbs.) 118006. ALLIUM sp. No. 926–A. (Seeds.)

118007 to 118008. From India. Seeds collected by Walter Koelz, Bureau of Plant Industry. Received September 3, 1936.

118007 to 118010. AMYGDALUS spp. Amygdalaceae. 118008 to 118009. AMYGDALUS PERSICA L. Peach.
118007. No. 974. Aru. From Chamba, Chamba State, at 3,000 feet altitude, July 12, 1936. A small tree 8 inches in diameter, fruit white, freestone, 1¼ inches in diameter, of good flavor.
118008. No. 975. Aru. From Chamba, Chamba State. A yellow-fleshed, beaked, clingstone peach, 2¼ inches in diameter. This variety is found from 3,000 to 7,500 feet altitude.
118009. No. 1008. Aru. From Srinagar, Kashmir, July 20, 1936. Presented by the Government Gardens. Fruit well marked with crimson, 1½ inches in diameter; a white-fleshed freestone of good quality. Said to be one of the Saharanpur varieties and, as such, grows in extreme heat. Here it tolerates mild freezes.
118010. AMYGDALUS sp.
No. 939. From Kukti, Chamba State, July 4, 1936, at 9,000 feet altitude. Tall slender trees, 3 or 4 inches in diameter and 40 feet high, which resemble willows from a distance. Fruit 1 inch in diameter. Should be a fine ornamental.
118011. ANDROSACE sp. Primulaceae.

118007 to 118009—Continued.

118012. ANEMONE sp. Ranunculaceae.
No. 937. From Reiling, Chamba State, July 2, 1936, at 14,000 feet altitude. Flowers yellow, backed more or less with indigo. Attractive clumps to 2 feet.

118013. AQUELEGIA sp. Ranunculaceae.
No. 981. From the Kalatop Forest, Dalhousie, Punjab, July 12, 1936. A plant 2½ feet high, with glaucous foliage, found in the shade. The few flowers are deep wine colored without fragrance and appear early.

118014 and 118015. BRASSICA RAPA L. Brassicaceae. Turnip.
From Partan, Kashmir, July 22, 1936. Collected in the market.
118014. No. 1025. A greenish rutabaga, common on the market, up to 4 inches in diameter, mild and of good flavor.
118015. No. 1022. Said to be red-rooted and globular.

No. 978. From Khañjür, Chamba State, July 11, 1936. A thorny shrub sometimes 10 feet high, semiscandent, with long racemes of orange or yellow flowers.
For previous introduction see 103116.

118017 to 118032. CITRULLUS VULGARIS Schrad. Cucurbitaceae. Watermelon.
118017 to 118021. Tarbuza. From Lahore, Punjab, July 14, 1936, but of unknown source.
118017. No. 984. Fruit elongate, 16 inches long, pale green, lightly and finely netted. Flesh of good quality, but low in sugar.
118018. No. 985. A pale-green elongate fruit 18 inches long with longitudinal blotching. Flesh good, but not very sweet.
118019. No. 986. A dark-green globular fruit, 18 inches in diameter, with red flesh.
118020. No. 987. A dark-green globular fruit 12 inches in diameter; flesh of good texture and sweet.
118021. No. 991. A pale-green subglobose fruit 8 inches in diameter, lightly netted.
118022. No. 1005. Tarbuza. From Lake Dal, Kashmir, July 19, 1936. A dark-green globose fruit 12 inches in diameter which is indistinguishable externally from the regular red-seeded form.
118023. No. 1037. Hendvend. From Srinagar, Kashmir, at 3,000 feet altitude, July 1, 1936. A small tree, 1½ feet high, with thorny branches and leaves, and globular fruit, 18 inches long, with dark greenish-brown spotted with darker green. Grown on rafts in the lake.
118024. COHOLUS sp. Betulaceae.
No. 969. T. angri. From Chamba, Chamba State, July 12, 1936. Said to have come from Pangri. A large ornamental tree that grows in the walnut-fir zone. The nuts have a good flavor and are not so woody as our bush hazels.
118007 to 118098—Continued.

118025 to 118031. CUCUMIS spp. Cucurbitaceae.

118025. No. 967. Kharbuza. From Chamba, Chamba State, July 12, 1936. A smooth, nearly globular orange fruit, 6 inches in diameter, with pronounced ribs and fragrant orange flesh. Nos. 118026 to 118028 were from Kharbuza.

118026. No. 988. Kharbuza. Said to have come from Neahey. A smooth globular orange fruit with prominent ribs. The fragrant orange flesh is sweet with no musky flavor.

118027. No. 989. Kharbuza. Said to have come from Lucknow. A smooth yellow compressed fruit 8 by 4 inches, nearly unribbed, and sometimes netted with green. Flesh white to salmon, but the white flesh is usually the best; sweet with attractive flavor.

118028. No. 992. Lada. Said to have come from Chaman. Fruit elongate, 16 inches long, yellow to gold, well netted. A variety of very favorable reputation.

118029. No. 999. Kharbuza. Said to have come from Kobat, North West Frontier Province. A pale-yellow, slightly netted cigarlike fruit, 1 foot long, with sweet and very attractive yellow flesh.

118030 and 118031. CUCUMIS SATIVUS L. Cucumber.

118030. No. 952. K a k r i. From Chamba Brahmaur, Chamba State, July 7, 1936. Said to be a cucumber of ordinary size and shape.


118032 to 118034. CUCURBITA spp. Cucurbitaceae.

118032. CUCURBITA MAXIMA Duchesne. Squash.

No. 972. From Chamba, Chamba State, July 12, 1936. Described as a squash that attains a very large size.

118033 and 118034. CUCURBITA PEPO L. Pumpkin.

From Chamba, Chamba State, July 12, 1936.

118033. No. 971. Said to have an elongate fruit which weighs 30 pounds. Vines very vigorous and climb over houses and trees.

118034. No. 970. Said to be a small turban-squash, cream-colored to deep orange, 6 inches in diameter.

118035. DAUCUS CAROTA L. Apiaceae. Carrot.

No. 961. G a d j a r. From Chamba, Chamba State, July 10, 1936. Said to be a mixture of local races.
118007 to 118098—Continued.

118047 to 118054. ORYZA SATIVA L. Poa-ceae. Rice.

118047. No. 983. L a t h a u l. From Chamba, Chamba State, July 11, 1936. A wet rice with low heat requirements. Planted now and harvested in October.

118048. No. 1000. Near. From Verinag, Kashmir, July 16, 1936, at 6,400 feet altitude. One of the good rice of the State, and there are said to be about 200 varieties.


118052. No. 1019. Mughul Biol. From Par-tan, Kashmir, July 22, 1936, at 5,000 feet altitude. A wet rice, said to be one of the best white rices grown in Kashmir.

118053. No. 1020. Bara. From Partan, Kashmir, July 22, 1936, at 5,000 feet altitude. A wet rice, said to be one of the best grown in Kashmir.

118054. No. 1035. Lalanza. From the Srinagar bazar, Kashmir, July 23, 1936. Said to be one of the best of the Kashmir rices.

118055. PEDICULARIS sp. Scrophulariaceae.

No. 946. From Kukti, Chamba State, July 5, 1936, at 10,000 feet altitude. A perennial with very attractive large yellow sp. Scrophulariaceae.


No. 948. From Hursar, Chamba State, July 12, 1936. A long white radish; used fresh or in curry.

118058 to 118060. PHASEOLUS VULGARIS L. Fabaceae. Common bean.

118058. No. 960.

118059. No. 965.


No. 965. Muli. From Chamba, Chamba State, July 12, 1936. A long white radish; used fresh or in curry.

118064. No. 1029.

118065. No. 1030.


No. 964. Nosa. From Chamba, Chamba State, July 11, 1936, but said to be from Brahmun at 7,500 feet altitude. An attractive tree with symamorelike bark and edible seeds which are exported in quantities.

118067. PISUM SATIVUM L. Fabaceae. Pea.

No. 1021. Kara. From Srinagar, Kash-mir, July 23, 1936. Eaten roasted or boiled, both green and dried.

118068. POPULUS sp. Salicaceae.

No. 949. From Hursar, Chamba State, July 6, 1936. A tree 60 feet high and 8 feet in diameter, found growing in river bottoms and plantations. It is a fast grower and does not seem to spread from the roots.

118069. PRIMULA sp. Primulaceae.

No. 958. From Reling, Chamba State, July 12, 1936, at 1,400 feet altitude. Plants 8 to 10 inches high. The large purple flowers, one-half inch across, have white eyes.

118070. PRUNUS ARMENIACA L. Amygdala-ceae. Apricot.

No. 955. From Brahmun, Chamba State, July 7, 1936, at 8,000 feet altitude. Tree between 2 and 3 feet high, with fruit 1 inch in diameter.

118071. PRUNUS ARMENIACA L. Amygdala-ceae.

No. 950. Ohuli. From Lahore, Punjab, July 14, 1936, but said to have come originally from Baluchistan. Fruits 1 inch in diameter, the color of a greengage plum, very sweet and pleasant.


118073. RAPHANUS SATIVUS L. Brassicae-ceae. Radish.

No. 965. Muli. From Chamba, Chamba State, July 12, 1936. A long white radish; used fresh or in curry.

118074 to 118080. RUBUS sp. Rosaceae.

118074. RUBUS sp.

No. 944. From Kukti, Chamba State, July 4, 1936. A large well-formed bush 6 feet high, growing in pine forest. Fruits not ripe but probably blackish.

118075. RUBUS sp.

No. 945. From Kukti, Chamba State, July 5, 1936, at 9,000 feet altitude. A small plant between 3 and 4 feet high, with scarlet to crimson fruits one-fourth inch across which are sweet and pleasant.

118076. RUBUS sp.

No. 948. From Hursar, Chamba State, July 5, 1936. A bush about 5 feet high with small, few-seeded fruits. Edible root.

118077. RUBUS NIVEUS Thunb. Rosaceae.

No. 979. From Dalhousie, Punjab, July 13, 1936, at 7,000 feet altitude. Sweet crimson fruits from a bush 4 feet high.
118007 to 118098—Continued.

118089. VIBURNUM sp. Caprifoliaceae.
No. 941. From Kukti, Chamba State, July 4, 1936, at 9,000 feet altitude. A shrub 7 feet high, with attractive white to pink flowers which appear as the snow begins to melt. The flowers have a pleasant scent, like that of trailing-arbutus.

118090. VIBURNUM sp. Caprifoliaceae.
No. 1009. From Pir Pinjal, Kashmir, June 16, 1936, at 9,000 feet altitude. Shrubs 5 feet high, said to have fragrant pink flowers borne early in the spring.

118091 and 118092. VICIA FABA L. Fabaceae.
From the bazar at Srinagar, Kashmir, July 23, 1936; a form used dry, like pigeonpeas.

118093. No. 1033. No. 1034.
118094 to 118098. VIOLA spp. Violaceae.

118095. No. 963. From near Brahmput, Chamba State, July 12, 1936. Said to be a garden plant.

118096 to 118098. VIGNA CYLINDRICA (Stickm.) Skeels. Fabaceae. Catjang.


118099 and 118100.

118100. ORBIGNYA sp. Phoenicaceae.
From Srinagar, Kashmir, July 23, 1936. A climbing bean with edible pods. The beans are also used dried.

118101 to 118104.
From India. Bulbs and seeds collected by Walter Koels, Bureau of Plant Industry. Received September 15, 1936.

From Venezuela. Seeds collected by Raymond Stadelman, Bureau of Plant Industry. Received September 26, 1936.

118110. No. 184. From El Purgatorio, Monagas, at 380 m. altitude, July 28, 1936.
118111. No. 185. From Bejucales, near Caicara, Monagas, at 200 m. altitude, August 1, 1936.
118115. No. 188. *Tabaco blanco*. From San Felix, Monagas, at 250 m. altitude, August 2, 1936.
118116. No. 189. *Tabaco negro*. From Los Cavimbos, near Santa Maria, Sucre, at 300 m. altitude, August 9, 1936.
118117 and 118118. From San Felix, Monagas, at 250 m. altitude, August 2, 1936.
118120. No. 190. From Las Merellas, near San Felix, Monagas, August 2, 1936, at 250 m. altitude.
118122. No. 197. *Zambo*.* From the Colorado River near San Antonio, Monagas, August 3, 1936, at 250 m. altitude.
118124 and 118125. From La Fantasma, near San Antonio, Monagas, at 250 m. altitude, August 3, 1936.
118126. No. 199. *Tabaco negro*. From La Soledad, south of San Antonio, on the way to Cumanacoa, at 250 m. altitude, August 3, 1936.
118130. No. 205. *Tabaco negro*. From Sabana de Piedras, Sucre, at 1,000 m. altitude, August 9, 1936.
118131. No. 206. *Tabaco negro*. From Cueva del Guacharo, near Carip, Monagas, at 950 m. altitude, August 10, 1936.
118132 and 118133. *Guacharo*. From Guacharo, Monagas, at 800 m. altitude, August 10, 1936.
118134 to 118137. From Amarillas, near Carip, Monagas, at 750 m. altitude, August 11, 1936.
118139 and 118140. From Santa Maria, Sucre, at 300 m. altitude, August 11, 1936.
118139. No. 214. *Guacharo*. From Santa Maria, Sucre, at 300 m. altitude, August 11, 1936.
118140. No. 215. *Tabaco negro*. From Boqueron, near San Agustin, Sucre, at 1,000 m. altitude, August 11, 1936.
118141. No. 216. *Urcea*. From Santa Cruz, at 250 m. altitude, August 12, 1936.
118142 and 118143. *Tabaco negro*. From El Toro, near Santa Cruz, Sucre, at 250 m. altitude, August 12, 1936.
118144 and 118145. *Tabaco negro*. From La Soledad, south of San Antonio, on the way to Cumanacoa, at 250 m. altitude, August 19, 1936.
118147 and 118148. *Cayuca*. From Caiguare, near Cumanacoa, Sucre, at 220 m. altitude, August 19, 1936.
118148. No. 223. *Tabaco negro* or *salam*.
118149 to 118151. From La Rinconada, near Cumanacoa, Sucre, at 230 m., August 10, 1936.
118149. No. 224. *Tabaco negro*.
118153. No. 228. *Cubano*. From Pachiquito, near Piritu, Anzotea, at 120 m. altitude, August 11, 1936.
118105 to 118181—Continued.

118154 to 118157. From Guanape, Anzoategui, August 15 and 16, 1936, at 180 m. altitude.


118156. No. 231. Caraqueno.


118158 and 118159. Rabo de gallo. From El Guamo, near Guanape, Anzoategui, at 110 m. altitude, August 15, 1936.

118158. No. 233.

118159. No. 234.


118161. No. 236. Capadare and Virginia.


118163 to 118166. From El Placer, near El Valle, Anzoategui, from 260 to 270 m. altitude, August 16, 1936.

118163. No. 238. Cubano.

118164. No. 239. Cubano.


118167 and 118168. From La Chaguarama, near El Valle, at 280 m. altitude, August 16, 1936.


118169 to 118171. From San José de Guaribe, Guárico, August 16, 1936, at 260 m. altitude.

118169. No. 244. Caujaro, Pallon, Gacho, and Rabo de gallo.

118170. No. 245. Pallon.


118173. No. 248. From El Chaparral, near Guanta, Anzoategui, at 160 m. altitude, August 20, 1936.

118174. No. 249. A mixture of No. 227 and No. 228.

118175 to 118177. From Cocoyal, near San Antonio, Monagas, at 1,500 m. altitude, August 21, 1936.

118175. No. 250. Tabaco negro.

118176. No. 251. Tabaco negro.


118178. No. 253. Tabaco negro. From El Hato de la Cuesta, near San Antonio, at 1,500 m. altitude, August 21, 1936.

118179 and 118180. From Guanaguana, Monagas, at 440 m. altitude, August 22, 1936.


118180. No. 255. Tabaco común.

118181. No. 256. A mixed sample.

118182. SACCHARUM OFFICINARUM L. Poaceae. Sugar cane.

From Papeete, Tahiti, Society Islands. Cuttings obtained through the Division of Sugar Investigation, Bureau of Plant Industry. Received September 29, 1936.

118183. PHOENIX HANCEANA Naudin. Phoenicaceae. Date palm.

From Japan. Seeds presented by Prof. Tyozaburo Tanaka, Taihoku Imperial University, Taiwan. Received September 24, 1936.

A Chinese relative of the date palm which has short, tufted stems and pinnate foliage. For previous introduction see 101094.

118184. AMYGDALUS PERSICA L. Amygdalaceae. Peach.

From China. Seeds presented by Miss B. C. Patterson, Tenghsien, Shantung. Received September 24, 1936.

A wild peach which becomes a tree 35 feet high, with fruits little larger than a cherry.

118185 to 118356. From Brazil. Seeds collected by W. A. Archer, Bureau of Plant Industry. Received September 21, 1936.

Unless otherwise stated, these were all purchased in seed stores in São Paulo, August 28, 1936.

118185 to 118191. ALLIUM CEP* L. Liliaceae. Onion.

118185. No. 3818. Cebola branca Italiana.


118187. No. 3820. Cebola vermelha das Canarias.

118188. No. 3821. Cebola das Canárias amoreira.


118192. ALLIUM PORRUM L. Liliaceae. Leek.

No. 3823. Cebolinha de todo ano.

118193 to 118196. APIUM GRAVEOLENS L. Apiaceae. Celery.


118194. No. 3792. Aipo salado branco cheio.

118195. No. 3893. Aipo salado tronchado sem rival.

118196. No. 3791. Aipo rabano tronchado.
118197 to 118201. *Arachis hypogaea* L. 

Fabaceae. Peanut.

118197. No. 3741. From a farm south of São Paulo, August 26, 1936. Pods small, integument black, seeds short, ovoid.


118199 to 118201. *Tatu.* From São Miguel, south of São Paulo, August 26, 1936.

118199. No. 3742.

118200. No. 3743.

118201. No. 3744.


118203. No. 3759. *Beterrba vermelha.*

118204. No. 3760. *Beterrba red ondo vermelha.*


118206. *Brassica campestris* L. Rutabaga.


118208 and 118209. Grown on the island of Tenerife, Canary Islands.


118211 to 118219. *Brassica oleracea capitata* L. Cabbage.


118212. No. 3778. *Couve brocoli branco.*

118213. No. 3779. *Couve flor d'Algeria.*

118214. No. 3780. *Couve flor gigante de Napoles.*

118215. No. 3781. *Couve flor lenormand.*


Nos. 118217 to 118219 were grown on the island of Tenerife, Canary Islands.


118218. No. 3856. *Couve flor de inverno,* or *Couve brocoli de curto branco monstruoso.* Cauliflower.

118219. No. 3857. *Couve flor alta costal.* Cauliflower.

118220 to 118233. *Brassica oleracea botrytis* L. Cabbage.


118233 to 118235. *Brassica oleracea viridis* L. Collard.

118233. No. 3775. *Couve de todo ano.* Said to be imported; used in colder climates as forage and greens.

118234. No. 3827. *Couve gallega de folha larga.*


118236. No. 3895. *Couve Chosen.*

118237. No. 3896. *Couve chakushina.*

118238 to 118246. *Brassica rapa* L. Turnip.

118238. No. 3783. *Nabo branco meio comprido.*

118239. No. 3784. *Nabo amarello de mildo.*

118240. No. 3785. *Nabo chato branco Francoez.*

118241. No. 3786. *Nabica de tarra.*

118242. No. 3871. *Nabo do Japão.*

118243. No. 3902. *Nabo branco chato tennoji.*

118244. No. 3903. *Nabo branco chato shogoin.*

118245. No. 3904. *Nabo branco tokinashi.*

118246. No. 3787. *Couve nabo branco.*

118238 to 118246. *Brassica rapa* L. Turnip.

Seeds said to be imported.

118238. No. 3783. *Nabo branco meio comprido.*

118239. No. 3784. *Nabo amarello de mildo.*

118240. No. 3785. *Nabo chato branco Francoez.*

118241. No. 3786. *Nabica de tarra.*

118242. No. 3871. *Nabo do Japão.*

118243. No. 3902. *Nabo branco chato tennoji.*

118244. No. 3903. *Nabo branco chato shogoin.*

118245. No. 3904. *Nabo branco tokinashi.*

118246. No. 3787. *Couve nabo branco.*
118185 to 118356—Continued.

118247 to 118350. **BRASSICA OLERACEA** GONGYLOIDES L. Kohlraii.

Nos. 118247 and 118248 were said to be imported seed.

118247. No. 3799. Couve rabano branco.


Nos. 118249 and 118250 were grown on the island of Tenerife, Canary Islands.

118249. No. 3872. Couve rabano rôzio goliath.


118251 to 118259. **CAPSICUM ANNUUM** L. Solanaceae. Common redpepper.

118251. No. 3761. Pimenta doce mostruosa.

118252. No. 3762. Pimenta doce quadrado.

118253. No. 3763. Pimenta doce de hespanha.

118254. No. 3764. Pimenta cayenna forte.

Nos. 118255 to 118259 were grown on the island of Tenerife, Canary Islands.

118255. No. 3863. Pimenta doce grande amarello ouro.

118256. No. 3864. Pimenta ou pimentão grande comum.

118257. No. 3865. Pimenta cereja.

118258. No. 3866. Pimenta malagueta do Chile.

118259. No. 3867. Pimenta cayenna.

118260 to 118263. **CICHORIUM ENDIVIA** L. Cichoriaceae. Endive.


118261. No. 3907. Almeirdo de folha larga verde erecta.


118264. No. 3765. Pimentão doce grande amarelo ouro.

118265. No. 3766. Pimenta ou pimentão grande comum.

118266. No. 3855. Pimenta cereja.

118267. No. 3866. Pimenta malagueta do Chile.

118268. No. 3867. Pimenta cayenna.

118269. **CAPSICUM ANNUUM** Schrad. Solanaceae. Watermelon.

No. 3862. Melão americana de Santa Barbara. Seeds grown in Brazil.

118270 to 118283. **CIMPITUS VULGARE** Schrad. Cucurbitaceae.

118270. No. 3749. Meldo cavaillon (casca amarella).

118271. No. 3752. Meldo (cascade carvalho).

118272. No. 3753. Meldo cantaloup.


118275. No. 3929. Meldo casca de carvalho.

118276. No. 3929. Meldo casca de carvalho.

118277 to 118283. **CUCURBITA SPP.** Cucurbitaceae.

118277. No. 3750. Pepino pequeno para conserva.

118278. No. 3751. Pepino Italiano verde comprido.

118279. No. 3868. Pepino verde comprido.

118280. No. 3869. Pepino cornichon para conserva.

118281. No. 3870. Pê pino verde grande.


118283. No. 3928. Pepino verde comprido.

118284 to 118296. **CUCURBITA** SPP. Cucurbitaceae.

118284 to 118289. **CUCURBITA MAXIMA** Duchesne. Squash.

118284. No. 3824. Abobora morango.


118286. No. 3883. Abobora moranga verde de Espanha.

118287. No. 3884. Abobora moranga amarella monstruosa.

118288. No. 3887. Abobora moranga vermelha girimú.

118289. No. 3889. Abobora moranga de Portugal.

118290 to 118297. **CICHORIUM INTYBUS** L. Cichoriaceae. Chicory.

118290. No. 3770. Chicoria roxa Italiana.

118291. No. 3771. Chicoria amarga de raiz.

118292. No. 3772. Chicoria amarga.

118293. No. 3828. Almeirão de folha larga (radichio).

118294. No. 3829. CTRULLUS VULGARIS Schrad. Watermelon.


No. 3896. Couve maritima. From the island of Tenerife, Canary Islands.
PLANT MATERIAL INTRODUCED

118185 to 118356—Continued.


118324. No. 3806—A. Tomate Rei Humberto.

118325. No. 3807—A. Tomate pera.

118326. No. 3808—A. Tomate grande lisos.

118327. No. 3840. Tomate grande vermelho lisos.

118328. No. 3841. Tomate grande vermelho lobado.

118329 to 118331. Pastinaca sativa L. Apiaceae. Parsnip.

118330. No. 3758. Pastinaca comprida.

118331. No. 3838. Pastinaca temporaria meio curta.

118331. No. 3839. Pastinaca comprida.


118333. No. 3766. Ervilha para debrulhar.

118334. No. 3767. Ervilha maravilha (ana).

118335 to 118343. Raphanus sativus L. Brassicaceae. Radish.

118335. No. 3793. Rabanete comprido rosado.

118336. No. 3794. Rabanete redondo branco.

118337. No. 3795. Rabanete meto comprido rosado. 

118338. No. 3796. Rabanete preto comprido.

118339. No. 3897. Rabanete minokokonoka.

118340. No. 3898. Rabanete sakurajima.

118341. No. 3899. Rabanete tokinashi.

118342. No. 3900. Rabanete miyashigique.


No. 3875. Rhubarbo rizo melhorado.

118345. Scolymus hispanicus L. Cichoraceae. Spanish oysterplant.


118346. No. 3876. Beringela branca (Glô).

118347. No. 3877. Beringela vermelha (Glô).


118349. No. 3815. Espinafre rasteiro virofay.

118350. No. 3880. Espinafre monstruoso de virofay.
From the Union of Soviet Socialist Repub-
118185 to 118356—Continued.
lics. Seeds presented by the Director, All-
118351. TETRAGONIA HEXAPANNA Murray. Union Research Institute of Humid Sub-
Aizoaceae.解
No. 3879. Espinifre de Nova Zelando.
118352 to 118354. TRAGOPOGON FORRIFOLIUS Vegetable cyster.
L. Cichoriaceae. Vegetable cyster.
118352. No. 3757. Salafisa branço.
118353. No. 3911. Escorenciero da Es-
ponha.
118354. No. 3912. Salafisa branço.
Valerianaceae.
No. 3844. Alfaces do campo verde plena.
118356. VICIA PARA L. Fabaceae. Broadbean.
No. 3768. Fava de sevilha.
118357 to 118362. From the Union of Soviet Socialist Repub-
Aceraceae. Colisma maple.
118357. No. 3945. From the Instituto Biologico, Sao Paulo, August 28, 1936.
A tree which b.comes 60 feet high, native to the Caucasus region and eastward to western China. The five- to seven-
lobed, cordate leaves are 3 to 6 inches wide, and the greenish yellow flowers, in upright corymbs, are followed by spreading winged fruits.
For previous introduction see 98308.
118358. No. 3947. Presented by Dr. F. C. Archit, Bureau of Plant Industry. Re-
A large tree with deeply cordate leaves, 5 to 10 inches across, having coarsely crenate-narate lobes. The flowers are borne in large erect panicles. It is native to the Caucasus region and northern Iran (Persia).
For previous introduction see 95564.
118359. ALNUS GLEUTINOSA BARBATA (C. A. Mey.) Ledeb. Betulaceae.
A curly tree up to about 75 feet high, of narrow pyramidal habit with dark-green, ovato-long leaves. Native to the Caucasus region.
118360. GLEDITSIA CAPSICSA Donf. Cassal-
118360. No. 3918. Cerfolio commun.
A very bony tree, 30 to 40 feet high, the spines branched and slightly flattened, 6 inches or more long. The plinate or biminate leaves are 6 to 10 inches long, and the green flowers, almost sessile, are in dense downy racemes 2 to 4 inches long. The scimitar-shaped pods are about 8 inches long and 1 inch wide. Native to northern Iran (Persia).
For previous introduction see 42777.
118361. PARROTIA PERSICA (DC.) Meyer. Hamamelidaceae.
118361. No. 3950. From the Instituto Biologico, Sao Paulo, August 28, 1936. A perenni-
A shrub or small tree up to 15 feet high, with spreading branches and ovate-
oblong, coarsely crenate leaves, 3 to 4 inches long, which turn scarlet, yellow, and orange in the autumn and remain on the branches a long time. The flower heads, which appear in March before the leaves, are rather inconspicuous except for the pendent purple stamens; the ovoid fruits are half an inch long with two recurved lobes. Native to Iran (Persia).
For previous introduction see 81354.
118362. PTEROCARYA FRAXINIFOLIA (Lam.) Schacht. Juglandaceae.
A handsome spreading tree which becomes 60 feet high, with attractive dark-green planate leaves about 1 foot long. It is native to the Caucasus region.
For previous introduction see 74506.
118363. Hibiscus sp. Malvaceae.
From Argentina. Seeds presented by Dr. Arturo Donat, Botanico del Parque Na-
118364 to 118402. From Brazil. Seeds collected by W. A. Archer, Bureau of Plant Industry. Re-
118364. No. 3947. Presented by Dr. F. C. Hoehne, Instituto Biologico, Sao Paulo, August 28, 1936. Received as Alstro-
118364. No. 3947. A twining vine with nearly glabrous, oblong-acuminates leaves 3 inches long and cymes of faintly odororous, saucer-
118365. ANTHRISCUS BOREOLUS (L.) Hoffm. Apiaceae.
A cultivated herb.
118366. ARALIA SERICIFERA Brodt. Ascle-
118366. No. 3910. Losna. (Absinthio officinalis.)
A very bony tree, 30 to 40 feet high, the spines branched and slightly flattened, 6 inches or more long. The plinate or biminate leaves are 6 to 10 inches long, and the green flowers, almost sessile, are in dense downy racemes 2 to 4 inches long. The scimitar-shaped pods are about 8 inches long and 1 inch wide. Native to northern Iran (Persia).
For previous introduction see 42777.
118367. ARISTOLOCHIA ARCUATA Mast. Aristolochiaceae.
A perennial twiner with membranous, deltoid-ovate leaves 2 to 4 inches long and large soli-
118369. BOMBAX CYATHOPHORUM (Casar.) K. Schum. Bombacaceae.
No. 3943. From the Instituto Biologico, Sao Paulo, August 28, 1936. An ornate-
118370. BORAGO OFFICINALIS L. Boraginaceae.
A cultivated herb.
118367. ARISTOLOCHIA ARCUATA Mast. Aristolochiaceae.
No. 3950. From the Instituto Biologico, Sao Paulo, August 28, 1936. A perennial twiner with membranous, deltoid-ovate leaves 2 to 4 inches long and large soli-
118368. ARTEMISIA ABSINTHIUM L. Astera-
118369. BOMBAX CYATHOPHORUM (Casar.) K. Schum. Bombacaceae.
No. 3943. From the Instituto Biologico, Sao Paulo, August 28, 1936. An ornate-
118370. BORAGO OFFICINALIS L. Boraginaceae.
A cultivated herb.
118367. ARISTOLOCHIA ARCUATA Mast. Aristolochiaceae.
No. 3950. From the Instituto Biologico, Sao Paulo, August 28, 1936. A perennial twiner with membranous, deltoid-ovate leaves 2 to 4 inches long and large soli-
118364 to 118402—Continued.

118371. RHYSONIMA LIGUSTRIFOLIA A. Juss. Malpighiaceae. No. 3956. An evergreen tree about 20 feet high, with leathery oblong or lanceolate leaves about 2 inches long and terminal racemes of small rose-colored flowers. Native to Brazil.

118372. CARPOCROCHUS B R A S I L I E N S I S (Raddi) Endl. Flacourtiaceae. Sapucainhia. No. 3941. A tropical tree 30 to 50 feet high, with oblong leaves about 4 inches long and few-flowered racemes of small white flowers. The fruits are about 4 inches in diameter. A sirup used in treating leprosy is prepared from the seeds. For previous introduction see 104108.


118374. CHORISIA SPECIOSA A. Juss. Bombacaceae. No. 3926. Palmeiro. A timber tree; the floss from the seed pods is used locally like kapok. For previous introduction see 104108.


118376. RHYNCHOSIA MINIMA (L.) DC. Fabaceae. No. 3955. From the Instituto Biologico, Sao Paulo, August 28, 1936. No. 3954. From the Instituto Biologico, Sao Paulo, August 28, 1936. No. 3953. From the Instituto Biologico, Sao Paulo, August 28, 1936.

118377. RHYNCHOSIA PHASEOLOIDES (Sw.) DC. Fabaceae. No. 3952. From the Instituto Biologico, Sao Paulo, August 28, 1936. A spiny shrub up to 6 feet high, with leathery leaves of three leaflets and showy scarlet flowers in erect racemes about 5 inches long. It is used as an ornamental hedge plant in Brazil, where it is native.

118378. RHYNCHOSIA RETICULATA (Sw.) DC. Fabaceae. No. 3951. Erythrina reticulata. A shrub or small tree with leathery horizontal lanceolate leaves, umbels of small sessile white flowers, and obvate fruits. Used in Australia as a windbreak and as a shade tree. The wood is hard, tough, and durable. For previous introduction see 103624.

118379. EUCALYPTUS BOTRYOIDES J. E. Smith. Melaleuca. No. 3924. A tall handsome tree, native to Australia, with beautiful dark-green horizontal lanceolate leaves, umbels of small sessile white flowers, and obvate fruits. Used in Australia as a windbreak and as a shade tree. The wood is hard, tough, and durable. For previous introduction see 77610.

118380. EUCALYPTUS LONGIROSTRIS F. Muell. Creek gum. No. 3923. In Australia, where this tree is native, it becomes 200 feet high, with smooth dark-gray bark, narrowly lanceolate leaves 6 inches or more long, stalked umbels of small white flowers, attractive to bees, and globular fruits with conical tops. The heavy red wood is durable both above and below the ground and is used for railroad ties, piles, and fence posts. For previous introduction see 77610.

118381. EUCALYPTUS TERTICORNIS J. E. Smith. Silty gum. No. 3921. This evergreen tree is usually not more than 100 feet high in Australia, where it is native. It is closely related to Eucalyptus longirostris, differing only in minor botanical characteristics.

118382. EUCALYPTUS TERETICORNIS F. Muell. No. 3920. From the Instituto Biologico, Sao Paulo, August 28, 1936. An evergreen shrub or small tree with leathery lanceolate or ovate-lanceolate leaves about 4 inches long and small white flowers. Native to Brazil.

118383. EUCALYPTUS SEMISERRATA DC. Melastomaceae. No. 3919. Eucalyptus semiserrata, closely related to Eucalyptus tereticornis, differing only in minor botanical characteristics.


118385. HIPPEASTRUM AULICUM ROBUSTUM (A. Dietr.) Voss. Amaryllidaceae. No. 3940. From the Instituto Biologico, Sao Paulo, August 28, 1936. A variety which is distinguished by its more vigorous growth and broader perianth segments. The large crimson flowers are produced in spring and autumn. Native to Brazil.

118386. HUBERIA SEMISERRATA DC. Mela-stomaceae. No. 3944. From the Instituto Biologico, Sao Paulo, August 28, 1936. An ornamental shrub or small tree with leathery lanceolate or ovate-lanceolate leaves about 4 inches long and small white flowers. Native to Brazil.


118388. HYPERIUM SEMBERA DECUMANUM DC. Mela-stomaceae. No. 3946. From the Instituto Biologico, Sao Paulo, August 28, 1936. An evergreen shrub or small tree with narrow lanceolate or oblong leaves 1 1/2 to 3 inches long and small whitish flowers. Native to Brazil.


Continued.


No. 3915. Anis verde.


No. 3948. From the Instituto Biológico, São Paulo, August 28, 1936. A climbing evergreen shrub with biternate, rarely pinnate leaves and clusters of small white flowers. Native to Brazil.


No. 3747. From one of the city parks, São Paulo, August 28, 1936. A bushy or small erect arborescent palm up to 20 feet high, with less spiny leaves and much smaller fruits than those of *Phoenix dactylifera*. Native to tropical Africa.


No. 3913. Azeda de folha larga.


No. 3909. Salvia vivaz.


No. 3858. Segurelha das hortas.


No. 3949. From the Instituto Biológico, São Paulo, August 28, 1936. A climbing shrub with biternate, evergreen leaves and small white flowers, solitary or in compound racemes. Native to Brazil.


No. 3939. From the Instituto Biológico, São Paulo, August 28, 1936. A large Brazilian tree, with digitate leaves and showy red flowers in terminal clusters.


No. 3942. From the Instituto Biológico, São Paulo, August 28, 1936. A handsome leguminous tree with glossy green pinnate leaves and racemes of white flowers. The balsam-of-Peru of commerce is obtained from the lower part of the trunk.

For previous introduction see 104163.

118403 to 118410.

From Venezuela. Seeds collected by Raymond Stadelman, Bureau of Plant Industry. Received September 25, 1936.


118403. From Río Colorado, Monagas, August 3, 1936.

118404. From Bejucal, near Monagas, August 1, 1936.

118405. From Muelle de Cariaco, State of Sucre.

118406. From Cumana, State of Sucre, August 5, 1936.

118407. From Las Mercedes, Guárico, July 25, 1936.

118408. From Cantaura, Anzoategui, July 28, 1936.

118409. From Muelle de Cariaco, State of Sucre, August 12, 1936.


From Las Mercedes, Guárico, July 25, 1936.
INDEX OF COMMON AND SCIENTIFIC NAMES

Abelmoschus esculentus, 117025-117027.
Acer cappadocicum, 118337.
Acer negundo, 117824-117826, 117838.
Acrocomia aculeata, 117924.
Agrisits palustris, 117747.
Albizia sp., 117047.
sassa, 117046.
Alfalfa. See Medicago sativa.
Allium, spp. 117106-117108, 118709-118719, 117821, 117822, 117824-117826, 117838-117840, 118005, 118006.
cepa, 117098-117103, 117535, 117839-117843, 118185-118191, 118120, pulchellum, 117820.
sativum, 117536, 117587, 118101.
Alnus glutinosa barbata, 118359.
Aloepeurus myurosorum, 117319.
Alstroemeria sp., 118344.
Althaea rosea, 116966, 116967.
Amgdalu8 persica, 117854, 117865, 117690.
Arbutus unedo, 117852, 117462-117464, 117488, 117769, 117880-117889, 118007-118009, 118018.
Arctium lappa, 118082.
Arrhenatherum elatius bulbosum, 117297.
Arisala leptopus, 117304.
Artabotrys guianensis, 117043, 117044, 117684, 117685, 118013, 118164, 118165.
Asparagus officinalis, 117045.
Asparagus officinalis, 117045, 117046, 117846, 117850, 117899.
Aracari sp., 117575.
arucana, 117588.
brasiliana, 117925.
tuberosum, See A. arucana.
Aracarica, Brazilian. See Aracarica brasiliensis.
Aratula sericea, 118566.
Arilcea sp., 117042.
Aristolochia arucata, 118367.
Arrhenatherum elatius bulbosum, 117297.
eriantha, 117321.
Artisia lomentaria, 118368.
Artichoke. See Cynara scolymus.
Artocarpus communis, 117591.
Asparagus, garden. See Asparagus officinalis.
Asparagus officinalis, 117544, 117852, 118202.
Astragalus spp., 117322, 117323.
Avocado lucuma, 118009.
Avena sativa, 117545.
Azalea, cork. See Rhododendron quinquefolium, fiveleaf. See R. pentaphyllum.
Balsam-of-Peru. See Myrcyphon pereira.
Banana. See Musa longistiplicata, Cephalostachyum burmanicum, and Den trochloa distans.
Bamboo. See Bambusa longistiplicata, Cephalostachyum burmanicum, and Den trochloa distans.
Bambusa longistiplicata, 117530.
Bangor. See Eryngium botyroides.
Barbarea sp., 117900.
Barley. See Hordeum vulgare.
Basil, common. See Ocimum basilicum.
Bauhinia variegata, 117439.
Bean. See Phaseolus spp.
Beeswax. See P. vulgaria.
Bergamot. See P. lindens.
rice. See P. calcaratus.
scarlet runner. See P. cocineus.
sword. See P. vulgaris.
Bettula ermani communis, 117050.
bermoo. See Apium graveolens.
mandshurica japonica, 117053.
schmidtii, 117052.
simmonica, 117054.
Birch. See Betula spp.
Bomazes, sp., 117440.
Borrago officinalis, 118369.
Borrage, officinalis. See Borrago officinalis.
Borrago officinalis, 118357.
Bassia sp., 117548, 117549, 117549, 118359, 117854, 118206, 118206.
fussa, 117854-117858, 118207-118210,
oleaceae botrytis, 117551, 117839-118792, 118111-118119.
oleaceae capitata, 117819, 117819, 118220-118222.
oleaceae gongylodes, 117870, 118247-118250.
oleaceae viridis, 118223-118225.
pekinensis, 117543, 118207-118227, 118227.
rapa, 117120-117126, 117547, 117871, 118014, 118015, 118238-118246.
Breadfruit. See Artocarpus communis.
Breadfruit. See Ficus carica.
Broccoli. See Brassica oleracea botrytis.
Buddleia. See Watkinia densiflora.
Bursa-pastor, See Oenothera biennis.
Bursa-pastor, See Oenothera biennis.
Butterfly. See Papilio dardanus.
Cabbage. See Brassica oleracea capitata.
Caespitifia setario, 118016.
Carpotroche brasiliensis, 117029.
Canarium ensiformis, 117553.
glandata, 117527.
Canna sativa, 117929.
Capsicum annuum, 117127-117142, 118782, 118521-118529.
Cardoon. See Cynara cardunculus.
Carica papaya, 117705.
Carnation. See Dianthus caryophyllus.
Carpotroche brasiliensis, 118372.
Carrot. See Daucus carota.
Cating. See Vigna cylindrica.
Cauliflower. See Brassica oleracea botrytis.
Chickweed. See Galium gramineum.
Chicory. See Cichorium intybus.
Chives. See Allium schoenoprasum.
Chorisia speciosa, 118374.
JULY 1 TO SEPTEMBER 30, 1936

Rubus spp., 117457, 118074–118076, 118078, 118079.

elipticus, 117455.
necius, 118077.
phoenicolasius, 117511.
ruyous, 117456.
puflfolia, 117090.
Rumex acetosa, 117915, 118397.

Rutubaga. See Brassica campestris.

Saccharum, 117000.

officinalum, 118182.

Sabula montrofiandia, 118081.

officinalis, 118396.
solare, 118083.
verberis, 118082.

Rumex acetosa, 117915, 118397.

Rutabaga. See Brassica campestris.

Sage, garden. See Salvia officinalis.

Saccharum, 117000.

ojlcinarum, 118182.

Sage, garden. See Salvia officinalis.

Salvia officinalis, 118398.
sclarea, 118083.

Sage, garden. See Salvia officinalis.

Sage, garden. See Salvia officinalis.

Sage, garden. See Salvia officinalis.

Sage, garden. See Salvia officinalis.

Sapindus emarginata, 117458.

Sapucainha. See Carpotroche biasiliensis.

Satureja hortensis, 118399.

Savory, summer. See Satureja hortensis.

Scoiymus hispanicus, 118345.

Seakale, common. See Crambe maritima.

Sedum sp., 118084.

Serjania reticulata, 118400.

Sesamum orientale, 117396.

Sesbania sp., 117958.

Sesame. See Sesamum orientale.

Sisymbrium trio, 117279.

Snapdragon. See Antirrhinum spp.

Soapberry. See Sapindus emarginata.

Soja max, 117742–117745.

Solanum sp., 117400, 117741.

diopodium, 117707.

macranthum, 117708.
melongena, 117729–117723, 117572, 118085, 118346–118348, 118410.

pyracanthum, 117709.

torvum, 117710.

warscewiczii, 117711.

Sophora sp., 118086.

Sophora japonica, 117397–117399.

Soybean. See Soja max.

Spinacea oleracea, 117284, 117295, 117919, 117920, 118085, 118349, 118350.

Squash. See Cucurbita maxima.

Strawberry. See Fragaria spp.

Strophanthus gratus, 118001.

Styrax shiraiana, 117080.

Sugarbush. See Protea mellifera.

Sugarcane. See Saccharum and S. officinalis.

Sunchokes, common. See Helianthus annuus.

Sunflower, common. See Helianthus annuus.

Sweetpotato. See Ipomoea batatas.

Swiss chard. See Beta vulgaris cicla.

Tabebuia ipe, 118401.

Teosinte. See Euchlaena mexicana.

Tephrosia adenoe, 117851.
purpurea, 117902.

Tetragremma expansa, 118346.

Triolium spp., 117404–117417.

cinnaurn, 117440.
gilulare, 117401–117403.

Trigonella foenum-graecum, 117000.

Trifolium sp., 117404–117417.

Trigonella foenum-graecum, 117440.

Trifolium sp., 117404–117417.

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Trifolium sp., 117404–117417.

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Turnip. See Brassica rapa.

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