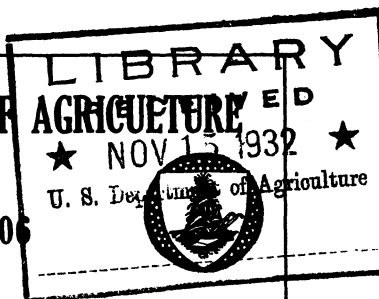


UNITED STATES DEPARTMENT OF AGRICULTURE



INVENTORY No. 106

Washington, D. C.



Issued November, 1932

PLANT MATERIAL INTRODUCED BY THE DIVISION OF FOREIGN PLANT INTRODUCTION, BUREAU OF PLANT INDUSTRY, JANUARY 1 TO MARCH 31, 1931 (Nos. 90837-92336)

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INTRODUCTORY STATEMENT

The present inventory covers the period from January 1 to March 31, 1931 (Nos. 90837 to 92336) and lists the seeds and plants received by the Division of Foreign Plant Introduction, Bureau of Plant Industry, during that time. This inventory, perhaps more than any other to date, records an unusually large percentage of importations made for the particular use of specialists within the department and in related institutions. This is particularly illustrated by the collections of vegetables including beans, spinach, squash, melons, cabbage, eggplant, tomato, lettuce, etc., from Africa, China, India, Siam, Turkey, Japan, and Bulgaria; a considerable collection of types of native apricot, grape, and pistache; and several collections of seeds of ornamentals for definite tests.

The inventory includes considerable collections of soybeans (Nos. 91003-91005, 91071-91181, 91193-91195, 91340-91350, 91556-91561, 91678-91734, 92062-92066) from Dorsett and Morse, by direct collections and by purchase and exchange at their direction from Manchuria, Chosen, and China.

An interesting group of acacias (Nos. 92321-92325) was presented by Dr. Mario Calvino who has been working with hybrid acacias and has selected seedlings, particularly with a view to increasing winter flowering.

Other acacias were presented in a collection of seeds (Nos. 92326-92332) sent in by the director of the Botanic Gardens at Sydney, New South Wales, who also contributed seeds of various shrubs and small trees that should be useful for the southern Pacific coast area.

The inventory also records the introduction of various maples particularly desired for the permanent study collection at Glenn Dale, Md.; the continued introduction of ornamental plants for the collections at the same garden, and similar material for the study collections at the Plant Introduction Garden at Coconut Grove, Fla.

The botanical determinations have been made and the nomenclature determined by H. C. Skeels, who has had general supervision of this inventory.

KNOWLES A. RYERSON,
Principal Horticulturist, in Charge.

DIVISION OF FOREIGN PLANT INTRODUCTION,
Washington, D. C., April 17, 1932.

INVENTORY¹

90837 to 90865.

From New South Wales, Australia. Seeds Presented by the Director, Botanic Gardens, Sydney. Received January 2, 1931.

90837 to 90842. ACACIA spp. Mimosaceae.

90837. ACACIA CRASSIUSCULA Wendl. (*A. adunca* A. Cunn.).

A shrub several feet high with acutely angled branchlets, thick linear falcate 1-nerved phyllodes 2 inches long, and short racemes made up of small dense globular heads of 20 or more flowers. It is native to Australia and Tasmania.

For previous introduction see 90677.

90838. ACACIA BUXIFOLIA A. Cunn.

An Australian shrub 4 feet high, with angular branchlets and small rather thick phyllodia. The short racemes, scarcely longer than the phyllodia, bear globular heads of flowers.

For previous introduction see 75581.

90839. ACACIA DECORA Reichenb.

A shrub with spatulate phyllodes 2 inches long and numerous racemes made up of globular heads of small flowers. Native to Queensland, Australia.

For previous introduction see 75582.

90840. ACACIA DISCOLOR Willd.

An unarmed shrub or small tree native to southeastern Australia and Tasmania. The terminal axillary clusters of yellow flowers are produced during the autumn.

For previous introduction see 75587.

90841. ACACIA MELANOXYLON R. Br.

An Australian evergreen tree up to 100 feet high, with lanceolate leathery phyllodes 4 inches long, heads of creamy flowers in short racemes, and reddish-brown twisted pods. The dark wood is very similar to black walnut and is used for the same purposes. The tree makes a rapid growth while young.

90837 to 90865—Continued.

For previous introduction see 76921.

90842. ACACIA SUAVEOLENS (J. E. Smith) Willd.

An Australian shrub up to 6 feet high with linear to lanceolate phyllodes and small heads of yellow flowers in axillary racemes.

For previous introduction see 78670.

90843. BANKSIA MARGINATA Cav. Proteaceae.

Usually a shrub 10 to 15 feet high, but varying from a low straggling shrub to a tree of considerable size. The entire or serrate leaves, 1 to 2 inches long, vary from broadly linear to oblong-lanceolate, with recurved margins, and are white beneath. The flowers are in spikes varying from nearly globular to oblong-cylindrical and up to 4 inches long. It is native to Australia.

90844 to 90848. CALLISTEMON spp. Myrtaceae.

90844. CALLISTEMON ACUMINATUS Cheel.

An Australian shrub with lanceolate sharp-pointed leaves and spikes of ornamental flowers.

For previous introduction see 75548.

90845. CALLISTEMON HORTENSIA Hort.

A name for which a place of publication or a description has not been found.

90846. CALLISTEMON CITRINUS (Curtis) Skeels (*C. lanceolatus* DC.). Lemon bottlebrush.

An evergreen shrub up to 12 feet high, with lanceolate leaves 1 to 3 inches long, reddish when young, and spikes, 2 to 4 inches long, of small flowers with long bright-red stamens. Native to southeastern Australia.

For previous introduction see 78532.

90847. CALLISTEMON CITRINUS × ACUMINATUS.

A hybrid between *Callistemon citrinus* and *C. acuminatus*.

¹ It should be understood that the names of horticultural 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 Foreign Plant Introduction, and, further, that the printing of such names here does not constitute their official publication and adoption in this country. As the different varieties are studied, their entrance into the American trade forecast, and the use of varietal names for them in American literature becomes necessary, the foreign varietal designations appearing in this inventory will be subject to change with a view to bringing the forms of the names into harmony with recognized horticultural nomenclature.

It is a well-known fact that botanical descriptions, both technical and economic, seldom mention the seeds at all and rarely describe them in such a way as to make possible identification from the seeds alone. Many of the unusual plants listed in these inventories are appearing in this country for the first time, and there are no seed samples or herbarium specimens with ripe seeds with which the new arrivals may be compared. The only identification possible is to see that the sample received resembles seeds of other species of the same genus or of related genera. The responsibility for the identifications 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.

90837 to 90865—Continued.

90848. *CALLISTEMON LINEARIS* DC.
Bottlebrush.

A tall shrub or small tree up to 30 feet high, closely resembling *C. citrinus*, but the leaves are much narrower, and the stamens, an inch long, are dark or pale red. It is native to Australia.

90849. *CARMICHAELIA EXSUL* F. Muell.
Fabaceae.

A low shrub with flattened branchlets, compound leaves made up of three to five obovate, emarginate leaflets nearly 1 inch long, and axillary peduncles bearing one or two yellowish-white flowers. It is native to Lord Howe Island.

90850. *CASSIA ARTEMISIOIDES* Gaud.
Caesalpinaceae. Wormseed senna.

An erect bushy shrub covered with silky white tomentum. The leaves are made up of three to six pairs of linear-terete leaflets 1 inch long, and the yellow flowers are in short dense racemes. Native to Australia.

90851. *CASSIA BREMOPHILA* A. Cunn.
Caesalpinaceae.

A handsome Australian shrub 5 feet high, with leaves made up of two pairs of narrow leaflets and yellow flowers. The leaves and pods are said to be eaten by stock.

For previous introduction see 77278.

90852. *DORYPHORA SASSAFRAS* Endl.
Monimiacae.

A tree of considerable size but of irregular growth, the whole plant aromatic. The ovate to oblong-lanceolate, serrate leaves, reticulate beneath, are 2 to 4 inches long, and the small inconspicuous flowers are in axillary clusters of three. It is native to Australia.

90853. *GEIJERA PARVIFLORA* Lindl. Rutaceae.

The *wilga* is a tall shrub or a tree, native to the interior of New South Wales, where it reaches a height of about 30 feet. It has slender pendulous branches, narrow leaves 3 to 6 inches long, and, when well developed, has a highly ornamental appearance with something of the aspect of a weeping willow. It has remarkable drought-enduring qualities, and the leaves are often fed to sheep, which are very fond of them.

For previous introduction see 64000.

90854 to 90856. *GREVILLEA* spp. Proteaceae.

90854 and 90855. *GREVILLEA BANKSII* R. Br.

For previous introduction see 76639.
90854. An ornamental Australian red-flowered shrub or small tree 8 to 10 feet high.

90855. Variety *alba*. A white-flowered form.

90856. *GREVILLEA HILLIANA* F. Muell.

A large evergreen tree 60 feet or less high, native to Australia, with leaves varying from elliptical to entire, 6 to 12 inches long, and deeply pinnatifid with five or seven lanceolate lobes. The small red flowers are in dense cylindrical racemes 4 to 8 inches long.

For previous introduction see 80068.

90837 to 90865—Continued.

90857. *HYMENOSPORUM FLAVUM* (Hook.) F. Muell. Pittosporaceae.

An ornamental evergreen shrub or tree, sometimes 50 feet high, native to Australia. The leaves are up to 9 inches long, and the fragrant flowers, yellow marked with red at the throat, are over an inch across. Its symmetrical, pyramidal habit and rapid growth make it promising as a street tree for the Gulf States and California.

For previous introduction see 81170.

90858. *LEPTOSPERMUM ODORATUM* Cheel.
Myrtaceae.

An upright shrub 3 to 5 feet high with angular branchlets, oblong to obovate, emarginate leaves 1 to 2 inches long, and clusters of two to five small white flowers near the tips of the branchlets. The leaves when bruised emit a pleasant odor. It is native to Australia.

90859. *MELALEUCA ELLIPTICA* Labill.
Myrtaceae.

A tall evergreen shrub, native to Western Australia, with elliptical leaves one-half inch long and cylindrical spikes of large showy red flowers.

For previous introduction see 79137.

90860. *MELALEUCA HYPERICIFOLIA* J. E. Smith. Myrtaceae. Dotted melaleuca.

A tall shrub with opposite, lanceolate to oblong leaves 1 to 2 inches long, dotted beneath, and spikes, 2 inches long and wide, of deep-red flowers, the axis growing out as a leafy shoot. It is native to Australia.

90861. *SYNCARPIA GLOMULIFERA* (J. E. Smith) Niedenzu (*Metrosideros glomulifera* J. E. Smith). Myrtaceae.

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

For previous introduction see 80073.

90862. *OXYLOBIMUM LANCEOLATUM* (Vent.) Druce (*O. callistachys* Benth.). Fabaceae.

A tall evergreen shrub, native to Australia, with whorls of lanceolate leaves 3 to 5 inches long and yellow flowers in dense terminal racemes 6 inches long.

For previous introduction see 79054.

90863 to 90865. *PIMELEA* spp. Thymelaeaceae.

90863. *PIMELEA FERRUGINEA* Labill.

A much-branched shrub 1 to 2 feet high, with opposite crowded, ovate to oblong, entire leaves less than 1 inch long and globular heads of small rose-colored flowers covered with silky hairs. It is native to Australia.

90864. *PIMELEA LINIFOLIA* J. E. Smith.

An erect shrub 1 to 3 feet high with slender, rust-brown branches, linear to oblong leaves half an inch long, and terminal globular heads of small white flowers. It is native to Australia.

90837 to 90865—Continued.

90865. *PIMELEA TRICHOSTACHYA* Lindl.

An erect slender branching annual about 1 foot high, with alternate, linear, concave leaves half an inch long and hairy spikelike racemes 1 to 2 inches long of small yellowish flowers. It is native to Australia.

90866 to 90893.

From Cuba. Material collected by F. G. Walsingham at Harvard Botanic Garden, Soledad, Cienfuegos. Received January 5, 1931.

90866 and 90867. *CITRUS GRANDIS* (L.) Osbeck. Rutaceae. Grapefruit.

90866. Harvard No. 2. Bud wood of a selection from the Foster grapefruit, made by Robert Grey. An excellent pink-fleshed variety, with very thin skin and very juicy.

90867. Bud wood of a hybrid between Washington Naval orange and grapefruit, originated by Robert Grey. The fruit has the appearance of a grapefruit, but tastes as sweet as an orange.

90868. *ALPINIA SANDERAE* Sand. Zingiberaceae. Banded alpinia.

A tropical, gingerlike plant, native to New Guinea, cultivated for its leaves, which are narrowly ovate, about 5 inches long, rich shining green, and regularly and closely striped in broad bands of white leading from the midrib to the margin.

90869. *CALYPTROGYNE OCCIDENTALIS* (Swartz) G. Maza. Phoenicaceae. Palm.

A beautiful and rare native palm with a straight smooth stem sometimes reaching a height of 50 feet. The pinnate leaves are from 8 to 12 feet long.

For previous introduction see 87502.

90870. *CEREUS HEXAGONUS* (L.) Mill. (*C. lepidotus* Salm-Dyck). Cactaceae.

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

90871. *CLERODENDRUM MACROSPHON* Hook. f. Verbenaceae. Glorybower.

Cuttings of an erect shrub with opposite oblanceolate notched or pinnatifid leaves and terminal cymes of tubular pure white flowers 4 to 5 inches long with red stamens 2 inches long. It is native to tropical Africa.

90872. *CLERODENDRUM PENDULIFLORUM* Wall. Verbenaceae.

Cuttings of a shrub up to 6 feet high with lanceolate, nearly entire leaves 5 to 8 inches long and pendulous panicles of small white flowers followed by fleshy dark-purple fruits a third of an inch in diameter, subtended by the enlarged reddish calyx. It is native to Burma.

90873. *COLPOTERINAX WRIGHTII* Griseb. and Wendl. Phoenicaceae. Palm.

90866 to 90893—Continued.

Seedlings of a Cuban fan palm with a trunk up to 40 feet high having a bottle-shaped base.

For previous introduction see 89174.

90874. *CORDIA ALBA* (Jacq.) Roem. and Schult. Boraginaceae.

Seedlings of a large bushy shrub up to 18 feet high, common along the eastern edge of the Valley of San Luis, Cuba. This shrub branches close to the ground, sending up long stiff shoots well furnished with dark-green foliage. The leaves are alternate, entire, obovate to ovate-elliptical, 3 to 4 inches long, with the surface covered with short bristly hairs. The pale yellow flowers, about half an inch in diameter, are borne in broad flat-topped corymbs sometimes a foot across. The oblong-obovate fruits are half an inch in length and pearly white when ripe. It is apparently a good honey plant and of considerable ornamental value.

For previous introduction see 40988.

90875. *DIOSPYROS TEXANA* Scheele. Diospyraceae. Persimmon.

A large shrub or small tree with small obovate leaves and fruits about an inch in diameter.

90876. *ASSONIA NATALENSIS* (Sond.) Kuntze (*Dombeya natalensis* Sond.). Sterculiaceae. Cape-weddingflower.

Cuttings of a shrub or small tree, native to southern Africa, with cordate, angular, toothed leaves and axillary, 6-flowered to 8-flowered umbels of large pure-white fragrant flowers.

90877. *ECHITES RUBRO-VENOSA* Linden. Apocynaceae.

Seedlings of a tropical American twining shrub with simple opposite leaves. The upper surface of these leaves is covered with a network of bright-red lines, at times golden yellow and emerald green.

90878. *EUGENIA* sp. Myrtaceae.

Seedlings of a large compact bush or small tree, native to Cuba.

90879. *EUPHORBIA PULCHERRIMA* Willd. Euphorbiaceae. Poinsettia.

Variety *rubicunda*. Cuttings of a very ornamental variety, similar in habit and growth to the common poinsettia, but the upper leaves and bracts instead of being bright red are orange pink.

90880. *GRAPTOPHYLLUM HORTENSE* Nees (*G. pictum* Griff.) Acanthaceae.

Cuttings of a shrub 6 to 8 feet high with opposite entire elliptic leaves irregularly marked with yellow along the midrib. The widespreading crimson flowers are in axillary whorls. Native to tropical Asia.

90881. *HELICONIA LEHMANNI* Hort. Musaceae.

Rootstocks of a stocky, broad-leaved, bananalike plant with yellow stems; the leaves are striped with creamy yellow.

90882. *IXORA ACUMINATA* Roxb. Rubiaceae.

Seedling plants of a glabrous shrub up to 6 feet high, native to India, with linear-oblong to elliptic leaves and dense cymes of tubular fragrant white flowers nearly an inch across.

90866 to 90893—Continued.

90888. JATROPHA HASTATA Jacq. Euphorbiaceae.

Cuttings of a shrubby perennial about 3 feet high with obovate to oblanceolate hastate leaves and umbellike cymes of small scarlet flowers. It is native to Cuba.

90884. JUGLANS INSULARIS Griseb. Juglandaceae. Cuban walnut.

Seedlings of a comparatively rare Cuban tree found along streams up to 2,000 feet altitude. It is a slender tree sometimes over 40 feet high with foliage somewhat finer than that of *Juglans nigra*. The nuts resemble those of *J. nigra* in appearance, but are smaller, and the kernels are removed with difficulty, as the septae are very thick and woody. In its present wild state the Cuban walnut is of little horticultural value, but with improvement by selection it may become an excellent nut for tropical regions.

For previous introduction see 58810.

90885. LIGUSTRUM NEPALENSE Roxb. Oleaceae. Nepal privet.

Seedlings of an evergreen shrub or small tree with pubescent branchlets, oblong to ovate leaves 2 to 5 inches long, and large broad panicles of small white fragrant flowers, followed by dark-blue fruits. It is native to the temperate slopes of the Himalayas in India.

90886. LITCHI CHINENSIS Sonner. Sapindaceae. Lychee.

Seedlings.

90887. MABA CARIBAEA (A. DC.) Hiern. Diospyraceae.

Cuttings of a Cuban tree, with branchlets covered with a pale-brown, soft pubescence and obovate coriaceous leaves 3 inches long. The brownish flowers are in small cymes, and the squarely subglobose, shining orange-colored fruits are 1 inch in diameter.

90888. RUSSELLIA SARMENTOSA Jacq. Menaceae.

Seedlings of a shrub native to Mexico and Cuba, with 4-angled branches, subcoriaceous, coarsely crenate-serrate broadly ovate leaves 2 inches long, and cymes of 2-lipped, bright-red flowers.

90889. SABAL DEALBATA Hort. Phoeniceae. Palm.

Seedlings of a dwarf, stemless fan palm with numerous glaucous-green leaves of fine form.

90890. SARACA INDICA L. Caesalpinaceae. Common saraca.

Seedlings of a medium-sized Indian tree with pinnately compound leaves. The 6 to 12 oblong leathery leaflets are 6 to 9 inches long, and the orange-red, fragrant flowers are in compact panicles.

For previous introduction see 78524.

90891. TERMINALIA MYRIOCARPA Heurck and Muell. Arg. Combretaceae.

Cuttings of a deciduous tree 80 to 100 feet in height, found in open forest at about 500 feet altitude. The fruits appear in January and February, before the elliptical leaves. This may be useful as a shade tree.

For previous introduction see 53470.

90866 to 90893—Continued.

90892. THUNBERGIA VOGELIANA Benth. Acanthaceae.

Cuttings of an erect perennial with large, ovate to oblong, dark-green leaves, and funnellform, blue-violet flowers with a yellowish throat, 2 inches across, appearing in the summer. It is native to tropical Africa.

90893. TINNEA AETHIOPICA Kotschy and Peyr. Mentaceae.

Cuttings of an ornamental, tropical African shrub about 4 feet high with many branches and oblong, short-stemmed leaves. The dark purplish-brown flowers are in axillary whorls and have an odor like violets.

90894 to 90942.

From Cuba. Seeds collected by F. G. Walsingham at Harvard Botanic Garden, Soledad, Cienfuegos. Received January 5, 1931.

90894. ALLOPHYLUS OCCIDENTALIS (Swartz) Radlk. Sapindaceae.

A spreading, pubescent shrub with trifoliate leaves made up of elliptical, sinuate serrate leaflets and racemes of inconspicuous flowers followed by red berries. It is native to the West Indies.

90895. ELETTERIA CARDAMOMUM (L.) Maton (*Amomum cardamomum* L.). Zinziberaceae. Cardamom.

A perennial with large leafy shoots. The fruits of this tropical Asiatic plant are used as a spice.

90896. AMPELOCISSUS MARTINI Planch. Vitaceae.

An ornamental vine, native to the Philippine Islands, which should do well in the sandy soils in southern and central Florida. It makes a large tuberous root, and the vines, which are covered with stiff hairs, die annually after fruiting. The grapelike fruits make excellent jelly.

90897. ARIKURYROBA SCHIZOPHYLLA (Mart.) Bailey (*Cocos schizophyllus* Mart.). Phoeniceae. Palm.

A slender, straight-stemmed, pinnate-leaved palm, native to tropical America.

For previous introduction see 88107.

90898. BARLERIA ALATA S. Moore. Acanthaceae.

A small shrub with attractive yellow flowers; native to southwestern Africa.

90899 and 90900. BAUHINIA TOMENTOSA L. Caesalpinaceae. St. Thomas tree.

For previous introduction see 73922.

90899. An erect tropical shrub with pale-yellow flowers, native to India.

90900. Received as *B. wallacii*.

90901. BOURRERIA SUCCULENTA Jacq. Boraginaceae.

A shrub or small tree up to 15 feet high with oblong-ovate leaves 2 to 5 inches long and spreading corymbs of small white flowers followed by yellow fruits. It is native to the West Indies.

90902. CAPPARIS FLEXUOSA L. Cappariaceae.

A shrub or small tree up to 25 feet high, with long flexuose branches, ob-

90894 to 90942—Continued.

long leaves 2 to 3 inches long, clusters of small white or pale-rose flowers, and fruits 3 to 7 inches long which open gradually and expose the bright red inside. It is native to Cuba.

90903. *CEREUS REPANDUS* (L.) Mill. Cactaceae.

A tall, treelike cactus up to 30 feet high, branched at the top, native to tropical America. The narrowly funnel-form, nocturnal flowers are 3 to 4 inches long and dark green. The oblong, dark-red fruits are 1 to 2 inches long and have white pulp.

90904. *CITHAREXYLUM CORDATUM* Hort. Verbenaceae.

A name for which a place of publication has not been found. Said to be a small tree with spikes of small white flowers and dark berries, native to Cuba.

90905. *CLERODENDRUM PENDULIFLORUM* Wall. Verbenaceae.

For previous introduction and description, see 90872.

90906. *CLITORIA TERNEATEA* L. Fabaceae.

An ornamental vine with white, double, pea-shaped flowers.

90907. *BUTIA ERIOSPATHA* (Mart.) Becc. (*Cocos eriospatha* Mart.). Phoenicaceae. Apricot palm.

A handsome pinnate-leaved palm with violet-colored stems, creamy flowers, and edible yellow fruits the size of a small plum. Native to Brazil.

For previous introduction see 73923.

90908 to 90910. *COLUBRINA* spp. Rhamnaceae.90908. *COLUBRINA CUBENSIS* (Jacq.) Brongn.

A shrub or small tree up to 18 feet high, with branchlets, leaves, and inflorescence densely velvety pubescent. The thick, oblong leaves are 2 to 5 inches long, and the small yellow flowers are followed by capsules with shining black seeds. It is native to Cuba.

90909. *COLUBRINA FERRUGINOSA* Brongn.

A low tree, native to the West Indies, with rusty tomentose branchlets, ovate to oblong, entire leaves 6 inches long, yellowish-green flowers in umbel-like clusters, and small black fruits with shining black seeds.

90910. *COLUBRINA RECLINATA* (L'Her.) Brongn.

A native Cuban shrub or low tree with elliptical lanceolate, glandular margined leaves 3 inches long, small greenish-yellow flowers, and purplish fruits.

90911 to 90913. *CORDIA* spp. Boraginaceae.90911. *CORDIA ALBA* (Jacq.) Roem. and Schult.

For previous introduction and description see 90874.

90912. *CORDIA BRACHYCALYX* (Britt.) Urb.

90894 to 90942—Continued.

A tree similar to *Cordia sebestena*, but having much rougher leaves and yellow or orange fruits. It is native to the West Indies.

90913. *CORDIA TREMULA* Griseb.

A large tree with broadly ovate, repand-crenate leaves, 3 to 4 inches long, and lax cymes of lemon-yellow flowers followed by greenish-white fruits. It is native to Barbados.

90914. *CYRTOSPERMA SENEGALENSE* (Schott) Engler. Araceae.

A curious aroid which sends up its spathe on a spiny stem 10 feet high. The spathe itself is 16 inches long. The plant requires wet sandy soil, tropical conditions, and moist atmosphere.

For previous introduction see 75271.

90915. *DIOSPYROS DISCOLOR* Willd. Diospyraceae. **Mabolo.**

A handsome tree with dark-green shiny leaves, silky underneath. The edible fruits, about the size of a peach, are of good quality.

90916. *HEBESTIGMA CUBENSE* (H. B. K.) Urban (*Gliricidia platycarpa* Griseb.). Fabaceae.

A shrub or tree with opposite, pinnate leaves made up of seven to nine ovate leaflets 2 to 4 inches long and racemes of rose-purple flowers appearing before the leaves. It is native to Cuba.

90917 to 90919. *HIBISCUS* spp. Malvaceae.90917. *HIBISCUS CRYPTOCARPOS* A. Rich.

A native Cuban shrub with long petioles, cordate, palmately 5-lobed leaves 3 to 4 inches long and wide, and solitary plum-colored flowers.

90918. *HIBISCUS MUTABILIS* L. Cotton rosemallow.

A double variety of a tall East Indian shrub with large broad, cordate leaves and large white flowers which change to red. It blooms in summer and late autumn and is considerably planted in the Bermuda Islands in gardens and hedges.

For previous introduction see 50156.

90919. *HIBISCUS SORORIUS* L.

A shrub with cordate-crenate leaves and axillary, rose-colored flowers an inch across. It is native to the West Indies.

90920. *ABUTILON* sp. Malvaceae.

A shrubby plant, not very ornamental, with small yellow flowers and bark which may be useful for fiber. It is native to Cuba.

90921. *JACQUINIA ACULEATA* (L.) Mez. Theophrastaceae.

A native West Indian shrub 2 to 3 feet high with spiny tipped, ovate-lanceolate leaves 1 inch long, in whorls of five to eight. The small white flowers, in lax drooping fascicles, are followed by small red fruits.

90922. *LATANIA LODDIGESII* Mart. Phoenicaceae. **Palm.**

90894 to 90942—Continued.

A low spineless palm, native to Mauritius, with rounded fan-shaped leaves, 3 to 5 feet long, and pear-shaped fruits over 2 inches long.

For previous introduction see 88119.

90923. LICUALA SPINOSA Thunb. **Phoenicaceae.** **Falm.**

A beautiful fan palm, native to the East Indies, with graceful stems 20 to 25 feet high, produced in groups.

For previous introduction see 88120.

90924. LIGUSTRUM AMURENSE Carr. **Oleaceae.** **Amur privet.**

A shrub up to 15 feet high, with upright branches, elliptic to oblong leaves 1 to 2 inches long, and panicles of small white flowers followed by globose-ovoid, slightly bloomy black fruits. Native to northern China.

90925 to 90927. MALPIGHIA spp. **Malpighiaceae.**

90925. MALPIGHIA CUBENSIS H. B. K.

A shrub with lanceolate, entire leaves having stinging hairs on the under side. The small, reddish flowers are in axillary corymbs and are followed by red fruits half an inch long.

90926. MALPIGHIA SUBEROSA Small.

A small tree with oblong-ovate, crenulate, coarsely reticulated leaves 3 to 5 inches long and cymes of small pink or white flowers, followed by ovoid, yellow-red fruits. It is native to Cuba.

90927. MALPIGHIA sp.

A small upright tree with bright red berries about the size of cherries.

90928. MELIA AZEDARACH L. **Meliaceae.** **Chinaberry.**

Variety *sempervirens*. A form with light-lilac, fragrant flowers which are produced continuously throughout the year.

90929. OCOTEA CORIACEA (Swartz) Britton (*Neotandra coriacea* Griseb.). **Lauraceae.**

An evergreen, West Indian tree 30 to 40 feet high, with oblong-lanceolate, coriaceous leaves 2 to 6 inches long and panicles of small whitish to dark-blue fruits nearly 1 inch long, with red or yellow persistent calyx bases.

90930. BARYXYLUM BRASILIENSE (L.) Pierre. **Caesalpinhiaceae.**

A tree up to 80 feet high with bipinnate leaves of small leaflets and axillary or terminal racemes of small yellow flowers. The orange-colored wood is elastic, tough, and durable, and it takes a fine polish. The tree is native to Central America.

For previous introduction see 87499.

90931. POSOQUERIA MULTIFLORA L. em. **Rubiaceae.**

A small tree with broadly cordate leaves and terminal cymes of large tubular white very fragrant flowers. It is native to Brazil.

For previous introduction see 88132.

90932. RHIPSA LIS CASSUTHA Gaertn. **Cactaceae.** **Mistletoe cactus.**

90894 to 90942—Continued.

An epiphytic cactus which hangs in large clusters up to 30 feet long, with weak round light-green stems less than a quarter of an inch in diameter. The small solitary creamy flowers are followed by white fruits about the size of mistletoe berries. It is native to Mexico and southern Brazil.

90933. RHYTIDOPHYLLUM TOMENTOSUM (L.) Mart. **Gesneriaceae.**

A small plant with oblong-lanceolate, serrate, woolly leaves and greenish-yellow tubular flowers in corymbs. It is native to Jamaica.

90934. SOLANUM JAMAICENSE Mill. **Solanaceae.**

A native Jamaican shrub 5 to 6 feet high with stout recurved thorns, oval, woolly, angular-sinuate leaves 6 inches long, and umbels of small yellow flowers followed by round saffron-colored fruits.

90935. SOLANUM MAMMOSUM L. **Solanaceae.**

An ornamental shrub 5 to 8 feet in height, native to tropical Asia, with thorny leaves and large yellow flowers. It bears a large round deep-yellow fruit about 3 inches in diameter, with five small fingerlike protuberances projecting from the side at the base. The fruit lasts for a long time, both on the plant and after being picked. The root and fruit are used medicinally. The tough plant wood is much used in certain parts of India for making drums, and the young twigs yield a good fiber.

For previous introduction see 52385.

90936. RUELLIA MACROPHYLLA Vahl. (*Stemonacanthus macrophyllus* Nees). **Acanthaceae.**

An erect shrub with ovate-lanceolate leaves 3 to 5 inches long and axillary peduncles, each bearing a pair of tubular crimson flowers 1 to 2 inches long. It is native to the West Indies.

90937. TRICHILIA HIRTA L. (*T. spondioides* Jacq.). **Meliaceae.**

A shrub or tree up to 60 feet high, native to the West Indies and Mexico, with pinnately compound leaves of obliquely ovate glabrous leaflets and 11 to 21 panicles, 9 inches long, of greenish flowers.

For previous introduction see 88137.

90938 and 90939. UVARIA RUFA (Dunal) Blume. **Annonaceae.**

A much-branched shrub, native to Japan, with a stem 4 to 6 inches in diameter and alternate, elliptic-oblong, acute or obtuse leaves 2 to 5 inches long. The solitary flowers are purplish red and about 1 inch wide. The oblong kidney-shaped red fruits, about 2 inches long, are in bunches of 18 to 20, with scant white flesh which is juicy, aromatic, and subacid with a trace of sugar and contains many seeds.

For previous introduction see 81927.

90940. VERNONIA FALLAX Gleason. **Asteraceae.**

A sparingly branched, shrubby perennial 3 to 4 feet high with elliptic-oblong leaves 2 to 3 inches long, finely gray-tomentose beneath, and terminal recurved clusters of three to seven small heads of purplish flowers. It is native to Cuba.

90944 to 90942—Continued.

90941. *ZAMIA PUMILA* L. Cycadaceae.

A palmlike cycad with the trunk mostly underground. The compound leaves, 3 to 4 feet long, are made up of 20 to 50 coriaceous shining leaflets with entire margins except for a few teeth at the tip. The conelike fruits, 3 to 5 inches long, are covered with tomentose hexagonal scales, and the angled red seeds are 1 inch long. It is native to Cuba.

90942. *ZANTHOXYLUM MARTINICENSE* (Lam.) DC. Rutaceae.

A spiny tree up to 60 feet high, native to the West Indies, with compound leaves made up of oblong entire leaflets, small white flowers, and small fruits which open and show the bright black seeds.

90943. *TRIFOLIUM PRATENSE* L. Fabaceae. Red clover.

From Hamburg, Germany. Seeds purchased from R. Liefmann & Sons. Received January 6, 1931.

Silesian red clover, produced in the district of Schweidnitz, in western-central Silesia.

90944 and 90945. *TRIFOLIUM PRATENSE* L. Fabaceae. Red clover.

From Paris, France. Seeds purchased from Vilmorin-Andrieux & Co. Received January 6, 1931.

90944. Brittany grown.

90945. Vendee grown.

90946 to 90973.

From Quedlinburg, Germany. Seeds purchased from Heinr. Mette. Received January 6, 1931.

90946. *ACHIMENES* sp. Gesneriaceae.

No. 10796. Mixed varieties.

90947. *ALLIUM PULCHELLUM* Don. Liliaceae. Onion.

No. 11002. An onion with narrow-linear leaves about 1 foot long and a rather dense umbel of bell-shaped, violet flowers. Native to Asia Minor.

90948 to 90950. *ARISTOLOCHIA* spp. Aristolochiaceae.90948. *ARISTOLOCHIA ELEGANS* Masters. Calicoflower.

No. 11770. A perennial vine with long-stalked, broadly cordate leaves 2 to 3 inches across, and solitary flowers, which have no unpleasant odor, borne on the pendulous young wood. The flowers have a yellow-green tube 2 to 3 inches long, and the cordate-circular limb, 3 inches across, is purple and white blotched, white outside, with a yellow eye. It is native to Brazil.

90949. *ARISTOLOCHIA FIMBRIATA* Cham.

No. 11772. A native of Argentina with a weak, slender stem, not climbing; the leaves are cordate-reinform and very obtuse. The tube of the perianth is green, much curved, like a hunting horn, swollen at the base, expanding above into a large 1-sided limb which is greenish-brown outside and deep purple-brown inside, with yellow reticulations; the margin is beset with long succulent hairs, each tipped with a gland. The very sing-

90946 to 90973—Continued.

ular structure and color of the long-fringed flowers render this species particularly worthy of cultivation under glass or in favorable situations in the open.

For previous introduction see 48657.

90950. *ARISTOLOCHIA GRANDIFLORA* Swartz. Pelicanflower.

No. 11774. A downy climbing shrub with cordate-acuminate leaves and strong-scented flowers, 20 inches across, which in bud resemble a pelican with its head thrown back as at rest. The expanded limb of the flower is cordate-ovate, wavy margined, purple blotched, and has a slender ciliated tail 3 feet or more long. It is native to tropical America.

90951. *COLCHICUM AUTUMNALE* L. Melanthiaceae.

No. 16696. *Meadow saffron.*

90952. *DAHLIA ROSEA* Cav. (*D. variabilis* Hort.). Asteraceae.

No. 17250. *Nana.* Mixed dwarf single dahlias.

90953. *DICENTRA SPECTABILIS* (L.) Lemaire (*Dielytra spectabilis* Don). Papaveraceae. Bleedingheart.

No. 18244. *Carminrosa.*

90954. *ESCHSCHOLTZIA CALIFORNICA* Cham. Papaveraceae.

No. 18517. *Canaliculata* Mikado. A California poppy with crimson-scarlet-orange fluted petals.

90955. *FREESIA HYBRIDA* Hort. Iridaceae.

No. 18672. *Ragioneri.*

90956. *GESNERIA HYBRIDA* Hort. Gesneriaceae.

No. 18818. Mixed varieties.

90957. *HEDYCHIMUM GARDNERIANUM* Roscoe. Zinziberaceae. India gingerlily.

No. 19229. A lemon-flowered variety.

90958 and 90959. *LACINARIA SPICATA* (L.) Kuntze (*Liatris spicata* Willd.). Asteraceae. Spike gayfeather.

90958. No. 20620. Received as *Liatris callilepis*. A variety with purple-red flowers.

90959. No. 20622. *Purpurrosa.* A variety with purple flowers.

90960. *OXALIS CORNICULATA* ATROPURPUREA Planch. (*O. tropeoloides* Vilm.). Oxalidaceae. Nasturtium oxalis.

No. 21910. A yellow-flowered form with dark-brown leaves.

90961. *OXALIS VALDIVIENSIS* Barn. Oxalidaceae. Chilean oxalis.

No. 21911. A Chilean oxalis with very short stems, clustered leaves, and close umbels on long stems of small yellow flowers with red veins.

90962 to 90973. *TROPAEOLUM* spp. Tropaeolaceae.90962 to 90966. *TROPAEOLUM PELTOPHORUM* Benth. (*T. lobbianum* Veitch). Shield nasturtium.

90962. No. 25420. *Lobb's climbing;* yellowish white.

90946 to 90973—Continued.

90943. No. 25428. *Lobb's climbing*; a bright-scarlet variety with dark foliage.

90944. No. 25544. *Liliput*, *Little snow white*.

90945. No. 25516. *Triomphe* (d'Hyeres).

90946. No. 25541. *Othello*. A small variety with blackish-red flowers and dark foliage.

90967 to 90969. *TROPAEOLUM MAJUS* L. Common nasturtium.

90967. No. 25572. *Heinemann*. A tall climbing plant with silky, bronze-chocolate flowers.

90968. No. 25580. A tall climbing variety with pale yellow flowers.

90969. No. 25606. Schultz's tall climbing variety with scarlet flowers and dark leaves.

90970 to 90973. *TROPAEOLUM MINUS* L. Bush nasturtium.

90970. No. 25634. *Aurora*. Tom Thumb, a dwarf variety with terra-cotta colored flowers.

90971. No. 25648. Tom Thumb, a dwarf variety with scarlet flowers and golden-yellow leaves.

90972. No. 25725. A dwarf variety with red flowers and variegated foliage.

90973. No. 25696. Tom Thumb, a dwarf variety with rose-colored flowers.

90974 to 90976.

From Greece. Seeds presented by Panos Th. Anagnostopoulos, Professor of Horticulture, College of Agriculture, Athens. Received January 6, 1931.

90974. *DELPHINIUM STAPHISAGRIA* L. Ranunculaceae. Larkspur.

A stout-stemmed perennial or biennial, soft-hairy throughout, 1 to 3 feet high. The leaves are palmately five to seven lobed, with the lobes sometimes three cleft. The light-blue flowers are in a dense simple or branched raceme. Native to the Mediterranean countries.

90975. *DRACUNCULUS VULGARIS* Schott. Araceae. Common dragon.

A tuberous perennial, native to Europe, which resembles the American Indian turnip, *Arisaema triphyllum*, with the leaves divided into 10 fingerlike segments from a bow-shaped base and a purple, wavy margined spathe.

90976. *VERBASCUM UNDULATUM* Lam. Scrophulariaceae.

A yellow-flowered biennial about 3 feet high, native to stony hills in southeastern Europe. The short-stemmed lower leaves are oblong spatulate, and the upper ones are ovate-cordate and clasping. The flowers, an inch across, are in a long interrupted raceme.

90977 to 90981. *LILIUM* spp. Liliaceae. Lily.

From India. Seeds purchased from G. Ghose & Co., Townsend, Darjeeling. Received January 6, 1931.

90977 to 90981—Continued.

90977. *LILIUM GIGANTEUM* Wall.

Giant lily.

A lily, native to the Himalayas, with bulbs which grow close to the surface in rich black soil, at altitudes between 7,500 and 9,000 feet, where the ground is covered with snow from November to April. The smooth hollow stems, 6 to 9 feet high, are sometimes used for musical pipes. The handsome cordate leaves, shining dark-green above and paler beneath, are 10 to 12 inches long on petioles of equal length; both become smaller near the apex. In the large white fragrant flowers, often 12 to a raceme, the perianth tube is slightly greenish and the inner surface of the segments is tinged with deep purple.

For previous introduction see 80010.

90978. *LILIUM LONGIFLORUM* Thunb.

Easter lily.

90979. *LILIUM BAKERIANUM* Coll. and Hemsl. (*L. lowii* Baker).

A herbaceous perennial with purple-tinged white bulbs, slender erect stems 3 feet high, scattered linear-lanceolate leaves, and one to six fragrant, nodding, bell-shaped, creamy white flowers 2 to 3 inches across, spotted red-brown on the inside. Native to Burma and western China.

90980. *LILIUM NEPALENSE* D. Don.

A showy lily, native to the central Himalayas, with a slender erect stem 2 to 3 feet long, leafy to the inflorescence. The glossy bright-green leaves, 4 to 6 inches in length, are oblong-lanceolate and five ribbed. The flowers, 4 to 5 inches long, are greenish yellow outside and yellow within and flushed, except in the upper third, with purplish black; the oblong-lanceolate segments are reflexed only in the upper half. The purplish-black filaments bear yellow anthers nearly an inch long. The plant was first discovered in the high mountains of Nepal.

90981. *LILIUM POLYPHYLLUM* D. Don.

A lily with a white, pink-tinged, stoloniferous bulb, a green stem 4 to 5 feet high, and fairly numerous scattered linear to oblong-lanceolate leaves 2 to 8 inches long. The fragrant nodding flowers, 2 to 12 in a lax umbel, are dull yellowish green outside, marble white, spotted and streaked with purple within, and are 2 to 3 inches across. It is native to the western Himalayas between 6,000 and 12,000 feet altitude.

90982 to 90992.

From Manchuria. Scions collected by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received January 7, 1931.

Scions of the best varieties grown in this region, presented by the Agricultural Experiment Station of the Kwantung Government, Chinchou (Kinshu), Manchuria.

90982 to 90985. *PRUNUS ARMENIACA* L. Amygdalaceae. Apricot.

90982. No. 7478. *Daisan kori*.

90983. No. 7479. *Bakwori*.

90984. No. 7480. *Dairibai*.

90985. No. 7482. *Shinri*.

90986. *PYRUS* sp. Malaceae. Pear.
No. 7484. *Auri* or *kamonashi*. Duck-beak pear.

90982 to 90992—Continued.

90987. *PIRUS* sp. Malaceae. Pear.
No. 7486. *Kouri* or *beninashi*. Red pear.

90988 to 90992. *VITIS VINIFERA* L. Vitaceae. European grape.

90988. No. 7481. *Gyunaí*.

90989. No. 7483. *Shidenso*.

90990. No. 7485. *Murasaki budo*.

90991. No. 7487. *Hakkeishin*.

90992. No. 7488. *Yen shin*.

90993 to 91009.

From China. Seeds collected by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received January 7, 1931.

Nos. 90993 to 91000 were collected at the Fa Hua Ssu Temple, November 18, 1930.

90993. *ASTER* sp. Asteraceae.

No. 7463. A wild aster with light-lavender flowers.

90994. *ASTER* sp. Asteraceae.

No. 7464. A wild aster with yellow center.

90995. *CHRYSANTHEMUM MORIFOLIUM* (Ramat) Hemsl. Asteraceae. Mulberry chrysanthemum.

No. 7466. A wild pink-flowered chrysanthemum.

90996 to 91000. *LESPEDEZA* spp. Fabaceae. Bushclover.

90996. *LESPEDEZA* sp.

No. 7461. A small-leaved variety with purple pea-shaped flowers. Collected in a mountainous region in decomposed granitic soil.

90997. *LESPEDEZA* sp.

No. 7462. Said to have large leaves and white flowers.

90998. *LESPEDEZA* sp.

No. 7467. Closely related to *L. bicolor*, but this form has small pea-shaped pods, and the flowers are larger and more attractive than those of *L. bicolor*.

90999. *LESPEDEZA* sp.

No. 7468. This is perhaps the true *L. bicolor*. The seed pods are quite different from No. 7467 [90998], which is by far the better ornamental.

91000. *LESPEDEZA* sp.

No. 7469. Reported to come from plants bearing interesting white pea-shaped flowers with purple centers during the summer and early fall.

Nos. 91001 to 91007 were collected in the foothills near Hsianglang, 25 miles north of Peiping, Chihli Province, November 21, 1930.

91001. *PHASEOLUS ANGULARIS* (Willd.) W. F. Wight. Fabaceae. Adzuki bean.

No. 7472.

91002. *PHASEOLUS AUREUS* Roxb. Fabaceae. Mung bean.

No. 7474. Glossy mung beans.

90993 to 91009—Continued.

91003 to 91005. *SOJA MAX* (L.) Piper (*Glycine hispida* Maxim.). Fabaceae. Soybean.

91003. No. 7473. A strain with yellow seeds.

91004. No. 7475. Green seeds with a yellowish cast.

91005. No. 7477. A common variety with black seeds.

91006 and 91007. *VIGNA SINENSIS* (Torner) Savi. Fabaceae. Cowpea.

91006. No. 7471. A brown-eyed cowpea, a variety commonly grown in this region.

91007. No. 7476. A pink cowpea, a commonly grown variety.

Nos. 91008 and 91009 were collected at the Fa Hua Ssu Temple, November 18, 1930.

91008. *COTYLEDON FIMBRIATA RAMOSISSIMA* Maxim. Crassulaceae.

No. 7465. A small succulent 6 to 8 inches high, with a rosette of lanceolate leaves and a compound pyramidal raceme 6 inches long of rose-pink flowers. It is native to China.

91009. *INDIGOFERA KIRILOWII* Maxim. Fabaceae. Kirilow indigo.

No. 7470. A shrub 3 to 6 feet high, with compound leaves made up of 7 to 11 obovate or elliptic leaflets 1 inch long and dense racemes 6 inches long of rose-colored, pea-shaped flowers 1 inch long. It is native to China.

For previous introduction see 44285.

91010. *PINUS BUNGEANA* Zucc. Pinaceae. Lacebark pine.

From China. Seeds presented by Anna Carrere, landscape architect, through P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry, Received January 7, 1931.

A tree sometimes 100 feet high, native to China, with the bark exfoliating in large scales, leaving white-colored areas which on old trees become chalky white.

For previous introduction see 79179.

91011. *TRIFOLIUM REPENS* L. Fabaceae. White clover.

From England. Seeds purchased from Pattulle, Higgs & Co. (Ltd.), Orpington, Kent. Received January 16, 1931.

Wild white clover.

91012 to 91017. *VITIS VINIFERA* L. Vitaceae. European grape.

From England. Cuttings presented by Fred J. Chittenden, Director, Royal Horticultural Society's Gardens, Wisley, Ripley, Surrey. Received January 7, 1931.

91012. *Black Alicante*.

91013. *Duchess of Buccleugh*.

91014. *Duke of Buccleugh*.

91015. *Lady Downes*.

91016. *Mrs. Prince*.

91017. *Prince of Wales*.

91018. UAPACA KIRKIANA Muell. Arg.
Euphorbiaceae.

From South Africa. Seeds presented by Dr. W. L. Thompson, Mount Silinda, Southern Rhodesia. Received January 7, 1931.

Majanji. An indigenous fruit of great value to the natives and which perhaps saves many lives in famine times. It is of delicious flavor and very healthful. The great drawback to its use by Europeans is that the seeds occupy so large a part of the bulk of the fruit. The tree grows about 20 feet high, often on rocky hillsides not well adapted for cultivation. The fruits are variable in shape and size, as well as in the size of seeds.

For previous introduction see 54769.

91019 to 91025. LACTUCA SATIVA L.
Cichoriaceae. **Lettuce.**

From France. Seeds purchased from Vil-morin-Andrieux & Co., Paris. Received January 8, 1931.

91019. *Brown Batavian*.

91020. *Brown Percheronne*.

91021. *Curled Batavian*.

91022. *Long White Standing Cos*.

91023. *Large Whitestone Summer*.

91024. *Paris Batavian*.

91025. *Royal Summer*.

91026 to 91037. LINUM USITATISSIMUM L.
Linaceae. **Flax.**

From the Union of Soviet Socialist Republics. Seeds presented through the Institute of Applied Botany, Leningrad. Received January 8, 1931.

91026. No. 8. From Althausen.

91027. No. 22. From Althausen.

91028. No. 76. From Tamarkand district.

91029. No. 81. From the Government of Novgorod.

91030. No. 139. From the Government of Pskov.

91031. No. 172. From the Moscow Plant Breeding Station.

91032. No. 262. From Althausen.

91033. No. 279. From the Government of Saratov.

91034. No. 301. From northern Africa.

91035. No. 320. From Parnir.

91036. No. 343. From the mountains of Bokhara.

91037. No. 381. From the mountains of Bokhara.

91038 to 91041.

From Canada. Seeds presented by Prof. John Davidson, Department of Botany, University of British Columbia, Vancouver, B. C. Received January 10, 1931.

91038. *ALLIUM GEYERI* S. Wats. Lilia-ceae. **Onion.**

A perennial with a fibrous-reticulated bulb, green leaves a foot high, and a scape 1 to 2 feet tall, bearing an umbel of rose-colored flowers one-third of an inch long. It is native to northwestern North America.

91038 to 91041—Continued.

91039. *IRIS SETOSA* Pall. Iridaceae.

Arctic iris.

This was originally described as an Asiatic plant, but forms that can not be separated from it are found in North America. At least half a dozen forms come true from seed. The peculiarity of this iris is that the standards have dwindled until they are only small points about half an inch long, but their disappearance is usually counterbalanced by the increased size of the falls. The color is usually blue, but same shades are so light as to be almost gray.

For previous introduction see 67006.

91040. *LILIUM PARVIFLORUM* (Hook.) Hol-zinger. Liliaceae.

This lily, native to northwestern North America, closely resembles the leopard lily (*Lilium pardalinum*) but the flowers, of the same bright yellow with purplish spots, are smaller and are usually solitary or only two or three together.

For previous introduction see 78690.

91041. *SOLANUM NIGRUM* L. Solanaceae. **Black nightshade.**

For previous introduction see 35209.

91042 to 91044.

From Siam. Seeds presented by the director, Department of Agriculture, Ministry of Lands and Agriculture, Bangkok. Received January 10, 1931.

91042. *DATURA METEL* L. Solanaceae. **Hindu datura.**

A coarse pubescent annual 4 to 5 feet high, native to India, with heart-shaped, nearly entire leaves and large white flowers. The seeds are used as a narcotic.

91043. *PHYSALIS PERUVIANA* L. Solanaceae. **Peruvian groundcherry.**

A small shrub producing a very taste-ful fruit which can be served in sirup.

For previous introduction see 82629.

91044. *SOLANUM MELONGENA* L. Solanaceae. **Eggplant.**

For previous introduction see 86394.

91045 to 91051.

From Irish Free State. Seeds purchased from Sir Josslyn Gore-Booth, Lissadell. Received January 10, 1931.

91045. *ALLIUM MOLY* L. Liliaceae. **Lily leek.**

A bulbous plant with broad glaucous leaves and scapes 10 to 15 inches high. The bright-yellow flowers are in compact heads. Native to southern Europe.

For previous introduction see 82014.

91046. *ASTER* sp. Asteraceae.

Nos. 6156 and 6159, Everest Expedition.

91047. *IBERIS GARREXIANA* All. Brassica-ceae. **Candytuft.**

A dwarf, evergreen, slightly woody perennial 6 inches high with oblong glabrous leaves, narrowed at the base, and corymbose racemes of small white flowers. It is native to southern Europe.

91045 to 91051—Continued.

91048. MARGYRICARPUS SETOSUS Ruiz and Pav. Rosaceae.

A dwarf heathlike creeping evergreen shrub about 1 foot high, with odd-pinnate leaves, very small greenish flowers, and showy white berries which persist for some time. Native to Peru.

For previous introduction see 78360.

91049 to 91051. ROSCOEA spp. Zinziberaceae.

91049. ROSCOEA CAUTLEOIDES Gagn.

A very vigorous variety which flowers two months later, but is otherwise like the type.

For previous introduction see 81986.

91050. ROSCOEA HUMEANA Balf. and Smith.

A stout gingerlike perennial about 8 inches high, with cigar-shaped rhizomes, four to six broadly lanceolate sessile leaves 4 to 8 inches long, and four to eight large violet-purple flowers in a terminal spike. It is native to Yunnan, southwestern China, and has flowered freely at Kew, England, where it is considered the finest of the genus and where, likewise, it appears entirely hardy.

For previous introduction see 81987.

91051. ROSCOEA PURPUREA J. E. Smith.

Variety *capitata*. A thick-rooted perennial gingerlike Himalayan plant about 1 foot high with sessile lanceolate leaves and purple, rarely pale lilac or white flowers in a sessile spike.

For previous introduction see 82396.

91052. CARICA PAPAYA L. Papayaceae. **Papaya.**

From Brazil. Seeds presented by P. H. Rolfs, Consultor Technico de Agricultura do Estado de Minas Geraes, Escola Superior de Agricultura e Veterinaria, Viçosa, Minas Geraes. Received January 10, 1931.

From Bella Horizonte. A locally grown variety of excellent flavor with a fruit which weighed over 8 pounds. It belongs to the same group of papaya as those that were cultivated extensively around Miami and other parts of Florida. The altitude of Bella Horizonte is sufficient to put it at the frost line.

91053. NICOTIANA TABACUM L. Solanaceae. **Tobacco.**

From Buin, island of Bougainville. Seeds obtained through Alfred Rehder, Arnold Arboretum, Jamaica Plain, Mass. Received January 12, 1931.

No. 2312. Collected by Frank Kajewski. A native tobacco which has been cultivated for about a century in the Solomon Islands.

91054 to 91059. (Undetermined.)

From South America. Terrestrial orchid cuttings presented by W. A. Archer, Medellin, Colombia. Received January 12, 1931.

91054. 91057.

91055. 91058.

91056. 91059.

91060 to 91181.

From Manchuria and Chosen. Seeds collected by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received January 14, 1931.

Nos. 91060 to 91064 were received from Kungtsi, a grain merchant at Kailynan, Manchuria, December 4, 1930.

91060. CANNABIS SATIVA L. Moraceae. **Hemp.**

No. 6642. *Shaomatzu*. A native variety.

91061. PERILLA FRutescens (L.) Britton. Menthaceae. **Green perilla.**

No. 6645. An annual Chinese herb, the seeds of which are used as bird feed and also to produce an oil used for waterproofing paper.

91062 to 91064. PHASEOLUS spp. Fabaceae.

91062. PHASEOLUS ANGULARIS (Willd.) W. F. Wight. **Adzuki bean.**

No. 6639. *Zaushaotou*. A medium-sized red bean, used for food.

91063. PHASEOLUS AUREUS Roxb. **Mung bean.**

No. 6640. *Liutou*. A small dark-green seed, used for making bean sprouts and bean vermicelli.

91064. PHASEOLUS ANGULARIS (Willd.) W. F. Wight. **Adzuki bean.**

No. 6641. *Zaushaotou*. A mixture of light-yellow and red varieties which are used for food.

91065 and 91066. PUERARIA THUNBERGIANA (Sieb. and Zucc.) Benth. Fabaceae. **Kudzu-bean.**

From Dairen, Manchuria. Purchased from Manshu Nosen Shokai (Inc.), seed growers, December 11, 1930. Kudzu which may prove to be hardier forms than the ones now grown in the United States.

91065. No. 6646. Collected in the mountain regions in Kwantung territory.

91066. No. 6647. Collected in the mountain regions of northeastern Chosen.

Nos. 91067 to 91070 were received from Kungtsi, a grain merchant at Kailynan, Manchuria, December 4, 1930.

91067 and 91068. SORGHUM VULGARE Pers. Poaceae. **Sorghum.**

91067. No. 6638. Hsifeng kaulhang. Used for food and also as cattle feed.

91068. No. 6643. Kaulhang. Used for food and cattle feed.

91069. VIGNA SINENSIS (Torner) Savi. Fabaceae. **Cowpea.**

No. 6637. *Pazu*. A medium-sized cowpea of whippoorwill type.

91070. ZEA MAYS L. Poaceae. **Corn.**

No. 6644. *Paomi*. A native variety, grown extensively in this district.

91071 to 91181. SOJA MAX (L.) Piper (*Glycine hispida* Maxim.). Fabaceae. **Soybean.**

Nos. 91071 to 91088 were received from Norborn Tajima, Agricultural Engineer, County Agricultural Society, Kosai, Chosen, November 24, 1930.

91060 to 91181—Continued.

91071. No. 6525. *Jinunikon*. A very small nearly round dark-brown bean which may be of value for sprouting.
91072. No. 6526. *Kagabikon*. A medium-large oval slightly flattened green bean with brown hilum and green germ.
91073. No. 6527. *Ajkarikon*. A medium-sized oval black bean marked with brown in concentric rings. Very similar to the *Meyer*, No. 17852.
91074. No. 6528. *Saita*. A very small nearly round yellow bean with pale hilum. It may have value for sprouts.
91075. No. 6529. *Atsuki daizu*. A medium-large oval green bean with pale hilum.
91076. No. 6530. *Kokuta*. A large black oval slightly flattened bean with yellow germ.
91077. No. 6531. *Sashokuta*. A medium-sized oval slightly flattened seal-brown bean with green germ.
91078. No. 6532. *Jinunikon*. A mixture of medium-small brown and black varieties.
91079. No. 6533. *Bankon*. A large oval slightly flattened black bean with yellow germ.
91080. No. 6534. *Chunurikon*. A mixture of brown and black seeded varieties.
91081. No. 6535. *Kantekon*. A medium-sized oval seal-brown bean with green germ.
91082. No. 6536. *Zomukon*. A medium-small oval slightly flattened yellow bean with brown hilum.
91083. No. 6537. *Seihita*. A medium-sized oval slightly flattened light-green bean with brown hilum.
91084. No. 6538. *Kagabikon*. A medium-large oval slightly flattened black bean marked with brown in concentric rings.
91085. No. 6539. *Heijo*. A medium-sized oval yellow bean with pale hilum.
91086. No. 6540. *Horabikon*. A large oval yellow bean with brown hilum.
91087. No. 6541. *Pakute*. A medium-sized oval slightly flattened bean with brown hilum.
91088. No. 6542. *Kurosaita*. A medium-small nearly round brown bean with yellow germ.
- Nos. 91089 to 91181 are mixed samples of yellow-seeded varieties from Manchuria. Nos. 91089 to 91106 are from the South Manchurian Railway Experiment Station, Kungchuling, November 28, 1930. *Kungchuling*. A medium-large nearly round yellow seed with light-brown hilum.
- 91089 to 91094. First-prize seed from the Changchun district.
91089. No. 6543. 91092. No. 6546.
91090. No. 6544. 91093. No. 6547.
91091. No. 6545. 91094. No. 6548.

91060 to 91181—Continued.

- 91095 to 91100. First-prize seed from the Kungchuling district.
91095. No. 6549. 91078. No. 6552.
91096. No. 6550. 91099. No. 6553.
91097. No. 6551. 91100. No. 6554.
- 91101 to 91106. First-prize seed from the Ssuningkai district.
91101. No. 6555. 91104. No. 6558.
91102. No. 6556. 91105. No. 6559.
91103. No. 6557. 91106. No. 6560.
- Nos. 91107 to 91123 are mixtures of yellow-seeded varieties from northern Manchuria. Received December 1, 1930.
91107. No. 6562. Collected at Mankou, a medium-sized bean.
91108. No. 6563. Collected at Anda, medium-small to medium-sized seeds.
91109. No. 6564. Collected at Tsia-chiatun; medium-sized seeds.
91110. No. 6565. Collected at Taian-chen; medium-sized oval beans with pale hilum.
91111. No. 6566. Collected at San-chaho, medium-sized seed.
91112. No. 6567. Collected at Tachia-kou, medium-sized seed.
91113. No. 6568. Collected at Yaomen.
91114. No. 6569. Collected at San-chaho.
91115. No. 6570. Collected at Makou, medium-sized seed.
91116. No. 6571. Collected at Sung-chang, medium-sized seed.
91117. No. 6572. Collected at Sung-huachiang, medium-sized seed.
91118. No. 6573. From Taolai-chao, medium-sized beans.
91119. No. 6574. From Tuichingshan, small to medium-sized beans.
91120. No. 6575. Collected at Taolai-chao.
91121. No. 6576. Collected at Shuang-chenpu, medium-sized varieties.
91122. No. 6577. Collected at Shuangchenpu.
91123. No. 6578. Collected at Anda, medium to medium-large nearly round beans with pale hilum.
- Nos. 91124 to 91181 were collected November 30, 1930.
91124. No. 6579. From Liangshihchiatzu. A native variety of medium-sized nearly round yellow beans; the color of the hilum varies from pale to brown; used for oil.
91125. No. 6580. From Palichiaotzu. Medium-small to medium-sized varieties, used for oil.
91126. No. 6581. From Huantou-shantzu. A medium-small nearly round native variety with pale hilum.
91127. No. 6582. From Chungyangpu. A mixed sample of native varieties, medium small to medium sized.

91060 to 91181—Continued.

91128. No. 6583. From Tayushu. A mixture of native varieties varying from medium small to medium sized.
91129. No. 6584. From Chaoyangpo. A mixture of native varieties, used for oil.
91130. No. 6585. From Liangshih-chiatzu. A mixture of yellow-seeded varieties, used for oil.
91131. No. 6586. From Hualtehsien. A mixed sample of native varieties, used for oil.
91132. No. 6587. From Shihsanchiatzu. A mixed sample of native varieties, used for oil.
91133. No. 6588. From Santaokang. A medium-sized nearly round native variety with pale-brown hilum.
91134. No. 6589. From Taichiatun. A mixed sample of native varieties, used for oil.
91135. No. 6590. From Kaoshantun. A mixed sample of native varieties, used for oil.
91136. No. 6591. From Tayushu. A mixed sample of native varieties.
91137. No. 6592. From Chinchiatun. A medium-sized nearly round native variety with pale-brown hilum.
91138. No. 6593. From Hualtehsien. A mixed sample of native varieties.
91139. No. 6594. From Shihchipu. A medium-large nearly round native variety with pale-brown hilum, very similar to the *Improved Kungchuling*.
91140. No. 6595. From Youtachuang-tzu. A mixed sample of native varieties.
91141. No. 6596. From Shih-toutzu. A mixed sample of native varieties, used for oil.
91142. No. 6597. From Liufangtzu. A mixed sample of native varieties, used for oil.
91143. No. 6598. From Shantoukang. Medium-large nearly round beans with light-brown hilum; very similar to the variety *Kungchuling*.
91144. No. 6599. From Chingchiakang. A mixed sample of medium-sized nearly round varieties.
91145. No. 6600. From Tapingchuang. Medium-large nearly round beans with light-brown hilum; very similar to the variety *Kungchuling*.
91146. No. 6601. From Toutaokang. A mixed sample of native varieties.
91147. No. 6602. From Palichiatzu. A medium-large nearly round yellow bean with light-brown hilum, very similar to the variety *Kungchuling*.
91148. No. 6603. From Hellutzu. A mixed sample of native varieties.
91149. No. 6604. From Kuochiakang. A medium-sized nearly round variety with light-brown hilum.
91150. No. 6605. From Tayushu. A medium-small nearly round bean with light slate-colored hilum, somewhat similar to the *Wea* variety.

91060 to 91181—Continued.

91151. No. 6606. From Liufangtzu. A mixed sample of native varieties.
91152. No. 6607. From Wutaitzu. A mixed sample of native varieties.
91153. No. 6608. From Kaoshantun. Medium-sized nearly round beans with light-brown hilum.
91154. No. 6609. From Ssutaokang. A mixed sample of native varieties.
91155. No. 6610. From Shihsanchiatzu. A mixed sample.
- Nos. 91156 to 91181 are from Kalyan, December 4, 1930. Mixed samples of yellow-seeded varieties.
91156. No. 6611. Medium-small varieties, used for oil.
91157. No. 6612. Varieties used for oil.
91158. No. 6613. Medium-sized nearly round beans with pale hilum.
91159. No. 6614. Medium-small varieties.
91160. No. 6615. A mixed sample of medium-small varieties.
91161. No. 6616. A mixed sample.
91162. No. 6617. A mixed sample of medium-small varieties.
91163. No. 6618. Medium-small varieties.
91164. No. 6619.
91165. No. 6620. Medium-small varieties.
91166. No. 6621. Medium-small varieties.
91167. No. 6622. Medium-sized varieties.
91168. No. 6623. Medium-small varieties.
91169. No. 6624. Medium-sized varieties.
91170. No. 6625. Medium-small varieties.
91171. No. 6626. Medium-sized varieties.
91172. No. 6627. Medium-sized varieties.
91173. No. 6628. Medium-sized varieties.
91174. No. 6629. Seed originally from Changchungentou.
91175. No. 6630. Medium-sized varieties.
91176. No. 6631. Medium-sized nearly round beans with light-brown hilum. Seed originally from Kailian.
91177. No. 6632. Medium-sized nearly round varieties. Seed came originally from Hsifeng.
91178. No. 6633. Medium-small varieties which came originally from Fakumen.
91179. No. 6634. *Huangpaohsu*. Medium-sized nearly round beans with pale hilum.
91180. No. 6635. Medium-sized varieties.
91181. No. 6636. *Kalyan huangpao*. Medium-sized nearly round beans with very light-brown hilum.

91182 to 91197.

From China. Scions and seeds obtained by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received January 16, 1931.

91182 to 91187. DIOSPYROS KAKI L. f. Diospyraceae. **Kaki persimmon.**

91182. From Chu Li Chi, village of Hseangtong. No. 7489. Scions of the Lantern persimmon. The fruits are about 2 inches long by 2 to 3 inches in diameter. This persimmon is of good color and attractive in appearance. The constriction is nearer the top than that of the Tamopan or Lange persimmon. The Lantern persimmon trees are usually stronger and more vigorous growers than the Tamopan and are usually girdled, as this variety has a tendency to produce vegetative growth at the expense of fruit; and the checking of this tendency by girdling is essential to the best fruit production.

Nos. 91183 to 91187 are scions collected at Kutang, near Hangchow.

91183. No. 7490. *Fire* persimmon. This is the second most important variety grown in this region. The attractive fruit, which ripens in September, is smooth without constriction and of rather deep-red color, measuring about 2 inches in thickness and over 2 inches in diameter. It is probably nonastringent when firm, as it is reported that they are not processed and that they are gone before frost.

91184. No. 7491. *Square* persimmon. This is the most important variety grown in this region. The fruit ripens in September and is a good-sized, smooth-skinned, red persimmon without constriction, 2 inches in thickness and nearly 3 inches in diameter. The color is not so deep a red as that of No. 7490 [91183], but the fruit is larger. It is reported that this persimmon is not processed and that its season is over before frost, therefore it may be nonastringent when quite firm.

91185. No. 7492. *High foot* persimmon. This is the third important persimmon grown in this region. The fruit ripens in September. This is a very fine large fruit, with smooth skin without constriction, and the color is somewhat redder than that of No. 7491 [91184], but not so deep a red as No. 7490 [91183]; it measures over 2 inches in thickness and over 3 inches in diameter. It is reported that the fruit is not processed and that the season is over before frost, therefore it is probably nonastringent when quite firm.

91186. No. 7493. The *Whitebark* persimmon, used as a stock on lowlands in this region and also used to some extent as a fresh fruit. The fruits, about 2 inches in thickness and over 2 inches in diameter, are a rather dull russet-yellow color and ripen in October. Growers in this region take the young plants from the mountain side when about 6 feet in height and 1 inch in diameter and plant them in their orchards. The second season, when

91182 to 91197—Continued.

the plant is about 2 inches in diameter, they are grafted apparently by what is known as the side-spur method.

91187. No. 7494. Scions of the *Whitebark* persimmon, taken from a different tree from those sent in under No. 7493 [91186].

91188. DIOSPYROS sp. Diospyraceae. **Persimmon.**

No. 7596. Supposed to be the *Whitebark* persimmon.

91189. LIGUSTRUM LUCIDUM Ait. Oleaceae. **Glossy privet.**

No. 7597. November 30, 1930. Collected along the road from Hangchow to Kutang. Trees up to 40 feet high, with light-colored bark. This seed was collected from a tree 20 feet high, which was in full leaf at this date.

91190. PHASEOLUS ANGULARIS (Willd.) W. F. Wight. Fabaceae. **Adzuki bean.**

No. 7583. November 27, 1930. Obtained in Shanghai and said to be grown in that region.

91191. PHASEOLUS AUREUS Roxb. Fabaceae. **Mung bean.**

No. 7498. November 27, 1930. *Green* bean. Glossy and dull-green beans from Shanghai.

91192. PISUM SATIVUM L. Fabaceae. **Pea.**

No. 7584. November 28, 1930. Obtained in Shanghai; said to be native grown.

91193 to 91195. SOJA MAX (L.) Piper (Glycine hispida Maxim.). Fabaceae. **Soybean.**

From Shanghai, seeds said to be locally grown.

91193. No. 7585. November 28, 1930. A black bean with green germ.

91194. No. 7586. November 27, 1930. A good-sized yellow bean.

91195. No. 7587. November 27, 1930. A large, dull-green, rather promising bean.

91196. VICIA FABA L. Fabaceae. **Broadbean.**

No. 7499. November 27, 1930. *Silk-worm* bean. From Shanghai, said to be locally grown.

91197. CASTANEA HENRYI (Skan) Rehd. and Wils. Fagaceae. **Chestnut.**

No. 7497. November 30, 1930. From Hangchow. An edible chestnut, originally from Shaohsing, Chekiang Province. The tree becomes from 25 to 90 feet high, with oblong-lanceolate long-acuminate leaves, green on both sides. The burs are either solitary or two in a bunch, usually containing but one nut.

For previous introduction see 85723.

91198 to 91230.

From France. Plants purchased from F. Delaunay, Angers. Received January 16, 1931.

91198 to 91210. PYRUS spp. Malaceae. **Pear.**

91198. PYRUS sp. *Admiral Gervais*.

91198 to 91230—Continued.

91199. PYRUS sp.

Alexandra Lambre.

91200. PYRUS sp.

Belle Guérandaie.

91201. PYRUS sp.

Beurré Six.

91202. PYRUS sp.

Charles Ernest.

91203. PYRUS sp.

Directeur Hardy.

91204. PYRUS sp.

Doyenné Georges Boucher.

91205. PYRUS sp.

Général Tottleben.

91206. PYRUS sp.

La France.

91207. PYRUS sp.

Nouveau Poiteau.

91208. PYRUS sp.

Petite Marguerite.

91209. PYRUS sp.

Président Barabe.

91210. PYRUS sp.

*Soldat Laboureur.*91211 to 91230. CORYLUS spp. Betula-
ceae.91211. CORYLUS AVELLANA L. Filbert.
*Aveline d'Angleterre.*91212 and 91213. CORYLUS MAXIMA L.
Giant filbert.91212. *Aveline de Piémont.*91213. *Aveline de Provence.*91214 to 91230. CORYLUS AVELLANA L.
Filbert.91214. *Bard Espagnol.*91215. *Belle de Guibiltino.*91216. *Commun à feuilles de Chêne.*91217. *Commun à grappe.*91218. *Commun à gros fruits striés.*91219. *De Beyne.*91220. *De Metz.*91221. *Downton.*91222. *Franc à fruits blanc.*91223. *Franc rouge.*91224. *Franc à gros fruits.*91225. *Grosse longue d'Espagne.*91226. *Grosse ronde.*91227. *Longue Pointue.*91228. *Précoce de Grugliasco.*91229. *Prolif.*91230. *Large Spanish.*91231 to 91233. CORYLUS spp. Betula-
ceae.From England. Scions presented by Dr.
A. W. Hill, Director, Royal Botanic Gar-
dens, Kew. Received January 17, 1931.

91231. CORYLUS CHINENSIS Franch.

Chinese hazelnut.

The Chinese hazelnut is closely allied to the Turkish hazelnut (*Corylus colurna*), differing in leaf and stem characters. It becomes a tall tree, sometimes over 100 feet high, with heart-shaped leaves about 7 inches long. The nuts are borne in clusters of four to six. It is native to western China.

For previous introduction see 73502.

91232. CORYLUS COLUMNA L.

Turkish hazelnut.

A vigorous free-growing tree up to 60 feet in height, with stout, more or less horizontal branches, heart-shaped glossy green leaves 5 inches long, and small hard-shelled nuts inclosed in fleshy hairy green involucre.

For previous introduction see 86263.

91233. CORYLUS JACQUEMONTII Decaisne.
Hazelnut.

A tree closely related to *C. colurna*, but the leaves are distinctly obovate and sharply serrate. It is native to the Himalayas.

91234. PYRUS USSURIENSIS OVOIDEA
Rehder. Malaceae. Ussurian pear.

From Carmel, N. Y. Scions presented by Arthur Sullivant Hoffman. Received January 15, 1931.

A large handsome tree of pyramidal habit, eventually 50 feet high, with sharply serrate oval-oblong leaves 3 to 5 inches long. The large pure-white flowers, in few-flowered racemes, are borne in such profusion as to make this one of the handsomest of all the pears when in bloom. The deep-yellow ovoid fruits are about 1 inch long. In autumn the leaves turn brilliant scarlet. A native of northern China, this pear is perfectly hardy in the vicinity of Boston, Mass.

91235. TRITICUM AESTIVUM L. (*T. vul-*
gare Vill.). Poaceae.

Common wheat.

From Manila, Philippine Islands. Seeds presented by Manuel L. Roxas, Director of Plant Industry. Received January 16, 1931.

Cagayan. Collected in Tuguegarao, Cagayan. A local variety utilized for the production of pastries, cakes, and bread.

91236. CANAVALIA MARITIMA (Aubl.)
Thouars. Fabaceae.

From island of Bougainville, Solomon Islands. Seeds presented by Alfred Rehder, Arnold Arboretum, Jamaica Plain, Mass. Received January 19, 1931.

A leguminous plant growing on the beach in very poor soil. It produces a good mat of foliage and may be useful for green manure in the warmer parts of the United States.

For previous introduction see 76916.

91237 to 91239.

From Pretoria, Union of South Africa. Seeds presented by I. B. Pole Evans, Chief, Division of Plant Industry, Department of Agriculture. Received January 20, 1931.

91237. *POLLICHIA CAMPESTRIS* Ait. Sile-naceae.

A diffusely branched, subshrubby plant 1 to 2 feet high, with linear-lanceolate leaves half an inch long and minute inconspicuous flowers. It is native to South Africa and is of value as a cover crop.

91238. *TETRAGONIA ARBUSCULA* Fenzl. Aizoaceae.

A much-branched, semishrubby perennial, with fleshy leaves less than an inch long, varying from linear to ovate-oblong. The small inconspicuous flowers are borne in leafy racemes and are followed by 3-winged to 4-winged nutlike fruits. It is native to South Africa.

91239. *SUTHERLANDIA FRUTESCENS* (L.) R. Br. Fabaceae.

A leguminous shrub about 3 feet in height, with finely pinnate leaves and showy scarlet flowers produced in short axillary racemes. Native to the Mediterranean countries.

For previous introduction see 59297.

91240 to 91259.

From Japan. Seeds purchased from the Chugai Shokubutsu Yen, Yamamoto, Kawabegun, near Kobe. Received January 20, 1931.

91240 to 91244. *ACER* spp. Aceraceae. Maple.91240. *ACER CISSIFOLIUM* (Sleb. and Zucc.) Koch.

A Japanese maple of compact, rounded habit becoming 30 feet or more high, with leaves composed of three leaflets up to 4 inches long. The minute flowers are produced in May with the leaves, and the keys, about 1 inch long, occur in long racemes. In autumn the foliage turns red and yellow.

For previous introduction see 85678.

91241. *ACER MANDSHURICUM* Maxim. Manchurian maple.

A hardy Manchurian maple which forms a shrub or small tree.

For previous introduction see 72401.

91242. *ACER NIKOENSE* (Miquel) Maxim.

A tree up to 50 feet high, native to Japan and central China, with attractive foliage which becomes brilliant red or purple in autumn.

For previous introduction see 77645.

91243. *ACER RUFINERVE* Sieb. and Zucc.

A tree up to 40 feet high, with striped bark, glaucous branchlets, 3-lobed, doubly serrate leaves 3 to 5 inches long, rusty tomentose on the veins beneath when young. The flowers are borne in upright, rusty pubescent racemes, and the wings of the fruits spread nearly at right angles. It is native to Japan.

91240 to 91259—Continued.

91244. *ACER CAUDATUM UKURUNDENSE* (Trautv. and Meyer) Rehder.

A small Manchurian tree with coarsely toothed, 5-lobed or 7-lobed leaves.

For previous introduction see 71133.

91245 and 91246. *RHODODENDRON RETICULATUM* D. Don. Ericaceae. Azalea.

A much-branched deciduous Japanese shrub up to 25 feet high, belonging to the section *Schadorhodion*. The branchlets are yellow-brown, the reticulate broadly ovate leaves, 2 to 3 inches long, are in clusters of two to three, and the slightly 2-lipped rotate-campanulate flowers are rose-purple to magenta. There are two forms—the ordinary form with 10 stamens, often called *R. rhombicum*, and a form with 5 stamens, called *R. dilatatum*.

For previous introduction see 85690.

91245. Received as *Azalea dilatata*.91246. Received as *Azalea rhombica*.91247. *RHODODENDRON PENTAPHYLLUM* Maxim. (*Azalea quinquefolia rosea* Rehd.). Ericaceae. Fiveleaf azalea.

A deciduous shrub of the section *Rhodora*, up to 20 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 to crimson in the autumn. It is native to Japan.

For previous introduction see 85688.

91248 to 91250. *EURYA* spp. Theaceae.91248. *EURYA EMARGINATA* (Thunb.) Makino.

An evergreen shrub, native to Japan, with short-stemmed obovate emarginate leaves and axillary paired flowers, followed by black berries about an eighth of an inch in diameter.

91249. *EURYA JAPONICA* Thunb.

Variety *thunbergii*. Said to be a dwarf form with bright reddish-green leaves.

91250. *EURYA OCHNACEA* (DC.) Szysz.

A shrub or small tree with coriaceous oblanceolate to oblong leaves 3 to 5 inches long and usually solitary nodding white flowers 1 inch across, followed by berrylike black fruits a quarter of an inch in diameter. It is native to Japan.

91251. *HEMIPTELEA DAVIDII* (Hance) Planch. Ulmaceae. David zelkova.

A shrubby, spiny, elmlike tree, native to Chosen and northern China, which has merit as an ornamental tree because of its handsome dark-green foliage; the leaves are oval or oblong, deeply toothed, and about 2 inches long. Because of its spines, the tree may be useful for tall hedges.

For previous introduction see 67031.

91252 to 91255. *ILEX* spp. Aquifoliaceae. Holly.91252. *ILEX FUJISANENSIS* Hort.

A place of publication for this name has not been found, but a trade catalogue describes it as an evergreen tree

91240 to 91259—Continued.

20 feet high, with glossy leathery leaves like those of *Andromeda japonica*, and the numerous red berries are borne on long stems. It is native to Mount Fuji, Japan, at an altitude of 3,000 feet.

91253. *ILEX INTEGRA* Thunb.

An evergreen Japanese shrub or tree, up to 40 feet high, with oval or oblong, usually entire leaves 2 to 3 inches long, and globular or ovoid red berries.

For previous introduction see 67361.

91254. *ILEX PURPUREA* Hassk. (*I. oldhami* Miquel).

An evergreen tree with crenate-serrulate, elliptic-lanceolate leaves 2 to 3 inches long and red berries, half an inch long, in clusters of two to five. It is native to Japan and central China.

For previous introduction see 80095.

91255. *ILEX SUGEROKI* Maxim.

A dense evergreen shrub 6 feet high, with pubescent branchlets, elliptic, acute leaves 1 to 2 inches long, serrate above the middle, and solitary fruits, about one-third of an inch in diameter, on pedicels 1 inch long. It is native to Japan.

91256. *LESPEDeza DAURICA* (Laxm.) Schindler. Fabaceae. Bushclover.

A tall plant with white, pealike flowers.

For previous introduction see 65493.

91257. *IRIS ROSSII* Baker. Iridaceae.

An Apogon iris with a creeping rhizome, linear green grasslike leaves 4 to 6 inches long, and a very short stem with a single lilac flower an inch across. It is native to Chosen and northern China.

91258. *LILIUM CORDIFOLIUM* Thunb. Liliaceae. Lily.

A Japanese lily, 3 to 4 feet high, with pendulous leaves 12 to 18 inches long and wide, and a raceme of 4 to 10 fragrant white flowers often 6 inches long.

For previous introduction see 85683.

91259. *MICHELIA COMPRESSA* (Maxim.) Sarg. Magnoliaceae.

A tree up to 40 feet high, with oblong to obovate coriaceous leaves 3 to 4 inches long, and fragrant yellow flowers 1 inch across. It is native to Japan.

91260 and 91261. *LILIUM* spp. Liliaceae. Lily.

From England. Seeds purchased from W. A. Constable, Paddock Wood, Kent. Received January 21, 1931.

91260. *LILIUM MARTAGON* L. Martagon lily.

Variety *Cattanaeae*. A form with stems 6 to 7 feet high, five to seven whorls of leaves, flower buds covered with cottony down, and the rich-purple flowers only slightly spotted.

91261. *LILIUM PHILIPPINENSE* FORMOSANUM (Baker) Wilson.

Price's variety. A dwarf alpine form which is said to be hardy in England.

91262 and 91263.

From Japan. Seeds presented by Prof. Mitsunaga Fujioka, Division of Forestry, College of Agriculture, Imperial University, Tokyo. Received January 21, 1931.

91262. *LARIX LEPTOLEPIS* (Sieb. and Zucc.) Gord. (*L. kaempferi* Sarg., not Carr.). Pinaceae. Japanese larch.

A deciduous tree up to 80 feet high, with short horizontal branches and yellowish or reddish-brown branchlets. The soft rather broad obtuse leaves are less than 2 inches long and are bluish green, and the obovate-oblong cones are 2 inches long. It is native to Japan.

91263. *THUJOPSIS DOLABRATA* (L. f.) Sieb. and Zucc. Pinaceae. False-arborvitae.

A pyramidal Japanese conifer 50 feet high, with spreading frondlike branchlets, nodding at the ends, small glossy dark-green leaves having white patches below and broadly ovoid cones less than 1 inch long. The wood is very resistant to decay and makes excellent poles and ties. This variety seeds but rarely, perhaps having only one good crop in 13 years.

For previous introduction see 78397.

91264 to 91272.

From Mexico. Seeds and tubers collected by C. O. Erlanson and Max Souviron, Bureau of Plant Industry. Received January 23, 1931.

Nos. 91264 to 91268 were collected at Chapala, Jalisco, January 3, 1931, at 5,000 feet altitude.

91264. *ALBIZZIA* sp. Mimosaceae.

No. 1. An ornamental leguminous shrub, 8 feet high, with attractive deep-red flowers; found growing abundantly in arid rocky soil.

91265. (Undetermined.)

No. 10. A rather common herbaceous vine with milky juice, found on dry barren hillsides.

91266. *CARDIOSPERMUM* sp. Sapindaceae.

No. 2. A woody vine with papery capsules, found occasionally in arid rocky soil.

91267. *CEIBA ACUMINATA* (S. Wats.) Rose. Bombacaceae. Pochote.

A close relative of the kapok tree (*Ceiba pentandra*). It is a large or medium-sized tree with a spiny trunk, compound leaves, and hard, oblong fruits about 7 inches long, which contain whitish down, used for stuffing pillows and life preservers and for making candlewicks. It is native to western and southern Mexico.

For previous introduction see 78244.

No. 3. Seeds harvested by the natives in October, when they were ripe, from trees growing on rocky open hillsides with southern exposure.

No. 4. Seeds from a few stray fruits left by natives.

91268. (Undetermined.)

No. 9. A herbaceous vine found on a dry barren hillside; the edible ovate fruit, 6 inches long, is orange red and marked with longitudinal rows of yellow spots.

91264 to 91272—Continued.

Nos. 91269 to 91271 were collected at El Desierto, Distrito Federal, December 26, 1930, at 10,000 feet altitude.

91269. *SALVIA* sp. Menthaceae. Sage.

No. 5. An ornamental herb, 3 to 5 feet high, found abundantly in semi-shaded situations under cedar and Douglas fir trees. The large flowers are deep red.

91270. *SOLANUM* sp. Solanaceae.

No. 6. Tubers of a herbaceous vine 3 feet long with green berrylike fruits three-quarters of an inch in diameter, with one small tuber to each plant. Found under cedar and fir trees.

91271. *SOLANUM* sp. Solanaceae.

No. 6a. Seeds collected from the same plants as No. 6 [91270].

91272. (Undetermined.)

No. 11. From a private garden in Guadalajara, Jalisco, January 4, 1931, at an altitude of 5,000 feet. A tree with milky juice and fruit in pairs.

91273. *SMITHIA SENSITIVA* Ait. Fabaceae.

From Mandalay, Burma. Seeds presented by the Director of Agriculture, Burma. Received January 23, 1931.

An annual plant 2 to 3 feet high with slender much-branched stems, compound leaves made up of 4 to 20 leaflets half an inch long, and simple racemes of small yellow flowers. It is native to India. Of possible value as a forage crop or for green manure.

91274 to 91289.

From England. Seeds purchased from Clarence Elliott, Six Hills Nurseries, Stevenage, Herts. Received January 23, 1931.

91274 to 91277. *ALLIUM* spp. Liliaceae. Onion.

91274. *ALLIUM CYANEUM* Regel.

A rather dwarf plant, less than a foot high, with small pendulous heads of pale-blue flowers. Native to northern China.

For previous introduction see 82386.

91275. *ALLIUM MACRANTHUM* Baker.

A handsome herbaceous perennial from the eastern Himalayas. The flat leaves are over 1 foot long, and the mauve-purple flowers are produced in clusters of 50 or more on scapes 2 feet high.

For previous introduction see 78984.

91276. *ALLIUM SIKKIMENSE* Baker.

A neat little compact perennial 6 inches high or more, with grasslike leaves and loose umbels of deep-blue flowers. Native to Sikkim, India.

For previous introduction see 66534.

91277. *ALLIUM* sp.

An onion, native to Tibet.

91274 to 91289—Continued.

91278. *ANEMONE NARCISSIFOLIA* L. (*A. narcissiflora* L.). Ranunculaceae.

A stout erect herbaceous perennial with petioled 3-parted to 5-parted deeply cut basal leaves, sessile involucre leaves, and an umbel of several white flowers 1 inch across, with yellow anthers. It is native to Europe.

91279. *BELLUM MINUTUM* L. Asteraceae.

A dwarf annual, scarcely 1 inch high, with ovate-spatulate radical leaves and white flowers in small heads. Native to southeastern Europe.

91280. *CYCLAMEN NEAPOLITANUM* Tenore. Primulaceae. Neapolitan cyclamen.

A low perennial 3 inches high, with handsomely marked heart-shaped leaves arising from a large black tuber. The deep pink or rarely white flowers are borne in autumn. Native to Italy.

For previous introduction see 79055.

91281. *GYPSOPHILA ELEGANS* Bleb. Silenaceae. Common gypsophilla.

Carmineus.

91282. *HYACINTHUS AMETHYSTINUS* L. Liliaceae. Hyacinth.

A slender graceful Spanish hyacinth with short racemes of light-blue flowers 6 inches or less high.

For previous introduction see 66574.

91283. *KNIPHOFIA HYBRIDA* Hort. Liliaceae. Torch Lily.

New hybrids.

91284. *LEONTOPODIUM ALPINUM* Cass. Asteraceae. Common edelweiss.

A low tufted woolly perennial herb with creeping stolons, lanceolate leaves, and heads of seven to nine small flowers surrounded by a starlike cluster of white woolly bracts. It is native to the Alps of Europe.

91285. *OSTROWSKIA MAGNIFICA* Regel. Campanulaceae. Giant bellflower.

A tall erect glabrous herbaceous perennial, 4 to 6 feet high, with ovate toothed leaves 4 to 6 inches long, in whorls of four or five, and pale-lilac, broadly bell-shaped flowers 2 inches long and 4 inches across the mouth. It is native to central Asia.

91286. *LUPINUS HYBRIDUS* Hort. Fabaceae. Lupine.

New hybrids.

91287. *PORTULACA GRANDIFLORA* Hook. Portulacaceae. Common portulaca.

A slender, terete, prostrate or ascending annual, or perennial under glass, 6 to 12 inches high, with short terete leaves and flowers 1 inch across in many bright colors. It is native to Brazil.

91288. *DIERAMA PULCHERRIMA* (Hook. f.) Baker (*Sparaxis pulcherrima* Hook. f.). Iridaceae.

A bulbous perennial native to South Africa, with irislike leaves, a remotely branched stem 4 to 6 feet high, and tubular, blood-purple, pendulous flowers 1 to 2 inches long.

91274 to 91289—Continued.

91289. THALICTRUM DIPTEROCARPUM
Franch. Ranunculaceae.

Yunnan meadowrue.

An erect perennial Chinese herb with large rose-colored flowers and pale-green leaflets, glaucous below.

For previous introduction see 53111.

91290. MAGNOLIA SCHIEDEANA Schlecht.
Magnoliaceae.

From Mexico. Plant and cuttings collected by C. O. Erlanson and Max Souvillon, Bureau of Plant Industry. Received January 24, 1931.

No. 22. Collected near the Los Promontorias mine, near Alamos, Sonora, at 3,000 feet altitude. A large evergreen tree up to 45 feet high, native to Mexico, with finely reticulated, oval to elliptical leaves 5 to 8 inches long and creamy white flowers 4 to 6 inches across.

91291. MEDICAGO SATIVA L. Fabaceae.
Alfalfa.

From Algeria. Seeds presented by the Gouvernement Général de l'Algérie. Received January 24, 1931.

A variety from Jamacine, near Fougout.

91292. ROSA ODORATA GIGANTEA (Collett) Rehd. and Wils. Rosaceae.
Giant tea rose.

From Calcutta, India. Seeds presented by the superintendent of the Royal Botanic Gardens, Sibpur, near Calcutta. Received January 24, 1931.

A strong climbing, evergreen rose, native to Burma, with creamy white single flowers 4 to 6 inches across. It resembles the Cherokee rose, but is hardy only in the far south.

For previous introduction see 77272.

91293 to 91295.

From Gladwyne, Pa. Plants presented by Mrs. J. Norman Henry. Received January 26, 1931.

91293. SPIRAEA MOLLIFOLIA Rehd. ex
Rosaceae. **Spiraea.**

A shrub 6 to 8 feet high with arching, strongly angled branches and purplish, pubescent branchlets. The ovate to oblong leaves, 1 inch long, are slightly toothed near the apex and silky pubescent on both sides. The small white flowers are in pubescent umbels 1 inch across. It is native to western China.

91294. PRATIA ANGULATA (Forst f.) Hook. f. Campanulaceae.

A slender creeping herbaceous perennial forming broad matted patches. The stems are 2 to 7 inches long, the rather fleshy ovate to orbicular leaves less than half an inch long are sinuate-dentate, and the axillary flowers, less than 1 inch long, are white with purple streaks. It is native to New Zealand.

91295. PAROCHETUS COMMUNIS Buch-Ham. Fabaceae. **Shamrock-pea.**

A half-hardy perennial trailing vine with shamrocklike leaves, each leaflet marked at the base with a brown crescent. The pea-shaped flowers, nearly 1 inch across, have cobalt-blue standards and pink wings. It is native to tropical Asia.

91296. BETA VULGARIS L. Chenopodiaceae. **Sugar beet.**

From Praha, Czechoslovakia. Seeds presented by J. Zapotil. Received January 26, 1931.

Zapotil-original.

91297 and 91298.

From Juan Fernandez Island. Seeds presented by Señor René Durand, through Waldo L. Schmitt, Curator of Marine Invertebrates, Smithsonian Institution, Washington, D. C. Received January 28, 1931.

91297. JUANIA AUSTRALIS (Mart.) Drude. **Palm.**
Phoenixaceae.

A pinnate-leaved palm of moderate size, native to Juan Fernandez Island. The leaves are 4 to 5 feet long, with linear-acuminate pinnae, and the slender trunk is unarmed.

91298. DENDROSERIS LITORALIS Skottsb. **Cichoriaceae.**

A treelike plant 4 to 7 feet high, with large feathery dark-green broadly oval leaves up to 10 inches long and saffron-yellow flowers in terminal heads 2 inches across. Native to Juan Fernandez Island.

91299 and 91300. LILIUM spp. Liliaceae. **Lily.**

From England. Seeds purchased from Watkins & Simpson (Ltd.), London. Received January 28, 1931.

91299. LILIUM MONADELPHUM Bleb. (L. *szowitzianum* Fisch. and Lallemand.).
Great Caucasian lily.

A variety with reddish-brown anthers and lemon-yellow flowers, which are large and thickly purple dotted.

For previous introduction see 75734.

91300. LILIUM PHILIPPINENSE FORMOSANUM (Baker) Wilson.

A form of the Benquet lily native to Taiwan, characterized by long narrow leaves and vinous purple-tinged flowers.

For previous introduction see 90527.

91301 and 91302.

From Tahiti, Society Islands. Seeds presented by Harrison W. Smith. Received January 28, 1931.

91301. MUNTINGIA CALABURA L. Elaeocarpaceae.

A tropical American tree with a spreading crown, pinnate leaves, and small white flowers. The small yellow berries make good tarts or jam, and the leaves are used for tea.

For previous introduction see 67936.

91302. SICANA ODORIFERA (Vell.) Naud. **Cucurbitaceae.** **Casabanan.**

A subtropical ornamental cucurbitaceous vine producing large fruits a foot or more long which are edible but insipid.

For previous introduction see 80701.

91303 and 91304. SOLANUM MELONGENA L. Solanaceae. **Eggplant.**

From Japan. Seeds presented by Y. Kakizaki, Saitama Agricultural Station, Urawa, Saitama. Received January 29, 1931.

91303 and 91304—Continued.

Eggplant hybrids, produced at the station.

91303. *Kintyaku* × *Sinkuro*.

91304. *Stronasu* × *Sinkuro*.

91305 to 91315. *RIBES RECLINATUM* L.
Grossulariaceae.

European gooseberry.

From England. Plants purchased from George Bunyard & Co., Maidstone. Received January 29, 1931.

91305. *Bobby*.

91306. *Careless*.

91307. *Green ocean*.

91308. *Keepsake*.

91309. *Lancashire Lad*.

91310. *Lancer*.

91311. *Langley Beauty*.

91312. *Langley Gage*.

91313. *Leveller*.

91314. *Lord Derby*.

91315. *Sandwich Yellow*.

91316 to 91353.

From China. Seeds and cuttings collected by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received January 29, 1931.

91316. *CASTANEA HENRYI* (Skan.) Rehd. and Wils. Fagaceae. Chestnut.
No. 7637.

For previous introduction and description see 91197.

91317. *POPULUS* sp. Salicaceae. Poplar.

No. 7623. Scions of a white-barked poplar collected between Tangshan and Hsiangtang. The tree was 12 inches in diameter and 75 feet tall, with small leaves.

Nos. 91318 to 91353 were collected in Hopei Province.

91318. *ALLIUM* sp. Liliaceae.

No. 7630. From Peiping, December 27, 1930. *Chin tsai*, the Chinese leek, is a winter vegetable 1 inch in diameter and 18 to 24 inches long, commonly used in Peiping.

91319. *AVENA NUDA* Hoejer. Poaceae.
Naked oats.

No. 7602. From Kalgan, December 15, 1930. Procured from a grain dealer. This is the common variety grown in these cold regions.

91320. *BRASSICA PEKINENSIS* (Lour.) Gagn. Brassicaceae. Peking cabbage.

No. 7625. *Ching pai kon pai tsai* (Chinese white cabbage), from Peiping, December 27, 1930.

91321. *CORIANDRUM SATIVUM* L. Apiaceae.
Coriander.

No. 7626. *Hsiang tsai* (fragrant vegetable). From Peiping, December 27, 1930. A vegetable used extensively both in China and Japan as a condiment for soups.

91316 to 91353—Continued.

91322. *DAUCUS CAROTA* L. Apiaceae.
Carrot.

No. 7624. *Hung la pu* (red carrot). From Peiping, December 27, 1930. An attractive red carrot, purchased from a dealer.

91323. *DIOSPYROS LOTUS* L. Diospyraceae.
Dateplum.

No. 7500. From Hsiangtang, 25 miles north of Peiping, December 25, 1930. Seed of the Chinese wild persimmon or black date, collected in the foothills. The Chinese use this tree as a stock on which to graft their large-sized persimmons.

91324. *FAGOPYRUM ESCULENTUM* Moench. Polygonaceae. Buckwheat.

No. 7601. Purchased from a dealer at Kalgan, December 15, 1930, but grown farther north.

91325. *LACTUCA SATIVA* L. Cichoriaceae.
Asparagus lettuce.

No. 7627. *Wo sun* (root lettuce), purchased from a dealer in Peiping, December 27, 1930. The stalk, 1 to 2 inches thick and 8 to 12 inches long, is the part eaten. It is peeled, boiled until tender, and served with a cream sauce. The stalk has a slightly greenish color and much resembles the chayote, and could no doubt be used in similar ways. This is a good vegetable and well worth a trial.

91326. *LINUM USITATISSIMUM* L. Linaceae.
Flax.

No. 7598. Purchased in Kalgan, December 15, 1930, but said to have been grown in Japan.

91327 and 91328. *PISUM SATIVUM* L. Fabaceae.
Pea.

Locally grown seeds purchased from a dealer at Kalgan, December 15, 1930.

91327. No. 7603. A mixed sample of smooth and wrinkled green, white, and tan seeds.

91328. No. 7622. Rather small seed.

91329 and 91330. *RAPHANUS SATIVUS* L. Brassicaceae.
Radish.

From Peiping, December 27, 1930.

91329. No. 7631. *Hsin li mei lo pu* (inside beautiful). A green radish extensively used by the Chinese and usually eaten raw.

91330. No. 7632. *Ching tsui po pu* (green radish), also known as brittle radish. It is eaten raw and is very popular, especially among the poorer people.

91331. *SPINACIA OLERACEA* L. Chenopodiaceae.
Spinach.

No. 7633. *Po tsai* (Chinese spinach). From Peiping, December 27, 1930.

91332. *VICIA FABA* L. Fabaceae.
Broadbean.

No. 7600. Purchased at Kalgan, December 15, 1930. A pinkish bean of good size.

91333. *VIGNA SINENSIS* (Torner) Savi. Fabaceae.
Cowpea.

No. 7617. Purchased at Kalgan, December 15, 1930. A reddish-brown cowpea, said to be locally grown.

91316 to 91353—Continued.

91334 to 91339. *PHASEOLUS* spp. Fabaceae. Bean.

Purchased at Kalgan, December 15, 1930. Said to be grown locally.

91334 and 91335. *PHASEOLUS ANGULARIS* (Willd.) W. F. Wight. Adzuki bean.

91334. No. 7605. A mixed sample of yellowish-brown and green beans.

91335. No. 7616. Gray beans.

91336 and 91337. *PHASEOLUS AUREUS* Roxb. Mung bean.

91336. No. 7614. A glossy bean.

91337. No. 7615. A green glossy bean.

91338 and 91339. *PHASEOLUS VULGARIS* L. Common bean.

91338. No. 7604. A white garden bean.

91339. No. 7606. A good-sized red garden bean.

91340 to 91350. *SOJA MAX* (L.) Piper (*Glycine hispida* Maxim.). Fabaceae. Soybean.

From Kalgan, December 15, 1930. Locally grown seed purchased from a grain dealer.

91340. No. 7599. A rather light-green bean with yellow germ and conspicuous hilum.

91341. No. 7607. A green bean with green germ and conspicuous hilum.

91342. No. 7608. A rather small, more or less flattened black bean with yellow germ.

91343. No. 7609. A rather small oblong yellow bean with prominent dark-brown to black hilum.

91344. No. 7611. An oblong yellow bean with a moderately conspicuous hilum and yellow germ.

91345. No. 7612. Yellowish-green bean, more or less oblong, with a conspicuous dark-brown hilum and yellow germ.

91346. No. 7618. A green bean with black hilum and green germ.

91347. No. 7619. Rather small oval green beans with a dark-brown to black hilum and green germ.

91348. No. 7620. A good-sized oval yellow bean with a prominent brown to black hilum.

91349. No. 7621. A small black bean, more or less flattened, with a yellow germ.

91350. No. 7610. Purchased with those under No. 7609 [91343] from which were selected these brownish-green rather oblong beans.

91351. *PHASEOLUS ANGULARIS* (Willd.) W. F. Wight. Fabaceae. Adzuki bean. No. 7613. Purchased at Kalgan, December 15, 1930. A small yellowish-brown bean, said to be locally grown.

91352. *PISUM SATIVUM* L. Fabaceae. Pea. No. 7628. *Hsiao wan tou* (small white early field pea). From Peiping, December 27, 1930. A good-looking small-sized early garden pea.

91316 to 91353—Continued.

91353. *RAPHANUS SATIVUS* L. Brassicaceae. Radish.

No. 7629. *Tu pi hung tou* (large red-skinned radish), obtained at Peiping, December 27, 1930. A winter radish which is much used with other vegetables in Peiping.

91354. (Undetermined.)

From Mount Silinda, Southern Rhodesia, Africa. Seeds presented by Dr. W. L. Thompson. Received January 29, 1931.

A tropical tree 1 foot in diameter and 50 feet high, with small pear-shaped fruits which usually contain two seeds. The flesh is aromatic, but the natives are not known to use it as food.

91355 to 91367.

From Quetta, India. Seeds purchased from the Quetta Fruit Agency. Received January 29, 1931.

91355. *AMYGDALUS DAVIDIANA* (Carr.) Zabel (*Prunus davidiana* Franch.). Amygdalaceae. Chinese wild peach.

The best variety; a very large peach.

91356 to 91360. *CITRULLUS VULGARIS* Schrad. Cucurbitaceae. Watermelon.

91356. [No data.]

91357. [No data.]

91358. A white melon striped with black.

91359. *Dhaddhai* variety.

91360. White.

91361 to 91363. *CUCUMIS MELO* L. Cucurbitaceae. Melon.

91361. *Dukt* variety.

91362. Assorted *Quetta* varieties.

91363. Assorted *Sardos* varieties.

91364 to 91367. *PRUNUS ARMENIACA* L. Amygdalaceae. Apricot.

91364. *Charmaghy white*.

91365. *Chighali*.

91366. A strain with sweet white fruits.

91367. A variety with sweet fruits.

91368 to 91378. *AGROPYRON* spp. Poaceae.

From Saskatchewan, Canada. Seeds presented by Prof. L. E. Kirk, University of Saskatchewan, Saskatoon. Received January 30, 1931.

91368 to 91372. *AGROPYRON TENERUM* Vasey. Slender wheatgrass.

91368. Strain No. 9.

91369. Strain No. 10.

91370. Strain No. 11.

91371. Strain No. 12.

91372. Strain No. 15.

91373 and 91374. *AGROPYRON SMITHII* Rydb. Wheatgrass.

91373. Strain No. 22.

91374. Strain No. 23.

91368 to 91378—Continued.

91375 to 91377. *AGROPYRON TENERUM* Vasey. Slender wheatgrass.

91375. Strain No. 24.

91376. Strain No. 26.

91377. Strain No. 27.

91378. *AGROPYRON SMITHII* Rydb. Wheatgrass.

Variety *Mecca*. Grade No. 1, Saskatchewan No. 8.

91379. *VISCUM* sp. Lorantheae.

From Hopei Province, China. Seeds obtained by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received January 29, 1931.

No. 7634. *Tung ching*. winter grown. A red or pink-berried mistletoe purchased from a florist in Peiping, but grown about 200 miles northeast of the city. The plant had been growing on a poplar tree.

91380 to 91448.

From Ipswich, England. Seeds purchased from Thompson & Morgan. Received January 30, 1931.

91380 to 91382. *ALLIUM* spp. Liliaceae. Onion.

91380. *ALLIUM SUBHIRSUTUM* L. (*A. ciliatum* Cyr.).

A bulbous perennial, native to the Mediterranean region, with hairy margined, narrow leaves 1 foot high and white flowers.

For previous introduction see 78996.

91381. *ALLIUM MOLY* L. Lily leek.

For previous introduction and description see 91045.

91382. *ALLIUM OSTROWSKIANUM* Regel.

A particularly striking species, native to Turkestan. The deep-rose flowers are produced freely in many-flowered umbels on scapes 12 inches high.

For previous introduction see 82390.

91383. *ALSTROEMERIA CHILENSIS* Lem. Amaryllidaceae. Chilean alstroemeria.

A stout tuberous-rooted plant 2 to 4 feet high, with scattered obovate or spatulate leaves and large rosy red or whitish flowers in pairs. Native to Chile.

For previous introduction see 78872.

91384 to 91388. *ANEMONE* spp. Ranunculaceae.

91384. *ANEMONE BALDENSIS* L.

A tuberous-rooted white-flowered perennial about 6 inches high, native to Switzerland.

For previous introduction see 66911.

91385. *ANEMONE FULGENS* Gay.

A herbaceous perennial 1 foot high, with 3-lobed to 5-lobed basal leaves and deeply cut sessile involucre leaves. The solitary vivid scarlet flower is 2 inches across with black stamens. It is native to France.

91380 to 91448—Continued.

91386. *ANEMONE HALLERI* All.

A villous herbaceous perennial about 6 inches high, with pinnately divided leaves, involucre leaves in long narrow segments, and a large erect whitish-purple flower with yellow stamens. It is native to Switzerland.

91387. *ANEMONE NARCISSIFOLIA* L. (*A. narcissiflora* L.).

For previous introduction and description see 91278.

91388. *ANEMONE NEMEROSA* L. European wood anemone.

A delicate herbaceous perennial with a creeping rootstock and 5-parted toothed basal leaves appearing after the flower stems. The stems are simple, 3 to 8 inches high; the involucre leaves are petioled, 3 to 5 parted, and toothed; and the solitary white to purplish flower is 1 inch across. It is native to Europe.

91389. *BULBINELLA HOOKERI* (Colenso) Cheeseman (*Anthericum hookeri* Colenso). Liliaceae.

A New Zealand herbaceous perennial related to the asphodels, varying in size from 1 to 3 feet. The numerous glaucous-green leaves are linear, and the loose racemes of bright-yellow flowers are on slender scapes up to 10 inches long.

For previous introduction see 78879.

91390. *ANTHERICUM RAMOSUM* L. Liliaceae.

A herbaceous perennial with tuberlike rhizomes, narrowly linear leaves, and branching stems which bear racemes of small wheel-shaped white flowers. It is native to Europe.

91391. *FATSIA JAPONICA* (Thunb.) Decaisne and Planch. (*Aralia sieboldii* Hort.). Araliaceae.

A broadleaved evergreen undershrub, native to Japan.

For previous introduction see 80600.

91392. *FATSIA JAPONICA* (Thunb.) Decaisne and Planch. (*Aralia sieboldii* Hort.). Araliaceae.

Variety *Moseri*. A compact form.

91393. *ARISTOLOCHIA ELEGANS* Masters. Aristolochiaceae. Calicooflower.

For previous introduction and description see 90948.

91394. *ARUM MACULATUM* L. Araceae. Lords-and-ladies.

A tuberous-rooted herbaceous perennial closely resembling the American Indian turnip (*Arisaema triphyllum*). The plant is about 1 foot high with black-spotted, hastate leaves, and the spathe is spotted with purple. It is native to Europe.

91395. *ASARUM EUROPAEUM* L. Aristolochiaceae. Wildginger.

A creeping herbaceous perennial with kidney-shaped dark-green evergreen leaves on petioles 3 to 5 inches long, and greenish-purple flowers, half an inch across, on short peduncles close to the ground under the leaves. It is native to Europe.

91380 to 91448—Continued.

91396. ASCLEPIAS TUBEROSA L. Asclepiadaceae. Butterflyweed.

A hairy herbaceous perennial 2 to 3 feet high, native to the eastern part of the United States, with usually opposite lanceolate-oblong leaves and several umbels of orange-red flowers.

91397. ASPARAGUS LUTZII Hort. Convolvulariaceae.

Said to be a hybrid between *Asparagus plumosus nanus* and some other unknown form. The erect stems, 6 feet long, show little tendency to climb, but flower freely and persistently.

91398. ASPARAGUS VERTICILLATUS L. Convolvulariaceae.

A semiwoody climbing vine with stems 10 to 15 feet long, green angled flexuose branches, and filiform cladodes 2 inches long. The funnel-shaped, greenish-yellow flowers are in clusters of one to four and are followed by red berries a quarter of an inch in diameter. It is native to Persia and Siberia.

91399. ASPHODELINE LUTEA (L.) Reichenb. (*Asphodelus luteus* L.) Liliaceae. Common Jacobs-rod.

A hardy herbaceous perennial 2 to 4 feet high, with rough-margined leaves 2 to 12 inches long and racemes of lily-like yellow flowers. It is native to the Mediterranean region.

91400. ASPHODELUS RAMOSUS L. Liliaceae. Asphodel.

A stemless herbaceous perennial with firm linear tufted radical leaves and racemes of white lilylike flowers. It is native to southern Europe.

91401 and 91402. BETA VULGARIS CICLA L. Chenopodiaceae. Leaf beet.

91401. *Brasilensis*. A variety with crimson and yellow leaves.

91402. *Dracaenaefolia*. A variety with narrow, dark-crimson leaves.

91403. QUAMASIA sp. (*Camassia hybrida* Hort.). Liliaceae. Camas.

A selection of named varieties, all of which are beautiful.

91404 to 91408. CORYDALIS spp. Papaveraceae.**91404. CORYDALIS CHEILANTHIFOLIA Hemsl. Chinese corydalis.**

A small low perennial with erect, fernlike radical leaves 8 inches high and racemes, longer than the leaves, of yellow flowers resembling the dutchmans-breeches. It is native to China.

For previous introduction see 69912.

91405. CAPNOIDES LUTEUM (L.) Gaertn. (*Corydalis lutea* DC.). Yellow corydalis.

An erect or spreading annual about 7 inches high, with delicate pale-green much-divided leaves, and short racemes of pale-yellow flowers. Native to southern Europe.

For previous introduction see 66454.

91406. CORYDALIS OCHROLEUCA Koch.

A tuberous perennial 1 foot high with compound leaves having winged petioles and heart-shaped yellow and white flowers with yellow spurs. It is native to Italy.

91380 to 91448—Continued.

91407. CORYDALIS THALICTRIFOLIA Jameson.

A perennial herb with a woody elongated rhizome and large long-petioled finely divided leaves which resemble those of the meadowrue. The showy flowers are in spreading racemes opposite the leaves. It is native to China.

For previous introduction see 66456.

91408. CORYDALIS TUBEROSA DC.

A tuberous perennial less than 1 foot high, with finely divided leaves and heart-shaped purple and white flowers. It is native to France.

91409 to 91413. CYCLAMEN spp. Primulaceae.**91409. CYCLAMEN COUM Mill.**

A spring-blooming tuberous-rooted plant, native from southeastern Europe to Persia, about 6 inches high, with rounded-reniform, uniformly green leaves and small scentless purple flowers.

For previous introduction see 79191.

91410. CYCLAMEN EUROPAEUM L. European cyclamen.

A more or less evergreen European perennial with a tuberous root, rounded or kidney-shaped leaves, white marbled above and purplish beneath, and fragrant bright-red flowers on scapes 4 or 5 inches high in autumn.

For previous introduction see 79192.

91411. CYCLAMEN MACROPHYLLUM Sieber.

A low tuberous-rooted perennial, native to southern Europe, with large cordate crenate leaves usually mottled with white, and, in autumn, white flowers on scapes 6 inches high.

For previous introduction see 79054.

91412. CYCLAMEN NEAPOLITANUM Tenore. Neapolitan cyclamen.

For previous introduction and description see 91280.

91413. CYCLAMEN NEAPOLITANUM Tenore. Neapolitan cyclamen.

Variety *album*. A form with white flowers.

91414 to 91418. DATURA spp. Solanaceae.**91414. DATURA ARBOREA L. Floripondio.**

A small tree, native to Peru and Chile, with ovate-lanceolate leaves and large trumpet-shaped greenish-white flowers.

For previous introduction see 77054.

91415. DATURA CHLORANTHA Hook. Yellow floripondio.

Variety *Golden Queen*. A glabrous shrub with broadly ovate, nearly triangular, sharply toothed leaves and pendulous yellow flowers. Probably a garden hybrid of unknown parentage.

91416. DATURA METEL FASTUOSA (L.) Safford (*D. cornucopia* Hort.). Cornucopia floripondio.

An ornamental herbaceous annual, common throughout India and the East Indies, which varies in height from 2

91380 to 91448—Continued.

to 6 feet. It has entire or deeply toothed leaves about 4 inches long and flowers 7 inches or more in length, varying in color from white to lavender or rose. The plant is propagated by cuttings.

For previous introduction see 51603.

91417. DATURA METELOIDES DC.
Sacred datura.

A perennial, though usually cultivated as an annual, with slender forked branches, nearly entire, unequally ovate leaves, and fragrant white flowers suffused with violet. It is native to northern Mexico.

91418. DATURA STRAMONIUM L.

A glabrous annual with green stems, ovate-sinuate to cut-toothed leaves, and white flowers. A well-known ill-scented weed.

91419. DICENTRA EXIMIA (Ker) Torr. Papaveraceae. **Fringed bleedingheart.**

A stemless herbaceous perennial with finely cut glaucous leaves 1 to 2 feet high and compound racemes of pink heart-shaped flowers 1 inch long. It is native to western New York and south to Georgia and Tennessee in the mountains.

91420. DICENTRA SPECTABILIS (L.) Lemaire. Papaveraceae. **Bleedingheart.**

A herbaceous perennial with stems 1 to 2 feet high, ternately compound leaves, and simple racemes of rose-colored heart-shaped flowers. It is native to Japan.

91421. EREMOSTACHYS LACINIATA Bunge. Menthaceae.

An erect herbaceous perennial 1 to 2 feet high, with doubly pinnately divided leaves, and spikes made up of many-flowered whorls of mintlike yellow flowers. It is native to Asia Minor.

91422. ERYTHRONIUM DENS-CANIS L. Liliaceae. **Troutlily.**

A bulbous herbaceous perennial with a stem 4 to 6 inches high, bearing a pair of ovate-acuminate leaves, blotched with reddish brown, and a solitary rose-colored lilylike flower with strongly reflexed segments. It is native to central Europe and Japan.

91423. FREESIA HYBRIDA Hort. Iridaceae.

Ragionieri hybrids, said to produce spotted and veined fragrant flowers in tinted shades of pink, rose, purple, blue, brown, and orange.

91424. FRITILLARIA TUBAEFORMIS Gren. and Godr. (F. delphinensis Gren.). Liliaceae. **Fritillary.**

A tuberous perennial 6 to 12 inches high, with oblanceolate to linear leaves near the middle of the stem, and wine-purple, yellow-spotted, and checkered flowers. It is native to the Alps in France.

91425. FRITILLARIA PYRENAICA L. Liliaceae. **Fritillary.**

A bulbous perennial 1 to 2 feet high, with 6 to 10 glaucous linear leaves and usually a single tulplike dark-purple flower spotted green. It is native to the Pyrenees.

91380 to 91448—Continued.

91426. GENTIANA LUTEA L. Gentianaceae. **Yellow gentian.**

A coarse perennial herb, too large for the rock garden, with three to four stems bearing handsome rugose foliage, crowned in late summer in the upper whorls of leaves, with dense clusters of slender-lobed golden-yellow flowers.

For previous introduction see 78932.

91427. GERANIUM MACROBRIZIUM L. Geraniaceae. **Cranesbill.**

A large-rooted herbaceous perennial with a woody base, stems 1 to 2 feet high, 3-lobed to 5-lobed leaves often colored red, and blood-red flowers in bunches at the end of the stem. It is native to southern Europe.

91428. HOMERIA COLLINA (Thunb.) Vent. Iridaceae.

A perennial plant, native to the Cape of Good Hope, with a globose corm covered with fibrous coats, and usually one convolute-concave narrow leaf, much longer than the stem. The erect stem bears one or more clusters of handsome red-orange flowers.

For previous introduction see 48676.

91429. HOUSTONIA CAERULEA L. Rubiaceae. **Bluet.**

A tufted perennial with slender stems 3 to 6 inches high, small hairy spatulate leaves, and small salverform flowers varying from blue to white with a yellow eye. It is native to the eastern United States and flowers in early spring.

91430. QUAMOCLIT PENNATA (Desr.) Voigt. (*Ipomoea cardinalis* Hort.). Convolvulaceae. **Cypressvine.**

Said to be a form with intense cardinal-red flowers.

91431. IRIS DELAVAYI Michx. Iridaceae. **Delavay iris.**

An iris, 2 to 4 feet high, with violet and white flowers. Native to southwestern China.

For previous introduction see 69918.

91432. IRIS RETICULATA Bleb. Iridaceae. **Netted iris.**

A bulbous iris, native to Asia Minor, with short erect leaves 1 to 2 feet high, a very short stem, and fragrant bright-purple flowers which appear early in spring before the leaves develop.

For previous introduction see 79915.

91433. LATHYRUS TUBEROSUS L. Fabaceae.

A tuberous-rooted lathyrus, native to northern Europe, which resembles the flat pea (*L. sylvestris*), but has red flowers.

91434. LEWISIA HOWELLII (S. Wats.) Robinson. Portulacaceae.

A low succulent perennial with a rosette of flat oblong to ovate leaves having thin crisped margins, and deep-rose flowers in racemose cymes. It is native to Oregon.

91380 to 91448—Continued.

91435. *LACINARIA PYCNOSTACHYA* (Michx.) Kuntze (*Liatris pycnostachya* Michx.). Asteraceae. **Cattail gayfeather.**

A stout herbaceous perennial with lanceolate to linear leaves and spikes 5 to 18 inches long of heads of purple flowers. It is native to the central United States.

91436. *LACINARIA SPICATA* (L.) Kuntze (*Liatris spicata* Willd.). Asteraceae. **Spike gayfeather.**

For previous introduction and description see 90958.

91437. *LIBERTIA FORMOSA* R. Grah. Iridaceae.

A herbaceous perennial with rigid linear leaves 1 to 2 feet long and a stem 2 to 3 feet high, bearing an inflorescence made up of dense clusters of white flowers 1 inch across. It is native to Chile.

91438. *ASPARAGUS ASPARAGOIDES* (L.) W. F. Wight (*Myrsophyllum asparagoides* Willd.). Convallariaceae. **Smilax asparagus.**

Variety *myrtifolius*. An extremely light and elegant variety with much smaller leaves than the type.

91439. *OSTROWSKIA MAGNIFICA* Regel. Campanulaceae. **Giant bellflower.**

For previous introduction and description see 91285.

91440. *OXALIS CORNICULATA ATROPURPUREA* Planch. (*O. tropaeoloides* Villm.). Oxalidaceae. **Nasturtium oxalis.**

For previous introduction and description see 90960.

91441. *OXALIS VALDIVIENSIS* Barn. Oxalidaceae. **Chilean oxalis.**

For previous introduction and description see 90961.

91442. *PHORMIUM TENAX* Forst. Liliaceae. **New Zealand flaxlily.**

Variety *variegata*. A form with beautifully variegated foliage.

91443. *PODOPHYLLUM EMODI* Wall. Berberidaceae. **Himalayan mayapple.**

A herbaceous perennial about 1 foot high, native to India. In early spring the 5-lobed to 7-lobed leaves are bronze red and are said to be edible; the flowers are white or pale rose, and the deep red fruits are as large as a hen's egg.

For previous introduction see 46092.

91444. *POLYGONUM BISTORTA* L. Polygonaceae.

Variety *superbum*. A dwarf tufted form with pink flowers in heads on long slender stems.

91445. *RANUNCULUS GRAMINEUS* L. Ranunculaceae. **Grassy buttercup.**

A smooth herbaceous perennial 6 to 12 inches high, with linear to lanceolate leaves and bright-yellow flowers. It is native to Europe.

91446. *ROSCOA HUMEANA* Balf. and Smith. Zinziberaceae.

For previous introduction and description see 91050.

91380 to 91448—Continued.

91447. *ROSCOA PURPUREA* J. E. Smith. Zinziberaceae.

A perennial herb 1 foot high, with lanceolate leaves and purple, pale-lilac, or white flowers in a sessile spike. Native to the Himalayas in northern India.

For previous introduction see 82396.

91448. *SALVIA PATENS* Cav. Menthaceae. **Gentian sage.**

A pilose herbaceous perennial with erect stems 1 to 3 feet high, ovate-deltoid crenate leaves, and spikes of tubular blue flowers 2 inches long. It is native to Mexico.

91449 to 91451.

From Africa. Plant material presented by C. Bey Rozet, Direction Générale de l'Agriculture, Morocco, through H. Brayard, Directeur de la Ferme Expérimentale, Marrakech. Received January 30, 1931.

91449. *CITRUS* sp. Rutaceae.

Seeds of *Khouds el Asia*.

91450. *PYRUS* sp. Malaceae. **Pear.**
Scions of a native pear.

91451. *PYRUS* sp. Malaceae. **Pear.**
Scions of *Banouje*, an Arab pear.

91452 to 91455.

From Nicosia, Cyprus. Seeds presented by George Frangos, through the Director of Agriculture. Received January 30, 1931.

91452. *ARISTOLOCHIA* sp. Aristolochiaceae.

Collected at Platres, October 14, 1930.

91453. *DELPHINIUM STAPHISAGRIA* L. Ranunculaceae. **Larkspur.**

For previous introduction and description see 90974.

91454. *MANDRAGORA OFFICINARUM* L. Solanaceae. **Mandrake.**

Collected at Pellapaise, Cyprus, September 15, 1930. A perennial herb with thick tuberous roots, broad undulate-margined leaves, bell-shaped greenish-yellow flowers, and fleshy globose berries. It is native to the Mediterranean region.

91455. *PAEONIA CORALLINA* Retz. Ranunculaceae. **Coral peony.**

Collected at Prodromos village, September 2, 1930. A tall wild peony with carrotlike roots and purple flowers, rarely whitish or yellowish. Native to southern Europe.

For previous introduction see 89032.

91456 and 91457.

From Africa. Cuttings presented by C. Bey Rozet, Direction Générale de l'Agriculture, Morocco, through H. Brayard, Directeur de la Ferme Expérimentale, Marrakech. Received January 31, 1931.

91456. *PRUNUS* sp. Amygdalaceae. **Plum.**
Beloiana.

91457. *PRUNUS ARMENIACA* L. Amygdalaceae. **Apricot.**

Bullida.

91458. LYCOPERSICON ESCULENTUM Mill.
Solanaceae. Tomato.

From Edinburgh, Scotland. Seeds presented by Dobbie & Co. (Ltd.). Received February 3, 1931.

Primrose Gage. Collected in the village of a seminomadic tribe in the jungle of southern India, between 5,000 and 8,000 feet altitude. The foliage is more glaucous green than that of the ordinary tomato, and the primrose-yellow fruit, about the size of a golf ball, has a bloom like that of a grape. It has a sharp sweet flavor which is quite distinct from that of all other tomatoes.

91459 to 91465.

From Stockton, Calif. Plants presented by the Vistica Nurseries Co. Received February 4, 1931.

91459. AMYGDALUS PERSICA L. (*Prunus persica* Stokes). Amygdalaceae. **Peach.**

A pendulous variety with double red flowers.

91460. BETULA PENDULA Roth. Betulaceae. **Birch.**

A form with purple leaves.

91461 to 91465. PRUNUS spp. Amygdalaceae.**91461. PRUNUS MUME Sieb. and Zucc.** Japanese apricot.

A pendulous variety with red double flowers.

91462 to 91464. PRUNUS SERRULATA Lindl. Oriental cherry.

91462. A pendulous variety with double pink flowers.

91463. A variety with light-pink very large double flowers borne in great clusters. The flowers open in succession over a relatively long period.

91464. A variety with large pale-pink double flowers with leaflike pistils. A late bloomer.

91465. PRUNUS SUBHIRTELLA PENDULA (Sieb.) Tanaka. Shidarehigan.

Park weeping. A strain with deep-pink flowers borne in great profusion. The original tree is in Golden Gate Park, San Francisco.

91466. PRUNUS ARMENIACA L. Amygdalaceae. **Apricot.**

From Africa. Seeds presented by C. Bey Rozet, Direction Générale de l'Agriculture, Morocco, through H. Brayard, Directeur de la Ferme Expérimentale, Marrakech. Received January 31, 1931.

Seeds of native varieties.

91467 to 91469.

From Java. Seeds purchased from De Thee-Factorij, Bandoeng. Received February 5, 1931.

91467. BRADBURYA PLUMIERI (Turp.) Kuntze (*Centrosema plumieri* Turp.). Fabaceae.

A tropical ornamental vine, native to Brazil, with white and red flowers. It is of value as a green manure.

For previous introduction see 81407.

91467 to 91469—Continued.**91468. CROTALARIA ANAGYROIDES H. B. K.** Fabaceae.

A shrubby leguminous plant native to tropical America. It is up to 6 feet high and is used as a cover plant in the East Indies.

For previous introduction see 81410.

91469. CROTALARIA USARAMOENSIS Baker f. Fabaceae.

A native of East Africa which has proved very successful as a green manure when grown in alternation with corn, producing large quantities of vegetation rich in nitrogen. In the cinchona plantations of Java it endures partial shade and forms a low dense growth, binding the edges of the terraces. It is a very strong grower, 8 feet or more in height, with long spikes of yellow flowers.

For previous introduction see 81424.

91470 to 91475. DAUCUS CAROTA L. Apiaceae. **Carrot.**

From Voorburg, Netherlands. Seeds purchased from N. V. Maatschappij voor Zaadselectie en Zaadfeelf, Zwaan & Van der Nolen. Received February 5, 1931.

91470. *Amsterdam forcing.*

91471. *French forcing; Zwaan's select strain.*

91472. *Nantes Half Long.*

91473. *Zwaan's Delicacy Half Long.*

91474. *Zwaan's Grant, stump rooted.*

91475. *Zwaan's Winter Perfection.*

91476 to 91479. CEIBA ACUMINATA (S. Wats.) Rose. Bombacaceae.

Pochote.

From Navojoa, Sonora, Mexico. Seeds collected by C. O. Erlanson and Max Souvion, Bureau of Plant Industry. Received February 5, 1931.

Collected from trees 20 to 45 feet high, found growing in scrub, in the foothills near Alamos, Sonora, between 500 and 1,500 feet altitude. The fruits were selected for their large diameter.

91476. No. 23. Selection No. 1.

91477. No. 24. Selection No. 2.

91478. No. 25. Selection No. 3.

91479. No. 26. Selection No. 4.

91480 to 91485. CYDONIA OBLONGA Mill. (Pyrus cydonia L.). Malaceae.

Quince.

From Kent, England. Plants purchased from the East Malling Research Station, East Malling. Received February 6, 1931.

91480. *Angera* (A) quince stock.

91481. *Common* (B) quince stock.

91482. *Quince* (C); an early-fruited type.

91483. (E) An apple-shaped quince.

91484. (F) A pear-shaped quince.

91485. (G) *Portugal* quince.

91486 to 91489.

From India. Seeds presented by the agricultural officer, Northwest Frontier Province, Peshwar. Received February 2, 1931.

91486. DIOSPYROS LOTUS L. Diospyraceae. **Dateplum.**

For previous introduction and description see 91323.

91487. OLEA FERRUGINEA Royle (*O. cuspidata* Wall.). Oleaceae. **Olive.**

A tree up to 30 feet high with coriaceous oblong leaves 2 to 3 inches long, short axillary panicles of small flowers, and small ellipsoid black fruits one-third of an inch long. It is native to India.

91488. PRUNUS ARMENIACA L. Amygdalaceae. **Apricot.**

A wild apricot.

91489. PYRUS PASHIA Buch-Ham. Malaceae. **Pashi pear.**

A small tree common in Burma and northern India in the Himalayas at altitudes of 3,000 to 8,000 feet. The barren branchlets usually end in a spine. The simple, ovate or ovate-lanceolate, long-pointed leaves, 2 to 4 inches long, are tomentose when young, ultimately glabrous. The white flowers, tinged with pink, 1 inch in diameter, are in simple corymbs of 10 or fewer. The yellowish-brown apple-shaped fruits, half an inch in diameter, are rough with small white spots.

For previous introduction see 52342.

91490. ACACIA sp. Mimosaceae.

From South Australia. Seeds presented by J. Howard Johnson, St. Peters. Received February 7, 1931.

Dead finish. Collected at Bon Bon, about 500 miles from Adelaide, South Australia. A low shrub, 10 to 12 feet high, with dull-green, needlelike foliage and yellow flowers. The trunk and branches are particularly crooked, so that the wood can only be used for veneers and in making small articles, such as souvenirs, pipes, etc., although the marking of the heavy dark-red wood is very beautiful. The native Australians use this wood to make their boomerangs. It grows here in a limestone soil with not much water.

91491. AMYGDALUS PERSICA L. (*Prunus persica* Stokes). Amygdalaceae. **Peach.**

From Algiers, Algeria. Seeds presented by Jacob Ben Lalou, through the American consul, Oscar S. Heiser. Received February 7, 1931.

91492 to 91515. DIOSPYROS spp. Diospyraceae.

From Okitsu, Japan. Scions collected by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received February 10, 1931.

Received through Dr. K. Nagai, Acting Director, Okitsu Imperial Experiment Station, Okitsu, Shizuoka Ken, December 20, 1930.

91492 to 91514. DIOSPYROS KAKI L. f. **Kaki persimmon.**

91492 to 91515—Continued.

91492. No. 7647. *Aosa*, nonastringent.

91493. No. 7659. *Atago*, astringent.

91494. No. 7650. *Banashi*, astringent.

91495. No. 7641. *Benigaki*, astringent.

91496. No. 7655. *Eboshi*, astringent.

91497. No. 7652. *Fujiwara-gosho*, nonastringent.

91498. No. 7643. *Gijo-sha-kokushi*, astringent.

91499. No. 7646. *Heguro-gaki*, nonastringent.

91500. No. 7660. *Hgakushi*, astringent.

91501. No. 7645. *Ibogaki*, astringent.

91502. No. 7648. *Ichiryō*, astringent.

91503. No. 7649. *Inamochi*, astringent.

91504. No. 7654. *Izaemon*, astringent.

91505. No. 7639. *Kiyosu tanenashi*, astringent.

91506. No. 7657. *Kubo*, nonastringent.

91507. No. 7644. *Kunitomi*, astringent.

91508. No. 7653. *Kurogaki*, nonastringent.

91509. No. 7642. *Mikagemaru*, nonastringent.

91510. No. 7638. *Sahuahu-mishirazu*, astringent.

91511. No. 7658. *Sangokuichi*, astringent.

91512. No. 7651. *Shimpet*, astringent.

91513. No. 7656. *Wase-haha*, astringent.

91514. No. 7640. *Yukineri*, nonastringent.

91515. DIOSPYROS LOTUS L. **Dateplum.**
No. 7661. *Naga-mamegaki*.

For previous introduction and description see 91323.

91516 and 91517.

From Seville, Spain. Seeds presented by José Gomez Cherlo, through Frank L. Goll, Bureau of Plant Industry. Received February 11, 1931.

91516. ERYTHRINA sp. Fabaceae. **Coral tree.**

A handsome flowering shrub, apparently well adapted to severe dryness and warm temperature.

91517. RICINUS COMMUNIS L. Euphorbiaceae. **Common castor-bean.**

91518 and 91519.

From Japan. Seeds purchased from the Yokohama Nursery Co., Yokohama. Received February 11, 1931.

91518. ILEX LATIFOLIA Thunb. Aquifoliaceae. **Holly.**

A Japanese evergreen holly, one of the most attractive of the genus, which sometimes develops into a tree 60 feet tall. The glossy green leaves, 3 to 7 inches long, are oval or narrowly oblong, and the red berries, about one-third of an inch in diameter, are produced in dense clusters.

For previous introduction see 83975.

91518 and 91519—Continued.

91519. LILIUM AURATUM Lindl. Liliaceae.
Goldband lily.

For previous introduction see 83803.

91520. PRUNUS SUBHIRTTELLA PENDULA
(S. e. b.) Tanaka. Amygdalaceae.
Shidarehigan.

From Chevy Chase, Md. Scions presented by J. Marion Shull, through Paul Russell, Bureau of Plant Industry. Received February 11, 1931.

For previous introduction and description see 91465.

91521 to 91523. ACER spp. Aceraceae.
Maple.

From southern Manchuria. Seeds purchased from Manshu Nosan Shokai (Inc.), seed growers, Dairen. Received February 11, 1931.

91521. ACER DIABOLICUM PURPURESCENS
(Franch. and Sav.) Rehd.
Red-devil maple,

A tree up to 50 feet high with red flowers appearing before the leaves, which are 5-lobed and reddish while young. The fruits, with spreading wings and bristly nutlets, are purplish while young. It is native to Japan.

91522. ACER RUFINERVE Sieb. and Zucc.

For previous introduction and description see 91243.

91523. ACER TSCHONOSKII Maxim.

A graceful shrubby tree, sometimes 20 feet high, native to Japan. The leaves turn bright yellow in the autumn.

For previous introduction see 83777.

91524. LIVISTONA CHINENSIS (Jacq.) R. Br. Phoenixaceae.
Chinese fan palm.

From Nassau, Bahama Islands. Seeds presented by the Allison V. Armour expedition to Mexico and the West Indies, 1931. Received February 11, 1931.

No. 9101. A palm, native to China, with a short thick trunk up to 6 feet high and 1 foot thick, having a crown of reniform palmately divided leaves 4 to 6 feet across on petioles about 5 feet long, which are armed below the middle with recurved brown spines more than an inch long.

For previous introduction see 85742.

91525 and 91526.

From Fort Dauphin, Madagascar. Plants presented by Rev. A. S. Burgess, through C. F. Swingle, Bureau of Plant Industry. Received February 12, 1931.

91525. KALANCHOE BEHARENSIS Drake. Crassulaceae.

Mongy vola. A shrubby succulent about 12 feet high, with large thick fleshy ovate leaves up to 8 inches long. These are rusty tomentose above and silvery below, both surfaces becoming dingy with age. The pale-yellow flowers are borne in ample terminal panicles. Native to Madagascar.

For previous introduction see 78423.

91526. KALANCHOE sp. Crassulaceae.

Tavytavy.

91527. PRUNUS SIMONII Carr. Amygdalaceae.
Apricot-plum.

A superior variety of the apricot-plum, of uncertain origin, growing at the United States Plant Introduction Garden, Chico, Calif. The quality of the fruit is said by pomologists to be considerably higher than that of other known forms of this species, and there is less bitterness in the skin. The other known forms apparently have been of interest mainly to the breeder, while this strain may prove of value as it is, at least as a home fruit.

91528 to 91553.

From the Union of Soviet Socialist Republics. Seeds presented by V. P. Alekseev, Subtropical Branch of the Institute of Applied Botany and New Cultures, Sukhum, Abkhazia Republic, through A. Kol, Leningrad. Received February 12, 1931.

91528. CITRULLUS COLOCYNTHIS (L.) Schrad. Cucurbitaceae. Colocynth.

No. 40912. Crop of 1929. A perennial herbaceous vine allied to the watermelon. The small round hard green fruits, 3 inches in diameter, are used medicinally as a purgative.

For previous introduction see 74177.

91529. CITRULLUS VULGARIS Schrad. Cucurbitaceae. Watermelon.

No. 34072. Crop of 1927.

91530. CUCUMIS MELO L. Cucurbitaceae. Melon.

No. 34068. Crop of 1927.

91531. DAUCUS CAROTA L. Apiaceae. Carrot.

No. 34228. Crop of 1929.

91532. LACTUCA VIROSA L. Cichoriaceae.

No. 34254. Crop of 1929. A biennial with a long fusiform root and a tall leafy stem often branched at the base. The sagittate-cordate ovate-oblong leaves are spiny and the sulphur-yellow flowers are in cylindrical heads. Native to rocky places in central and southern Europe.

91533. PHASEOLUS VULGARIS L. Fabaceae. Common bean.

No. 34503.

91534 to 91545. PHYSALIS spp. Solanaceae. Groundcherry.

91534 and 91535. PHYSALIS ANGULATA L.

A plant with medium-sized fruits which are not edible out of hand.

91534. No. 40169.

91535. No. 40170.

91536. PHYSALIS FUSCO-MACULATA Dun.

No. 35409. A prostrate plant with medium-sized orange-colored fruit which is very sweet, but mawkish.

91537. PHYSALIS FRANCHETI Masters. Lantern groundcherry.

No. 40179. A plant with bright-red very ornamental fruit which is non-edible.

91538 to 91541. PHYSALIS IXOCARPA Brot. Tomatillo.

91538. No. 35410. Fruit of good size, edible, but mawkish.

91528 to 91553—Continued.

91539. No. 35410a. Collected in 1930.

91540. No. 35415. The yellow fruit is very large, sweet, but mawkish.

91541. No. 35420. A very productive variety with large yellow fruit, which is sweet, but mawkish. Very much like No. 35415 [91540].

91542. *PHYSALIS PERUVIANA* L.
Peruvian groundcherry.

No. 14547.

For previous introduction and description see 91043.

91543. *PHYSALIS PHILADELPHICA* Lam.

No. 40177. Crop of 1928.

91544. *PHYSALIS PUBESCENS* L.
Common groundcherry.

No. 35416. A plant with small very sweet fruit, which is edible out of hand.

91545. *PHYSALIS VISCOSA* L.

No. 35424. A prostrate plant with medium-sized orange-colored fruit, which is very sweet, but mawkish. It is very much like No. 35409 [91536].

91546 to 91553. *SOLANUM* spp. Solanaceae.

91546. *SOLANUM AETHIOPICUM* L.

No. 35300. A vigorous ornamental plant, with small fruits which resemble tomatoes in shape.

91547. *SOLANUM CAPSICAESTRUM* Link.
False Jerusalem-cherry.

No. 34147. A very ornamental perennial plant, with small round orange-colored fruits.

91548. *SOLANUM KHASIANUM* C. B. Clarke.
Nightshade.

No. 40404. An ornamental plant with large prickly leaves and fruits the size of small apples.

91549. *SOLANUM MACROCARPON* L.
Nightshade.

No. 35304. A plant with medium-sized fruits which resemble tomatoes; said to be edible.

91550. *SOLANUM NIGRUM* L.
Black nightshade.

No. 35319. Variety *chlorocarpum*. A plant with small edible green-colored fruits.

91551. *SOLANUM NIGRUM* L.
Black nightshade.

No. 35305. Variety *pumila*. A small plant with edible fruit.

91552. *SOLANUM PYRACANTHUM* Jacq.
Nightshade.

No. 19833. A plant with all parts covered by prickles. The bright-red round fruits are edible.

91553. *SOLANUM SISYMBRIFOLIUM* Lam.
Nightshade.

No. 35316. A plant with small round black fruit.

91554 to 91561.

From Manchuria and Chosen. Seeds collected by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received February 12, 1931.

91554 to 91561—Continued.

91554 and 91555. *PUERRARIA THUNBERGIANA* (Sieb. and Zucc.) Benth. Fabaceae.
Kudzu-bean.

Seeds purchased December 11, 1930, at Dairen, Manchuria, from Manshu Nosan Shokai (Inc.), seed growers.

91554. No. 6646. Collected in mountain regions in Kwantung, southern Manchuria.

91555. No. 6647. Collected in the mountain regions of northeastern Chosen.

91556 to 91561. *SOJA MAX* (L.) Piper (*Glycine hispida* Maxim.). Fabaceae.
Soybean.

Nos. 91556 to 91559 were received through the South Manchurian Railway Agricultural Bureau from Kanto district, Manchuria, December 15, 1930.

Nos. 91556 and 91557 were from Liang Cheng Son.

91556. No. 6652. Medium-sized oval yellow beans with slate-black hilum; used for oil and oil meal.

91557. No. 6653. A mixture of medium-small to medium-sized yellow varieties; used for oil and oil meal.

91558. No. 6654. *Hwan-pau-shu*. From Juitzukai. A medium-sized nearly round light-yellow bean with pale hilum; used for oil and oil cake.

91559. No. 6655. From Liang Cheng Son. A mixed sample of yellow-seeded varieties; used for oil and oil meal.

Nos. 91560 and 91561 were received from the Tansen Agricultural Society, Tansen, Kankyo Nando Prefecture, Chosen, December 17, 1930.

91560. No. 6656. *Tansenkiti*. A large nearly round light-yellow bean with pale hilum; used for food purposes.

91561. No. 6657. *Tansen usuao*. A large oval light greenish-yellow bean with pale hilum; used as a green-manure crop.

91562 to 91592.

From Quetta, India. Seeds purchased from the Quetta Fruit Agency. Received February 13, 1931.

A collection of seeds introduced for the use of specialists working with fruits and vegetables.

91562. *ALLIUM CEPA* L. Liliaceae.
Onion.

Piaz.

91563. *AMYGDALUS PERSICA* NECTARINA Ait. Amygdalaceae. Nectarine.

91564. *ASPARAGUS OFFICINALIS* L. Con-vallariaceae. Garden asparagus.

91565 to 91568. *CITRULLUS VULGARIS* Schrad. Cucurbitaceae. Watermelon.

91565. *Gardai*.

91566. *Kadu-Sargat*.

91567. *Uzda*.

91568. *Special variety*.

91562 to 91592—Continued.

- 91569 to 91582. CUCUMIS MELO L. Cucurbitaceae. Melon.**
91569. Alaf Khant.
91570. Gardai.
91571. Htrati.
91572. Kabuli.
91573. Kalandri.
91574. Kandahari.
91575. Kharwari Dastambol.
91576. Mashade.
91577. Shinag.
91578. Sufaidak.
91579. Sur.
91580. Tarimat.
91581. Special variety, very sweet.
91582. Assorted melon seeds.
- 91583. CUCUMIS SATIVUS L. Cucurbitaceae. Cucumber.**
91584. CUCUMIS SATIVUS L. Cucurbitaceae. Cucumber.
 Snake cucumber.
- 91585. CUCURBITA MAXIMA Duchesne. Cucurbitaceae. Squash.**
 A round pumpkin.
- 91586. DAUCUS CAROTA L. Apiaceae. Carrot.**
- 91587. LAGENARIA LEUCANTHA (Duchesne) Rusby (L. vulgaris Seringe). Cucurbitaceae. Calabash gourd.**
 Long pumpkin.
- 91588. MEDICAGO SATIVA L. Fabaceae. Alfalfa.**
 Lucerne.
- 91589. PRUNUS ARMENIACA L. Amygdalaceae. Apricot.**
Chighali. Yellow-colored apricots.
- 91590. PRUNUS ARMENIACA L. Amygdalaceae. Apricot.**
 A small white variety.
- 91591. SOLANUM MELONGENA L. Solanaceae. Eggplant.**
Banyan.
- 91592. SPINACIA OLERACEA L. Chenopodiaceae. Common spinach.**
- 91593. TELOSMA CORDATA (Burm. f.) Merr. (Pergularia odoratissima J. E. Smith). Asclepiadaceae.**
 From China. Seeds presented by Prof. W. Y. Chun, of the Sun Yat-sen University, Canton, through H. Green, Superintendent, Botanical and Forestry Department, Hong Kong. Received February 13, 1931.
 A woody vine, native to the East Indies, with opposite ovate-cordate membranous leaves and umbellike cymes of salver-shaped fragrant aromatic greenish flowers.
- 91594. DIOSPYROS sp. Diospyraceae. Persimmon.**
 From Peiping, China. Trees and scions collected by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received February 13, 1931.
 No. 7700. Plants collected on the mountain side. Said to be the white-barked persimmon.

91595. GOSSYPIMUM sp. Malvaceae.

Cotton.

From Belize, British Honduras. Seeds collected by Prof. Harley H. Bartlett, Department of Botany, University of Michigan, Ann Arbor, Mich. Received February 14, 1931.

A variety grown locally.

91596. BETA VULGARIS L. Chenopodiaceae. Sugar beet.

From Germany. Seeds purchased through the National Seed Co., New York, N. Y. Received February 14, 1931.

"Normal" "Rabbethge and Giesecke Kleinwanzleben Original."

91597. (Undetermined.)

From Southern Rhodesia, Africa. Seeds presented by Dr. W. L. Thompson, Mount Silinda. Received February 14, 1931.

Potato-nut. A large timber tree which becomes 3 to 4 feet in diameter and has cherrylike wood. The seeds are about the size and shape of acorns, and the flavor of the kernel reminds one of a raw potato.

For previous introduction see 86001.

91598. ACACIA LONGIFOLIA SOPHORAE (Labill.) F. Muell. Mimosaceae.

From Melbourne, Victoria, Australia. Seeds from the Melbourne Botanic Garden, presented by Pomeroy L. Dunbar, Boynton, Fla. Received February 16, 1931.

A yellow-flowered rapid-growing evergreen shrub or small tree 15 to 20 feet high, excellent for preventing the encroachments of the sea along sandy coasts. It frequents the coastline of southeastern Australia from southern Queensland to South Australia, and also Tasmania.

For previous introduction see 80061.

91599 to 91607. FRAGARIA spp. Rosaceae. Strawberry.

From Loiret, France. Plants presented by Edmond Versin. Received February 16, 1931.

A collection of new varieties, introduced for the use of department specialists.

91599. La Frana Novelle.

91600. La Normandie.

91601. Ministre Cheroy.

91602. Odette Gauthier.

91603. Otvenir.

91604. Precieuse.

91605. Radio.

91606. Resurrection.

91607. Surpasse Aurore.

91608. PISTACIA sp. Anacardiaceae.

From Greece. Seeds presented by George T. Choremis, Chios Island, through David Fairchild, Bureau of Plant Industry. Received February 16, 1931.

Turpentine tree.

**91609. TRIFOLIUM PRATENSE L. Faba-
ceae. Red clover.**

From England. Seeds purchased from Clover Growers (Ltd.), Montgomery. Received February 16, 1931.

Certified Montgomery Late Flowering.

**91610. ARACHIS HYPOGAEA L. Faba-
ceae. Peanut.**

From northern Nigeria, Africa. Seeds presented by the Agricultural Department of Nigeria, through Fred H. Hull, Assistant Agronomist, Agricultural Experiment Station, Gainesville, Fla. Received February 13, 1931.

A large groundnut, native to Bin, Bornu, northern Nigeria.

**91611. PRUNUS INCISA Thunb. Amyg-
dalaceae. Mame cherry.**

From Philadelphia, Pa. Scions presented by J. C. Wister. Received February 17, 1931.

An ornamental Japanese cherry which is usually a large compact shrub, occasionally a small tree about 25 feet high. The flowers, three-fourths of an inch across, appear in drooping clusters before the deeply serrate leaves, and are white or rosy, with bright-red calyxes and bright-yellow anthers. The petals fall early, but the calyxes, which gradually grow brighter, remain on the young fruits for some time and are quite showy.

For previous introduction see 77855.

**91612. ANDROPOGON INTERMEDIUS R. Br.
Poaceae. Grass.**

From St. Croix, Virgin Islands. Seeds presented by J. B. Thompson, Director, Agricultural Experiment Station. Received February 18, 1931.

Variety *acidulus*. A perennial grass with a short, hard rhizome and erect or ascending stems 3 feet or more high. The linear leaves are 3 to 8 inches long, pale green or with a reddish tinge, and the obovoid panicle is 2 to 3 inches long. It is native to western tropical Africa and has been introduced into the West Indies.

**91613 to 91617. PRUNUS ARMENIACA L.
Amygdalaceae. Apricot.**

From Algeria, Africa. Seeds presented by Julien Brichet, Chief of the Horticultural Service in Algeria, through Fred-eric T. Bioletti, College of Agriculture, Berkeley, Calif. Received February 18, 1931.

91613. From Anis, in the Aures Moun-
tains.

91614. From Arbou, Souman Valley, Djud-
jura Mountains.

91615. From M'Sila Oasis.

91616. From Menaa, in the Aures Moun-
tains.

91617. From Menaa, in the Aures Moun-
tains.

91618 and 91619.

From Mexico. Seeds collected by C. O. Erlanson and Max Souviron, Bureau of Plant Industry. Received February 19, 1931.

91618 and 91619—Continued.**91618. CEIBA sp. Bombacaceae.**

From Jesus G. Ortega, Mazatlan, Sinaloa. The fruits of this tree are mostly spherical.

**91619. CEIBA ACUMINATA (S. Wats.) Rose.
Bombacaceae. Pochote.**

No. 30. A tree 40 feet high found at 400 feet altitude, in the foothills between Mazatlan and Modesto, Sinaloa, February 4, 1931.

**91620 to 91622. ANNONA CHERIMOLA
Mill. Annonaceae. Cherimoya.**

From Chula Vista, Calif. Scions presented by William H. Sallmon. Received February 19, 1931.

Scions of new varieties propagated by Mr. Sallmon.

91620. *Ryerson*.

91621. *Sallmon No. 1*.

91622. *Sallmon No. 2*.

**91623. PRUNUS SUBHIRTILLA Miquel.
Amygdalaceae. Higan cherry.**

From Jamaica Plain, Mass. Scions presented by J. G. Jack, Arnold Arboretum. Received February 19, 1931.

Arnold Arboretum No. 3674. The so-called typical form of the Higan cherry, which is not known in the wild state, forms a rather low wide-spreading tree with smooth gray bark. In early spring, before the leaves appear, the tree is hidden in a dense mass of very light-pink flowers, slightly larger than those of other Higan cherries. The small black fruits follow early in the summer.

For previous introduction see 77707.

91624 to 91631.

From Germany. Seeds purchased from Hehn. Mette, Quedlinburg. Received February 20, 1931.

**91624. ANTIGONON LEPTOPUS Hook. and
Arn. Polygonaceae. Rosa-de-montana.**

No. 11424. 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 colored sepals, are in many-flowered racemes.

For previous introduction see 62907.

**91625 to 91627. EREMURUS spp. Lilia-
ceae.****91625. EREMURUS BUNGEI Baker.
Desertcandle.**

No. 18452. Variety *perfectus*. A low herbaceous perennial with a rosette of linear leaves 1 foot long and bright-yellow flowers in a dense raceme 4 to 5 inches long on a scape 1 foot high. It is native to Persia.

**91626. EREMURUS HIMALAICUS Baker.
Himalayan desertcandle.**

No. 18453. A tall herbaceous perennial with lanceolate leaves 1 to 2 feet long in a rosette at the base of the stem which rises to 6 feet and bears a spike, 2 to 3 feet long, of white flowers. It is native to India.

For previous introduction see 69356.

91624 to 91631—Continued.

91627. *EREMURUS ROBUSTUS* Regel.
Giant desertcandle.

No. 18455. A tall, hardy herbaceous perennial with pale-pink flowers on a stalk 5 to 8 feet high. Native to Turkistan.

For previous introduction see 73190.

91628. *HELIANTHUS SCABERRIMUS* Eil. (*H. rigidus* Desf.). Asteraceae.
Prairie sunflower.

No. 19346. A stout herbaceous perennial with rough branching stems 4 to 6 feet high. The thick rigid oblong-lanceolate leaves are rough on both sides and 6 to 12 inches long, and the bright-yellow flowers are 2 to 4 inches across. It flowers from August to October and is native to the eastern part of the United States.

For previous introduction see 62793.

91629. *HELIANTHUS STRUMOSUS* L. Asteraceae.
Woodland sunflower.

No. 19348. A tall herbaceous perennial with glaucous stems, 3 to 7 feet high, ovate-lanceolate entire or toothed leaves 3 to 8 inches long, and bright-yellow flowers 2 to 4 inches across. It is native to the eastern part of North America, extending west to Wisconsin and Arkansas.

91630. *OXALIS ROSEA* Feuille. Oxalidaceae.
Rose oxalis.

No. 21906. A tall leafy-stemmed herbaceous perennial with notched leaflets and open irregularly forked axillary cymes of rosy flowers having deeper-colored veins. Native to Chile.

91631. *KNIPHOFIA HYBRIDA* Hort. Liliaceae.
Torchlily.

No. 25385. Variety *Mirabilis*.

91632 and 91633.

From India. Seeds purchased from G. Ghose & Co., Townend, Darjeeling. Received February 20, 1931.

91632. *LILIUM OCHRACEUM* Franch. Liliaceae.
Lily.

A rare and beautiful lily from Burma, not hardy except in the most favored districts; it is an admirable cool greenhouse plant. This is a very variable species, producing flowers which range in color from deep golden yellow to pale yellow, stained in varying degrees with deep wine-purple.

For previous introduction see 75729.

91633. *LILIUM WALLICHIANUM* Schult. f. Liliaceae.
Wallich lily.

A lily 4 to 6 feet high, with linear leaves 6 to 9 inches long and usually solitary creamy waxy white fragrant flowers 9 inches long, which are golden yellow at the base inside and green outside.

For previous introduction see 90013.

91634 to 91638. *DIOSPYROS KAKI* L. f. Diospyraceae.
Kaki persimmon.

From Japan. Scions presented by Kimijiro Noro, Shizuokaken Agricultural Experiment Station, Toyoda Mura, near Shizuoka. Received February 21, 1931.

91634. *Fuyu*.

91635. *Giondo*.

91634 to 91638—Continued.

91636. *Jiro*.

91637. *Saijo*.

91638. *Yokong*.

91639. (Undetermined.)

From Papeite, Tahiti, Society Islands. Plants received from L. Garnier, through John Bryant, Jardin des Plantes, Papeite. Received February 21, 1931.

This bamboo is understood to be a very long-jointed species from a mountainous locality in Tahiti. A beautiful ribbon fiber up to 3 feet long, and used in making fine baskets and other articles, is produced from the internodes, according to Edwin Peace, a former resident of Tahiti. Like many other bamboos, the plants received produce three primary branches at a node, the middle branch being a little the largest; later numerous additional small branches are put out from the node. The lanceolate leaves on the plants received are up to 11 inches long by $1\frac{1}{2}$ inches wide and are pubescent beneath. They have 8 to 11 pairs of secondary veins with 5 to 7 intermediates.

91640 to 91647.

From Tunisia, Africa. Scions presented by André H. Petitpierre, Direction Générale de l'Agriculture du Commerce et de la Colonisation, Tunis, northern Africa. Received February 24, 1931.

91640 to 91643. *PRUNUS ARMENIACA* L. Amygdalaceae.
Apricot.

91640. *Gros Indigène*.

91641. *Luitzeb-Bouchoi*.

91642. *Oblong*.

91643. *Senadgui*.

91644 to 91647. *VITIS VINIFERA* L. Vitaceae.
European grape.

91644. *Benzerti*.

91645. *Bezoub el Khadem*.

91646. *Bidh el Hamay*.

91647. *Osl*.

91648. *TRIFOLIUM PRATENSE* L. Fabaceae.
Red clover.

From Toronto, Canada. Seeds purchased from William Rennie Co. (Ltd.). Received February 24, 1931.

Red clover grown in York County, Province of Ontario, within 50 miles of Toronto.

91649 and 91650.

From Morocco. Seeds presented by H. Brayard, Ingénieur Horticole, Directeur de la Ferme Expérimentale, Marrakech. Received February 25, 1931.

91649. *MEDICAGO SATIVA* L. Fabaceae.
Alfalfa.

Luzerne de Demnat.

91650. *ARGANIA SPINOSA* (L.) Skeels (*A. sideroxyylon* Roem. and Schult.). Sapotaceae.
Argan.

The argan tree of western Morocco is very limited in its range, occurring only in that part of the African Continent. It grows to a large size and bears an abundance of light-yellow fruits somewhat resembling small plums in shape. Cattle

91649 and 91650—Continued.

and goats feed upon these fruits, which are exceedingly acid. The seeds are very thick-walled and contain an oil which is used as food and also for illuminating purposes. Apparently the tree is not injured by considerable frost, and it may thrive wherever the hardy citrus grows.

For previous introduction see 88935.

91651. ZEA MAYS L. Poaceae.

From French Equatorial Africa. Seeds presented by Elizabeth Herrmann, Alindao, Ubangi Chari Territory. Received February 26, 1931.

A white corn which matures in two months. The natives plant it near swamps at the beginning of the dry season, and in the rainy season they plant it in stony ground near the fertile ant hills. It yields two ears in good ground, but only one in less fertile situations.

91652. FORSTERONIA FLORIBUNDA (Swartz) A. DC. Apocynaceae.

From Jamaica. Seeds presented by M. S. Goodman, Superintendent, Hope Gardens, Kingston. Received February 26, 1931.

A trailing shrub with oblong, bluntly mucronate, leathery leaves 2 to 3 inches long, and terminal cymes of whitish wheel-shaped flowers. It is native to Jamaica and is of possible value as a rubber-producing plant.

For previous introduction see 90831.

91653. CHLORIS PARAGUAIENSIS Steud. Poaceae. Grass.

From St. Croix, Virgin Islands. Seeds presented by J. B. Thompson, Director, Agricultural Experiment Station. Received March 5, 1931.

A close relative of Rhodes grass. A very good, palatable grass that withstands extreme drought.

For previous introduction see 49689.

91654. PRUNUS sp. Amygdalaceae.

From Rabat, Morocco. Scions presented by C. Bey Rozet, Direction Générale de l'Agriculture. Received February 27, 1931.

Belciana. A precocious and vigorous variety of plum which thrives in the coastal region, is harvested the latter part of May, and is a good shipper.

91655. GUNNERA MASAFUERAE Skottsb. Haloragidaceae.

From Juan Fernandez Island. Seeds presented by Señor René Durand, through Waldo L. Schmitt, Curator of Marine Invertebrates, Smithsonian Institution, Washington, D. C. Received February 27, 1931.

A perennial herb with large, deeply cut, radicle leaves often 10 feet long, the petioles of which are edible, having a refreshing acid flavor. The flowers are closely packed in large conelike clusters 1 foot in diameter and several feet high. It is native to the island of Juan Fernandez at an altitude of 3,500 feet.

91656 to 91671.

From Quetta, India. Trees and cuttings purchased from the Quetta Fruit Agency. Received February 27, 1931.

91656 to 91671—Continued.

91656 to 91660. AMYGDALUS PERSICA L. (Prunus persica Stokes). Amygdalaceae. Peach.

91656. A locally grown variety with round fruit colored red and white.

91657. Long, almondlike, the best.

91658. A locally grown variety with long red and white fruit.

91659. *Kandahari*.

91660. A grafted peach.

91661. PISTACIA VERA L. Anacardiaceae. Pistache.

Thin shelled; best variety.

91662 to 91665. PRUNUS ARMENIACA L. Amygdalaceae. Apricot.

91662. A locally grown red variety.

91663. *Ghaizi nari*.

91664. *Char naghaz*.

91665. *Sur baghli*. A locally grown white apricot with a red tinge.

91666 to 91671. VITIS VINIFERA L. Vitaceae. European grape.

91666. *Sahibi*. A red grape.

91667. *Red Kishmishie*. A seedless grape.

91668. *Haitha*, Kandhar variety, a long white grape with seeds.

91669. *Sheik Ali*.

91670. Long, black.

91671. *Kishmishie*. A seedless white grape.

91672 to 91677. TRITICUM TURGIDUM L. Poaceae. Poulard wheat.

From Huancayo, Peru. Seeds presented by Paul G. Ledig, Magnetic Observatory, Carnegie Institution of Washington, Department of Research in Terrestrial Magnetism. Received February 27, 1931.

91672 and 91673. From Muellos, Peru, at 12,000 feet altitude.

91672. No. 5.

91673. No. 4.

91674 to 91677. From Chambora, Peru, at a slightly less altitude.

91674. No. 6. **91676.** No. 3.

91675. No. 1. **91677.** No. 2.

91678 to 91734. SOJA MAX (L.) Piper (Glycine hispida Maxim.). Fabaceae. Soybean.

From Chosen and Manchuria. Seeds collected by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received February 27, 1931.

Nos. 91678 to 91729 were received from the Heian Nando Seed & Nursery Farm, Heijo, Chosen, January 27, 1931.

91678. No. 6708. *Kakkaichuomi*. A mixture of yellow-seeded native varieties.

91679. No. 6709. *Ryumokute* (dragon's eye). A medium-sized oval light-yellow bean slightly mottled with black; hilum black.

91678 to 91734—Continued.

91680. No. 6710. *Seita* (light-blue). A mixture of native varieties varying from yellow to greenish yellow.
91681. No. 6711. *Purukon* (roasted bean). A medium-sized oval slightly flattened seal-brown bean; used roasted.
91682. No. 6712. *Porikon*. A medium-sized oval slightly flattened green bean with pale hilum and green germ.
91683. No. 6713. *Afgerikon*. A medium-sized oval slightly flattened bean, mottled with yellow and black.
91684. No. 6714. *Porikon* (millet fried bean). A large oval light-yellow bean with the testa more or less cracked; hilum light brown.
91685. No. 6715. *Purukon*. A medium-sized oval green bean with brown hilum and green germ.
91686. No. 6716. *Kikkasu* (chrysanthemum bean). A medium-sized oval yellow bean with brown hilum.
91687. No. 6717. *Wanita* (dragon's eye). A medium-sized oval slightly flattened glossy yellow bean with slate-black hilum which is rather long and narrow.
91688. No. 6718. *Aoshoryu*. A medium-small oval slightly flattened greenish-yellow bean with brown hilum and yellow germ.
91689. No. 6719. *Kaisen purukon*. A medium-large oval slightly flattened black and brown bean.
91690. No. 6720. *Chuinunikon*. A small nearly round black bean with yellow germ.
91691. No. 6721. *Kaisen horebikon*. A medium-sized nearly round light-yellow bean with pale hilum.
91692. No. 6722. *Chonkon*. A medium-sized oval slightly flattened green bean with light-brown hilum and green germ.
91693. No. 6723. *Iruchoitari*. A medium-sized oval black bean with yellow germ.
91694. No. 6724. *Ankechaji*. A medium-small oval light-yellow bean with pale hilum.
91695. No. 6725. *Kokuzu*. A medium-sized oval slightly flattened black bean with yellow germ.
91696. No. 6726. *Hakutaotsu*. A medium-sized oval light-yellow bean with pale hilum.
91697. No. 6727. *Kanmokuta*. A medium-sized oval yellow bean, more or less mottled with brown; hilum dark brown.
91698. No. 6728. *Ryumokute* (dragon's eye). A medium-sized oval yellow bean with black hilum.
91699. No. 6729. *Purute*. A medium-sized oval slightly flattened green bean with brown hilum and green germ.
91700. No. 6730. *Himashita* (castor-bean). A medium-sized nearly round brown bean marked with black in concentric rings.
91701. No. 6731. *Iruchoitate*. A medium-sized oval yellow bean with dark-brown hilum.

91678 to 91734—Continued.

91702. No. 6732. *Awata* (millet bean). A medium-large oval light-yellow bean with pale hilum.
91703. No. 6733. *Komuzomkon*. A medium-large much-flattened green and black bean, very similar to No. 2199.
91704. No. 6734. *Pottakukon*. A medium-small oval very light-yellow bean with pale hilum.
91705. No. 6735. *Hakuta Orukon*. A medium-sized oval yellow bean with a pale hilum; used for bean curd.
91706. No. 6736. *Chumokuta* (mouse eye). A mixture of reddish-brown and olive-brown varieties.
91707. No. 6737. *Oruchankon*. A medium-small nearly round greenish-yellow bean with brown hilum.
91708. No. 6738. *Teihata*. A medium-sized oval glossy yellow bean, more or less mottled with brown; hilum brown.
91709. No. 6739. *Oruchankon*. A medium-small oval light-yellow bean, mottled with brown; hilum brown.
91710. No. 6740. *Chonchutunikon*. A medium-small nearly round light-green bean with reddish-brown hilum and green germ.
91711. No. 6741. *Angechiifichankon*. A very small oval slightly flattened yellow bean, heavily mottled with brown; hilum brown.
91712. No. 6743. *Chongepikon*. A medium-large oval green bean with brown hilum and green germ.
91713. No. 6742. *Wanta*. A large nearly round glossy yellow bean with light-brown hilum.
91714. No. 6744. *Chanpurukon*. A very small nearly round light-brown bean, very similar to Brownie, No. 17256.
91715. No. 6745. *Purukon*. A medium-sized oval slightly flattened glossy yellowish-brown bean.
91716. No. 6746. *Jiante*. A large oval glossy yellow bean with light-brown hilum.
91717. No. 6747. *Chuinunikon*. A medium-small oval slightly flattened black bean, very similar to Ebony, No. 17254.
91718. No. 6748. *Budome* (grape eye). A medium-sized oval glossy yellow bean with pale slate-colored hilum.
91719. No. 6749. *Shirodaidzu* (white bean). A medium-sized oval glossy yellow bean with pale hilum.
91720. No. 6750. *Ryumokute* (dragon's eye). A medium-sized oval glossy yellow bean, more or less mottled with brown; hilum brown.
91721. No. 6751. *Pudokuton*. A medium-sized oval yellow bean with brown hilum.
91722. No. 6752. *Kokaita*. A mixture of glossy yellow beans with black and brown hilums.
91723. No. 6753. *Ryokudatsu* (blue bean). A medium-large oval green bean with light slate-black hilum and green germ.
91724. No. 6754. *Chumokuzu* (mouse eye). A small nearly round black bean with yellow germ.

91678 to 91734—Continued.

91725. No. 6755. *Akazu* (red bean). A medium-sized oval seal-brown bean with yellow germ.

91726. No. 6756. *Ucousetta* (crow's early bean). A medium-sized bluish-green nearly round bean with black hilum and yellow germ.

91727. No. 6757. *Komujomukon*. A medium-sized oval slightly flattened black bean with yellow germ.

91728. No. 6758. *Chutkon*. A very small nearly round light-brown bean, very similar to Brownie, No. 17256.

91729. No. 6759. *Kokaita*. A medium-sized oval greenish-yellow bean with brown hilum.

Nos. 91730 to 91734 were obtained at Kungchuling, Manchuria, January 30, 1931; mixed samples of yellow-seeded varieties from various sources, graded by the Grade Conference of the South Manchurian Railway, in December, 1930.

91730. No. 6767. *Excellent*, Grade No. 1, used for soy sauce and miso.

91731. No. 6768. Grade No. 1.

91732. No. 6769. Grade No. 2.

91733. No. 6770. Grade No. 3.

91734. No. 6771. Grade No. 4.

91735 to 91742.

From Medellin, Colombia, South America. Seeds presented by Dr. W. A. Archer, Escuela de Agricultura. Received February 28, 1931.

91735. *CIPURA PALUDOSA* Aubl. Iridaceae.

No. 5. Collected November 9, 1930, at Medellin. A beautiful dwarf bulbous plant with narrow lanceolate grasslike leaves 12 to 15 inches high. The light-blue flowers, not over 1 inch in diameter, are similar in color to those of *Iris paludosa dalmatica*. It is native to the Guianas.

For previous introduction see 37877.

91736. *IPOMOEA* sp. Convolvulaceae. Morning-glory.

No. 1. Collected at Medellin, November 9, 1930. A dwarf morning-glory 3 to 4 feet high, with blue flowers.

91737. *MERIANIA NOBILIS* Triana. Melastomaceae.

No. 7. *Amarroballa*. Collected at Santa Elena, December 28, 1930. A large tree with large purplish blossoms which are very handsome.

91738. (Undetermined.)

No. 9. *Lirio virginal*. Collected December 28, 1930, at Santa Elena. Aerial bulbils borne on the flower stalk of a liliaceous plant. The flowers are said to be white and to look like a lily.

91739. (Undetermined.)

No. 6. *Cortapico*. Collected at Santa Elena, December 28, 1930. A climbing plant which grows 20 feet high. The flowers are pale yellow with purple spots and dark reddish sepals.

91740. (Undetermined.)

No. 2. A terrestrial orchid, collected at Santa Elena, December 28, 1930.

91735 to 91742—Continued.

91741. (Undetermined.)

No. 3. *La Sierra*. A terrestrial orchid, collected at Medellin, January 4, 1930.

91742. (Undetermined.)

No. 4. A terrestrial orchid, collected at Santa Elena in October, 1930.

91743. (Undetermined.)

From Indo-China. Seeds presented by the Institut des Recherches Agronomiques de l'Indochine, Division de Botanique. Received February 28, 1931.

Collected near Laokay between 4,500 and 6,000 feet altitude. A handsome saponaceous tree 45 to 60 feet high, with golden foliage.

91744. *CASTANOPSIS TRIBULOIDES* (J. E. Smith) A. DC. Fagaceae.

From India. Seeds presented by R. N. Parker, Forest Botanist, Dehra Dun, United Provinces. Received March 2, 1931.

An evergreen chinquapin from the subtropical Himalayas, with small narrow leaves and solitary nuts. The tree is usually 40 to 80 feet high. The bark is said to yield a relatively large amount of tannin.

For previous introduction see 71030.

91745 to 91760.

From the West Indies. Seeds presented by the Allison V. Armour expedition to Mexico and the West Indies, 1931, through J. H. Kempton, Bureau of Plant Industry. Received March 2, 1931.

Nos. 91745 to 91747 were collected at the Harvard Botanic Garden, Soledad, Cienfuegos, Cuba, February 10, 1931.

91745. *BOTOR TETRAGONOLOBA* (L.) Kuntze (*Psophocarpus tetragonolobus* DC.). Fabaceae. Goa bean.

No. 9132. A summer vegetable with winged pods, which are eaten like string beans. The seeds are also eaten after the pods are too tough to use. This plant produces its seeds in the summer after the other beans have matured.

For previous introduction see 74529.

91746. *CHRYSALIDOCARPUS MADAGASCARIENSIS* Beccari (*Dypsis madagascariensis* Hort.). Phoenicaceae. Palm.

No. 9126. A graceful palm, native to Madagascar, about 15 feet high, with pinnate leaves 10 feet long, having the segments arranged in fascicles and appearing to be in threes, giving a triangular effect.

For previous introduction see 81511.

91747. *HIBISCUS SORORIUS* L. Malvaceae. No. 9111.

For previous introduction and description see 90919.

91748 to 91753. *GOSSYPIUM* spp. Malvaceae. Cotton.

Nos. 91748 to 91753 were collected February 11, 1931, on Grand Cayman, Cayman Islands.

91748. *GOSSYPIUM* sp.

No. 9138. A variety with green fuzz.

91745 to 91760—Continued.

91749. *GOSSYPIUM* sp.

No. 9140. Smooth seeds.

91750. *GOSSYPIUM* sp.

No. 9142.

91751. *GOSSYPIUM* sp.

No. 9143.

91752. *GOSSYPIUM* sp.

No. 9144. A form with petal spot.

91753. *GOSSYPIUM* sp.

No. 9145.

Nos. 91754 and 91755 were collected at Nassau, New Providence Island, the Bahamas, February 2, 1931.

91754. *GOSSYPIUM* sp.

No. 9102.

91755. *GOSSYPIUM* sp.

No. 9103.

91756. *GOSSYPIUM* sp.

No. 9107. Collected at Guantanamo, Cuba, February 6, 1931. A cotton which has evidently escaped from cultivation.

Nos. 91757 and 91758 were collected February 8, 1931, at Soledad, Cuba.

91757. *GOSSYPIUM* sp.

No. 9109. A shrub 10 to 12 feet high with no petal spot, and light-yellow flowers. It is probably a hybrid between *Gossypium hirsutum* and *G. barbadense* and was, perhaps, brought to Cuba from Trinidad by Germans in 1861.

91758. *GOSSYPIUM* sp.

No. 9110. A shrub 12 feet high which produces brown cotton.

91759. *LUCUMA* sp. Sapotaceae.

No. 9139. Collected on Grand Cayman Island, February 11, 1931. Said to have smooth fruit with yellow flesh.

91760. *ZEA MAYS* L. Poaceae. Corn.

No. 9141. Collected on Grand Cayman Island, February 11, 1931.

91761 to 91763. *AMYGDALUS PERSICA* L. (*Prunus persica* Stokes). Amygdalaceae. Peach.

From Oporto, Portugal. Plants presented from Alfredo Moreira de Silva & Filhos, nurserymen. Received March 3, 1931.

91761. *Teton de Venus*.91762. *Madeleine de Courson*.91763. *Grosse Mignone*.91764. *CITRUS NOBILIS DELICIOSA* (Ten.) Swingle. Rutaceae.

Mandarin orange.

From Indo-China. Seeds presented by the Institut des Recherches Agronomiques de l'Indochine, Division de Botanique. Received March 3, 1931.

Mandarin oranges of very good quality from the region of Laokay and Hanol.

91765 to 91770. *DIGITARIA* spp. Poaceae. Grass.

From South Africa. Plants presented by I. B. Pole Evans, Chief, Division of Plant Industry, Department of Agriculture, Pretoria, Union of South Africa. Received March 3, 1931.

Forms of perennial grasses which are related to the woolly fingergrass (*Digitaria eriantha stolonifera*). They are to be tested as winter forage for stock in dry regions.

91765. *DIGITARIA PENTZII* Stent.91766. *DIGITARIA LITTORALIS PROSTRATA* Stent.91767. *DIGITARIA DECUMBENS* Stent.91768. *DIGITARIA POLEVANSII* Stent.91769. *DIGITARIA SWAZILANDENSIS* Stent.91770. *DIGITARIA VALIDA* Stent.91771 to 91785. *PHOENICACEAE*. Palm.

From the West Indies. Seeds presented by the Allison V. Armour expedition to Mexico and the West Indies, 1931, through J. H. Kempton, Bureau of Plant Industry. Received March 3, 1931.

Collected in the Harvard Botanic Garden, Soledad, Cienfuegos, Cuba, February 10, 1931.

91771. *ARECA* sp.

No. 9136. Received as *Actinorhysis calapparia*, but the seeds do not agree with other material of that species. To be grown for identification.

91772. *ARCHONTOPHOENIX ALEXANDRAE* (F. Muell.) Wendl. and Drude.

No. 9128. A pinnate-leaved palm 70 to 80 feet high, with leaves several feet long, of lanceolate, usually entire leaflets 1 to 2 feet long and whitish beneath. The greenish-yellow flowers are borne in a cluster about 1 foot long and are followed by small round fruits. Native to Queensland, Australia.

For previous introduction see 81582.

91773 and 91774. *ARECASTRUM ROMANZOFIANUM* (Cham.) Becc. (*Cocos romanzoffiana* Cham.).

A palm, native to Brazil, with an unarmed trunk about 30 feet high and 1 foot in diameter, bearing a crown of plumelike leaves 12 to 15 feet long. The fruit is a pale-orange drupe about the size of a large acorn, inclosing a bony seed which has three eyes near the base.

For previous introduction see 81687.

91773. No. 9121.

91774. No. 9135.

91775. *ARIKURYOBA SCHIZOPHYLLA* (Mart.) Bailey (*Cocos schizophyllus* Mart.).

No. 9127. A slender straight-stemmed pinnate-leaved palm.

91776. *BUTIA ERIOSPATHA* (Mart.) Becc. (*Cocos eriospatha* Mart.).

Apricot palm.

No. 9129. A handsome pinnate-leaved palm with violet-colored stems, creamy flowers, and edible yellow fruits the size of a small plum. It is native to Brazil.

For previous introduction see 73923.

91771 to 91785—Continued.

91777. *CARYOTA URENS* L. **Toddy palm.**

No. 9122. A Malayan palm up to 80 feet high and 18 inches in diameter, with twice pinnately divided leaves 20 feet long by 12 feet wide, and the segments are curved and drooping.

For previous introduction see 77157.

91778. *CHRYSLIDOCARPUS LUTESCENS* (Bory) Wendl. **Yellow palm.**

No. 9125. A spineless stoloniferous palm up to 30 feet high, native to Madagascar. The pinnate leaves are about 5 feet long, and the fruits are violet or almost black.

For previous introduction see 81585.

91779. *HETEROSPATHE ELATA* Scheff.

No. 9131. A tall unarmed palm with straight slender stem and long pinnate leaves, growing in protected situations where the rainfall is evenly distributed. It is one of the most attractive and graceful palms and will make a good plant for the conservatory and possibly a good house palm.

For previous introduction see 88117.

91780. *PRYCHOSPERMA MACARTHURI* Wendl. (*Kentia macarthuri* Hort.).

No. 9137. A palm, native to Australia, which grows to a height of 80 feet, but is usually a dwarf in cultivation and suckers from the base, making a bushy plant. The smooth ringed trunk is crowned by a dense cluster of pinnate leaves with arching leaflets 6 to 9 inches long.

For previous introduction see 80190.

91781. *LICUALA SPINOSA* Thunb.

No. 9130.

For previous introduction and description see 90923.

91782. *LIVISTONA CHINENSIS* (Jacq.) R. Br. **Chinese fan palm.**

No. 9120.

For previous introduction and description see 91524.

91783. *LIVISTONA HOOGENDORPII* Andre.

No. 9124. A tall Javanese palm with fan-shaped leaves 4 to 6 feet wide on spiny petioles 3 to 5 feet long, red-brown at the base and becoming olive green near the leaf. The leaves are made up of 10 to 12 plicate, pendulous segments with five to seven acute lobes at the apex.

For previous introduction see 88121.

91784. *TILMIA CARYOTAEOFOLIA* (H. B. K.) O. F. Cook (*Martinezia caryotaefolia* H. B. K.).

No. 9134. A beautiful slender straight-stemmed spiny-trunked palm with bright orange-scarlet fruits borne in drooping racemes.

For previous introduction see 88136.

91785. *SYAGRUS FLEXUOSA* (Mart.) Becc. (*Cocos flexuosa* Mart.).

No. 9123. A low Brazilian palm, 9 to 12 feet high, with lax terminal pinnate leaves 3 to 6 feet long, having 70 to 90 pairs of rigid leaflets.

For previous introduction see 71406.

91786 to 91791.

From China. Seeds from the Botanic Garden, Hong Kong, presented through Prof. J. G. Jack, Arnold Arboretum, Jamaica Plain, Mass. Received March 5, 1931.

91786. *MIMOSA SEPIARIA* Benth. **Mimosa-ceae.**

A shrub or small tree with bipinnate leaves made up of four to eight pinnae, each bearing 20 to 40 linear leaflets one-fourth of an inch long. The small white flowers are borne in large lax panicles. It is native to Brazil.

91787. *CALLISTEMON CITRINUS* (Curtis) Skeels (*C. lanceolatus* DC.) **Myrtaceae.** **Lemon bottlebrush.**

An evergreen shrub up to 12 feet high with lanceolate leaves 1 to 3 inches long, reddish when young, and spikes, 2 to 4 inches long, of small flowers with long bright-red stamens. Native to south-eastern Australia.

For previous introduction see 78532.

91788. *CRYPTOMERIA JAPONICA* (L. f.) D. Don. **Pinaceae.** **Common cryptomeria.**

A beautiful Japanese evergreen tree, growing to a height of 300 feet and attaining a diameter of 7 feet. It will withstand considerable frost.

For previous introduction see 43837.

91789. *ALTINGIA CHINENSIS* (Champ.) Oliver (*Liquidambar chinensis* Champ.). **Hamamelidaceae.**

A tall tree with coriaceous oblong-ovate glandular-serrate leaves 3 to 4 inches long and inconspicuous flowers. It is native to Hong Kong.

91790. *PINUS MASSONIANA* Lambert. **Pinaceae.** **Pine.**

A tall tree up to 80 feet high with spreading branches and yellowish brown branchlets. The thin slender light-green leaves are 5 to 8 inches long, and the dull-brown ovate cones are 3 to 5 inches long. It is a native to southern China.

For previous introduction see 53849.

91791. *SAPIUM SEBIFERUM* (L.) Roxb. **Euphorbiaceae.** **Chinese tallowtree.**

An attractive, long-lived Chinese tree which reaches a height of 40 to 50 feet and a diameter of 5 to 6 feet. The 3-celled flattened-ovoid fruits, three-fifths of an inch in diameter, are covered with a fatty substance, which the Chinese remove by steaming and rubbing through a bamboo sieve. After the fat is removed the seeds are crushed and an oil is expressed which is used in the manufacture of candles and soap. It is occasionally grown as a shade tree in the Gulf and South Atlantic States.

For previous introduction see 75262.

91792. *PRUNUS DOMESTICA* L. **Amygdalaceae.** **Prune.**

From Chevy Chase, Md. Scions presented by Dr. A. Hrdlička, United States National Museum. Received March 4, 1931.

This prune, received from Czechoslovakia by Doctor Hrdlička, appears very similar to the French prune in character of fruit, but the latter does not succeed in the climate of Washington, whereas Doctor Hrdlička's tree bears well annually, and the fruit seems

91792—Continued.

almost immune to the attacks of curculio and other pests. The ripening season is September and October.

For previous introduction see 60973.

91793 to 91835.

From Scotland. Seeds presented by W. Wright Smith, Regius Keeper, Royal Botanic Garden, Edinburgh. Received February 26, 1931.

91793. AGAPANTHUS AFRICANUS (L.) Hoffmannsegg (*Abumon africanum* Britton). Liliaceae.

Variety *caulescens*. A form with long-pediceled blue flowers paler inside, and the outer flowers of the umbel nodding.

91794 to 91801. ALLIUM spp. Liliaceae. Onion.

91794. ALLIUM ATTENUIFOLIUM Kellogg.

A bulbous perennial with a slender scape 6 to 15 inches high, channeled leaves, and a dense umbel of nearly white rose-tinted flowers. It is native to California.

91795. ALLIUM LIBANI Boiss.

A species with very narrow leaves and a dense umbel of straw-colored flowers. It is about 4 inches high and grows wild in the mountains of southern Palestine.

For previous introduction see 59348.

91796. ALLIUM OREOPHILUM Meyer.

A bulbous perennial with linear to lanceolate leaves and hemispheric umbels of purple-lavender flowers. It is native to the mountains of the Caucasus.

91797. ALLIUM PARADOXUM (Bieb.) Don.

A perennial onion, 1 foot high, with white flowers. Native to Siberia.

For previous introduction see 78989.

91798. ALLIUM PULCHELLUM Don.

For previous introduction and description see 90947.

91799. ALLIUM ROSEUM L.

A plant about 1 foot high, with strap-shaped leaves rolled inward at the top and pale lilac-rose flowers produced in umbels. Native to southern Europe.

For previous introduction see 81101.

91800. ALLIUM SIKKIMENSE Baker.

For previous introduction and description see 91276.

91801. ALLIUM WALLICHIANUM Steud.

A tall, eastern Asiatic onion, with narrow flat leaves about 3 feet long and purple flower heads.

For previous introduction see 66435.

91802. ALSTROEMERIA HAEMANTHA Ruiz and Pav. Amaryllidaceae.

A tuberous-rooted perennial with a flower stem 2 to 3 feet high, bearing thin lanceolate leaves 3 to 4 inches long and a compound umbel of flowers 2 inches long which are bright red tipped with green, the inner ones with red-purple spots on a red-yellow ground. It is native to Chile.

91793 to 91835—Continued.

91803. ALSTROEMERIA REVOLUTA Ruiz and Pav. Amaryllidaceae.

A tuberous-rooted perennial, native to Chile, with a stem 1 foot high, crowded linear leaves 1 to 2 inches long, and 6 to 12 purplish flowers 1 inch long with the segments recurved half their length, the inner ones spotted white.

91804. COMMELINA SIKKIMENSIS C. B. Clarke. Commelinaceae. Dayflower.

A slender, creeping, herbaceous perennial, rooting at the nodes, with lanceolate leaves 2 to 3 inches long and blue flowers. It is native to the Province of Sikkim, India.

91805 to 91807. CRASSULA spp. Crassulaceae.

91805. CRASSULA NUDICAULIS L.

A nearly stemless succulent with the semiterete, lanceolate leaves, 2 to 6 inches long, in a rosette, and the flower stem, 1 to 2 feet high, bearing dense headlike clusters of small greenish flowers. It is native to southern Africa.

91806. CRASSULA ORBICULARIS L.

A succulent, native to southern Africa, producing offsets and runners. The spatulate-obovate leaves, with cartilaginously ciliate margins, spread horizontally and are imbricated, forming a circular rosette. The peduncle, 6 to 8 inches high, bears three to five pairs of clusters of small creamy white flowers.

91807. CRASSULA TENUIFOLIA Schoenl.

A diffuse succulent, 8 to 12 inches high, with linear leaves 1 inch long and corymbs of small white flowers. It is native to Natal.

91808. DRACOCEPHALUM ISABELLAE Forrest. Menthaceae. Dragonhead.

A perennial, mintlike plant 12 to 18 inches high, native to China, with leaves 1 inch long, divided into five to seven linear segments and spikes 4 to 5 inches long made up of verticillate clusters of dragon-shaped, deep blue-purple flowers 1 to 2 inches long.

91809. DRACOCEPHALUM RUPRECHTI Regel. Menthaceae. Dragonhead.

A dwarf compact perennial 1 to 2 feet high, with ovate-lanceolate incised and toothed leaves and axillary clusters of rose-purple to lilac tubular 2-lipped flowers 1 inch long. It is native to Turkistan.

91810 to 91813. ECHEVERIA spp. Crassulaceae.

91810. ECHEVERIA ALPINA Hort.

A name for which a place of publication and description has not been found.

91811. ECHEVERIA CUSPIDATA Rose.

A stemless succulent with a dense rosette of glaucous red-tinged obovate leaves 2 to 3 inches long and rose-colored flower stalks 12 to 18 inches high bearing second racemes of purple flowers with yellow tips. It is native to Mexico.

91812. ECHEVERIA GRACILIS Hort.

A name for which a place of publication and description has not been found.

91793 to 91835—Continued.

91813. ECHEVERIA PULCHELLA Berger.

A small fleshy succulent, spreading by means of rhizomes, with a rosette of 20 to 50 ovate leaves and a flower stalk 12 to 18 inches high, bearing light-red campanulate flowers half an inch long.

91814 and 91815. ERICA VAGANS L. Ericaceae. Cornish heath.

A low shrub, native to Europe, 1 foot or more high, with the leaves in whorls of four or five and bearing pale purplish-red flowers.

For previous introduction see 85854.

91814. *Kevernensis* or *St. Keverne*. A variety with large flower trusses of clear rose pink without a shade of blue.91815. *Leucantha*. A white-flowered form.

91816 to 91818. ESCALLONIA spp. Escalloniaceae.

91816. ESCALLONIA VIRGATA (Ruiz and Pav.) Pers. (*E. philippiana* Masters).

An evergreen bush with an abundance of fragrant white flowers borne in the summer. Native to Peru.

91817. ESCALLONIA PTEROCLADON Hook.

A shrub of erect growth, 6 to 10 feet high, with white flowers borne on long spikes. It is native to southern Argentina.

For previous introduction see 78343.

91818. ESCALLONIA PUNCTATA DC.

A very scarce shrub, 4 to 5 feet high, with neat evergreen foliage and bright-red flowers which are distinct from all others. It is native to Chile.

For previous introduction see 78345.

91819. FUCHSIA BACILLARIS Lindl. Onagraceae.

A shrub up to 10 feet high, with short-jointed branches, lanceolate to elliptic leaves 2 to 4 inches long, and small drooping flowers with rosy flaring mouths. It is native to Mexico.

91820. HEMEROCALLIS PLICATA Hort. Liliaceae. Daylily.

A perennial herb with linear leaves and large lilylike orange flowers.

For previous introduction see 85857.

91821. IRIS SENTENISII Janka. Iridaceae.

A beardless iris of the same general type as *Iris graminea*, with tufted evergreen leaves about 12 inches long and flower stalks little higher than the leaves. The flowers are blue purple, with red purple on the style branches and haffs. Native to southeastern Europe and Asia Minor.

For previous introduction see 78863.

91822. KALANCHOE BENTII C. H. Wright (*K. tetetifolia* Deflers, not Haw.). Crassulaceae.

A succulent with dull olive-green stems about 3 feet high, thick fleshy spreading and recurved terete leaves 3 to 6 inches long, and panicles of erect tubular white flowers half an inch long, the buds being pink. It is native to Arabia.

91793 to 91835—Continued.

91823. OPHIOPOGON INTERMEDIUS D. Don. Liliaceae.

A hardy perennial, indigenous to Ceylon, with grasslike leaves and white flowers. It reaches a height of about 1 foot and is suited to moist shady places.

For previous introduction see 47743.

91824. OPHIOPOGON JABURAN (Siebold) Lodd. Liliaceae. Jaburan.

A stemless Japanese perennial belonging to the lily family, with a stoloniferous rhizome and erect narrowly linear leaves about 2 feet high. The flowers, varying in color from white to lilac, are in racemes 3 to 6 inches long, borne on a scape up to 2 feet high. It is likely to prove tender for outside growing in the northern United States.

For previous introduction see 62288.

91825. ORNITHOGALUM ECKLONII Fisch. and Mey. Liliaceae.

A bulbous perennial, native to tropical and southern Africa, with linear leaves 12 to 18 inches long, a slender flower stalk as high as the leaves, and a dense raceme 4 to 6 inches long of pure white flowers keeled with green.

91826. PASSIFLORA EDULIS Sims. Passifloraceae. Purple granadilla.

This passionflower is extensively grown in Australia and thrives in the warmer portion of the United States, although not well known. The fruit is the size and shape of an egg, and contains a pulp of exceedingly good flavor; the pulp is eaten with a spoon after cutting off one end of the fruit. The pulp is also used as a flavoring for cakes, ice cream, and drinks, and in fruit salads. The vine grows well in any ordinary soil with abundant fertilizer. The rich-green foliage is very ornamental.

For previous introduction see 49475.

91827. PASSIFLORA SUBEROSA L. Passifloraceae. Cork passionflower.

Several of the small-fruited passionflowers are valued as ornamental plants, and this woody climber from the West Indies is one of the little-known species which properly comes under that class. The flowers are greenish yellow, and the fruit is a small ovoid berry. Coming from the Tropics, this vine will probably endure little or no frost.

For previous introduction see 60312.

91828. PAVONIA SPINIFEX (L.) Cav. Malvaceae.

A slender shrub, sometimes 20 feet high, with hairy oval heart-shaped leaves and handsome large yellow flowers. It is native to southern South America, and yields a fiber said to be of fine texture and excellent quality.

For previous introduction see 64044.

91829. PRIMULA APOCLITA Balf. and Forr. Primulaceae. Primrose.

A Tibetan primrose of the section Muscarioidea, with a rosette of papery oblong-spatulate leaves, and purplish blue flowers borne on a scape 6 inches high.

For previous introduction see 79097.

91793 to 91835—Continued.

91830. PRIMULA LEUCOPHYLLA Pax.
Primulaceae. **Primrose.**

A stemless herbaceous perennial with coriaceous oblong to elliptic rugose leaves, densely white tomentose beneath, and scapes 4 to 8 inches high, bearing umbels of rather small yellow flowers. It is native to Austria.

91831. RUBUS LAMBERTIANUS Seringe. Ro-
saceae.

A bramble with long slender square evergreen stems, simple or 3-lobed to 5-lobed leaves, bright green above and lighter beneath, terminal clusters of small white flowers and red or yellow fruits. It is native to China.

91832. RUBUS PHOENICOLASII Maxim.
Rosaceae. **Wineberry.**

A tall subscandent Japanese bramble with slender branches. The peduncles and calyxes are covered with close-set stiff red-purple hairs, which in the lower parts of the stem are glandless and mixed with slender straight or recurved prickles. The trifoliate leaves are 5 to 7 inches long. The leaflets are green and glabrous above and covered with snow-white tomentum beneath. The small flowers have rose-pink petals and spreading, narrowly lanceolate red-purple sepals 1 inch long. The ovoid-oblong fruits are scarlet droops, three-fourths of an inch long and edible, but without much flavor.

For previous introduction see 52949.

91833. SYRINGA TOMENTELLA Bur. and
Franch. (*S. adamiana* Balf. and
Smith). Oleaceae. **Felty lilac.**

A bushy shrub, about 10 feet high, with elliptic leaves which are hairy beneath and loose long-branched spikes of fine mauve-pink flowers, produced in late May and early June. It is native to western China.

For previous introduction see 85863.

91834. SYRINGA YUNNANENSIS Franch.
Oleaceae. **Yunnan lilac.**

A handsome shrub of open spreading growth, related to *Syringa wilsonii*, but with pale-pink flowers in large panicles, produced in June. The downy leaves have a distinct red midrib, the color being continued through the leafstalk. It is native to China.

For previous introduction see 85864.

91835. ZEPHYRANTHES VERECUNDA Herb.
Amaryllidaceae. **Zephyrilly.**

A bulbous perennial with narrowly lanceolate leaves and funnel-shaped flowers, 1 to 2 inches long, greenish white, tinged with rose on the outside. It is native to the highlands of central Mexico.

91836 and 91837. SOLANUM MELONGENA
L. Solanaceae. **Eggplant.**

From Algiers, Algeria, Africa. Seeds presented by Dr. René Maire, Jardin Botanique, University of Algiers. Received March 5, 1931.

Algerian-grown seed, introduced for the use of specialists who are trying to breed a variety immune from the eggplant wilt.

91836. Aubergine longue violette.

91837. No. 1588.

91838. VITIS VINIFERA L. Vitaceae.
European grape.

From England. Cuttings presented by Fred J. Chittenden, Director, Royal Horticultural Society's Gardens, Wisley, Ripley, Surrey. Received March 5, 1931.

Princess of Wales.

91839 and 91840. PISTACIA VERA L.
Anacardiaceae. **Pistache.**

From Quetta, India. Seeds purchased from the Quetta Fruit Agency. Received March 6, 1931.

91839. Kandhari or herati variety.

91840. A thin-shelled variety.

91841. BETA VULGARIS L. Chenopodia-
ceae. **Beet.**

From the Netherlands. Seeds presented through Dr. L. A. H. Peters, the Netherlands Legation, Washington, D. C. Received March 6, 1931.

Eureka. A variety used for stock feed.

91842. MESPILUS GERMANICA L. Mala-
ceae. **Medlar.**

From Bulgaria. Seeds presented by J. G. Dickson, United States Department of Agriculture. Received March 6, 1931.

Collected in northwestern Bulgaria, October 26, 1930. This so-called wild apple is acid and much like a quince until it turns brown, when it has a delicious flavor and aroma. It is collected by the natives and sold in the markets.

For previous introduction see 41803.

91843 and 91844. TRITICUM AESTIVUM
L. (*T. vulgare* Vill.). Poaceae.
Common wheat.

From Rabat, Morocco. Seeds presented by the Station de Selection et d'Essai de Semences. Received March 6, 1931.

Two varieties of soft wheat.

91843. No. 422.

91844. No. 335.

91845. PASPALUM FIMBRIATUM H. B. K.
Poaceae. **Grass.**

From St. Croix, Virgin Islands. Seeds presented by J. B. Thompson, Director, Agricultural Experiment Station. Received March 6, 1931.

A grass which makes a thrifty growth under very dry conditions. It is less palatable than some other grasses, but stock eat it when pasturage is sparse. In the Virgin Islands it grows in mixture with other grasses and rarely if ever is seen to occupy the principal place in the grass flora.

91846 to 91945.

From Bulgaria. Seeds collected by J. G. Dickson, United States Department of Agriculture. Received March 9, 1931.

91846 to 91848. ABELMOSCHUS ESCULENTUS (L.) Moench. (*Hibiscus esculentus* L.). Malvaceae. **Okra.**

91846. No. 494.

91847. No. 495.

91848. No. 496.

91846 to 91945—Continued.

91849 to 91853. *ALLIUM* spp. Liliaceae.91849 to 91855. *ALLIUM CEPA* L. Onion.91849. No. 416. *Gorna orechowiza*.91850. No. 417. *Gorna orechowiza*.91851. No. 418. *Elechovo*.

91852. No. 497. Red, large.

91853. No. 498. Medium red.

91854. No. 499. Yellow medium.

91855. No. 500. Miscellaneous sets.

91856 and 91857. *ALLIUM PORRUM* L. Leek.

91856. No. 484.

91857. No. 490.

91858. *APIUM GRAVEOLENS* L. Apiaceae.
Celery.
No. 493.91859 and 91860. *BETA VULGARIS* L. Beet.
Chenopodiaceae.

91859. No. 485. Egyptian beet.

91860. No. 486. A red beet.

91861 to 91870. *BRASSICA OLERACEA CAPITATA* L. Brassicaceae. Cabbage.91861. No. 410. *Erfurtski*.91862. No. 411. *Turski*.

91863. No. 412. Blue and white.

91864. No. 476. White.

91865. No. 477. White and blue.

91866. No. 478. Red.

91867. No. 479. Perfection early.

91868. No. 480.

91869. No. 481. White.

91870. No. 482. Curly.

91871 to 91891. *CAPSICUM ANNUM* L. Solanaceae.
Red pepper.

Collected at Pleven, Bulgaria.

91871. No. 400. Hardy, mixed.

91872. No. 422. Long, sweet.

91873. No. 423. Long, sweet.

91874. No. 424. Hot, small.

91875. No. 425. Hot, long.

91876. No. 426. Red, hot.

91877. No. 427. Long, hot.

91878. No. 428. Red, sweet.

91879. No. 429. Hot.

91880. No. 430.

91881. No. 431. Long, white, and sweet.

91882. No. 432. Sweet.

91883. No. 433. Sweet, long.

91884. No. 434. Red, sweet.

91885. No. 435. White, sweet.

91886. No. 436. Black, hot.

91887. No. 437.

91888. No. 438. Green.

91846 to 91945—Continued.

91889. No. 439.

91890. No. 440. Sweet.

91891. No. 441. Sweet.

91892 to 91900. *CUCUMIS SATIVUS* L. Cucurbitaceae. Cucumber.

91892. No. 401. Long.

91893. No. 402. Medium.

91894. No. 403. Sweet.

91895. No. 404. Long.

91896. No. 405. Russian.

91897. No. 406. Long.

91898. No. 407. Long.

91899. No. 408. Long.

91900. No. 409. Green, long.

91901. *CUCURBITA PEPO* L. Cucurbitaceae. Pumpkin.
No. 491.91902 and 91903. *DAUCUS CAROTA* L. Apiaceae. Carrot.

91902. No. 413.

91903. No. 420.

91904 to 91906. *LACTUCA SATIVA* L. Choriaceae. Lettuce.

91904. No. 414. White.

91905. No. 415.

91906. No. 483. Curly.

91907 to 91919. *LYCOPERSICON ESCULENTUM* Mill. Solanaceae. Tomato.

91907. No. 442.

91908. No. 443. Round, medium early.

91909. No. 444. Early.

91910. No. 445. Medium early.

91911. No. 446. Early.

91912. No. 447. Medium early.

91913. No. 448. Medium early.

91914. No. 449. Ribbed.

91915. No. 450.

91916. No. 451. Round.

91917. No. 452. Early.

91918. No. 453.

91919. No. 454. Early curly.

91920 and 91921. *PETROSELINUM HORTENSE* Hoffm. Apiaceae. Parsley.

91920. No. 487. Leafy type.

91921. No. 488. Root type.

91922 to 91938. *PHASEOLUS VULGARIS* L. Fabaceae. Common bean.

91922. No. 458.

91923. No. 459. Early.

91924. No. 460. White.

91925. No. 461. Yellow, sweet.

91926. No. 462. Black.

91927. No. 463. Black.

91928. No. 464. Black, sweet.

91929. No. 465.

91846 to 91945—Continued.

91930. No. 467.

91931. No. 468.

91932. No. 469. Yellow, sweet.

91933. No. 470. Black, sweet.

91934. No. 471. Black, sweet.

91935. No. 472. Mottled.

91936. No. 473. Mottled (raisin).

91937. No. 474. White.

91938. No. 475.

91939. *RAPHANUS SATIVUS* L. Brassica-
ceae. Radish.

No. 489. White.

91940 and 91941. *SOLANUM MELONGENA* L. Solanaceae. Eggplant.

91940. No. 419.

91941. No. 421.

91942. *SPINACIA OLERACEA* L. Chenopo-
diaceae. Spinach.

No. 492.

91943 to 91945. *VICIA FABA* L. Fabaceae.
Broadbean.

91943. No. 455.

91944. No. 456.

91945. No. 457.

91946. *LINUM USITATISSIMUM* L. Li-
naceae. Flax.From Kompolt, Hungary. Seeds presented
by the Seed Testing Station, through
B. B. Robinson, Bureau of Plant In-
dustry. Received March 9, 1931.

Fiber flax.

91947 and 91948.

From Narberth, Pa. Scions presented by
A. E. Wohlert, The Garden Nurseries,
through Paul Russell, Bureau of Plant
Industry. Received March 9, 1931.91947. *PRUNUS CAMPANULATA* Maxim. Amygdalaceae. Taiwan cherry.A bushy tree up to 25 feet high, of
upright-spreading habit, with bright
shining-green serrate leaves. The cam-
panulate pendulous single flowers are
deep pink, opening before the leaves, and
are succeeded by conical red fruits about
three-fifths of an inch long. Native to
Taiwan.91948. *PRUNUS SERRULATA* Lindl. Amyg-
dalaceae.Variety *Jeanne Wohlert*. A decidedly
dwarf variety, less than 6 feet high, with
semidouble fragrant light-pink flowers.

For previous introduction see 72725.

91949 and 91950.

From Halle-Saale, Germany. Seeds pre-
sented by Dr. W. Nicolaisen, University
of Halle. Received March 9, 1931.91949. *TRITICUM AESTIVUM* L. (*T. vulgare*
Vill.). Poaceae. Common wheat.A variety immune from *Ustilago*
tritici.91950. *AVENA SATIVA* L. Poaceae. Oats.A variety resistant to some physiological
forms of smut.91951 to 91956. *TRITICUM DURUM* Desf.
Poaceae. Durum wheat.From Peru. Seeds presented by M. E.
Ochlozola, Chief, Estación Experimental
Agrícola, Lima. Received March 9, 1931.A collection of local strains which have
been cultivated in different parts of Peru
for a long period.91951. No. 1. *Barba negra*. From Aco-
bamba, Department of Huancavelica.91952. No. 2. *Barba azul*. From Cerro
de Pasco, Department of Junin.91953. No. 3. *Chumpe blanco*. From
Jauja, Department of Junin.91954. No. 4. *Llagua*. From Huancayo,
Department of Junin.91955. No. 5. *Barba blanca*. From Are-
quipa, Department of Arequipa.91956. No. 6. *Chumpe negro*. From Si-
caya, Department of Junin.

91957 to 91960.

From Japan. Seeds purchased from The
Chugai Shokubutsu Yen, Yamamoto, Ka-
wabegun, near Kobe. Received March 9,
1931.91957 to 91959. *ACER* spp. Aceraceae.
Maple.91957. *ACER CARPINIFOLIUM* Sieb. and
Zucc. Hornbeam maple.A small tree up to 30 feet high with
oblong sharp-pointed doubly serrate
leaves 3 to 5 inches long, short ra-
cemes of greenish flowers, and glabrous
fruits about an inch long. The bright-
green hornbeamlike leaves turn bright
brownish yellow in autumn. Native to
Japan.

For previous introduction see 85677.

91958. *ACER CRATAGIFOLIUM* Sieb. and
Zucc.A small tree 30 to 35 feet high, with
purplish branchlets, subcordate leaves
with two to four short lobes near the
base, racemes of yellowish-white flow-
ers, and fruits with nearly horizontal
wings. It is native to Japan.

For previous introduction see 85679.

91959. *ACER DISTYLM* Sieb. and Zucc.A deciduous tree about 50 feet high,
with deeply cordate serrulate leaves 4
to 8 inches long and panicles of yellow
ish flowers followed by upright panicles
of winged fruits. Native to Japan.

For previous introduction see 85680.

91960. *ILEX LATIFOLIA* Thunb. Aquifolia-
ceae. Holly.For previous introduction and descrip-
tion see 91518.

91961 and 91962.

From Africa. Seeds presented by the di-
rector, Department of Agriculture, Akkra,
Gold Coast. Received March 10, 1931.91961. *INDIGOFERA ARRECTA* Hochst. Fa-
baceae. Indigo.A shrub several feet high, with com-
pound leaves made up of six to eight
pairs of oblanceolate leaflets and racemes
of yellow flowers. It is native to the
Gold Coast of Africa where it is used as
a forage crop.

91961 and 91962—Continued.

91962. *PHASEOLUS TRINERVIUS* Heyne.
Fabaceae.

An annual or biennial vine, densely clothed with deflexed tawny hairs. The trifoliolate leaves have broadly ovate leaflets 3 to 5 inches long, and the red flowers are in clusters of three to six on flexuous peduncles. It is native to tropical Africa and Asia.

91963 to 91975.

From Kastrup, Denmark. Seeds presented by A. Hansen. Received March 10, 1931.

91963 to 91969. *BRASSICA OLERACEA* CAPITATA L. Brassicaceae. Cabbage.

91963. *Charleston Wakefield*.

91964. From the Copenhagen market.

91965. *Danish Ballhead*, a balloon-shaped variety.

91966. *Danish Ballhead*, an extra short-stemmed variety.

91967. *Danish Ballhead*, a short-stemmed variety.

91968. *Early Jersey Wakefield*.

91969. *Original Golden Acre*.

91970 to 91972. *BRASSICA OLERACEA* BOTRYTIS L. Brassicaceae. Cauliflower.

91970. *Dwarf Gerfurt*.

91971. *Snowball*.

91972. *Snowball No. 10*.

91973 to 91975. *SPINACIA OLERACEA* L. Chenopodiaceae. Spinach.

91973. *King of Denmark*.

91974. *Triumph*.

91975. *Princess Juliana*.

91976. *PISTACIA VERA* L. Anacardiaceae. Pistache.

From Moscow, Union of Soviet Socialist Republics. Seeds presented through Prof. J. Russell Smith, Columbia University, New York, N. Y. Received March 10, 1931.

91977. *VITIS BERLANDIERI* × *RIPARIA*. Vitaceae. Grape.

From Austria. Scions received from Kober, Kohlfurst & Co., Vienna. Received March 17, 1931.

Kober BB. A hybrid used as a stock. European varieties grafted on this stock are said to give early grapes of best quality.

91978 to 91980.

From Medellin, Colombia, South America. Seeds presented by Camilo C. Restrepo. Received March 10, 1931.

91978. *ERIOCHLOA RAMOSA* (Retz.) Kuntze. Poaceae. Grass.

A common grass in rather low ground with fairly erect slender stems. It is of value as a pasture grass wherever it will establish itself.

For previous introduction see 31597.

91979. *JUGLANS COLUMBIENSIS* Dode. Juglandaceae. Walnut.

A tree closely resembling the American black walnut (*J. nigra*), but the nuts are usually smaller.

91978 to 91980—Continued.

91980. *RUBUS* sp. Rosaceae.

La Concha. A large blackberry of the best quality, 1½ inches by 1 inch in diameter.

91981. *AMOMUM* sp. Zinziberaceae.

From Indo-China. Seeds presented by M. Poilane, Institut des Recherches Agronomiques de l'Indochine, Division de Botanique. Received March 10, 1931.

Cardamomum. A plant 10 to 15 feet high, cultivated between 4,500 and 6,000 feet altitude.

91982 and 91983.

From Paris, France. Seeds purchased from Vilmorin-Andrieux & Co. Received March 10, 1931.

91982. *LOTUS CORNICULATUS* L. Fabaceae. Birdsfoot trefoil.

A low-growing legume with yellow flowers.

For previous introduction see 69005.

91983. *LOTUS ULIGINOSUS* Schkuhr. Fabaceae.

A herbaceous perennial pasture plant which grows in wet swampy ground.

For previous introduction see 73267.

91984 to 92000.

From Canada. Seeds presented by J. Adams, Division of Botany, Central Experimental Farm, Ottawa. Received March 11, 1931.

91984 to 91990. *ALLIUM* spp. Liliaceae. Onion.

91984. *ALLIUM CARINATUM* L.

A species with narrowly linear leaves and purple-lilac flowers, produced in a comparatively large head. It is found throughout southern Europe, especially in the Alps.

For previous introduction see 78977.

91985. *ALLIUM CAERULEUM* Pall.

A wild onion, native to northern Europe, 2 or more feet high, with linear leaves and attractive light-blue flowers in erect rounded umbels.

For previous introduction see 78978.

91986. *ALLIUM CAERULESCENS* Boiss.

Experimental Farm No. 586. An onion about 1 foot high with rather short linear leaves and bluish-violet flowers in a short umbel. Native to Armenia.

91987. *ALLIUM FETISOWI* Regel.

An onion with linear-lanceolate or oblong leaves up to a foot high and a light-green scape, nearly 2 feet high, which bears a many-flowered umbel of small uniformly rosy lilac flowers. It is native to eastern Turkestan.

91988. *ALLIUM FLAVUM* L.

Pumilus roseum. A small pink form of an onion with an ascending or upright stem a foot or less high, narrowly linear leaves about as long as the stem, and small bell-shaped flowers in a rather dense cluster. Native to dry rocky places, especially in chalky soil, in south-central Europe.

For previous introduction see 82011.

91984 to 92000—Continued.

91989. *ALLIUM GEYERI* S. Wats.

For previous introduction and description see 91038.

91990. *ALLIUM TEXTILE* Nelson and McBride.

A hardy wild onion, with semiterete linear leaves which are shorter than the foot-high scape. The white flowers with purple keels are in lax umbels. Native to North America.

91991. *KALANCHOE FLAMMEA* Stapf. Crassulaceae.

A stout erect pale-green succulent, 1 foot high, native to Somaliland, Africa. The obovate, entire, or obscurely crenulate leaves are over 3 inches long, and the flowers are in a flat cyme 4 to 5 inches across. The corolla tube is pale yellow, while the petals are bright orange-red.

91992 to 91996. *PRIMULA* spp. Primulaceae. Primrose.91992. *PRIMULA ALGIDA* Adam.

A perennial primrose, white or yellow-mealy throughout, with oblong-spatulate leaves and deep rose-violet flowers. It is native to damp places in Asia Minor and is closely related to *Primula farinosa*.

91993. *PRIMULA LEUCOPHYLLA* Pax.

For previous introduction and description see 91830.

91994. *PRIMULA PAXIANA* Gilg.

A showy herbaceous perennial with thin cordate-reniform triangular-lobed denticulate leaves on long petioles. The scape is 16 to 20 inches high and bears three to four superposed umbels of blue-lilac flowers 1 inch across. It is native to China.

91995. *PRIMULA PAXII* Hort.

A name for which a place of publication and a description have not been found.

91996. *PRIMULA URALENSIS* Hort.

A name for which a place of publication and a description have not been found.

91997 to 92000. *ROSA* spp. Rosaceae. Rose.91997. *ROSA BEGGERIANA* Schrenk.

A bush 4 to 8 feet high with prickly pinnate leaves; the leaflets, usually seven to nine, are elliptic to oblong, smooth and deep green above, generally thickly hairy and bluish-green below. The inflorescences are 1 to nearly 50 flowered; the flowers are white, cream colored or more nearly red. The fruits are very dark red.

For previous introduction see 65774.

91998. *ROSA CORNIFOLIA* Hort.

A name for which a place of publication and a description have not been found.

91999. *ROSA WASSERBURGENSIS* Kirschl.

Said to be a hybrid between *Rosa tomentosa* and *R. pendulina*.

For previous introduction see 66945.

91984 to 92000—Continued.

92000. *ROSA ZAGRABIENSIS* Vukot. and Braun.

A large shrub with a very thorny stem and very leafy long branches. The five to seven leaflets are oval to oval-elliptic, and the pale-rose flowers are solitary or in twos or threes. It is related to *Rosa zalana* Wiesb. Native to Croatia.

92001. *AMYGDALUS PERSICA* L. (*Prunus persica* Stokes). Amygdalaceae. Peach.

From Morocco. Seeds presented by H. Brayard, Ingénieur Horticole, Directeur de la Ferme Expérimentale, Marrakech. Received March 11, 1931.

Introduced for the use of specialists interested in plant breeding.

92002. *MEDICAGO SATIVA VARIA* (Mart.) Urban. Fabaceae. Variegated alfalfa.

From Canada. Seeds purchased from William Rennie Co. (Ltd.), Toronto. Received March 11, 1931.

Canadian.

92003 to 92010.

From Wales. Seeds presented by Dr. R. G. Stapledon, Director, Welsh Plant-Breeding Station, Aberystwyth. Received March 11, 1931.

92003 to 92008. *TRIFOLIUM PRATENSE* L. Fabaceae. Red clover.

Named varieties of late-flowering red clover.

92003. *Montgomery*.92004. *Cotswold*.92005. *Vale of Clwyd*.92006. *Cornish Marl*.92007. *Huntingdonshire*.92008. *Essex*.92009. *PHLEUM PRATENSE* L. Poaceae. Timothy.92010. *PHLEUM PRATENSE* L. Poaceae. Timothy.92011 to 92022. *ARACHIS HYPOGAEA* L. Fabaceae. Peanut.

From Java. Seeds presented by L. Koch, Chief of the Section for the Breeding of Annual Plants, General Experiment Station, Buitenzorg. Received March 11, 1931.

A collection of pure strains, isolated from the erect type of Javanese peanuts, which are practically resistant to a bacterial root disease that is very common in Java.

92011. No. 34.

92017. No. 44.

92012. No. 7.

92018. No. 6.

92013. No. 9.

92019. No. 15.

92014. No. 16.

92020. No. 43.

92015. No. 10.

92021. No. 21.

92016. No. 49.

92022. No. 20.

92023 and 92024. TRITICUM AESTIVUM
L. (*T. vulgare* Vill.). Poaceae.

Common wheat.

From Peru. Seeds presented by Alberto Martin Lynch, Sayapullo (Trujillo). Received March 12, 1931.

Wheat grown at an altitude of 10,000 feet from Huancajanga, district of Sayapullo, Province of Cajabamba, Department of Cajamarca, where the rainfall is heavy.

92023. No. 1. *Mocho* (without beards). Seed came originally from Australia.

92024. No. 2. *Candeal* (hard wheat). Seed originally brought by the Spaniards during the colonial epoch.

92025. MALUS sp. Malaceae. Apple.

From France. Plants presented by J. Dufrenoy, Station de Recherches Agronomiques de Clermont-Ferrand. Received March 12, 1931.

Nor de Monton. An apple which is propagated by layering and is highly valued as a stock in the Clermont-Ferrand region.

92026 to 92029.

From Nigeria, Africa. Seeds presented by Rev. C. J. Bender, Grand Soppo Post Buea, Cameroon Province. Received March 13, 1931.

92026 and 92027. FLACOURTIA JANGOMAS (Lour.) Gmel. (*F. cataphracta* Roxb.). Flacourtiaceae. **Paniala.**

A small spiny tropical tree of compact habit, native to India. It bears small purplish fruits which may be made into an excellent jelly.

For previous introduction see 81688.

92026. Fruits the size of a small plum.

92027. A sport of *Flacourtia cataphracta*. The fruits are the size of a small cherry, very sweet, and with few seeds.

92028. CITRUS sp. Rutaceae.

A cross between a wild African orange and Las Palmas. The fruits are very sweet and luscious.

92029. RUBUS sp. Rosaceae.

A wild blackberry, grown at about 3,000 feet altitude.

92030. LECYTHIS ZABUCAJO Aubl. Lecythidaceae. Sapucaya nut.

From Port of Spain, Trinidad, British West Indies. Seeds purchased from R. O. Williams, Superintendent and Assistant Botanist, Department of Agriculture. Received March 13, 1931.

The sapucaya nut is native to the Amazon Valley and adjacent regions, and many people consider it even better flavored than the Brazil nut. The somewhat triangular nuts are over 2 inches long and about 1 inch wide. They are borne in large woody urn-shaped capsules about 6 inches in diameter, with close-fitting lids at the top. It is a slow grower, and a long time is required for the trees to reach the bearing age. It seems unlikely that this tree will succeed in the United States, but it may do so in the Canal Zone, Puerto Rico, Hawaii, and elsewhere in the Tropics.

For previous introduction see 63427.

92031. COUEPIA GRANDIFLORA (Mart. and Zucc.) Benth. Rosaceae.

From Brazil. Seeds presented by E. I. du Pont de Nemours & Co., Wilmington, Del., through G. S. Jamieson, United States Department of Agriculture. Received March 18, 1931.

A small tree with stout branches, linear-oblong, coriaceous leaves 3 to 6 inches long, and small flowers in densely tomentose compound panicles 5 to 10 inches long. It is native to Brazil, and the seeds are said to produce a valuable oil.

92032. CITRULLUS VULGARIS Schrad. Cucurbitaceae. Watermelon.

From New South Wales, Australia. Seeds presented by John Douglas, Field Branch, Department of Agriculture, Sydney. Received March 13, 1931.

Angelo. A very prolific variety of exceptionally high quality under Australian conditions.

92033. RHODODENDRON PENTAPHYLLUM Maxim. (Azalea quinquefolia rosea Rehd.). Ericaceae. Fiveleaf azalea.

From Japan. Seeds purchased from T. Sakata & Co., Yokohama. Received March 13, 1931.

For previous introduction and description see 91247.

92034. EREMOCHLOA ZEYLANICA Hack. Poaceae. Grass.

From Ceylon. Seeds presented by the systematic botanist, Department of Agriculture, Peradeniya. Received March 13, 1931.

A perennial grass, native to Ceylon, 12 to 18 inches high, with narrow leaves and slender spikes. Of possible value for lawns and pastures.

For previous introduction see 78038.

92035 and 92036.

From Quetta, India. Plants purchased from the Quetta Fruit Agency. Received March 14, 1931.

92035. PRUNUS ARMENIACA L. Amygdalaceae. Apricot.

Nari Pas Ras.

92036. AMYGDALUS PERSICA L. (Prunus persica Stokes). Amygdalaceae. Peach. Garma Sarda.**92037. GUILIELMA GASIPAES (H. B. K.) Bailey (G. speciosa Mart.). Phoenicaceae. Pupunha.**

From Cali, Colombia. Seeds presented through C. B. Doyle, Bureau of Plant Industry. Received March 14, 1931.

A palm with clustered stems that attain a height of 40 feet. The fruit grows in large bunches and has a firm, thick, and mealy pericarp which when cooked has a flavor resembling that of a chestnut.

For previous introduction see 81587.

92038 to 92044. OCIMUM BASILICUM L. Menthaceae. Common basil.

From Paris, France. Seeds purchased from Vilmorin-Andrieux & Co. Received March 16, 1931.

92038 to 92044—Continued.

Introduced for the use of department specialists working with drug plants.

92038. *Large green.*

92039. *Purple.*

92040. *Bush green.*

92041. *Bush green, compact.*

92042. *Purple, compact.*

92043. *Lettuce-leaved.*

92044. *Curled.*

92045 to 92072.

From Manchuria and China. Seeds collected by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received March 17, 1931.

Nos. 92045 to 92050 were received from Manshu Nosan Shokai (Inc.), seed growers, Dairen, Manchuria, February 3, 1931.

92045. *AQUILEGIA OXYSEPALA* Trautv. and Mey. Ranunculaceae.
Early columbine.

No. 7726. *Siberian mountain columbine.* A very early-flowering herbaceous perennial 2 to 3 feet high, with blue, yellow, and white flowers. The spurs are short and are bent inward. It is native to Siberia.

For previous introduction see 68407.

92046. *AMYGDALUS PERSICA* L. (*Prunus persica* Stokes). Amygdalaceae.
Peach.

No. 7732. Wild-peach seeds which are larger and rougher than any before collected.

92047. *CELTIS SINENSIS* Pers. Ulmaceae.
Chinese hackberry.

No. 7717. 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 a serrate-dentate margin. The dull orange-red fruits are borne on stout pedicels. This tree has proved hardy at the Arnold Arboretum.

For previous introduction see 85732.

92048. *CORYLUS SIEBOLDIANA MANDSHURICA* (Maxim.) C. Schneid. Betulaceae.
Hazelnut.

No. 7731. A Manchurian shrub up to 15 feet high, with oblong or elliptic leaves and clusters of small edible nuts.

For previous introduction see 72641.

92049. *CORYLUS SIEBOLDIANA* Blume. Betulaceae.
Japanese hazel.

No. 7729. A shrub up to 15 feet high, with elliptic to obovate, doubly serrate and slightly lobed leaves 2 to 4 inches long, often with a purple blotch in the middle. The tubular involucre, covered with bristly hairs, is 1 to 2 inches long and incloses the edible nut. It is native to Japan.

92050. *EUONYMUS MAACKII* Rupr. Celastraceae.

No. 7719. A large shrub or small tree with narrowly oval leaves about 3 inches long and small clusters of pink 4-lobed fruits which have orange-red arils. Native to northeastern Asia.

For previous introduction see 77829.

92045 to 92072—Continued.

92051. *LESPEDEZA* sp. Fabaceae.
Bushclover.

No. 7665. From Fa Hua Ssu Temple, near Peiping. A variety with purple flowers.

92052. *LESPEDEZA* sp. Fabaceae
Bushclover.

No. 7716. Said to be white flowered and valuable as an ornamental. Received from the Manshu Nosan Shokai (Inc.), seed growers, February 3, 1931.

92053 to 92055. *PHASEOLUS* spp. Fabaceae.

Locally grown seed purchased from a grain dealer at Tientsin, China, January 6, 1931.

92053. *PHASEOLUS ANGULARIS* (Willd.) W. F. Wight. **Adzuki bean.**

No. 7686. A small white bean.

92054. *PHASEOLUS AUREUS* Roxb. **Mung bean.**

No. 7687. A mixed sample of yellow and green beans.

92055. *PHASEOLUS AUREUS* Roxb. **Mung bean.**

No. 7688. A glossy green bean.

Nos. 92056 to 92062 were received from the Manshu Nosan Shokai (Inc.), seed growers, February 3, 1931.

92056. *PINUS BUNGEANA* Zucc. Pinaceae.
Lacebark pine.

No. 7730.

For previous introduction and description see 91010.

92057. *PRUNUS TOMENTOSA* Thunb. Amygdalaceae. **Nanking cherry.**

No. 7725. Introduced for the use of plant breeders.

92058. *PYRUS FAURIEI* C. Schneid. Malaceae.
Pear.

No. 7728. The Korean wild pear is a very thorny tree about 8 feet high, with fruits the size of a Concord grape, russet with numerous brown spots. Introduced for trial as a stock for commercial pears and also as an ornamental.

For previous introduction see 82159.

92059. *MALUS PRUNIFOLIA* (Willd.) Borkh. (*Pyrus prunifolia* Willd.). Malaceae. **Pearleaf crab.**

No. 7724. A small tree with pubescent branchlets, ovate to elliptic sharply serrate leaves 2 to 4 inches long, and clusters of white flowers 1 inch across, followed by ovoid yellow or red fruits which persist on the tree for a long time. Native to northeastern Asia.

92060. *ROSA MAXIMOWICZIANA* Regel. Rosaceae. **Rose.**

No. 7715. A shrub with arching stems armed with scattered hooked prickles and bristles. The compound leaves are made up of seven to nine ovate to oblong finely serrate leaflets 2 to 3 inches long, and the white flowers, 2 to 3 inches across, are borne in many-flowered corymbs. It is native to Manchuria and Chosen.

92061. *SAMBUCUS RACEMOSA* L. Caprifoliaceae. **European red elder.**

No. 7727. The Chinese elder, of possible ornamental value.

92045 to 92072—Continued.

92062 to 92066. SOJA MAX (L.) Piper
(*Glycine hispida* Maxim.). Fabaceae.
Soybean.

92062. No. 6792. *Moshito*. Received from Mr. O'Hara, Dairen, Manchuria, February 9, 1930. A medium-small much-flattened glossy yellowish-brown bean; used for green manure and as forage for horses.

Nos. 92063 to 92066 were purchased in Tientsin, Chihli Province, China, January 6, 1931.

92063. No. 7682. An oblong somewhat flattened black bean with yellow germ and gray hilum. Said to be locally grown.

92064. No. 7683. A locally grown rather small light-yellow bean which is irregular in size; germ yellow and hilum inconspicuous.

92065. No. 7684. A locally grown light-green bean which is irregular in size, some being quite small; germ yellow, hilum more or less inconspicuous.

92066. No. 7685. A large nearly round deep-green bean with green germ and rather inconspicuous hilum; said to be locally grown.

Nos. 92067 to 92071 were received from the Manshu Nosan Shokai (Inc.), seed growers, Dairen, Manchuria, February 3, 1931.

92067. SYRINGA AMURENSIS Rupr. Oleaceae. Manchurian lilac.

No. 7723. A lilac which grows from a shrub to a small tree, with large handsome clusters of white flowers.

92068. SYRINGA OBLATA DILATATA (Nakai) Rehder. Oleaceae. Lilac.

No. 7720. A loosely branched shrub up to 12 feet high, with ovate long-pointed leaves 6 inches long which turn vinous red in autumn, and loose clusters of pale purple-lilac flowers which appear early in the spring. It is native to Chosen.

For previous introduction see 85739.

92069. TILIA MANSHURICA Rupr. and Maxim. Tiliaceae. Linden.

No. 7721. A small-leaved linden, native to Manchuria.

For previous introduction see 73059.

92070. VACCINIUM ULIGINOSUM L. Vacciniaceae. Bog bilberry.

No. 7718. A low shrub 1 to 2 feet high with nearly sessile obovate entire leaves 1 inch long, axillary clusters of one to four pink or white urn-shaped flowers a quarter of an inch long, and blue-black edible sweet berries. It is native to northern Europe, Asia, and America.

92071. VIBURNUM SARGENTI Koehne. Caprifoliaceae. Sargent cranberrybush.

No. 7722. A strong-growing shrub 12 to 15 feet high, somewhat resembling *Viburnum opulus*, with broadly ovate 3-lobed leaves and large clusters of bright-red fruits which are very attractive. It is native to northeastern Asia.

For previous introduction see 71167.

92045 to 92072—Continued.

92072. VIGNA SINENSIS (Torner) Savi. Fabaceae. Cowpea.

No. 7689. From Tientsin, Chihli Province, China. A mottled red-brown cowpea which is commonly grown in this vicinity.

92073 to 92092.

From the Union of Soviet Socialist Republics. Seeds presented by the director, Regional Oil Plant Station, Kruglik, Northern Caucasus. Received March 17, 1931.

92073 to 92083. ARACHIS HYPOGAEA L. Fabaceae. Peanut.

92073. African.

92074. Spanish.

92075. Spanish No. 4.

92076. Spanish No. 10.

92077. Spanish No. 308.

92078. Spanish No. 330.

92079. Improved Spanish.

92080. Tennessee Red.

92081. Valencia.

92082. Valencia No. 479.

92083. Virginia Bunch.

92084 to 92086. BRASSICA spp. Brassicaceae.

92084. BRASSICA NIGEA (L.) Koch. Black mustard.

Received as *Brassica nigra*, but the seeds look like *B. juncea*.

92085. BRASSICA NAPUS L. Rape.

A collection of early varieties.

92086. BRASSICA NAPUS L. Rape.

A collection of late varieties.

92087. CAMELINA SATIVA (L.) Crantz. Brassicaceae.

An annual crucifer 1 to 2 feet high with lanceolate leaves and small yellow flowers. It is cultivated in Europe for the oil expressed from the seeds, and is also used as fodder for cattle.

92088. HELIANTHUS ANNUUS L. Asteraceae. Common sunflower.

No. 631.

92089. HELIANTHUS ANNUUS L. Asteraceae. Common sunflower.

No. A-41.

92090. PERILLA FRUTESCENS (L.) Britton (*P. ocyroides* L.). Menthaceae. Green perilla.

Sou tze.

For previous introduction and description see 91061.

92091. RICINUS COMMUNIS L. Euphorbiaceae. Castor-bean.

Compactus (improved).

92092. RICINUS COMMUNIS L. Euphorbiaceae. Castor-bean.

Compactus No. 5.

92093. CITHAREXYLUM BERLANDIERI
Robinson. Verbenaceae.

From Brownsville, Tex. Seeds presented by Peter H. Heinz. Received March 17, 1931.

An ornamental shrub or small tree of upright rather loose growth, which may be made compact by clipping, oblong or rhombic leaves about 4 inches long, and short axillary racemes of glossy purple berries. Early in March it flowers in profusion and at the same time bears clusters of old well-ripened glossy purple berries, as well as younger coral-red ones. The ripe berries are eaten by ducks and other birds. It is native to Mexico.

For previous introduction see 78537.

92094 to 92134.

From Nagar, Kulu, Punjab, British India. Seeds collected by Walter Koelz, Botanist, Himalayan Research Institute, and presented through Prof. Harley H. Bartlett, Department of Botany, University of Michigan, Ann Arbor, Mich. Received March 18, 1931.

A collection of plants native to the Himalayan region.

92094. ACONITUM sp. Ranunculaceae.

No. 6. An aconite 18 inches high, with large, musk-scented flowers, found between 12,000 and 14,000 feet altitude.

92095. AQUILEGIA sp. Ranunculaceae.
Columbine.

No. 11. A very attractive blue and yellow fragrant-flowered columbine, 18 inches high; found in open places and in forests between 10,000 and 11,000 feet altitude.

92096. ANEMONE sp. Ranunculaceae.
Windflower.

No. 15. An attractive anemone, 8 inches tall, with large white flowers; found between 10,000 and 12,000 feet altitude.

92097. ANGELICA sp. Apiaceae.

No. 32a. A plant found in damp places at 10,000 feet altitude, whose roots are used to flavor meat.

92098 to 92101. ASTER spp. Asteraceae.

92098. ASTER sp.

No. 3. An attractive aster, 12 inches high, with purple flowers; found between 13,000 and 15,000 feet altitude in the Province of Lahul.

92099. ASTER sp.

No. 21. Collected in the Province of Lahul, and probably like No. 3 [92098].

92100. ASTER sp.

No. 22. Collected in the Province of Lahul, and probably like No. 3 [92098].

92101. ASTER sp.

No. 24. A much-branched aster 4 feet high, with lavender flowers, collected in the Shalina Gardens, Lahore, Punjab.

92102. CHRYSANTHEMUM sp. Asteraceae.

No. 29. *Kanfa*. A yellow scented chrysanthemum found between 12,000 and 14,000 feet altitude.

92094 to 92134—Continued.

92103. CHRYSANTHEMUM sp. Asteraceae.

No. 34. *Pat O*. Collected in Lahul Province at 10,000 feet altitude. A yellow-flowered variety, used for flavoring soups.

92104. DIANTHUS sp. Silenaceae.

No. 2. Collected in Lahul Province at 10,000 feet altitude. An attractive plant with pink flowers, found growing in dry places. It may prove useful for dry borders.

92105. HIPPOPHAE RHAMNOIDES L. Elaeagnaceae.

No. 30. A hardy deciduous shrub 10 feet high, with dense silvery foliage and orange-yellow fruits, found in dry places in Lahul Province at 10,000 feet altitude.

For previous introduction see 74684.

92106. IMPATIENS sp. Impatiensaceae.

No. 10. Collected at Chanderkani, Kulu, at 12,000 feet altitude. A very attractive impatiens, 10 feet high, with large rose flowers.

92107. IRIS sp. Iridaceae.

No. 5. Collected in Lahul Province between 10,000 and 14,000 feet altitude. An iris 6 inches high, with large fragrant purple flowers.

92108. PISUM SATIVUM L. Fabaceae.

No. 31a. *Shadma*. Collected in Lahul Province. A cultivated variety.

92109. MALVA sp. Malvaceae.

No. 9. Collected at Trilogath, Chamba, at 9,000 feet altitude, in dry places. A rose malva 6 feet high.

92110. MECONOPSIS sp. Papaveraceae.

No. 8. From Lahul Province between 12,000 and 15,000 feet altitude. A very attractive blue poppy.

92111 to 92115. PEDICULARIS spp. Scrophulariaceae.

92111. PEDICULARIS sp.

No. 16. Collected in Rothang Pass, between 12,000 and 14,000 feet altitude. A pedicularis 12 inches high with large yellow flowers.

92112. PEDICULARIS sp.

No. 17. Collected in Lahul Province in fields at 10,000 feet altitude. A very attractive pink pedicularis 2 feet high.

92113. PEDICULARIS sp.

No. 18. Collected along a stream in Lahul Province at 10,000 feet altitude. A variety 12 inches high whose flowers are pink rose with a white throat.

92114. PEDICULARIS sp.

No. 19. Collected in Lahul Province at 10,000 feet altitude.

92115. PEDICULARIS sp.

No. 20. Collected in Lahul Province at 10,000 feet altitude.

92116. PLEUROSPERMUM APIOLENS C. B. Clarke. Apiaceae.

No. 26a. Collected in Rothang Pass at 13,000 feet altitude. Used to keep moths out of clothes.

92094 to 92134—Continued.

92117. *POLYGONUM* sp. Polygonaceae.

No. 13. Collected in Lahul Province at 10,000 feet altitude. An attractive buckwheat with fragrant white flowers. It grows in masses 8 feet high.

92118. *POLYGONUM* sp. Polygonaceae.

No. 14. Collected at Kulu, Punjab, between 10,000 and 12,000 feet altitude. A buckwheat with bright-red flowers.

92119. *PRIMULA* sp. Primulaceae.

No. 12. Collected in Lahul Province between 13,000 and 14,000 feet altitude. A very attractive primrose with royal-purple flowers.

92120. *PRUNUS* sp. Amygdalaceae.92121. *RHODODENDRON* sp. Ericaceae.

No. 4. Collected in Rothang Pass at 12,000 feet altitude. A shrub up to 10 feet high with purple flowers.

92122 to 92125. *RIBES* spp. Grossulariaceae.92122. *RIBES* sp.92123. *RIBES* sp.

No. 26b.

92124. *RIBES* sp.

No. 27. Collected in Lahul Province at 10,000 feet altitude. The fruit is made into preserves.

92125. *RIBES* sp.

No. 32. Collected in Lahul Province at 10,000 feet altitude.

92126 to 92131. *ROSA* spp. Rosaceae.92126. *ROSA* sp.

No. 1. Collected in Lahul Province at 10,000 feet altitude on dry ground. A very attractive, many-flowered pink rose, up to 8 feet high.

92127. *ROSA* sp.

No. 1a. Same as No. 1 [92126], but the seeds are from a different bush.

92128. *ROSA* sp.

No. 7. Collected in Lahul Province at 10,000 feet altitude. A free-flowering bush, 6 feet high, with very attractive large yellow flowers.

92129. *ROSA* sp.

No. 7a. Same as No. 7 [92128], but the seeds are from a different bush.

92130. *ROSA* sp.

No. 33. A pink rose collected at 9,000 feet altitude in Chyassu Rampus-Bushahs.

92131. *ROSA MOSCHATA* Mill.

Musk rose.

No. 28. Collected at Kulu, Punjab.

92132. *SENECIO CHRYSANTHEMOIDES* D C.

No. 25. Collected in Lahul Province at 10,000 feet altitude. A much-branched plant, 2 feet high, with yellow flowers which are much esteemed by the natives.

92133. *SENECIO CHRYSANTHEMOIDES* D C. Asteraceae.

No. 26. Collected in Lahul Province. It is probably the same as No. 25 [92132].

92094 to 92134—Continued.

92134. *TYPHONIUM* sp. Araceae.

No. 31. Collected in Rothang Pass at 13,000 feet altitude.

92135 and 92136.

From Southern Rhodesia, Africa. Seeds presented by Dr. W. L. Thompson, Mount Silinda. Received March 18, 1931.

92135. *STRYCHNOS MELLODORA* S. Moore. Loganiaceae.

A tree much prized for its strong fine-grained timber, which is used for tool handles and fancy furniture. When in fruit the tree resembles a cherry tree.

For previous introduction see 54921.

92136. *TRICHILIA CHIRINDENSIS* Swynn. and Baker. Meliaceae.

Ukuhla. A fine timber tree with a spreading head of dark glossy leaves, light-gray bark, and dull-white flowers. It makes an excellent shade tree, sometimes becoming 120 feet high. The timber is reddish brown and easily worked. The seeds are partially covered with a white pulp (inclosed by a bright-red skin) having a nutty flavor, and although there is very little of it, the natives are very fond of it. An oil is obtained from the seeds.

For previous introduction see 54922.

92137 to 92139. *SOLANUM MELONGENA* L. Solanaceae. Eggplant.

From Giza, Egypt. Seeds presented by Thomas W. Brown, Director, Horticultural Section, Ministry of Egypt. Received March 18, 1931.

Egyptian-grown seed, introduced for the use of specialists who are trying to breed a variety immune from the eggplant wilt.

92137. *Long Black*.92138. *Globe*.92139. *White*.

92140 to 92147.

From the Netherlands. Seeds purchased from Zwaan & De Willes Seed Co. (Inc.), Scheemda, Groningen. Received March 18, 1931.

92140 to 92142. *BETA VULGARIS* L. Chenopodiaceae. Beet.92140. *Crimson Globe*.92141. *Detroit Dark Red*.92142. *Crosby's Egyptian*.92143 to 92147. *SPINACIA OLERACEA* L. Chenopodiaceae. Spinach.92143. *Resected Bloomsdale*.92144. *Prickly Winter*.92145. *Victoria*.92146. *Viroflay*.92147. *Juliano*.

92148 to 92166.

From England. Seeds purchased from Thompson & Morgan, Ipswich. Received March 18, 1931.

92148 to 92166—Continued.

92148. ANEMONE RANUNCULOIDES L. Ranunculaceae. Yellow wood anemone.

A low herbaceous perennial with stems 3 to 8 inches high from a somewhat tuberous rootstock. The leaves are 3-parted to 5-parted, with the lobes deeply cut and serrated, and the solitary golden-yellow flowers are single or semidouble. It is native to Europe and Siberia and flowers in March and April.

92149. ASPARAGUS ACUTIFOLIUS L. Con-vallariaceae.

A hardy evergreen species which makes a beautiful hedge plant, somewhat resembling the juniper. As the plants grow older there is a tendency to produce vinelike shoots. The tuberlike storage roots and drought-resistant foliage make it valuable for regions of scanty rainfall. The shoots are edible, although much smaller than those of ordinary asparagus. The flavor, however, is said by some to be superior to the common species.

For previous introduction see 49458.

92150. BLOOMERIA AUREA Kellogg. Lillia-ceae. Goldenstar.

A small summer-flowering bulbous perennial, closely resembling the alliums. The grasslike leaves are radical, and the stiff slender scape, 6 to 18 inches high, bears an umbel of wheel-shaped golden-yellow flowers nearly 1 inch across. It is native to California.

92151. BRODIAEA CANDIDA Baker. Lillia-ceae.

A spring-flowering bulbous perennial, with linear leaves and scapes 1 to 2 feet high bearing umbels of tubular white or bluish flowers with a green midrib. It is native to California and is probably not hardy north of Virginia.

92152. BRODIAEA LACTEA (Lindl.) S. Wats. Liliaceae.

A bulbous perennial, native to California, with stems 1 to 2 feet high, linear leaves, and an umbel of wheel-shaped white flowers having a green midvein.

92153 to 92157. CALOCHORTUS spp. Lillia-ceae.

92153. CALOCHORTUS ALBUS Dougl. White globe-tulip.

A bulbous perennial, native to California, with a single basal leaf and a slender flexuous leafy branched stem bearing several globular pendent white flowers 1 inch across.

92154. CALOCHORTUS CATALINAE S. Wats. Catalina mariposa.

A bulbous perennial with branching stems 1 to 2 feet high and large handsome white to deep-lilac flowers having a round black spot at the base of each petal. It is native to Santa Catalina Island.

92155. CALOCHORTUS CLAVATUS S. Wats. Golden mariposa.

A bulbous perennial, native to California, with stout stems and golden-yellow bowl-shaped flowers 5 to 6 inches across.

92148 to 92166—Continued.

92156. CALOCHORTUS KENNEDYI Porter.

A low bulbous perennial 1 to 4 inches high, with linear tufted leaves and 2-flowered to 4-flowered umbels of red-orange to vermilion flowers with a purple spot at the base of each segment. It is native to the deserts of southern California.

92157. CALOCHORTUS PLUMMERAE Greene. Santa mariposa.

A bulbous perennial with a broad glossy radical leaf, branching stems 1 to 2 feet high, and very showy lilac to purple flowers of triangular square-topped petals having the margins lined with long silky hairs. It is native to southern California.

92158. CHLOROGALUM POMERIDIANUM Kunth. Liliaceae. Amole.

A perennial with a bulb 4 inches long and 2 inches thick, sending up a stem 5 feet high. The basal leaves are linear and wavy margined, and the numerous starlike white flowers with purple veins are in a terminal panicle and open in the afternoon. It is native to California, and the bulbs are used for soap making.

92159. CLAYTONIA ROSEA Rydb. Portu-lacaceae. Springbeauty.

A delicate bulbous perennial, native to Colorado, with spatulate basal leaves, linear-lanceolate stem leaves, and 5 to 10 pink flowers on a short stem.

92160. CLAYTONIA VIRGINICA L. Portu-lacaceae. Virginia springbeauty.

A smooth succulent bulbous perennial 4 to 8 inches high, with linear-lanceolate leaves 2 to 6 inches long and a loose raceme of pink-tinged white flowers. It is native to the eastern United States.

92161. DICENTRA CHRYSANTHA Walp. Papaveraceae. Golden eardrops.

The yellow-flowered bleedingheart, found at an altitude of 2,500 feet in the Coast Range Mountains of California. It is a glaucous perennial with stiff course leafy stems 2 to 3 feet high and bipinnate leaves 1 foot or more in length. The yellow flowers, about half an inch long, are borne in large racemose panicles.

92162. ERYTHRONIUM CALIFORNICUM Purdy. Liliaceae. California troutlily.

A bulbous perennial with two richly mottled lanceolate leaves and a scape bearing up to 16 nodding lilylike creamy to light-yellow flowers with revolute petals marked maroon at the base. It is native to California.

92163. ERYTHRONIUM HENDERSONI S. Wats. Liliaceae. Henderson troutlily.

A bulbous perennial with lanceolate to oblong leaves mottled in dark brown and one to three pale-purple flowers having recurved petals and a dark, almost black, center. It is native to southern Oregon.

92164. LEWISIA FINCHII Hort. Portula-caceae.

A name for which a place of publication has not been found. It is said to be a rare and beautiful rock plant with rosettes of fleshy leaves and handsome soft-pink flowers.

92148 to 92166—Continued.

92165. *PHORMIUM TENAX* Forst. Liliaceae. New Zealand flaxlily.

A plant with rigid, sword-shaped leaves 6 or more feet in length and a flower stalk sometimes 15 feet high, which bears numerous dull-red or yellow flowers. Adapted for growing out of doors in Florida and California and as a tub plant farther north.

For previous introduction see 64197.

92166. *SANGUISORBA CANADENSIS* L. Rosaceae. American burnet.

A stout herbaceous perennial 5 to 6 feet high, with unequally pinnate leaves made up of 6 to 10 pairs of cordate serrate leaflets and cylindrical flower heads, 2 to 6 inches long, of small white flowers. It is native to the eastern part of the United States.

92167 to 92176.

From Mexico. Material collected by C. O. Erlanson and Max Souviron, Bureau of Plant Industry. Received March 18, 1931.

92167. *FUCHSIA SPLENDENS* Zucc. Onagraceae.

No. 83. Cuttings collected on the road between San Cristóbal and Tenejapa, Chiapas, February 28, 1931, at 3,500 feet altitude. A much-branched ornamental shrub about 5 feet high. The single drooping flowers, over 1 inch long, are scarlet with greenish-yellow tips and greenish petals. The tube is over twice the length of the calyx lobes, the pointed petals half as long as the tube; the stamens are much exerted and the anthers are yellow.

92168 to 92175. *PERSEA AMERICANA* Mill. (*P. gratissima* Gaertn. f.). Lauraceae. Avocado.

Nos. 92168 to 92170 were scions collected February 26, 1931, at 1,900 feet altitude at San Andres, northwest of San Cristóbal, Chiapas.

92168. No. 69. Tree about 35 feet high.

92169. No. 70. A small wild avocado with thin skin, instead of the thick skin of the usual type in this region. Collected from a tree 30 feet high.

92170. No. 71. *Aguacate*. The common type of hard-skinned wild avocado. Tree about 45 feet high.

92171. No. 86. Scions collected February 28, 1931, from a tree 25 feet high, growing along the road between San Cristóbal and Tenejapa, Chiapas, at 3,500 feet altitude.

92172. No. 37. Fruit bought in the market at Tuxtla Gutierrez, Chiapas, but said to have come from the area around San Cristóbal. A very hard-shelled, round avocado.

Nos. 92173 to 92175 were fruits bought in the market of San Cristóbal, Chiapas, February 27, 1931.

92173. No. 77. A pear-shaped avocado.

92174. No. 78. A very small round avocado, said to have come from San Pedro, Chiapas.

92175. No. 79. The ordinary-sized round avocado. Origin not known.

92167 to 92176—Continued.

92176. *SOLANUM* sp. Solanaceae.

No. 3. Tubers collected in January, 1931, at approximately 10,000 feet altitude, in El Desierto, Distrito Federal.

92177. *CYCAS PECTINATA* Griff. Cycadaceae.

From India. Seeds purchased from the Chandra Nursery, Rhenock, Sikkim State. Received March 20, 1931.

An evergreen palmlike tree, 8 to 10 feet high, native to India, with ascending recurved compound leaves 5 to 7 feet long, made up of sword-shaped narrowly linear leaflets 7 to 10 inches long. The carophylls, or fruit-bearing leaves, are about 10 inches long, broadly rounded, and long pointed, and are covered with dense tawny wool.

92178 and 92179.

From Mexico. Scions collected by C. O. Erlanson and Max Souviron, Bureau of Plant Industry. Received March 21, 1931.

92178. *PERSEA AMERICANA* Mill. (*P. gratissima* Gaertn. f.). Lauraceae. Avocado.

No. 59. *Aguacate*. Collected in February, 1931, at La Laguna, between Acala and San Cristóbal, Chiapas. The common type of hard-skinned wild avocado.

92179. (Undetermined.)

No. 50. *Jogote*. Collected February 21, 1931, near Acala, Chiapas, at 2,800 feet altitude. A cultivated tree, 10 feet high, with edible fruit.

92180 to 92188.

From the Netherlands. Seeds presented by Zwaan & De Wiljes Seed Co. (Inc.), Scheemda, Groningen. Received March 21, 1931.

92180 to 92183. *BETA VULGARIS* L. Chenopodiaceae. Beet.

92180. *Early Wonder*.

92181. *Extra Early Flat Egyptian*.

92182. *Waefer Long Blood*.

92183. *Long Smooth Blood*.

92184 to 92188. *SPINACIA OLERACEA* L. Chenopodiaceae. Common spinach.

92184. *Triumph*.

92185. *New Zealand*.

92186. So-called *Nobel*.

92187. *Bloomsdale Long-standing Dark-green*.

92188. *King of Denmark*.

92189. *RUBUS URSINUS* Cham. and Schlecht. Rosaceae.

Logan blackberry.

From England. Plants purchased from Laxton Bros., Bedford. Received March 21, 1931.

A red-fruited variety of the wild trailing blackberry of the Pacific coast.

**92190 and 92191. CITRULLUS NAUDINIA-
NUS** Hook. Cucurbitaceae.

From the Union of South Africa. Seeds presented by Herbert Lang, Transvaal Museum, Pretoria. Received March 23, 1931.

A wild watermelon said to have a perennial root, trailing pubescent stems, and leaves like those of *C. colocynthis*. The seeds received are similar to those of the *colocynthis* in shape, but are the size of the common watermelon.

92190. Received as Gembok cucumber.

92191. Received as Tsama melon.

92192 to 92197.

From Summit, Canal Zone. Seeds presented by J. E. Higgins, Director, Canal Zone Experiment Gardens. Received March 23, 1931.

92192. *ARECA ALICAE* F. Muell. **Phoenix-
caceae. Palm.**

An Australian palm with several slender graceful spineless trunks, 9 feet or more in height, and pinnate shining-green leaves 3 to 6 feet long.

For previous introduction see 68107.

92193. *CALOPHYLLUM CALABA* L. **Clusia-
caceae. Calaba-tree.**

A West Indian relative of the mango-steen (*Garcinia mangostana*) which becomes a tree 60 feet high, with dark-green glossy foliage and axillary clusters of white flowers. The wood is used for building purposes, and in Puerto Rico the oil pressed from the seeds is sometimes used in lamps.

For previous introduction see 62141.

92194. *CANANGIUM ODORATUM* (Lam.) Baill. **Annonaceae. Ylang-ylang.**

A large quick-growing tree, 60 to 80 feet high, native to the Philippines, Guam, and Java. The large greenish-yellow flowers are strongly scented and yield by distillation the popular perfume, ylang-ylang.

For previous introduction see 51811.

92195. *CASSIA MULTIJUGA* Rich. **Caesal-
pinaceae.**

A small tree 15 to 20 feet high, with compound leaves made up of linear leaflets about half an inch long and large yellow flowers followed by flat glabrous pods 6 inches long and less than an inch wide. It is native to Mexico, South America, and the West Indies.

92196. *ELAEIS MELANOCOCCA* Gaertn. **Palm.
Phoenixaceae.**

A widespread low palm which grows in damp situations. It is closely related to the African oil palm (*Elaeis guineensis*), and a clear oil is extracted from the kernels in small quantities by the natives, who prize it highly for cooking.

For previous introduction see 61627.

92197. *WARSZEWICZIA COCCINEA* (Vahl) Klotzsch. **Rubiaceae.**

An ornamental tree with dark-green foliage and clusters of small flowers, each a quarter of an inch across. One sepal of each cluster is brilliant scarlet and over 2 inches long, making a startling splash of color against the dark leaves. The tree blooms in summer (the wet season), whereas most of the showy flowering trees of the Tropics bloom in the dry season.

For previous introduction see 56022.

92198. BEAUMONTIA GRANDIFLORA (Roth) Wall. **Apocynaceae.**

From Mount Joy, Dominica, British West Indies. Seeds presented by Stephen Haweis. Received March 24, 1931.

A tall-growing woody vine with obovate cuspidate wavy-margined leaves and cymes of large pure-white fragrant bell-shaped flowers. It is native to India.

For previous introduction see 42971.

92199 to 92245.

From Europe and Asia Minor. Seeds collected by James G. Dickson, United States Department of Agriculture. Received March 24, 1931.

92199 to 92219. *MEDICAGO* spp. **Faba-
caceae. Alfalfa.**

Nos. 92199 to 92212 were collected in the Union of Soviet Socialist Republics.

92199. *MEDICAGO FALCATA* L. **Yellow-flowered alfalfa.**

No. 151. An alfalfa hybrid of the semierect type. It is hardy at Khar-kof, Ukraine.

92200. *MEDICAGO FALCATA* L. **Yellow-flowered alfalfa.**

No. 199. From Erivan, Armenia, July 20, 1930; collected on canyon slopes at 200 feet altitude. A wild species which is a good seed producer.

92201. *MEDICAGO SATIVA* L.

No. 157. From Saratov, August 14, 1930. A winter-resistant variety which seeds freely along the dry roadside.

Nos. 92202 to 92208 were collected June 29, 1930, at Atrada Kubanska.

92202. *MEDICAGO SATIVA VARIA* (Mart.) Urban. **Variegated alfalfa.**

No. 158. *Grimm*. A very good seed producer.

92203. *MEDICAGO SATIVA* L.

No. 159. *Kharkov* strain. Very good seed.

92204. *MEDICAGO SATIVA* L.

No. 160. *Turkestan* alfalfa. A medium-good seed producer.

92205. *MEDICAGO FALCATA* L. **Yellow-flowered alfalfa.**

No. 161. A yellow-flowered hybrid of the erect type.

92206. *MEDICAGO SATIVA* L.

No. 162. *Frankenburg* alfalfa. A very good seed.

92207. *MEDICAGO FALCATA* L. **Yellow-flowered alfalfa.**

No. 163. A white-flowered hybrid, good seed, but not very hardy.

92208. *MEDICAGO FALCATA* L.

No. 164. A semierect, very leafy form.

92209 to 92211. *MEDICAGO SATIVA* L.

92209. No. 165. *Midt* alfalfa. Collected in the south of France.

92210. No. 166. A semierect form from Alma Ata (Viernii), Union of Soviet Socialist Republics.

92199 to 92245—Continued.

92211. No. 167. *Alma Atinka*. A hardy variety from near Wierny, Kasakstan, Union of Soviet Socialist Republics.
92212. *MEDICAGO SATIVA VARIA* (Mart.) Urb. **Variegated alfalfa.**
No. 168. From the West Siberian Experiment Station.
92213. *MEDICAGO SATIVA VARIA* (Mart.) Urb. **Variegated alfalfa.**
No. 169. From Paris, France. Received from Vilmorin-Andrieux & Co.; crop of 1928.
- 92214 to 92216. *MEDICAGO FALCATA* L. **Yellow-flowered alfalfa.**
Collected in the Union of Soviet Socialist Republics.
92214. No. 170. From the District of Samara.
92215. No. 171. Sickie shaped. From the Agricultural Experiment Station, District of Voronezh.
92216. No. 172. From the Subdivision of Selection, West Siberian Experiment Station, District of Akmolin.
- 92217 to 92219. *MEDICAGO SATIVA* L.
92217. No. 173. From Aulis Ata, near Tashkent, Uzbekistan, Union of Soviet Socialist Republics.
92218. No. 174. From Pisidia Isparta, Asia Minor.
92219. No. 175. From the Agricultural Experiment Station, Pisidia Isparta, Asia Minor.
- Nos. 92220 to 92235 were collected in the Union of Soviet Socialist Republics.
92220. *MORUS CAUCASICA* Hort. **Moraceae.** **Mulberry.**
No. 148. Collected in the Tiflis Botanic Garden, Georgia. A very sweet-flavored aromatic fruit, superior to others found.
92221. *PRUNUS ARMENIACA* L. **Amygdalaceae.** **Apricot.**
No. 149. Collected at Dshelaloglu, Armenia, June 17, 1930. A very fine large fruit produced in the steppe region at 4,000 feet altitude.
92222. *PRUNUS ARMENIACA* L. **Amygdalaceae.** **Apricot.**
No. 156. Collected at Erivan, June 20, 1930. A freestone apricot of medium-to-large size and very fine texture and flavor.
- 92223 to 92231. *ONOBRYCHIS VULGARIS* Hill (*O. viciaefolia* Scop.). **Fabaceae.** **Sanfoin.**
92223. No. 150. A large type, originally from Afghanistan, but collected in Vaiki, near Kharkof, Ukraine.
92224. No. 201. From the Lorbambakski region, Armenia.
92225. No. 176. From Zangezursk, Karakilis, Armenia.
92226. No. 177. Turkestan selection.

92199 to 92245—Continued.

92227. No. 178. Turkestan selection.
92228. No. 179. Turkestan selection.
92229. No. 180. Turkestan selection.
92230. No. 202. From Ukraine.
92231. No. 203. From Azerbaijan.
92232. *LATHYRUS SATIVUS* L. **Fabaceae.** **Bittervetch.**
No. 152. From Kharkof, Ukraine. A large leafy plant which matures early.
92233. *LATHYRUS SATIVUS* L. **Fabaceae.** **Bittervetch.**
No. 153. From Kharkof, Ukraine. An early dwarf plant, very leafy.
92234. *LOLIUM PERSICUM* Boiss. and Hohen. **Poaceae.** **Ryegrass.**
No. 191. From Erivan, Armenia. Collected in high hills in a very hot and dry region. An annual grass closely resembling *Lolium multiflorum*.
92235. *PUNICA GRANATUM* L. **Punicaceae.** **Pomegranate.**
No. 185. From Tiflis, Georgia. A large sweet fruit.
92236. *PHASEOLUS VULGARIS* L. **Fabaceae.** **Common bean.**
No. 181. From Trebizond, Asiatic Turkey, October 5, 1930. Beans grown commonly on the hillsides in the Black Sea region with corn in the same field.
92237. *PHASEOLUS VULGARIS* L. **Fabaceae.** **Common bean.**
No. 186. From Bela Slatina, Bulgaria, October 14, 1930. Field beans.
92238. *CUCUMIS MELO* L. **Cucurbitaceae.** **Melon.**
No. 182. From Istanbul, Turkey. Collected October 9, 1930. The *Turkish sugar* melon. A long slender green-gray melon with little mottling; very sweet. It is much prized by the peasants in the Black Sea region.
92239. *CUCUMIS MELO* L. **Cucurbitaceae.** **Melon.**
No. 183. Collected at Istanbul, Turkey, October 9, 1930. *Turkish sugar* melon. A round green melon, mottled with white, cultivated in the Black Sea region. Not so sweet as the preceding, No. 182 [92238], but of good flavor.
92240. *HIPPOPHAE RHAMNOIDES* L. **Elaeagnaceae.** **Common sea-buckthorn.**
No. 184. Collected in the Caucasus Mountains.
- For previous introduction and description see 92105.
- Nos. 92241 to 92245 were collected in the Union of Soviet Socialist Republics.
92241. *VICIA* sp. **Fabaceae.** **Vetch.**
No. 197. Collected near Erivan, Armenia, June 20, 1930, in a dry canyon at 950 feet altitude. An early vetch.
92242. *VICIA VILLOSA* Roth. **Fabaceae.** **Hairy vetch.**

92199 to 92245—Continued.

No. 200. A variety which branches from the roots when the top is cut. The seed pods do not shatter.

92243. *SCORZONERA* sp. Cichoriaceae.

No. 205. From Baku, Azerbaijan, June 13, 1930. A plant found on dry lava soils which produces 15 per cent of good quality rubber.

92244. (Undetermined.)

No. 155. An ornamental legume, resembling a lupine, which is winter hardy at Kharkof, Ukraine.

92245. *VICIA BITHYNICA* L. Fabaceae.
Vetch.

No. 154. Collected at Erivan, Armenia, June 21, 1930. A winter field pea with hairy pods and foliage which makes an excellent growth on dry soil.

For previous introduction see 50315.

92246. *PINUS KORAIENSIS* Sieb. and Zucc. Pinaceae. Korean pine.

From Chosen, Japan. Seeds presented by the Government General of Chosen. Received March 24, 1931.

From the Forest Experiment Station, Keijo, Chosen. A 5-needle pine, up to 100 feet high, native to Chosen and Japan. It produces valuable lumber and edible seeds and is also of ornamental value, being slow in growth and forming a dense broad pyramidal head of handsome foliage.

For previous introduction see 82483.

92247. *TECOMA CHRYSOTRICHIA* Mart. Bignoniaceae.

From Brazil. Seeds presented by Mrs. Ynes Mexia, Vicosas, Minas Geraes, through W. T. Swingle, Bureau of Plant Industry. Received March 24, 1931.

Pau Mulato. A small to medium-sized tree which grows in the open or in partial shade. The handsome canary-yellow flowers, with red-streaked throats, open in early spring while the tree is still leafless. It grows just below the frost line in Minas Geraes, at about 2,000 feet altitude.

92248. *CANNA EDULIS* Ker. Cannaceae.
Edible canna.

From the Union of Soviet Socialist Republics. Seeds presented by A. Kol, Chief, Bureau of Introduction, Institute of Applied Botany and New Cultures, Leningrad. Received March 24, 1931.

No. 129050. A close relative to the ornamental cannas, cultivated for its edible tuber.

For previous introduction see 80543.

92249 to 92258.

From Chiapas, Mexico. Seeds and scions collected by C. O. Erlanson and Max Souviron, Bureau of Plant Industry. Received March 25, 1931.

92249. *CITRUS AURANTIUM* L. Rutaceae.
Seville orange.

No. 55. Seeds of a sour orange, collected February 22, 1931, near Acala, from a tree 10 to 15 feet high, growing wild.

92249 to 92258—Continued.

92250. *GOSSYPIUM* sp. Malvaceae.

Cotton.

No. 38. *Cultuche*. Seeds collected February 18, 1931, at Tuxtla Gutierrez. An interesting small-bolled cotton with short brown lint, which is without economic importance except that it is proof against the boll weevil. The bolls are protected by a proliferation much more complete than any other cotton thus far studied.

92251 to 92258. *CITRUS* spp. Rutaceae.

Nos. 92251 to 92257 are scions of cultivated trees collected near Acala, February 21, 1931, at 2,800 feet altitude.

92251 to 92253. *CITRUS AURANTIFOLIA* (Christm.) Swingle. Lime.

92251. No. 47. *Lima*. A tree 10 feet high with white flowers.

92252. No. 48. *Lima*. A tree 10 feet high, flowers white.

92253. No. 49. *Lima naranja*. Tree 15 feet high.

92254. *CITRUS SINENSIS* (L.) Osbeck. Orange.

No. 52. Tree 15 feet high. This is the commonly cultivated orange of this region.

92255. *CITRUS AURANTIFOLIA* (Christm.) Swingle. Lime.

No. 53. A tree of good type.

92256. *CITRUS MEDICA* L. Citron.

No. 54. Tree 15 feet high.

92257. *CITRUS AURANTIUM* L. Seville orange.

No. 55a. A sour-orange tree 10 to 15 feet high, growing wild. Seeds of this tree were given the number 92249.

92258. *CITRUS SINENSIS* (L.) Osbeck. Orange.

No. 82. Scions collected at Tenejapa, west of San Cristobal, February 28, 1931, at 3,500 feet altitude. A sweet orange of excellent quality, said to be the best in this region.

92259. *BERBERIS BEANIANA* C. Schneid. Berberidaceae. Barberry.

From France. Seeds presented by Prof. D. Bois, Paris Museum of Natural History, Paris. Received March 26, 1931.

A Chinese shrub with long yellow spines, yellow flowers, and purple ellipsoidal fruits.

For previous introduction see 76213.

92260 to 92273. *SORGHUM VULGARE* Pers. Poaceae. Sorghum.

From China. Seeds presented by the Director, College of Agriculture, National University of Peiping. Received March 26, 1931.

Seeds grown at the experiment farm of the Chinese Eastern Railway at Echo.

92260. No. 1. 92267. No. 8.

92261. No. 2. 92268. No. 9.

92262. No. 3. 92269. No. 10.

92263. No. 4. 92270. No. 11.

92264. No. 5. 92271. No. 12.

92265. No. 6. 92272. No. 13.

92266. No. 7. 92273. No. 14.

92274. PHOENIX TOMENTOSA Hort.
Phoenicaceae. **Palm.**

From the Canary Islands. Seeds presented by Wildpret Bros., Port Orotava, Tenerife. Received March 26, 1931.

A name for which a description has not been found. The seeds closely resemble those of *Phoenix reclinata*.

92275. TRIFOLIUM PRATENSE L. Fabaceae.
Red clover.

From Canada. Seeds purchased from Henry Reid, County Agronomist for Soulanges Vaudreuil, Vaudreuil Station, Province of Quebec. Received March 27, 1931.

Red clover, grown by Wilfred Besner, St. Clet, Soulanges County. This variety has been grown on the same farm for the past 15 years.

92276 to 92280.

From England. Plants purchased from J. Cheal & Sons (Ltd.), Crawley, Sussex. Received March 27, 1931.

92276 to 92279. PRUNUS SERRULATA Lindl.
Amygdalaceae. **Oriental cherry.**

92276. *Albo pleno*.

92277. *Benifugen*.

92278. *Cheal's weeping*.

92279. *Shirofugen*.

92280. PHILADELPHUS VIRGINALIS Rehd.
Hydrangeaceae. **Mockorange.**

A shrub 3 to 6 feet high with ovate remotely dentate leaves and racemes of large double or semidouble white flowers. It is a garden hybrid.

92281. FRAGARIA sp. Rosaceae.

Strawberry.

From England. Plants purchased from Thomas Swarbrick, Agricultural Research Station, Long Ashton, Bristol. Received March 27, 1931.

Royal Sovereign. A very early everbearing strain, robust, hardy, with large foliage; fruit very large, of brisk luscious flavor and shipping well.

92282 to 92287.

From England. Plants purchased from Burkwood & Shipwith (Ltd.), Kingston-on-Thames, Surrey. Received March 27, 1931.

92282. CEANOTHUS sp. Rhamnaceae.

Autumnal blue. A rapid-growing evergreen with dark shiny foliage and large spikes of intense blue flowers which are produced throughout the whole of September. It is hardy in the south of England.

92283. CEANOTHUS sp. Rhamnaceae.

Burkwoodii. The indigo-blue flower spikes are much larger than the type and are borne continuously during the autumn months.

92284. DAPHNE CAUCASICA Pall. Thymelaeaceae.
Caucasian daphne.

A hardy deciduous shrub, up to 4 feet high, with lanceolate leaves and fragrant white flowers in terminal heads of 3 to 20 flowers. Native to the Caucasus region.

For previous introduction see 81830.

92282 to 92287—Continued.**92285. DAPHNE BLAGAYANA Freyer.**
Thymelaeaceae. **Balkan daphne.**

A low diffusely branched shrub, native to the mountains of southeastern Europe. The obovate leaves, 1 to 2 inches long, are crowded at the end of the branchlets, and the yellowish white fragrant flowers, borne in heads, are followed by globose pinkish-white fruits.

For previous introduction see 80432.

92286. OSMAREA BURKWOODII Hort. Oleaceae.

This new bigeneric hybrid, a cross between *Osmanthus delavayi* and *Phillyrea decora*, is a fine hardy evergreen, with pendulous flowers, ivory white and very fragrant.

92287. VIBURNUM BURKWOODII Hort. Caprifoliaceae.

This new hybrid between *Viburnum utile* and *V. carlesii* is a strong-growing very hardy evergreen with shiny green foliage and, in April, large panicles of fragrant white flowers, which are pink in the bud.

92288. VICIA FABA L. Fabaceae.

Broadbean.

From Tokyo, Japan. Seeds presented by First Lieut. Joseph J. Twitty, Corps of Engineers, U. S. Army, American Embassy. Received March 27, 1931.

Otafuku mame. A large, well-flavored, edible bean which is used for canning by the Japanese, very much as we can the navy bean in the United States.

92289. CITRULLUS VULGARIS Schrad.
Cucurbitaceae. **Watermelon.**

From Union of South Africa. Seeds presented by A. Ford & Co., Johannesburg, through Prof. A. R. Pullen, University of Pretoria, Pretoria, Transvaal. Received March 28, 1931.

Makataan melon. A native melon which is very drought resistant but not sweet. It is used in the western part of the Transvaal as cattle feed.

92290 to 92302.

From the Union of Soviet Socialist Republics. Seeds presented by A. Kol, Chief, Bureau of Introduction, Institute of Applied Botany and New Cultures, Leningrad. Received March 28, 1931.

92290 and 92291. PRUNUS ARMENIACA L.
Amygdalaceae. **Apricot.**

From Kasakstan, Alma Ata. Collected in the Alatau Mountains by Kostina in 1930.

92290. No. 127829.

92291. No. 127404.

92292 to 92302. RUBUS spp. Rosaceae.**92292. RUBUS ARCTICUS L.**

A bramble, native to Manchuria, with medium-sized red edible berries.

For previous introduction see 69167.

92293. RUBUS CAESIUS L. Dewberry.

A deciduous shrub with slender creeping prickly stems, which are covered with a whitish bloom when young. The leaves, usually composed of three

92290 to 92302—Continued.

leaflets, are green on both sides. The white flowers are in small clusters, and the fruit, composed of a few large carpels, is covered with a blue-white bloom when ripe. It is common throughout Europe and northern Asia, but is of no value for gardens.

For previous introduction see 42639.

92294. *RUBUS CHAMAEMORUS* L.

The cloudberry is of circumpolar distribution, and the edible yellowish fruits are much prized by the natives of the subarctic regions. The plant is creeping in habit and is frequently found in peat bogs.

For previous introduction see 55370.

92295. *RUBUS GLANDULOSUS* Bellardi.

A name for which a description is not available.

For previous introduction see 78324.

92296. *RUBUS IDAEUS* L.

European raspberry.

The plant is a strong, upright grower, everbearing in habit. The fruit is large, red, and of excellent quality.

For previous introduction see 58806.

92297. *RUBUS ILLECEBROSUS* Focke.

Strawberry raspberry.

A dwarf prickly undershrub 2 to 4 feet high with pinnate leaves made up of five to seven oblong-lanceolate doubly serrate leaflets and small clusters of large white flowers nearly 2 inches across, followed by large scarlet fruits. It is native to Japan.

92298. *RUBUS PARVIFLORUS* Nutt. (*R. nutkanus* Mocc.).

White-flowering raspberry.

An upright shrub 6 to 8 feet high, with reniform 3-lobed to 5-lobed leaves 4 to 8 inches across, dense corymbs of small white flowers one-fourth inch wide, and red fruits more than half an inch in diameter. It is native to western North America.

92299. *RUBUS ODORATUS* L.

Flowering raspberry.

An upright shrub up to 10 feet high, with cordate leaves 4 to 12 inches broad having five triangular lobes and many-flowered panicles of purple fragrant flowers 2 inches across. The flat red fruits are less than an inch across. It is native to the eastern United States.

92300. *RUBUS PHOENICOLASIUS* Maxim.

Wineberry.

For previous introduction and description see 91832.

92301. *RUBUS SAXATILIS* L. Dewberry.

A dewberry producing large bright-red fruits of good quality.

For previous introduction see 68824.

92302. *RUBUS XANTHOCARPUS* Bur. and Franch.

A climber, 1 to 4 feet long, sparsely prickly or unarmed, which dies to the ground every year. The edible fruit is composed of many golden drupes. It is cultivated for the fruit in Lithuania. Native to central and northwestern China.

For previous introduction see 53540.

92303. *ACTINIDIA CHINENSIS* × *ARGUTA*.
Dilleniaceae.

Plants growing at the United States Plant Field Station, Glenn Dale, Md. Numbered in November, 1930.

Unfruited plants from a cross made by David Fairchild in the hope of combining all the better characters of each parent.

92304 and 92305. *FICUS CARICA* L.
Moraceae. Common fig.

From France. Plants purchased from Vilmorin-Andrieux & Co., Paris. Received March 3, 1930. Numbered in March, 1931.

92304. *Blanche d'Argenteuil*.92305. *Dauphine*.

92306 to 92313.

From the Union of Soviet Socialist Republics. Seeds presented by the director of the subtropical section of the Institute of Applied Botany and New Cultures, Sukhum, Abkhasia Republic, through A. Kol, Chief, Bureau of Introduction, Leningrad. Received March 30, 1931.

92306 to 92308. *CANNA* spp. Cannaceae.92306. *CANNA ANGUSTIFOLIA* L.

No. 41000. A canna with red flowers, native to Brazil.

92307. *CANNA EDULIS* Ker. Edible canna.

No. 6832.

For previous introduction and description see 92248.

92308. *CANNA INDICA* L.

No. 41009. A low slender-stemmed tropical American canna, 3 to 5 feet high, with green oblong leaves about 1 foot long and simple lax racemes of small flowers. The latter have pale-green narrow petals, a reddish-yellow lip, and bright-red upper staminodia.

For previous introduction see 66714.

92309. *CORYLUS COLURNA* L. Betulaceae.
Turkish hazel.

No. 19768. *Lagodekhi*. A vigorous free-growing tree up to 60 feet high, with stout more or less horizontal branches, heart-shaped glossy green leaves 5 inches long, and small hard-shelled nuts inclosed in fleshy hairy green involucre.

For previous introduction see 86263.

92310. *CARICA* sp. Papayaceae.

No. 34434.

92311. *MEDICAGO SATIVA* L. Fabaceae.
Alfalfa.

No. 4483.

92312. *MEDICAGO SATIVA* L. Fabaceae.
Alfalfa.

No. 4485.

92313. *ZELKOVA CARPINIFOLIA* (Pall.)
Dipp. Ulmaceae. Elmleaf zelkova.

No. 19771. A tree up to 75 feet high, native to the Caucasus region, with crenately serrate dark-green obovate leaves 2 to 6 inches long, resembling those of the hornbeam.

For previous introduction see 79149.

92314 to 92319. IRIS spp. Iridaceae.

From England. Seeds purchased from R. Wallace & Co. (Ltd.), Tunbridge Wells. Received March 30, 1931.

92314. IRIS BULLEYANA Dykes.**Hollowstem iris.**

An iris from western China with a hollow unbranched stem. The narrow leaves are glossy above and glaucous beneath. The stem, 15 to 18 inches long, bears a single head of one to two flowers. The falls have a greenish-yellow oblong haft, veined and dotted with purple. On the obovate blade the coloring becomes clearer and consists of broken veins and blotches of bright blue purple on a creamy ground. The extremity is a uniform blue purple, paler at the edges. The oblanceolate channeled standards are pale blue purple with deeper veins and diverge at an angle of about 60°. The keeled dark-purple styles are held high above the falls.

For previous introduction see 67364.

92315. IRIS CHRYSOGRAPHES Dykes.**Goldvein iris.**

One of the handsomest of the beardless irises; the velvety dark-purple flowers are brightened by golden reticulations at the throat, running into a signal patch on the blade.

For previous introduction see 79029.

92316. IRIS CLARKEI Baker. Clarke iris.

A curiously local Himalayan iris, native to a circumscribed area in the Sikkim and Bhutan region at altitudes between 6,000 and 11,000 feet, in ground that is swampy half the year and frozen hard under snow during most of the remaining months. The narrow leaves, 2 feet long, droop at the tops; the upper surface is polished and shiny, the under side glaucous. The solid stem is 2 feet long and bears one or two lateral heads. The falls are blue purple blotched with white and are reflexed laterally. The upper part of the haft is marked with yellow. The reddish-purple lanceolate standards are poised horizontally. The styles form the highest point of the flower; they are keeled, very convex, and 1½ inches long.

For previous introduction see 86681.

92317. IRIS GRAMINEA L. Grass iris.

A dwarf beardless iris with strongly ribbed linear leaves 12 to 18 inches long and flowers with lilac outer segments having a yellow claw and erect red-purple style branches and inner segments. The plant is of value chiefly for its freesialike scent. Native to central and southern Europe.

For previous introduction see 81821.

92318. IRIS MILESHI Baker.**Himalayan iris.**

A semievergreen Himalayan iris, related to *Iris tectorum*, with seven or eight leaves 2 to 3 feet long on the tall flower stem; the latter is branched and bears about four heads of small rosy lilac flowers, more or less spotted with darker magenta.

For previous introduction see 79030.

92319. IRIS WILSONI Wright. Wilson iris.

A western Chinese iris 2 feet high, with yellow flowers having falls veined with purple.

For previous introduction see 76252.

92320. TRIFOLIUM PRATENSE L. Faba-ceae. Red clover.

From Austria. Seeds presented by Fred M. Kies, Jackson, Mo. Received March 30, 1931.

An early-flowering strain, said to be resistant to drought.

92321 to 92325. ACACIA spp. Mimosa-ceae.

From San Remo, Italy. Plants presented by Dr. Mario Calvino. Received May 27, 1931.

A collection of acacias grafted on *A. floribunda* for winter blooming.

92321. ACACIA sp.

Bon Accueil. Improved No. 561. One of the best varieties.

92322. ACACIA sp.

Bon Accueil. Improved F No. 1796. One of the best varieties.

92323. ACACIA sp.

Gaulois. Considered the best for the cut-flower industry.

92324. ACACIA sp.

Montaldo. A cross between *Acacia podalyriaefolia* and *A. dealbata*. It is better than *A. hanburyana*.

92325. ACACIA sp.

Rustica. One of the best-flowered varieties.

92326 to 92332.

From Australia. Seeds presented by F. W. Fricke, Melbourne, through H. E. Magill, Pasadena, Calif. Received March 31, 1931.

92326 to 92331. ACACIA spp. Mimosa-ceae.**92326. ACACIA BUXIFOLIA A. Cunn.**

For previous introduction and description see 90838.

92327. ACACIA BAILEYANA F. Muell.**Cootamundra wattle.**

A shrub or small tree with compound leaves made up of two to three pairs of pinnae having about 20 pairs of small leaflets arranged spirally around the branchlets and nearly concealing them. The small flowers are in heads arranged in racemes 2 to 4 inches long. It is native to Australia.

92328. ACACIA HEMOLOPHERA Hort.

A name for which a place of publication and a description have not been found.

92329. ACACIA MOLLISSIMA Willd.**Black wattle.**

A tree up to 50 feet high with reddish bark showing under the fissures. The compound leaves are made up of 8 to 20 pairs of pinnae each having 30 to 60 pairs of small, closely crowded leaflets. The small heads of pale-yellow flowers are in racemes and appear profusely in June and intermittently at other times. It is native to Australia.

92330. ACACIA RETINODES Schlecht.

A tall shrub or small tree, native to Australia, with feathery foliage and dense yellow flower heads.

For previous introduction see 68836.

92326 to 92332—Continued.

92331. *ACACIA TERMINALIS* (Salisb.) Macbride.

An Australian tree up to 60 feet high, with golden pubescent branchlets, pinnately compound leaves, and globular heads of yellow flowers in clusters 6 inches long.

For previous introduction see 76858.

92332. *ALBIZZIA LOPHANTHA* (Willd.) Benth. Mimosaceae. **Plume albizzia.**

A shrub or small tree up to 20 feet high, with compound leaves made up of 14 to 24 pairs of pinnae each bearing 60 pairs of small linear leaflets. The small yellow flowers are in spikes about 2 inches long. It is native to Australia.

For previous introduction see 52895.

92333 to 92336.

From Argentina, South America. Seeds presented by Dr. Lorenzo R. Parodi, Laboratorio de Botanica, Facultad de Agronomía y Veterinaria, Buenos Aires. Received March 31, 1931.

A collection of South American grasses, introduced for testing as forage crops.

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92334. *CHLORIS BERROI* Arech. Poaceae. **Grass.**

92335. *LAMPROTHYRSUS HIERONYMI* (Kuntze) Pilger. Poaceae. **Grass.**

92336. *PASPALUM GAYANUM* Desv. Poaceae. **Grass.**

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Zamia pumila, 90941.
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Zephyranthes verecunda, 91835.
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