UNITED STATES DEPARTMENT OF AGRICULTURE



INVENTORY No. 122



Washington, D. C.

Issued October 1939

PLANT MATERIAL INTRODUCED BY THE DIVISION OF PLANT EX-PLORATION AND INTRODUCTION. BUREAU OF PLANT INDUSTRY. JANUARY 1 TO MARCH 31, 1935 (Nos. 107748-110197)

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INTRODUCTORY STATEMENT

The present inventory, No. 122, is a record of the plant material (Nos. 107748-110197) received by the Division of Plant Exploration and Introduction during the period from January 1 to March 31, 1935.

Nearly one-half of the plant material recorded for this period was received from H. L. Westover and C. R. Enlow, of the Bureau of Plant Industry, who were still in the field, and whose expedition to the cold semiarid regions of Turkistan has resulted in the introduction of plant material of particular value for the Soil Conservation Service of this Department. This material will be tested in our Western and Southwestern States.

As a result of agricultural explorations carried on by W. A. Archer in Surinam and Venezuela during the early part of 1935, about 150 lots of seeds were sent in from those countries. The material collected by Dr. Archer included a number of leguminous plants of probable value as cover crops, local varieties of vegetables and tropical fruits, and several ornamental shrubs and trees destined for testing in southern Florida.

Large areas of eastern Ecuador are practically unknown, from a botanical point of view, and it is, therefore, with considerable interest that mention is made of five shipments of seeds collected in this area by the late Mrs. Ynes Mexia. Among the various items received were seeds of several species of Juglans, Diospyros, and Datura.

Further additions to chestnut material intended for the use of forest pathologists are recorded in three shipments of scions and seeds of Castanea spp., from eastern China, collected by Peter Liu, from whom, during the past decade, much Chinese plant material has been received. Mr. Liu also sent in scions of a number of new or little-known varieties of Diospyros kaki (Nos. 107775-107778; 108311, 108312).

Light specification of the

A collection of walnut varieties, *Juglans* spp. (Nos. 110021–110051), obtained from Islington, Ontario, Canada, is for testing in the colder parts of the United States. Noteworthy also is a shipment of nearly 100 lots of tubers of frost-resistant potato varieties (Nos. 108120–108215), presented by the Union of Soviet Socialist Republics.

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

supervision of this inventory.

B. Y. Morrison, Principal Horticulturist, in Charge,

Division of Plant Exploration and Introduction, Washington, D. C., October 24, 1938.

INVENTORY

107748 and 107749. ALLIUM SATIVUM L. | 107750 to 107754—Continued. Garlic. Liliaceae.

From Germany. Bulbs presented by Rudolf Neumiller. Frankenthal. Received January 10, 1935.

Locally grown varieties introduced for the use of Department specialists.

107748. From Furth

107749. From Schweinfurt.

107750 to 107754.

From Surinam. Seeds collected by W. A. Archer, Bureau of Plant Industry. Received December 1, 1934.

107750. CALOPOGONIUM MUCUNOIDES Desv. Fabaceae.

No. 2651. From near Scotelweg, November 2, 1934. A stout twining vine with rhombic-ovate leaflets and long-stalked racemes of pale-blue flowers. It forms a mat of foliage 1 to 2 feet thick and is used as a cover crop. Native to tropical America. tropical America.

For previous introduction see 106638.

107751 to 107753. PHASEOLUS spp.

107751. PHASEOLUS CAMPESTRIS Mart.

No. 2690. About 8 miles northwest of Paramaribo along the highway, November 6, 1934. A herbaceous climber with hairy trifoliolate leaves, the leaflets rhombic-ovate, and small flowers, which vary in color from red to yellow shading to green. Native to tropical South America.

107752. PHASEOLUS PANDURATUS Mart.

No. 2661. Near Scotelweg, November 2, 1934. A tropical vine with small, ovate-rounded, pubescent leaflets less than 1 inch long and white, purpletinged flowers. Native to tropical South America.

107753. PHASEOLUS Sp.

No. 2703. About 8 miles northwest of Paramaribo along the highway, November 6, 1934.

107754. SESBANIA GRANDIFLORA Poir. baceae.

No. 2693. About 8 miles northwest of Paramaribo along the highway, November 6, 1934. A small, rapid-growing, softwooded tree, 15 to 20 feet high, with pinnate leaves and large pendulous white flowers, followed by sickle-shaped pods. The leaves and young shoots are sometimes used as folder. used as fodder.

For previous introduction see 69143,

107755. LESPEDEZA UEKII Nakai. Fabaceae.

From Japan. Seeds presented by Dr. T. Kaburaki, Director, Forest Experiment Station, Government General of Chosen, Keijo, Chosen. Received January 2, 1935.

Introduced for Department specialists,

A shrub with a creeping rhizome, broadly oblong, acute leaflets over an inch long, and reddish flowers in axillary racemes. Collected in Chinkai, Shogen-Gun, and Keisho-Nan-Do, Chosen, where it is native.

107756. GOSSYPIUM TRANSVAALENSE Watt. Malvaceae.

From the Union of South Africa. Seeds presented by Dr. R. A. Dyer, Department of Agriculture, Pretoria. Received January 11, 1935.

A small bush with three- to five-lobed, reniform, velvety leaves 1 inch long and over an inch wide. The seeds are clothed with harsh, gray-white, greasy floss. Native to the Transvaal.

¹ It should be understood that the names of varieties of fruits, vegetables, cereals, and other plants used in this inventory are those under which the material was received when introduced by the Division of Plant Exploration and Introduction, and, further, that the printing of such names here does not constitute their official publication and adoption in this country. As the different varieties are studied, their entrance into the American trade forecast, and the use of varietal names for them in American literature becomes necessary, the foreign varietal designations appearing in this inventory will be subject to change with a view to bringing the forms of the names into harmony with recognized horticultural homenclature.

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. can be made.

107757. NANNORRHOPS BITCHIEANA | 107760 to 107769—Continued. (Griffith) Wendl. Phoenicaceae.

Mazri palm.

From India. Seeds presented by R. R. Stewart, Gordon College, American United Presbyterian Mission, Rawalpindi. Received January 4, 1935.

A small rare cluster palm, native to the mountains of Afghanistan and western India. The rigid, fan-shaped leaves are very glaucous both above and below and are about 3 feet long. In its native habitat this palm is often covered with snow in winter.

For previous introduction see 99604.

107758. Rubus hawaiensis A. Gray. Akala.

From Hawaii. Seeds presented by W. T. Pope, senior horticulturist, Agricultural Experiment Station, Honolulu. Received January 11, 1935.

A wild raspberry native to Hawaii between 3,500 and 5,000 feet altitude, which grows over 15 feet high. The large fruits, 1½ inches long and about 1 inch in diameter, have a rather sharp but pleasant acid flavor.

For previous introduction see 101344

107759. POLYTRIAS AMAURA (Buehse) Kuntze. Poaceae.

om Puerto Rico. Seeds presented by Atherton Lee, Agricultural Experiment Station, Mayaguez. Received January 5, 1935.

 \boldsymbol{A} common lawn and pasture grass, native to low altitudes in Java.

For previous introduction see 77489.

107760 to 107769.

From Surinam. Seeds collected by W. A. Archer, Bureau of Plant Industry. Received January 9, 1935.

107760. Cassia undulata Benth. Caesalpiniaceae.

No. 2707. Near Scotelweg, November 12, 1934. A shrub 10 to 12 feet high, with falcate-oblong leaflets 2 to 3 inches long and golden-yellow flowers in short dense panicles. Native to British Guiana.

107761. CESTRUM LATIFOLIUM TENUIFLORUM (H, B, K.) O. E. Schulz. Solanaceae.

No. 2705. Near Scotelweg, November 12, 1934. A low bush with ovate acuminate leaves less than 4 inches long and axillary spikes of white flowers. Native to Venezuela.

107762. CLEOME ACULEATA L. Capparida-

No. 2700. About 8 miles northeast of Paramaribo, along the highway, November 6, 1934. A tall annual up to 3 feet high, with digitately three-foliolate leaves and small solitary white flowers. Native to tropical America. to tropical America.

107763 to 107765. CLIBADIUM SURINAMENSE L. Asteraceae.

Kunami-ran. Near Scotelweg, November 12, 1934. A large busby perennial up to 10 feet high, with broadly ovate leaves and small white flower heads in dense clusters.

For previous introduction see 106539.

107763. No. 2716. A form with small

107764. No. 2717. A form with large leaves.

107765. No. 2725. Typical form.

107766. EUPHORBIA BRASILIENSIS Lam. Euphorbiaceae.

No. 2719. Near Scotelweg, November 12, 1934. A herbaceous perennial, native to Brazil, with reddish stems 8 to 10 inches high, elliptic-oblong leaves, and small brownish and white flowers.

107767. POTHOMORPHE PELTATA (L.) Miq. Piperaceae.

No. 2727. Near Scotelweg, November 12, 1934. An erect shrub with rounded-cordate, peltate leaves; closely allied to Piper. Native to western India.

107768. SOLANUM MELONGENA L. Solana-Eggplant.

No. 2699. About 8 miles northwest of Paramaribo along the highway. A cultivated eggplant with small greenish-white fruits, 2½ by 2 inches, shaped like a tomato.

107769. VISMIA CAYENNENSIS (Jacq.) Pers. Hypericaceae.

No. 2706. About 8 miles northeast of Paramaribo on the highway, November 6; 1934. A shrub or small tree with small yellow flowers, whitish fuzzy on the inside and waxen on the outside.

107770 to 107778.

From China. Scions collected in Shantung Province by Peter Liu. Received Janu-ary 4, 1935.

107770 to 107774. CASTANEA spp. Fagaceae. Chestnut.

107770. No. 1. Chia Lee (home chest-nut). From the foothills of Sun Chia Tzu J'ang, near Nanking. The most common variety of this region; ripens about the middle of September.

107771. No. 2. Yu Lee. From the foot-hills of Sun Chia Tzu J'ang, near Nanking. Larger than the Chia Lee [107770], with a bright shining skin.

107772. No. 3. Kuei Hua Lee Tzu (cassia flower chestnut). Collected between Nanking and Shanghai in the foothills of Heui Shan, near Wusih. One of the best in this region; ripens cerly in Sontember. early in September.

107773. No. 4. Ta Ming Lee Tzu (large bright chestnut). From the village of Ta Ching Kou, northeast of Taian. The most common variety in Shantung and the best of all; ripens about the third week in September.

107774. No. 5. Hsiao Ming Lee Tzu (small bright chestnut). Smaller than Ta Ming Lee Tzu [107773]; ripens at the same time.

107775 to 107778. DIOSPYROS KAKI L. f. Kaki.

107775. No. 6. Ho Shih (box persimmon) from near Ta Ching Kou, Shantung. Fruit 3 inches wide and over 2 inches high.

107776. No. 7. Tung Shih (freezing persimmon) from Ta Ching Kou, northeast of Taian, Shantung. Fruit 2½ to 3 inches high and 2 inches wide; not good to eat until it has thawed after being frozen.

107770 to 107778—Continued.

107777. No. 8. Shui Shih (water persimmon) from Ta Ching Kou, northeast of Taian, Shantung. Fruit large, 2½ to 3 inches high and 2 inches wide; very sweet and moist and used for drying. for drying.

107778. No. 9. Ssu Hung Shih (four square red persimmon) from Ta Ching Kou near Taian, Shantung. Fruit small, red, 1 to 2 inches wide, shaped like a box.

107779 to 107782.

rom Egypt. Seeds presented by Alfred Bircher, Middle Egypt Botanic Station, El Saff. Received January 7, 1935. From

collection of native vegetable varieties introduced for Department specialists.

107779. ALLIUM CEPA L. Liliaceae.

Onion.

107780. ALLIUM SATIVUM L. Liliaceae. Garlie.

Apiaceae. 107781. APIUM GRAVEOLENS L. Celery.

107782. DAUCUS CAROTA L. Apiaceae

Carrot.

107783. AMYGDALUS PERSICA L. Amygdalaceae. Peach.

From Yugoslavia. Scions presented by Ivo State Agronomist, San Received January 11, 1935. Volarie. Samobov.

Scions of a seedling peach from the Croatian shore of Lake Veglia.

107784 to 107786.

From India. Seeds presented by M. P. Sharma, Harrai, Sihora, Narsinghpur, Central Provinces. Received January 9,

A collection of native vegetable varieties introduced for Department specialists.

107784, ALLIUM CEPA L. Liliaceae.

Liliaceae. 107785. ALLIUM SATIVUM L. Garlic.

107786. DAUCUS CAROTA L. Apiaceae.

Carrot.

107787 to 107807.

From Surinam. Seeds collected by W. A. Archer, Bureau of Plant Industry. Received December 17, 1934.

Nos. 107787 to 107806 were collected at Sandrij No. 1 in November 1934.

107787. Antonia ovata Pohl. Loganiaceae.

No. 2795. Paloeloipio. A tropical shrub or sometimes a tall timber tree found in the jungle, with thick, leathery, ovalelliptic, dark-green leaves and small white flowers in large terminal cymes. It is native to Brazil.

For previous introduction see 106510.

107788. Banisteriopsis sp. Malpighiaceae. No. 2761.

107789. STIGMAPHYLLON FULGENS (Lam.) Malpighiaceae. A. Juss.

No. 2798. Found at the edge of a Savanna.

For previous introduction see 107736.

107787 to 107807—Continued.

107790 to 107792. CENTROSEMA spp. Fabaceae.

107790. CENTROSEMA PUBESCENS Benth.

No. 2757. A leguminous vine, native to tropical America, with trifoliolate leaves and small yellowish flowers. Cultivated as a cover crop.

For previous introduction see 106916.

107791 and 107792. CENTROSEMA BRASILI-ANA (L.) Benth.

A slender leguminous vine 10 to 15 feet long. Native to the Provinces of Para and Bahia, Brazil.

For previous introduction see 33929.

107791. No. 2800. A form with lavender and white flowers.

107792. No. 2774. A form with flowers varying from blue to light blue.

107793. Byrsonima crassifolia (L.) H. B. K. Malpighiaceae.

No. 2732. A loose semiprostrate shrub 2 feet high with yellow flowers. Found on the open savanna in pure-white sand.

For previous introduction see 52530.

107794. CALOPOGONIUM MUCUNOIDES Desv. Fabaceae.

2787. A cultue flowers. A cultivated cover crop with wers. Found on the open pale-blue savanna in pure-white sand.

For previous introduction and description see 107750.

107795. CITRULLUS VULGARIS Schrad. curbitaceae. Watermelon.

No. 2802. Seed purchased originally from a Javanese, but now growing at the experiment station on the open savanna in pure-white sand. The melon is of a good color and the flesh is sweet.

107796 to 107798, CLIBADIUM SDD. Astera-

From the open savanna in pure-white sand.

107796 and 107797. CLIBADIUM SURINA-MENSE L.

For previous introduction and description see 107765.

107796, No. 2771. 107797. No. 2756.

107798. CLIBADIUM SYLVESTRE (Aubl.) Baill.

No. 2767. An herb 5 feet tall with dark-red stems.

107799. TEPHROSIA TOXICARIA (Sw.) Pers. (Cracca toxicaria (Pers.) Kuntze). Fabaceae.

A scanty shrub 2 to 3 feet high, with leaves made up of nine or more leaflets and racemes of greenish-white flowers with a purple spot at the base of the wings. It is used as a cover crop.

For previous introduction see 107462.

107800. CROTALARIA VITELLINA Ker. Fabaceae.

No. 2758. A slender shrub 8 to 10 feet high, found at the edge of the clearing, growing in pure-white sand.

107787 to 107807—Continued.

107801. CUPANIA DIPHYLLA Vahl. Sapindaceae.

No. 2741. A tree 30 feet high, found in the jungle.

107802. Gossypium sp. Malvaceae.

No. 2769. A hybrid cotton 6 to 10 feet high with yellow flowers, found on the open savanna in pure-white sand.

107803. Indigofera Hirsuta L. Fabaceae. Indigo.

No. 2744. An annual 3 feet high with crimson flowers. Used as a cultivated cover crop at the Sandrij Experiment Station.

For previous introduction see 106928.

107804. Passiflora auriculata H. B. K. Passifloraceae.

No. 2785. A shrubby climber found in the jungle, with ovate, obtuse, entire, shining leaves and whitish flowers. Native to northern South America.

107805. PHASEOLUS PEDUNCULARIS H. B. K. Fabaceae.

No. 2773. A tropical annual vine with narrowly ovate, acuminate leaflets and axillary racemes of small pinkish flowers. Native to Colombia.

107806. Plumeria sp. Apocynaceae.

No. 2793. A tree 20 feet high with reddish wood, milky latex, and cream-colored flowers. Found in white sand.

107807. ZEA MAYS L. Poaceae. Corn.

No. 2777. From a cooperative field of Carib Indians.

107808 to 107811.

From China. Seeds presented by Dr. Wang Tai Yih, the Sun Yat-Sen Tomb and Memorial Park Commission, Nanking. Received January 10, 1935.

A collection of native vegetables introduced for Department specialists.

107808. ALLIUM CEPA L. Liliaceae. Onion. White globe.

107809. ALLIUM CEPA L. Liliaceae. Onion. Yellow globe.

107810. DAUCUS CAROTA L. Apiaceae.

107811. DAUCUS CAROTA L. Apiaceae. Carrot.

Scarlet long.

107812 to 107814.

From Siam. Bulbs presented by Dr. H. M. Smith, Department of Fisheries, Bangkok. Received January 5, 1935.

Locally grown bulbs.

107812. CRINUM sp. Amaryllidaceae.

107813. HIPPEASTRUM EQUESTRE (L. f.) Herb. Amaryllidaceae.

107814. (Undetermined.)

107815. Licania sp. Rosaceae.

From Guatemala, Central America. Seeds presented by Sr. Julio E. Castaneda de Ranero, Puebla Nuevo, through J. L.

107815—Continued.

Colom, Pan American Union, Washington, D. C. Received January 9, 1935.

The licanias are tropical American shrubs or trees, some of which bear edible fruits.

107816 to 107818.

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

107816. MAXIMILIANA sp. Phoenicaceae. Palma real.

No. 6736-A. Canton Pujili, Province of Leon, November 24, 1934. A tree over 90 feet high, found in dense virgin forest. The orange fruits fall as they ripen.

107817. EUCHARIS GRANDIFLORA Planch. and Linden. Amaryllidaceae.

No. 6644. Bulbs of a Colombian eucharis, with two to four ovate-acuminate leaves about 4 inches long and three to five white flowers on a scape over a foot high. It resembles Eucharis candida, but the flowers are about twice as large.

107818. (Undetermined.)

Bulbs and seeds.

107819. ERYTHRINA HERBACEA L. Fabaceae. Coraltree.

From Texas. Seeds presented by W. L. Gillespy, Taylor. Received January 19, 1935.

A shrubby perennial with a very thick root and stems 2 to 4 feet high. The three leaflets are ovate to hastate, and the deep-scarlet flowers, 2 inches long, are in long loose racemes. Native to the West Indies and the Gulf States.

107820 to 107837.

From Ecuador. Seeds collected by Mrs. Ynes Mexia, Bureau of Plant Industry. Received January 7, 1935.

107820. ROLLINIA sp. Annonaceae.

No. 6736. Guayas Province. Tropical American shrubs or trees, closely related to Annona.

107821. Banisteriopsis Quitensis Morton. Malpighiaceae.

No. 6636. Los Rios Province. A woody climber with ovate-lanceolate leaves 2 to 4 inches long and small yellow flowers in terminal clusters. Native to Ecuador.

107822. Browallia americana L. Solanaceae.

No. 6565. Los Rios Province. A slender annual about 2 feet high, with smooth ovate leaves up to 2 inches long and solitary flowers less than an inch long. Native to tropical America.

107823. CLIBADIUM SURINAMENSE L. Asteraceae.

No. 6595. Los Rios Province. A shrub up to 8 feet high, with broadly ovate leaves and small white flowers in dense clusters.

For previous introduction see 106539.

107824. CLIBADIUM SYLVESTRE (Aubl.) Baill. Asteraceae.

No. 6678. Los Rios Province.

For previous introduction and description see 107798.

107820 to 107837—Continued.

107825. TEPHROSIA TOXICARIA (Sw.) Pers. Fabaceae.

No. 6563. Los Rios Province.

For previous introduction and description see 107799.

107826. DATURA CANDIDA (Pers.) Safford. Solanaceae.

No. 6601-A. Canton Vinces, Los Rios Province, along the trail from Santa Lucia to Morache. A shrub up to 15 feet high, with broadly ovate to oblong-ovate leaves about 20 inches long and large white flowers. Known only in cultivation; this is the large white flower floripondio of tropical America.

107827. ERYTHRINA sp. Fabaceae.

No. 6686-A. An ornamental from Los Rios Province.

107828. ERYTHRINA sp. Fabaceae.

No. 6586-A. November 17, 1934. Canton Vinces, Los Rios Province, along the trail from Heda to Santa Lucia at 180 feet altitude. A small tree, commonly found in the open woods, with red flowers which appear before the leaves.

107829. GLIRICIDIA sp. Fabaceae.

No. 6590-A. October 28, 1934. Quevedo, Canton Vinces, Los Rios Province. Presented by Gustavo Buchwald.

107830. Hibiscus sp. Malvaceae.

No. 6656-A. November 1934. Quevedo, Canton Vinces, Los Rios Province. Presented by Dr. Frederico von Buchwald, who exports the seed to Germany where it is used as the base for perfumery and as a remedy for whooping cough.

107831. PISCIDIA CARTHAGINENSIS Jacq. Fabaceae.

No. 6760. Guayas Province. A low tree with unevenly pinnate leaves and lateral panicles of pink to purplish flowers, followed by winged fruits. Native to northern South America.

107832. JACQUINIA SPRUCEI Mez. Theophrastaceae.

No. 6766. Guayas Province. A tropical shrub with leathery elliptic, mucronate leaves nearly 2 inches long and terminal racemes of small yellowish flowers. Native to Ecuador.

107833. PHYLLANTHUS BRASILIENSIS (Aubl.) Muell. Arg. Euphorbiaceae.

No. 6689. Los Rios Province. A shrub 5 to 8 feet high, with alternate, roundish, pale-green leaves and inconspicuous flowers. Native to tropical Brazil.

107834. SAPINDUS sp. Sapindaceae.

No. 6553. Los Rios Province.

107835, SOLANUM CONFERTISERIATUM Bitter. Solanaceae.

No. 6568. Los Rios Province. A shrub or small tree 10 to 15 feet high, with broadly elliptic or obovate, grayish-green leaves about 7 inches long and white flowers one-half inch across. Native to Ecuador.

107836. TECOMA GAUDICHAUDII DC. Bignoniaceae.

No. 6742. Guayas Province. An arborescent shrub with opposite or alternate,

107820 to 107837—Continued.

elliptic-oblong, simple, coarsely serrate leaves and large yellow flowers in terminal panicles. Native to Colombia.

107837. Swartzia sp. Caesalpiniaceae.

No. 6570-A. Arbol de Murcielago. An ornamental leguminous tree with yellow flowers, from Los Rios Province.

107838. AMYGDALUS PERSICA L. Amygdalaceae. Peach.

From China. Seeds presented by Peter Liu, Peiping. Received January 17, 1935.

Mao Tao (hairy peach). Collected in the vicinity of Feicheng by Wen Ying Tang.

107839. DIOSPYROS KAKI L. f. Diospyraceae. Kaki.

From Virginia. Scions collected by K. A. Ryerson and W. E. Whitehouse, Bureau of Plant Industry, at the home of a Mr. Conklin. Smithfield. Received January 16, 1935.

107840. SACCHARUM OFFICINARUM L. Poaceae. Sugarcane.

From Spain. Cuttings presented by Arsenio Rueda y Maria, Granada, at the request of Julius Matz, through Señor Miguel de Echegaray, agricultural attaché of the Spanish Embassy. Washington, D. C. Received January 22, 1935.

Algarobena. The oldest variety grown in Spain.

Introduced for Department specialists.

107841. Cassia viminea L. Caesalpiniaceae.

From Cuba. Seeds presented by Robert M. Grey, Superintendent, Atkins Institution of the Arnold Arboretum. Soledad, Cientuegos, through F. G. Walsingham. Received January 16, 1935.

A trailing shrub, native to Jamaica, with compound leaves composed of two pairs of obliquely ovate leaflets and showy yellow flowers in terminal panicles.

107842. Passiflora sp. Passifloraceae.

From Colombia. Seeds presented by Carlos Palacio, Pasto (Nariño). Received January 24, 1935.

Quijo. A vine bearing an orange-yellow, plum-shaped fruit the size of a small orange, with numerous seeds embedded in very sweet pulp of delicate flavor. It grows at 5,000 feet above sea level and begins bearing 2 years after planting. The fruit ships well and keeps in good condition for some time if stored in a cool place.

107843. TEPHROSIA VOGELII Hook. f. Fabaceae.

From Africa. Seeds presented by Miss Margaret Haines, Bangassou, French Equatorial Africa. Received January 24, 1935.

Introduced for Department specialists.

 \boldsymbol{A} shrubby legume native to tropical Africa.

For previous introduction see 98926.

107844 to 107849.

From Ecuador. Seeds collected by Mrs. Ynes Mexia, Bureau of Plant Industry. Received January 10, 1935.

107844 to 107849—Continued.

107844. ACACIA PELLACANTHA Vogel. Mimosaceae.

No. 6763. Province of Guayas, October 1934. A spiny tree tomentose throughout, with bipinnate leaves and small flowers in dense axillary heads. Native to Peru at altitudes of 2,000 to 3,000 feet.

107845. CERBERA THEVETIA L. Apocynaceae. Yellow oleander.

No. 6748. Province of Guayas, December 10, 1934. An ornamental, willow-leaved, yellow-flowered tree or shrub 10 to 15 feet high. Native to tropical America.

For previous introduction see 106951.

107846. DIOSPYROS PSIDIOIDES H. B. K. Diospyraceae.

No. 6749. Province of Guayas, December 10, 1934. A low tree with alternate obovate-oblong entire leathery leaves 4 inches long and solitary small yellow edible fruits 1 inch in diameter. Native to Peru.

Nos. 107847 to 107849 were collected in the Province of Los Rios, October 1934.

Nos. 107847 to 107849 were collected in No. 6660. A vine with large pods.

107848. OCHROMA GRANDIFLORA Rowlee. Bombacaceae.

No. 6637. A tall tree with mottled gray bark, entire orbicular leaves 8 inches wide, and large showy flowers 6 inches long. This tree is a source of kapok. Native to Ecuador.

107849. SMILAX OFFICINALIS H. B. K. Smilacaceae. Sarsaparilla.

No. 6638. A climbing shrub with square stems armed along the angles with small prickles. The glabrous leaves, often a foot long, are variable in form, often triangular or oblong-acute, cordate or somewhat auriculate at the base. The greenish-yellow flowers are in stalked umbels, and the cinnamon-brown roots are one of the principal sources of sarsaparilla.

For previous introduction see 45731.

107850. Serjania sp. Sapindaceae.

From Texas. Seeds presented by Peter Heinz, Brownsville. Received January 2, 1935.

A woody vine from the eastern, rainy side of the mountains below Taxco, Mexico. The vine is a vigorous grower; it climbs to the tops of trees and bears conspicuous reddish winged fruits.

107851 and 107852.

From the Union of South Africa. Bulbs purchased from E. G. Bryant, Prieska. Received January 5, 1935.

107851. Ammocharis falcata Herb. Amaryllidaceae.

A tender bulbous plant from the Cape of Good Hope, with strap-shaped leaves up to 2 feet long and an umbel of 20 to 40 fragant red flowers.

107852. NERINE DUPARQUETIANA (Baill.) Baker. Amaryllidaceae.

A nerine with strap-shaped leaves 8 to 12 inches long, contemporary with the flowers; the latter are funnel-shaped, white

107851 and 107852-Continued.

with a carmine keel, in umbels of 20. Native to the Kalahari region, South Africa.

107853 to 107864.

From the Union of Soviet Socialist Republics. Bulbs presented by the Botanical Institute, Turcomania, Ashkhabad, through H. L. Westover, Bureau of Plant Industry. Received January 3, 1935.

107853. ALLIUM GIGANTEUM Regel. Liliaceae.

One of the largest members of the genus, with large bulbs and broad fleshy leaves about 18 inches long. The bright-lilac flower heads, 4 inches across, are on stalks about 4 feet high.

For previous introduction see 106640.

107854. IXIOLIRION TATARICUM (Pall.) Herbert. Amaryllidaceae.

A bulbous herbaceous perennial, native from the Caucasus through central Asia, with awl-shaped leaves and terminal umbels of deep-blue or violet six-lobed flowers, which are borne in the spring.

For previous introduction see 107552.

107855 and 107856. MUSCARI RACEMOSUM (L.) Mill. Liliaceae.

A grape-hyacinth with five to six thick, almost cylindrical leaves about 5 inches long and dark-blue, fragrant flowers. Native to the Caucasus.

107857 to 107864. TULIPA spp. Liliaceae. Tulip.

107857. TULIPA KUSCHKENSIS B. Fedtsch.

A tulip about a foot high which has four to six undulate, sickle-shaped leaves with narrow white margins. The yellow flower, black at the base of the perianth segments, is about 2 inches long. Native to Turkistan.

For previous introduction see 107427.

107858. TULIPA MICHELIANA Hoog.

A tulip native to the Casplan region, with a pubescent scape 12 inches high. The lanceolate to linear-lanceolate leaves, usually four, are striped with brown and have undulate margins. The large single flowers are lilac scarlet and vermilion scarlet inside with black lanceolate blotches on the back.

For previous introduction see 106913.

107859. TULIPA WILSONIANA Hoog.

A dwarf tulip with narrow, purple-edged leaves and a deep-red flower on a stem 4 inches high. Native to Turkistan,

For previous introduction see 107428.

107860 to 107864.

The following numbers were received without labels.

107860. TULIPA sp.

107861. TULIPA Sp.

107862. TULIPA sp.

107863. TULIPA Sp.

107864. TULIPA SP.

107865 to 108014.

From the Union of Soviet Socialist Republics. Seeds collected in Turkistan by H. L. Westover and C. R. Enlow, Bureau of Plant Industry. Received November 2, 1934. Numbered in January 1935.

107865. ACONITUM EXCELSUM Reichb. Ranunculaceae.

No. 573. Alma Ata, foothills, July 23, 1934. A tall stout perennial with broadly palmate leaves and purple-lilac flowers nearly 1 inch long in an elongated raceme. Native to Siberia.

107866. AEGILOPS SQUARROSA L. Poaceae.

No. 656. Northeast of Alma Ata, July 25, 1934.

20, 1904. 107867 to 107874, AGROPYRON spp. Poa-Wheatgrass.

107867. AGROPYRON sp.

No. 689. From the mountains surrounding Lake Issyk, July 26, 1934. Received under the name "brevisubulatum," for which a place of publication has not been found.

107868 and 107869. AGROPYRON CANINUM (L.) Beauv.

107868. No. 575. Mountains south of Alma Ata, July 23, 1934.

7869. No. 628. Mountains east of Alma Ata, July 24, 1934. 107869. No. 628.

107870. AGROPYRON CRISTATUM (L.) Gaertn. Crested wheatgrass.

No. 557. On the steppe 40 miles west of Alma Ata.

107871. AGROPYRON Sp.

No. 690. Near Lake Issyk, east of Alma Ata, July 25, 1934.

107872. AGROPYRON SEMICOSTATUM Nees.

No. 637. Lake Issyk Canyon in rocky soil, July 25, 1934.

107873. AGROPYRON sp.

No. 554. Alkali steppe 95 miles west of Alma Ata, July 29, 1934.

107874. AGROPYRON Sp.

No. 560. Alkali steppe 95 miles west of Alma Ata, July 29, 1934.

107875 to 107877. ALLIUM spp. Liliaceae. 107875. ALLIUM sp.

No. 656. Alkali soil 100 miles west of Alma Ata, July 29, 1934. En route to Frunze.

107876. ALLIUM sp.

No. 595. Lake Issyk, east of Alma Ata, July 26, 1934.

107877. ALLIUM sp.

No. 688. Foothills southeast of Alma Ata, July 24, 1934.

107878. ALTHAEA sp. Malvaceae.

No. 648. From the roadside east of Alma Ata, July 24, 1934.

107879. ALTHAEA NUDIFLORA Lindl. Mal**у**ясеяе.

No. 678. Alma Ata, July 26, 1934. A biennial 6 feet high, with large roundish cordate, three-lobed, rough-hairy leaves and white flowers. Native to central Asia.

For previous introduction see 105472.

107865 to 108014—Continued.

107880 and 107881. Andropogon ISCHAB-MUM L. Poaceae. Grass.

From the steppe northeast of Alma Ata, July 25, 1934. A leafy wild grass, 3 to 4 feet high, producing a large quantity of coarse feed.

For previous introduction see 81810.

107880. No. 621. 107881. No. 630.

107882. Androsace sp. Primulaceae.

No. 598. Near Lake Issyk, east of Alma Ata, July 26, 1934.

107883. Androsace sp. Primulaceae.

No. 603. Near Lake Issyk, east of Alma Ata, July 26, 1934.

107884. ANEMONE NARCISSIFOLIA L. nunculaceae.

No. 599. Near Lake Issyk, east of Alma Ata, July 26, 1934. A stout herbaceous perennial with stalked three- to five-parted, deeply cut basal leaves, sessile involucral leaves, and white flowers 1 inch across, with yellow anthers, in a small umbel. Native to Europe and Asia.

For previous introduction see 103175.

107885. Anemone sp. Ranunculaceae.

No. 605. Mountains of Lake Issyk, east of Alma Ata, July 26, 1934. A beautiful flowering plant.

107886 and 107887. ANTHOXANTHUM ODO-RATUM L. Poaceae. Sweet vernal grass.

107886. No. 601. Lake Issyk, east of Alma Ata, July 26, 1934.

107887. No. 661. Foothills southeast of Alma Ata, July 26, 1934.

107888 to 107890. AQUILEGIA spp. Ranunculaceae.

107888 and 107889. AQUILEGIA KARELINI Baker.

A perennial up to 2 feet high, with membranous, deeply lobed leaves and bright-blue or claret-purple flowers. Na-tive to the Ala Tau Mountains.

107888. No. 643. Mountains south of Alma Ata, July 23, 1934.

107889. No. 681. Foothills southeast of Alma Ata, July 24, 1934.

107890. AQUILEGIA Sp.

No. 600. Lake Issyk, east of Alma Ata, July 26, 1934.

107891. ASTER ALPINUS L. Asteraceae.

No. 597. Lake Issyk, east of Alma Ata, July 26, 1934. A perennial alpine, native to central Europe, with lanceolate, obtuse, hairy leaves and large sky-blue flowers.

107892. ASTRAGALUS SD.

No. 536. From a rocky s Little Chimgan, July 15, 1934. slope of the

107893 to 107895. AVENA spp. Poaceae. Oats.

107893. AVENA FATUA L.

No. 617. Alma Ata Experiment Station, July 22, 1934.

107894 and 107895. AVENA PUBESCENS Huds.

From the mountains east of Alma Ata, July 24, 1934.

107895, No. 672. 107894. No. 655.

107896. BERBERIS HETEROPODA Schrenk. Turkistan barberry. Berberidaceae.

No. 674. Mountains south of Alma Ata, July 23, 1934. A handsome spreading shrub up to 6 feet high, with spines, when present, often 2 inches long; and broadly oval, pale blue-green, entire leaves an inch or two in length. The fragrant orange flowers are in five- to seven-flowered racemes, and the dark-blue berries are covered with a claucous bluom. Native to covered with a glaucous bloom. Native to Turkistan.

For previous introduction see 65238.

107897. BRACHYPODIUM PINNATUM Beauv. Poaceae.

No. 627. From the foothills near Alma ta, July 23, 1934. A perennial grass Ata, July 23, 1 used for grazing.

For previous introduction see 106020.

107898 to 107901. Bromus spp. Poaceae. Bromegrass.

107898. Bromus Inermis Leyss.

No. 618. From the steppe northeast of Alma Ata, July 25, 1934. Variety sibiricus.

107899. Bromus sp.

No. 642. From the foothills near Alma Ata, July 23, 1934.

107900. Bromus sp.

No. 562. From the alkali steppe 95 miles west of Alma Ata, July 29, 1934.

107901. BROMUS ARVENSIS L.

No. 610. From the mountains south of Alma Ata, July 23, 1934.

107902. CICER sp. Fabaceae.

No. 543. From the mountains near Alma Ata, July 27, 1934. Received under the name "Zangonicum," for which a place of publication has not been found.

107903 to 107905. CODONOPSIS OVATA Benth. Campanulaceae.

A decumbent perennial up to 12 inches high, with small, ovate, acute or obtuse, hairy leaves less than an inch long. The bell-shaped flowers, about an inch long, white or pale blue speckled inside, are on long terminal peduncles. Native to the Himalayas.

107903. No. 548. Mountains above Lake Issyk, near Alma Ata, July 26, 1934.

107904. No. 647. Mountains near Alma Ata, July 23, 1934. A form with beautiful white bell-shaped flowers.

107905. No. 7905. No. 659. Mountains east of Alma Ata, July 24, 1934. A form with blue-tinged white flowers.

107906. CYNODON DACTYLON (L.) Pers.

Bermuda grass.

No. 556. Collected en route from Alma Ata to Frunze, July 29, 1934.

107907. DACTYLIS GLOMERATA L. Poaceae.
Orchard grass.

No. 684. From foothills en route from Alma Ata to Frunze, July 29, 1934.

107865 to 108014—Continued.

107908. DELPHINIUM sp. Ranunculaceae. Larkspur.

No. 633. From the mountains south of Alma Ata, July 23, 1934. A form with blue flowers.

107909. Delphinium sp. Ranunculaceae. Larkspur.

No. 653. En route to Alma Ata, July 21, 1934. A form with yellow flowers.

107910 to 107912. ELYMUS spp. Poaceae. Wild-rye.

107910 and 107911. ELYMUS SIBIRICUS L.

tall grass with heavy overhanging heads; a promising grass for forage.

For previous introduction see 90139.

107910. No. 616. From the rocky shore of Issyk Lake Canyon at 4,500 feet altitude, July 25, 1934.

107911. No. 665. Iss: Ata, July 25, 1934. Issyk, east of Alma

107912. ELYMUS GIGANTEUS Vahl. Siberian wild-rye.

No. 561. From the steppe 115 miles west of Alma Ata in alkali soil, July 29, 1934.

107913. Eremurus altaiacus (Pall.) Stev. Liliaceae.

No. 682. Alma Ata, July 23, 1934. An ornamental desert plant with long linear leaves forming a rosette from which rises a columnar spike of star-shaped rosynumle flowers. purple flowers.

107914. Eremurus sp. Liliaceae.

No. 622. From footbills southeast of Alma Ata, July 24, 1934.

107915. ERYSIMUM sp. Brassicaceae.

No. 676. Near Lake Issyk, July 26, 1934. A plant with bright-orange flowers.

107916 to 107927. FESTUCA spp. Poaceae. Fescue.

107916. FESTUCA ELATIOR L. Meadow fescue.

No. 641. Alma Ata Experiment Station, July 22, 1934.

107917. FESTUCA GIGANTEA (L.) VIII. Great fescue.

No. 685. Foothills southeast of Alma Ata, July 24, 1934. A shady grass up to 3 feet high.

For previous introduction see 99125.

107918. FESTUCA ELATIOR L.
Meadow fescue.

No. 686. Alma Ata Experiment Station, July 22, 1934. A loosely tufted perennial grass with short creeping rootstalks and erect stems up to 4 feet high.

For previous introduction see 107056.

107919. FESTUCA Sp.

No. 547. Mountains southeast of Alma Ata, July 24, 1934.

107920. FESTUCA OVINA DURIUSCULA (L.) Koch.

No. 588. Foothills southeast of Alma Ata, July 24, 1934.

107921. FESTUCA OVINA L.

No. 646. From the steppe northeast of Alma Ata, July 25, 1934.

107922. FESTUCA RUBRA L.

No. 619. Mountains east of Alma Ata, July 24, 1934.

107923. FESTUCA Sp.

No. 582. Mountains southeast of Alma Ata, July 24, 1934.

107924. FESTUCA ELATIOR L.

No. 632. Issyk Lake Canyon at 4,500 feet altitude, July 25, 1934. Found among gravel and rocks.

107925. FESTUCA OVINA L.

No. 651. From a dry slope of the Little Alma Ata River, July 23, 1934.

107926. FESTUCA Sp.

No. 559. From the steppe region 35 miles west of Alma Ata, July 29, 1934.

107927. FESTUCA OVINA L.

No. 580. Mountains east of Alma Ata, July 24, 1934.

107928. AVENA sp. Poaceae.

No. 594. July 26, 1934. Near Lake Issyk, east of Alma Ata, at 7,100 feet altitude.

107929. FESTUCA sp. Poaceae.

No. 649. Near Lake Issyk, east of Alma Ata, at 6,000 feet altitude, July 26, 1934.

107980. FESTUCA ELATIOR L. Poaceae.

No. 620. En route from Tashkent to Alma Ata, July 21, 1934. A bunch grass.

107931. GERANIUM sp. Geraniaceae.

No. 687. From Alma Ata, July 23, 1934.

107932. Hordeum brevisubulatum (Trin.)
Link. Poaceae.

No. 698. Found in moist soil along the Karakol River in the mountains near Frunze, August 4, 1934.

107933. IRIS ALBERTI Regel. Iridaceae.

No. 606. Mountains south of Alma Ata, July 23, 1934. A bearded iris with glaucous, sword-shaped leaves about as lyellowish toward the base, nearly 2 inches long. Native to Turkistan.

107934. ISOPYRUM ANEMONOIDES Kar. and Kir. Ranunculaceae.

No. 593. Rocks of Lake Issyk, east of Alma Ata, July 26, 1934. A subalpine perennial with triternately incised leaves and small panicles of white flowers resembling those of anemone. Native to central Asia.

107935 to 107937. IXIOLIRION spp. Amaryllidaceae.

107935. IXIOLIRION TATARICUM (Pall.) Herbert.

No. 623. East of Alma Ata, July 26, 1934.

For previous introduction and description see 107854.

107936. IXIOLIRION Sp.

No. 609. Alma Ata, July 23, 1934.

107865 to 108014—Continued.

107937. IXIOLIRION SD.

No. 693. From Alma Ata, July 23, 1934.

107938. JUNIPERUS Sp. Pinaceae.

No. 645. Near Lake Issyk at 7,000 feet altitude, July 26, 1934. A semiprostrate species.

107939. KOELERIA CRISTATA (L.) Pers. Poaceae. Grass.

No. 587. Mountains south of Alma Ata, July 24, 1934.

For previous introduction see 101660.

107940 to 107944. LATHYRUS spp. Fabaceae.

107940. LATHYRUS GMELINI (Fisch.) Fritsch.

No. 540. Foothills near Alma Ata, July 23, 1934. An excellent fodder plant. In protected situations, as among shrubs, this plant becomes 8 feet high, but it is usually between 3 and 4 feet.

For previous introduction see 32190.

107941. LATHYRUS TUBEROSUS L.

No. 612. Foothills near Alma Ata, July 23, 1934. A tuberous rooted lathyrus, native to northern Europe, which resembles the flat pea, Lathyrus sylvestris, but has red flowers.

For previous introduction see 91433.

107942. LATHYRUS Sp.

No. 660. Alma Ata Experiment Station, July 22, 1934.

107943. LATHYRUS PRATENSIS L.

No. 635. Mountains south of Alma Ata, July 23, 1934. A form with yellow flowers

107944. LATHYRUS sp. -

No. 675. Mountains southeast of Alma Ata, July 24, 1934.

107945. LIGULARIA MACROPHYLLA DC. Asteraceae.

No. 625. South of Alma Ata, July 13, 1934. A hardy perennial 4 to 6 feet high, with large elliptic, dentate leaves a foot long and long panicles of yellow flowers. Used as a silage plant. Native to central Asia.

107946. LONICERA HISPIDA Pall. Caprifoliaceae. Honeysuckle.

No. 683. Alma Ata, July 23, 1934. A western Chinese shrub 3 to 5 feet high, with oblong leaves, yellowish flowers over an inch long subtended by whitish bracts nearly an inch long, and followed by oblong, bright-red berries.

For previous introduction see 76260.

107947. MEDICAGO FALCATA L. Fabaceae. Yellow-flowered alfalfa.

No. 650. East of Alma Ata, July 25, 1934.

107948. MEDICAGO LUPULINA L. Fabaceae. Black medick.

No. 664. Near the Little Alma Ata River, July 23, 1934.

107949 to 107951. Melica spp. Poaceae. Grass.

107949. MELICA ALTISSIMA L.

No. 572. From foothills south of Alma Ata, July 23, 1934.

For previous introduction see 84455.

107950. MELICA CILIATA L.

No. 629. From dry slopes of mountains along the Little Alma Ata River, July 23, 1934.

For previous introduction see 84456.

107951. MELICA CUPANI GUSS.

No. 591. From the mountains surrounding Lake Issyk, east of Alma Ata, July 26, 1934. A tall-growing species which seems to thrive in poor dry soil.

For previous introduction see 64954.

107952. MELILOTUS OFFICINALIS (L.) Lam. Fabaceae. Sweetclover.

No. 626. Alma Ata Experiment Station, July 22, 1934.

107953 and 107954. MILIUM EFFUSUM L. Poaceae. Millet grass.

For previous introduction see 84462.

107953. No. 611. From the mountains along the Little Alma Ata River, July 23, 1934.

107954. No. 673. Near Lake Issyk, east of Alma Ata, July 26, 1934.

107955. MYRICARIA ALOPECUROIDES Schrenk. Tamaricaceae.

No. 542. Near Lake Issyk, east of Alma Ata, July 26, 1934. A shrub with linearlanceolate leaves and dense spikes of small pink flowers. Native to central Asia.

107956. OXYTROPIS OXYPHYLLA (Pall.) DC. Fabaceae.

No. 574. From the foothills southeast of Alma Ata, July 24, 1934. Plants 6 to 12 inches high with roots 5 to 6 feet long, which thrive on poor dry soil.

For previous introduction see 107689.

107957. PAEONIA sp. Ranunculaceae.

No. 668. From the foothills south of Alma Ata, July 24, 1934. A hybrid of unknown parentage.

107958 to 107960. PAPAVER spp. Papaveraceae. Poppy.

107958. PAPAVER CROCEUM Ledeb.

No. 608. Near Lake Issyk, south of Alma Ata, July 26, 1934. A perennial poppy, native to rocky situations in central Asia. The leaves are pinnately divided, and the flowers are orange yellow.

107959. PAPAVER Sp.

No. 666. Forty miles west of Alma Ata on very dry hills, July 24, 1934.

107960. Papaver pavoninum Schrenk.

No. 578. Stalinabad, Tajikistan, July 1, 1934. An annual poppy with hairy pinnately parted, oblong leaves and rather large, deep-pink flowers on long stems. Native to the region around Ala Kul. Siberia.

107865 to 108014—Continued.

107961. PHALARIS ARUNDINACEA L. Poaceae. Reed canary grass.

No. 570. From the mountains south of Alma Ata, July 23, 1934. A tall rough grass which is a good forage plant.

For previous introduction see 75349.

107962. PHALARIS Sp. Poaceae. Grass.

No. 613. From the foothills near Alma Ata, July 23, 1934.

107963 to 107965. Phleum spp. Poaceae. Timothy.

107963. PHLEUM ALPINUM L.

No. 596. Near Lake Issyk, east of Alma Ata, July 26, 1935.

107964. PHLEUM PHLEOIDES (L.) Karst.

No. 590. From the mountains east of Alma Ata, July 24, 1934.

107965. PHLEUM Sp.

No. 624. From the dry plains east of Alma Ata, July 25, 1934.

107966 to 107980. Poa spp. Poaceae. Bluegrass.

107966. POA ALPINA L.

No. 652. From mountains surrounding Lake Issyk, July 26, 1934.

107967 and 107968. POA BULBOSA L.

107967. No. 553. From dry foothills 135 miles west of Alma Ata, July 29, 1934.

107968. No. 663. From the steppe northeast of Alma Ata, July 25, 1934.

107969 to 107971. POA PRATENSIS L. Kentucky bluegrass.

107969. No. 640. From mountains near Alma Ata at 4,000 feet altitude, July 24, 1934.

107970. No. 662. From foothills near Alma Ata, July 23, 1934.

107971. No. 657. Mountains south of Alma Ata, July 23, 1934.

107972. Poa sp.

No. 604. Near Lake Issyk, east of Alma Ata, July 26, 1934.

107973. Poa sp.

No. 667. Near Alma Ata, July 1934. 107974. Poa sp.

No. 636. Mountains east of Alma Ata, July 24, 1934.

107975. Poa sp.

No. 571. Mountains south of Alma Ata, July 23, 1934.

107976. Poa sp.

No. 679. From a rocky slope in Lake Issyk Canyon at 4,500 feet altitude, July 25, 1934.

107977. Poa sp.

No. 614. Lake Issyk region at 4,500 feet altitude, in rocky soil, July 25, 1934.

107978. POA COMPRESSA L.

No. 602. Lake Issyk, east of Alma Ata, July 26, 1934.

107979. Poa sp.

No. 592. From the mountains near Lake Issyk, east of Alma Ata, July 26, 1934.

107980. Poa sp.

[No W. and E. number.] This seed was in a package with Anygdalus sp., which was collected July 15, 1934, on the Little Chingan, east of Uzbekistan.

107981. POLYGONUM SONGARICUM Schrenk. Polygonaceae.

No. 639. Mountains of Alma Ata, July 23, 1934. A perennial over a foot high, with a thick rootstock, membranous ovate leaves about 3 inches long, and sessile racemes of purplish flowers. Native to central Asia.

107982. PRUNUS ARMENIACA L. Amygdala-Apricot. ceae.

No. 585. Tolgar, east of Alma Ata, July 26, 1934. Wild apricots.

107983 to 107985. PUCCINELLIA spp. Poaceae.

107983. PUCCINELLIA Sp.

No. 552. From the steppe region, 35 miles west of Alma Ata, July 29, 1934. 107984. PUCCINELLIA Sp.

No. 558. West of Alma Ata, 100 miles, in somewhat salty soil, July 29,

107985. PUCCINELLIA Sp.

No. 550. West of Alma Ata 100 miles, on somewhat salty soil, July 29, 1934.

107986, ROSA Sp.

No. 586. Mountains of Lake Issyk, east of Alma Ata, July 26, 1934. A wild rose. 107987. Rosa sp. Rosaceae.

658. No. 658. From near the Little Alma Ata River, July 23, 1934. A wild rose.

107988. RUMEX SONGARICUS Fisch. and Mey. Polygonaceae.

No. 583. From the mountains near Lake Issyk, east of Alma Ata, July 26, 1934. An annual with oblong-ovate leaves, native to mountainous regions of central Asia.

107989. (Undetermined.)

No. 563. From rocky mountain slopes, en route from Alma Ata to Frunze, July 29, 1934.

107990. SCABIOSA Sp. Dipsacaceae.

No. 654. East of Alma Ata, July 25, 1934.

107991. SILENE sp. Silenaceae.

No. 564. En route from Alma Ata to Frunze, July 29, 1934. A rock flower.

107992 to 108001. STIPA spp. Poaceae. Feathergrass.

107992. STIPA CAPILLATA L.

No. 577. From the steppe and foothills northeast of Alma Ata, July 25, 1934.

107993. STIPA CAPILLATA L.

No. 576. From the foothills southeast of Alma Ata, July 24, 1934.

107865 to 108014—Continued.

107994. STIPA Sp.

No. 697. About 40 miles west of Alma Ata, July 29, 1934. A large bunch

107995. STIPA Sp.

No. 579. From the mountains east of Alma Ata at 7,000 feet altitude, July 24, 1934.

107996. STIPA sp.

No. 568. Along the railroad, east of Tulkibas, en route from Tashkent to Alma Ata, July 21, 1934.

107997. STIPA SD.

No. 551. From dry foothills bordering the steppe, 135 miles west of Alma Ata, July 29, 1934.

107998. STIPA Sp.

No. 549. From the steppe, 38 miles west of Alma Ata, July 29, 1934.

107999. STIPA SD.

No. 545. Along the railroad east of Samarakand, Uzbekistan, July 18, 1934.

108000. STIPA REDOWSKII Trin.

No. 566. En route from Alma Ata to Frunze, July 29, 1934. A perennial bunch grass 1 to 3 feet high, from dry hills and plains. Native to central

108001. STIPA sp.

No. 694. Along the railroad east of Tulkibas, en route from Tashkent to Alma Ata, July 21, 1934.

108002. THALICTRUM MINUS L. Ranunculaceae. Low meadowrue.

No. 581. From the foothills near Alma Ata, July 23, 1934. A species 1 to 2 feet high, native to Europe, Asia, and northern Africa, with loose panicles of drooping yellow or greenish flowers.

For previous introduction see 106906.

108003. THALICTRUM sp. Ranunculaceae.

No. 634. Near Lake Issyk, July 26, 1934. Received under the name "setedum," for which a place of publication and description have not been found.

108004 to 108007. TRIFOLIUM spp. Fabaceae.

108004. TRIFOLIUM REPENS L. White clover.

No. 631. Along the Little Alma Ata River, July 23, 1934.

108005. TRIFOLIUM PRATENSE L. Red clover.

No. 569. H July 23, 1934. Foothills near Alma Ata,

108006. TRIFOLIUM REPENS L. White clover.

No. 677. H July 23, 1934. Foothills near Alma Ata,

108007. TRIFOLIUM REPENS L. White clover.

No. 692. Near Lake Issyk, east of Alma Ata, July 26, 1934.

108008. TRISETUM Sp. Poaceae. Grass.

No. 639. Above Lake Issyk at 7,000 feet altitude, July 26, 1934.

108009 to 108014. VICIA spp. Fabaceae.

108009. VICIA SEPIUM L.

No. 589. Bush vetch. From the foothills near Alma Ata, July 23, 1934. A perennial vetch native to Europe and Asia. It is semiupright or bushy in habit and is eaten by stock of all kinds.

For previous introduction see 52278.

108010 and 108011. VICIA TENUIFOLIA Roth.

A deep-rooted perennial, cut for hay, which thrives in very dry situations.

For previous introduction see 107129.

108010. No. 615. Foothills near Alma Ata, July 23, 1934.

108011. No. 537. Mountains south of Alma Ata, July 25, 1934.

108012. VICIA Sp.

No. 538. Mountains south of Alma Ata, July 23, 1934.

108013. VICIA Sp.

No. 644. Experiment station at Alma Ata, July 22, 1934.

108014. VICIA sp.

No. 670. Experiment station at Alma Ata, July 22, 1934.

108015. LICANIA RIGIDA Benth. Rosa-

From Ceará, Brazil. Seeds presented by H. A. Gardner, Institute of Paint and Varnish Research, Washington, D. C., through the Bureau of Chemistry and Soils. Received March 28, 1935.

A large tropical tree of the Brazilian forests, with rigid leathery oblong leaves, 3 to 5 inches long, and shining green above. The greenish, ovoid-cylindrical fruits, about 2 inches long, yield an oil known as oiticica oil, that is used in the paint and varnish industry.

For previous introduction see 106500.

108016. AECHMEA MEXICANA Baker. Bromeliaceae.

From Mexico. Plants purchased from Dr. C. A. Purpus, Zacuanam, Huatusco. Numbered in January 1935.

A tropical epiphyte, allied to the billbergias, with a basal rosette of large, long, fine-toothed leaves and a lax panicle of crimson flowers borne on a long stalk arising from the center of the plant. Native to Mexico.

108017. CASTANEA Sp. Fagaceae.

From Indo-China. Seeds presented by M. Poilane, Annam, Institut des Recherches Agronomique de l'Indochine, Division de Botanique. Numbered in January 1935.

108018. Euphorbia sp. Euphorbiaceae.

From Madagascar. Seeds presented by Miss Bargyla Rateaver, Fort Dauphin. Received March 22, 1935.

Introduced for Department specialists.

108019. EUPHORBIA sp.

From Mexico. Seeds presented by the V. D. Anderson Co., Cleveland, Ohio. Received April 9, 1935.

Introduced for Department specialists.

108020. LIVISTONA ROTUNDIFOLIA (Lam.) Mart. Phoenicaceae. Java fan palm.

From Cuba. Plants presented by Robert M. Grey, Superintendent, Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos, through F. G. Walsingham. Received October 29, 1934. Numbered in January 1935.

Seedlings from seeds grown in Cuba. An erect fan-leaved palm, with a trunk ultimately about 50 feet high and 18 inches in diameter. The roundish leaves, with 60 to 80 segments, are 3 to 5 feet across.

For previous introduction see 104696.

108021. SABAL MAURITIAEFORMIS (Karst.) Griseb. and Wendl. Phoenicaceae.

From Cuba. Seedlings presented by the Department of Agriculture, British Guiana, through Robert M. Grey, Superintendent of the Atkins Institution of the Arnold Arboretum, Soledad, Clenfuegos. Received October 9, 1934.

A handsome West Indian fan-leaved palm with a trunk 60 to 80 feet in height and over a foot in diameter and large roundish leaves multifid to the middle, up to 12 feet in diameter. The black fruits are about the size of peas.

For previous introduction see 104703.

108022. MANGIFERA INDICA L. Anacardiaceae. Mango.

From Trinidad, British West Indies. Seeds presented by Dr. Doris M. Cochran, assistant curator of reptiles, United States National Museum. Numbered in January 1935.

Introduced for Department specialists.

108023. EULOPHIA ANDAMENSIS Reichb. Orchidaceae.

From Siam. Bulbs presented by Dr. H. M. Smith, Ministry of Lands and Agriculture, Bureau of Fisheries, Bangkok. Received January 5, 1935.

A terrestrial orchid, native to the Andaman Islands, with oblong-lanceolate acuminate leaves.

108024. PHYLLOSTACHYS sp. Poaceae.

From China. Plants presented by the Lingnan University, Canton. Numbered in January 1935.

No. 7484.

108025 to 108119.

From the Union of Soviet Socialist Republics. Seeds collected in Turkistan by H. L. Westover and C. R. Enlow, Bureau of Plant Industry. Received November 5, 1934. Numbered in January 1935.

Introduced for Department specialists.

108025. ACONITUM sp. Ranunculaceae.

No. 791. On the mountains along the Karakol River near Lake Issyk, August 4, 1934.

108026 to 108037. AGROPYRON spp. Poaceae. Wheatgrass.

108026 to 108032. AGROPYRON CRISTATUM (L.) Gaertn. Crested wheatgrass.

108026. No. 713. From dry clay foothills south of Frunze, July 31, 1934.

108025 to 108119—Continued.

108027. No. 726. Dry flat slope, Jetty Augus near Lake Issyk, August 3, 1934.

108028. No. 735. From dry clay hills near the head of Lake Issyk, August 2, 1934. This is either a dwarf form or the plants have become stunted from lack of moisture.

108029. No. 751. Kurdi Plateau, 30 miles northeast of Frunze, July 29, 1934.

108030. No. 752. From the mountains near Lake Issyk, August 3, 1934.

108031. No. 733. Dry land near Lake Issyk, August 5, 1934.

108032. No. 760. Near the Government horse farm at Lake Issyk, August 6, 1934. A dwarf form.

108033. AGROPYRON REPENS (L.) Beauv. Quackgrass.

No. 746. Chu River Canyon near Lake Issyk, August 6, 1934.

108034. AGROPYRON Sp.

No. 749. From foothills, Kurdi Plateau, 30 miles northeast of Frunze, July 29, 1934.

108035. AGROPYBON INERME (Scribn. and Smith) Rydb. Beardless wheatgrass.

No. 705. Chu River Canyon, east of Tokmak, on a dry hillside, August 5, 1934. A perennial bunch grass related to Agropyron spicatum. Native to the northwestern United States and Canada. 108036. AGROPYRON Sp.

No. 767. Near the Government horse farm at Lake Issyk, August 5, 1934.

108037. AGROPYRON STRIATUM Nees.

No. 706. Along the Karakol River, near Lake Issyk, in moist soil, August 4,

108088 and 108039. Andropogon ischaemum L. Poaceae.

108038. No. 729. From dry stony mountainside near Lake Issyk, August 5, 1934.

108039. No. 737. Dry land near Lake Issyk, August 5, 1934.

108040. ASTER sp. Asteraceae.

No. 715. Karakol Mountains, near Lake Issyk, August 4, 1934. A purple aster with yellow center.

108041 to 108044. ASTRAGALUS spp. Faba-

108041 and 108042. Collected along the Karakol River near Lake Issyk, August 4, 1934.

108041. ASTRAGALUS Sp.

No. 789.

108042. ASTRAGALUS Sp.

No. 758.

108043. ASTRAGALUS Sp.

No. 702. Dry clay foothills south of Frunze, July 31, 1934.

- 108044. ASTRAGALUS Sp.

No. 730. From the sandy rocky shore of Lake Issyk, August 5, 1934.

108025 to 108119—Continued.

108045 and 108046. From a dry mountainside near Lake Issyk, August 3, 1934.

108045. AVENA sp. Poaceae. Oats. No. 794.

108046. AVENA sp. Poaceae. Oats. No. 796.

108047. BERBERIS sp. Berberidaceae.

No. 728. From a mountain slope along the Karakol River near Lake Issyk, August 4, 1934.

108048. Bromus sp. Poaceae.

Bromegrass.

No. 748. From dry hillside near Frunze, July 31, 1934.

108049. Bromus inermis Leyss. Poaceae. Bromegrass.

No. 725. From a dry gully near Lake Issyk, August 3, 1934.

108050. CALAMAGROSTIS sp. Poaceae.

No. 755. Near the river at Frunze, July 31, 1934.

108051. CARAGANA sp. Fabaceae.

No. 756. Along the Jetty Augus River, August 3, 1934.

108052. CODONOPSIS OVATA Benth. Campanulaceae.

No. 719. From mountains along the Karakol River, August 4, 1934. A decumbent perennial with stems 6 to 12 inches long, ovate-cordate leaves three-fourths of an inch long, and pale-blue, bell-shaped axillary and terminal flowers over an inch in length. Native to the Himalayas.

108053. DELPHINIUM sp. Ranunculaceae.

No. 731. From dry adobe soil in the footbills near Frunze, July 31, 1934. A larkspur with yellow flowers.

108054. DESCHAMPSIA Sp. Poaceae. Grass.

No. 708. Collected in mountains near the Karakol River, August 4, 1934.

108055. DIANTHUS sp. Silenaceae. Pink

No. 703. Near Lake Issyk, August 5, 1934. Rock pink.

108056. EPHEDRA sp. Gnetaceae.

No. 780. Foothills south of Frunze, July 31, 1934.

108057 to 108061. FESTUCA spp. Poaceae. Fescue.

108057. FESTUCA OVINA L.

No. 750. From a dry plateau 25 miles northeast of Frunze, July 29, 1934.

108058. FESTUCA ELATIOR ARUNDINACEA (Schreb.) Wimm.

No. 742. Foothills of Kurdi Plateau by a stream, 25 miles northeast of Frunze, July 29, 1934.

108059. FESTUCA RUBRA L.

No. 714. From rocks on the bank of the Karakol River, August 4, 1934.

108060. FESTUCA Sp.

No. 710. From a dry hillside near Frunze, July 31, 1934.

108025 to 108119—Continued.

108061. FESTUCA OVINA L.

No. 754. From a dry ridge near Lake Issyk, August 3, 1934.

108062. Hedysarum sp. Fabaceae.

No. 734. Along the Jetty Augus River, August 3, 1934.

108063. HIPPOPHAE RHAMNOIDES L. Elaeagnaceae. Common sea-buckthorn.

No. 778. From a rocky river bottom near Frunze, July 31, 1934. A hardy spiny deciduous shrub with white branches, olive-green leaves, and yellow berries.

For previous introduction see 105886.

108064. HORDEUM Sp. Poaceae.

No. 723. Kergyra, on the Chu River, 35 miles below Lake Issyk, August 1, 1934.

108065. ELYMUS JUNCEUS Fisch. Poaceae.

No. 736. Vigorous bunch grass on dry rocky slopes of the Chu River Canyon, east of Tokmak, August 6, 1934.

108066 to 108068. Koeleria spp. Poaceae. **108066.** Koeleria sp.

No. 739. From dry adobe hillside in the foothills near Frunze, July 21, 1934.

No. 782. From dry land beside Lake Issyk, August 5, 1934.

108068. KOELERIA CRISTATA (L.) Pers.

No. 717. Along the Karakol River, August 4, 1934.

108069. LATHYRUS TUBEROSUS L. Fabaceae.

No. 732. From dry land, near an irrigation ditch in the region of Lake Issyk, August 5, 1934.

For previous introduction and description see 107941.

108070. LATHYRUS Sp. Fabaceae.

No. 764. From the village of Jetty Augus on Lake Issyk, August 3, 1934.

108071. Lotus sp. Fabaceae.

No. 722. Beside a river near Frunze, July 31, 1934.

108072 to 108075. MEDICAGO spp. Fabaceae.

108072. MEDICAGO FALCATA L. Yellow-flowered alfalfa.

No. 761. From Jetty Augus on Lake Issyk, August 3, 1934.

108073. MEDICAGO FALCATA L. Yellow-flowered alfalfa.

No. 776. From the foothills south of Frunze, July 31, 1934.

108074. MEDICAGO LUPULINA L. Black medick.

No. 798. Near the city of Karakol, August 4, 1934.

108075. MEDICAGO SATIVA L. Alfalfa

No. 747. From the dry hillside, Chu River Canyon, east of Tokmak, August 6, 1934.

108076. Melica sp. Poaceae.

No. 783. From dry mountain slopes near Lake Issyk, August 3, 1934.

108025 to 108119—Continued.

108077. MILIUM EFFUSUM L. Poaceae. Millet grass.

No. 774. From fir woods along the Karakol River, August 4, 1934.

108078. Onobrychis sp. Fabaceae.

No. 704. From a very steep dry stony hillside near Frunze, July 31, 1934.

108079. ORYZOPSIS Sp. Poaceae.

No. 781. From a dry slaty hillside in the foothills of the Kurdi Plateau, about 30 miles northeast of Frunze, July 29, 1934.

108080. Oryzopsis sp. Poaceae.

No. 766. From dry rocky slopes of Lake Issyk, August 5, 1934.

108081. OXYTROPIS sp. Fabaceae.

No. 721. Along the Jetty Augus River, August 3, 1934.

108082. PAPAVER sp. Papaveraceae.

No. 701. Along the Karakol River, August 4, 1934. A plant with yellow flowers.

108083. PHLEUM GRAECUM Boiss. and Heldr. Timothy.

No. 775. From the village of Jetty Augus, August 3, 1934.

108084. PHLEUM sp. Poaceae. Timothy.

No. 740. From dry hillsides in the foothills near Frunze, July 31, 1934. An annual grass.

108085. Poa sp. Poaceae. Bluegrass.

No. 799. Found on a rocky precipice in the mountains along the Karakol River near Lake Issyk, August 4, 1934.

108086. POA PRATENSIS L. Poaceae. Kentucky bluegrass.

No. 724. Along the Karakol River near Lake Issyk, August 4, 1934.

108087. Polypogon sp. Poaceae.

No. 762. Foothills about 30 miles northeast of Frunze, July 29, 1934.

108088. PRUNUS sp. Amygdalaceae.

No. 777. Chu River Canyon, east of Tokmak, August 6, 1934.

108089. PRUNUS sp. Amygdalaceae.

No. 772. From a dry rocky slope in the footbills near Frunze, July 31, 1934.

108090 to 108092. Rosa spp. Rosaceae.

Rose.

108090. Rosa sp.

No. 795. Along the Karakol River, August 4, 1934. A wild rose.

108091. Rosa sp.

No. 727. Along the Jetty Augus River, west of Karakol, August 3, 1934. 108092. Rosa sp.

No. 745. Rocky flats near Frunze, July 31, 1934.

108093. Salvia sylvestris L. Menthaceae.

No. 712. In the mountains near Karakol, Lake Issyk region, August 4, 1934. A salvia with blue flowers. 108025 to 108119—Continued.

108094 to 108103. STIPA spp. Poaceae. Feathergrass.

108094. STIPA Sp.

No. 768. Near Lake Issyk, August 5, 1934.

108095. STIPA Sp.

No. 716. From dry land near Lake Issyk, August 5, 1934.

108096. STIPA SD.

No. 743. From dry land near Lake Issyk, August 5, 1934.

108097. STIPA Sp.

No. 757. From a clay hillside in the foothills near Frunze, July 31, 1934.

108098. STIPA Sp.

No. 771. Along the Karakol River near Lake Issyk, August 4, 1934.

108099. STIPA Sp.

No. 784. From dry mountains near Lake Issyk, August 3, 1934.

108100. STIPA sp.

No. 785. From dry mountains near Lake Issyk, August 3, 1934.

108101 and 108102. Collected near Lake Issyk, August 2, 1934.

108101. STIPA sp.

No. 792.

108102. STIPA SD.

No. 787.

108103. STIPA Sp.

No. 744. From a dry adobe hillside in the foothills near Frunze, July 31, 1934. Bunch grass.

108104 to 108106. THALICTRUM spp. Ranunculaceae.

108104 and 108105. Collected along the Karakol River near Lake Issyk, August 4, 1934.

108104. THALICTRUM Sp.

No. 738.

108105. THALICTRUM sp.

No. 797.

108106. THALICTRUM Sp.

No. 788. From dry land along an irrigating ditch near Lake Issyk, August 5, 1934.

108107 to 108109. TRIFOLIUM spp. Fabaceae. Clover.

108107. TRIFOLIUM REPENS L. White clover.

No. 793. Along the Jetty Augus River near Lake Issyk, August 8, 1934.

108108. TRIFOLIUM PRATENSE L.
Red clover.

No. 720. Near the town of Karakol, August 4, 1934.

108109. TRIFOLIUM sp.

No. 733. Near a stream at Frunze, July 31, 1934.

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108025 to 108119—Continued.

108110. TRIGONELLA ARCUATA Meyer. Fa-

No. 790. From dry mountain side near Lake Issyk, August 3, 1934. An annual leguminous plant native to dry situations in Asia Minor.

For previous introduction see 61446.

108111. TRISETUM sp. Poaceae.

No. 718. From mountains near the Karakol River, August 8, 1934.

108112 to 108114. VICIA spp. Fabaceae. Vetch.

108112. VICIA sp.

No. 765. Jetty Augus, near Lake Issyk, August 5, 1934.

108113. VICIA Sp.

No. 770. Along the Karakol River near Lake Issyk, August 4, 1934.

108114. VICIA sp.

No. 773. From dry gravelly soil near Lake Issyk, August 6, 1934.

108115. (Undetermined.)

No. 711. Karakol River near Lake Issyk, August 4, 1934. A pernicious weed, with rootstalks and very attractive blue flowers.

108116. (Undetermined.)

No. 759. Along the Karakol River near Lake Issyk, August 4, 1934.

108117. (Undetermined.)

No. 786. A dry rocky slope near Lake Issyk, August 1, 1934. A leguminous spiny shrub.

108118. (Undetermined.)

No. 741. Rabatsky, near Lake Issyk, August 6, 1934. A prostrate shrub found in dry rocky soil.

108119. (Undetermined.)

No. 707. Along the Karakol River, August 4, 1934. Flowering rock plants found in the mountains.

108120 to 108216. Solanum spp. Solanaceae.

From the Union of Soviet Socialist Republics. Tubers presented by the Institute of Plant Industry, Leningrad. Received January 23, 1935.

A collection of potatoes said to be frost resistant; introduced for Department specialists. Unless otherwise stated these tubers are all hybrids.

108120 to 108215. SOLANUM TUBEROSUM L. Potato

108120. No. 2.

108121. No. 3.

108122. No. 12.

108123. No. 21.

108124. No. 26.

108125. No. 26-a.

108126. No. 31.

108127. No. 35.

108128. No. 43.

108129. No. 52.

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108120 to 108216-Continued.
                                                     108120 to 108216-Continued.
                                                          108182. No. 3086.
     108130. No. 96.
                                                          108188. No. 3091.
     108131. No. 112.
                                                          108184. No. 3094.
     108132. No. 158.
                                                          108185, No. 8080.
     108133. No. 165.
                                                             new variety.
     108134. No. 198.
                                                          108186. No. 8018.
new variety.
     108135. No. 213.
                                                          108187. No. 8023. A
     108136. No. 225.
                                                             new species.
     108137. No. 231.
                                                          108188. No. 0205. A
wild potato.
     108138. No. 232.
                                                          108189. No.
                                                                          02113.
    108139, No. 236,
                                                             A wild potato.
    108140. No. 465.
                                                          108190. No. 2/S-6.
    108141. No. 485.
                                                          108191. No. 2/178.
    108142. No. 492.
                                                          108192. No. 2/184.
    108143. No. 497.
                                                          108193. No. 3/184.
    108144. No. 528.
                                                          108194. No. 4/184.
    108145. No. 560.
                                                          108195. No. 4/238.
    108146. No. 597.
                                                          108196. No. 5/107.
    108147. No. 652.
                                                         108197. No. 11/108.
    108148. No. 688.
                                                         108198. No. 13/107.
    108149. No. 712.
                                                         108199. No. 18/108.
    108150. No. 722.
                                                         108200. No. 26/108.
    108151. No. 749.
                                                         108201. No. 44/107.
    108152. No. 797.
                                                         108202. No. 160/74.
    108153. No. 811.
                                                         108203. No. 314/80.
    108154. No. 815.
                                                         108204. No. 316/81.
    108155. No. 832.
                                                         108205. No. 413/89.
    108156. No. 837.
                                                         108206. No. 478/99.
    108157. No. 838.
                                                         108207. No. 482/101.
    108158. No. 857.
                                                         108208. No. 891/88.
    108159. No. 870.
                                                         108209. No. 1803/19.
    108160. No. 871.
                                                         108210. No. 1805/18.
    108161. No. 880.
                                                         108211. No. 1805/17.
    108162. No. 882.
                                                         108212. No. 1805/2.
    108163. No. 884.
                                                         108213. No. 2009/109.
    108164. No. 886.
                                                         108214. No. 2/53. A
    108165. No. 888.
                                                            wild potato.
    108166. No. 901.
                                                         108215. No. 889.
    108167. No. 906.
                                                      108216. SOLANUM Sp.
                                                      A wild potato received under the name "vavilovii," for which a place of publication has not been found.
    108168. No. 909.
    108169. No. 912.
    108170. No. 920.
                                                    108217 to 108228.
    108171. No. 986.
                                                   From Surinam. Seeds collected by W. Archer, Bureau of Plant Industry. ceived January 11, 1935.
    108172. No. 987,
    108173. No. 999.
                                                   Collected at the Experimen Sandrij No. 1, in November 1934.
                                                                             Experiment
                                                                                             Station.
    108174. No. 1003.
    108175. No. 1004.
                                                      108217. DIOCLEA LASIOCARPA Mart. Faba-
    108176. No. 1006.
                                                        ceae.
                                                      No. 2743. A small vine clambering over low shrubs. The lavender and white flowers are in terminal racemes.
    108177. No. 1012.
   108178. No. 1013.
                                                      108218. TEPHROSIA
   108179. No. 1019.
                                                                            SESSILIFLORA (Poir.)
                                                        Hassl. Fabaceae.
   108180. No. 1055.
                                                      No. 2829. An herb 2 to 3 feet high, with compound leaves, with oblong-obtuse
   108181. No. 1060.
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108217 to 108228-Continued.

leaflets, whitish beneath, and pale yellowgreen flowers. Native to the Mediterranean countries.

108219. EUGENIA Sp. Myrtaceae.

No. 2789. A low shrub 2 to 3 feet high, with white flowers and red berries.

108220. GALACTIA VELUTINA Benth. Fa-

No. 2848. A perennial climber, softhairy throughout, with oval-obtuse leaflets. Native to British Guiana.

108221. Indigofera suffruticosa Mill. Fabaceae. Indigo.

No. 2819. A low shrub up to 3 feet high, with rose to salmon-colored flowers.

108222. Jacaranda Copaia (Aubl.) Don. Bignoniaceae.

No. 2801. A large handsome tree 60 to 80 feet high, with opposite bipinnate leaves 1 to 2 feet long and sky-blue flowers in large terminal panicles. Native to British Guiana.

For previous introduction see 106374.

108223. Manihot esculenta Crantz. Euphorbiaceae. Cassava.

No. 2762. Cultivated at the station.

108224. MESOSETUM LOLIIFORME (Hochst.) Chase. Poaceae.

No. 2730. A grass found on slopes and open places where it acts as a sand binder.

For previous introduction see 47027.

108225. Monnieria Trifolia L. Rutaceae.

No. 2778. Oriri. An annual herb up to 2 feet high, with white flowers. Native to coastal regions of northern South America.

108226. PAULLINIA ACUMINATA Uittien. Sapindaceae.

No. 2749. A vine from the edge of the clearing, with white flowers and orange-colored fruits.

108227. VISMIA CAYENNENSIS (Jacq.) Pers. Hypericaceae.

No. 2706. Scotelweg, November 12, 1934. A shrub or small tree about 18 feet high, with ovate leaves and waxy, green flowers, white-fuzzy within.

108228. (Undetermined.)

No. 2817. Near Sandrij No. 1, November 25, 1934. A scanty shrub with pale, minute flowers.

108229 to 108231. LESPEDEZA spp. Fabaceae.

From South Manchuria. Seeds presented by the Manshu Nosan Shokai, Inc., Dairen. Received January 18, 1935.

Introduced for Department specialists.

108229. LESPEDEZA ROBUSTA Nakai.

A shrub about 10 feet high, with ovateoblong leaflets and small purple flowers in short racemes. Native to the mountains of Chosen.

108230. LESPEDEZA DAURICA (Laxm.) Schindler.

A tall annual, up to 3 feet high, with small white flowers.

For previous introduction see 91256.

108229 to 108231—Continued.

108231. LESPEDEZA UEKII Nakai.

For previous introduction and description see 107755.

108232 to 108247.

From Germany. Seeds presented by the Director, Tabak-Forschungsinstitut für das Deutsche Reich, Forchbeim-Karlsruhe-Baden. Received January 21, 1935.

Introduced for Department specialists.

108232 to 108243. NICOTIANA spp. Solanaceae.

108232. NICOTIANA CHINENSIS Forsch

An annual relative of common tobacco, *Nicotiana tabacum*, which grows to a height of 6 feet, with pink flowers. Native to China.

For previous introduction see 72692. 108283. NICOTIANA LONGIFLORA Cav.

An erect annual or perennial, 2 to 3 feet tall, with slender scabrous bristly stems and somewhat clasping, spatulate to lanceolate leaves. The night-opening, fragrant flowers, 4 inches long, in loose terminal racemes, are pale violet to yellowish violet without and white within with yellowish-violet anthers. Native from Texas to Chile and Argentina.

For previous introduction see 42338.

108234. NICOTIANA TABACUM MACRO-PHYLLA Dunal.

A large-leaved variety with large red flowers, of which there are several horticultural forms.

For previous introduction see 42353. 108285. NICOTIANA NUDICAULIS S. Wats.

A viscid-pubescent herb 1 to 2 feet high, with entire, oblanceolate leaves up to 18 inches long. Native to Nuevo Leon, Mexico.

108236. NICOTIANA PETIOLARIS Schlecht.

A tall annual tobacco, closely related to the common type.

108237. NICOTIANA PLUMBAGINIFOLIA VIV.

An annual species, 2 feet high, with white flowers which appear in May. Native to tropical America.

For previous introduction see 42340.

108238 and 108239. NICOTIANA RUSTICA L. 108238. Variety Brasilia.

108239. Variety Ovata.

 $\begin{array}{ccc} \textbf{108240.} \times & \text{Nicotiana} & \text{sanderae} & W. \\ \text{Wats.} \end{array}$

A hybrid of Nicotiana alata and N. forgetiana. The plant is about 3 feet high with rich-green foliage. Each of the six to nine branches bears 6 to 10 large rosy red flowers, the largest over 2 inches across.

108241 and 108242. NICOTIANA TABACUM L.

108241. Variety Calycina.

108242. Variety Lacerata.

108243. NICOTIANA TEXANA MAXIM.

A coarse annual, closely allied to Nicotiana rustica, differing in its more

108232 to 108247—Continued.

slender stems, smaller flowers. shorter leaves, and

108244 to 108246. LYCOPERSICON ESCULENTUM Mill. Solanaceae. Tomato. Tomato.

108244. Variety baccis luteis.

108245. Variety cerasiforme.

108246. Variety pyriforme.

108247. SOLANUM CITRULLIFOLIUM A. Br. Solanaceae.

A prickly annual with pinnatifid leaves and large violet flowers over an inch across. Native to Texas and Arizona.

For previous introduction see 93094.

108248 and 108249.

om India. Seeds presented by W. Head, Acting Deputy Director of the Botanic Gardens, Saharanpur. Received January From India. 23, 1935

Introduced for Department specialists.

108248. APIUM GRAVEOLENS L. Apiaceae. Celery.

108249. DAUCUS CAROTA L. Apiaceae Carrot.

108250 to 108265.

From Surinam. Seeds and bulbs collected by W. A. Archer, Bureau of Plant In-dustry. Received January 15, 1935.

Received as seeds unless otherwise stated. Introduced for Department specialists.

108250. AMARYLLIS sp. Amaryllidaceae.

No. 2945. Bulbs collected at Paramaribo, December 26, 1934. A cultivated ornamental with salmon-colored blossoms.

108251. AMARYLLIS sp. Amaryllidaceae.

No. 2946. Bulbs collected at Paramaribo, December 26, 1934. A cultivated ornamental with white blossoms marked with green.

108252. AMASONIA CAMPE Moldenke. Verbenaceae. CAMPESTRIS (Aubl.) Moldenke.

No. 2772. Sandrij No. 1, November 17, 1934. A herbaceous perennial 2 to 3 feet high, with alternate, ovate, acute leaves and solitary, axillary, yellow flowers. Na-tive to French Guiana.

108253. AVERRHOA BILIMBI L. Oxalidaceae.

No. 2940. Paramaribo, December 26, 1934. A tree 20 to 60 feet high, cultivated in parts of South America and the West Indies for the sake of its greenish-yellow, cucumber-shaped, acid fruits which are pickled or used as a relish with meat. It is tropical in its requirements.

For previous introduction see 64905.

108254. BANISTERIOPSIS Sp. Malpighiaceae.

No. 2943. Paramaribo, December 26, 1934.

108255. CALOPOGONIUM MUCUNOIDES Desv. Fabaceae.

2874. Vredenburg Weg, December 7, 1934.

For previous introduction and description see 107794.

108250 to 108265—Continued.

108256. CLEOME PSORALIAEFOLIA DC. Capparidaceae.

No. 2872. Vredenburg Weg. December 7, 1934. A swamp herb 2 to 3 feet high, with sticky leaves and pale-cream flowers.

108257. CLIBADIUM SURINAMENSE L.

No. 2857. Vredenburg Weg, December 5, 1934. A plant 4 to 7 feet high, occurring in thick stands.

For previous introduction and description see 107797.

108258. TEPHROSIA TOXICARIA (Sw.) Pers. Fabaceae.

No. 2880. Along the railway about 15 miles south of Paramaribo, February 8,

For previous introduction and description see 107799.

108259. GALACTIA JUSSIAEANA Kunth. Fabaceae.

No. 2825. Near Sandrij No. 1, November 25, 1934. A woody climber with ternate leaves; the leaflets elliptic rounded, sticky on the upper surface and hairy beneath; and small pink flowers. Native to Venezuela.

108260. JACARANDA sp. Bignoniaceae.

No. 2935. Marshall Creek near the Surinam River, December 16, 1934.

108261. PHYSALIS LAGASCAE Roem, and Schult. Solanaceae. Groundcherry.

No. 2865. Vredenburg Weg, December 7, 1934. An herb 2 feet high, with a rank fetid odor, leaves sticky on the upper surface, and pale greenish-cream flowers.

108262. Quassia amara L. Simaroubaceae.

No. 2942. Paramaribo, December 26, 1934. Indian cinchona. A lofty tree, native to Surinam, with dark-green pinnate leaves and racemes of large showy crimson flowers, followed by beautiful and decorative fruits arranged in fives around a fleshy peduncle. The wood of this tree is extremely bitter and is used as a remedy for certain fevers.

For previous introduction see 107167.

108263. TRIPLARIS SURINAMENSIS Polygonaceae.

No. 2868. Vredenburg Weg, December 7, 1934. A small tropical tree with ovate acuminate alternate leaves and small cream-white flowers in pilose spikes. The young stems are hollow and are usually occupied by ants. Native to Surinam.

For previous introduction see 102619. 108264. VIGNA SESQUIPEDALIS (L.) Fru-

Fabaceae. Asparagus-bean.

No. 2881. Paramaribo market, October 10, 1934.

108265. WEDELIA TRILOBATA (L.) Hitchc. Asteraceae.

No. 2786. Sandrij No. 1, November 21, 1934. A prostrate perennial with opposite three-lobed leaves and bright yellow flowers. Native to tropical America.

108266. Sorbus sp. Malaceae.

rom the Union of Soviet Socialist Republics. Seeds presented by the Insti-From

108266—Continued.

tute of Plant Industry, Leningrad. Received January 24, 1935.

Nevezhenskaya Rjabina. A mountain-ash tree from Vladimir, central Russia, with edible seeds.

108267 to 108290.

From Turkey. Bulbs and rhizomes collected by H. L. Westover and C. R. Enlow, Bureau of Plant Industry. Received January 7, 1935.

Received as bulbs unless otherwise stated. Introduced for Department specialists.

108267. ALLIUM CEPA L. Liliaceae.

Onion.

A red onion.

108268. ALLIUM sp. Liliaceae. No. T-553.

108269. ARUM sp. Araceae.

No. T-425. Adana, October 17, 1934.

108270 to 108274. Colchicum spp. Melanthiaceae.

108270. COLCHICUM Sp.

No. T-167. En route from Shebink-arasihar to Giresum, October 17, 1934.

108271. Colchicum sp.

No. T-318. About 30 miles south of Kastamonu, October 8, 1934.

108272. COLCHICUM SD.

No. T-423. About 18 miles east of Adana, October 18, 1934.

108273. COLCHICUM SD.

No. T-434. About 50 miles northwest of Adana, October 18, 1934.

108274. Colchicum sp.

No. T-420. About 25 miles northeast of Adana, October 17, 1934.

108275 to 108279. CROCUS spp. Iridaceae.

No. T-516. Southeast of Bandirma, en route to Bursa, October 26, 1934.

108276. CROCUS Sp.

No. T-516-a. Konya, about 2 miles southeast of Bandirma, October 26, 1934.

108277. CROCUS sp.

No. T-84. About 70 miles northeast of Sivas, September 26, 1934.

108278. CROCUS Sp.

No. T-99. About 26 miles west of Susheeri, September 26, 1934.

108279. CROCUS sp.

No. T-231. Near Iskilip, en route to Tosya. Collected in the mountains, October 3, 1934.

108280. CYCLAMEN sp. Primulaceae.

No. T-349. Near Bolu, October 9, 1934. 108281. CYCLAMEN sp. Primulaceae.

No. T-451. About 50 miles northwest of Adana, October 18, 1934.

108282 to 108284. Ermmurus spp. Liliaceae.

108267 to 108290—Continued.

108282. EREMURUS Sp.

No. T-427. Adana. Roots collected October 18, 1934.

108283. EREMURUS Sp.

No. T-428. East of Adana. Roots collected October 18, 1934.

108284. EREMURUS sp.

No. T-518. Near Bandirma. Roots collected October 26, 1934.

108285. GLADIOLUS sp. Iridaceae.

No. T-493. About 55 miles northeast of Izmir.

108286 to 108289. IRIS spp. Iridaceae.

A collection of rhizomes.

108286. IRIS Sp.

No. T-75. North of Kayseri 100 miles, September 25, 1934.

108287. IRIS Sp.

No. T-168. Giresun, September 27, 1934.

108288. IRIS sp.

No. T-517. About 40 miles southeast of Bandirma, October 26, 1934.

108289. IRIS Sp.

No. T-207. About 80 miles west of Samsun, October 2, 1934.

108290. STERNBERGIA Sp. Amaryllidaceae.

No. T-410. About 15 miles east of Adana, October 17, 1934. A variety with yellow flowers which appear in the autumn.

108291. Soja Max (L.) Piper. Fabaceae. Soybean.

From Japan. Seeds presented by Yamato Shubyo Nobu Kaisha, Sapporo, Hokkaido. Received January 18, 1935.

Hasho Mame. Introduced for Department specialists.

108292. Buphane disticha (L. f.) Herbert. Amaryllidaceae.

From the Union of South Africa. Bulbs purchased from E. G. Bryant, Prieska. Received January 28, 1934.

Gif-bol. A South African plant with a very large bulb up to 1 foot in diameter which grows half out of the ground, protected by a multitude of papery coats. The stout scape, 6 inches to 1 foot high, bears a dense umbel of red flowers, and the thick distichous leaves which appear late are strap-shaped and 1 to 2 feet long.

For previous introduction see 61213.

108293 to 108297.

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

108293. PHAEDRANASSA CHLORACRA Herb. Amaryllidaceae.

No. 6766-a. Near Riobamba, December 19, 1934. Collected in an open field by Auguste Rimbach. A bulbous plant from the mountains of Peru, with strap-shaped leaves less than a foot high and an umbel of about six tubular flowers, reddish with yellowish-green bases and tips, on a peduncle 2 feet high.

108293 to 108297—Continued.

108294. DATURA SANGUINEA Ruiz and Pav. Solanaceae.

No. 6768-A. Riobamba, December 19, 1934. From a garden at over 9,000 feet altitude. A small tree or spreading shrub over 15 feet high, with pubescent, ovate-acuminate leaves and brilliant brick-red, pendulous flowers 8 inches long.

For previous introduction see 77055.

108295. DELOSTOMA INTEGRIFOLIA D. Don. Bignoniaceae.

No. 6769-A. From the Agricultural College garden at Ambato, at over 9,000 feet altitude, December 20, 1934. Chalan. A shapely spreading tree about 30 feet high, with pink flowers, growing in an arid situation where the annual rainfall is about 20 inches and there are light

108296. Juglands sp. Juglandaceae.

No. 6765-A. From the market at Riobamba, December 19, 1934.

108297. TECOMA STANS VELUTINA DC. Bignoniaceae.

No. 6767-A. Riobamba, December 19, 1934. A small tree or shrub 25 feet high, native to the Andes of Ecuador, at over 9,000 feet altitude, with compound leaves composed of oblong, serrate, acuminate leaflets 7 or 8 inches long and yellow flowers in terminal panicles.

108298. Arbutus andrachne L. Ericaceae.

om Greece. Seeds collected by H. L. Westover and C. R. Enlow, Bureau of Plant Industry. Received December 12,

Athens, November 9, 1934. An ornamental evergreen tree 10 to 30 feet high, native to Asia Minor. The oval, dark-green glossy leaves are up to 4 inches long, and the terminal panicles of small white flowers are succeeded by edible orange-red fruits one-half inch in diameter.

For previous introduction see 27187.

108299 and 108300.

om Siam. Seeds presented by Dr. H. M. Smith, Ministry of Lands and Agricul-ture, Bureau of Fisheries, Bangkok. Re-ceived January 21, 1935. From Siam.

108299. AFGEKIA SERICEA Craib. Fabaceae.

A woody vine resembling the wistaria, with compound leaves and racemes of dark-purple flowers marked with yellow. Native to Siam.

108300. Nelumbo nucifera Gaertn. phaeaceae. Hindu lotus.

108301 and 108302.

From China. Seeds presented by Andrew Tse, Hong Kong. Received January 25, 1935.

Chinese vegetables introduced for Department specialists.

108301. ALLIUM CEPA L. Liliaceae.

Onion.

Kau Tsoi

108302. APIUM GRAVEOLENS L. Apiaceae. Celery.

108303. TSUGA DUMOSA (D. Don.) Eichler. Pinaceae. Hemlock.

om India. Seeds presented by the divi-sional forest officer, Darjeeling, Bengal. Received January 25, 1935. From India.

A tall pyramidal hemlock, sometimes 120 feet high, with gracefully drooping branches, native to northeastern India at altitudes of 8,000 to 10,000 feet. A few have become established in southwestern England, but there is no record of any in America.

108304, DELPHINIUM ZALIL Aitch. and Hemsl. Ranunculaceae.

Yellow larkspur.

rom India. Seeds presented by the Cura-tor, Royal Botanic Garden, Sibpur, near Calcutta, through the Economic Botanist, Lucknow, United Provinces. Received January 25, 1935. From India.

An erect perennial, 1 to 2 feet high, with slender, ternately divided or triternate leaves 3 to 4 inches across and yellow flowers about 1 inch in diameter in a lax raceme. Native to Khorasan, Asia.

For previous introduction see 105441.

108305 to 108312.

From China. Scions collected by Peter Liu, Peiping. Received February 1, 1935.

108305. AMYGDALUS PERSICA L. Amygdala-ceae. Peach.

No. 13. Shui Mi Tao, water honey peach. From Ping Chia Ton, near Hong Chow. This is the most famous peach in the Chekiang Province. It is a white peach from 2 to over 3 inches in diameter and ripens in July.

108306 to 108310. CASTANEA spp. Faga-Chestnut.

108306 to 108309. CASTANEA MOLLISSIMA Blume. Hairy chestnut.

108306. No. 11. Huei Hua Lee Tzu, cassia flower chestnut. This chestnut is knocked off the tree before it is ripe, and the spines cut off the bur before it is taken to market, where it is sold to be eaten fresh fresh

108307. No. 12. K'uei Lee, large chestnut. From Chiu Lee Sung village, near Hong Chow. A very common variety which is used for cooking with meat, chicken, and vegetables.

108308. No. 17. K'uei Lee, large chestnut. Secured near the villarge of Shang Yeo Tsun, near Hsin Teng. large

108309. No. 15. Sha Lee, sand chest-nut. From the village of Chin Sung Tsun, near Yu Hong, north-east of Hong Chow. Said to be a wild chestnut with white hairs at the bottom.

108310. CASTANEA SEGUINII Dode.

No. 10. Ya Lee Tzu, wild chestnut. From the mountainside of Pei Kao Feng, North High Mountain, near Hong Chow. Only bushes 2 to 5 feet high seen, apparently having been chopped back for fuel.

108305 to 108312—Continued.

108311. DIOSPYROS KAKI L. f. Diospyraceae. Kaki.

No. 16. Huo Shih Tzu, fire persimmon. From a hillside at Chin Sung Tsun, near Yu Hong. A small bright-red persimmon about 2 inches wide and 1 inch high.

108312. DIOSPYROS KAKI L. f. Diospyraceae. Kaki.

No. 14. Ya Shih Tzu, wild persimmon. From a hillside of Pei Kao Feng Mountain, near Hong Chow. A wild persimmon which grows to be a bush 5 or 6 feet high. The small fruits are about 1 inch in diameter and three-fourths of an inch high, all with seeds.

108313. Passiflora quadrangularis L. Passifloraceae. Giant granadilla.

From Puerto Rico. Seeds presented by Atherton Lee, Director, Puerto Rico Agricultural Experiment Station, Mayaguez. Received January 30, 1935.

For previous introduction see 106999.

108314. EPHEDRA ALATA Decaisne. Gnetaceae.

From Algeria. Seeds presented by Dr. R. Maire, University of Algiers, Algiers. Received January 26, 1935.

A tall, freely-branching shrub with rough, green equisetumlike branches, small scale-like leaves, and inconspicuous flowers. Native to Arabia and northern Africa. Received under the varietal name "alenda," not different botanically from the typical form.

For previous introduction see 104316.

108315 to 108404.

From the Union of Soviet Socialist Republics. Seeds collected in Turkistan by H. L. Westover and C. R. Enlow, Bureau of Plant Industry. Received November 7, 1934.

Introduced for Department specialists.

108315. AELUROPUS LITTORALIS (Gouan) Parl. Poaceae.

No. 891. Kazilinsk, August 9, 1934. A flat alkaline desert.

108316 to 108319. AGROPYRON spp. Poaceae. Wheatgrass.

108316. AGROPYRON CRISTATUM (L.)
Gaertn. Crested wheatgrass.

No. 829. A dwarf type from Lake Issyk, August 5, 1934.

108317 to 108319. Collected from the flat sandy desert at Chelkar, August 11 and 13, 1934.

108317. AGROPYRON INTERMEDIUM (Host) Beauv.

No. 883

108318. AGROPYRON DESERTORUM (Fisch.) Schult.

No 994

108319. AGROPYRON DESERTORUM (Fisch.) Schult.

No. 897. A pubescent form.

108320. AGROSTIS ALBA L. Poaceae

Redtop.

No. 827. Tokmak, August 3, 1934.

108315 to 108404—Continued.

108321 and 108322. Collected along the Karakol River, near Lake Issyk, August 4, 1934.

108321. AQUILEGIA sp. Ranunculaceae. No. 830.

108322. AQUILEGIA sp. Ranunculaceae.

108323. ARISTIDA PENNATA Trin. Poaceae.

No. 873. From moving sands at Chelkar, August 11, 1934. A grass native to Turkistan where it is found in dry sandy places.

For previous introduction see 106843.

108324. ASTRAGALUS Sp. Fabaceae.

No. 854. From dry rocky soil near Lake Issyk, August 5, 1934.

108325. ASTRAGALUS Sp. Fabaceae.

No. 823. Near Lake Issyk, August 3, 1934. A spiny shrub.

108326. AVENA FATUA L. Poaceae. Oats.

No. 806. Near the town of Karakol on Lake Issyk, August 4, 1934.

For previous introduction see 107893.

108327. BERBERIS sp. Berberidaceae.

No. 802. From a dry mountain slope near Lake Issyk, August 3, 1934.

108328. CALAMAGROSTIS EPIGEIOS (L.) Roth. Poaceae.

No. 886. From low depressions in the sandy desert near Chelkar, August 11, 1934.

108329 to 108331. CALLIGONUM spp. Polygonaceae.

From the sand desert near Chelkar, August 11, 1934.

108329. CALLIGONUM sp.

No. 875.

108330. Calligonum sp.

No. 874.

108831. CALLIGONUM sp.

No. 894.

108332. CARAGANA sp. Fabaceae.

No. 836. Karakol, on Lake Issyk, August 4, 1934.

108333. CAREX sp. Cyperaceae.

No. 857. Along the Karakol River, near Lake Issyk, August 4, 1934.

108334. CHONDRILLA PAUCIFLORA Led. Cichoriaceae.

No. 893. Chelkar, August 14, 1934. A biennial herb with a vertical root and numerous slender branches. The basal leaves are pinnatifid, and the yellow flower heads are solitary, terminating the branches. Native to Turkistan.

For previous introduction see 106869.

108335. CLEMATIS sp. Ranunculaceae.

No. 826. Near Lake Issyk, August 4, 1934. A form with small yellow flowers.

108336. CLEMATIS sp. Ranunculaceae.

No. 838. En route to Lake Issyk, August 2, 1934.

108337 to 108340. ELYMUS spp. Poaceae.

Collected from the alkali area around Chelkar, August 11 to 13, 1934.

108337. ELYMUS SD.

No. 890. A bunch type.

108338. ELYMUS Sp.

No. 878.

108339. ELYMUS GIGANTEUS Vahl.

No. 872.

108340. ELYMUS Sp.

No. 887.

108341 and 108342. EPHEDRA spp. Gnetaceae.

Collected east of Tokmak in the Chu River Canyon, August 6, 1934.

108341. EPHEDRA Sp.

No. 862.

108342. EPHEDRA Sp.

No. 863.

108343. Eragrostis sp. Poaceae.

892. Chelkar, August 11, 1934. Found in lime soil.

108344. EREMURUS sp. Liliaceae.

No. 861. Frunze, August 1, 1934.

108345. EREMURUS Sp. Liliaceae.

No. 866. Little Chimgan, east of Tashkent, July 15, 1934.

108346 to 108348. FESTUCA spp. Poaceae. Fescue.

108346. FESTUCA OVINA L.

No. 899. Chelkar, August 14, 1934. Found growing on sand dunes. This is the first grass in the depressions of moving sand.

108347 and 108348. Collected August 3, 1934, near Lake Issyk, on the dry slope of a mountain.

108347. FESTUCA SD.

No. 815.

108348. FESTUCA OVINA L.

No. 809.

108349. HALIMODENDRON HALODENDRON (Pall.) Voss. Fabaceae.

839. Near Rabatsky, August 6, A spiny shrub found on dry, and sometimes salty soils, along No. 1934. rocky, and so the Chu River.

108350. Hedysarum sp. Fabaceae.

No. 868. Near Lake Issyk on stony hills, August 5, 1934.

108351. IRIS sp. Iridaceae.

No. 837. Along the Jetty Augus River, west of Karakol, August 3, 1934.

108352. JUNIPERUS sp. Pinaceae.

No. 814. A prostrate plant found in the dry mountains near Lake Issyk, Au-gust 3, 1934.

108353 to 108355. Koeleria spp. Poaceae.

108315 to 108404—Continued.

108353. KOELERIA GLAUCA DC.

No. 895. Chelkar, in a flat sand desert, August 13, 1934. A tall perennial grass about 2 feet high, native to sandy places in central Europe.

108354. KOELERIA SD.

No. 813. From mountains along the Karakol River near Lake Issyk, August 4, 1934.

108355. KOELERIA CRISTATA (L.) Pers.

No. 812. From the dry slope of the mountains near Lake Issyk, August 3, 1934.

108356 and 108357. From dry foothills near Frunze, July 31, 1934.

108356. LAPPULA sp. Boraginaceae.

No. 840. A plant which resembles the forget-me-not.

108357. LATHYRUS Sp. Fabaceae.

No. 851.

108358. LATHYRUS sp. Fabaceae.

No. 810. Along the Jetty Augus River near Lake Issyk, August 3, 1934. A yellow-flowered form.

8359 and 108360. Collected along the Karakol River near Lake Issyk, August 4, 1934.

108359. LONICERA CAERULEA L. Caprifoliaceae. Sweetberry honeysuckle.

No. 848

108360. LONICERA Sp.

No. 850.

108361 to 108364. MEDICAGO FALCATA L. Fabaceae. Yellow-flowered alfalfa.

108361. No. 822. From Jetty Augus, on Lake Issyk, August 3, 1934.

831. 108362. No. 831. August 5, 1934. From Lake Issyk,

108363. No. 852. From the Chu River gorge, east of Tokmak, August 6, 1934.

108364. No. 816. August 5, 1934. From Lake Issyk,

108365. Melilotus sp. Fabaceae.

No. 843. From Frunze, July 30, 1934.

108366 and 108367. From dry clay foothills south of Frunze, July 31, 1934.

108366, Onobrychis Micrantha Schrenk. Tabaceae.

No. 846.

108367. PAPAVER sp. Papaveraceae. No. 841.

108368. Papaver sp. Papaveraceae.

No. 845. From rocky soil near Lake Issyk, August 5, 1934.

108369. Pappophorum sp. Poaceae.

No. 800. From a dry flat near Rabatsky on Lake Issyk, August 6, 1934.

108370, PHLEUM sp. Poaceae.

No. 855. From the Animal Husbandry Experiment Station, Frunze, July 30, 1934.

108371. PHLEUM sp. Poaceae.

No. 860. Along the Karakol River near Lake Issyk, August 4, 1934.

108372. PHRAGMITES COMMUNIS Trin. Poaceae.

No. 879. From a low alkali area near a salt pond at Chelkar, August 13, 1934. A very abundant grass which grows over 4 feet high.

For previous introduction see 90201.

108373. PICEA TIANSCHANICA Rupr. Pina-Spruce. Pina-

No. 834. Along the Karakol River near Lake Issyk, August 4, 1934. A large tree, sometimes 100 feet high under favorable conditions, with dark shining-green leaves. Native to central Asia and closely allied to *Picea schrenkiana*.

108374. PUCCINELLIA DISTANS (L.) Parl. Poaceae.

No. 876. From an alkali flat near Chelkar, August 13, 1934.

108375 to 108378. Poa spp. Poaceae. Bluegrass.

108375. POA sp.

No. 817. From rocky soil in the foot-hills south of Frunze, August 3, 1934.

108376. POA SD.

No. 858. From moist areas in the mountains along the Karakol River near Lake Issyk, August 4, 1934.

108377. Poa sp.

No. 803. From a dry gravelly clay flat along the Jetty Augus River near Lake Issyk, August 3, 1934.

108378. Poa sp.

No. 811. From a dry mountain slope near Lake Issyk, August 3, 1934.

108379. POTENTILLA sp. Rosaceae.

844. Foothills near Frunze, July 34. A low-growing plant found in 31, 1934. A low-growing plant found in hard clay soil.

108380. Puccinellia sp. Poaceae.

No. 898. Found in the alkali area around Chelkar, August 17, 1934.

108381. PUCCINELLIA DISTANS (L.) Parl.

No. 882. From alkali flats near Lugovaya, August 8, 1934.

soil along the Chu River, east of Tokmak, August 6, 1934. 108382 and 108383.

108382. Rosa sp. Rosaceae. Rose. No. 864.

108383. SCHISMUS BARBATUS (L.) Chase. Poaceae. Grass.

No. 853. An annual grass.

108384. SCHISMUS BARBATUS (L.) Chase. Grass. Poaceae.

No. 808. Along the Chu River in very dry soil, about 30 miles from Lake Issyk, August 1, 1934.

108385. Scutellaria sp. Menthaceae.

No. 859. From foothills south of Frunze, July 31, 1934. An attractive low-growing labiate.

108315 to 108404—Continued.

108386. SILENE Sp. Silenaceae.

No. 847. About 40 miles west of Alma Ata, July 29, 1934. An annual flowering plant.

108387. LIMONIUM sp. Plumbaginaceae.

No. 888. From alkali flats near Chelkar, August 14, 1934.

108388 to 108395. STIPA spp. Poaceae. Feathergrass.

108388 and 108389. STIPA CAPILLATA L.

From the flat sand desert a few miles orth of Chelkar, August 12 and 13, 1934

For previous introduction see 107700.

108388. No. 877. 108389. No. 896.

108390. STIPA sp.

No. 807. From a dry mountain side near Lake Issyk, August 13, 1934.

108391 to 108393. Collected in dry rocky soil at Jetty Augus, near Lake Issyk, August 3, 1934.

108391. STIPA sp.

No. 819.

108392. STIPA Sp.

No. 820.

108393. STIPA Sp.

No. 821.

108394. STIPA Sp.

No. 880. From the clay desert near Chelkar, August 12, 1934.

108395. STIPA Sp.

No. 801. Near Lake Issyk, August 2, 1934.

108396. DIGITARIA Sp. Poaceae.

No. 885. Chelkar Experiment Station, August 10, 1934. A very tall, erect type. 108397. THALICTRUM SD. Ranunculaceae.

No. 818. Jetty Augus, near Lake Issyk, August 3, 1934.

108398 to 108400. Collected along the Karakol River near Lake Issyk, August 4 and 5, 1934.

108398. TRIFOLIUM PRATENSE_L. Red clover.

No. 805. A large hairy type.

108399. VICIA sp. Fabaceae.

No. 804

108400. VICIA sp. Fabaceae.

No. 835.

108401. NITRARIA SCHOBERI L. Zygophyllaceae.

No. 871. From the sand desert near Chelkar, August 11, 1934.

108402. (Undetermined.)

No. 828. Along the Chu River about 15 miles below Lake Issyk, August 1, 1934. A thick-leaved herbaceous plant.

108403. (Undetermined.)

No. 870. From the foothills south of Frunze, July 31, 1934. A small annual spring flower.

108404. ZIZIPHORA CLINOPODIOIDES SERPYL-LACEA (Bieb.) Boiss. Menthaceae.

No. 856. Lake Issyk, August 6, 1934. A much-branched perennial, shrubby at the base and about a foot high, with terminal heads of small flowers which vary in color from white to magenta. Native to Georgia.

108405 to 108414. TULIPA spp. Liliaceae. Tulip.

From the Union of Soviet Socialist Republics. Bulbs presented by Dr. A. Popov, Department of New Cultures and Introduction, Leningrad. Received February 1, 1935.

Introduced for Department specialists.

108405. TULIPA BORSZCZOWI Regel.

No. 598. A Siberian tulip with stems 10 to 18 inches high, bluish-green, narrowly ovate leaves up to 6 inches in length, and red flowers with black blotches at the base of the petals.

For previous introduction see 61447.

108406. TULIPA FOSTERIANA HOOG.

No. 589.

For previous introduction see 107585.

108407. TULIPA Sp.

No. 587.

108408. Tulipa kaufmanniana Regel. No. 596.

For previous introduction see 106774.

108409. Tulipa Ķolpakowskiana Regel.

For previous introduction see 107588.

108410. TULIPA KUSCHKENSIS B. Fedtsch. No. 593.

For previous introduction and description see 107857.

108411. TULIPA LINIFOLIA Regel.

No. 588.

For previous introduction see 107590.

108412. Tulipa ostrowskiana Regel.

No. 592.

For previous introduction see 106780.

108413. TULIPA PRAESTANS Hoog.

No. 597.

For previous introduction see 107591.

108414. TULIPA WILSONIANA Hoog.

No. 591.

For previous introduction and description see 107859.

108415 to 108548.

From the Union of Soviet Socialist Republics. Seeds collected by H. L. Westover and C. R. Enlow, Bureau of Plant Industry. Received November 9, 1934.

108415 to 108437. AGROPYRON Spp. Poaceae. Wheatgrass.

108415 to 108422. AGROPYRON CRISTATUM (L.) Gaertn. Crested wheatgrass.

108415 to 108548—Continued.

108415. No. 918. Along the railroad near Orenburg, August 15, 1934.

108416. No. 972. From the lower Volga.

108417. No. 973. From the Altai.

108418 to 108422. From the middle Volga region.

108418. No. 975. 108421. No. 985.

108419. No. 978. 108422. No. 986.

108420, No. 984.

108423. AGROPYRON TRITICEUM Gaertn.

No. 981. From Armenia. An annual Siberian grass, much branched at the base, with stems up to 8 inches in length.

For previous introduction see 106834.

108424 and 108425. AGROPYRON RAMOSUM (Trin.) Richt.

From the middle Volga region.

108424. No. 979. 108425. No. 987.

108426 to 108428. AGROPYRON REPENS (L.) Beauv.

108426. No. 974. From western Siberia.

108427. No. 976. From eastern Kazakstan.

108428. No. 988. From the middle Volga region.

108429 to 108435. AGROPYRON SIBIRICUM (Willd.) Beauv.

108429 to 108431. From Chelkar.

108429. No. 906.

108430. No. 907.

108431. No. 908.

108432. No. 917. Near Orenburg, along the railroad, August 15, 1934.

108433. No. 980. From Altai-Zaisakin.

108434. No. 982. From Kazakstan.

108435. No. 983. From Alma Ata.

108436. AGROPYRON Sp.

No. 977. Collected at Katta-Kurgan. Received under the name "orientali," for which a place of publication has not been found.

108437. AGROPYRON Sp.

No. 915. Collected June 13, 1934, along the railroad near the Aral Sea.

108488 to 108450. Agrostis alba L. Poaceae. Redtop.

108438 and 108439. From southern Kazakstan.

108438. No. 923. 108439. No. 924. 108440 and 108441. From Omsk, Siberia.

108440. No. 925. 108441. No. 926.

108442 to 108444. From the Ukraine.

108442. No. 927. 108444. No. 929. 108443. No. 928.

108445. No. 931. From Urai Province. 108446 to 108449. From western Siberia.

108446. No. 932. 108448. No. 934. 108447. No. 933. 108449. No. 936.

108415 to 108548—Continued.

108450. No. 937. From eastern Kazakstan.

108451. POA NEMORALIS L. Poaceae.
Wood bluegrass.

No. 938. From the Ukraine.

Poaceae. Redtop. 108452. AGROSTIS ALBA L.

No. 939. From eastern Kazakstan.

108453. Poa sp. Poaceae. Bluegrass. No. 940. From eastern Kazakstan.

108454 to 108456. AGROSTIS ALBA L. Poa-Redtop.

108454 and 108455. From eastern Kazak-

108454. No. 941. 108455. No. 942.

108456. No. 943. From Ural Province.

108457. AGROSTIS Sp. Poaceae.

No. 930. From Altai.

stan.

108458. ASTRAGALUS Sp. Fabaceae.

No. 902. August 11, 1934. sand desert, Chelkar. From the

108459 to 108477. BROMUS spp. Poaceae. Bromegrass.

108459 108468. BROMUS INERMIS to Common bromegrass. Leyss.

108459. No. 1014. From Armenia.

108460. No. 1006. From the Azaisansk Experiment Station. From the Altai-

and 108462. From eastern 108461 Kazakstan.

108461. No. 1007. 108462. No. 1008.

108463 and 108464. From the Altai Tchujsk Experiment Station.

108463. No. 1009. 108464. No. 1010.

108465. No. 1011. From the Altai-Zaisansk Experiment Station.

108466 and 108467. From Omsk, Siberia.

108466. No. 1012. 108467. No. 1021.

108468. No. 1023. From the Zaisansk Experiment Station. From the Altai-

108469 to 108471. Bromus squarrosus L. 108469. No. 1015. From the Ukraine. 108470. No. 1016. From the lower

108471. No. 1022. From the Ukraine.

108472. BROMUS ARVENSIS L.

No. 1017. From Armenia.

108473. Bromus erectus Huds.

No. 1013. From Armenia.

108474. BROMUS Sp.

No. 1018. From Armenia.

108475. BROMUS ERECTUS Huds.

No. 913. From near Kelif, Tajikistan Province.

108476. BROMUS SQUARROSUS L.

No. 1019. From southern Kazakstan. 108415 to 108548—Continued.

108477. BROMUS Sp.

No. 1020. From Alma-Ata.

108478 to 108496. ELYMUS spp. Poaceae. Grass.

108478 and 108479. ELYMUS ANGUSTUS Trin.

n erect perennial grass about high, with flat rigid leaves. I An tive to central Asia.

108478. No. 998. From the Altai region.

108479. No. 999. From the lower Volga region.

108480 to 108482. ELYMUS ARENARIUS L. From the Altai region. European dunegrass.

108480. No. 997.

108481. No. 996.

108482. No. 1003.

108488 to 108486. ELYMUS DAHURICUS Turcz.

108483. No. 994. From the Altai region.

108484. No. 993. From the Altai region.

108485. No. 992. From western Siberia.

108486. No. 995. From eastern Kazakstan.

108487 to 108491, ELYMUS GIGANTEUS Vahl. Siberian wild-rye.

108487. No. 910. From Chelkar.

108488. No. 909. From Chelkar.

108489. No. 905. From Chelkar.

108490. No. 1001. From eastern Kazakstan.

108491. No. 1000. From the lower Volga region.

108492 to 108494. ELYMUS JUNCEUS Fisch.

An erect perennial grass, with minal spikes resembling rve. N spikes resembling rye. to Russia.

For previous introduction see 75737.

108492. No. Kazakstan. 989. eastern From

108493. No. 990. From eastern Kazakstan.

108494. No. 991. From the middle Volga region.

108495. ELYMUS SIBIRICUS L.

No. 1002. From the Altai region.

108496. ELYMUS JUNCEUS Fisch.

No. 1004. From the Altai region.

108497. EREMURUS Sp. Liliaceae.

No. 911. Varsov Collected July 8, 1934, River, north of Stali Province, at 5,500 along the Varso Tajikistan Stalinabad feet altitude.

108498 to 108528. FESTUCA spp. Poaceae. Fescue.

108498 to 108501. FESTUCA ELATIOR ARUNDINACEA (Schreb.) Wimm.

108415 to 108548-Continued.

108498. No. 959. From the middle Volga region.

108499. No. 960. From the middle Volga region.

108500. No. 972-A. From the Ural Province.

108501. No. 1005. From northern Kazakstan.

108502 to 108513. Festuca elation L. Meadow fescue.

108502. No. 944. From eastern Kazakstan.

108503. No. 945. From western Siberia.

108504. No. 946. From Armenia.

108505. No. 947. From Armenia.

108506. No. 948. From eastern Kazakstan.

108507. No. 949. From Armenia.

108508. No. 950. From Armenia.

108509. No. 951. From Armenia.

108510. No. 952. From the Altai region.

108511. No. 953. From the Union of Soviet Socialist Republics.

108512. No. 954. From Armenia.

108513. No. 955. From western Siberia.

108514. FESTUCA OVINA L. Sheep fescue. No. 967. From the middle Volga region.

108515. FESTUCA ELATIOR L. Meadow fescue.

No. 968. From Armenia.

108516. FESTUCA OVINA L. Sheep fescue. No. 969. From Armenia.

108517. FESTUCA ELATIOR L.

Meadow fescue.
No. 970. From Armenia.

108518. FESTUCA OVINA L.

Sheep fescue.

No. 971. From Armenia.

108519 to 108525. FESTUCA OVINA SUL-CATA Hack. Fescue.

108519. No. 904. From Chelkar.

108520. No. 961. From the Ural Province.

108521. No. 962. From the Ukraine.

108522. No. 963. From Crimea.108523. No. 964. From the Ukraine.108524. No. 965. From the lower

Volga region.

108525. No. 966. From Kalmyk Province.

108526 to 108528. FESTUCA RUBRA L. Red fescue.

108526. No. 956. From Moscow Province.

108527. No. 957. From Armenia.

108528. No. 958. From Moscow Province.

108415 to 108548—Continued.

108529. HORDEUM BULBOSUM L. Poaceae. No. 919. From the Kopet Dagh, Ash-

No. 919. From the Kopet Dagh, Ashkhabad.

108530 to 108543. Poa spp. Poaceae. Bluegrass.

108530. POA BULBOSA L.

No. 1031. From Azerbaijan.

108531. POA LONGIFOLIA Trin.

No. 1032. From Armenia. A perennial grass with a creeping rhizome and very narrow leaves. Native to the Caucasus.

108532. POA PRATENSIS L. Kentucky bluegrass.

No. 1026. From the Ural district.

108533 to 108536. From the Altai region.

108533 and 108534. POA TIBETICA Munro.

A tall stout grass 1 to 2 feet high, with firm, linear, acute leaves about 8 inches long. Native to northwestern India at altitudes of 9,000 to 16,000 feet.

108533. No. 1030. 108534. No. 1033.

108535 and 108536, POA ATTENUATA Trin.

108535. No. 1028. 108536. No. 1034. 108587. PoA sp.

No. 1029. From the Crimea.

108538. Poa sp.

No. 1024. From Ivanoosk Province.

108539 to 108541. POA PRATENSIS L. Kentucky bluegrass.

108539. No. 1025. From the middle Volga region.

108540. No. 1035. From northern Kazakstan.

108541. No. 1036. From the Ukraine. 108542. Poa sp.

No. 1037. From western Siberia.

108543. POA PRATENSIS L. Kentucky bluegrass.

No. 1027. From the Altai region.

108544. SALVIA SPINOSA L. Menthaceae.

No. 922. From the Botanic Garden, Tashkent. A perennial mint about a foot high, with pale-green, viscid-pubescent. rounded-ovate leaves and whorls of small white flowers. Native to Arabia.

108545. SCALIGERA UGAMICA Korovin. Apiaceae.

No. 921. A perennial about 3 feet high, with oblong-ovate, bipinnately divided leaves up to 10 inches long and numerous umbels of small white flowers. Native to Turkistan.

108546. Schismus sp. Poaceae.

No. 912. Collected June 20, 1934, along the railroad between Kelif and Termez, Tajil·istan Province.

108547. SILENE sp. Silenaceae.

No. 900. Collected August 13, 1934, in Chelkar.

108415 to 108548-Continued.

108548. (Undetermined.)

No. 914. July 3, 1934. A leguminous shrub found in rocky soil near the Government rest house on the Varsov River, north of Stalinabad, Tajikistan Province.

108549. MAHONIA TENUIFOLIA (Lindl.) Loud. Berberidaceae.

From Cuba. Seeds presented by Robert M. Grey, Superintendent, Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos, through F. G. Walsingham. Received January 28, 1935.

A large evergreen shrub about 10 feet high, with alternate pinnate bright-green leaves and long racemes of yellow flowers. Native to Vera Cruz, Mexico.

108550 to 108555. Castanea spp. Fabaceae. Chestnut.

From China. Seeds collected by Peter Liu and sent through Owen L. Dawson, American agricultural commissioner, Shanghai. Received February 1, 1935.

108550 and 108551. CASTANEA HENRY (Skan.) Rehd. and Wils.

108550. Feng Chiao Chu Lee, Pearl chestnut of Feng Chiao, Chekiang Province.

108551. Pearl chestnut of Hsiao Feng, Anhwei Province.

108552 to 108554. CASTANEA MOLLISSIMA Blume.

K'uei Lee, large chestnut. Collected in Chekiang Province.

108552. From Hang Chow.

108553. From Hsin Teng.

108554. From Feng Chiao.

108555. CASTANEA SEGUINII Dode.

Ya Lee Tzu, wild chestnut. From the mountains near Hang Chow.

108556 to 108558.

From Shilka, Siberia. Plants and cuttings collected by Prof. N. E. Hansen, South Dakota State College of Agriculture and Mechanic Arts, Brookings, S. Dak. Received November 27, 1934. Numbered in January 1935.

108556. RIBES sp. Grossulariaceae.

Siberian black currant.

108557. SALIX sp. Salicaceae.

108558. ULMUS PUMILA L. Ulmaceae. Chinese elm.

Collected in the northern part of Siberia where it appears to be immune from the Dutch elm disease.

108559. CHENOPODIUM QUINOA Willd. Chenopodiaceae. Quinoa.

From Peru. Seeds presented through J. L. Colom, Chief, agricultural cooperation, Pan American Union, Washington, D. C. Received February 4, 1935.

Introduced for Department specialists.

108560 to 108562. Phaseolus coccineus L. Fabaceae. Scarlet Runner bean.

From Mexico. Seeds presented by Mrs. Walter Douglas, Chauncey, N. Y. Re-

108560 to 108562-Continued.

ceived December 6, 1934. Numbered in January 1935.

108560. A wild form with white seeds.

108561. A very hardy and prolific variety, said to be a cross between the Spanish white bean and the wild Mexican perennial bean.

108562. A variety with purple seeds.

108563 to 108592.

From Surinam, South America. Seeds collected by W. A. Archer, Bureau of Plant Industry. Received January 26, 1935.

Introduced for Department specialists.

108563. Banisteriopsis sp. Malpighiaceae.

No. 2921. Koni Koni bita, December 16, 1934. From the Djuka lumber camp on Marshall Creek, Surinam River, 20 miles above Carolina.

108564. CENTROSEMA DASYANTHUM Benth. Fabaceae.

No. 2931. From the Surinam River banks, above Carolina, December 17, 1934. A vine with white flowers, the standard marked in the center with purple stripes.

108565. Byrsonima sp. Malpighiaceae.

No. 2901. Hulia. From the Simon Creek, Surinam River, above Carolina, December 14, 1934. Found in white sand.

108566. CACOUCIA COCCINEA Aubl. Combretaceae.

No. 2902. Freinousoe notto, bat nut. From the Simon Creek, Surinam River, above Carolina, December 14, 1934. A woody vine with crimson flowers and flat ribbed fruits 3 by 2 inches.

108567. CALOPOGONIUM CAERULEUM (Benth.) Hemsl. Fabaceae.

No. 2913. Atti. Near the Surinam River above Carolina, December 15, 1934. A twining vine with blue flowers.

108568. Cassia multijuga L. C. Rich. Caesalpiniaceae.

No. 2906. Krekre. From the Surinam River bank near Carolina, December 15, 1934. A small tree with compound leaves made up of linear leaves about one-half inch long and large yellow flowers followed by flat glabrous pods 6 inches long and less than an inch wide. It is native to tropical America.

For previous introduction see 92195.

108569. CLEOME PSORALIAEFOLIA DC. Capparidaceae.

No. 2872-A. Makka. Vredenburg Weg, December 7, 1934. A swamp herb 2 to 3 feet high, with sticky leaves and palecream flowers.

108570 and 108571. CLIBADIUM SYLVESTRE (Aubl.) Baill. Asteraceae.

An herb to 4 to 10 feet high with white flowers.

108570. No. 2893. Koenami. From Carolina on the Surinam River, December 13, 1934.

108571. No. 2919. Windiku. From the Djuka lumber camp on Marshall Creek, Surinam River, above Carolina, December 16, 1934.

108563 to 108592—Continued.

108572. CLITORIA ARBOREA Benth. Faba-

No. 2854. Haiariballi. Near Scotelweg, December 1, 1934. A shrubby vine climbing on bushes and small trees in open places. The flowers are purple on the margins, shading to white in the center where reddish lines appear.

108573 and 108574. TEPHROSIA TOXICARIA (Sw.) Pers. Fabaceae.

108573. No. 2880-A. Asikuna. Collected along the railway about 70 miles south of Paramaribo, February 8, 1934. An herb 4 to 5 feet high; the flowers have grayish-green standards with pure-green spot at center and greenish-white wings with purple spot at the base. spot at the base.

108574. No. 2883. Asikuna. From Carolina, Surinam River, December 13, 1934. An herb 2 to 4 feet high with enlarged carrotlike roots. The inside 1954. An nero 2 to 4 feet nigh with enlarged carrotlike roots. The inside of the flowers is lavender and the outside is greenish gray.

108575. Dalbergia sp. Fabaceae.

No. 2933. Motostian. Carolina, Surinam River, December 18, 1934. Seeds of a vine found on the beach in the flotsam Carolina, of the river.

108576. DALBERGIA MONETARIA L. f. baceae.

No. 2885. Motosilan. Carolina, Surinam River, December 18, 1934. A tropical shrub with ternate leaves and small white flowers in axillary spikes. Native to Surinam.

108577. DERRIS PTEROCARPUS (DC.) Killip. Fabaceae.

No. 2930. From Marshall Creek, Surinam River, 20 miles above Carolina at the Djuka lumber camp, December 16, 1934. A climbing shrub, native to French Guiana, with trifoliolate leaves and racemes of rather large white flowers.

108578. DIOCLEA LASIOCARPA Mart. Faba-

No. 2912. Above Carolina, on the Surinam River, December 15, 1934. A shrubby vine twining over tall trees, with sparsely pubescent trifoliolate leaves, the somewhat-pointed leaflets 2 to 5 inches long. The purple-violet flowers, with fringed keel and papery deciduous branchlets, are on peduncles 1 to 1½ feet long. Native to tropical American forests.

For previous introduction see 107217.

108579. DIOCLEA sp. Fabaceae.

No. 2909. Received without notes.

108580. INGA ACUMINATA Benth. Mimosaceae.

No. 2907. Near Carolina, Surinam River, December 15, 1934. A tropical American shrub with pinnate leaves; the 4 to 6 leaflets are ovate-lanceolate and 4 to 5 inches long. The white flowers are in small spikes. in small spikes.

108581. MONNIERIA TRIFOLIA L. Rutaceae. No. 2910. Koffie messa. Near Carolina, Surinam River, December 15, 1934.

For previous introduction and description see 108225.

108563 to 108592—Continued.

108582. MUCUNA sp. Fabaceae.

No. 2934. Kowai. Carolina, Surinam River, December 18, 1934. From flotsam on the beach.

108583. Mucuna sp. Fabaceae.

No. 2905. Near Carolina, Surinam River, December 15, 1934. Flowers from ground, said to belong to *Kowai*.

108584. Pentaclethra macroloba (Willd.) Kuntze. Mimosaceae.

No. 2896. Koroballi and Kroebara. From Simon Creek, above Carolina, Surinam River, December 14, 1934. A large tree, common in this region, which quickly sprouts from the stump if cut back. The James have red sonals and white stamens. 2896. dowers have red sepals and white stamens.

108585. Phaseolus hirsutus L.

No. 2891. Krumata. From Carolina, Surinam River, December 13, 1934. A cultivated bean used by the Caribs as a vegetable. Said to have been cultivated before the advent of the white man.

108586. Physalis Lagascae Roem. and Schult. Solanaceae.

No. 2865-A. Sibeero beemi and Batoto Bita. From Vredenburg Weg, December 7, 1934. An herb 2 feet high with a rank fetid odor. The leaves are sticky on the upper surface and the flowers are pale greenish yellow. Native to tropical America.

For previous introduction see 108261.

108587. Solanum mammosum L. Solana-Nightshade.

No. 2903. Njoe Wintje Bobbie. Outskirts of Paramaribo. December 13, 1934. A spiny shrub with indigo flowers and yellow fruits 2 to $2\frac{1}{2}$ inches wide and 2 to 3 inches long, which have the odor of tomato.

For previous introduction see 101801.

108588. Solanum sp. Solanaceae.

No. 2904. Outskirts of Paramaribo, December 13, 1934. A plant with white flowers and bright orange-red spherical fruit 1 inch in diameter.

108589. Spigelia anthelmia L. Loganiaceae.

No. 2911. Droegoeman. Near Carolina, Surinam River, December 15, 1934. An annual 1 to 2 feet high, with lanceolate leaves and spikes of pink-tinged white flowers, followed by green fruits. It grows by preference near water, but is also found on dry ground. The stems have the rank odor of Nekoe (Lonchocarpus chrysophyllus). Native to the West Indies.

108590. TETRAPTERIS Sp. Malpighiaceae.

No. 2929. From Marshall Creek, Surinam River, 20 miles above Carolina at the Djuka lumber camp, December 16, 1934. A vine.

108591. VIGNA SESQUIPEDALIS (L.) Fruwirth. Fabaceae. Asparagus-bean.

No. 2875. Jare pesi, yard bean. From Vredenburg Weg, December 7, 1934. A local variety.

108592. (Undetermined.)

No. 2932. Batie batie. From Marshall Creek, Surinam River, December 16, 1934.

108563 to 108592-Continued.

An introduced tree with edible fruit shaped like cacao; the flavor is like that of *Spondias* sp. (Pomme de Cythere).

108593 to 108748.

From the Union of Soviet Socialist Republics. Seeds collected by H. L. Westover and C. R. Enlow, Bureau of Plant Industry. Received November 10, 1934.

Introduced for Department specialists.

108593 to 108601. ALOPECURUS PRATENSIS L. Poaceae. Meadow foxtail.

108593. No. 1038. From the Ukraine.

108594. No. 1040. From the Ukraine.

108595. No. 1043. From Ivanovsk Province.

108596. No. 1046. From the Ukraine.

108597. No. 1051. From western Siberia.

108598. No. 1052. From the lower Volga region.

108599. No. 1053. From the Moscow region.

108600. No. 1055. From the middle Volga region.

108601. No. 1056. From the Moscow region.

108602 to 108604. Gastridium ventricosum (Gouan) Schinz and Thell. Poaceae.

108602. No. 1041. From northern Kazakstan.

108603. No. 1042. From the middle Volga region.

108604. No. 1044. From Omsk, Siberia.

108605. ALOPECURUS ARUNDINACEUS Poir. Poaceae.

No. 1045. From Omsk, Siberia.

108606 to 108609. GASTRIDIUM VENTRICO-SUM (Gouan) Schinz and Thell. Poaceae.

108606. No. 1047. From the Altai region.

108607. No. 1049. From Buriato, Mongolia.

108608. No. 1050. From the Ural district.

108609. No. 1054. From western Siberia.

108610. Alopecurus sp. Poaceae.

No. 1048. From the Ukraine.

108611. ASTRAGALUS TESTICULATUS Pall. Fabaceae.

No. 1191. From western Siberia. A perennial, cespitose, densely hairy astragalus, native to Siberia.

For previous introduction see 61397.

108612. ASTRAGALUS Sp. Fabaceae.

No. 1190. From southern Kazakstan.

108613 to 108618. BECKMANNIA spp. Poaceae. Grass.

108613 to 108616. BECKMANNIA ERUCAE-FORMIS (L.) Host. Sloughgrass.

108593 to 108748—Continued.

108613. No. 1057. From White Russia; central region of the Dnieper River.

108614. No. 1059. From Moscow Province.

108615. No. 1060. From Yakut Province.

108616. No. 1058. From the Ukraine.

108617 and 108618. BECKMANNIA SYZI-GACHNE (Steud.) Fern.

108617. No. 1061. Eastern Kazakstan region, Irtish district.

108618. No. 1071. From Buriato, Mongolia.

108619. CAREX sp. Cyperaceae.

No. 916. Collected near Tashkent, Turkistan, June 14, 1934.

108620 to 108628. DACTYLIS GLOMERATA L. Poaceae. Orchard grass.

108620. No. 1062. From the northern Caucasus.

108621. No. 1063. From Azerbaijan, Turkistan,

108622. No. 1064. From the Altai region.

108623. No. 1065. From the Altai region.

108624. No. 1066. From eastern Kazakstan.

108625. No. 1067. From Armenia.

108626. No. 1068. From western Siberia.

108627. No. 1069. From western Siberia.

108623. No. 1070. From eastern Kazakstan.

108629. GALEGA ORIENTALIS Lam. Fabaceae.

No. 1193. From Armenia, A leguminous shrub with ovate-acute leaflets and racemes of blue flowers. Native to the Caucasus.

108630 to 108632. LATHYRUS spp. Fabaceae.

108630. LATHYRUS ERECTUS Lag.

No. 1187. From Kazakstan. A slender-stemmed annual about 6 inches high, with linear-lanceolate leaflets and very small lilac flowers. Native to southeastern Europe.

108631 and 108632. LATHYRUS PRATENSIS L. Yellow vetchling.

108631. No. 1186. From the Ural district, western Siberia.

108632. No. 1189. From southern Kazakstan

108633. VICIA SATIVA L. Fabaceae.

No. 1188. From southern Kazakstan.

108634. LOTUS CORNICULATUS CILIATE (Tenore) C. Koch. Fabaceae.

No. 1192. From Armenia.

108635 to 108657. Melilotus spp. Fabaceae.

108635 to 108646. MELILOTUS ALBA Desr.
White sweetclover.

108593 to 108748-Continued.

108635. No. 1166. From the middle Volga region.

108636. No. 1171. From western Siberia.

108637. No. 1150. From Semipalatinsk.

108638. No. 1152. From western Siberia.

108639. No. 1153. From Omsk, Siberia.

108640. No. 1154. From the Ukraine. 108641. No. 1158. From western Si-

beria.

108642. No. 1159. From the Ukraine.108643. No. 1160. From eastern Kazakstan.

108644. No. 1168. From the lower Volga region.

108645. No. 1169. From the Ural district.

108646. No. 1172. From Moscow Province.

108647. MELILOTUS CASPIA Gruner.

No. 1162. From the lower Volga region. A biennial sweetclover with an upright stem 20 to 30 inches high, somewhat sparse foliage, and brightyellow flowers in short racemes. Native to southern Soviet Union.

108648 to 108655. MELILOTUS OFFICINA-LIS (L.) Lam.

108648. No. 1151. From the lower Volga region.

108649. No. 1155. From the Ukraine.108650. No. 1157. From the lower Volga region.

108651. No. 1161. From the Ukraine.108652. No. 1163. From the lower Volga region.

108653. No. 1165. From the Ukraine.108654. No. 1167. From Don Province.

108655. No. 1170. From the lower Volga region.

108656. MELILOTUS Sp.

No. 1164. From Armenia.

108657. MELILOTUS Sp.

No. 1166-A. From the Ural district.

108658 to 108670. Onobrychis spp. Fabaceae.

108658. Onobrychis arenaria DC.

No. 1178. From western Siberia. A forage plant of much promise, which is said to make a more rapid growth the first year than the ordinary sort.

For previous introduction see 84463.

108659 and 108660. Onobrychis Mi-CHAUXII DC.

From Azerbaijan.

108659. No. 1175. 108660. No. 1177.

108661 and 108662. ONOBRYCHIS OXYTRO-POIDES Bunge.

From Armenia. A stemless herbaceous perennial with a woody spreading

108593 to 108748—Continued.

rhizome and compound leaves 2 to 3 inches long. Native to Asia Minor.

108661. No. 1180. 108662. No. 1183.

108663. ONOBRYCHIS PETRAEA Desv.

No. 1176. From eastern Kazakstan. An erect perennial with pinnate leaves, the leaflets oblong-lanceolate. Native to the Caucasus region.

108664. Onobrychis subacaulis Boiss.

No. 1173. From Armenia. A low annual 1 or 2 inches high, native to arid places in Asia Minor.

108665 to 108669. Onobrychis Transcau-Casica Grossh.

From Armenia. An erect herbaceous perennial 1 to 2 feet high, with a thick rhizome, pinnate leaves, and small pink flowers. Native to the Caucasus region.

108665. No. 1174. From the Akhtinsk district.

108666. No. 1179. From the Katinskii district.

108667. No. 1182. From Privolokoe Village.

108668. No. 1184. From the Akhtinsk district.

108669. No. 1185. From the Stepnsi district.

108670. Onobrychis sp.

No. 1181. From Armenia, Badarzechersk district.

108671 to 108694. PHLEUM spp. Poaceae.

108671. PHLEUM ALPINUM L.

No. 1094. From Armenia.

108672 to 108681. PHLEUM PHLEOIDES (L.) Karst.

108672. No. 1080. From Armenia.

108673. No. 1082. From Kazakstan

108674. No. 1083. From eastern Kazakstan.

108675. No. 1084. From eastern Kazakstan.

108676. No. 1085. From the middle Volga region.

108677. No. 1086. From eastern Kazakstan.

108678. No. 1089. From Stone Steppe.

108679. No. 1091. From Kazakstan.

108680. No. 1092. From eastern Kazakstan.

108681. No. 1093. From eastern Kazakstan.

108682 to 108689. PHLEUM PRATENSE L. 108682. No. 1072. From western Siberia.

108683. No. 1073. From Armenia.

108684. No. 1074. From western Siberia.

108685. No. 1075. From eastern Kazakstan.

108686. No. 1076. From eastern Kazakstan. 108593 to 108748—Continued.

108687. No. 1078. From the Ural district.

108688. No. 1079. From eastern Kazakstan.

108689. No. 1095. From western Siberia.

108690. PHLEUM GRAECUM Boiss. an Heldr.

No. 1081. From eastern Kazakstan. 108691. Phleum sp.

No. 1087. From the Ural Province.

108692. PHLEUM sp.

No. 1088. From eastern Kazakstan.

108693 and 108694. PHLEUM GRAECUM Boiss, and Heldr.

From Armenia.

108693. No. 1090. 108694. No. 1077.

108695 to 108722. TRIFOLIUM spp. Fabaceae. Clover.

108695 and 108696. TRIFOLIUM AGRARIUM L.

From the Ukraine.

108695. No. 1140. 108696. No. 1141.

108697 and 108698. TRIFOLIUM ALPESTRE L.

From Armenia.

108697. No. 1148. 108698. No. 1149.

108699. TRIFOLIUM AMBIGUUM Bieb. No. 1143. From the Crimea.

108700. TRIFOLIUM CANESCENS Willd.

No. 1136. From Armenia. A perennial clover about 6 inches high, with obovate villous leaflets and grayishwhite flower heads. Native to Asia Minor.

108701 to 108708. TRIFOLIUM FRAGIFERUM

For previous introduction see 107579. 108701. No. 1137. From the Ukraine.

108702. No. 1138. From Armenia.108703. No. 1139. From Armenia.

108704. TRIFOLIUM HYBRIDUM L.

No. 1135. From eastern Kazakstan.

108705 to 108707. TRIFOLIUM LUPINASTER

108705. No. 1144. From western Siberia.

108706. No. 1145. From western Kazakstan.

108707. No. 1146. From western Siberia.

108708. TRIFOLIUM MEDIUM Huds.
Mammoth clover

No. 1142. From Armenia.

108709. TRIFOLIUM MONTANUM L.

No. 1147. From Ivanovsk Province.

108710 to 108719. TRIFOLIUM PRATENSE
L. Red clover.

108710. No. 1122. From the Altai region.

136008-39-3

108593 to 108748—Continued.

108711. No. 1123. From the Ural district.

108712. No. 1124. From southern Kazakstan.

108713. No. 1125. From eastern Kazakstan.

108714. No. 1126. From the Ural Province.

108715. No. 1127. From the Ural Province.

108716. No. 1128. From Ivanovsk Province.

108717. No. 1129. From the Ural Province.

108718. No. 1130. From eastern Kazakstan.

108719. No. 1131. From the Altai region.

108720 to 108722. TRIFOLIUM REPENS L. White clover.

108720. No. 1132. From western Siberia.

108721. No. 1133. From the Ural discrict.

108722. No. 1134. From eastern Kazakstan.

108723 to 108725. VICIA AMOENA Fisch.

A perennial hairy vetch, native to Siberia, with stems up to 2 feet high and purplish flowers.

For previous introduction see 107709.

108723. No. 1104. From Buriato, Mongolia.

108724. No. 1105. From western Siberia.

108725. No. 1106. From Buriato, Mongolia.

108726. VICIA TENUFOLIA Roth.

No. 1107. From the Altai region.

108727 to 108732. VICIA CRACCA L.

Cow vetch. 108727. No. 1108. From the Westoblast

Province.

108728. No. 1109. From the Altai re-

gion. 108729. No. 1110. From the Ivanovsk

Province.

108730. No. 1111. From the Moscow

Province.

108731. No. 1112. From the White Rus-

sian Republic.

108732. No. **1113.** From western Siberia.

108733. VICIA HIRSUTA (L.) S. F. Gray.

No. 1101. From the Ukraine. A small vetch.

For previous introduction see 81050.

108734. VICIA MICHAUXII Spreng.

No. 1121. From southern Kazakstan. A creeping or climbing annual vetch, native to Syria.

For previous introduction see 67066.

108735. VICIA SATIVA L. Common vetch. No. 1116. From Armenia. 108593 to 108748—Continued.

108736. VICIA SEPIUM L.

Bush vetch. From western No. 1096. Siberia.

For previous introduction and description see 108009.

108737 and 108738. VICIA SYLVATICA L.

For previous introduction see 52279.

108737. No. 1102. From Siberia.

108738. No. 1103. From western Siberia.

108739. VICIA VILLOSA Roth. Hairy vetch. No. 1097. From the northern Caucasus.

108740. VICIA TENUIFOLIA Roth.

No. 1098. From western Siberia.

For previous introduction and description see 108011.

108741 and 108742. VICIA UNIJUGA A. Br. For previous introduction see 90585.

108741. No. 1114. From Buriato, Mongolia.

108742. No. 1115. From western Siberia.

108743. VICIA VARIABILIS Freyn and Sint.

No. 1100. From the northern Caucasus. A herbaceous perennial with ascending stems, linear-lanceolate leaflets, and blue or purplish flowers in a dense raceme. Native to Armenia.

108744. VICIA VILLOSA Roth. Hairy vetch. No. 1099. From the Ukraine.

108745. VICIA sp.

No. 1117. From western Siberia.

108746 to 108748. VICIA spp.

From Armenia.

108746. VICIA SD.

No. 1118.

108747. VICIA Sp.

No. 1119.

108748. VICIA sp.

No. 1120.

108749. DAUCUS CAROTA L. Apiaceae. Carrot.

om Morocco. Seeds presented by H. Bray-ard, Directeur de la Station Expérimen-tale de Marrakech. Received January 29, From Morocco.

A carrot cultivated by the natives. troduced for Department specialists.

108750 to 108753. TRITICUM AESTIVUM Poaceae. Common wheat.

rom Australia. Seeds presented by H. Wenholz, Director of Plant Breeding, Department of Agriculture, New South Wales, through R. C. May, Experiment Farm, Bathurst, New South Wales. Received February 6, 1935. From

Wheat crosses made at the Experiment Farm, Bathurst, New South Wales. Introduced for Department specialists.

108750. $(Galgalos \times Bena) \times Federation.$ 5/1-1-1.

108750 to 108753—Continued.

108751. $(Galgalos \times Bena) \times Federation.$ 6/1-1-1-1.

108752. $(Galgalos \times Bena) \times Federation.$ 6/3-2-1-1.

108753. $(Galgalos \times Federation) \times Federation$. 5/1-1-1.

108754 and 108755. Prunus spp. Amygdalaceae.

From California. Scions presented by W. B. Clarke & Co., San Jose. Received February 7, 1935.

For use by Department specialists.

108754. PRUNUS SERRULATA Lindl. Oriental cherry.

Daikoku.

108755. PRUNUS SUBHIRTELLA Mig. Higan cherry.

Beni-hoshi.

108756. SCHEFFLERA ACTINOPHYLLA Harms (Brassaia actino-(Endl.) phylla Endl.). Araliaceae.

From Coconut Grove, Fla. Seeds originally from Brisbane, Australia, collected by F. G. Walsingham at Woodlawn Cemetery and brought to the Plant Introduction Garden January 8, 1929. Numbered for convenience in distribution, February 1935.

An evergreen tree up to 40 fcet high, native to Queensland, Australia, with compound leaves made up of 6 to 16 oblong leathery leaflets a foot long. The racemes, several feet long, of fragrant flowers, are followed by small heads of angled dry fruits. This is a very good honey tree and does best in moist situations.

For previous introduction see 98137.

108757. CROCUS ALATAVICUS Regel. Iri-

From the Union of Soviet Socialist Republics. Seeds presented by the Botanic Garden, Alma Ata, through Dr. A. Popov, Department of New Cultures and Introduction, Leningrad. Received February 7, 1935.

A spring-blooming crocus from central Asia, with linear, white-striped leaves and white flowers.

108758. STYLOMA THURSTONI (Muell. and Drude) O. F. Cook (Pritchardia thurstoni Muell, and Drude). Phoenicaceae.

rom Puerto Rico. Seeds presented by David Barry, Jr., Los Angeles, Calif. Re-ceived February 2, 1935. From

A tall palm with a slender, ringed trunk crowned by a cluster of spreading, fanshaped leaves 3 to 6 feet in diameter. The clusters of small greenish flowers are borne on long stalks resembling fishing poles. It is native to the Fiji Islands.

For previous introduction see 86695.

108759 to 108778.

rom Europe. Seeds collected by Dr. Edgar Anderson, of the Arnold Arboretum Bal-kan expedition. Received January 26, 1935. From Europe.

108759 to 108778—Continued.

The following were collected in regions unusually cold and high for these particular species.

108759. CLEMATIS VITALBA L. Ranunculaceae. Travelers-joy.

From the Balkan Mountains, Bulgaria. A handsome strong-growing vine with pinnate, ovate leadets and axillary and terminal panicles of slightly fragrant white flowers. Native to the Mediterranean region.

For previous introduction see 76326.

108760. FORSYTHIA EUROPAEA Degen and Bald. Oleaceae.

No. 143-A. From Peč, Yugoslavia. A bushy shrub with firm opposite, ovatelanceolate leaves about 2 inches long and yellow flowers about 1 inch across. Native to Albania.

108761. ILEX AQUIFOLIUM L. Aquifoliaceae. English holly.

From above Sarajevo, Yugoslavia. A variety with duller leaves and more winter hardy than the type. It thrives in rather shady places.

108762 to 108764. LIGUSTRUM VULGARE L. Oleaceae. European privet.

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

108762. From Fanata, Cluj, Rumania.

108763. From Sarajevo, Yugoslavia.

108764. From Babadag, Rumania.

108765. LINUM sp. Linaceae.

No. 153. From the Ravna Mountains, Yugoslavia.

108766. Lunaria rediviva L. Brassicaceae.

No. 39-A. From the Rila Mountains, Bulgaria. A herbaceous perennial with large broadly-cordate leaves, terminal racemes of gray-purple flowers, and large flat, disk-shaped, translucent fruits. Native to southern Europe.

For previous introduction see 106526.

108767. PRUNUS LAUROCERASUS L. Amygdalaceae. English cherry-laurel.

From Ljutljana, Yugoslavia. Variety schipkaensis. A shrubby form with nearly entire leaves 2 to 5 inches long.

For previous introduction see 103598.

108768. PRUNUS WEBBII (Spach) Vierhapper. Amygdalaceae.

No. 151. From the Botanical Museum, Sarajevo, Yugoslavia. A much-branched shrub, native to Asia Minor, with light-green, lanceolate-oblong leaves and small fruits less than 1 inch long.

108769. PYRUS ELAEAGRIFOLIA Pall. Malaceae.

From Niculital, Rumania. An ornamental wild pear, native to Asia Minor, which becomes a large bush or small tree. The small white flowers appear in May, and the small globose fruits are crowned with a prominent calyx. The leaves are lanceolate, oblong-lanceolate, or linear lanceolate and covered with a whitish silky pubescence.

108759 to 108778-Continued.

108770. SAMBUCUS NIGRA L. Caprifoliaceae. European elder.

No. 68. From Tarda-Schlecht, Rumania.

108771. Sambucus Racemosa L. Caprifoliaceae. European red elder.

No. 23. From the Rila Monastery, Bulgaria.

For previous introduction see 92061.

108772. SILENE ROEMERI Friv. Silenaceae.

No. 19. From Mount Vitoska, above Sofia, Bulgaria. A perennial alpine, native to southeastern Europe, with hairy, narrow-spatulate leaves and small whitish flowers in headlike racemes.

108773. Syringa vulgaris L. Oleaceae.

No. 114. From Mount Domogled, Rumania. A dwarf form.

108774. Syringa vulgaris L. Oleaceae. Lilac.

No. 106. From the Cazan Pass, Rumania.

108775. VACCINIUM MYRTILLUS L. Vacciniaceae. European whortleberry.

No. 22. From the Rila Mountains, Bulgaria. A low deciduous shrub about 1 foot high, native to northern and central Europe, with bright-green, ovate leaves. The globose black berries, one-third of an inch in diameter, are sometimes sold in the markets, but the plant is not generally cultivated.

For previous introduction see 42640.

108776. VACCINIUM VITIS-IDAEA L. Vacciniaceae. Cowberry.

No. 57. From the Bihor Mountains, Rumania, in a rather dry situation. A small evergreen bush, 6 to 10 inches high, with racemes of small pinkish flowers, which grows wild in the northern regions of Europe, Asia, and North America. The deep-red berries have a tart taste and are used in northern regions as a substitute for cranberries.

For previous introduction see 95437.

108777. VERBASCUM LYCHNITIS L. Scrophulariaceae.

No. 25. From the Rila Monastery, Bulgaria, at 4,200 feet altitude, August 13, 1934. A tomentose biennial, found in turf in full sun, with oblong-elliptic, crenate leaves and panicles of small yellow flowers. Native to Europe and the Caucasus.

For previous introduction see 106534.

108778. VERBASCUM SPECIOSUM Schrad. Scrophulariaceae.

No. 113. From Mount Domogled, Rumania. A tall biennial mullein with pale-green, oblong-lanceolate leaves more than a foot long at the base of the stem, becoming much smaller toward the top. The yellow flowers are in a long panicled raceme. Native to eastern Europe.

108779 to 108802.

From the Union of Soviet Socialist Republics. Seeds presented by the Director, Botanic Garden, Tiflis, Caucasus. Received January 29, 1935.

108779 to 108802-Continued.

108779. ALLIUM VICTORIALIS L. Liliaceae.

One of the most distinctive species of European onions, with stems about 2 feet high, leaves resembling those of the lily-of-the-valley, and white to greenish-white flowers.

For previous introduction see 97582.

108780. Anthemis Iberica Bieb. Asteraceae.

An alpine perennial, native to Spain, with ascending stems 1 foot high, hairy pinnate leaves and small flower heads with white rays.

108781. Anthemis Marschalliana Willd. Asteraceae.

A perennial, native to the Caucasus region, with ascending stems, bipinnate leaves with linear pinnae, and yellow flower heads,

108782 to 108785. Bellevalia spp. Liliaceae.

108782. Bellevalia fominii Voronov.

A bulbous plant with three to five narrow basal leaves 8 inches long and about one-half inch wide, and small pinkish flowers in a lax cylindrical raceme. Native to the Transcaucasian region.

108783. BELLEVALIA LONGISTYLA (Miscz.) Grossh.

A bulbous plant with lanceolate leaves about a foot high and one-half inch wide and a panicle of 15 to 25 small, rusty-purple, campanulate flowers. Native to the Caucasus.

. 108784. BELLEVALIA MAKUENSIS Voronov.

A bulbous plant, native to dry places in the Caucasus, with leaves 8 to 12 inches high and one-half inch wide and a broad panicle of small brown-violet flowers

108785. BELLEVALIA SPECIOSA Voronov.

A bulbous plant, native to Armenia and Transcaucasia, with four to five lorate, narrow leaves about 6 inches long with narrow cartilaginous margins and small yellow flowers in a dense raceme about 7 inches long.

108786. DELPHINIUM FLEXUOSUM Bieb. Ranunculaceae.

A hardy herbaceous perennial with violet flowers. Native to the mountains of Armenia.

For previous introduction see 104849.

108787. DELPHINIUM LINEARILOBUM Busch. Ranunculaceae.

A herbaceous perennial with deeply palmately lobed leaves, the segments linear, and blue flowers in lax racemes. Native to the Transcaucasian region.

108788. DIGITALIS FERRUGINEA L. Scrophulariaceae. Foxglove.

A biennial or perennial, 5 to 6 feet high, densely leafy, with long dense racemes of rusty-red flowers. Native to southern Europe.

For previous introduction see 104574.

108779 to 108802—Continued.

Fomin.

108789 to 108791. GAGEA spp. Liliaceae.

108789. GAGEA ALEXEENKOANA MISCZ.

A plant about 5 inches high, with narrow-linear leaves slightly exceeding the scape. The small flowers, yellow inside and green without, are borne in small clusters. Native to the Caucasus.

108790. GAGEA CHLORANTHA (Bieb.) Schult. f.

A bulbous plant with filiform or narrow-lanceolate leaves and corymbs of greenish-yellow flowers. Native to dry stony places in the Caucasus.

For previous introduction see 92984. 108791. GAGEA TENUIFOLIA (Boiss.)

A tufted, bulbous plant with narrow linear, recurved leaves and small flowers, yellow within, in small clusters. Native to dry slopes in the Caucasus region.

108792. HEDERA COLCHICA Koch. Araliaceae. Colchis ivy.

A high-climbing vine with the young growth covered by golden-yellow scales, broadly cordate, almost entire bright-green leaves of firm texture, and small umbels of greenish-yellow flowers in paniculate clusters, followed by black fruits. It is native to the Caucasus region.

For previous introduction see 81345.

108793 to 108798. IRIS spp. Iridaceae.

108793 to 108796. IRIS PUMILA L.

108793. Albidis. A form with white flowers.

108794. Luteis. A form with light-yellow flowers.

108795. Pallidis. A form with pale-violet flowers, rarely white.

108796. Violaceis. A form with violet flowers.

108797. IRIS SULPHUREA Koch.

A dwarf hardy iris of the Pogoniris section, with linear leaves 2 to 4 inches long and sulphur-yellow flowers. Native to southern Russia.

108798. IRIS IMBRICATA Lindl.

A Pogoniris with about six pale-green, broadly ensiform leaves 6 to 8 inches long at flowering time and a stem 12 to 20 inches long, bearing clusters of greenish-yellow flowers about 2 inches in length. Native to northern Iran and Transcaucasia.

For previous introduction see 81349.

108799. PAEONIA ABCHASICA Misch. Ranunculaceae.

A herbaceous perennial with deepgreen leaves, paler beneath, and yellow flowers about 3 inches across. Native to the Caucasus region.

108800. RHODODENDRON CAUCASICUM Pall. Ericaceae. Caucasian rhododendron.

For previous introduction see 103392.

108801. RHODODENDRON FLAVUM G. Don. Ericacene.

A shrub 4 to 6 feet high, with ovateoblong, pilose, ciliated shining-green leaves and handsome yellow flowers. Native to Asia Minor.

108779 to 108802—Continued.

108802. VIOLA SIEHEANA W. Beck. Violaceae.

A perennial about 5 inches high, with reniform-cordate basal leaves and broadly ovate stem leaves, and pale-blue or white flowers. Native to Asia Minor.

108803 and 108804.

From Rumania. Seeds collected by Dr. Edgar Anderson, of the Arnold Arboretum Balkan expedition. Received February 2, 1935.

108803. QUERCUS sp. Fagaceae.

108804. Quercus sp. Fagaceae.

108805 to 108813.

om Australia. Seeds presented by H. Wenholz, Director of Plant Breeding, De-partment of Agriculture, Sydney, New South Wales. Received February 2, 1935.

collection of local vegetable varieties introduced for Department specialists.

108805 to 108812. ALLIUM CEPA L. Onion. ceae.

108805. Brown Spanish.

108806. Early White Globe.

198807. Hunter River Brown.

108808. Hunter River White.

108809. Late White Globe.

108810. Odourless.

198811. Silver King.

108812. White Queen.

108818. DAUCUS CAROTA L. Apiaceae Carrot.

Red Top Colonial carrot.

108814. ALLIUM SATIVUM L. Liliaceae.

From Yugoslavia. Seeds presented by Prof. Ivo. Volaric, State Agronomist, Samobov, Croatia. Received February 8, 1935.

Introduced for Department specialists.

108815. CASTANEA CRENATA Sieb. and Zucc. Fagaceae. Japanese chestnut.

om Japan. Seeds purchased from the Yokohama Nursery Co., Yokohama. Re-ceived December 28, 1934. Numbered in January 1935.

Introduced for Department specialists.

108816 to 108819.

om China. Seeds purchased through Albert N. Steward, College of Agriculture and Forestry, University of Nanking, Nanking. Received February 6, 1935.

Locally grown seeds introduced for Department specialists; obtained from farmers in the vicinity of Nanking.

. 108816. ALLIUM CEPA L. Liliaceae. Onion.

Yang Ts'ong.

108817. ALLIUM SATIVUM L. Liliaceae. Garlic.

" 'Chui Ts'ai.

108816 to 108819—Continued.

108818. APIUM GRAVEOLENS L. Apiaceae. Cêlery. Peh Ch'ing.

108819. DAUGUS HOAROTA L. Apiaceae;

Carrot. Hu Lo Po. 1 Post of the second

108820 to 108823.

From Ecuador. Seeds collected by Mrs. Ynes Mexia, Bureau of Plant Industry. Received January 31, 1935.

108820. Bomarea sp. Amaryllidaceae.

No. 6800-A. Collected on the lower slopes of the volcano of Pichincho, Province of Pichincho, December 29, 1934, between 9,000 and 12,000 feet altitude. A climbing shrub about 6 feet high, the flowers are crimson without and orange flecked with black on the inside. The shrub is quite common in this region and is seen also in the valley of Quito south of Chillo.

108821. DIOSPYROS sp. Diospyraceae.

108822. JUGLANS HONOREI Dode. Juglan-

No. 6781-B. Purchased January 12, 1935, at Quito, Pichincho Province, altitude about 10,500 feet. A wild walnut, native to the highlands of northern South America, which resembles closely the black walnut of the United States. The thick-shelled nut contains a kernel of wild placent favor. mild pleasant flavor.

For previous introduction see 106450.

108823. JUGLANS PERUVIANA Dode." Juglandaceae/

No. 6782. The nogal, or native black walnut tree, occasionally seen in cultivation, but more commonly wild. It is a shapely tree up to 50 feet high, and the nuts are much like those of Juglans nigra, but with a thicker shell. The wood is considered valuable.

For previous introduction see 49375.

108824. DAUCUS CAROTA L. Apiaceae. Carrot.

rom India. Seeds presented by Ralph Stewart, systematic botanist, Gordon Col-lege, Rawal, Pindi. Received February 7, 1935. From India.

Locally grown seeds introduced for Department specialists.

108825 to 108827.

From Algeria. Seeds presented by Julian Brichet, Chef du Service de L'Arboricul-ture a la Direction de l'Agriculture, Algiers. Received February 8, 1935.

Introduced for Department specialists.

108825. ALLIUM CEPA L. Liliaceae.

108826. APIUM GRAVEOLENS L. Aplaceae. Celery.

108827. PIMPINELLA ANISUM L. Apiaceae. Anise.

108828 to 108831.

From Venezuela. Seeds collected by W. A. Archer, Bureau of Plant Industry. Received February 2, 1935.

Introduced for Department specialists.

108828 to 108831—Continued.

108828. PAULLINIA LEIOCARPA Griseb. Sapindaceae.

No. 2950. Antimano, near Caracas, January 12, 1935. A climbing shrub with pinnate leaves having ovate-oblong leaflets 3 to 4 inches long, racemes of small white flowers, and nurple-black seeds. Native to the West Indies.

108829. Passiflora Ligularis Juss. Passifloraceae. Sweet granadilla.

No. 2947. Caracas, January 8, 1935. Parche amarilla. This is said to be the best of the genus and is sold in the market. The light-yellow or green-yellow fruit is egg-shaped and has a rather thin rind. The seed is surrounded by an edible translucent arillus which is very refreshing.

For previous introduction see 102612.

108830. Polygonum sp. Polygonaceae.

No. 2949. From near Caracas, January 12, 1935. Found in shaded places near the stream. A plant with reddish stems.

108831. POLYGONUM HYDROPIPEROIDES Michx, Polygonaceae.

No. 2948. Barbaseo blanco. From Antimano, near Caracas, January 12, 1935. Native to the southeastern United States.

108832. PORLIERIA ANGUSTIFOLIA (Engelm.) A. Gray. Zygophyllaceae.

From Texas. Seeds presented by H. B. Parks, San Antonio, through F. J. Crider, Tucson, Ariz. Received February 11, 1935.

A shrub or small tree, native to northern Mexico, with compound leaves, the 8 to 12 linear leaflets about one-half inch long and the small sweet-scented purple flowers about one-half inch across.

108833. Prunus salasii Standl. Amygdalaceae.

From Guatemala. Seeds presented by the Director, Department of Agriculture, Guatemala City. Received February 11, 1935.

Carreto. A tropical evergreen cherry which is native to the highlands of Antigua, Guatemala. The light-green, leathery, narrow, oblong leaves are 3 to 5 inches long, and the small white flowers are in racemes about 6 inches long.

For previous introduction see 98929.

108834. Trifolium sp. Fabaceae.

From Africa. Seeds presented by Raymond Hool, Nanyuki, Kenya. Received February 11, 1935.

A locally grown variety of medium purple clover.

108835 to 108977.

From the Union of Soviet Socialist Republics. Seeds collected in Turkistan by H. L. Westover and C. R. Enlow, Bureau of Plant Industry. Received December 7, 1934

Introduced for Department specialists.

108835 to 108840. AEGILOPS spp. Poaceae.

| 108835 to 108977--Continued.

108835. AEGILOPS CRASSA Boiss.

No. 99. Near Tashkent, June 13, 1934. A decumbent annual grass with with flat leaves. Native to Asia Minor.

For previous introduction see 107479.

108836 to 108838. AEGILOPS CYLINDRICA Host.

For previous introduction see 94301.

108836. No. 93. Between Milibash and Tashkent, Uzbekistan, June 14, 1934.

108837. No. 102. Near Arice, Uzbekistan, June 13, 1934.

108838. No. 108. Between Milibash and Tashkent, June 14, 1934.

108839 and 108840. AEGILOPS TRIUNCI-ALIS L.

Collected June 19, 1934, on clay flats west of Ashkhabad, Turkmenistan. A thickly branched annual grass with ascending stems and flat rough leaves. Native to dry places in the Mediterranean region.

For previous introduction see 107478. 108839. No. 96. 108840. No. 97.

108841 to 108843. AELUROPUS LITTORALIS (Gouan) Parl. Poaceae.

From the Karakum Desert near Ashkhabad, June 18, 1934.

A good grazing plant found in moist places, as well as in very dry situations.

For previous introduction see 108315.

108841, No. 90.

108843. No. 15. Collected from plants growing along the railroad near the Syr Darya and Milibash, Uzbekistan, June 13, 1934.

108842. No. 95.

108844. AGRIOPHYLLUM LATIFOLIUM Fisch. and Mey. Chenopodiaceae.

No. 114. From the Repetek Sand Desert Station, Turkmenistan. A muchbranched annual with ovate or subcordate, long-cuspidate leaves and small inconspicuous flowers in globular axillary clusters. Native to sandy deserts in Turkistan.

For previous introduction see 101976.

108845 to 108849. AGROPYRON spp. Poaceae. Grass.

108845. AGROPYRON ORIENTALE (L.) Roem, and Schult.

No. 110. June 18, 1934. From the edge of the desert near Ashkhabad. An annual much-branched grass, prostrate-ascending in habit, native to sandy places in Asia Minor and Turkistan.

For previous introduction see 106830.

108846. AGROPYRON ORIENTALE LASIAN-THUM Boiss.

No. 126. June 26, 1934. From the Repetek Sand Desert Station, Turkmenistan. An annual grass thickly branched at the base, with numerous mostly prostrate stems scarcely 8 inches high. Native to Asia Minor and northern Africa.

For previous introduction see 98528.

108847. AGROPYRON SIBIRICUM (Willd.) Beauv.

No. 122. June 13, 1934. At Milibash on the Syr Darya.

For previous introduction see 108435.

108848 and 108849. AGROPYRON SQUAR-ROSUM (Roth) Link.

A perennial grass of possible use as forage.

For previous introduction see 92961.

108848. No. 92. June 18, 1934. Ashkhabad, at the edge of the desert.

198849. No. 118. June 28, 1934. Repetek Sand Desert Station, Turkmenistan.

108850. ALLIUM SABULOSUM Stev. Liliaceae.

No. 112. June 28, 1934. From the Repetek Sand Desert Station, Turkmenistan. A yellow-flowered allium, from sandy places in eastern Turkistan, with terete, fillform leaves. The flowers are in lax globular heads.

108851 and 108852. Ammodendron conol-LYI Bunge. Fabaceae.

An evergreen, silky-leaved shrub, native to Siberia, and used as a sand binder. Collected at the Repetek Sand Desert Experiment Station, Turkmenistan, June 28, 1934.

For previous introduction see 101978.

108851. No. 98. 108852. No. 124.

108853 and 108854. Ammothamnus Lehmanni Bunge. Fabaceae.

A much-branched shrub up to 2 feet high, with compound pinnate leaves, the leaflets cuneate obovate and one-half inch long. The small white flowers are in long, lax racemes. Native to Turkistan. Collected near the edge of the Karakum Desert, June 18, 1934.

108853. No. 106. 108854. No. 73.

108855. Amygdalus spinosissima Bunge. Amygdalaceae.

No. 89. From Kopet Dagh, south of Ashkhabad, near the Persian border, June 19, 1934. A wild almond.

For previous introduction see 86302.

108856. AMYGDALUS Sp. Amygdalaceae.

No. 88. From Kopet Dagh, near Ashkhabad, June 21, 1934. A wild almond.

108857 to 108865. Aristida spp. Poaceae. Grass.

108857 to 108860. ARISTIDA PENNATA KARELINI Trin. and Rupr.

A perennial grass of possible value as a forage crop.

For previous introduction see 106844.

108857 to 108859. Collected at the Repetek Sand Desert Experiment Station where they were growing in moving sand.

108857. No. 128. 108859. No. 85. 108858. No. 113.

108860. No. 125. Collected June 27, 1934, 15 miles west of Repetek, at Behl Kaduk Wells in the Karakum Desert, Turkmenistan.

108835 to 108977—Continued.

108861 to 108865. ARISTIDA PENNATA MINOR Lity.

A perennial grass, of possible value as a forage crop.

For previous introduction see 98204.

108861. No. 87. June 27, 1934. From Behl Kaduk Wells in the Karakum Desert, west of Repetek, Turkmenistan.

108862. No. 109. June 18, 1934. Collected north of Ashkhabad at the edge of sand hills, Turkmenistan.

108863 to 108865. June 28, 1934; from the sands at Repetek, Turkmenistan.

108863. No. 127. 108865. No. 94. 108864. No. 86.

108866 to 108877. ASTRAGALUS Spp. Faba-

108866 and 108867. ASTRAGALUS ALOPE-CIAS Pall.

June 18, 1934. From the Karakum Desert north of Ashkhabad. A perennial with white-woolly ovate leaflets and pale-yellow flowers. Native to central Asia.

For previous introduction see 106846. 108866. No. 116. 108867. No. 119.

108868 and 108869. ASTRAGALUS AMMODENDRON Bunge.

June 18, 1934. From the Karakum Desert, north of Ashkhabad. A large shrub native to sandy places near the Caspian Sea. The pinnate leaves have three leaflets, and the small purplish flowers are in short racemes.

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

For previous introduction see 94925. 108868. No. 103. 108869. No. 115.

108870 and 108871. ASTRAGALUS CHIWENSIS Bunge.

June 18, 1934. From the Karakum Desert, north of Ashkhabad. An erect, densely villous herb with pinnate leaves, the leaflets roundish and retuse. The light-yellowish flowers are in lax racemes. Native to Turkistan.

108870, No. 104, 108871, No. 120,

108872. ASTRAGALUS Sp.

No. 105. June 18, 1934. From the Karakum Desert. Received under the name "drobowii," for which a place of publication has not been found.

108873. ASTRAGALUS MAXIMOWICZII Trautv.

No. 117. Collected near Ashkhabad. A yellow-flowered herb with long whitehairy compound leaves, the leaflets broadly elliptic, obtuse. The flowers are in dense axillary spikes. Native to Turkistan.

108874. ASTRAGALUS PAUCIJUGUS Schrenk.

No. 11. June 23, 1934. Found on moving sands at Repetek.

108835 to 108977—Continued. 108835 to 108977—Continued.

108875. ASTRAGALUS Sp.

No. 101. June 13, 1934. From Milibash on the Syr Darya.

108876. ASTRAGALUS SD

No. 91. June 18, 1934. From the Karakum Desert, north of Ashkhabad. 108877. ASTRAGALUS SD

No. 121. June 21, 1934: From the Ashkhabad Mountains. Excellent fodder for both grazing and hay.

108878 and 108879. ATRIPLEX DIMORPHOS-TEGIA Kar. and Kir. Chenopodiaceae.

An annual 18 inches high, with alternate membranous ovate leaves and terminal or axillary inconspicuous flowers. nal or axillary inconspicuous nowers. Native to dry places in Arabia and Iran.

For previous introduction see 98205.

108878. No. 123. June 30, 1934. From the Repetek Sand Desert Experiment Station, Turkmenistan.

108879. No. 107. June 18, 1934. From the Karakum Desert near Ashkhabad.

108880 to 108885. Bromus spp. Poaceae. Bromegrass.

108880 to 108883. Bromus DANTHONIAE Trin.

19, 108880. No. 131. June From Kopet Dagh, Ashkhabad.

108881. No. 132. June 18, 1934. From the foothills west of Ashkhabad. Found in rocky soil.

108882. No. 133. June 14, 1934. From Montitash, near Ashkhabad. Turkmenistan.

108888. No. 134. Arice, Uzbekistan. June 14, 1934.

108884. BROMUS SCOPARIUS L.

No. 13. June 14, 1934. From Montitash, between Ashkhabad and Tashkent. An annual grass with erect culms up to 16 inches high. Native to Turkis-

108885. Bromus tectorum L.

No. 129. Collected in June 1934 at the Repetek Sand Desert Station, Turkmenistan. A weedy annual grass with erect slender stems 1 to 2 feet tail and hairy narrow leaf blades. It will produce a good cover crop with very little rainfall. Native to Europe.

For previous introduction see 107032. 108886 to 108894. CALLIGONUM spp. lygonaceae.

8886 to 108891. Collected in June 1934 at the Repetek Sand Desert Ex-periment Station, Turkmenistan.

108886 and 108887. Calligonum arbo-RESCENS Lity.

drought-resistant shrub 10 feet high.

ror previous 107507. introduction

108886. No. 5. 108887. No. 2.

108888 and 108889. CALLIGONUM CA-PUT-MEDUSAE Schrenk.

Native to northern and central Asia, where it is used as a sand binder.

For previous introduction see 107508.

108888. No. 4. 108889. No. 145. 108890. CALLIGONUM COMOSUM L'Her.

No. 7. A densely branched shrub 10 to 15 feet high, with minute subu-late leaves and small, ovate, densely spiny, nutlike fruits. Native to the eastern Mediterranean region.

For previous 106616. introduction

108891. CALLIGONUM ERIOPODUM Bunge.

No. 8. A slender-branched shrub with whitish branchlets and linear-subulate minute leaves which are nearly deciduous. Native to Turkistan. Used as a sand binder.

ror previous 107511. introduction see

108892 to 108894. CALLIGONUM SETOSUM

A leafless shrub, native to the Caspian region, where it is used as a sand

For previous introduction see 107513.

108892. No. 136. June 18, 1934. From the Karakum Desert, north of Ashkhabad.

108893 and 108894. From the Repetek Sand Desert Experiment St Turkmenistan, June 28, 1934.

108893. No. 6. 108894, No. 3.

108895 to 108897. CAREX spp. Cyperaceae. 108895. CAREX DESERTORUM Litv.

No. 140. June 19, 1934. From west of Ashkhabad on a clay flat. A desert-loving sedge from Turkistan with a creeping rhizome, a solitary stem 2 to 8 inches high, and flat rigid leaves half as long as the stem.

108896. CAREX PHYSODES Bieb.

No. 146. June 1934. From the Repetek Sand Desert Experiment Station, Turkmenistan. A perennial sedge, usually about 6 inches high, with fillform leaves. Native to sandy deserts

For previous introduction see 107517. 108897. CAREX sp.

No. 135. June 13, 1934. From Milibash on the Syr Darya.

108898. CONVOLVULUS DIVARICATUS Regel and Schmalh. Convolvulaceae.

No. 137. June 1934. From the Renetek Sand Desert Experiment Station, Turkmenistan. A densely hairy, erect or ascending plant with small ovate, acute, sessile leaves two-fifths of an inch long and very small terminal or axillary flowers. Native to sandy places near Chiva,

For previous introductions see 98211.

108899. Corispermum Papill (Kuntze) Iljin. Chenopodiaceae. PAPILLOSUM

No. 143. June 18, 1934. From the Karakum Desert near Ashkhabad. A low bushy plant up to a foot high, with slender, arched branches. The lower leaves

are oblanceolate, the upper ones almost linear. Native to Turkistan.

For previous introduction see 92977.

108900. CRAMBE KOTOCHYANA Boiss. Brassicaceae.

No. 130. Collected June 18, 1934, about 10 miles west of Ashkhabad in rocky soil. An erect herb with rounded ovate dentate leaves 7 to 9 inches long and large white flowers. Native to Iran (Persia).

For previous introduction see 107520.

108901 to 108905. Cucumis Melo. L. Cucurbitaceae. Muskmelon.

Presented by Director Frezi, Peoples Commissioner of Agriculture, Chardjui, Turkmenistan, June 24, 1934.

108901. No. 67. Orange gulabe. From Kerke; their best selection.

108902. No. 68. Persian gulabe.

108903. No. 69. Green Chardjui gulabe.

108904. No. 70. Black Chiva gulabe.

108905. No. 71. Brown Chardjui gulabe. Large meat, but not so sweet.

108906. CUTANDIA MEMPHITICA (Spreng.) Richter. Poaceae. Grass.

No. 1. June 28, 1934. From the Repetek Sand Desert Experiment Station, Turkmenistan. A perennial grass of possible value as forage.

For previous introduction see 92978.

108907. DACTYLIS GLOMERATA L. Poaceae. Orchard grass.

No. 11. Collected June 20, 1934, in the Ashkhabad Mountains.

108908. DANTHONIA FORSKALII Trin. Poaceae. Grass.

No. 9. June 27, 1934. From the Repetek Sand Desert Experiment Station, Turkmenistan. A tuffed perennial grass about 16 inches tall, with broad linear leaves over 2 inches long. Native to sandy places in Egypt.

108909 and 108910. DELPHINIUM CAMPTO-CARPUM Fisch. and Mey. Ranunculaceae.

A somewhat bushy annual 6 inches high, with biternate leaves and small grayish-blue flowers. Native to sandy places in southeastern Europe.

For previous introduction see 106873.

108909. No. 10. From the Repetek Sand Desert Experiment Station, Turkmenistan.

108910. No. 111. Collected June 18, 1934, in the Karakum Desert.

108911. DIANTHUS sp. Silenaceae.

No. 144. June 21, 1934. From the Kopet Dagh, near Ashlabad.

108912 and 108913. ELYMUS CAPUT-MEDUSAE L. Poaceae.

108912. No. 26. June 13, 1934. From Arice, Uzbekistan.

108913. No. 24. June 14, 1934. From the foothills west of Ashkhabad in dry rocky soil.

108835 to 108977—Continued.

108914. EPHEDRA STROBILACEA Bunge. Gnetaceae.

No. 12. June 23, 1934. Renetek Sand Desert Experiment Station, Turkmenistan. A large bushy shrub about 6 feet high, with irregularly whorled, terete, yellowish branches and minute triangular leaves. Native to central Asia.

108915. EREMOSPARTON FLACCIDUM Litv. Fabaceae.

No. 17. June 23, 1934. Repetek. A bushy tree about 15 feet high, native to sandy places in the Transcaspian region. The branches are threadlike and limp, and the small flowers are dark violet.

For previous introduction see 98213.

108916. EREMOSTACHYS sp. Menthaceae.

No. 75. Collected June 14, 1934, between Milibash and Tashkent. An erect perennial with large dentate leaves, mostly radical. The yellowish flowers are in dense whorls.

108917. FERULA BADRAKEMA K.-Pol. Apiaceae.

No. 150-G. June 17, 1934. From the Repetek Sand Desert Experiment Station, Turkmenistan. A large coarse perennial, 4 to 5 feet high, with pinnatisect leaves and whitish flowers in dense terminal umbels. Native to the Transcaspian region.

108918. FRITILLARIA KARELINI (Fisch.) Baker. Liliaceae.

No. 47. June 18, 1934. From the Kopet Dagh near Ashkhabad. A dwarf compact species, with flowers which vary from pink to lilac, in 3— to 12-flowered racemes.

For previous introduction see 61423.

108919. HEDYSARUM WIGHTIANUM Aitch. and Baker.

No. 20. June 21, 1934. From the mountains near Ashkhabad. A low shrub up to a foot high, with compound leaves 2 to 4 inches long and small reddishyellow flowers in racemes. Native to Afghanistan.

108920 to 108923. Hordeum spp. Poaceae. 108920 and 108921. Hordeum Bulbosum

108920, No. 22. June 20, 1934. From the Kopet Dagh, south of Ashkhabad.

108921. No. 25. June 20, 1934. From the Ashkhabad Mountains.

108922. HORDEUM MURINUM L. Grass. No. 21. June 1934. From Montitash near Arice, Uzbekistan.

For previous introduction see 99130.

108923. Hordeum spontaneum C. Koch.

Barley.

No. 23. June 1934. From the Kopet Dagh, south of Ashkhabad.

For previous introduction see 107062.

108924. IRIS FILIFOLIA Boiss. Iridaceae.

No. 58. June 1934. From the Repetek Sand Desert Experiment Station, Turkmenlstan. An iris with pale-green fill-form leaves 2 feet or more long and violet-purple flowers about 1 inch long on a scape 2 feet high. Native to Spain.

108925. TRIS SD.

No. 27. June 1934. of Ashkhabad. Collected north

108926 to 108928. ISATIS spp. Brassica-

108926 and 108927. ISATIS Bunge.

A low annual with oblong sinuate radical leaves, linear-lanceolate stem leaves, and yellow flowers.

For previous introduction see 92985.

108926. No. 138. June 14, 1934. tween Milibash and Tashkent.

108927. No. 59. June 1934. From the Repetek Sand Desert Experi-ment Station, Turkmenistan.

108928. ISATIS VIOLASCENS Bunge.

No. 28. May 28, 1934. From the Repetek Sand Desert Experiment Station, Turkmenistan. A slender annual ahout a foot high, with oblong-lanceolate, entire leaves and yellow flowers. Native to Iran (Persia).

For previous introduction see 92986.

108929. ECHINOSPERMUM SEMIGLABRUM Ledeb. Boraginaceae.

No. 14. June 18, 1934. North of Ashkhabad, in the Karakum Desert. A sandloving annual, native to somewhat salty places in central Asia, with a tuft of erect stems 6 to 10 inches high, obtuse-spatulate leaves, and small white flowers in racemes.

108930. LATHYRUS sp. Fabaceae.

No. 42. June 26, 1934. Kopet Dagh near Ashkhabad. From the

108931. LEONTICE EVERSMANNI Bunge. Berberidaceae.

16. From Repetek, Turkmenistan. A herbaceous perennial about a foot high, with pinnatisect leaves and terminal racemes of small yellow flowers. Native to Turkistan.

108932. LYCIUM RUTHENICUM Murr. anaceae.

No. 30. June 18, 1934. From the edge of the Karakum Desert, Ashkhabad. A shrub up to 6 feet high, with fascicled, linear leaves about 1 inch long and small purple flowers. Native to salty areas in continuation and southwestern Asia.

108933. MALCOMIA CIRCINNATA Boiss. Brassicaceae.

No. 72. June 8, 1934. From the Repetek Sand Desert Experiment Station, Turkmenistan. An annual about a foot high, with oblong-lanceolate, runcinate leaves and racemes of small pale-pink flowers. Native to Turkistan.

108934. MATRICARIA LAMELLATA Asteraceae.

No. 31. From Repetek, June 23, 1934. A low annual, 3 to 5 inches high, with fleshy, hairy, pectinate leaves less than an inch long and small flower heads, the ray flowers white and the disk flowers yellow. It is a good grazing plant and is native to central Asia.

108935 to 108941. Collected in June 1934 in the clay foothills of the Kopet Dagh, south of Ashkhabad, near the border of

108835 to 108977-Continued.

Faba-108935. MEDICAGO RADIATA L. ceae.

No. 57.

108936 to 108939. Onobrychis spp. Fa-

108936. ONOBRYCHIS CHORASSANICA Bunge.

No. 34.

108937. Onobrychis Pulchella Schrenk.

No. 33. An erect annual with narrow acute leaflets, stems about 2 feet high, and dull-yellow flowers. A forage plant native to the Soviet Union.

108938. Onobrychis sp.

No. 80. Received under the name "perrisanica," for which a place of publication has not been found.

108939. ONOBRYCHIS PULCHELLA Schrenk.

No. 32. An annual less than a foot high, with narrow leaflets and pink flowers. Native to the Soviet Union.

108940. PAPAVER SD. Papaveraceae.

108941. PAPAVER sp. Papaveraceae. No. 36.

108942. PEGANUM HARMALA L. Zygophyllaceae.

No. 81. June 18, 1934. From the edge of the Karakum Desert, near Ashkhabad. In Iran this plant is used medicinally.

108943. PENNISETUM ORIENTALE L. Rich. Poaceae.

No. 45. June 19, 1934. From the foothills of the Kopet Dagh, 15 miles west of Ashkhabad.

108944 to 108946. PHLEUM PANICULATUM Huds. Poaceae.

Collected June 20, 1934, in the Kopet Dagh, south of Ashkhabad, near the Iran-ian frontier.

108946. No. 41. 108944. No. 40.

108945. No. 29.

108947 to 108949. Poa Bulbosa L. Poaceae. Bluegrass.

37. 108947. No. June 1934.

near Arice, Uzbekistan.

108948. No. 44. June 14, 1934. Montitash near Tashkent, Uzbekistan.

108949. No. 38. From the Kopet Dagh, south of Ashkhabad, in a rolling wheatfield, June 20, 1934.

108950. PRUNUS MICROCARPA Mever. Amygdalaceae.

No. 43. June 20, 1934. From a mountain top in the Kopet Dagh, near Ashkhabad. A bush 3 to 7 feet high, with coarsely serrate leaves, rosy pink flowers less than an inch across, and small yellowish or red fruits. Native to Asia Minor.

108951 to 108958. RHEUM spp. Polygonaceae.

108951. RHEUM SD.

No. 39. June 21, 1934. From the Kopet Dagh, south of Ashkhabad. Received under the name "turcomanicum," for which a place of publication has not been found.

108952 and 108953. RHEUM TURKESTANI-CUM Janischew.

June 23, 1934. Repetek, Tur'menistan. A wild rhubarb from the Transcaspian region, over 2 feet high, with a large thick rhizome and a short thickened, densely leafy stem. The cordatereniform leaves, up to 8 in number, are about a foot wide.

For previous introduction see 98217.

108952. No. 48. 108953. No. 49.

108954. Rosa sp. Rosaceae.

June 20, 1934. No. 46. Kopet Dagh. From the

ARBORESCENS RICHLERI 108955. SALSOLA Moquin. Chenopodiaceae.

No. 62. From the Repetek Sand Desert Experiment Station, Turkmenistan. A much-branched shrub with semiterete leaves and small inconspicuous flowers. Native to the deserts of Siberia.

For previous introduction see 107575.

108956 to 108958. SENECIO SUBDENTATUS Ledeb. Asteraceae.

An erect annual up to 9 inches high, with broadly linear leaves about 2 inches long, more or less entire, and corymbs of yellow flower heads. A good grazing plant, native to central Asia.

108956. No. 63. June 18, 1934. Fre sandy soil in the Karakum Desert. From

108957 and 108958. From the Repetek Sand Desert Experiment Station, Sand Desert Turkmenistan

108957. No. 61. May 28, 1934.

108958, No. 51. June 1934.

108959 and 108960. SMIRNOWIA TURKESTANA Bunge. Fabaceae.

June 24, 1934. From the Repetek Sand Desert Experiment Station, Turkmenistan. A much-branched shrub with long, almost filiform branches and leaves reduced to a single obovate leaflet. Native to the deserts of Turkistan.

For previous introduction see 101980.

108959. No. 53. 108960, No. 50.

108961 to 108964. STIPA spp. Poaceae. Grass.

108961. STIPA CAUCASICA Schmalh.

No. 54. June 17, 1934. Collected in the sandy soil of the Karakum Desert north of Ashkhabad. A tufted perennial grass over a foot high with narrow panicles. Native to the Caucasus.

108962. STIPA FONTANESII Parl.

No. 52. June 21, 1934. From the Kopet Dagh, in clay soil. A perennial grass with slender leaves. Native to Europe.

108835 to 108977—Continued.

108968 and 108964. STIPA SZOVITZIANA Trin.

A tufted perennial grass with fibrous roots and short rigid leaves. Native to Asia Minor, Arabia, and Iran.

For previous introduction see 106905.

108963. No. 55. June 20, 1934. From clay soil, in the Kopet Dagh, near Ashkhabad.

8964. No. 56. June 13, 1934. From Milibash on the Syr Darya.

108965 and 108966. June 8, 1934; from the Repetek Sand Desert Experiment Sta-tion, Turkmenistan.

108965. SUAEDA LYPSKII Lity. Chenopodiaceae.

No. 60. An erect annual up to 16 inches high, with terete filiform leaves and inconspicuous flowers. Native to the Transcaspian region.

108966. TAMARIX KARELINI Bunge. Tamaricaceae.

No. 65. Received as T. ramosissima, a synonym of the above species. A bushy shrub with glaucous, deciduous branchlets and slender racemes of deeppurple flowers. Native to the vicinity of the Caspian Sea.

108967. Tournefortia sp. Boraginaceae.

No. 19. June 18, 1934. From the Karakum Desert north of Ashkhabad. Received under the name "sogdiana," for which a place of publication has not been found. A sand-binding plant.

108968 to 108970. TRIGONELLA spp. Faba-

108968. TRIGONELLA ARCUATA Meyer.

No. 83. June 13, 1934. From Montitash near Arice.

For previous introduction and description see 108110.

108969 and 108970. Collected between Milibash on the Syr Darya and Tash-kent, June 13, 1934.

108969. TRIGONELLA SD.

108970. TRIGONELLA sp.

No. 77.

108971. TULIPA sp. Liliaceae.

No. 78. Collected between Milibash on the Syr Darya and Tashkent, June 13,

108972 to 108974. Collected June 19 and 20, 1934, on the Kopet Dagh, near Ashkhabad.

108972. VICIA sp. Fabaceae.

No. 64.

108978. VICIA sp. Fabaceae.

No. 150-F. Found in dry rocky soil.

108974. VICIA sp. Fabaceae.

No. 66

108975. (Undetermined.)

No. 141. June 13, 1934. A crucifer collected along the railroad south of Milibash along the Syr Darya.

108976. (Undetermined.)

No. 142. June 13, 1934. A crucifer from Milibash on the Syr Darya.

108977. (Undetermined.)

No. 76. June 14, 1934. Collected on rolling land between Milibash and Tashkent.

108978. Allium sativum L. Liliaceae. Garlic.

From Europe. Bulbs presented by Prof. Ivo Volaric, State Agronomist, Croatia, Yugoslavia. Received February 16, 1935.

Native garlic, introduced for Department specialists. $\ensuremath{^{1}}$

108979 to 108982. TRITICUM AESTIVUM L. Poaceae. Common wheat.

From New Zealand. Seeds presented by R. B. Tennent, Director, Fields Division, Department of Agriculture, Wellington. Received February 16, 1935.

Introduced for Department specialists.

108979. Solid straw Tuscan (standard).

108980. Solid straw Tuscan (variant).

108981. Solid straw Tuscan, Selection 13/28.

108982. Cross 7.

108983. SOLANUM TUBEROSUM L. Solanaceae. Potato.

From Venezuela, South America. Tubers collected by W. A. Archer, Bureau of Plant Industry. Received February 16, 1935.

From the market at Caracas. A cultivated variety of the Andes section of Venezuela, said to be the only potato that will produce a crop there.

108984 to 108989.

From Egypt, Africa. Seeds presented by Thomas W. Brown, Ministry of Agriculture, Giza. Received February 18, 1935.

Locally grown strains introduced for Department specialists.

108984. ALLIUM CEPA L. Liliaceae.

108985 to 108987. ALLIUM SATIVUM L.

Liliaceae. Garlic.

108988. APIUM GRAVEOLENS L. Apiaceae.

Celery. 108989. DAUCUS CAROTA L. Apiaceae.

Carrot.

108990. Nephelium Lappaceum L. Sapindaceae. Rambutan.

From Java. Seeds presented by A. M. Cramer, Sr.. Wonosobo. Received February 11, 1935.

Tangkoewe, a freestone variety of an erect tropical tree 35 to 40 feet high, native to the Malay Archipelago, and not yet extensively cultivated elsewhere. The compound leaves are composed of five to seven pairs of elliptic, obovate or oblong, glabrate leaflets about 4 inches long, shining darkgreen above, paler beneath. The small flowers are in loose axillary and terminal panicles. The crimson or yellowish fruits, in clusters of 10 to 12, are oval, about 2 inches

108990—Continued.

long, and covered with soft fleshy spines less than an inch long. The white juicy translucent flesh (aril) which adheres to the oblong flattened seed is acidulous in flavor.

For previous introduction see 101158.

108991 and 108992.

From Cuba. Seeds presented by Robert M. Grey, Superintendent, Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos. Received February 9, 1935.

108991. GILBERTIA ARBOREA (L.) E. March. Araliaceae.

A large shrub or small tree, with ovaloblong or three-lobed leaves and umbels of small whitish flowers, succeeded by black fruits. Native to the Canal Zone.

108992. QUISQUALIS INDICA L. Combretaceae. Rangoon-creeper.

A rambling, subscandent shrub native to India, with opposite obovate leaves 4 inches long and short axillary and terminal spikes of tubular pink or red flowers. The obovoid fruits are 1 to 2 inches long and are sharply five-angled.

For previous introduction see 98380.

108993. EPHEDRA sp. Gnetaceae.

From India. Seeds presented by Ralph R. Stewart, Gordon College, Rawalpindi. Received February 7, 1935.

Introduced for Department specialists.

108994 to 109001.

From California. Seeds presented by James N. Robinson, Cash Nurseries, Sebastopol. Received February 12, 1935.

108994. AGAPETES sp. Vacciniaceae.

The agapetes are tender evergreen shrubs with handsome lustrous foliage and showy, usually scarlet, flowers. Native to the Himalayas at altitudes between 3,000 and 6,000 feet.

108995. LEUCOSPERMUM REFLEXUM Buek. Proteaceae.

An erect shrub with linear-oblong leaves, dentate at the apex, 1 to 2 inches long, and small yellow flowers in roundish heads 3 inches across. Native to South Africa.

108996. PRIMULA KINGII Watt. Primulaceae. Primrose.

A glabrous perennial, native to the Sikkim Himalayas. The elliptic-lanceolate, crenulate leaves, 2 to 3 inches long, are in a crowded rosette, and the slender scapes, 6 to 10 inches high, bear four or five claret-colored, funnel-shaped flowers nearly an inch across.

For previous introduction see 102324.

108997. PRIMULA WATTII King. Primulaceae. Primrose.

A handsome primrose from the Sikkim Himalayas, with oblong-oblanceolate, membranous, lobed-crenate leaves one-half inch across and small violet flowers in heads 2 inches across on a scape 5 to 6 inches high.

108998. RHODODENDRON ANTHOPOGON Don. Ericaceae.

A small shrub 1 foot high, with rough densely scaly branches and leaves which

108994 to 109001—Continued.

are over an inch long, cinnamon brown beneath, and tomentose from the layer of glands. The yellow flowers are in numerous short terminal fascicles.

For previous introduction see 58914.

108999. RHODODENDRON AUCKLANDII Hook. f. Ericaceae.

A rare shrub up to 8 feet high, native to the Sikkim Himalayas between 7,000 and 9,000 feet altitude. The oblong-elliptical, bright-green leaves are 4 to 10 inches long, and the flowers, white, tinged with pink, and 4 inches across, are in terminal clusters of three to five.

109000. SWERTIA MULTICAULIS D. Don. Gentianaceae.

A cespitose herbaceous perennial about 2 inches high, with lanceolate obtuse leaves and small purplish flowers. Native to the mountains of Nepal, India.

109001. TSUGA MERTENSIANA Carriere. Pinaceae.

A large tree, 200 feet or more in height, of pyramidal habit. Closely allied to Tsuga canadensis, but differing in its unforked trunk and spirelite summit. Native to the Pacific coast of North America from Oregon to Alaska.

109002 to 109189.

From Turkey. Seeds collected by H. L. Westover and C. R. Enlow, Bureau of Plant Industry. Received January 8, 1935.

109002 to 109009. AEGILOPS sp. Poaceae.

109002. AEGILOPS SPELTOIDES Tausch.

No. T-104. Collected September 26, 1934, about 10 miles east of Sivas. A bushy grass with slender erect stems and narrow rough leaves. It is native to western Asia, especially Syria.

For previous introduction see 45802. 109003. Aegilops sp.

No. T-59. September 25, 1934, at Palas Lake.

109004 and 109005. Collected September 21, 1934, at Ankara.

109004. AEGILOPS Sp.

No. T-10.

109005. AEGILOPS sp.

No. T-5.

109006. AEGILOPS Sp.

No. T-40. September 24, 1934. Near Kirshehir.

109007 and 109008. Collected September 21, 1934, at Ankara.

109007. AEGILOPS sp.

No. T-2.

109008. AEGILOPS Sp.

No. T-7.

109009. AEGILOPS Sp.

No. T-46. September 24, 1934. About 15 miles southeast of Kirshehir.

109010 to 109022. AGROPYRON spp. Poaceae. Wheatgrass.

109010 to 109012. AGROPYRON CRISTATUM (L.) Gaertn. Crested wheatgrass.

109002 to 109189—Continued.

109010. No. T-33. About 25 miles southeast of Ankara, September 23, 1934.

109011. No. T-68. September 25, 1934. Found on very dry red loam near Palas Lake, northeast of Kayseri.

109012. No. T-3. September 21, 1934. Found on dry gravelly clay soil at Ankara.

109018 to 109016. AGROPYRON TRICOPHORUM (Link) Richt.

For previous introduction see 107483.

109013. No. T-44. September 24, 1934. About 15 miles southeast of Kirshehir.

109014. No. T-95. September 26, 1934. Between 35 and 40 miles east of Sivas in dry limestone hills.

109015. No. T-58. September 25, 1934, at Palas Lake.

109016. No. T-45. September 24, 1934. About 15 miles southeast of Kirshehir.

109017. AGROPYRON SD.

No. T-16. September 23, 1934. About 30 miles northeast of Kirshehir on a dry mountainside.

109018. AGROPYRON Sp.

No. T-32. September 23, 1934; Ankara.

109019. AGROPYRON Sp.

No. T-121. September 27, 1934. In rocky soil in a mountain gorge, 50 miles south of Giresun.

109020. AGROPYRON Sp.

No. T-100. September 26, 1934. Found in dry clay soil 65 miles northeast of Sivas.

109021. AGROPYRON Sp.

No. T-79. About 50 miles northeast of Sivas on a mountain slope.

109022. AGROPYRON Sp.

No. T-148. September 27, 1934. About 15 miles from Shebinkarahisar and Giresun.

109023 and 109024. AGROSTIS ALBA L. Poaceae. Redtop.

109023. No. T-127. From Shebinkarahisar.

109024. No. T-64. September 25, 1934. From a low area near Palas Lake, northeast of Kayseri.

109025 and 109026. AGROSTIS INTERRUPTA

An annual bushy grass up to 2 feet high. Native to sandy places in the Mediterranean countries.

For previous introduction see 107483.

109025. No. T-80. September 26, 1934. From a dry rocky mountainside about 65 miles east of Sivas.

109026. No. T-132. September 27, 1934. From rocky soil in a mountain gorge, 50 miles south of Giresun.

109002 to 109189-Continued.

109027 to 109029. ALLIUM spp. Liliaceae. 109027 and 109028. ALLIUM CEPA L.

Onion.

109027. No. T-180. From Samsun.

109028. No. T-135. From the bazaar at Shebinkarahisar, September 27, 1934

109029. ALLIUM sp.

No. T-72. September 25, 1934. From Palas Lake.

109030. ALTHAEA sp. Malvaceae.

No. T-143. September 27, 1934. About 65 miles south of Giresun in a mountain gorge.

109031 to 109033. Andropogon ischaemum L. Poaceae.

109031. No. T-6. September 21, 1934. Ankara. From very dry permanent sod growing on gravelly clay.

109032. No. T-47. September 24, 1934. From a very dry clay rolling plain, about 7 miles east of Kirshehir.

109033. No. T-60. September 25, 1934. Kayseri. Collected on dry rocky soil.

109034. ANETHUM GRAVEOLENS L. Apiaceae. Dill.

No. T-178. September 30, 1934. From Samsun.

109035. Arbutus andrachne L. Ericaceae.

No. T-155. September 27, 1934. From Giresun.

For previous introduction and description see 108298.

109036. AVENA DESERTORUM Less. Poaceae.

No. T-136. September 27, 1934. From rocky soil in a mountain gorge, about 65 miles south of Giresun. A perennial grass, native to central Asia, with a black fibrous rhizome and rigid, elongated leaves

109037. RHODODENDRON sp. Ericaceae.

No. T-165. September 27, 1934 From Giresun,

109038 to 109040. Beta VULGARIS L. Chenopodiaceae. Beet.

109038 and 109039. September 30, 1934. From Samsun.

109038. No. T-179. 109039. No. T-184.

109040. No. T-169. September 27, 1934. From the bazar at Shebinkarahisar.

109041 and 109042. Brassica OLERACEA CA-PITATA L. Brassicaceae. Cabbage.

September 30, 1934, at Samsun.

109041. No. T-187. 109042. No. T-183.

109043. BRIZA MEDIA L. Poaceae.

No. T-122. About 20 miles north of Shebinkarahisar. A low perennial grass with erect culms. Native to Europe.

109044. BRIZA MINOR L. Poaceae.

No. T-91. September 26, 1934. About 65 miles northeast of Sivas. An erect annual grass, up to 3 feet high. Native to Europe.

109002 to 109189—Continued.

109045. Bromus sp. Poaceae.

No. T-62. September 25, 1934. An annual grass collected 35 miles northeast of Kayseri near Palas Lake.

109046. BROMUS Sp. Poaceae.

No. T-70. September 25, 1934. About 105 miles northeast of Kayseri. A perennial grass.

109047. BROMUS sp. Poaceae.

No. T-88. September 26, 1934. A perennial grass found on dry limestone hills about 65 miles east of Sivas.

109048. BROMUS Sp. Poaceae.

No. T-123. September 27, 1934. Collected at the mouth of a small canyon about 10 miles from Shebinkarahisar, en route to Giresun.

109049. CALAMAGROSTIS Sp. Poaceae.

No. T-163. September 27, 1934. 10 miles from Shebinkarahisar, en route to Giresun.

109050. CALAMAGROSTIS sp. Poaceae.

No. T-85. September 26, 1934. About 55 miles northeast of Sivas in the mountains.

109051. Campanula sp. Campanulaceae.

No. T-177. September 28, 1934. From a mountainside at Giresun.

109052. Campanula sp. Campanulaceae.

No. T-128. September 27, 1934. From Giresun. A form with white flowers.

109053 and 109054. CAPSICUM ANNUUM L. Solanaceae. Common redpepper.

109053. No. T-37. September 24, 1934. From the Kayseri bazar.

109054. No. T-189. September 30, 1934. A sweet pepper from Samsun.

109055. CISTUS Sp. Cistaceae.

No. T-176. September 24, 1934. From Giresun.

109056. CLEMATIS sp. Ranunculaceae.

No. T-166. September 27, 1934. From Giresun.

109057. CORIANDRUM SATIVUM L. Apiaceae. Coriander.

No. T-191. September 30, 1934. From Samsun.

109058. COTONEASTER sp. Malaceae.

No. T-20. September 23, 1934. From a dry rocky hillside about 65 miles southeast of Ankara.

109059 to 109062. Cucumis melo L. Cucurbitaceae. Muskmelon.

109059. No. T-81. September 26, 1934. A long, gray netted melon from Sivas.

109060. No. T-48. September 24, 1934. A green-skinned melon of very good flavor from Kirshehir.

109061. No. T-141. September 27, 1934. A round yellow melon from Shebinkarahisar.

109062. No. T-49. September 24, 1934. From Ankara. A melon with a mottled green and yellow skin.

109002 to 109189—Continued.

109063. Cucumis sativus L. Cucurbitaceae. Cucumber.

No. T-148. September 27, 1934. From the bazar at Shebinkarahisar.

109064. CUCURBITA MAXIMA Duchesne, Cucurbitaceae. Squash.

No. T-196. September 30, 1934. From Samsun.

109065. CYNANCHUM sp. Asclepiadaceae.

No. T-161. September 27, 1934. From Giresun. An attractive vine with milky juice and seed pods like the milkweed.

109066 to 109068. CYNODON DACTYLON (L.) Pers. Poaceae. Bermuda grass.

109066. No. T-8. September 21, 1934. Along the roadside at Ankara.

109067. No. T-30. September 23, 1934. Along the roadside in dry stony clay soil about 65 miles southeast of Aniara.

109068. No. T-63. September 25, 1934. About 35 miles northeast of Kayseri.

109069 and 109070. CYNOSURUS CRISTATUS L. Poaceae. Crested dogtail.

109069. No. T-134. September 27, 1934. Collected in stony soll in a mountain canyon about 50 miles south of Giresun.

109070. No. T-130. September 27, 1934. About 10 miles from Shebinkarahisar, en route to Giresun.

109071 to 109073. DACTYLIS GLOMERATA L. Poaceae. Orchard grass.

109071. No. T-69. September 25, 1934. Collected about 25 miles northeast of Kayseri near Palas Lake, on reddish clay loam.

109072. No. T-14. September 23, 1934. Collected 80 miles southeast of Ankara in very dry loam.

109073. No. T-19. September 23, 1934. From a dry overgrazed hillside of stony loam soil between 6 and 25 miles southeast of Ankara.

109074 and 109075. DAUCUS CAROTA L. Carrot.

109074. No. T-182. September 30, 1934. From Samsun.

109075. No. T-131. September 27, 1934. From the bazaar at Shebinkarahisar.

109076 and 109077. DESCHAMPSIA CAESPITOSA (L.) Beauv. Poaceae.

109076. No. T-142. September 27, 1934. From rocky soil in a mountain gorge, 50 miles south of Giresun.

109077. No. T-160. September 27, 1934. Twenty miles from Shebinkarahisar, en route to Giresun.

109078. DIANTHUS sp. Silenaceae.

No. T-34. September 24, 1934. Southeast of Kirshehir.

109079. DIANTHUS sp. Silenaceae.

No. T-74. September 21, 1934. From dry rocky soil at Kayseri.

109080. ECHINOPS BANNATICUS Roch. As teraceae.

No. T-109. September 26, 1934. An ornamental, thistlelike plant with blue

109002 to 109189—Continued.

stems and blue flowers, collected about 50 miles northeast of Sivas.

109081 to 109083. ELICHRYSUM spp. Asteraceae.

Strawflowers collected September 26, 1934, from 7 to 40 miles east of Sivas.

109081. ELICHRYSUM sp.

No. T-101.

109082. ELICHRYSUM sp.

No. T-112. A yellow strawflower found growing in limestone.

109083. ELICHRYSUM Sp.

No. T-117.

109084. EREMURUS sp. Liliaceae.

No. T-50. September 25, 1934. From Kayseri.

109085. EREMURUS sp. Liliaceae.

No. T-57. September 25, 1934. From Kayseri.

109086 to 109088. FESTUCA OVINA L. Poaceae. Sheep fescue.

109086. No. T-66. September 25, 1934. About 100 miles from Kayseri, en route to Sivas, in barren limestone soil.

109087. No. T-110. September 26, 1934. Collected about 8 miles east of Sivas in limestone hills.

109088. No. T-77. About 8 miles northeast of Sivas on a dry stony mountainside. September 26, 1934.

109089. GLAUCIUM sp. Papaveraceae.

No. T-12. September 21, 1934. Ankara. A plant with orange-colored flowers like the California-poppy.

109090 and 109091. Holcus Lanatus L. Poaceae. Velvet grass.

September 27, 1934. About 12 miles from Shebinkarahisar, en route to Giresun.

109090. No. T-125. 109091. No. T-126.

109092. HORDEUM BULBOSUM L. Poaceae.

No. T-27. September 23, 1934. From a dry rocky hillside about 70 miles southeast of Ankara.

109093 to 109095. JUNIPERUS spp. Pinaceae.

109093. JUNIPERUS COMMUNIS L. Common juniper.

No. T-83. September 26, 1934. From a mountainside, 40 miles east of Sivas.

109094 and 109095. JUNIPERUS OXYCEDRUS L. Prickly juniper.

An ornamental evergreen tree, native to Europe, about 15 feet high, with light-green foliage covered somewhat with a whitish bloom. It is reported to thrive in dry rocky places.

For previous introduction see 79922.

109094. No. T-92. September 26, 1934. About 50 miles east of Sivas.

109095. No. T-26. September 23, 1934. About 65 miles southeast of Ankara.

109002 to 109189-Continued.

109096 to 109098. Koeleria Cristata (L.) Pers. Poaceae.

109096. No. T-106. September 26, 1934. From a dry rocky mountainside, about 40 miles northeast of Sivas.

109097. No. T-61. September 25, 1934. About 107 miles northeast of Kayseri.

109098. No. T-93. September 26, 1934. From a dry stony mountainside, about 7 miles northeast of Sivas.

109099. Koeleria sp. Poaceae.

No. T-15. September 23, 1934. From permanent grazing land on a stony hill-side about 25 miles southeast of Ankara.

109100 and 109101. LACTUCA SATIVA Cichoriaceae. Garden lettuce.

109100. No. T-170. September 27, 1934. From the bazar at Shebinkarahisar.

109101. No. T-186. September 30, 1934. From Samsun.

109102. LATHYRUS sp. Fabaceae.

No. T-97. September 26, 1934. About 50 miles northeast of Sivas.

Brassica-109108. LEPIDIUM SATIVUM L. Garden cress.

No. T-185. September 30, 1934. From Samsun.

109104 to 109106. LINUM spp. Linaceae.

109104. LINUM Sp.

September 26, T-111. 1934. About 37 miles east of Sivas, from dry limestone hills.

109105 and 109106. LINUM USITATISSI-MUM L.

T-71. 109105. No. T-71. September 15, 1934. Thirty miles east of Kayseri.

109106. No. T-35.September 24, 1934. From the bazar at Kayseri.

109107. LOLIUM PERENNE L. Poaceae. Perennial ryegrass.

No. T-159. September 27, 1934. From a mountain gorge 50 miles south of Gire-

109108 to 109111. Lotus spp. Fabaceae.

Shrubby perennials found in woods and thickets on the mountainside near Giresun, September 27 and 28, 1934.

109108. Lotus sp.

No. T-156.

109109. Lotus sp.

No. T-174.

109110. LOTUS SD.

No. T-173

109111. LOTUS Sp.

No. T-158.

109113. Lycopersicon escu-109112 and LENTUM Mill. Solanaceae.

109112. No. T-38. September 24, 1934. From the Kayseri bazar.

109113. No. T-181. September 30, 1934. From Samsun.

109002 to 109189—Continued.

109114. MEDICAGO SATIVA L. Fabaceae. Alfalfa.

No. T-120. September 26, 1934. From the Sivas bazar.

109115. MEDICAGO FALCATA L. Fabaceae. Yellow-flowered alfalfa.

No. T-115. September 26, About 50 miles northeast of Sivas.

Collected September 109116 and 109117. 28, 1934, in woods near Giresun.

109116. MESPILUS GERMANICA L. Mala-Medlar.

T-172. This so-called apple is acrid and much like a quince until it turns brown, when it has a delicious flavor and aroma. Native to the Balkan region.

For previous introduction see 91842.

109117. MOLINIA CAERULEA (L.) Moench. Poaceae.

No. T-175. A grass with striped leaves which is cultivated as an ornamental for use in borders.

For previous introduction see 50540.

109118. Onobrychis sp. Fabaceae.

No. T-113. September 26, About 37 miles east of Sivas. 1934.

109119. PEGANUM HARMALA L. Zygophyllaceae.

No. T-11. September 21, 1934. From Ankara. A shrub common in dry soil in Turkey and Turkistan.

109120. PENNISETUM sp. Poaceae.

No. T-25. September 23, 1934. From a dry rocky hillside about 65 miles southeast of Ankara.

109121 to 109123. PETROSELINUM HORTENSE Hoffm. Apiaceae. Parsley.

109121. No. T-139. September 27, 1934. From the market at Shebinkarahisar.

109122 and 109123. Collected September 30, 1934, at Samsun.

109122. No. T-188. 109123. No. T-190.

109124 and 109125. PHASEOLUS VULGARIA L. Fabaceae. Common bean.

Collected September 30, 1934, at Samsun.

109124. No. T-195. A pole bean.

109125. No. T-194. A bush bean.

109126 to 109130. PHLEUM SPD. Poaceae. Timothy.

109126 to 109129. PHLEUM ARENARIUM L.

109126. No. T-65. September 25, 1934. From a very dry, rocky clay field, much overgrazed, about 7 miles east of Kayseri.

109127. No. T-89. September 26, 1934. From a mountain slope about 55 miles northeast of Sivas.

109128. No. T-13. September 23, 1934. From a permanent grazing field on a dry stony loam hillside about 25 miles southeast of An-

109129. No. T-154. September 27, 1934. From the rocky soil of a mountain gorge, 50 miles south of Giresun.

109002 to 109189—Continued.

109130. PHLEUM PHLEOIDES (L.) Karst.

No. T-17. From dry rocky soil about 65 miles southeast of Ankara, en route to Kirshehir.

109131. PINUS sp. Pinaceae.

No. T-76. September 26, 1934. Abundant in the mountains of northern Turkey.

109132 to 109142. Poa spp. Poaccae.

109132 to 109135. POA BULBOSA L.

109132. No. T-43. September 24, 1934. From very dry clay soil of the rolling plain about 7 miles east of Kirshehir.

109133. No. T-55. September 25, 1934. About 8 miles northeast of Kayseri.

109134. No. T-105. September 26, 1934. From a dry stony mountainside, about 7 miles northeast of Sivas.

109135. No. T-41. September 24, 1934. Collected near Kirshehir.

109136. Poa sp.

No. T-22. September 23, 1934. From a permanent grazing field on a dry stony hillside near Ankara.

109137. Poa sp.

No. T-98. September 26, 1934. About 7 miles east of Sivas in limestone hills.

109138. Poa sp.

No. T-107. September 26, 1934. From a mountain slope about 55 miles northeast of Sivas.

109139. Poa sp.

No. T-24. September 23, 1934. From a dry rocky hillside about 65 miles southeast of Ankara.

109140. Poa sp.

No. T-90. September 26, 1934. From a mountain slope about 55 miles northeast of Sivas.

109141. Poa sp.

No. T-51. September 25, 1934. About 107 miles from Kayseri, en route to Sivas.

109142. Poa sp.

No. T-116. September 26, 1934. About 7 miles east of Sivas on low limestone mountains.

109143. POLYPOGON MONSPELIENSIS (L.) Desf. Poaceae.

No. T-67. September 25, 1934. From a low area northeast of Kayseri near Palas Lake. An annual grass with soft bristly green or yellowish spikes up to 6 inches long.

For previous introduction see 107113.

109144. PRUNUS sp. Amygdalaceae.

No. T-147. September 27, 1934. A wild plum found at the entrance to a canyon about 12 miles north of Shebinkarahisar, en route to Giresun.

109002 to 109189—Continued.

109145. Pyracantha Coccinea Roem. Malaceae. Scarlet firethorn.

No. T-133. September 27, 1934. A rather spiny, ornamental shrub with red fruit, collected at Giresun.

109146 to 109148. RAPHANUS SATIVUS L. Brassicaceae. Radish.

109146. No. T-36. September 24, 1934. From the Kayseri bazar.

109147. No. T-193. September 30, 1934. From Samsun.

109148. No. T-137. September 27, 1934. From the Shebintarahisar bazar.

109149. RHAPHIS GRYLLUS (L.) Desv. Poaceae.

No. T-23. September 23, 1934. From a dry rocky hillside about 65 miles southeast of Ankara.

109150. RHODODENDRON sp. Ericaceae.

No. T-162. September 27, 1934. From Giresun.

109151. ROBINIA PSEUDACACIA L. Fabaceae. Common locust.

No. T-4. September 21, 1934. Black locust, collected along a roadside near Ankara.

109152 to 109154. Rosa spp. Rosaceae.

109152. Rosa sp.

No. T-54. September 25, 1934. Near Palas Lake, about 27 miles northeast of Kayseri.

109153. Rosa sp.

No. T-53. September 25, 1934. A wild rose collected 100 miles northeast of Kayseri.

109154. Rosa sp.

No. T-198. October 1, 1934. A wild rose from Samsun.

109155. RUBUS sp. Rosaceae.

No. T-129. September 27, 1934. A wild blackberry collected near a mountain stream about 65 miles south of Giresun on the road from Shebinkarahisar. The berries are large, with a fine flavor, and the bush is a prolific bearer.

109156 and 109157. Collected September 27, 1934, at Giresun.

109156. RUSCUS ACULEATUS L. Convallariaceae. Butchersbroom.

No. T-152. A shrub found growing in deep shade. The bright-red berries are borne on the leaves.

For previous introduction see 98159. 109157. SCABIOSA sp. Dipsacaceae.

No. T-149. A species with white flowers.

109158. SILENE sp. Silenaceae.

No. T-118. September 26, 1934. From Sivas. A plant found growing on almost bare limestone.

109159 and 109160. SOLANUM MELONGENA L. Solanaceae. Eggplant.

109159. No. T-39. September 24, 1934. From the Kayseri bazar.

109002 to 109189—Continued.

109160. No. T-42. September 26, 1934. From Sivas. A long narrow type, grown commercially in Turkey.

109161 and 109162. SPINACIA OLERACEA L. Chenopodiaceae. Common spinach.

109161. No. T-146. September 27, 1934. From the bazar at Shebinkarahisar.

109162. No. T-192. September 30, 1934. From Samsun.

109163. STAPHYLEA PINNATA L. Staphyleaceae. European bladdernut.

No. T-171. September 27, 1934. About 27 miles south of Giresun, en route to Shebinkarahisar. A treelike shrub with deciduous leaves and terminal clusters of small white flowers and much inflated membranaceous podlike fruits.

For previous introduction see 50306.

109164 to 109172. STIPA spp. Poaceae. Feathergrass.

109164. STIPA CAPILLATA L.

No. T-29. September 23, 1934. From a dry mountainside, 20 miles northeast of Kirshehir.

109165. STIPA sp.

No. T-9. September 21, 1934. From Ankara.

109166. STIPA Sp.

No. T-78. September 26, 1934. From a dry rocky mountainside about 35 miles east of Sivas.

109167 to 109169. Collected September 23, 1934, from 25 miles to 85 miles southeast of Ankara.

109167. STIPA Sp.

No. T-18.

109168. STIPA Sp.

No. T-21. From a permanent grazing field on a stony dry hillside.

109169. STIPA Sp.

No. T-28. From very dry loam. 109170. STIPA SD.

No. T-56. September 25, 1984. From dry red clay loam soil near Palas Lake, northeast of Kayseri.

109171 and 109172. Collected September 26, 1934, from a dry stony mountainside about 7 miles northeast of Sivas.

109171. STIPA sp.

No. T-94.

109172. STIPA sp.

No. T-108.

109173 to 109181. TRIFOLIUM spp. Fabaceae. Clover.

109173. TRIFOLIUM AGRARIUM L.

No. T-144. September 27, 1934. Hop clover, found on a fairly moist mountain slope about 35 miles south of Giresun.

For previous introduction see 108696.

109174 and 109175. TRIFOLIUM PRATENSE L. Red clover.

109002 to 109189—Continued.

109174. No. T-145. September 27, 1934. Collected along a mountain road 50 miles south of Giresun.

109175. No. T-96. September 26, 1934. Collected in the mountains about 50 miles northeast of Sivas.

109176. TRIFOLIUM Sp.

No. T-157. September 27, 1934. From Giresun.

109177 and 109178. Collected October 1, 1934, in the flats along the Black Sea, 10 miles east of Samsun.

109177. TRIFOLIUM sp.

No. T-197.

109178. TRIFOLIUM Sp.

No. T-199.

109179 and 109180. Collected September 26. 1934, about 50 miles northeast of Sivas.

109179. TRIFOLIUM Sp.

No. T-86. From a dry mountain slope.

109180. TRIFOLIUM sp.

No. T-82.

109181. TRIFOLIUM sp.

No. T-138. September 27, 1934. From Giresun.

109182. VIBURNUM sp. Caprifoliaceae.

No. T-124. September 27, 1934. An ornamental shrub with large clusters of bright-red berries one-half inch in diameter, found on the bank of a canyon near Giresun.

109183 to 109185. VICIA spp. Fabaceae.

109183. VICIA FABA L. Broadbean.

No. T-149-A. September 27, 1934. From the Shebinkarahisar bazar.

109184. VICIA Sp.

No. T-114. September 27, 1934. From about 50 miles northeast of Sivas.

109185. VICIA sp.

No. T-140. September 26, 1934. From basalt soil near Giresun.

109186. (Undetermined.)

No. T-73. September 25, 1934. From Kayseri. A shrub.

109187. Cornus mas L. Cornaceae. Cornelian-cherry.

No. T-1. September 18, 1934. Kiziljik. From the Ankara bazar. Small, dark-red fruits with a distinctive flavor.

For previous introduction see 107624.

109188. PLUMBAGO EUROPAEA L.

No. T-52. September 25, 1934. A flowering plant from Kayseri.

109189. (Undetermined.)

No. T-153. September 27, 1934. From Giresun. A shrub with black berries.

109190. Furcraea foetida (L.) Haw. Amaryllidaceae.

From Venezuela, South America. Bulbils collected by W. A. Archer, Bureau of

109190—Continued.

Plant Industry. Received February 16, 1935.

No. 2995. Coquisa. Collected January 27, 1935, near Caracas. A tropical American plant, resembling the agaves in general abbit, with little or no trunk, and broadly oblanceolate spineless leaves 5 to 8 feet long. The loose panicles of greenish-white flowers are borne on a slender scape about 25 feet high.

109191 to 109198.

From Australia. Seeds presented by Arthur Yates & Co., Ltd., seed merchants, at the request of Dr. H. Wenholz, Department of Agriculture, Sydney, New South Wales. Received February 21, 1985.

Locally grown varieties introduced for Department specialists.

109191 to 109196, ALLIUM CEPA L. Liliaceae. Onion.

109191. Brown Spanish; Yates select Werwent Long Keeping.

109192. Early Golden Gloe.

109193. Hunter River Early Brown.

109194. Hunter River Early White.

109195. Odourless.

109196. White Imperial Spanish.

109197 and 109198. APIUM GRAVEOLENS L. Apiaceae. Celery.

109197. South Australian Green.

109198. South Australian White.

109199. Cassia sieberiana DC. Caesalpiniaceae.

From Africa. Seeds presented by F. W. Hall, Senior Agricultural Superintendent, Department of Agriculture, Gambla, British West Africa, at the request of Sir Arthur Hill, Director of the Royal Botanic Gardens, Kew, England. Received February 19, 1935.

A small handsome tropical tree with pinnate foliage and long racemes of large yellow flowers. It is closely related to Cassia fistula.

For previous introduction see 73928.

109200. (Undetermined.)

From China. Seeds presented by Dr. Joseph F. Rock, Yunnanfu, Yunnan. Received February 9, 1935.

Chung Tien Tz. A large tree with fruits the size of a peach, which burst when ripe and expose the seeds.

109201 to 109203. ROBINIA PSEUDACACIA L. Fabaceae. Common locust.

From France. Seeds purchased from Vilmorin-Andrieux & Cie., Paris. Received February 18, 1935.

Introduced for Department specialists.

109201. Variety Bessoniana. A form with a rather dense ovoid head.

109202. Variety Fastigiata. A fastigiate pyramidal form.

109203. Variety Spectabilis. A spineless form.

109204 to 109208.

From India. Seeds presented by Judson College, through Winfield H. Scott, American consul, Rangoon, Burma. Received February 19, 1935.

109204. BAUHINIA sp. Caesalpiniaceae.

A shrub with white flowers.

109205. BAUHINIA sp. Caesalpiniaceae.

A climbing bauhinia with deeply-lobed leaves 2 inches long and mauve flowers 2 inches across.

109206. BAUHINIA sp. Caesalpiniaceae.

A shrub with attractive foliage and cream-colored flowers.

109207. CAESALPINIA PULCHERRIMA (L.) Swartz. Caesalpiniaceae. Flowerfence.

Peacock flower. A handsome tropical evergreen shrub about 7 feet high, with mimosalike foliage and yellow flowers which appear on the new growth.

For previous introduction see 73096.

109208. DELONIX REGIA (Boj.) Raf. Caesalpiniaceae. Royal poinciana.

Known in India as the Golden Mohurtree.

For previous introduction see 39964.

109209. FESTUCA CAPILLATA Lam. Poaceae. Hair fescue.

From Germany. Seeds presented by Ernst & Von Sprect elsen, Saathandel, Hamburg. Received February 21, 1935.

Introduced for Department specialists.

109210. Amburana claudii Schwacke and Taub. Fabaceae.

From Brazil. Seeds presented through the Bureau of Entomology and Plant Quarantine. Washington, D. C. Received February 20, 1935.

A large tropical tree with odd-pinnate leaves composed of 11 to 15 alternate leaflets and large clusters of cream-white flowers borne on the old wood. The seeds are crushed and used to perfume tobacco. Both the seeds and the wood have a strong odor of coumarin. Native to dry regions in Brazil and northern Argentina.

For previous introduction see 37906.

109211 to 109213. FESTUCA spp. Poaceae. Fescue.

From Germany. Seeds presented by R. Liefmann Söhne Nachf., Hamburg. Received February 21, 1935.

Introduced for Department specialists.

109211. FESTUCA CAPILLATA Lam. Hair fescue.

109212. FESTUCA OVINA L. Sheep fescue.
109213. FESTUCA RUBRA L. Red fescue.

109214 to 109406.

From Turkey. Seeds collected by H. L. Westover and C. R. Enlow, Bureau of Plant Industry. Received January 11, 1935

109214 and 109215. ABELMOSCHUS ESCU-LENTUS (L.) Moench. Malvaceae. Okra.

109214. No. T-293. October 4, 1934. From the Kastamonu bazar.

Fir.

109214 to 109406-Continued.

109215. No. T-368. October 10, 1934. From the Adapazari bazar.

109216. ABIES Sp. Pinaceae.

No. T-314. October 5, 1934. About 15 miles south of Kastamonu.

109217. AELUROPUS LITTORALIS (Gouan) Parl. Poaceae.

No. T-263. October 5, 1934. From a rocky mountainside about 7 miles south of Tosya.

For previous introduction see 108843.

109218 to 109220. AGROPYRON spp. Poaceae. Wheatgrass.

109218. AGROPYRON CRISTATUM (L.) Gaertn. Crested wheatgrass.

No. T-391. October 15, 1934. From the Sazova Experiment Station near Eskishehir.

109219. AGROPYRON INTERMEDIUM (Host.) Beauv.

No. T-322. October 8, 1934. About 20 miles east of Bolu.

109220. Brachypodium CAESPITOSUM (Host.) Roem. and Schult. Poaceae.

No. T-376. October 10, 1934. From rocky clay on dry mountainside, about 20 miles southwest of Bolu.

109221 to 109225. Agrostis spp. Poaceae. Grass.

109221. AGROSTIS ALBA L. Redtop.

No. T-333. October 9, 1934. About 10 miles west of Duzce.

109222. AGROSTIS SPICA-VENTI L.

No. T-233. October 3, 1934. From dry clay hillside and flat about 6 miles west of Chorum. An annual grass, usually about 20 inches high, with feathery panicles 4 to 8 inches long. Native to Europe.

109223 to 109225. AGROSTIS ALBA L. Redtop.

109223. No. T-222. October 2, 1934. About 12 miles south of Samsun.

109224. No. T-259. October 4, 1934. About 12 miles north of Tosya.

109225. No. T-319. October 8, 1934. About 18 miles north of Kizilja Hammam.

109226 to 109231. ALLIUM spp. Liliaceae.
109226 to 109229. ALLIUM CEPA L.
Onion.

109226. No. T-251. October 1, 1934. From the Chasamba bazar.

109227. No. T-289. October 4, 1934. From the Kastamonu bazar.

109228. No. T-350. October 10, 1934. From the Adapazari bazar.

109229. No. T-384. October 11, 1934. From the Nallihan bazar.

109230 and 109231. ALLIUM PORRUM L.

109230. No. T-380. October 11, 1934. From the Nallihan bazar.

109231. No. T-354. October 10, 1934. From the Adapazari bazar.

109214 to 109406—Continued.

109232 to 109234. ALTHAEA spp. Malvaceae.

Collected October 2, 1934.

109232. ALTHAEA SD.

No. T-211. Collected about 30 miles west of Samsun.

109233. ALTHAEA sp.

No. T-215. Collected about 12 miles south of Samsun. A form with pink flowers.

109234. ALTHAEA sp.

No. T-227. Collected about 70 miles south of Samsun.

109235. Anethum graveolens L. Apiaceae. Dill.

No. T-353. October 10, 1934. From the Adapazari bazar.

109236. APIUM GRAVEOLENS L. Apiaceae. Celery.

No. T-359. October 10, 1934. From the Adapazari bazar.

109237. ASCLEPIAS sp. Asclepiadaceae.

No. T-323. October 8, 1934. Found growing abundantly on dry rocky hills in the vicinity of Kizilja Hammam.

109238. ASTRAGALUS Sp. Fabaceae.

No. T-310. October 5, 1934. A perennial shrub 3 feet high found about 40 miles northeast of Ankara on a dry hill-side

109239. ASTRAGALUS Sp. Fabaceae.

No. T-398. October 15, 1934. From the Sazova Experiment Station, Eskishehir.

109240. Berberis sp. Berberidaceae.

No. T-239. October 3, 1934. About 2 miles north of Iskilip.

109241 to 109243. BRACHYPODIUM PINNATUM (L.) Beauv. Poaceae. Grass.

109241. No. T-202. October 2, 1934. Collected about 30 miles west of Samsun on a rocky clay hillside; an excellent sod grass.

109242. No. T-320. October 8, 1934. Southwest of Bolu about 36 miles.

109243. No. T-374. October 10, 1934. About 12 miles southwest of Bolu on a rocky mountainside.

109244. Brachypodium sp.

No. T-201. October 2, 1934. About 12 miles west of Samsun on a steep hill-side.

109245 to 109248. Brassica spp. Brassicaceae.

109245 to 109247. BRASSICA OLERACEA CA-PITATA L. Cabbage.

109245. No. T-265. October 4, 1934. From Tosya.

109246. No. T-287. October 4, 1934. From the Kastamonu bazar.

109247. No. T-358. October 10, 1934. From the Adapazari bazar.

109248. BRASSICA sp.

No. T-268. October 4, 1934. From Tosya.

109249. CALAMAGROSTIS sp. Poaceae.

No. T-257. October 4, 1934. From high mountains about 15 miles north of Tosya.

109250 and 109251. CANNABIS SATIVA L. Moraceae. Hemp.

109250. No. T-285. October 4, 1934. From the Kastamonu bazar.

109251. No. T-297. October 4, 1934. From the Agricultural Museum, Kastamonu.

109252 to 109255. Capsicum annuum L. Solanaceae. Common redpepper.

109252. No. T-366. October 10, 1934. From the Adapazari bazar.

109253. No. T-288. October 4, 1934. From the Kastamonu bazar.

109254. No. T-278. October 4, 1934. Large peppers from the Kastamonu bazar.

109255. No. T-363. October 10, 1934. A hot pepper from the Adapazari bazar.

109256 and 109257. LEPIDIUM SATIVUM L. Brassicaceae. Garden cress.

109256. No. T-383. October 11, 1934. From the Nallihan bazar.

109257. No. T-271. October 11, 1934. From the Kastamonu bazar.

109258. CENTAURIUM sp. Gentianaceae.

No. T-344. October 9, 1934. About 12 miles west of Duzce. A small plant with attractive pink flowers found in dry situations.

109259. CICER ARIETINUM L. Fabaceae. Chickpea.

No. T-361. October 10, 1934. From the Adapazari bazar.

109260, CICER sp. Fabaceae.

No. T-348. October 9, 1934. From a steep roadside bank about 12 miles west of Bolu.

109261. CISTUS sp., Cistaceae.

No. T-255. October 4, 1934. From rocky mountain slopes south of Tosya.

199262 and 109263. CITRULLUS VULGARIS Schrad. Cucurbitaceae. Watermelon.

109262. No. T-387. October 11, 1934. From the Nallihan bazar.

109263. No. T-232. October 3, 1934. From Chorum. A melon with orange-colored flesh and a yellow skin.

109264 and 109265. CUCUMIS MELO L. Cucurbitaceae. Muskmelon.

109264. No. T-316. October 3, 1934. From Samsun. A melon with mottled green and yellow skin and white flesh of a delicious flavor.

109265. No. T-386. October 11, 1934. From the Nallihan bazar.

109266. CORONILLA VARIA L. Fabaceae. Crown vetch.

No. T-301. October 5, 1934. From a moist rocky mountain slope, about 25 miles south of Kastamonu.

For previous introduction see 106521.

109214 to 109406—Continued.

109267. COTONEASTER sp. Malaceae.

No. T-243. October 3, 1934. From a dry rocky slope about 3 miles north of Iskilip.

109268. CRATAEGUS Sp. Malaceae.

No. T-206. October 2, 1934. About 85 miles west of Samsun on a dry billside.

109269. CRATAEGUS Sp. . Malaceae.

No. T-238. October 3, 1934. From Samsun. Fruit the size of a crab apple.

109270 to 109275. Cucumis spp. Cucurbitaceae.

109270 to 109272. Cucumis Melo L. Muskmelon.

109270. No. T-390. October 12, 1934. From Ankara. A melon with dark green rind and delicious white flesh.

109271. No. T-254. October 4, 1934. From Chorum. A round melon with green netted-type rind and white fiesh which is only fair.

109272. No. T-230. October 3, 1934. From Chorum. A green-netted type.

109273 to 109275. CUCUMIS SATIVUS L. Cucumber.

109273. No. T-260. October 4, 1934. From Tosya.

109274. No. T-385. October 11, 1934. From the Nallihan bazar.

109275. No. T-277. October 4, 1934. From the Kastamonu bazar.

109276 to 109278. CUCURBITA spp. Cucurbitaceae.

109276 and 109277. CUCURBITA MAXIMA Duchesne. Squash.

October 4, 1934. From the Kastamonu bazar.

109276. No. T-286. 109277. No. T-282.

109278. CUCURBITA PEPO L. Pumpkin.
No. T-388. October 11, 1934. From
the Nallihan bazar.

109279. DACTYLIS GLOMERATA L. Poaceae.
Orchard grass.

No. T-375. October 10, 1934. From a dry clay hillside, 20 miles southwest of Bolu.

109280. DAUCUS CAROTA L. Apiaceae. Carrot.

No. T-273. October 10, 1934. From the Kastamonu bazar.

109281 to 109283. DIANTHUS spp. Silenaceae.

109281. DIANTHUS sp.

No. T-241. October 3, 1934. A rock pink collected about 3 miles north of Iskilip.

109282. DIANTHUS sp.

No. T-395. October 15, 1934. From a dry hillside at the Dry Land Experiment Station near Eskishehir.

109283. DIANTHUS Sp.

No. T-373. October 10, 1934. From rocks about 15 miles southwest of Bolu.

109284. DIGITALIS sp. Scrophulariaceae.

No. T-325. October 8, 1934. Collected 50 miles north of Kizilja Hammam.

109285. EREMURUS sp. Liliaceae.

No. T-392. October 15, 1934. From the Dry Land Experiment Station near Eskishehir.

109286. ERIANTHUS HOSTII Griseb. Poaceae.

No. T-205. October 2, 1934. About 7 miles west of Samsun, in gullies and steep hillsides in rocky clay loam. A perennial reedlike grass with dense woolly panicles. Native to southern Europe and Asia Minor.

109287. EUONYMUS sp. Celastraceae.

No. T-347. October 9, 1934. A shrub growing beside a stream, about 15 miles north of Duzce.

109288. EUONYMUS sp. Celastraceae.

No. T-315. October 5, 1934. A tree with rose-colored berries found $20\cdot$ miles south of Kastamonu.

109289. FAGOPYRUM ESCULENTUM Moench. Polygonaceae. Common buckwheat.

No. T-294. October 4, 1934. From the Agricultural Museum at Kastamonu.

109290 to 109292. FESTUCA spp. Poaceae. 109290. FESTUCA sp.

No. T-258. October 4, 1934. About 15 miles north of Tosya in the high mountains.

109291. FESTUCA Sp.

No. T-336. October 9, 1934. A grass 3 feet tall found on the rocky slope of a stream bank about 15 miles west of Duzce.

109292. FESTUCA SD.

No. T-262. October 4, 1934. About 15 miles north of Tosya.

109293. GENTIANA sp. Gentianaceae.

No. T-302. October 5, 1934. About 25 miles south of Kastamonu.

109294. HEDYSARUM sp. Fabaceae.

No. T-87. October 26, 1934. Found in dry limestone at Sivas.

109295. HIPPOPHAE RHAMNOIDES L. Elaeagnaceae. Common sea-buckthorn.

No. T-203. October 2, 1934. About 50 miles south of Samsun. A rather thorny tree with leaves like the Russian-olive and great masses of fragrant orange-colored berries.

For previous introduction and description see 108063.

109296. ILEX sp. Aquifoliaceae.

No. T-337. October 9, 1934. About 9 miles west of Bolu.

109297. IRIS HISTRIOIDES Foster. Iridaceae.

No. T-216. October 4, 1934. About 70 miles south of Samsun.

109298 and 109299. Koeleria Cristata (L.) Pers. Poaceae. 109214 to 109406—Continued.

109298. No. T-204. October 2, 1934. From a dry hillside about 2 miles south of Chorum.

109299. No. T-324. October 8, 1934. About 53 miles north of Kizilja Hammam.

109300 to 109304. LACTUCA SATIVA L. Cichoriaceae. Garden lettuce.

109300 to 109302. Collected October 4, 1934, in the Kastamonu bazar.

109300. No. T-270. Ordinary variety.

109301. No. T-291. Curly variety.

109302. No. T-290. Black variety.

109303. No. T-266. October 4, 1934. From Tosya.

109304. No. T-379. October 11, 1934. From Nallihan.

109305. LAGENARIA LEUCANTHA (Duchesne) Rusby. Cucurbitaceae. Calabash gourd.

No. T-281. October 4, 1934. From the Kastamonu bazar.

109306. LEPTOCHLOA Sp. Poaceae. Grass.

No. T-221. October 2, 1934. Collected 75 miles south of Samsun on a dry rocky hillside.

109307. LINUM USITATISSIMUM L. Linaceae. Flax.

No. T-272. October 4, 1934. From the Kastamonu bazar.

109308. LOLIUM PERENNE L. Poaceae. Perennial ryegrass.

No. T-332. October 9, 1934. About 12 miles west of Bolu along a roadside. A large percentage of the sod of this section consists of this grass.

109309. LOLIUM RIGIDUM Gaud. Poaceae.

No. T-396. October 15, 1934. From the Dry Land Experiment Station near Eskishehir. A native grass used for lawns at Ankara.

109810 to 109814. Lotus spp. Fabaceae.

109310. Lotus sp.

No. T-342. October 9, 1934. About 12 miles west of Duzce.

109311. LOTUS sp.

No. T-321. October 8, 1934. About 75 miles northwest of Ankara near Kizilja Hammam.

109312. LOTUS sp.

No. T-209. October 2, 1934. About 15 miles south of Samsun.

109313. Lorus sp.

No. T-311. October 5, 1934. From a moist rocky mountain slope 24 miles south of Kastamonu.

109814. LOTUS SD.

No. T-371-A. October 10, 1934. Collected in a river bottom 13 miles east of Adapazari.

109315 and 109316. LYCOPERSICON ESCULENTUM Mill. Solanaceae. Tomato.

109315. No. T-356. October 10, 1934. From the Adapazari bazar.

109316. No. T-280. October 4, 1934. From the Kastamonu bazar.

109317. MALUS SD. Malaceae.

No. T-308. October 5, 1934. Wild apple trees found 12 miles south of Kastamonu.

109318 to 109321. MEDICAGO spp. Fabaceae.

109818. MEDICAGO FALCATA X SATIVA.

No. T-210. October 2, 1934. About 69 miles south of Samsun.

109319. Medicago Lupulina L. Black medick.

No. T-331. October 9, 1934. From a steen bank by a roadside 6 miles west of Bolu.

109320 and 109321. MEDICAGO SATIVA L. Alfalfa.

109320. No. T-299. October 4, 1934. From Tosya.

109321. No. T-397. October 15, 1934. From the Dry Land Experiment Station near Estishehir.

109322. MELICA CILIATA L. Poaceae.

No. T-244. October 3, 1934. From a rocky clay hillside, 6 miles west of Chorum.

109323 to 109326. Melilotus spp. Fabaceae. Sweetclover.

109328 and 109324. MELILOTUS ALEA Desr. White sweetclover.

109323. No. T-225. October 2, 1934. Sixty-nine miles south of Samsun.

109324. No. T-371. October 10, 1934. From the heavy soil of flat bottom land 18 miles southeast of Adapazari.

109325. Melilotus officinalis (L.) Lam.

No. T-329. October 9, 1934. From a steep bank on a roadside, 6 miles west of Bolu.

109326. MELILOTUS sp.

No. T-305. October 5, 1934. From the mountains, 24 miles south of Kastamonu.

109327. Onobrychis vulgaris Hill. Fabaceae.

No. T-394. October 15, 1934. From the Dry Land Experiment Station near Eskishebir where it grows profusely under irrigation; becomes 30 inches high and is cut three times in a season.

109828 to 109880. ORYZA SATIVA L. Poaceae. Rice.

109328. No. T-327. October 8, 1934. From near Kizilja Hammam, 54 miles northwest of Ankara.

109329. No. T-378. October 11, 1934. From Nallihan.

109330. No. T-298. October 4, 1934. From Tosya.

109331 and 109332. ORYZOPSIS PUBIFLORA Hacks. Poaceae. Grass.

A densely tufted perennial grass with narrow linear leaves, the blades being about 4 inches long. Native to mountainous places in southern Iran.

109331. No. T-245. October 3, 1934. From 10 miles west of Chorum.

109214 to 109406—Continued.

109882. No. T-213. October 2, 1934. From 70 miles south of Samsun.

109333. PALIURUS SPINA-CHRISTI Mill. Rhamnaceae. Christ-thorn.

No. T-200. October 1, 1934. A spiny shrub found on flats near Charashamba.

For previous introduction see 46425.

109334 PAPAVER sp. Papaveraceae.

No. T-102. September 26, 1934. Collected 35 miles east of Sivas.

109885 to 109887. Petroselinum hortense Hoffm. Apiaceae. Parsley.

109335. No. T-292. October 4, 1934. From the Kastamonu bazar.

109336. No. T-381. October 11, 1934. From the Nallihan bazar.

109337. No. T-360. October 10, 1934. From the Adapazari bazar.

109338 to 109344. Phaseolus spp. Fabaceae.

109338 and 109339. PHASEOLUS COC-CINEUS L. Scarlet Runner bean.

109888. No. T-296. October 4, 1934. From the Agricultural Museum at Kastamonu.

109339. No. T-279. October 4, 1934. From the Kastamonu bazar.

109340 to 109344. PHASEOLUS VULGARIS L. Common bean.

109340. No. T-295. October 4, 1934. From the Agricultural Museum at Kastamonu. A bean eaten while green.

109341 to 109343. October 10, 1934. From the Adapazari bazar.

109341. No. T-367. Cali fasuliye.

109342. No. T-365. Barbonrye fasuliye.

109343. No. T-364. Haray fasuliye.

109844. No. T-373-A. October 10, 1934. A red kidney bean collected about 12 miles east of Adapazari.

109845. PHLEUM ARENARIUM L. Poaceae. Timothy.

No. T-252. October 3, 1934. Collected about 9 miles west of Chorum.

109846. PHLEUM PHLEOIDES (L.) Karst. Poaceae.

No. T-214. October 2, 1934. About 6 miles south of Samsun.

109347. Physalis alkekengi L. Solanaceae. Strawberry ground-cherry.

No. T-339. October 9, 1934. Collected near Duzce.

For previous introduction see 65536.

109348. PISUM SATIVUM L. Fabaceae. Pea.

No. T-370. October 10, 1934. Bezeliye. From the Adapazari bazar.

109349 to 109351. Poa spp. Poaceae. Bluegrass.

109349. Poa bulbosa L.

No. T-249. October 3, 1934. From a dry rocky clay hillside about 6 miles west of Chorum.

109350. POA COMPRESSA L.

No. T-246. October 3, 1934. From a dry clay hillside about 6 miles west of Chorum.

109351, Poa sp.

 N_0 . T-219. October 2, 1934. Collected 12 miles south of Samsun.

109352. PYRACANTHA sp. Malaceae.

No. T=208. October 2, 1934. A shrub collected 6 miles south of Samsun.

109353 to 109359. RAPHANUS SATIVUS L. Brassicaceae. Radish.

109353 and 109354. October 4, 1934. From the Kastamonu bazar.

109353. No. T-284. A red variety.

109354. No. T-269. A black variety.

109355. No. T-351. Salgom. October 10, 1934. From the Adapazari bazar.

109356. No. T-293. October 4, 1934. From the Kastamonu bazar. A white variety.

109357. No. T-369. Kirmizi turup. October 10, 1934. From the Adapazari bazar. A red variety.

109358. No. T-274. October 4, 1934. From the Kastamonu bazar. A long red variety.

109359. No. T-357. October 10, 1934. Trup. From the Adapazari bazar.

109360 and 109361. RHAPHIS GRYLLUS (L.) Desv. Poaceae. Grass.

109360. No. T-234. October 3, 1934. Collected 9 miles west of Chorum.

109361. No. T-218. October 2, 1934. From a dry rocky wash on a hillside 78 miles south of Samsun. This grass forms a good sod.

109362. RHODODENDRON Sp. Ericaceae.

No. T-338. October 9, 1934. Collected 6 miles west of Bolu.

109363. RHUS CORIARIA L. Anacardiaceae. Sumac.

No. T-235. October 3, 1934. From a dry rocky hillside 4 miles west of Iskilip.

109364. Rosa sp. Rosaceae. Rose.

No. T-389. October 10, 1934. A wild rose collected 9 miles southwest of Bolu.

No. T-228. October 3, 1934. An everbearing blackberry from Charshamba.

109866 and 109867. Salvia spp. Mentha-

Collected October 5, 1934, 15 miles south of Kastamonu.

109366. SALVIA sp.

No. T-306.

109367. SALVIA Sp.

No. T-304.

109368. SECALE CEREALE L. Poaceae.

No. T-317. October 4, 1934. From the Agricultural Museum at Kastamonu.

109214 to 109406—Continued.

109369 to 109371. Solanum melongena L. Solanaceae. Eggplant.

109369. No. T-276. October 4, 1934. From the Kastamonu bazar.

109370. No. T-393. October 15, 1934. From Eskishehir. An eggplant 15 in thes long and over an inch in diameter.

109371. No. T-362. October 10, 1934. Patlican kemey. From the Adapazari bazar.

109372 and 109373. SPINACIA OLERACEA L. Common spinach.

109372. No. T-382. October 11, 1934. From the Nallihan bazar.

109373. No. T-355. October 10, 1934. Tspanek. From the Adapazari bazar.

109374 to 109377. STIPA spp. Poaceae. Feathergrass.

109374 and 109375. STIPA BROMOIDES (L.) Beck.

A tufted perennial grass up to 2 feet high. Native to dry mountain regions of southern Europe.

109374. No. T-224. October 2, 1934. From a rocky clay hillside 31 miles west of Samsun.

109375. No. T-220. October 2, 1934. From a dry rocky hillside 72 miles south of Samsun.

109376. STIPA CAPILLATA L.

No. T-399. October 15, 1934. From a protected situation on a dry hillside at the Dry Land Experiment Station, Eskishehir.

109377. STIPA Sp.

No. T-261. October 11, 1934. From a rocky mountain slope south of Tosya.

109378 to 109391. TRIFOLIUM spp. Fabaceae. Clover.

109378 to 109381. TRIFOLIUM PRATENSE L. Red clover.

109378. No. T-212. October 2, 1934. From a steep hillside 12 miles west of Samsun.

109379. No. T-309. October 5, 1934. From the mountains 25 miles south of Kastamonu.

109380. No. T-335. October 9, 1934. Collected 10 miles west of Duzce.

109881. No. T-340. October 9, 1934. Collected along the bank of a stream 6 miles west of Bolu.

109382 to 109386. TRIFOLIUM REPENS L. White clover.

109382. No. T-248. October 3, 1934. From the top of a mountain northwest of Iskilip.

109883. No. T-264. October 4, 1934. Collected 12 miles north of Tosya.

109384. No. T-300. October 5, 1934. Collected in the mountains 25 miles south of Kastamonu.

109385 and 109386. Collected October 9, 1934, about 11 miles west of Duzce on a mountain slope.

109385. No. T-341.

109386. No. T-343.

109387. TRIFOLIUM sp.

No. T-256. October 4, 1934 lected 12 miles north of Tosya. 1934. Col-

109388. TRIFOLIUM Sp.

No. T-226. October 2, 1934. (lected along an irrigation ditch, miles south of Samsun.

109389 to 109391. TRIFOLIUM spp.

A collection of hop clovers with large bright-yellow flowers.

109889. TRIFOLIUM sp.

No. T-313. October 5, 1934. Collected 25 miles south of Kastamonu.

109390. TRIFOLIUM Sp.

No. T-267. October 4, 1934. Collected 15 miles north of Tosya.

109391. TRIFOLIUM Sp.

No. T-330. October 9, 1934. Found near a stream 12 miles from

109392. TRIGONELLA sp. Fabaceae.

"No. T-326. October 8, 1934. From dry gravelly soil in a valley 46 miles north of Kizilija Hammam. It does not seem to be eaten by stock to any extent.

109393 and 109394. Collected October 5, 1934, in the mountains south of Kasta-

109393. VICIA sp. Fabaceae.

No. T-312

109394. SATHYRUS PRATERSIS L. Fabaceae.

No. T-303.

109395. VICIA sp. Fabaceae.

October 2, 1934. Collected No. T-217. 12 miles south of Samsun.

109396. VIGNA SINENSIS (Torner) Savi. Fabaceae.

October 10, 1934. Borulse, black-eyed peas from Adapazari.

109397. VITIS VINIFERA L. Vitaceae. European grape.

No. T-247. October 3, 1934. From Chorum. A very large blue grape which is almost seedless.

109398 to 109400. ZEA MAYS L. Poaceae.

109398 and 109399. October 10, 1934; two types of corn grown in the vi-cinity of Adapazari.

109398. No. T-377. White.

109399, No. T-377-A. Yellow.

109400. No. T-275. October 4, 1934. Popcorn from the Kastamonu

109401. (Undetermined.)

No. T-223. October 2, 1934. Collected about 30 miles west of Samsun.

109402. (Undetermined.)

No. T-334. October 9, 1934. A shrub collected near a stream 6 miles west of Rolu

109214 to 109406—Continued.

109403. (Undetermined.)

No. T-240. October 3, 1934. A low-growing shrub found on a dry rocky slope 9 miles north of Iskilip. The shrub is grazed by goats.

109404. DIGITALIS sp. Scrophulariaceae.

No. T-237. October 3, 1934. A flowering plant found on rocky slopes about 4 miles north of Iskilip.

109405. (Undetermined.)

No. T-328. October 9, 1934. An unknown legume found on a steep roadside bank 12 miles west of Bolu.

109406. (Undetermined.)

No. T-307. October 5, 1934. A flowering plant found about 15 miles south of Kastamonu.

109407 and 109408.

From Java. Seeds presented through A. M. Cramer, Sr., Wonosobo. Received February 25, 1935.

109407. BOUEA GANDARIA Blume. cardiaceae.

A large tropical evergreen tree, with glossy oblong leaves, racemes of very small yellow flowers, and egg-shaped fruits about 3 inches long. The small young fruits are pickled in a salt solution and eaten like olives with meat. When ripe, the red fruits are eaten fresh. Native to the East Indies.

For previous introduction see 31865.

109408. LANSIUM DOMESTICUM Jack. Meli-Langsat. aceae.

Doekoe. A Malayan tree up to 40 feet high, with pinnate leaves composed of five to seven elliptic leaflets each 4 to 8 inches long. The fruits, borne in dense pendulous clusters, vary from oval to round and from 1 to 2 inches in diameter, velvety and straw colored, with a thick leathery skin enclosing juicy aromatic flesh, and one to three large seeds. The seeds are extremely bitter. The best fruits are found in the village of Menteng, near Batavia.

For previous introduction see 80998.

109409. Fraxinus holotricha Koehne. Ash. Oleaceae.

From Rumania. Seeds collected by Dr. Edgar Anderson, Arnold Arboretum Balkan expedition. Received February 20, 1935.

A small tree with leaves about 8 inches long composed of 9 to 13 leaflets. Collected in the hybrid Fraxinus "Forest" on the Danube delta, a region of very low rainfall and very cold winters.

109410. PASSIFLORA LIGULARIS JUSS. Sweet granadilla. Passifloraceae.

From South America. Seeds collected by Mrs. Ynes Mexia, Bureau of Plant Indus-try, at Baños, Tunguragua Province, Ecua-dor. Received February 25, 1935.

Introduced for Department specialists.

For previous introduction and description see 108829.

109411 to 109419.

From Burma. Seeds presented by D. Rhind, Economic Botanist, Mandalay. Received February 25, 1935.

A collection of locally grown varieties, introduced for Department specialists.

109411 to 109414. APIUM GRAVEOLENS L. Apiaceae. Celery.

109411. Golden Self-Blanching.

109412. Rose Standard.

109413. White Plume.

109414. White Solid.

109415 to 109419. DAUCUS CAROTA L. Apiaceae. Carrot.

109415. Champion.

109416. Earliest Short Horn.

109417. Early Gem.

109418. Exhibition.

109419. Nantes.

109420 to 109422,

From the Union of Soviet Socialist Republics. Seeds presented by the Director, Botanic Garden, Samara. Received February 25, 1935.

109420. ATRIPLEX NITENS Schkuhr. Chenopodiaceae.

A large erect-stemmed annual about 6 feet high, growing in cultivated places.

109421. ATRIPLEX TATARICA L. Chenopo diaceae.

A bushy annual up to 3 feet tall. Na tive to coastal deserts in Asia Minor.

109422. Salsola Mutica C. A. Mey. Che nopodiaceae.

A desert annual, upright or rarely ascending, about 2 feet high. The graygreen linear leaves are about one-sixth of an inch long. Native to southeastern Europe.

109423 to 109435. MEDICAGO SATIVA L. Fabaceae. Alfalfa.

From the Union of Soviet Socialist Republics. Seeds presented by A. T. Belov, Central Flant Breeding Station, Tashkent, Turkistan, through H. L. Westover and C. R. Enlow, Bureau of Plant Industry. Received January 30, 1935.

109423 to 109426. Each sample of seed was collected from a single plant of wild alfalfa.

109423. No. 1199. From Khorog, the Pamirs.

109424. No. 1200. From Porshnev near Khorog, the Pamirs.

109425. No. 1201. From Porshnev near Khorog, the Pamirs.

109426. No. 1202. From near Khorog, the Panirs.

109427. No. 1203. Wild alfalfa from near Khorog, the Pamirs.

109428. No. 1204. Wild alfalfa collected near the plant breeding station at Tashkent.

109429. No. 1205. From Chartim in the Ghund Valley, the Pamirs.

109423 to 109435—Continued.

109430. No. 1206. From the Ghund Valley, the Pamirs.

109481. No. 1207. Wild alfalfa from the Kishlan, Upper Khorog, Ghund Valley, the Pamirs.

109432. No. 1208. Wild alfalfa from the Ghund Valley, the Pamirs.

109433. No. 1209. From Kishlan Juben in the Sharch-Dara Valley, the Pamirs.

109434 and 109435. From Khorog, the Pamirs.

109484. No. 1210. 109485. No. 1211.

109436. Phaseolus vulgaris L. Fabaceae. Common bean.

From Maine. Seeds presented by H. S. Howard, Waterville, through the Bureau of Entomology and Plant Quarantine. Received March 4, 1935.

Wild Goose beans.

109437 to 109447.

From the Union of Soviet Socialist Republics. Seeds presented by the Repetek Sand Desert Station, Turkmenistan, through H. L. Westover and C. R. Enlow, Bureau of Plant Industry. Received February 2, 1935.

Introduced for Department specialists.

109437. AGROPYRON ORIENTALE (L.) Roem. and Schult. Poaceae.

No. 1218

For previous introduction and description see 108846.

109438. AGROPYRON SQUARROSUM Roth. Poaceae.

No.1213.

109439. Ammodendron conollyi Bunge. Fabaceae.

No. 1212.

For previous introduction and description see 108852.

109440. ARISTIDA PENNATA MINOR Litv. Poaceae.

No. 1221.

For previous introduction and description see 108865.

10941. ATRIPLEX DIMORPHOSTEGIA Kar. and Kir. Chenopodiaceae.

No. 1222.

For previous introduction and description see 108879.

109442. Bromus **TECTORUM** L. Poaceae. No. 1215.

For previous introduction and description see 108885.

109448. CUTANDIA MEMPHITICA (Spreng.) Richter. Poaceae.

No. 1214.

For previous introduction and description see 108906.

109444. ISATIS VIOLASCENS Bunge. Brassicaceae.

No. 1220.

For previous introduction and description see 108928.

109437 to 109447-Continued.

109445. Kochia stellaris Moq. Chenopo-

No. 1217. An erect annual plant, native to the Karakum Desert, Turkistan; up to a foot high, much branched, with flat linear leaves and very small greenish flowers. In general appearance it resembles Kochia scoparia.

For previous introduction see 98216.

109446. MALCOMIA CIRCINNATA Boiss. Brassicaceae.

No. 1216

For previous introduction and description see 108933.

109447. Senecio subdentatus Ledeb. Asteraceae.

No. 1219

For previous introduction and description see 108958.

109448. PRUNUS ARMENIACA L. Amygdalaceae. Apricot.

From Syria. Trees presented by Joseph Dabbous, Bab Rouma, Damascus, through the American consulate general at Beirut. Received March 7, 1935.

Hamway.

Introduced for Department specialists.

109449. Amygdalus persica L. Amygdalaceae. Peach.

From Java. Seeds presented by A. M. Cramer, Sr., Wonosobo. Received February 25, 1935.

To sari peach. A naturalized peach from Tosari.

Introduced for Department specialists.

109450 to 109605.

From Turkey and Rumania. Seeds collected by H. L. Westover and C. R. Enlow, Bureau of Plant Industry. Received January 17, 1935.

The numbers preceded by a capital T were collected in Turkey and those preceded by a capital R from Rumania.

Introduced for Department specialists.

109450 to 109452. AGROPYRON spp. Poaceae. Wheatgrass.

109450. AGROPYRON CRISTATUM (L.) Gaertn. Crested wheatgrass.

No. T-554. October 24, 1934. Co lected 12 miles east of Kirshehir.

109451. AGROPYRON Sp.

No. T-489. October 24, 1934. Collected 50 miles northeast of Izmir on rolling land, in heavy soil.

109452. AGROPYRON INTERMEDIUM (Host) Beauv.

No. T-508. October 26, 1934. A large bunch grass collected 31 miles southeast of Bandirma along the road to Bursa, on low flat land.

109453. Brachypodium Pinnatum (L.) Beauv. Poaceae. Grass.

No. T-464. October 23, 1934. Collected 25 miles east of Izmir on the road to Kasaba.

109450 to 109605—Continued.

109454 to 109456. Agrostis spp. Poaceae. 109454. Agrostis alba L.

No. R-561. September 9, 1934. Collected at Constanza in a depression along the sandy beach.

109455. Agrostis sp.

No. R-564. September 10, 1934. Found in pure sand at Mamaia, near Constanza.

109456. Agrostis scabriglumis Boiss. and Reut.

No. T-463. October 23, 1934. Collected 25 miles east of Izmir near a gully on the road to Kasaba.

109457. ALLIUM CEPA L. Liliaceae. Onion.

No. T-522. October 30, 1934. From the Ankara bazar.

109458. ALTHAEA Sp. Malvaceae.

No. T-497. October 24, 1934. From Bergama.

109459 and 109460. Andropogon ischaemum L. Poaceae.

For previous introduction see 109033.

109459. No. T-415. October 17, 1934. Collected about 22 miles northeast of Adana.

109460. No. T-411. October 17, 1934. From a dry flat plain 12 miles east of Adana.

109461. ASTRAGALUS Sp. Fabaceae.

No. T-439. October 18, 1934. A perennial shrub collected 44 miles northwest of Adana.

109462 to 109465. Brachypodium spp. Poaceae. Grass.

109462. Brachypodium ramosum (L.) Roem, and Schult.

No. T-501. October 26, 1934. Collected about 25 miles southeast of Bandirma. A blue-green, perennial, creeping grass, much branched at the base, found in the warmer portions of the Mediterranean countries, especially on chalky soil and in dry rocky places.

For previous introduction see 88904.

109468. BRACHYPODIUM Sp.

No. T-422. October 17, 1934. Collected 22 miles northeast of Adana.

109464. Brachypodium sp.

No. T-445. October 18, 1934. From a rocky slope in the foothills 25 miles west of Adana.

109465. Brachypodium sp.

No. T-512. October 26, 1934. A bunch grass collected about 16 miles southeast of Bandirma.

109466 and 109467. October 30, 1934; from the Ankara bazar.

109466. Brassica Alba (L.) Boiss. Brassicaceae. White mustard.

No. T-525.

109467. BRASSICA Sp.

No. T-528.

109450 to 109605-Continued.

109468 to 109471. CAPSICUM ANNUUM L. Solanaceae. Common redpepper.

109468. No. T-527. From the Ankara bazar, October 30, 1934.

109469 and 109470. Collected October 21, 1934, at the Konya bazar.

109469. No. T-474.

109470. No. T-476. A hot pepper.

109471. No. T-407. Collected October 16, 1934, at the Adam bazar.

109472. CELTIS Sp. Ulmaceae.

No. T-555. October 18, 1934. A shrub collected northwest of Adana.

109473, CERCIS SILIQUASTRUM L. Caesalpiniaceae. Judas-tree.

No. T-452. October 18, 1934. Collected 44 miles northwest of Adana.

For previous introduction see 26684.

109474. CISTUS LADANIFERUS L. Cistaceae. Gum rockrose.

No. T-470. October 23, 1934. Collected 12 miles east of Izmir on the road to Kasaba. A handsome bushy evergreen from 4 to 8 feet in height, with large deep-green leaves, silvery white below, and numerous large showy white flowers. Native to the Mediterranean countries.

For previous introduction see 48666.

109475. CLEMATIS sp. Ranunculaceae.

No. T-437. October 18, 1934. Collected about 47 miles northwest of Adana.

109476 and 109477. CORNUS MAS L. Cornaceae. Cornelian-cherry.

Collected October 3, 1934. Kiziljik

(plumlike).

109476. No. T-229. Collected about 31

miles south of Samsun.

109477. No. T-236. Collected about 16 miles north of Iskilip.

109478 to 109485. Cucumis spp. Cucurbi-

taceae.

109478 and 109479. Cucumis melo L.

Muskmelon. 109478. No. T-556. October 26, 1934. A green and yellow melon from Balikesir.

109479. No. T-526. October 30, 1934. From the Ankara bazar.

109480 to 109485. CUCUMIS SATIVUS L. Cucumber.

109480 and 109481. Collected October 20, 1934, at the Ankara bazar.

109480. No. T-531. A long green cucumber.

109481. No. T-530.

109482. No. T-400. From the Adana bazar. A large cucumber grown under irrigation.

109483. No. T-475. October 21, 1934. From the Konya bazar.

109484. No. T-403. October 16, 1934. From the Adana bazar. A cucumber grown on dry land.

109485. No. T-408. October 16, 1934. From the Adana bazar. A cucumber adapted to either dry or irrigated

109450 to 109605—Continued.

land; irrigation improves development.

109486. CUCURBITA PEPO L. Pumpkin.

No. T-524. October 30, 1934. From the Ankara bazar.

109487 and 109488. CYNODON DACTYLON (L.) Pers. Poaceae. Bermuda grass.

109487. No. T-412. October 17, 1934. Collected from a cultivated field on dry land, 22 miles northeast of Adana.

109488. No. T-482. October 21, 1934. Collected in a dry ravine about 3 miles west of Konya.

109489 to 109492. DACTYLIS GLOMERATA L. Poaceae. Orchard grass.

109489. No. T-447. October 18, 1934. From a rocky mountain slope about 38 miles northwest of Adana.

109490. No. T-461. October 23, 1934. Collected on a mountain slope 12 miles east of Izmir.

109491. No. T-491. October 24, 1934. From Bergama, found among the old ruins.

109492. No. T-484. October 21, 1934. From a dry ravine, about 3 miles west of Konya.

109493 and 109494. Dianthus spp. Silenaceae.

109498. No. T-494. October 24, 1934. From Bergama.

109494. No. T-510. October 26, 1934. About 16 miles southeast of Bandirms.

109495. ERIANTHUS HOSTII Griseb. Poaceae. Grass.

No. T-468. October 23, 1934. Collected near a gully about 22 miles east of Izmir on the road to Kasaba.

For previous introduction and description see 109286.

109496. ERIANTHUS RAVENNAE (L.) Beauv. Poaceae. Ravenna grass.

No. T-416. October 17, 1934. Found near a spring about 16 miles east of Adana.

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For previous introduction see 78779.

109497. Festuca ovina L. Poaceae. Sheep fescue.

No. T-486. October 21, 1934. From dry rocky mountains about 3 miles south of Konya.

109498. FESTUCA sp. Poaceae.

No. T-346. October 9, 1934. Collected in deep shade near Bolu.

109499. GENISTA Sp. Fabaceae.

No. T-432. October 18, 1934. A shrub, collected 38 miles west of Adana.

109500. GENISTA sp. Fabaceae.

No. T-467. October 23, 1934. A shrub or small tree, collected about 18 miles east of Izmir.

109501. HAYNALDIA HORDEACEA (Coss. and Dur.) Hack, Poaceae. Grass.

No. T-462. October 23, 1934. From the roadside 5 miles east of Izmir on the

109450 to 109605—Continued.

road to Kasaba. A tufted perennial grass with rigid leaves. Native to the mountains of Algeria.

109502 and 109503. Hordeum Bulbosum L. Poaceae. Grass.

109502. No. T-515. October 26, 1934. Collected about 9 miles southeast of Bandirma, en route to Bursa.

109503. No. T-417. October 14, 1934. Collected 12 miles northeast of Adana.

109504. Ononis sp. Fabaceae.

No. R-566. September 10, 1934. A spiny perennial growing on the sands at Mamaia near Constanza.

109505. IRIS sp. Iridaceae.

No. T-490. October 24, 1934. Collected 50 miles northeast of Izmir.

109506, IRIS Sp. Iridaceae.

No. T-514, October 26, 1934. Collected about 31 miles southeast of Bandirma.

109507. JUNIPERUS OXYCEDRUS L. Pinaceae. Prickly juniper.

No. T-440. October 18, 1934. Collected 38 miles west of Adana.

109508. LACTUCA SATIVA L. Cichoriaceae Garden lettuce.

No. T-477. October 21, 1934. From the Konya bazar.

109509 and 109510. LINUM USITATISSIMUM L. Linaceae. Flax.

109509. No. T-479. October 21, 1934. From the Konya bazar.

109510. No. T-523. October 30, 1934. From the Ankara bazar.

109511. LOLIUM REMOTUM Schrank. Poaceae. Grass.

No. T-505. October 26, 1934. Collected 18 miles southeast of Bandirma.

109512 to 109514. Lycopersicon esculentum Mill. Solanaceae. Tomato.

109512. No. T-529. October 30, 1934. From the Ankara bazar.

109513. No. T-409. October 16, 1934. Large tomatoes from the Adana bazar.

109514. No. T-473. October 21, 1934. From the Konya bazar.

109515 and 109516. MANISURIS DIGITATA (Sibth. and Smith) Kuntze. Poaceae.

A perennial grass native to Asia Minor, with stems over 4 feet high.

109515. No. T-426. October 17, 1934. From the railroad embankment 12 miles east of Adana.

109516. No. T-513. October 26, 1934. From a low area 28 miles southeast of Bandirma.

109517 to 109522. MEDICAGO spp. Fabaceae.

109517. MEDICAGO FALCATA L. Yellow-flowered alfalfa.

No. R-567. September 10, 1934. Found in great abundance on pure sands at Mamaia, near Constanza.

109450 to 109605—Continued.

109518 and 109519. MEDICAGO SATIVA L. Alfalfa.

109518. No. T-472. October 21, 1934. From the Konya bazar.

109519. No. T-550. October 30, 1934. From the Ankara bazar.

109520. MEDICAGO Sp.

No. T-500. October 24, 1934. Bur clover. Collected 3 miles southeast of Bergama.

109521. MEDICAGO Sp.

No. T-498. October 21, 1934. Bur clover. Found growing on rather low ground near Bergama.

109522. MEDICAGO Sp.

No. T-471. October 23, 1934. Bur clover. Gathered from a thick stand on the mountain side 18 miles east of 1zmir on the road to Kasaba.

109523 to 109526. MELILOTUS spp. Fabaceae. Sweetclover.

109523. MELILOTUS ALBA Desr.
White sweetclover.

No. R-562. September 9, 1934. From the sand along the beach at Constanza. A variety with large seeds.

109524. MELILOTUS INDICA (L.) All.

No. R-565. September 10, 1934. Collected at Constanza on moist sandy land near the Black Sea.

For previous introduction see 107562. 109525. MELILOTUS sp.

No. T-507. October 26, 1934. Collected about 15 miles southeast of Bandirma.

109526. MELILOTUS Sp.

No. T-469. October 23, 1934. Collected 18 miles east of Izmir.

109527 to 109529. Collected October 18, 1934, about 30 miles northwest of Adana.

109527 and 109528. MYRTUS COMMUNIS L. Myrtaceae. True myrtle.

109527. No. T-448. Leucocarpa. A form with white berries.

109528. No. T-441. Melanocarpa. A form with black berries.

109529. NERIUM OLEANDER L. Apocynaceae. Oleander.

No. T-443. A shrub with pink flowers.

109530. OLEA EUROPAEA L. Oleaceae. Olive.

No. T-418. October 17, 1934. A wild olive from a rocky mountain slope about 12 mines east of Adana.

109531 to 109536. ORYZOPSIS spp. Poaceae. Grass.

109531 to 109533. ORYZOPSIS COERU-LESCENS (Desf.) Hack.

For previous introduction see 88917.

109531. No. T-455. October 23, 1934. Conjected on a rough hillside about 12 miles east of izmir, en route to Kasaba.

109450 to 109605-Continued.

109532. No. T-436. October 18, 1934. From a dry rocky slope 44 miles northwest of Adana.

109533. No. T-421. October 17, 1934. From bare limestone hills about 15 miles east of Adana.

109534 to 109536. ORYZOPSIS MILIACEA (L.) Benth. and Hook.

109534. No. T-442. October 18, 1934. Collected 25 miles west of Adana on rocky slopes in scrub oak clumps.

109535. No. T-456. October 23, 1934. From a mountain side east of Izmir on the road to Kasaba.

109536. No. T-438. October 18, 1934. From rocky slopes in the foothills about 30 miles northwest of Adams.

109537. Passiflora sp. Passifloraceae.

No. T-483. October 21, 1934. From a garden at Konya.

109538. PENNISETUM ORIENTALE L. Rich. Poaceae. Grass.

No. T-487. October 21, 1934. From a very dry ravine, about 3 miles west of Konya.

For previous introduction see 108943.

109539 and 109540. PHALARIS MINOR Retz. Poaceae. Grass.

An erect or ascending annual grass with linear leaves from 2 to 6 inches long, and tufted culms up to 3 feet high. Native to the Mediterranean countries.

For previous introduction see 49158.

109539. No. T-506. October 26, 1934. Collected about 15 miles from Bandirma.

109540. No. T-492. October 24, 1934. From heavy soil on rolling land, 50 miles northeast of Izmir.

109541 to 109545. Phaseolus spp. Fabaceae. Bean.

Collected October 21, 1934, at the Konya bazar.

109541. PHASEOLUS COCCINEUS L. Scarlet Runner bean.

No. T-478-A.

109542 to 109545. PHASEOLUS VULGARIS L. Common bean.

109542 to 109544. Collected October 21, 1934, at the Konya bazar.

109542. No. T-478.

109543. No. T-478-B.

109544. No. T-478-C.

109545. No. T-532. October 30, 1934. From the Ankara bazar.

109546. PHLEUM PHLEOIDES (L.) Karst. Poaceae. Timothy.

No. T-435. October 18, 1934. From the rocky foothills about 40 miles northwest of Adana.

109547. PHLEUM SUBULATUM (Savi) Aschers. and Graebn. Poaceae. Timothy.

No. T-457. October 23, 1934. From the flat plain east of Izmir on the road to Kasaba.

109450 to 109605—Continued.

109548 and 109549. PHRAGMITES COMMUNIS Trin. Poaceae.

For previous introduction see 108372.

109548. No. T-511. October 26, 1934. Collected about 22 miles southeast of Bandirma beside a stream.

109549. No. T-454. October 18, 1934. Collected about 31 miles northwest of Adana.

109550 and 109551. PINUS HALEPENSIS Mill. Pinaceae. Aleppo pine.

For previous introduction see 30815.

109550. No. T-450. October 18, 1934. Collected about 31 miles northwest of Adapa.

109551. No. T-552.

109552. PISTACIA LENTISCUS L. Anacardiaceae. Lentisk.

No. T-496. October 24, 1934. An attractive shrub with dense clusters of bright-red berries which become black. Collected 50 miles northeast of Izmir.

109553. PISTACIA VERA L. Anacardiaceae. Pistache.

No. T-405. October 16, 1934. Purchased in Adana, but grown on dry places at Gaziantep.

109554 and 109555. PISUM ELATIUS Bieb. Fabaceae.

Collected October 23, 1934, 18 miles east of Izmir.

109554. No. T-459.

109555. No. T-459-A.

109556 to 109560. Poa spp. Poaceae. Bluegrass.

109556 to 109558. POA BULBOSA L.

109556. No. T-460. October 23, 1934. Collected about 18 miles east of Izmir on the road to Kasaba.

109557. No. T-431. October 18, 1934. Collected in a moist gully in the foothills 44 miles northwest of Adana.

109558. No. T-488. October 21, 1934. From dry slopes about 3 miles west of Konya.

109559. Poa sp.

No. T-458. October 23, 1934. From dry rocky soil about 15 miles east of Izmir.

109560. Poa sp.

No. T-253. October 4, 1934. Collected about 12 miles north of Tosya.

109561. Pyrus sp. Malaceae.

No. T-502. October 26, 1934. A wild pear collected about 12 miles southeast of Bandirma.

109562 to 109567. RAPHANUS SATIVUS L. Brassicaceae. Radish.

109562. No. T-519. October 30, 1934. A red radish from the Ankara bazar.

109563 and 109564. Collected October 16, 1934, at the Adana bazar.

109563. No. T-406. A long red radish.

109450 to 109605—Continued.

109564. No. T-402. A globular radish.

109565. No. T-480. October 21, 1934. A red radish from the Konya bazar. 109566. No. T-521. October 30, 1934. A black radish from the Ankara

109567. No. T-401. October 16, 1934. A white radish from the Adana bazar.

109568 to 109570. RHUS spp. Anacardiaceae.

109568. RHUS sp.

No. T-499. October 24, 1934. Collected in the old ruins at Bergana.

109569. RHUS sp.

No. T-504. October 25, 1934. Collected between Izmir and Bandirma, near Harta.

109570. RHUS sp.

No. T-551. October 30, 1934. Collected about 3 miles south of Ankara.

109571. SOLANUM MELONGENA L. Solanaceae. Eggplant.

No. T-404. October 16, 1934. From the Ankara bazar.

109572. SORGHUM sp. Poaceae.

No. T-449. October 18, 1934. A large grass, 5 feet tall, collected in heavy soil in flat country about 23 miles west of Adana.

109573 and 199574. SPARTIUM JUNCEUM L. Fabaceae. Weavers-broom.

Collected October 18, 1934, 44 miles northwest of Adana.

109573. No. T-429. 109574. No. T-430.

109575 to 109577. STIPA spp. Poaceae. Grass.

109575. STIPA BROMOIDES (L.) Beck.

No. T-414. October 17, 1934. Collected in dwarf oak clumps on a flat dry plain, about 12 miles east of Adana

109576. STIPA Sp.

No. T-485. October 21, 1934. Collected on dry stony mountains about 3 miles south of Konya.

109577. STIPA SD.

Seeds mixed with other seed.

109578. STYRAX OFFICINALIS L. Styracaceae. Snowbell.

No. T-433. October 18, 1934. Collected about 31 miles northwest of Adana. A shrub or small tree with broadly oval leaves over 2 inches long and fragrant white flowers three-fourtis of an inch long, in small clusters. Native to southern Europe and Asia Minor.

109579. THEMEDA QUADRIVALVIS (L.) Kuntze. Poaceae. Grass.

No. T-424. From a dry rocky mountain slope 15 miles northeast of Adana. A coarse rather tough annual which grows in tufts from 1 to 3 feet high. It is native to India and is closely related to the kangaroo grass of Australia and Tasmania.

For previous introduction see 59362.

109450 to 109605—Continued.

109580 to 109582. TRIFOLIUM spp. Fabaceae. Clover.

109580. TRIFOLIUM sp.

No. T-520. October 30, 1934. From the Ankara bazar.

109581 and 109582. TRIFOLIUM REPENS L. White clover.

109581. No. R-563. October 10, 1934. From moist sandy soil near the Black Sea at Constanza.

109582. No. T-503. October 26, 1934. Collected 18 miles southeast of Bandirma.

109588 to 109600. TRITICUM spp. Poaceae. Wheat.

109583 to 109599. TRITICUM AESTIVUM L. Common wheat.

October 30, 1934. From the Seed Improvement Station, Ankara.

109588. No. T-533.

109584. No. T-534.

109585. No. T-535.

109586. No. T-536.

109587. No. T-537.

109588. No. T-538.

109589. No. T-539.

109590. No. T-540.

109591. No. T-541.

109592. No. T-542.

109593. No. T-543.

109594. No. T-544.

109595. No. T-545.

109596. No. T-546. 109597. No. T-547.

109598. No. T-548.

109599. No. T-549.

109600. TRITICUM AESTIVUM \times SECALE CEREALE. Wheat-rye hybrid.

No. R-560. August 1934. From Mos-

For previous introduction see 94611.

109601. VICIA FABA L. Fabaceae.

Broadbean.

No. T-481. October 21, 1934. From the Konya bazar.

109602. VITEX AGNUS-CASTUS L. Verbenaceae. Lilac chaste-tree.

No. T-444. October 18, 1934. A large tree with very aromatic foliage and d'ilcate lavender flowers. Collected 28 miles northwest of Adana.

For previous introduction see 96518.

109603. VITEX sp. Verbenaceae.

No. T-465. October 23, 1934. Collected 18 miles east of Izmir.

109604. (Undetermined.)

No. T-413. October 17, 1934. Collected about 12 miles east of Adana.

109605. (Undetermined.)

No. T-495. October 24, 1934. A shrub with bright-green leaves and clusters of blue berries. Collected 50 miles northeast of Izmir.

109606 to 109792.

Plants growing at the United States Plant Introduction Garden, Glenn Dale, Md.; originally grown by the Office of Crop Physiology and Breeding Investigations (CPB), a section of the Division of Horticultural Crops and Diseases. Numbered in January 1935 for convenience in distribution.

109606. AEGLOPSIS CHEVALIERI Swingle. Rutaceae.

CPB. 7633. A small spiny evergreen tree about 10 feet high, native to the Ivory Coast, western tropical Africa, with simple ovate leaves about 5 inches long. It has white flowers in short panicles, and the roundish or pear-shaped, brownishorange, hard-shelled fruits are 2 to 4 inches in diameter.

109607 and 109608. ARGANIA SPINOSA (L.)
Skeels (A. sideroxylon Roem. and
Schult.). Sapotaceae. Argan.

Originally from Morocco. The argan tree of western Morocco grows to a large size and bears an abundance of very acrid fruits, somewhat resembling small plums, that are eaten by cattle and goats.

For previous introduction see 100480.

109607. CPB. 7729-A.

109608. CPB. 12746. Originally received as seeds from R. Maire, Botanic Garden, University of Algiers, Algeria, June 29, 1926.

109609 to 109616. ATALANTIA spp. Rutaceae.

109609. ATALANTIA Sp.

CPB. 10089.

109610. ATALANTIA Sp.

CPB, 11226. Originally from India.

109611. ATALANTIA CEYLANICA (Arn.) Oliver.

CPB. 11225. From India. A muchbrauched spiny evergreen shrub or small tree, native to Ceylon and India, of interest chiefly as a stock for citrus fruits

For previous introduction see 98732.

109612 and 109613. ATALANTIA MONO-PHYLLA DC.

A small tropical evergreen, usually spiny, tree native to British India. It has oval emarginate leaves and orange-like fruits three-fourths of an inch in diameter.

For previous introduction see 74237.

109612. CPB. 10256. Originally received as seeds from the Experiment Station, Santiago de las Vegas, Cuba, June 24, 1924.

109613. CPB. 10258. Originally received as seeds from the Experiment Station, Santiago de las Vegas, Cuba, July 14, 1924.

109614. ATALANTIA DISTICHA (Blanco) Merrill.

CPB. 10261-H. A small tropical evergreen tree, native to the Philippines, with lanceolate, doubly serrate leaves and terminal corymbs of small white flowers.

109606 to 109792-Continued.

109615 and 109616. ATALANTIA RACEMOSA Wight.

A small evergreen tree or shrub found in the lower mountain regions of Ceylon and in southern India. The white flowers are produced in short racemes, and the small round berry has two to six seeds.

For previous introduction see 36102.

109615. CPB 7518.

109616, CPB, 7518-A.

109617. Balsamocitrus dawei Stapf. Rutaceae.

CPB. 2920. A tree about 60 feet tall, native to the subtropical plateau of Uganda, Africa. It has panicles of white flowers and subglobose fruits, 4 to 6 inches in diameter, with a thick hard shell, containing numerous large seeds.

109618. AFRAEGLE GABONENSIS (Swingle) Engler. Rutaceae.

CPB. 7516-B. A thorny tree or shrub with simple or trifoliolate leaves 5 to 8 inches long. The hard-shelled fruits are pear-shaped, about 4 inches in diameter. Native to the French Congo.

109619. CAVANILLESIA PLATANIFOLIA H. B. K. Bombacaceae.

CPB. 12627. Originally received as seeds from J. E. Higgins, Summit, Canal Zone, May 10, 1928. A Colombian tree up to 100 feet high, with a large thick trunk, smooth pale bark, large shallowly five- to seven-lobed leaves, and red flowers 1 inch long.

For previous introduction see 98928.

109620. CITRUS MEDICA L. Rutaceae.

CPB. 11178. Etrog citron.

For previous introduction see 105957.

109621. CITROPSIS SCHWEINFURTHII (Engler) Swingle and Kellerman. Rutacene

CPB. 2902. A spiny shrub or small tree with three- to five-foliolate leaves and large white flowers in small axillary clusters. The orangelike fruits are about 1 inch in diameter. Native to tropical Africa.

109622. CITROPSIS Sp.

CPB. 7800-g-c. A species from Kisantu, Belgian Congo, which has a much larger leaf than Citropsis schweinfurthii.

109623 to 109639. CITRUS spp. Rutaceae.

109623. CITRUS SD.

CPB. 2826. Kinokuni orange.

109624 to 109631. Presented by the Director of Agriculture, Manila, Philippine Islands.

109624, CITRUS Sp.

CPB, 7819. Limon Real No. 18. Originally received as seeds; collected on the island of Bohol. Received February 21, 1914.

109625 to 109627. Originally received as seeds; collected on the island of Bohol. Received April 1, 1914.

109625. CITRUS sp.

CPB. 7825. Amontay No. 7.

109606 to 109792-Continued.

109626. CITRUS Sp.

CPB. 7826. Talamisan No. 11.

109627. CITRUS Sp.

CPB. 7827. Talamisan No. 11.

109628. CITRUS AURANTIUM L.

7829. Dalandan. A Received April 1, 1914. CPB. sour orange.

109629. CITRUS LIMONIA Osbeck. Lemon.

CPB. 7833. A small lemon collected in Moro Province, Philippine Islands. Presented by the Director of Agriculture, April 1, 1934.

109630. CITRUS SD.

CPB. 7835. Mamis. Received from the Director of Agriculture, Philippine Islands, April 1, 1914.

109631. CITRUS LIMONIA Osbeck.

CPB, 7837. Davao lemon. Received April 1, 1914.

109632. CITRUS AURANTIFOLIA (Christm.) Swingle. Lime.

CPB. 7861. *Mandarin* lime. Budsticks brought from Manila by H. H. Boyle. Received May 22, 1914.

109633. CITRUS LIMONIA Osbeck.

Lemon.

CPB. 1158. Sweet lemon. Originally eceived as seeds from Jaffa, Palestine, March 4, 1914.

109634. CITRUS WEBBERI Wester. Alsem

CPB. 10026. Kalpi. Originally received as seeds and presented by P. J. Wester, Philippine Islands. Received February 24, 1919.

109635 and 109636. Received March 19, 1919, from Atherton Lee, Bureau of Plant Industry; collected by him in

109635. CITRUS NOBILIS Lour. King orange.

CPB. 10031. Chu-Kaa, vermilion orange.

109636. CITRUS Sp.

CPB. 10032. Pong-Kaa, honey orange.

109637 and 109638. From China; originally received as seeds, presented by G. Weidman Groff. Received March 29, 1919.

109637. CITRUS Sp.

CPB 10034. Chinka.

109638, CITRUS Sp.

CPB. 10036. Pook Ling Mung.

109639. CITRUS SD.

CPB. 10046. Iskalan. From the Philippine Islands. Presented by P. J. Wester. Received April 16, 1919.

109640. MICROMELUM TEPHROCARPUM Turcz. Rutaceae.

CPB. 10048. A small evergreen tree th unequally pinnate leaves. The small with unequally pinnate leaves. The small white flowers, in large terminal panicles, are followed by small dry berries. Native to thickets in the Philippine Islands.

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109606 to 109792—Continued.

109641 to 109646. CITRUS spp. Rutaceae.

109641. CITRUS Sp.

CFB. 10052. Kisum. From the Philippine Islands. Collected in the Amboanga district by E. D. Merrill. Received January 21, 1920.

109642. CITRUS Sp.

CPB. 10056. Chamoudi orange. From Egypt. Plants collected by S. C. Mason, Alexandria. Received August 7,

109643 and 109644. From Egypt; plants collected by S. C. Mason. Received July 21, 1922.

109643. CITRUS Sp.

CPB. 10173-A. Chamoudi orange.

109644. CITRUS Sp.

CPB. 10173-D. Chamoudi orange.

109645. CITRUS Sp.

CPB. 10076-A. From the Philippine Islands. A seedling from CPB. 10076, brought in by P. J. Wester. Received June 18, 1930.

109646. CITRUS NOBILIS UNSHIU Swingle. Satsuma orange.

CPB. 10077. From the Philippine Islands. Plants presented by P. J. Wester. Received May 18, 1930.

For previous introduction see 105226.

109647. PARAMIGNYA Merr. Rutaceae. LONGIPEDUNCULATA

CPB. 10200. From Los Banos, Philippine Islands. Presented by G. B. Lontok. Received May 24, 1923. A woody climber with elliptic-ovate leaves about 3 inches long and small white flowers. Native to the Philippine Islands.

109648 to 109762. CITRUS spp. Rutaceae.

109648. CITRUS sp.

CPB. 10280. From Japan. CFB. 10280. From Japan. Originally introduced as seeds, presented by Dr. T. Tanaka, Imperial University, Hakozaki, Fukuoka. Received February 18, 1925, under the name "pectinifera," for which a place of publication has not been found. Original-

109649. CITRUS SD.

CPB. 10301. Budwood presented by Dr. H. J. Webber, from Buitenzorg, Java. Received Adugst 11, 1935. Dejerock limoli, a small fruited species with a rough skin.

109650. CITRUS AURANTIUM L Seville orange.

CPB, 10330-A. Chinotto orange. A seedling of CPB, 10330, which came originally from C. Allegra, Catania, Sicily. Received November 18, 1925.

See 65128 for the introduction of CPB, 10330.

9651. CITRUS NOBILIS DELICIOSA (Ten.) Swingle. Mandarin orange. 109651. CITRUS

CPB. 10346. Szimkom. Received from the Director of Agriculture, Philippine Islands, February 20, 1925.

109652. CITRUS Sp.

CPB, 10358. From Japan. Originally received as seed, from Dr. T. Tanaka, Miyazaki, March 30, 1926.

109606 to 109792—Continued.

109653. CITRUS AURANTIFOLIA (Christm.) Swingle.

CPB. 10385. Dayap lime. Received from T. D. Bagarino, Los Banos, Philippine Islands, November 6, 1926.

109654. CITRUS sp.

CPB. 10552. Sour Kat. Plants received from F. A. McClure, Canton, China, June 27, 1927.

109655. CITRUS Sp.

CPB. 10652. Mandarin \times lemon. Plants from H. R. Wright, Auckland, New Zealand. Received July 12, 1930.

109656. CITRUS SD.

CPB. 14002. Ling Mung. From China. Budwood presented by G. Weidman Groff, Canton. Received August 20, 1919.

(Ten.) Swingle. Manda 109657. CITRUS DELICIOSA Mandarin orange.

CPB. 14003. Chin Chow Kom, Swatow orange. Originally received as budwood. Collected on the Canton Christian College grounds, Canton, China. Received August 20, 1919.

109658, CITRUS SINENSIS (L.) Osbeck.

CPB. 14007. Tim Kat. Budwood of a sweet orange, collected near Canton, China, by E. May, Jr. Received August

109659 to 109661. Originally received as budwood, collected in Japan by W. T. Swingle.

109659. CITRUS Sp.

CPB. 14027. ceived in 1919. Hime Buntan. Re-

109660. CITRUS Sp.

CPB. 14041. Sambo. Received in 1919.

109661. CITRUS AURANTIUM L.

CPB. 14043. Zadaidai. Received in January 1918.

109662. CITRUS NOBILIS DELICIOSA (Ten.) Swingle. Mandarin orange.

CPB. 14045. Swatow orange. Collected by E. May near the College of Agriculture, Los Banos, Philippine Islands, in 1919.

109663. CITRUS Sp.

CPB. 14046. From Japan. Originally collected as budwood by E. May at the Ikeda Nursery, Ikeda. Received November 3, 1919.

109664. CITRUS Sp.

CPB. 14026. Natsume daidai. Originally collected at the Los Banos Nursery, Philippine Islands, by E. May. Received December 1919.

109665 and 109666. CITRUS AURANTIFOLIA (Christm.) Swingle. Lime.

Dayap lime. Received from the Department of Agriculture, Manila, January 12, 1927.

109665. CPB. 10527-C.

109666. CPB, 10527-D.

109667. CITRUS SINENSIS (L.) Osbeck. CPB. 10841. Avana.

109606 to 109792—Continued.

109668. CITRUS SINENSIS (L.) Osbeck.

CPB. 10842. Avana blood.

109669. CITRUS MEDICA L.

Citron.

CPB. 10843. Yemen citron.

109670. CITRUS Sp.

CPB. 11587. Yuzu. Obtained at Seattle, Wash., January 13, 1931, by Paul Hedtke, plant quarantine in-

109671. CITRUS GRANDIS (L.) Osbeck. Grapefruit.

CPB. 11893. Shaddock. Seedling plants received from Thomas R. Towns, Holguin, Cuba, June 23, 1922. Seeds of this same shaddock were received and given the F. P. I. No. 55030.

109672. CITRUS LIMONIA Osbeck.

CPB, 12702-C. Rough lemon. From T. Ralph Robinson, Terra Ceia, Fla. Received November 4, 1932.

109678. CITRUS SD.

CPB. 15130. Som Sa. Budded plants received from Los Banos, Philippine Islands, but originally collected by O. A. Reinking on a trip to Siam in 1920. Received June 14, 1921.

109674. CITRUS AURANTIUM L Seville orange.

CPB. 10339. From San Juan, Puerto Rico; presented by O. W. Barrett. Received December 1, 1925.

109675. CITRUS Sp.

CPB. 11430. Received from Tabiti, May 1919, under the name "cambra-voixora odoratissima," for which a 11430. place of publication has not been found.

109676 to 109678. CITRUS GRANDIS (L.) Osbeck. Grapefruit.

109676. CPB. 7834. From the Philippine Islands. Presented by O. W. Barrett, Bureau of Agriculture, Manila. Received April 1, 1914.

9677. CPB. 10044. Siamese pum-melo. From Hong Kong, China. Collected by W. T. Swingle. Re-ceived April 11, 1919. 109677. CPB.

109678. CPB. 10059. Red pummelo. From Saharanpur, India. Received March 22, 1920.

109679. CITRUS sp.

CPB. 10072. Ichang. From Nanking, China. A large-fruited hybrid, presented by Prof. J. H. Reisner. Received May 5, 1920.

109680 to 109715. CITRUS GRANDIS (L.) Osheck. Grapefruit.

109680 to 109689. Received October 15, 1920, from Siam. Collected by O. A. Reinking.

109680 to 109688. Kao Pan.

109680. CPB. 10078.

109681, CPB, 10079.

109682. CPB. 10080.

109683. CPB. 10081.

109684, CPB, 10082,

109685. CPB, 10083.

109606 to 109792-Continued.

109686, CPB, 10084.

109687. CPB. 10085.

109688. CPB. 10087.

109689. CPB. 10088, Phuang.

109690 and 109691. Collected in Java by O. A. Reinking. Received January 26, 1922.

109690. CPB. 10126.

109691, CPB, 10127.

- 109692. CPB. 10129. Koon Non. Collected by O. A. Reinking in China or Siam. Received January 26, 1922.
- 109693. CPB. 10130. Nakorn Chaissi. Collected by O. A. Reinking in Siam. Received January 26, 1922.
- 109694. CPB. 10132. Kao Ruantia. Collected by O. A. Reinking in Indo-China or Siam. Received January 26, 1922.
- 109695. CPB. 10210. From Johannesburg, South Africa. Presented by R. A. Davis. Received October 6, 1923.
- 109696, CPB, 10242. Marsh seedless grapefruit. Budwood presented by C. S. Pomeroy, Riverside, Calif. Received March 26, 1931.
- 109697 to 109702. From Java. Originally received as seed, collected by H. J. Webber. Received August 11, 1925.

109697. CPB. 10304.

109698 to 109700. Especially selected pink-fleshed shaddocks.

109698. CPB. 10305.

109699. CPB. 10306.

109700. CPB. 10707.

- 109701. CPB. 10311. Especially selected deep-red-fleshed shaddock.
- 109702. CPB. 10312. Especially selected pink-fleshed shaddock.
- 109703. CPB. 10343. Pummelo Siamese. From Bangkok, Siam. Seeds presented by Yai S. Sanitwongse. Received December 20, 1925.
- 109704. CPB, 10359. Better Pummelo. From Los Banos, Philippine Islands. Presented by J. D. Bagarino. Received March 31, 1926.
- 109705 and 109706. Ichang hybrid. Originally received as seeds. Collected by W. T. Swingle, China-Japan trip, 1926. Received January 7, 1927.

109705. CPB. 10500-H.

109706. CPB. 10504-A.

- 109707. CPB. 11468. Siamese seedless.
- 109708. CPB. 14012. Siamese. From Los Banos, Philippine Islands. Budwood collected by E. May. Received October 30, 1919.
- 109709 to 109715. Budded plants presented by G. Weidman Groff through O. A. Reinking, Los Banos, Philippine Islands.

109606 to 109792—Continued.

- 109709. CPB. 15072. Pin Shan Kong Yan. From Dengo Shan, Kwangtung Province, China. Received June 14, 1921.
- 109710. CPB. 15073. Kong Yau. From Lakkau, China. Received June 14, 1921.
- 109711. CPB. 15076. Sha Tin Yau. From Wuchow, Kwangtung Province, China. Received in 1920.
- 109712. CPB. 15079. Song Ma Yau.
 From Lip Tak, Kwangtung Province, China. Received January 26, 1922.
- 109713. CPB. 15080. Song Ma Yau. From Szwui, Kwangtung Province, China. Received June 14, 1921.
- 109714. CPB. 15084. Wong Yau. From Lip Tak, China. Received June 14, 1920.
- 109715. CPB. 15123. Kao Pan. From Nakon Chaisi, Siam. Received June 9, 1920.
- 109716 to 109719. CITRUS HYSTRIX DC. Rutaceae.
 - 109716. CPB. 7831. Cabuyao. From the Philippine Islands. Seeds presented by O. W. Barrett, Bureau of Agriculture, Manila. Received April 1, 1914.
 - 109717. CPB. 10049. From the Philippine Islands. A wild orange collected by W. T. Swingle at Mount Maquiling, Los Banos. Received April 16, 1919.
 - 109718. CPB. 10272. Originally received as seeds presented by C. B. Lontok, through J. E. Higgins, Los Banos, Philippine Islands. Received November 6, 1924.
 - 109719. CPB. 14011. Budwood from a wild tree on Mount Maquiling, Los Banos, Philippine Islands, presented through E. May. Received October 30, 1919.
- 109720 and 109721. CITRUS LIMONIA Osbeck. Rutaceae. Lemon.
 - 109720. CPB. 7341. Malta lemon. From Lahore, India. Seeds of this variety, when received June 6, 1s11, were given the P. I. No. 31215.
 - 109721. CPB. 10247-A. India lemon. A seedling presented by H. E. Peake, Khaltoo Fruit Orchards, Solan Brewery KS. Ry., India. Received April 15, 1924.

109722. CITRUS Sp.

- CPB. 10267. From India. Plants presented by H. E. Peake, Khaltoo Fruit Orchards, Solan Brewery KS. Ry. Received October 3, 1934.
- 109723 to 109726. CITRUS LIMONIA Osbeck. Lemon.
- Originally received as seeds; from Surinam, February 11, 1922.
 - 109723. CPB. 11845. Borneo lemon. 109724. CPB. 11846. Baboon lemon.
 - 109725. CPB. 12920. Meyer lemon. Budwood received from T. Ralph Robinson, Terra Ceia, Fla., January 27, 1931.

109606 to 109792-Continued.

109726. CPB. 15115. From Saigon, Indo-China. Budded plants presented by G. Weidman Groff, through O. A. Reinking, Los Banos, Philippine Islands. Received June 14, 1921.

109727 and 109728. CITRUS spp. Rutacese.

Received December 12, 1921, under the name "moi," for which a place of publication has not been found.

109727. CITRUS Sp.

CPB. 10123.

109728. CITRUS sp.

CPB, 10124.

109729. CITRUS NOBILIS Lour. Rutaceae.

CPB. 10582. Plants presented by C. W. Edwards, United States Experiment Station, Guam. Received August 29, 1928.

109730. CITRUS NOBILIS DE LICIOSA (Ten.) Swingle. Rutaceae. Mandarin orange.

CPB. 12384. Batangas Mandarin. Plant collected by E. May, Philippine Islands. Received May 1919.

109731. CITRUS NOBILIS UNSHIU Swingle. Rutaceae. Satsuma orange.

CPB. 14009. Owari (C. A. 4411) Budsticks from the College of Agriculture, Los Banos, Philippine Islands. Received September 2, 1919.

109732 to 109735. CITRUS spp. Rutaceae

From Kwangtung Province, China Plants presented by G. Weidman Groff, through O. A. Reinking, Los Banos, Philippine Islands. Nos. 109732 and 109733 were received June 14, 1921.

109732. CITRUS NOBILIS Lour.

CPB. 15097. Chiu Kom. Collected at Swatow.

109733, CITRUS NOBILIS DELICIOSA (Ten.) Swingle. Mandarin orange.

CPB. 15099. Tim Kon. A mandarin orange from Szwui.

109734 and 109735. CITRUS NOBILIS Lour.

109734. CPB. 15102. Kat. Collected at Lo Kong Tung. Received January 26, 1922.

 109735. CPB, 15106. Sun Chu Sha Kat. Collected at Szwui. Received June 14, 1921.

109736 to 109753. CITRUS NOBILIS UN-SHIU Swingle. Rutaceae. Satsuma orange.

109736. CPB. 867. Moriya. Plant collected by W. T. Swingle on his China-Japan trip, 1926. Received January 4, 1927.

109737 to 109749. From Japan. Budwood presented by Dr. T. Tanaka. Received April 27, 1921.

109737. CPB. 10093. Shintani Wase.

109738. CPB. 10094. Hozaki Wase.

109606 to 109792—Continued.

109739. CPB. 10095. Ishikawa Wase.

109740. CPB, 10096. Horie Wase.

109741. CPB, 10097. Sueoka Wase.

109742. CPB, 10098. Hozaki Wase.

109743. CPB. 10099. Sueoka Wase.

109744. CPB. 10101. Mizometo's round Owari.

109745. CPB. 10102. Moriguch's Ikeda.

109746. CPB. 10103. Gyotoku's Zairai.

109747. CPB. 10104. Yoshino.

109748. CPB. 11101. Kawano Wase.

109749. CPB. 12996. Kawano Wase.

109750 and 109751. Plants grown from budwood of trees brought by E. May from the Ikeda Nursery, Ikeda, Japan. Received November 3, 1919.

109750. CPB, 14046. Kawano Wase, 109751. CPB, 14047. Hira.

109752. CPB. 14048. *Ikiriki*. From Kobe, Japan. Received from Dr. T. Tanaka, December 1919.

109753. CPB. 14051. Kawano Wase. From Japan. Budwood collected by Dr. T. Tanaka. Received December 1919.

109754. CITRUS sp. Rutaceae.

CPB, 12080. Sweequasaa. From Japan. Originally received as seeds, presented by Dr. T. Tanaka, Imperial University, Hakozaki, Fukuoka. Received February 18, 1935, under the name "pectinitera," for which a place of publication has not been found. See also F. P. I. 109648.

109755 and 109756. CITRUS SINENSIS (L.) Osbeck. Rutaceae. Orange.

109755. CPB. 10252. Poorman orange. From New Zealand. Budsticks presented by George A. Green, Auckland. Received June 17, 1924.

109756. CPB. 14007. Tim Kat. Budwood collected by E. May near Canton, China. Received in August 1919.

109757. CITRUS NOBILIS DELICIOSA (Ten.) Swingle. Mandarin orange.

CPB. 14054. Swatow orange. From Hong Kong, China. Plants collected by Mr. Byrd and given to E. May. Received October 29, 1919.

109758. PARAMIGNYA MONOPHYLLĄ Wight. Rutaceae.

CPB. 11433. A stout climbing evergreen shrub, native to the Sikkim Himalayas and the mountains of Khasi, between 2,000 and 5,000 feet altitude. The root contains large crystals of oxalate of lime and is used by the country people as an alternative tonic.

For previous introduction see 45159.

109759 to 109761, CITRUS SINENSIS (L.)
Osbeck.

From Kwangtung Province, China. Budded plants presented by G. Weidman

109606 to 109792—Continued.

Groff, through O. A. Reinking, Los Banos, Philippine Islands, Received June 14, 1921.

109759. CPB. 15093. Lau Ch'ang. From Szwui.*

109760. CPB. 15094. From Paak Shan.

109761. CPB. 15095. *Hang Chang*. From Szwui.

109762. CITRUS SOUTHWICKII Wester. Limao.

From the Philippine Islands. Plant presented by the Bureau of Agriculture, Manila. Received May 26, 1915. A compact thorny tree which becomes about 20 feet high, with dark-green, thick, distinct leaves and attractive oblate inedible fruits, used by the Boholanos for washing clothes. Native to the Philippine Islands, from the island of Bohol through Mindanao.

For previous introduction see 41387.

109763. FERONIELLA OBLATA Swingle. Rutaceae. Krassan.

CPB. 7521. (Date of origin not found.) A spiny tree up to 65 feet high, native to forests in Cambodia and Cochin-China. The leaflets of the pinnate leaves are oval with rounded or flattened tips, and the very fragrant white flowers appear in panicles on the branches of the previous year's growth. The small fruits, less than 3 inches in diameter, are borne in clusters and have a pronounced orange flavor when young. The edible pinkish pulp is subacid and is used as a condiment in sauces.

For previous introduction see 43968.

109764. Figus sp. Moraceae.

CPB. 10348. Kazzi. From Syria. Cuttings presented by A. E. Day, American University, Beirut. Received March 4, 1926.

109765. FORTUNELLA HINDSII (Champ.) Swingle, Rutaceae.

CPB. 7462-A. From Hong Kong, China. Originally presented by S. T. Dunn, Superintendent, Botanical and Forestry Department, January 1909. A small shrub with oval-elliptic, leathery leaves and small orange fruits. Native to southeastern China.

For previous introduction see 24587.

109766. HESPERETHUSA CRENULATA (Roxb.) Roemer. Rutaceae.

CPB. 2758. (Date of origin not found.) A shrub or small tree, native to India, where it grows in dry situations up to 4,000 feet altitude. The very small fruits are occasionally eaten.

109767. Hydnocarpus anthelminthica Pierre. Flacourtiaceae.

CPB. 15132. Seedling plants collected by O. A. Reinking in Siam in 1920; received from Los Banos, Philippine Islands, June 14, 1921. The maikrabao, as this tree is called in Siam, where it is native, is 30 to 60 feet tall, with large leathery leaves a foot long, pale yellow above and greenish below. The rose or purplish flowers are followed by round fruits 3 inches in diameter which contain about 80 seeds, from which a fatty oil is expressed. This oil closely resembles chaul-

109606 to 109792—Continued.

moogra oil, which is used in the treatment of leprosy.

For previous introduction see 65731.

109768. LITCHI CHINENSIS Sonner. Sapindaceae. Lychee.

CPB. 12978-C. Specimen of fruit from Estero, Fla., from P. W. Campbell, June 30, 1931.

109769 to 109773. MICROCITRUS AUSTRALA-SICA (F. Muell.) Swingle, Rutaceae, Finger lime.

A spiny shrub or small tree 15 to 30 feet high, with small oval or ovate leaves up to 1½ inches long. The finger-shaped, slender fruits, up to 4 inches long, contain very acid juice. Native to New South Wales and Queensland.

For previous introduction see 57702.

109769. CPB. 7307. From Australia.

109770. CPB. 7307-B. A seedling of CPB. 7307.

109771. CPB. 7775-B. Received originally as seeds from James Pink, Brisbane, Australia, in May 1906, and assigned P. I. No. 18550.

109772. CPB. 11372. Originally received as seeds from Australia.

109773. CPB. 11411. Sang.

109774 and 109775. MICROCITRUS GARRA-WAYI (Bail.) Swingle.

A small tree or shrub with very small, white flowers and ovoid to finger-shaped fruits. Native to Queensland, Australia.

109774. CPB. 11008.

109775. CPB. 11466.

109776. MICROCITRUS Sp.

CPB. 7775-E. Original seed from Australia. Received under the name "virgata," for which a place of publication has not been found.

109777. MURRAYA EXOTICA L. Rutaceae. Orange-jasmine.

CPB. 7380. From India. An evergreen shrub, native throughout tropical Asia to the East Indies and as far as New Zealand. It has handsome pinnate foliage and large fragrant white flowers.

109778. PEDILANTHUS TITHYMALOIDES Poit. Euphorbiaceae.

CPB. 13104. A tender, cactuslike shrub about 5 feet high, native to tropical America. The red or purple flowers are in dense terminal cymes. In Mexico this is known as the candelilla.

109779. PISTACIA MEXICANA H. B. K. Anacardiaceae.

CPB. 7581. Originally received as seeds from Mexico, July 1, 1912. A slender shrub or small tree with pinnate leaves composed of 11 to 29 oblique-oblong leaflets and small dry fruits with edible seeds. Native to Mexico.

109780 to 109786. SEVERINIA BUXIFOLIA (Poir.) Ten. Rutaceae.

A small spiny shrub, native to southern China, with elliptical, wavy margined, glossy-green leaves. The small pure-white flowers are borne in axillary clusters, and the black succulent berries are about the size of a pea.

109606 to 109792-Continued.

109780 and 109781. The original plants were received as Atalantia bilocularis from the Director of Agriculture, Buitenzorg, Java, in June 1910.

109780, CPB, 2916-A.

109781. CPB. 2916-C.

109782 to 109784. No data of origin found.

109782. CPB. 2760-A.

109783, CPB, 2760-AA.

109784. CPB, 2760-C.

109785. CPB, 11115. From the Philippine Islands,

109786. CPB. 11321. No data of origin found.

109787 and 109788. CHAETOSPERMUM GLUT-INOSUM (Blanco) Swingle. Rutaceae.

109787. CPB. 10168-A. Originally received from the Hawaii Agricultural Experiment Station, Honolulu, June 27, 1922.

109788. CPB. 10524. Collected by W. T. Swingle on his China-Japan trip in 1926.

109789. TRIPHASIA TRIFOLIA (Burm. f.) P. Wilson. Rutaceae.

CPB. 7788. (No data of origin.) A spiny shrub with compound leaves composed of three ovate leaflets notched at the tip. The white, sweet-scented axillary flowers are followed by small berries which are used in making jams and preserves.

109790. CITRUS GRANDIS (L.) Osbeck. Rutaceae. Grapefruit.

CPB. 11250. Buntan. (No data of origin.)

109791. CITRUS SINENSIS (L.) Osbeck. Rutaceae.

CPB. 10556. From Australia. Presented by G. Williams, Director, Department of Agriculture and Stock, Brisbane, Queensland. Received August 11, 1927.

109792. GLYCOSMIS PENTAPHYLLA (Retz.) Correa. Rutaceae.

CPB. 2914. From Java. An unarmed shrub with evergreen compound leaves, panicles of small white fragrant flowers, and small white berries. Originally received as seed and assigned P. I. No. 28124.

109793. Amygdalus persica L. Amygdalaceae. Peach.

From central Asia. Seeds presented through the Institute of Plant Industry, Leningrad. Received March 1, 1935.

Variety Ferganensis. Introduced for Department specialists.

109794 to 109803.

From the Union of Soviet Socialist Republics. Bulbs presented by V. Alferov, Introduction Garden of Subtropical Cultures, Sukhum, through the Institute of Plant Industry, Leningrad. Received March 1, 1935.

109794. CYCLAMEN IBERICUM Stev. Primulaceae.

No. 833. A dwarf herbaceous perennial, native to the Caucasus region, with

109794 to 109803—Continued.

oval-rounded leaves zoned with white above and purple flowers with darker-colored throats.

For previous introduction see 89093.

109795 to 109803. TULIPA spp. Liliaceae. Tulip.

109795. TULIPA BORSZCZOWI Regel.

No. 832.

For previous introduction and description see 108405.

109796. TULIPA FOSTERIANA HOOG.

No. 838.

For previous introduction and description see 107585.

109797. TULIPA GREIGII Regel.

No. 837.

For previous introduction and description see 108407.

109798. TULIPA KAUFMANNIANA Regel.

No. 836.

For previous introduction and description see 108408.

109799. TULIPA KOROLKOVII Regel.

No. 831.

For previous introduction see 106776.

109800. Tulipa Kuschkensis B. Fedtsch.

No. 839.

For previous introduction and description see 108410.

109801. TULIPA LEHMANNIANA Merck.

No. 830. A tulip from Bokhara, Turkistan, with four very narrow leaves about 4 inches long and a bright-yellow flower, the segments being less than 2 inches long.

109802. TULIPA OSTROWSKIANA Regel.

No. 829

For previous introduction and description see 108412.

109803. TULIPA SCHRENKII Regel.

No. 840. A tulip from Turkistan, with broadly campanulate yellow or purple-yellow flowers borne on a stem nearly a foot high. The leaves are wavy margined.

For previous introduction see 100645.

109804. ZIZIPHUS JUJUBA Mill. Rhamnaceae. Chinese jujube.

From Japan. Seeds presented by Kan-Yashiroda, Tonosho-Kyoku, Kagawaken. Received February 27, 1935.

Variety Inermis. A form without spines, from the coldest part of Japan.

109805 to 109830.

From Manchuria. Seeds presented by the Kungchuling Experiment Station of the South Manchurian Railway, through H. G. MacMillan and J. L. Stephens, Bureau of Plant Industry. Received February 26, 1935.

109805 to 109830—Continued.

Introduced for Department specialists.

109805 to 109809. Agropyron spp. Poa-Wheatgrass.

109805. AGROPYRON CILIARE (Trin.) Franch.

No. 84. A tall-growing, short-awned

For previous introduction see 88967.

109806. AGROPYRON CRISTATUM (L.) Gaertn. Crested wheatgrass.

No. 70.

For previous introduction see 109450. 109807. AGROPYRON REPENS (L.) Beauv. Quackgrass.

For previous introduction see 108428.

109808. AGROPYRON SEMICOSTATUM Nees.

No. 75. A perennial, fibrous-rooted grass with erect stems and narrowly linear leaves. Native to Asia from Afghanistan to Manchuria.

For previous introduction see 101645. 109809. AGROPYRON SEMICOSTATUM Nees.

109810. ARTHRAXON HISPIDUS Makino. Poaceae. (Thunb.)

No. 86. A slender branching annual grass with decumbent or creeping stems about 2 feet long. Native to Japan.

109811. ASTRAGALUS DAVURICUS DC. Fabaceae.

No. 79. A perennial from 2 to 5 feet high with purple flowers.

For previous introduction see 105583.

109812. BROMUS INERMIS Leyss. Poscese. Bromegrass. No. 77.

For previous introduction see 107898.

109813. BROMUS RAMOSUS Huds Bromegrass.

109814. CHLORIS sp. Poaceae. Grass. No. 81.

109815. DIGITARIA ISCHAEMUM (Schreb.) Muhl. Poaceae. Grass.

No. 87.

For previous introduction see 101653.

109816. DIGITARIA SANGUINALIS (L.) Scop. Poaceae. Grass

No. 82.

For previous introduction see 59298.

109817. ELYMUS sp. Poaceae.

No. 78.

109818. ERAGROSTIS CILIANENSIS (All.) Link. Poaceae.

For previous introduction see 107053.

109819. ERAGROSTIS PILOSA (L.) Beauv. Poaceae.

No. 67. A grass of in moist situations. A grass over 2 feet tall, found

For previous introduction see 107673.

109805 to 109830-Continued.

109820. ERIOCHLOA VILLOSA (Thunb.) Kunth. Poaceae.

For previous introduction see 101659.

109821. HORDEUM BREVISUBULATUM (Trin.) Link. Poaceae.

No. 66.

For previous introduction see 107932.

109822, KOELERIA CRISTATA (L.) Pers. Poaceae.

No. 90.

For previous introduction see 109299.

109823. LESPEDEZA BICOLOR Turcz. Fabaceae.

No. 91.

For previous introduction see 104671.

109824. LESPEDEZA STRIATA (Thunb.) Hook, and Arn. Fabaceae.

For previous introduction see 90359.

109825. ECHINOCHLOA CRUS-GALLI FRUMEN-TACEA (Roxb.) W. F. Wight. Ponceae.

For previous introduction see 87718.

109826. Poa sp. Poaceae.

No. 73.

109827. SETARIA (Weigel) LUTESCENS Hubbard. Poaceae. Grass.

No. 88. An annual grass about 2 feet high, erect or sometimes prostrate. Native to central Europe.

109828. SETARIA VIRIDIS (L.) Beauv. ceae.

For previous introduction see 107699.

109829. Soja max (L.) Piper. Rahaceae. Soybean.

No. 68.

109830. VICIA AMOENA Fisch. No. 72.

For previous introduction and description see 108726.

109831 to 109838. LYCOPERSICON ESCU-LENTUM Mill. Solanaceae.

From northern Africa. Seeds presented by H. Brayard, Director, Experiment Sta-tion, Marrakech, Morocco. Received March 5, 1935.

A collection of French varieties, intro-duced for Department specialists.

109831. De Marmande.

109832. Des Allies.

109833. Joffre.

109834. Merville des Marches.

109835. Pierrette.

109836. Precoce des Halles.

109837. Premiere.

109838. Profusion.

109839 to 109875.

From Venezuela. Seeds collected by W. A. Archer, Bureau of Plant Industry. Received February 28, 1935.

Introduced for Department specialists.

109839 and 109840. ARACHIS HYPOGAEA L. Fabaceae. Peanut.

Cultivated peanuts obtained in the market at Caracas, January 23, 1935. Said to be native.

109839. No. 2971. Mani.

109840. No. 2972. Mani americano.

109841. ARRABIDAEA sp. Bignoniaceae.

No. 3039. Collected near La Democracia, February 4, 1935. An ornamental climbing shrub.

109842. Banisteriopsis sp. Malpighiaceae.

No. 2951. January 22, 1935. From the lower Catuche Woods, near Caracas. A vine 20 to 30 feet high, clambering over other vegetation.

109843. Banisteriopsis Guatemalensis (Ndzu.) C. B. Robinson. Malpighiaceae.

No. 3005. February 5, 1935. Collected between Limon and El Sombrero. A climbing shub about 20 feet high; native to Guatemala.

109844. Cajanus indicus Spreng. Fabaceae. Pigeon-pea.

No. 2969. January 23, 1935. Quinchoncho. Obtained in the market at Caracas.

109845. CICER ARIETINUM L. Fabaceae. Chickpea.

No. 2956. January 23, 1935. Garbanzo. A cultivated variety originally from Spain. Obtained in the market at Cara-

For previous introduction see 109259.

109846. CLEOME STYLOSA Eichl. Capparidaces

No. 2990. January 27, 1935. Barbascajo. Collected on the outskirts of Caracas. A shrub about 4 feet high with sticky compound leaves of 5 to 11 lanceolate leaflets and small white to pinkish flowers. Native to Venezuela.

109847. CHENOPODIUM AMBROSIOIDES L Chenopodiaceae.

No. 2989. Collected on the outskirts of Caracas, January 27, 1935.

109848. COMBRETUM FRUTICOSUM (Loefl.) Stuntz. Combretaceae.

No. 3014. February 3, 1935. Near El Sombrero, State of Guarico. An ornamental climbing shrub with opposite elliptic leaves and spikes of orange and green flowers. Native to temperate regions from Argentina to Brazil.

For previous introduction see 107292.

109849. ERYTHRINA Sp. Fabaceae.

No. 3021. February 4, 1935. Near El Sombrero, State of Guarico. A large tree.

109850. HURA CREPITANS L. Euphorbiaceae. Sandboxtree.

No. 3016. Habillo. February 3, 1935. Near El Sombrero, State of Guarico. A tall tree with large poplarlike leaves and

109839 to 109875—Continued.

globose explosive capsules about 3 inches in diameter. Native to tropical America.

For previous introduction see 106992.

109851. INDIGOFERA SUFFRUTICOSA Mill. Fabaceae.

No. 2984. January 27, 1935. Near Caracas. A scantily branching open shrub 4 to 5 feet high.

For previous introduction see 107471.

109852. Indigofer suffruticos Mill. Fabaceae.

No. 2985. January 27, 1935. Near Caracas. In habit and appearance this is much like No. 2984 (109851) except that the fruit and leaves are larger.

109853. JACARANDA FILICIFOLIA (Anders.) Don. Bignoniaceae.

No. 2997. January 28, 1935. Near Caracas. A cultivated shade tree with fernlike leaves and showy panicles of large blue-purple flowers.

109854. Bontia daphnoides L. Myoporaceae.

No. 3000. Olivo. Collected near Caracas, January 8, 1935. A small tree with small glossy alternate lanceolate leaves and axillary flowers which are either solitary or in pairs. The fruit is a fleshy drupe containing eight hard seeds.

For previous introduction see 44907.

109855. NISSOLIA FRUTICOSA Jacq. Fabaceae.

No. 3009. Collected between Limon and El Sombrero, State of Guarico, February 3, 1935. A somewhat woody vine with opposite pinnate leaves and axillary racemes of small yellow flowers. Native to Central America.

109856. PAULLINIA LEIOCARPA Greisb. Sapindaceae.

No. 2950. Collected at Antimano, near Caracas, January 12, 1935. A climbing shrub.

109857 and 109858. PHASEOLUS LUNATUS L. Fabaceae. Lima bean.

From the market at Caracas, January 23, 1935.

109857. No. 2968. Guaracaros.

109858. No. 2970. Guaracaros blanco.

109859 to 109864. Phaseolus vulgaris L. Fabaceae. Common bean.

From the market at Caracas, January 23, 1935.

109859. No. 2959. Frijol.

109860. No. 2961. Caraotas negras. The most popular variety; widely cultivated also in Central America.

109861. No. 2962. Caráotas amarillas.

109862. No. 2964. Taitaguita.

109863. No. 2966. Poucha rosada,

109864. No. 2967. Caráota dominó.

109865 and 109866. PISUM SATIVUM L. Fabaceae. Pea.

From the market at Caracas, January 23, 1935.

109865. No. 2957. Arvejas amarillas.

109839 to 109875—Continued.

109866, No. 2963. Arvejas verdes.

109867. RUPRECHTIA CORIACEA (Karst.) Polygonaceae.

No. 3015. Biscochito. From near El Sombrero, State of Guarico, February 3, 1935. A small tree, 20 feet high, native to Venezuela, with ovate-lanceolate, acute leaves about 3 inches long.

109868. RUPRECHTIA SD. Polygonaceae.

No. 3030. Collected between El Sombrero and La Democracia, State of Guarico, February 4, 1935. A small tree.

109869. SAPINDUS SAPONARIA L. Sapinda-Southern soapberry.

No. 3031. Para Para, pepo. Collected between El Sombrero and La Democracia, State of Guarico, February 4, 1935.

For previous introduction see 51410.

9870. SCHOENOCAULON OFFICINALE (Schlecht.) A. Gray. Melanthiaceae.

No. 2994. Cebadilla, From Antimano, near Caracas, January 28, 1935. A bulbous plant, native to tropical America, about 3 feet high, with long linear, grasslike leaves and small white flowers on a lone suite. long spike.

For previous introduction see 45810.

109871. SERJANIA GLABRATA H. B. K. Sapindaceae.

No. 2954. From the lower Catuche Woods, near Caracas, January 22, 1935. A climbing shrub with alternate biternate leaves and white flowers in axillary spike-Catuche like racemes. Native to temperate regions in Peru.

For previous inaroduction see 101251.

109872. SICANA ODORIFERA (Vell.) Naud. Cucurbitaceae. Casabanana.

No. 2975. Cajúa. From the market at Caracas, January 23, 1935. A subtropical ornamental vine with cylindrical fruits over a foot long, which have finely mottled dark reddish rinds and yellow flesh with a pleasing odor somewhat like that of the muskmelon. The fruit is used for preserves or dulces. for preserves or dulces.

For previous introduction see 98882.

109873 to 109875. VIGNA spp. Fabaceae.

From the market at Caracas, January 23, 1935.

and 109874. VIGNA CYLINDRICA (Stickm.) Skeels. Catjang.

109873. No. 2958. Frijol blanco de sopa.

109874. No. 2965. Frijoles negros.

109875. VIGNA SINENSIS (Torner) Savi. Cowpea.

No. 2960. Frijol caia de santo

109876 to 109878. FESTUCA spp. Fescue.

Seeds presented by Gustav urg. Received March 5, From Germany. Zülzer, Hamburg.

Introduced for Department specialists.

109876. FESTUCA CAPILLATA Lam. Hair fescue.

Sapi.

For previous introduction see 109211.

109876 to 109878-Continued.

109877 and 109878. FESTUCA OVINA L Sheep fescue.

For previous introduction see 109497.

109877. Sano 109878. Saru.

109879 to 109883.

om Cuba. Seeds presented by Robert M. Grey, Superintendent, Atkins Institution of the Arnold Arboretum, Soledad, Clenfuegos, through F. G. Walsingham. Received February 28, 1935. From Cuba.

109879. CASSIA BACILLARIS L. f. Caesalpiniaceae.

A small tree of rather straggly habit with pinnate foliage and golden-yellow flowers in loose racemes.

For previous introduction see 106514.

109880. CASSIA EXCELSA Schrad. Caesalpiniaceae.

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

109881. Entada GIGAS (L.) Fawcett and Rendle. Mimosaceae.

A woody climber with stems often 100 feet long, bipinnate leaves about 6 inches long, and small racemes of yellow or white flowers. The fruit is a large, flat, jointed pod 3 to 7 feet long, with one seed to a joint. The handsome deep-brown seeds are 2 inches across. Native to the West Indies.

109882. IPOMOEA SINUATA Ortega. Convolvulaceae.

A handsome vine with attractive palmately-divided leaves and bell-shaped flowers 1 to 2 inches wide, white with a purple center. Native to Mexico.

For previous introduction see 26411.

109883. TECTONA GRANDIS L. f. Verbena-

A tall evergreen tree, native to southern and central Asia, with opposite ovate leaves and white or bluish flowers in terminal panicles 6 inches long. The wood is highly prized by shipbuilders because of its great strength and durability.

For previous introduction see 94201.

109884. Aloe sp. Liliaceae.

From Venezuela. Plants collected by W. A. Archer, Bureau of Plant Industry. Received March 12, 1935.

No. 3072. Zabila. Collected February 16, 1935, near the sea on a dry hillside, on the road between Caracas and Cabo Blanco. A stemless aloe about a foot high with dull yellow flowers.

109885 to 109888.

From China. Seeds and bulbs presented by Andrew Tse, Hong Kong. Received March 7, 1935.

collection of Chinese vegetables introduced for Department specialists.

109885. ALLIUM CEPA L. Liliaceae.

Onion.

109886. ALLIUM SATIVUM L. Liliaceae. Garlic.

109887. APIUM GRAVEOLENS L. Apiaceae. Celery. 109885 to 109888—Continued.

109888. DAUCUS CAROTA L. Apiaceae. Carrot.

109889 to 109893.

From Japan. Seeds and bulbs presented by Takatsuga Abiko, Director, Hokkaido Ag-ricultural Experiment Station Kotoni, ricultural Experiment Station. Sapporo. Received March 7, 1935.

Introduced for the use of Department specialists.

109889 to 109892. ALLIUM spp. Liliaceae.

109889. ALLIUM CEPA L.

Sapporo ki-tamanegi.

109890 to 109892. ALLIUM SATIVUM L Garlic.

Bulbs: Nin-niku.

109893. DAUCUS CAROTA L. Apiaceae. Carrot.

Sapporo futo-ninjin (big carrot).

109894 to 109896.

From Venezuela. Bulbs collected by W. A. Archer, Bureau of Plant Industry. Received March 12, 1935.

109894. HIPPEASTRUM AULICUM Herb. Amaryllidaceae.

No. 3074. February 18, 1935. From the market at Caracas. A form with six to nine broadly linear leaves 1 to 2 feet long and a scape 2 feet high bearing, usually, two large bright-red tubular flowers having segments 5 to 6 inches long and a green corona in the throat of the flowers. Native to Brazil.

For previous introduction see 93158.

109895. Amaryllis sp. Amaryllidaceae.

No. 3073. Lirio sanjuanero. Collected the market in Caracas, February 18, 35. A cultivated ornamental with red 1935. flowers.

109896. FREESIA sp. Iridaceae.

No. 3075. Nardo. From the market Caracas, February 18, 1935. A cultivated ornamental.

109897 to 109899. FESTUCA spp. Poa-

rom Germany. Seeds presented by Gustav Schott, Samenwerke, Hamburg-Wandsbek und Aschaffenburg a. M. Received March 5, 1935. From Germany.

Introduced for Department specialists.

Seeds grown in Bavaria.

109897. FESTUCA CAPILLATA Lam.

Hair fescue.

109898. FESTUCA RUBRA L. Red fescue.

Received as variety "parva," for which a place of publication has not been found.

109899. FESTUCA RUBRA L. Red fescue.

Received as variety "sylvaticus," for which a place of publication has not been

109900. Prunus subhirtella Miquel. Amygdalaceae. Higan cherry.

Scions presented by Collingwood Ingram, Benenden, Kent. ceived March 15, 1935.

109900—Continued.

Variety Rosea-plena. A form with rather large, double, pink flowers produced in profusion.

For previous introduction see 108755.

109901. Pyrus communis L. Malaceae.

rom Michigan. Scions presented by Stanley Johnson, Horticultural Experiment Station. South Haven. Received Management 15, 1935. From Michigan.

Gorabella pear. ment specialists. Introduced for Depart-

For previous introduction see 107639.

109902 to 109909. AMYGDALUS spp. Amygdalaceae.

From England. Scions presented by Thomas Rivers & Son Ltd., Sawbridgeworth, at the request of R. G. Hatton, East Mal-ling Research Station, East Malling, Kent. Received March 15, 1935.

Introduced for Department specialists.

109902 to 109908. AMYGDALUS PERSICA L.

109902. Bellegrade.

109903. Golden Eagle.

109904. Kestrel,

109905. Magdala.

109906. Prince of Wales.

109907. Princess of Wales. 109908. Violetta Hative.

109909. AMYGDALUS PERSICA NECTARINA Nectarine. Ait.

Newton. A nectarine of delicious qual-

For previous introduction see 107335.

109910 to 109913. ZEPHYRANTHES Spp. Amaryllidaceae. Zephyrlily.

Bulbs purchased Chandra Nursery, Rhenock, Sikkim State. Received March 15, 1935.

Introduced for Department specialists.

109910. ZEPHYRANTHES Sp.

109911. ZEPHYRANTHES Sp.

109912. ZEPHYRANTHES ROSEA Lindl.

For previous introduction see 107147.

109913. ZEPHYRANTHES Sp.

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

109914 to 109945.

From Venezuela. Seeds collected by W. A. Archer, Bureau of Plant Industry. Received March 4, 1935.

Introduced for Department specialists.

109914. ALLIUM CEPA. Liliaceae. Onion.

No. 3037. From La Victoria, February 5, 1935. A cultivated red onion, said to have been introduced from the Canary Islands.

109914 to 109945-Continued.

109915. CALLIANDRA MARGINATA Griseb. Mimosaceae.

No. 3003. Collected between Caracas and Maracay, February 2, 1935. An unarmed shrub or tree. Native to Trinidad.

109916. BOWDICHIA VIRGILIOIDES H. B. K.

No. 3002. Alcornoque. From a dry hillside at Limón near Maracay, Department of Aragua, February 2, 1935. A small usually crooked tree about 25 fethigh, with leathery compound leaves and terminal panicles of small purplish-blue flowers. Native to dry regions in Venezuela and Brazil.

109917. CENTROSEMA PLUMIERI (Turp.) Benth. Fabaceae.

No. 3028. Collected February 4, 1935, between El Sombrero and La Democracia in a river bed. A tropical ornamental vine, native to Brazil, with white and red flowers. Of value as a green manure.

For previous introduction see 106591.

109918. CENTROSEMA PUBESCENS Benth. Fabaceae.

No. 3038. Collected between El Sombrero and La Democracia, February 4, 1935.

109919. CENTROSEMA VIRGINIANUM (L.) Benth. Fabaceae.

No. 2998. January 29, 1935. From a dry hillside at Antimano, near Caracas.

109920. Cassia reticulata Willd. Caesalpiniaceae.

No. 3017. Collected February 4, 1935, at El Sombrero. An evergreen shrub about 10 feet high, with racemes of small yellow flowers. Native to tropical America.

109921 and 109922. CASSIA BIFLORA L. Caesalpiniaceae.

A shrub about 10 feet high, native to tropical America, with compound leaves and small racemes of showy yellow flowers.

109921. No. 2953. Collected January 22, 1935, in the lower Catuche Woods, near Caracas, on a dry hillside.

109922. No. 3008. Collected February 3, 1935, between Limon and El Sombrero, Department of Aragua.

109923. CAYAPONIA AMERICANA (Lam.) Cogn. Cucurbitaceae.

No. 3029. Collected between El Sombrero and La Democracia, February 4, 1937. Benenito. A woody vine with large rough, deep-green, five-lobed leaves and small ovoid fruits, less than an inch long that turn red when ripe.

For previous introduction see 98823.

109924. CHAETOCALYX PARVIFLORA Benth. Fabaceae.

No. 2992. Collected January 28, 1935, at Antímano, near Caracas. An evergreen vine with pinnate leaves and small paleyellow flowers in short axillary racemes. Native to eastern Brazil.

109925. CHENOPODIUM AMBROSIOIDES L. Chenopodiaceae. Wormseed.

No. 2982. Pasote. From Antimano, near Caracas, January 26, 1935.

109914 to 109945—Continued.

109926. GYNANDROPSIS PENTÁPHYLLA (L.) DC. Capparidaceae.

No. 3026. Collected February 4, 1935, between El Sombrero and La Democracia, in a river bed. An annual up to 15 feet high.

109927. CENTROSEMA PUBESCENS Benth. Fabaceae.

No. 3027. Collected between El Sombrero and La Democracia, February 4, 1935

109928. TEPHROSIA CINEREA L. Fabaceae.

No. 3033. Collected near Los Teques, State of Miranda, February 5, 1935. A shrubby perennial with a thick rootstalk, slender ascending stems 3 to 4 feet long, and purplish flowers in rather dense racemes. Native to the West Indies.

109929. BENTHAMANTHA CARIBAEA (Jacq.) Kuntze, Fabaceae.

No. 3010. February 3, 1935. Collected on dry banks between Limon and El Sombrero. A shrub up to 6 feet high.

109930. CUCUMIS MELO L. Cucurbitaceae.

No. 3036. February 5, 1935. From La Democracia. Fruit oval, yellow, ribbed, 8 inches long and about 5 inches in diameter, of unusually good flavor.

For previous introduction see 109479.

109931. Cassia biflora L. Caesalpiniaceae.

No. 3007. Collected between Limón and El Sombrero, Department of Aragua, February 3, 1935.

For previous introduction see 109921.

109932. DESMANTHUS VIRGATUS (L.) Willd. Mimosaceae.

No. 2978. From Miramar, near El Valle, Federal District, January 24, 1935. A slender climbing shrub 5 to 6 feet high, with sensitive bipinnate leaves.

For previous introduction see 107161.

109933. DESMANTHUS DEPRESSUS Humb. and Bonpl. Mimosaceae.

No. 3023. Collected February 4, 1925, between El Sombrero and La Democracia, State of Guarico. A dwarf, prostrate perennial, native to dry sandy places in tropical America.

109934. GALACTIA STRIATA (Jacq.) Urban. Fabaceae.

No. 3001. Collected February 2, 1935, at Limon, near Maracay, Department of Aragua, on a dry hillside. A small vine with pink, pea-shaped flowers.

For previous introduction see 95692.

109935. Indigofera subulata Vahl. Fabaceae.

No. 3034. Collected near Los Teques, State of Miranda, February 5, 1935. A shrubby herb up to 3 feet high, with salmon-pink flowers in racemes 5 to 10 inches long. Native to tropical America.

For previous introduction see 24763.

109914 to 109945-Continued.

109936. Indigofera suffruticosa Mill. Fabaceae.

No. 2952. Añil. From the lower Catuche Woods, near Caracas, January 22, 1935.

For previous introduction and description see 109851.

109937. Jacaranda filicifolia (Anders.) Don. Bignoniaceae.

No. 2997. January 28, 1935. From Antimano, near Caracas.

For previous introduction and description see 109853.

109938. LONCHOCARPUS FENDLERI Benth. Fabaceae.

No. 3006. Majomo. Collected February 3, 1935, between Limón and El Sombrero, Department of Aragua. A small to medium-sized deciduous tree with seven to nine oblong, subovate, downy-woolly leaflets, and pink flowers less than an inch long in axillary racemes. Native to Venezuela.

109939. LONCHOCARPUS STENURUS Pittier. Fabaceae.

No. 3019. February 4, 1935, from El Sombrero. A shrub or small tree, sometimes 30 feet high. Native to Venezuela.

109940. NICOTIANA TABACUM L. Solan ceae.

No. 2955. January 22, 1935. From the lower Catuche Woods, near Caracas, on a dry hillside; escaped from cultivation.

109941. PAULLINIA sp. Sapindaceae.

No. 2996. Bejuco mulato. January 27, 1935. Collected near Caracas.

109942. PHYLLANTHUS ACUMINATUS Vahl. Euphorbiaceae.

No. 2979. Hediondo. January 24, 1935. From Miramar, near El Valle, Federal District. A small tree 20 feet high.

109943. POLYGONUM PUNCTATUM Ell. Polygonaceae.

No. 2983, Barbasco, Collected near Caracas, January 27, 1935.

109944. SERJANIA sp. Sapindaceae.

No. 2981. Cruceta. From the Catuche Woods, Caracas, January 26, 1935.

109945. TERAMNUS VOLUBILIS Sw. Fabaceae.

No. 3024. Collected February 4, 1935, between La Democracia and El Sombrero, from a dry bank. A small woody vine with oblong or elliptical-lanceolate leaflets and very small, violet-rose flowers in axillary racemes. Native to tropical America.

109946 and 109947.

From India. Seeds presented by W. Gregson, Director of Agriculture, Tenasserim Circle, Moulmein. Received March 11, 1935.

Introduced for Department specialists.

109946. APIUM GRAVEOLENS L. Apiaceae. Celery.

Tayoke Nan Nan.

109946 and 109947-Continued.

109947. DAUCUS CAROTA L. Apiaceae.

Carrot.

109948 to 109950.

From Germany. Seeds presented by Rudolf Neumüller, Frankenthal, Pfalz. Received March 12, 1935.

Introduced for Department specialists.

109948 and 109949. ALLIUM CEPA L. Liliaceae. Onion.

109948, Zittau Yellow Giant.

109949. No. 2444. Nürnberger.

109950. SCORZONERA HISPANICA L. Cichoriaceae. Black salsify.

Heinemann, One Year Giant.

109951 to 109956. Cucurbita pepo L. Cucurbitaceae.

From Austria. Seeds purchased from M. Eifler & Co., through Francis R. Stewart, American consul, Vienna. Received March 7, 1935.

Introduced for Department specialists.

A collection of soft-seeded pumpkin varieties grown in Austria.

109951. Zitronen (citron).

109952. Apfel (apple).

109953, Bischofsmitre (bishop's miter).

109954. Pomeranzen (orange).

109955. Turkenbund (turban).

109956. Birne (pear).

109957 to 109962. Solanum Tuberosum L. Potato.

From the Netherlands. Tubers purchased from Professor Brockema, Director, Instituut voor Plantenverdeling, Wageningen. Received March 18, 1935.

Introduced for Department specialists.

For previous introduction see 108215.

109957. Albion.

109958. Bevelander.

109959. Frisco.

109960. Neordeling.

109961. Triumph.

109962. West Brabander.

109963. Eucharis narcissiflora Huber. Amaryllidaceae.

From Ecuador. Bulbs collected by Mrs. Ynes Mexia, Bureau of Plant Industry. Received March 15, 1935.

No. 6855. February 5, 1935. Province of Napo-Pastaza, along the trail between Indillama and Canelos, in a dense forest at 13,000 feet altitude. A little-known Amazonlily that differs from other species in having smaller flowers in dense umbels. The leaves are lanceolate-ovate and the scape is about 15 inches high. Native to tropical South America.

109964 to 109966.

From Venezuela. Bulbs collected by W. A. Archer, Bureau of Plant Industry. Received March 15, 1935.

109964 to 109966—Continued.

Amaryllidaceae. 109964. AMARYLLIS Sp.

o. 3094. *Lirio*. Collected February 1935, along the highway between ncia and El Cambul. A cultivated Valencia form with salmon-pink flowers.

109965. HIPPEASTRUM REGINAE (L.) Herb. Amaryllidaceae.

No. 3104. Lirio morado. A cultivated form with purplish flowers; collected along the highway between Valencia and El Cambul, February 23, 1935.

109966. HYMENOCALLIS CARIBAEA. Amaryllidaceae. Caribbean spiderlily.

No. 3103. Lirio. A cultivated form, collected February 23, 1935, along the highway between Valencia and El Cambul, of the West Indian spiderlily, with 12 or more strap-shaped leaves over 2 feet long and an umbel of 6 to 12 white flowers, with linear perianth segments about 3 inches long.

109967. Pistacia cabulica Stocks. Anacardiaceae.

rom India. Seeds presented by Harindar Singh Dinsa, Government Gardens, La-hore, Punjab. Received March 12, 1935. From India.

A tree about 15 feet high, native to Afghanistan, with compound leaves 2 inches long, having five to nine lanceolate-oblong leaflets and rounded-compressed fruits.

For previous introduction see 18635.

109968 to 109970. LINUM USITATISSI-MUM L. Linaceae.

From the Netherlands. Seeds presented by B. C. Algra, Stiens. Received March 16, B. C 1935 C. Algra, Stiens.

Introduced for Department specialists.

109968. Dorst's Original "I" 13.

109969. Dorst's Original "F" 6.

109970. Dorst's Original Concurrent.

109971 to 109986.

From Venezuela. Seeds collected by W. A. Archer, Bureau of Plant Industry. Received March 11, 1935.

Introduced for Department specialists.

ANGELONIA SALICARIAEFOLIA Humb. and Bonpl. Scrophulariaceae.

No. 3045. Mastranto morado. Collected February 12, 1935, near Sabana Grande. A bushy annual up to 2 feet high, with numerous sessile, oblong, viscid-hairy leaves 1 to 2 inches long. The solitary, long-stalked, axillary flowers vary in color from bright violet to deep lavender. Native to Venezuela.

109972. ASPIDOSPERMA VARGASII A. DC. Apocynaceae.

No. 3022. From La Democracia, near Para, State of Guarico, February 4, 1935. A tree up to 30 feet tall, with elliptic leaves about 4 inches long and numerous small yellow flowers in dense cymes. Native to Venezuela.

109973. BONTIA DAPHNOIDES L. Myopora-

No. 3063. Olivo. Collected on the road between Caracas and Cabo Blanco, Federal District, February 16, 1935.

For previous introduction and description see 109854.

109971 to 109986—Continued.

109974. CANAVALIA GLADIATA (Jacq.) DC. Fabaceae. Swordbean.

No. 3061. Caracas, February 15, 1935. Presented by the Director, Ministerio de Agricultura.

For previous introduction see 80505.

109975. CARDIOSPERMUM HALICACABUM L. Balloonvine. Sapindaceae.

No. 3020. Farolita de la Virgen. From El Sombrero, February 4, 1935.

109976. CASSIA OCCIDENTALIS L. piniaceae.

No. 3048. Brusca. Collected on the highway southeast of Antimano, February 15, 1935.

For previous introduction see 106566.

109977. CROTON FLAVENS L. Euphorbiaceae.

No. 3069. Carcanapire. Collected February 15, 1935, on dry hillsides near the sea on the road between Caracas and Cabo Blanco. An aromatic shrub 2 to 10 feet high, with ovate leaves 1 to 4 inches long and pale-yellow or white flowers. Native to the West Indies.

109978. DATURA METEL L. Solanaceae.

No. 3049. Nongue. February 15, 1935. Southwest of Antimano on the highway.

109979. HURA CREPITANS L. Euphorbia-Sandboxtree.

No. 3057. Collected February 15, 1935, on the highway southwest of Antimano.

For previous introduction and description see 109850.

109980. Jatropha Gossypifolia Staphy-sagrifolia (Mill.) Muell. Arg. Eu-phorbiaceae.

No. 3046. Tuatua morada. Collected February 15, 1935, on the highway southwest of Antimano. A shrub about 5 feet high, native to tropical America, with three- to five-lobed leaves about 5 inches across and small red to purplish flowers

109981. NICOTIANA GLAUCA R. Grah. Solanaceae.

No. 3062. Almorranera. Collected February 16, 1935, on the road between Caracas and Cabo Blanco. A slender shrub or small tree 10 to 20 feet high, with yellow flowers in loose terminal panicles. It is native to South America from Argentina to Bolivia.

For previous introduction see 42336.

109982. PAROSELA CARTHAGINENSIS (Jacq.) Killip. Fabaceae.

No. 2993. Barbasco blanco. Collected January 28, 1935, at Antimano, near Caracas, on a dry hillside. A shrub about 4 feet high, with small pinnate leaves less than 2 inches long and dense spikes of purple, rose, or white flowers. Native to northern South America.

109983. PASSIFLORA LIGULARIS JUSS. Sweet granadilla. sifloraceae.

No. 3058. Parche amarilla. Purchased near Los Teques, February 13, 1935.

For previous introduction and description see 109410.

109971 to 109986—Continued.

109984. PLUCHEA sp. Asteraceae.

No. 3066. Salvia. Collected on the road between Caracas and Cabo Blanco, February 15, 1935. A shrub 2 to 5 feet high, with aromatic leaves and stems and bright-lavender flowers.

109985. SCHOENOCAULON OFFICINALE (Schlecht.) A. Gray. Melanthiaceae.

No. 3060. Cebadilla. From Caracas. February 15, 1935. Presented by Señor Alamo, Director, Ministerio de Agricultura.

For previous introduction and description see 109870.

109986. TERAMNUS UNCINATUS (L.) Swartz. Fabaceae.

No. 3047. Collected on the highway southwest of Antimano, February 15, 1935. A small vine with a fleshy taproot, native to tropical America. It is used as forage in Brazil and in the Virgin Islands.

For previous introduction see 92941.

109987 and 109988. BACCHARIS PILU-LARIS DC. Asteraceae.

From California. Seeds presented by Carl B. Wolf, Rancho Santa Ana Botanic Garden, Anaheim. Received February 7,

An evergreen shrub 2 to 5 feet high, native to the Pacific coast of the United States, with sessile, obovate leaves less than an inch long and whitish flower heads.

109987. B-226.

109988, B-227.

109989. CUCUMIS MELO L. Cucurbita-Muskmelon. ceae.

From India. Seeds presented by the Director of Agriculture, North-West Frontier Province, Peshawar, through M. I. Shah, Utah State Agricultural College, Logan, Utah. Received March 15, 1935.

Kulachi melon. ment specialists. Introduced for Depart-

109990. NEPHELIUM MUTABILE Blume. Sapindaceae. Pulasan.

From Java. Seeds presented by A. M. Cramer, Wonosobo, through H. S. Wolfe, horticulturist in charge, Subtropical Experiment Station, Homestead, Fla. Received March 19, 1935.

A small Malayan tree 30 feet high, with compound leaves and small clusters of red fruits, commonly about the size of walnuts. The juicy flesh (properly the aril) is translucent, whitish, has a sweet, slightly acidulous flavor, and encloses a single large lucent, whiti lous flavor, oblong seed.

For previous introduction see 106102.

109991 to 110020.

rom northern Africa. Plants and cuttings presented by H. Brayard, Directeur de la Station Experimentale, Marrakech, From northern Africa. Station Experimentale, Mar. rocco. Received March 23, 1935. Marrakech, Morocco.

109991 to 110011. PRUNUS spp. Amygdala-

109991 to 110007. PRUNUS ARMENIACA L. 109991. Pêche Précoce.

109992. Angoumeis.

109991 to 110020—Continued.

109993. Bergeron.

109994. Blanc Rose à Confire.

109995. Cluster.

109996. Corot.

109997. Doctor Mascle.

109998. Galta Rocha.

109999, Gros Blanc d'Auvergne,

110000. Hemskirke.

110001. Luizet Special.

110002. Précoce d'Alexandria.

110003, Précoce du Portugal.

110004. Re Imberto.

110005. Saint Ambroise.

110006. Shiplay's Early.

110007. Stella.

110008 to 110010. PRUNUS AVIUM L Sweet cherry.

110008. Bigarreau Grosse Bombellaise.

110009. Bigarreau Marmotte.

110010. Bigarreau Pelissier.

110011. PRUNUS Sp.

Cherry, La Plus Précoce de la Marché.

110012 to 110020. VITIS spp. Vitaceae.

110012. Abbot.

110013, Ahmed ould Ali.

110014. Ain Kelba.

110015. Assoued Zine.

110016. Bezoul el kedim.

110017. Bezoul el Kelba. 110018. Bou Asserghim.

110019. Geir.

110020. Zene Abiot.

110021 to 110051. Juglans spp. Jug-Walnut. landaceae.

From Canada. Seeds purchased from G. H. Corsan, Islington, March 12, 1935. Ontario. Received

collection of Carpathian walnuts, introduced for Department specialists.

110021 to 110045. JUGLANS REGIA L. Persian walnut.

110021. No. 1. 110034. No. 17. 110022. No. 2. 110035. No. 20.

110023. No. 3. 110036. No. 22. 110024. No. 5. 110037, No. 24.

110025. No. 6. 110038. No. 25.

110026. No. 7. 110039. No. 26.

110027. No. 9. 110040. No. 27.

110028. No. 10. 110041. No. 29.

110029. No. 11. 110042. No. 33. 110030. No. 13. 110048, No. 39.

110031. No. 14. 110044. No. 42.

110032. No. 15. 110045. [No data.]

110033, No. 16.

110021 to 110051-Continued.

110046 to 110051. JUGLANS spp.

110046, No. 34. Manchurian heartnut.

110047. No. 8. Japanese walnut.

110048. No. 35. Faust heartnut.

110049. [No data.]

110050, No. 23, Globe.

110051. No. 23-A. (Long nuts.)

110052 to 110060.

From Mexico. Seeds collected in the State of Yucatan by J. H. Kempton, Bureau of Plant Industry. Received March 15, 1935.

Introduced for Department specialists.

110052. Gossypium sp. Malvaceae.

Cultivated cotton, collected between Merida and Pisti, January 29, 1935. The Mayas often grow a few plants for candlewicks.

110053. VIGNA SINENSIS (Torner) Savi. Fabaceae. Cowpea.

110054 to 110060. ZEA MAYS L. Poaceae.

110054. No. 1.

110058. No. 5.

110055, No. 2.

110059. No. 6.

110056. No. 3. 110060. No. 7.

110057. No. 4.

110061 to 110083.

From the Union of Soviet Socialist Republics. Seeds presented by the Botanic Garden, Alma Ata, through H. L. Westover and C. R. Enlow, Bureau of Plant Industry. Received March 11, 1935.

Introduced for Department specialists.

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

110061. AEGILOPS SQUARROSA L. Poaceae.

No. 1223. For previous introduction see 107866.

110062 to 110065. AGROPYRON spp. Poaceae. Wheatgrass.

110062. AGROPYRON CRISTATUM (L.) Gaertn. Crested wheatgrass.

No. 1224.

110063. AGROPYRON REPENS (L.) Beauv.
Quackgrass.

110064. AGROPYRON SIBIRICUM (Willd.) Beauv.

No. 1226. For previous introduction see 108847.

110065. AGROPYRON UGAMICUM Drobov.
No. 1227. A tufted perennial grass about 2 feet high, native to Turkistan.

110066. ALOPECURUS PRATENSIS L. Poaceae. Meadow foxtail.

No. 1229.

110067. ALOPECURUS ARUNDINACEUS Poir. Poaceae.

No. 1230.

110068. ARISTIDA PENNATA Trin. Poaceae. No. 1231. For previous introduction see 108323.

110061 to 110083—Continued.

110069. ARTEMISIA LEUCODES Schrenk. Asteraceae.

No. 1232. A biennial, white-woolly throughout, with erect stems, leaves palmately and finely divided, and white flower heads in axillary clusters. Native to sandy places in central Asia.

110070. ARTEMISIA RUPESTRIS L. Asteraceae.

No. 1233. A perennial herb, native to Siberia, with bipinnatisect leaves and inconspicuous flower heads in racemes.

110071 to 110073. ASTRAGALUS spp. Faba-

110071. ASTRAGALUS DENDROIDES Kar. and Kir.

No. 1234. A large erect shrub with oval-lanceolate leaflets and oblong spikes of pale-blue flowers. Native to the mountains of central Asia.

110072. ASTRAGALUS SIEVERSIANUS Pall.

No. 1235. An erect or ascending perennial, with oblong hairy leastets and axillary clusters of pale-yellow flowers. Native to central Asia.

For previous introduction see 107496.

110073. ASTRAGALUS VULPINUS Willd.

No. 1236. A perennial astragalus native to the desert regions of south-eastern Siberia.

For previous introduction see 61398.

110074. Bromus inermis Leyss. Poaceae. Bromegrass.

No. 1237.

110075. Bromus Japonicus Thunb. Poaceae. Bromegrass.

No. 1238. A biennial upright or ascending grass of wide distribution in Europe and Asia. It is commonly from 1 to 2 feet high.

110076 to 110079. ELYMUS spp. Poaceae.

110076. ELYMUS ARALENSIS Regel.

No. 1240. A tall erect perennial grass, native to Siberia.

For previous introduction see 61416.

110077. ELYMUS SIBIRICUS L.

No. 1241.

For previous introduction see 108495.

110078. ELYMUS sp.

No. 1228.

110079. ELYMUS sp.

No. 1239.

110080. LEPIDIUM REPENS Boiss. Brassicaceae.

No. 1242. A stout perennial about a foot high, with oblong, wavy-margined leaves and inconspicuous white flowers. Native to central Asia.

110081. ONOBRYCHIS CHORASSANICA Bunge. Fabaceae.

No. 1243.

For previous introduction see 108936.

110061 to 110083—Continued.

110082. PEGANUM HARMALA L. Zygophyllaceae.

No. 1244.

For previous introduction see 109119.

110083. TRIFOLIUM FRAGIFERUM L. Faba-

No. 1245.

110084. Scabiosa caucasica Bieb. Dipsacaceae.

rom Chile. Seeds presented by Miss Elsie Brown, editor of the Bulletin of the Pan American Union, through J. L. Colom, Chief, division of agricultural cooperation, Pan American Union. Received March From Chile. 15, 1935.

From Santiago, Chile. Said to be a superior strain of the Caucasian scabiosa.

110085 to 110091. MALUS SYLVESTRIS Malaceae. Apple. Mill.

Scions presented by W. I. oleka Experiment Station, r Siedlce. Received March From Poland. Sinoleka Ex near Siedlce. Filewicz, Sosnowe 22, 1935.

Introduced for Department specialists.

110085. Baumann's Reinette.

For previous introduction see 102132.

110086. Boshopskie (Belle de Boskoop).

110087. Glogierowka.

110088. Kosztela.

110089. Landsberger Reinette.

110090. Malinowe Oberlandskie.

110091. Reinette Koksa (Cox Orange Pippin).

110092. Prunus subhirtella Miquel. Higan cherry. Amygdalaceae.

From Maryland. Scions collected by H. C. Skeels at Takoma Park. Received Sep-tember 18, 1931. Numbered in March

Var. Shidarehigan. A strain with deeppink flowers borne in great profusion; tree growing in front of the residence of H. W. Hochbaum, 7329 Blair Road.

For previous introduction see 91465.

110093. CAREX PHYSODES Bieb. Cypera-

From the Union of Soviet Socialist Republics. Roots collected in Turkistan by H. L. Westover and C. R. Enlow, Bureau of Plant Industry. Received October 11,

Introduced for Department specialists.

No. 150-B. From the Repetek Sand Desert Station, Turkmenistan, June 1934. A perennial sedge, usually about 6 inches high, with filiform leaves, said to be an excellent forage plant. Native to sandy deserts in Turkistan.

For previous introduction see 108896.

110094 and 110095. DIOSCOREA spp. Dioscoreaceae. Yam.

From Venezuela. Tubers collected by W. Archer, Bureau of Plant Industry. ceived March 15, 1935.

110094 and 110095-Continued.

Introduced for Department specialists.

From the market at Valencia, February 24, 1935.

110094. No. 3105. Name pino.

110095, No. 3106. Name criollo.

110096. Citrus sp. Rutaceae.

om Algeria. Scions presented by J. Bri-chet, Directeur, Jardin d'Essai du Ham-ma, Algiers. Received March 29, 1935. From Algeria.

Introduced for Department specialists.

Bedmar Vernia. A late-ripening Spanish orange.

110097. Tephrosia sp. Fabaceae.

ca. Seeds presented by R. Ypata Estate, Kitall, E Received March 21, 1935. From Africa. dersen, Kenya Colony.

Introduced for Department specialists.

An upright leguminous plant found on rocky slopes.

110098 and 110099.

From India. Seeds purchased from Mrs. P. Kohli, Baramula, Kashmir. Received March 23, 1935. Received

Introduced for Department specialists.

110098. IRIS KUMAONENSIS Wall. Iridaceae.

A dwarf iris of, the Pseudevansia section, 2 to 12 inches high, native to the western Himalayas from Kashmir to Kumaon between 9,000 and 12,000 feet altitude. The flaccid linear leaves are 12 to 14 inches long, and the solitary flowers have a perianth tube 2 to 3 inches long. The bright-lilac falls, 1 to 2 inches long, are blotched with darker lilac, and the claw has a beard of yellow-tipped hairs on a white crest. The erect standards are over an inch broad.

For previous introduction see 101782.

110099. LILIUM POLYPHYLLUM D. Don. Liliaceae.

A lily with stoloniferous white, pinktinged bulb, a smooth green stem 4 to 5 feet high, and numerous erect scattered, linear to oblong-lanceolate leaves 2 to 8 inches long. The fragrant nodding flowers, 2 to 12 in a lax umbel or raceme, are pale creamy yellow outside, marble-white spotted and streaked with purple within, and are 2 to 3 inches across. It is native to the western Himalayas at altitudes between 6,000 and 12,000 feet.

For previous introduction see 90981.

110100 to 110151.

From the Union of Soviet Socialist Republics. Seeds presented by the Botanic Garden, Alma Ata. Received March 11, 1935.

Introduced for Department specialists.

110100. ACONITUM EXCELSUM Reichb.

For previous introduction and description see 107865.

110101. ACONITUM NAPELLUS L. Ranunculaceae.

For previous introduction see 66909.

110100 to 110151—Continued.

110102 to 110105. ALLIUM spp. Liliaceae.

110102. ALLIUM sp.

110103. ALLIUM Sp.

110104. ALLIUM Sp.

110105. ALLIUM SD.

110106. ANEMONE ALBANA Stev. Ranuncu-

A low alpine perennial, native to Asia Minor, with tripinnatifid leaves and nodding yellow campanulate flowers.

110107. Archangelica songorica Lipsky. Apiaceae.

A stout perennial about 1 foot high, with pinnately dissected leaves and large terminal umbels of small white flowers. Native to high altitudes in central Asia.

110108. ASTER ALPINUS L. Asteraceae.

For previous introduction and description see 107891.

110109 to 110111. ATRAPHANIS spp. Polygonaceae.

110109. A TRAPHAXIS MUSCHKETOWI Krassn.

A dwarf spreading shrub, about 3 feet high and wide, with narrow-oblong leaves up to 2 inches long and small white flowers in terminal racemes. Native to central Asia.

110110. ATRAPHAXIS PYRIFOLIA Bunge.

A spiny shrub about 1 foot high, with thick, leathery, round leaves about 1 inch wide. Native to central Asia.

110111. ATRAPHAXIS SPINOSA L.

A spiny shrub 1 to 1½ feet high, with small, cordate, prickly leaves and inconspicuous flowers. Native to dry stony places in Asia Minor.

110112. CHAEROPHYLLUM LONGILOBUM (Kar. and Kir.) O. and B. Fedtsch. Apiaceae.

An aromatic herb, native to central Asia, with pinnately dissected foliage and compound umbels of small white flowers.

110118. Codonopsis ovata Benth. Cam panulaceae.

For previous introduction and description see 108052.

110114. CRYPTODISCUS CACHROIDES Schrenk. Apiaceae.

A herbaceous perennial with small greenish flowers. Native to Turkistan.

110115. DELPHINIUM sp. Ranunculaceae.

110116. DESCHAMPSIA KOELERIOIDES Regel. Poaceae.

A tufted, hardy perennial grass about 1 foot high. Native to Tien Shan, central Asia, at 8,000 feet altitude.

110117. ECHINOPS ALBICAULIS Kar. and Kir. Asteraceae.

A perennial with thistlelike leaves and pale-blue, one-flowered heads, densely clustered at the ends of the branches. Native to sandy locations of central Asia.

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110100 to 110151-Continued.

110118. EPHEDRA EQUISETINA Bunge. Gnetaceae. Jointfir.

An erect or ascending shrub up to 6 feet high, with slender greenish branches and scalelike leaves. Native to China.

110119. EREMOSTACHYS MOLUCCELLOIDES Bunge. Menthaceae.

A hardy perennial mint, over a foot high, with cordate or ovate-oblong leaves and yellowish-white flowers, over an inch long, in whorls. Native to Mongolia and Siberia.

110120. EREMURUS ANISOPTERUS Regel Liliaceae.

An eremurus about 2 feet high, native to Asia Minor, with small, milky-white flowers in a long raceme and narrow linear leaves.

110121 to 110123. FERULA spp. Apiaceae.

110121. FERULA sp.

110122. FERULA SD.

110123. FERULA Sp.

110124. GENTIANA ALGIDA Pall. Gentianaceae.

A perennial alpine gentian with numerous stems 4 to 5 inches high, lanceolate-linear leaves, and numerous white flowers over 2 inches long, with narrow lines of blue spots. Native to central Asia.

110125. GYPSOPHILA TIANSCHANICA M. Popov and B. Schischk. Silenaceae.

A hardy herbaceous perennial, with ascending stems, native to the Tien Shan in central Asia, with straight lanceolate leaves and numerous corymbs of small white flowers.

110126. HEDYSARUM HEDYSAROIDES (L.) Stuntz. Fabaceae.

A hardy herbaceous ornamental perennial, native to the alpine regions of central Europe. It is about a foot high and produces spikes of purple flowers in midsummer.

For previous introduction see 67895.

110127. HEDYSARUM SEMENOWII Regel and Herd. Fabaceae.

An erect hardy herbaceous perennial with purplish flowers. Native to Turkistan

For previous introduction see 107546.

110128. HIEROCHLOE ODORATA (L.) Beauv. Poaceae. Sweetgrass.

For previous introduction see 53174.

110129. INULA BHIZOCEPHALA Schrenk. Asteraceae.

A stemless perennial with numerous oblong radical leaves about 3 inches long and 10 to 20 small yellowish flower heads. Native to mountainous regions of central China.

110130 to 110132. IRIS spp. Iridaceae.

110130. IRIS ALBERTI Regel.

For previous introduction and description see 107933.

110100 to 110151-Continued.

110131. Iris ensata Thunb.
Russian iris.

A very hardy Chinese form of the Russian iris, found in moist places.

For previous introduction see 107678.

110132. IRIS SONGARICA Schrenk.

A densely tufted Apogon iris about 1 foot high, with narrow-linear, strongly ribbed leaves up to a foot long and two to three lilac-colored flowers over an inch long. Native to central Asia.

110133. ISATIS COSTATA C. A. Mey. Brassicaceae.

An erect bushy annual about 3 feet high, native to northern India, with oblong leaves 3 to 4 inches long and small yellow flowers in a many-branched panicled raceme.

110134. LIBANOTIS SUBSIMPLEX M. Popov. Apiaceae.

A hardy perennial native to the Alatau Mountains, central Asia, with finely divided leaves and umbels of small white flowers.

110135. LINUM Sp. Linaceae. Flax

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

110136. LINUM HETEROSEPALUM Regel. Linaceae. Flax.

A perennial with erect stems over a foot high, ovate-lanceolate leaves, and corymbs of rather large yellow flowers. Native to Turkistan.

110137. MALCOMIA AFRICANA (Willd.) Ait. Brassicaceae.

A summer-blooming annual about 9 inches high, with lanceolate dentate leaves and racemes of small purple flowers. Native to tropical Africa.

For previous introduction see 107554.

110138. NEOGAYA sp. Apiaceae.

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

110139. NITRARIA SCHOBERI L. Zygophyllaceae.

A hardy, densely-branched shrub of spreading habit, with small bluish-green leaves and small berries which change from light green through red into a violet black. It is native to China, where it grows on strongly alkaline flats.

For previous introduction see 106621.

110140. OXYTROPIS RECOGNITA Bunge. Fabaceae.

A stemless alpine, native to central Asia, with pinnate leaves and racemes of comparatively large buff-colored flowers.

110141. PEDICULARIS DOLICHORH IZA Schrenk. Scrophulariaceae.

A hardy herbaceous perennial about a foot high, with deeply pinnately cut leaves resembling those of Achillea milli-folium and terminal spikes of goldenyellow flowers. Native to central Asia.

110142. POLYGONUM SONGARICUM Schrenk. Polygonaceae.

For previous introduction and description see 107981.

110100 to 110151-Continued.

110143. POTENTILLA SIBIRICA Th. Wolf. Rosaceae.

A perennial alpine, native to Siberia, with erect or ascending stems about 1 foot high, pinnatifid leaves, and dense cymes of small yellow flowers; closely related to Potentilla pennsylvanica, but not so tall and with smaller foliage.

110144. PRIMULA ALGIDA Adam. Primula-

A perennial primrose, white-mealy or yellow-mealy throughout, with oblong-spatulate leaves and deep rose-violet flowers. It is native to marshy areas in Asia Minor and is closely related to *Primula farinosa*.

For previous introduction see 91992.

110145. PRIMULA NIVALIS Pall. Primulaceae.

A hardy primrose, with glabrous, sometimes farinose, lanceolate or oblong-ovate leaves 3 to 5 inches long, and erect white or purple flowers three-fourths of an inch across, in a dense umbel terminating a stout scape 3 to 10 inches high. A variable species with well-marked geographical forms; native to western and central Asia.

110146. PUCCINELLIA DISTANS (L.). Parl. Poaceae.

An erect or decumbent perennial grass, native to Europe and Asia; naturalized in the United States.

For previous introduction see 64793.

110147. RHEUM SONGARICUM Schrenk. Polygonaceae.

A coarse herbaceous perennial with deeply cordate, reniform leaves. Native to alkaline deserts in central Asia.

110148. Rumex confertus Willd. Polygonaceae.

 Λ perennial about 4 feet high, with lanceolate leaves. Native to the mountains of Asia Minor.

110149. Rumex sp. Polygonaceae.

110150. SEMENOVIA TRANSILIENSIS Regel and Herd. Apiaceae.

A perennial about a foot high, native to central Asia, with pinnately dissected leaves and compound umbels of small white flowers.

110151. SPARTIUM JUNCEUM L. Fabaceae. Spanish broom.

For previous introduction see 51151.

110152 to 110171.

From Manchuria. Seeds collected by the Asiatic Expedition. Received March 20, 1935.

Introduced for Department specialists.

110152. AGROPYRON CRISTATUM (L.) Gaertn. Poaceae. Crested wheatgrass.

No. 8-IV. September 7, 1934. From Arshan-yamen, Barga District. Found in sandy, half-desert soil on the border of a deep valley.

110153. ARUNDINELLA ANOMALA Steud. Poaceae. Grass.

No. 7-IV. September 28, 1934. Collected at Barim station, western line of the Chinese Eastern Railway, in a river valley, and from a stony mountain slope.

110152 to 110171—Continued.

For previous introduction see 90130.

110154 to 110158. ELYMUS spp. Poaceae.

110154. ELYMUS DASYSTACHYS Trin.

No. 18a-IV. September 5, 1984. From sand dunes near the Ganjour Monastery, Barga District. A perennial grass 2 to 3 feet high, with creeping rhizomes. Native to central Asia.

110155 to 110158. ELYMUS PSEUDO-AGRO-PYRON Trin.

A perennial grass with a creeping rhizome and flat leaves.

For previous introduction see 107672.

110155. No. 9-IV. August 7, 1934. From marshy alkaline shore of Lake Khangai-nor, Barga District.

110156. No. 10-IV. September 25, 1934. Collected on a damp saline steppe north of the Manlou station, western line of the Chinese Eastern Railway.

110157. No. 10a-IV. October 1934. Collected on an alkaline steppe in the vicinity of Manlou station, western line of the Chinese Eastern Railway.

110158. No. 10c-IV. October 1934. Collected on an alkaline steppe in the vicinity of Manlou station, western line of the Chinese Eastern Railway.

110159. LESPEDEZA BICOLOR Turcz. Fabaceae.

No. 12-IV. October 1, 1934. Collected on the rocky shore of the Tal River, below Barim station, western line of the Chinese Eastern Railway.

For previous introduction see 109823.

110160. OXYTROPIS MYRIOPHYLLA (Pall.) DC. Fabaceae.

No. 11-IV. September 9, 1934. Collected near Khandagai, Barga District, on the sunny side of a steep mountain slope in stony half-desert soil on the road to Khalym-Arshan. A stemless perennial with a large root, pinnate leaves about 8 inches long, and purplish flowers in racemes. Native to the mountains of Siberia.

110161. SETARIA VIRIDIS (L.) Beauv. Poaceae.

No. 6-IV. October 24, 1934. Collected on an alkaline steppe northeast of Manlou station, western line of the Chinese Eastern Railway.

For previous introduction see 109828.

110162 to 110166. STIPA spp. Poaceae. Grass.

110162 and 110163. STIPA BAICALENSIS Roshev.

A tufted perennial grass up to 2 feet tall, native to the steppes of Siberia.

110162 No. 4-IV. September 28, 1934. Collected in a river valley on the mountain slope near Barim station, western line of the Chinese Eastern Railway.

110163. No. 5-IV. September 2, 1934. From a stony steppe, Tal River Valley near Barim station, west-

110152 to 110171—Continued.

ern line of the Chinese Eastern Railway.

110164 to 110166. STIPA SIBIRICA Lam.

From a stony mountain slope of the Tal River Valley, near Barim station, western line of the Chinese Eastern Railway. An erect perennial grass, native to Siberia, up to 4 feet tall with well-developed roots.

For previous introduction see 107703.

110164. No. I-IV and No. Ia-IV. September 28, 1934.

110165. No. 2-IV. July 2, 1934.

110166. No. 3-IV. September 29. 1934.

110167 and 110168. THERMOPSIS LANCEO-LATA R. Br. Fabaceae.

September 6, 1934. From sand dunes in the neighborhood of the Ganjour Monastery, Barga District. A perennial herb up to 2 feet high, with oblong-lanceolate leaflets and bright-yellow flowers in terminal racemes. Native to Siberia and Alaska where it is found in moist sandy places.

For previous introduction see 107705.

110167. No. 16-IV. 110168. No. 17-IV.

110169 and 110170. TRIFOLIUM LUPINASTER L. Fabaceae.

Collected on stony wooded steppes on a mountain slope near Barim station, western line of the Chinese Eastern Railway.

110169. No. 14-IV. September 30, 1934.

110170. No. 15-IV. September 28, 1934.

110171. VICIA sp. Fabaceae.

No. 13-IV. September 28, 1934. From stony steppes in the vicinity of Barim station, western line of the Chinese Eastern Rallway.

110172 to 110196.

From Venezuela. Seeds collected by W. A. Archer, Bureau of Plant Industry. Received March 15, 1935.

Introduced for Department specialists.

110172. ACHRAS ZAPOTA L. Sapotaceae. Sapodilla.

No. 3109. Nispero. Collected February 24, 1935, at Valencia. A small tropical American tree with dark-green leathery leaves and roundish fruits about 2 inches in diameter; these have thin skin and pale-brown, soft, juicy, sweet pulp.

For previous introduction see 103804.

110173. CENTROSEMA PUBESCENS Benth. (Bradburya pubescens (Benth.) Kuntze). Fabaceae.

No. 3078. February 23, 1935. Collected on the highway between Valencia and El Cambul, State of Carabobo.

110174. Brownea grandiceps Jacq. Caesalpiniaceae.

No. 3110. Rosa de monte. Collected February 26, 1935, at Valencia. A handsome evergreen tropical American tree about 30 feet in height, with attractive pinnate foliage and bright-red flowers in large dense capitate spikes borne at the ends of the branches.

For previous introduction see 98808.

110172 to 110196—Continued.

110175. CALOPOGONIUM CAERULEUM (Benth.) Hemsl. Fabaceae.

No. 3077. Semiruco. Collected February 23, 1935, along the highway between Valencia and El Cambul, State of Cara-

For previous introduction and description see 108657.

110176. CALOTROPIS GIGANTEA (L.) R. Br. Asclepiadaceae.

No. 3068. Collected February 16, 1935, on the road between Caracas and Cabo Blanco.

110177. CANAVALIA sp. Fabaceae.

No. 3118. Collected February 26, 1935, between Valencia and Guataporo, State of Carabobo.

110178. CLITORIA TERNATEA L. Fabaceae.

No. 3076. Zapitico de reina. A vine collected on the highway between Valencia and El Cambul, State of Carabobo, February 23, 1935.

110179. TEPHROSIA CANDIDA DC. (Cacandida (DC.) Kuntze). Fabaceae. (Cracca

No. 3111. Barbasco. Collected on the farm of Sr. L. Stelling at Valencia, February 26, 1935.

For previous introduction see 107461.

110180 to 110183. Collected on the high-way between Valencia and El Cam-bul, State of Carabobo, February 23, 1935.

110180. TEPHROSIA SENNA H. B. K. (*Oracca senna* (H. B. K.) Kuntze). Fabaceae.

No. 3088. A shrub with membranous pinnate leaves and violet flowers in racemes 5 or 6 inches long. Native to Colombia.

110181. CROTALARIA INCANA L. Fabaceae.

No. 3080. Espadilla.

For previous introduction see 106572.

110182. CROTALARIA STIPULARIA Desv. Fabaceae.

No. 3096. An annual about a foot high, native to the West Indies.

110183. CROTON sp. Euphorbiaceae.

110184 and 110185. Collected at the market at Valencia, February 24, 1935.

110184. CUCUMIS ANGURIA L. Cu-curbitaceae. West Indian gherkin.

No. 3107. Pepino de monte. A cultivated vegetable used as sweets or desserts, in salads, and in soups.

For 51222. previous introduction

110185. CUCUMIS MELO L. Cucurbi-Muskmelon.

No. 3108.

No. 3102.

For previous introduction see 109989.

1110172 to 110196—Continued.

0186 to 110191. Collected along the highway between Valencia and El Cambul, State of Carabobo, February 23 to 25, 1935. 110186 to 110191.

110186. MOMORDICA CHARANTIA L. Cucurbitaceae. Balsam-pear.

No. 3079. Cunde'amor.

110187. DATURA METEL FASTUOSA (L.) Safford. Solanaceae.

No. 3099. Nongué morada.

110188. DESMANTHUS VIRGATUS (L.) Willd. Mimosaceae.

No. 3081. Sensitiva.

previous introduction For see 109932.

110189. EUPATORIUM ODORATUM L. Asteraceae.

No. 3083. Cruceta.

110190. EUPATORIUM sp. Asteraceae. No. 3100 Cruceta moranda

110191. HURA CREPITANS L. Euphorbiaceae.

No. 3101. Jabillo

110192. MELINIS MINUTIFLORA Beauv. Poaceae. Molasses grass.

No. 3112. Yaragua, a cultivated forage grass collected on the farm of Sr. E. Stelling at Valencia, February 26, 1935.

For previous introduction see 105780.

110193 and 110194. Collected on the highway between Valencia and El Cambul, February 23 and 25, 1935.

110193. Sapindus Saponaria L. Sapindaceae. Southern soapberry. Sap-

No. 3087. Para para. A tree 50 feet high.

For previous introduction 109869.

110194. SCOPARIA DULCIS L. Scrophulariaceae.

No. 3086. Escobilla. annual 1 to 3 feet high. A glabrous

110195. STIZOLOBIUM PRURITUM (Wight) Piper and Tracy. Fabaceae.

No. 3113. Pica pica. Collected between Valencia and Guataporo, February 26, 1935. A vine with curved pods covered with brown stinging hairs.

For previous introduction see 89016.

110196. XYLOPIA AROMATICA (Lam.) Baill. Annonaceae.

No. 3089. Fruta de burra. Collected along the highway between Valencia and El Cambul, State of Carabobo, February 23, 1935. A low tree about 20 feet high. Native to the Guianas.

110197. Malus sylvestris Mill. Malaceae. Apple.

om Canada. Scions presented by Prof. M. B. Davis, Central Experiment Station, Ottawa. Received March 30, 1935.

Lawfam. Introduced for Department specialists.

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