

PLANT MATERIAL INTRODUCED BY THE DIVISION OF FOREIGN PLANT INTRODUCTION, BUREAU OF PLANT INDUSTRY, JANUARY 1 TO MARCH 31, 1930 (Nos. 82600-86755)

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INTRODUCTORY STATEMENT

This present inventory of materials received between January 1 and March 31, 1930 (Nos. 82600 to 86755), is made up mainly of seeds and plants collected by the bureau's agricultural explorers.

P. H. Dorsett and W. J. Morse during this period sent from the Orient more than 1,700 strains of soybeans, besides a collection of Japanese persimmon varieties (*Diospyros kaki*, Nos. 83707–83711, 83783–83792, 85698–85722, 85811–85834), and smaller quantities of forage crops and ornamentals. From Persia and Turkestan W. E. Whitehouse sent in a collection of seeds

From Persia and Turkestan W. E. Whitehouse sent in a collection of seeds and scions of peaches (*Amygdalus* spp., No. 82646–82648, 86284–86302), plums (*Prunus* spp., 82672–82679, 83751, 83752, 86380–86390), and pistache (*Pistacia* vera, Nos. 83734–83750, 85906–85928, 86368–86379). He also sent in a collection of watermelon seeds (*Citrullus vulgaris*, Nos. 82560–82569, 86311–86321), and melon seeds (*Cucumis melo*, Nos. 86323–86338), which will be used for experimental purposes.

R. K. Beattie sent in his last shipment of Japanese chestnuts (Castanea crenata, Nos. 85767-85804, 85969-85979) before leaving the Orient. H. L. Westover, who during this period has been traveling in Turkestan and

H. L. Westover, who during this period has been traveling in Turkestan and Europe, sent in many forage crops, including vicias, trifoliums, and over 250 strains of alfalfa (*Medicago sativa*, Nos. 82601–82626, 83728, 84337–84451, 85997, 85998, 86522–86664).

A collection of oats and barley (Nos. 86176-86210) has been received from Prof. A. Kol, Chief, Institute of Applied Botany, Leningrad, Union of Socialistic Soviet Republics. A large collection of barley and wheat (Nos. 82681-83682) was received from the University of Nanking, China, and will be used by the department specialists in their experimental work.

department specialists in their experimental work. J. F. Rock, traveling in the Orient under the direction of the National Geographic Society, Washington, D. C., has sent in a large collection of ornamentals including primulas, cotoneasters, enkianthus, gentians, loniceras, and meconopsis, as well as 165 rhododendrons.

Dr. H. S. Fawcett, of the University of California, during this period has been in the Mediterranean region and from there has sent seeds and scions of *Citrus* spp., *Prunus* spp., *Amygdalus persica*, and *Phoenix reclinata*, hoping through these introductions to contribute to the solution of horticultural problems in California.

61034-31----1

From Darjiling, India, the curator of the Lloyd Botanic Garden presented a collection of seeds of ornamentals and trees (Nos. 86665-86692) adapted for growing in the southern United States.

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

KNOWLES A. RYERSON, Principal Horticulturist, in Charge.

DIVISION OF FOREIGN PLANT INTRODUCTION, Washington, D. C., April 30, 1931.

82600. MANICARIA SACCIFERA Gaertn. | Phoenicaceae. Palm.

From J. E. Higgins, Director, Plant Intro-duction Gardens, Summit, Canal Zone. Received January 2, 1930.

Unlike most other palms, this Brazilian species has entire leaves, which become about 30 feet in length and 5 feet in width. The trunk is erect, ringed, and unarmed, and is 15 to 20 feet high. The natives of Brazil use the immense leaves of this palm for thatching their huts and also for making a coarse cloth.

For previous introduction see No. 61629.

82601 to 82627.

- e. Seeds collected by H. L. agricultural explorer, Bureau From France. Westover, agricultural explorer, Bureau of Plant Industry. Received January 2, 1930
 - 82601 to 82626. MEDICAGO SATIVA L. Fa-Alfalfa.
 - 82601. From the farm of Roux Ripert, southeast of Avignon; 1928 crop.
 - 82602. November 27, 1929. From the village of Benet, border of marshes, Niort.
 - 82603. November 27, 1929. From Mau-rice Boissinot, dealer, Thouars.
 - 804. November 27, 1929. From marshlands west of Niort and south of Fontenay, at the village of Vix. 82604. November
 - 82605. November 26, 1929. From Ber-nard Pamfroux, St. Maixent.
 - 25, 82606. November 1929. From northwest of the village of Turenne.
 - 82607. November 26, 1929. Five village of St. Jean d'Angely. From the
 - 82608. November 27, 1929. From Pathenay. Local production.

609. November 27, 1929. Thouars. Local production. 82609. November From 82601 to 82627-Continued.

- 82610. November 26, 1929. From the village of Pamproux.
- 811. November 26, 1929. Locally grown seed from the 1928 crop ob-tained in Niort. 82611. November Locally
- 82612. November 27, 1929. From Fontenay le Comte.
- 82613. From Mirabel, Avignon; 1929 crop. northeast of
- 82614. From the farm of Roux Ribert, Mouries; 1929 crop.
- 82615. From the vicinity of Entre-chaux, northeast of Avignon; 1929 crop.
- 82616. From St. Saturnin les Avignon; 1929 crop.
- 82617. From 617. From Piegou, Avignon; 1929 crop. northeast of
- 82618. From the farm of Roux Ripert, southeast of Avignon; 1929 crop.
- 82619. From Figeae.
- 82620. November 26, 1929. From Lusignant.
- 82621. November 27, 1929. vicinity of Foussais. From the
- 82622. November 25, 1929. From the village of Turrenne.
- 82623. November 23, 1929. From Boussoe.
- 82624. November 23, 1929. cial mixture from Figeae. Commer-
- From As-82625. November 23, 1929. sier.
- 82626. November 23, 1929. From Camboulet.
- 82627. TRIFOLIUM PRATENSE Faba-L. Red clover. ceae.

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

recognized horticultural nomenclature. It is a well-inown 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 inven-tories 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.

82628 and 82629.

- Colombia. Seeds presented lo Villa. Received January From Bogotá, C by Hernando by Her. 2, 1930.
 - 82628, PASSIFLORA MIXTA L. f. Passifloraceae.

This is the common curuba sold in the markets of Bogotá, Colombia.

82629. PHYSALIS PERUVIANA L. Peruvian groundcherry.

A small shrub which produces a very tasteful fruit which can be served in sirup.

82630. TRITICUM AESTIVUM L. (T. vulgare Vill.). Poaceae.

Common wheat.

rom Japan. Seeds collected by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received January 30, 1930. From Japan.

No. 3076. Nodamachi, January S, 1930. This wheat, said to have been imported from Canada, is roasted and used in the manufacture of soy sauce. One firm uses 20,000 bushels of wheat and 20,000 bu-shels of soybeans yearly for this purpose.

82631. EUTERPE sp. Phoenicaceae. Palm.

From Cali, Colombia. Seeds presented by M. J. Rivero. Received January 4, 1930.

The Euterpes are slender erect spineless palms of graceful habit, with feathery pinnate foliage.

82632 to 82636.

From Hanoi, Indo-China. Seeds presented by Mr. Poilane, Institut des Recherches Agronomique de l'Indochine. Received January 2, 1930.

82632 to 822634. CASTANOPSIS spp. Fagaceae.

82632. CASTANOPSIS SP.

82633. CASTANOPSIS SD.

82634. CASTANOPSIS sp.

82635 and 82636. PYRUS spp. Malaceae. Pear.

82635. PYRUS Sp.

82636. PYRUS sp.

82637 to 82640.

From Doleib Hill, Nalakal, Anglo-Egyptian Sudan, Africa. Seeds presented by H. B. Gephardt, American Mission. Received January 2, 1930.

82637, BRACHIARIA Sp. Poaceae. Grass.

A biennial or perennial grass with thick juicy stems 6 to 7 feet tall; grows in heavy clayey land. Seeds are eaten by the natives, and the plant is highly palatable to cattle.

82638, ERIOCHLOA ACROTRICHA (Steud.) Hack. Poaceae. Grass.

Akwath grass. This grows in water in heavy soil; the stems are 1 to 2 feet tall. Natives eat the seeds, and the plant is said to be very palatable for cattle.

82639. PANICUM sp. Poaceae. Grass.

Aginye grass. This grows to a height of 3 or 4 feet in dry clay soil. Seeds eaten by the natives; plants palatable for cattle.

82637 to 82640-Continued.

82640. SORGHUM LANCEOLATUM Stapf. Grass. Poaceae.

Abarro grass. Stems 7 to 9 feet tall. Grows in open soil on river banks. Seeds eaten by natives; plants palatable for cattle.

82641. GREVILLEA LEUCOPTERIS Meisn. Proteaceae.

From Santa Monica, Calif. Seeds pre-sented by Hugh Evans. Received Janu-ary 4, 1930.

A large evergreen shrub, 4 to 8 feet high, with handsome pinnate, pale-green foliage, and many-flowered loose terminal racemes of pure-white flowers. These ra-cemes are much larger than those of G. banksii.

82642 and 82643.

om Mount Silinda, Southern Rhodesia, Africa. Seeds presented by Dr. W. L. Thompson. Received January 6, 1930. From

82642. RANDIA sp. Rubiaceae.

Madododo. The edible fruit, which is considered delicious by the natives, seems to have remarkable keeping qualities.

82643. (Undetermined.)

A woody plant which grows in the Mount Silinda Forest. The very attrac-tive white flowers are trumpet-shaped, the tube being 4 or 5 inches in length. In the forest it is included to produce rather trailing branches, but on the ground it grows as a compact bush.

82644 to 82663.

- From the Union of Socialistic Soviet Re-publics. Seeds collected by W. E. White-house, agricultural explorer, Bureau of Plant Industry. Received January 6, 1930.
 - 82644, ALLIUM CEPA L. Liliaceae. Onion.

No. 22. August 22, 1929. Vicinity of Alma Ata, Turkestan.

82645. AMYGDALUS COMMUNIS L. (Prunus amygdalus Stokes). Amygdalaceae. Almond.

No. 4. August 13, 1929. Tashkent, Turkestan. From wild trees near Ferghana.

- 82646 to 82648. AMYGDALUS PERSICA L. (Prunus persica Stokes). Amygdala-Peach.
 - 82646. No. 1. September 4, 1929. An-dijan, Turkestan. Flesh yellow, red around stone, freestone, quality good; rarely found on market.
 - 82647. No. 1. Tashkent. Fruits pale greenish yellow, covered with deep orange-red over about one-third; of irregular shape; inclined to taper off to a fairly pronounced apex, with a shallow suture; diameter 2 to 3 inches; flesh yellow; stained red around plt; freestone. Matures Au-gust 10 to 15. A peach of good quality, closely resembling the El-berta. berta.
 - 82648. (No number.) Andijan Turke-stan. Grown locally. Flesh pale yellow to cream; tinged with red around pit, freestone, of good quality.

82644 to 82663-Continued.

82649. BRASSICA OLERACEA CAPITATA L. Brassicaceae. Cabbage.

No. 19. Tashkent, Turkestan. Grown locally.

- 82650 to 82654. CITRULLUS VULGARIS Schrad. Cucurbitaceae. Watermelon.
 - 82650. No. 20. August 12, 1929. Tashkent, Turkestan. A locally grown early watermelon about a foot long and 9 inches in diameter. Skin nale green with slightly darker.

and 9 inches in diameter. Skin pale green with slightly darker, somewhat subdued stripes. Flesh pink, of fine texture, with a medium rind. An attractive melon of excellent quality.

- 82651. No. 23. August 22, 1929. Alma Ata, Turkestan. An early, round melon of medium size, grown locally; light green with prominent darkgreen stripes; flesh pink; of good quality.
- 82652. No. 24. August 22, 1929. Alma Ata, Turkestan. A light green, early, round melon, grown locally; fiesh red; quality fair to poor.
- 82653. No. 25. August 22, 1929. Alma Ata, Turkestan. A dark green locally grown round melon with red fiesh of good quality.
- 82654. No. 26. August 22, 1929. Alma Ata, Turkestan. A long narrow dark green locally grown melon; flesh red; quality fair.
- 82655 to 82659. CUCUMIS MELO L. Cucurbitaceae. Melon.
 - 82655. No. 6. August 10, 1929. Kasalinsk, Turkestan. Yellowish bronze with dark-green stripes about one-fourth inch wide. Surface irregularly covered with numerous dark greenish bronze dots, giving a speckled appearance. Medium size, roundish shape, somewhat inclined to oblong. Flesh creamy yellow; quality good.
 - 82656. No. 7. August 10, 1929. Kasalinsk, Turkestan. Color pale yellowish green, dots scattered, numerous, dark green; stripes dark green; medium to small size, but fairly uniform; shape round, slightly oblate; flesh of fine texture, cream color, juicy; of good quality but a poor shipper.
 - 82657. No. 8. August 10, 1929. Orenburg, Turkestan. Shape long and narrow; color pale yellow; size medium to large; quality good.
 - 82658. No. 19. August 12, 1929. Plant Breeding Station, Tashkent, Turkestan. Local variety; shape long and narrow; skin with gray netting; flesh creamy white; of very good flavor.
 - 82659. No. 29. August 23, 1929. Alma Ata, Turkestan. A melon of good quality.
- 82660. MALUS SYLVESTRIS Mill. (Pyrus malus L.). Malaceae. Apple.

No. 21. August 22, 1929. Alma Ata, Turkestan.

82661 to 82663. PHASEOLUS spp. Fabaceae.

August 7, 1929. Obtained from the Saratov Experiment Station.

82644 to 82663—Continued.

82661, PHASEOLUS COCCINEUS L. Scarlet runner.

No. 17. Lopata. A white bean, originally from Verones Station, Institute of Applied Botany and Plant Breeding, Leningrad.

- 82662 and 82663. PHASEOLUS VULGARIS L. Common bean.
 - 82662. Ukrainka. A variety grown locally, obtained from a Russian peasant.
 - 82663. No. 18. A yellow bean, pure line No. 43621 of the Plant Breeding Department, Saratov Experiment Station.

82664 to 82668.

From Algeria. Seeds and scions collected by Dr. H. S. Fawcett, University of California. Received February 20, 1930.

82664. CITRUS NOBILIS DELICIOSA (Ten.) Swingle. Rutaceae. Mandarin orange.

No. 53. El Galea Oasis, January 30, 1930. Scions of a mandarin orange which is especially large and fine looking. The fruit is flat with a high color and seems different from varieties grown in California.

82665. GOSSYPIUM NANKING SOUDANENSIS Watt. Malvaceae. Cotton.

No. 56. El Galea Oasis, January 30, 1930. An indigenous cotton grown by the natives.

For previous introduction see No. 51949.

82666. PHOENIX RECLINATA Jacq. Phoenicaceae. Senegal date palm.

No. 57. February 4, 1930. A date palm 25 or more feet tall, which has brightgreen pinnate leaves with rigid leaflets. Native to tropical Africa.

For previous introduction see No. 75224.

82667. PRUNUS ARMENIACA L. Amygdalaceae. Apricot.

No. 51. Mesh-mesh. Laghouat Oasis, January 26, 1930. Scions from a large healthy seedling tree, a branch of which was still holding its leaves on January 28, 1930.

82668. PRUNUS ARMENIACA L. Amygdalaceae. Apricot.

No. 52. Mesh-mesh. January 30, 1930. El Galea Oasis E., 1,000 kilometers south of Algiers. Scions from seedling trees, doing well in a climate probably more severe than that of Indio, Calif.

82669 and 82670.

From Manila, Philippine Islands. Seeds presented by P. J. Wester. Received February 27, 1930.

82669. EVODIA BIDLEYI Hochr. Rutaceae.

A small shrub, 1 to 2 feet high, with opposite leaves having linear-lanceolate leaflets with undulate margins and panicles of small white flowers, followed by 2-lobed to 4-lobed greenish fruits inclosing small black seeds. Native to the Malayan region.

82670. HIBISCUS PUNGENS Roxb. Malvaceae. Rosemallow.

An erect, bristly herbaceous perennial, native to the tropical Himalayas, with

82669 and 82670—Continued.

roundish heart-shaped, deeply lobed leaves 5 to 8 inches long and yellow flowers with purple centers 5 inches in diameter.

For previous introduction see No. 68338.

82671. CUCUMIS MELO L. Cucurbita-Melon. ceae.

From Bombay, India. Seeds presented by Dr. S. G. Williams, through the American Consulate, Bombay. Received February 28, 1930.

Kabul. A melon which grows as large as watermelon and is similar in flavor to the Honey Dew.

82672 to 82680.

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- From the Union of Socialistic Soviet Re-publics. Seeds collected by W. E. White-house, agricultural explorer, Bureau of Plant Industry. Received January 6, 1930.
 - 82672 to 82677. PRUNUS ARMENIACA T. Amygdalaceae. Apricot.

Collected in the mountains near Alma Ata, Turkestan. Grows wild and with-stands low temperatures which kill out the European varieties of apricots grown in the orchards close to Alma Ata.

82672. No. 11. Collected August 22, 1929.						
82673. No. 12. Collected August 24, 1929.						
82674. No. 13. Collected August 24, 1929.						
82675. No. 14. Collected August 24, 1929.						
82676. No. 15. Collected August 24, 1929.						
82677. No. 16. Collected August 22, 1929, near Lake Issyk.						
82678 and 82679. PRUNUS CERASUS L. Amygdalaceae. Sour cherry.						
82678. No. 9. Volga River, above Sara- tov. A local strain of a wild form.						
82679. No. 10. Tolovaya, Vorenez dis- trict. A seedling sour cherry.						
82680. PYRUS HETEROPHYLLA Regel and Schmalh. Malaceae. Pear.						
From Alampa Si, a pass in the moun- tains west of Dzhelalabad, Turkestan. Wild pear.						
2681 to 83682.						
rom Nanking, China. Seeds presented by the University of Nanking. Received September 16, 1929. Numbered in Janu- ary, 1930.						
82681 to 82688. HORDEUM spp. Poaceae. Six-rowed barley.						
82681. HORDEUM VULGARE PALLIDUM Seringe.						
No. 5085. From Nanhsuchow.						
82682. HORDEUM VULGARE TRIFURCATUM (Schlecht.) Beaven.						
No. 5086. From Kweiteh.						
82683. HORDEUM VULGARE HORSFORDIA- NUM Wittmack.						

No. 5087. From Kweiteh.

82684 to 82686. HORDEUM VULGARE PAL-LIDUM Seringe. From Nanhsuchow. 82684. No. 5088. 82685. No. 5089. 82686. No. 5090. 82687. HORDEUM VULGARE COELESTE L. No. 5091. From Nanhsuchow. 82688. HORDEUM VULGARE PALLIDUM Seringe. No. 5092. From Nanhsuchow. 82689 to 83682. TRITICUM spp. Poaceae. 82689 to 83260. TRITICUM AESTIVUM L. (T. vulgare Vill.). Common wheat. 82689. A 1. 82729. A 47. 82730. A 48. 82690. A 2. 82731. A 49. 82691. A 4. 82732. A 50. 82692. A 5. 82693. A 7. 82733. A 51. 82694, A 8. 82734. A 54. 82695. A 10. 82735. A 55. 82696. A 11. 82736, A 56, 82697. A 12. 82737. A 57. 82738. A 58. 82698. A 13. 82699. A 14. 82739. A 60. 82700, A 15. 82740. A 61. 82741. A 62. 82701. A 16. 82702. A 17. 82742. A 63. 82703. A 18. 82743. A 64. 82704. A 19. 82744. A 65. 82705. A 20. 82745. A 66. 82706. A 22. 82746. A 68 (a) 82747. A 68 (b) 82707. A 23. 82708. A 24. 82748. A 69. 82709. A 25. 82749. A 70. 82750. A 71. 82710. A 26. 82711. A 27. 82751. A 73. 82712. A 28. 82752. A 74. 82713. A 29. 82753. A 75. 82714. A 30. 82754. A 78. 82715. A 31. 82755. A 80. 82716. A 32. 82756. A 81. 82717. A 33. 82757. A 82. 82758. A 83. 82718. A 34. 82719. A 35. 82759. A 84. 82720. A 36. 82760. A 85. 82721. A 37. 82761, A 86. 82722, A 38. 82762. A 87. 82723. A 39. 82763, A 88. 82724. A 40. 82764. A 89. 82725. A 41. 82765. A 90. 82726. A 42. 82766, A 91. 82767. A 93. 82727. A 44. 82728, A 45, 82768. A 95.

⁸²⁶⁸¹ to 83682—Continued.

82681 to 83682-Contir	uied	82681 to 83682-Contin	ued.
82769, A 96.	82826. B 22.	82883. C 4 (a).	82935. C 56.
82770. A 97.	82827. B 23.	82884. C 4 (b).	82936. C 57.
82771. A 98.	82828, B 24.	82885. C 5 (a).	82937. C 58.
82772. A 99.	82829. B 25.	82886, C 5 (b).	82938, C 59.
82773. A 101.	82830. B 26.	82887. C 6 (a).	82939. C 60.
82774. A 102.	82831. B 27 (a).	82888, C6 (b).	82940. C 61.
82775. A 103.	82832. B 27 (b).	82889, C 7.	82941, C 62.
82776. A 104 (a).	82833. B 28 (a).	82890, C 8 (a).	82942. C 63.
82777. A 104 (b).	82834. B 28 (b).	82891, C 8 (b).	82943. C 64.
82778. A 105.	82835. B 29.	82892, C 9.	82944. C 65.
82779. A 106.	82836. B 30.	82893. C 10.	82945. C 66.
82780. A 108.	82837. B 31 (b).	82894, C 11.	82946. C 67.
82781. A 109.	82838. B 32 (a).	82895, C 12.	82947, C 68.
82782. A 121.	82839. B 32 (b) 1.	82896, C 13.	82948, C 69.
82783. A 122.	82840. B 32 (b) 2.	82897. C 14.	82949, C 70.
82784. A 123.	82841. B 33.	82898. C 15.	82950, C 71.
82785, A 124.	82842. B 34.	82899. C 16.	
82786, A 125.	82843. B 35. 82844. B 36.		82951. C 72.
82787. A 126. 82788. A 128.	82845. B 37 (a).	82900, C 17.	82952. C 73.
82789, B1 (a).	82846. B 37 (b).	82901. C 18.	82953. C 74 (a).
82790. B1 (b) 1.	82847. B 38 (a).	82902, C 21.	82954. C 74 (b).
82791. B 1 (b) 2.	82848. B 38 (b).	82903. C 23.	82955. C 75.
82792. B 2 (a).	82849. B 39.	82904. C 24.	82956. C 78.
82793. B 2 (b) 1.	82850. B 40.	82905. C 25.	82957. C 79(a).
82794. B 2 (b) 2.	82851. B 41.	82906. C 26.	82958. C 79 (b).
82795. B 2 (b) 3.	82852. B 42.	82907. C 27.	82959. C.80.
82796. B 2 (b) 4.	82853. B 43.	82908. C 28.	82960. C 81.
82797. B3 (a).	82854. B 44.	82909. C 29.	82961. C 82.
82798. B 3 (b).	82855. B 45.	82910. C 30.	82962. C 83.
82799, B3 (c). 82800, B4 (a).	82856. B 46. 82857. B 47.	82911. C 31.	82963. C 84.
82801. B 4 (b).	82858. B 48.	82912. C-32.	82964. C 85.
82802. B 5.	82859. B 49.	82913. C 33.	82965. C 86.
82803. B 6 (a).	82860. B 53.	82914. C 34.	82966. C 87.
82804. B6 (b) 1.	82861. B 54.	82915. C 35.	82967. C 88.
82805. B6 (b) 2.	82862. B 55.	82916. C 36.	82968. C 89.
82806, B6 (b) 3.	82863. B 56.	82917. C 37 (a).	82969, C 90.
82807. B7 (a).	82864. B 57.	82918. C 37 (b).	82970. C 92.
82808. B7 (b).	82865. B 58.	82919. C 38.	82971. C 94.
82809. B 8.	82866. B 59.	82920. C 39.	82972. C 95 (a).
82810. B 9. 82811. B 10.	82867. B 60. 82868. B 61.	82921. C 41.	82973. C 95 (b).
82812. B 11 (a).	82869. B 62.	82922. C 42.	82974. C 96.
82813, B 11 (b).	82870. B 63.	82923. C 43.	282975. С 97 (a).
82814. B 12.	82871. B 64.	82924. C 44.	82976. C 97 (b).
82815. B 13.	82872. B 65.	82925. C 45.	82977. C 98.
82816. B 14.	82873. B 66.	82926. C 46.	82978. C 99.
82817. B 15 (a).	82874. B 67.	82927. C 48.	82979. C 100.
82818. B 15 (b).	82875. B 68.	82928. C 49.	82980. C 101.
82819, B 16. 82820, B, 17.	82876. B 72. 82877. B 76.	82929. C 50.	82981. C 102.
82821. B 18.	82878. C 1.	82930. C 51.	82982. C 103.
82822. B 19 (a).	82879, C 2 (a).	82931. C 52.	82983. C 104.
82823. B 19 (b).	82880. C 2 (b).	82932. C 53.	82984. C 105.
82824, B 20.	82881. C 3 (a).	82933. C 54.	82985. C 106.
82825. B 21.	82882. C 3 (b).	82934. C 55.	82986. C 108.

Seven Control Seven <	82681	to 836	382—Continu	ha		82681 to 836	182—Continu	eđ.	
\$2986. C 109 (b). \$3040. D 36. \$3092. D 95. \$3143. E 12. \$2986. C 110. \$3041. D 37. \$3093. D 96. \$3144. E 13. \$2995. C 111. \$3044. D 38. \$3094. D 97. \$3144. E 15. \$2992. C 117. \$3044. D 40. \$3095. D 98. \$3144. E 15. \$2992. C 117. \$3044. D 40. \$3095. D 98. \$3144. E 15. \$2992. C 117. \$3044. D 42. \$3097. D 102. \$3145. E 17. \$2995. D 1 (b) 1. \$3047. D 43. \$3099. D 104. \$3156. E 10. \$2995. D 1 (b) 2. \$3048. D 44. \$3100. D 105. \$3155. E 20. \$2997. D 1 (c). \$3049. D 45. \$3100. D 106. \$3156. E 21 (a). \$3000. D 3 (a). \$3055. D 44. \$3100. D 107. \$3155. E 24. \$3000. D 3 (a). \$3055. D 51. \$3106. D 11. \$3156. E 25 (a). \$3002. D 4. \$3056. D 54. \$3100. D 11. \$3156. E 27. \$3006. D 6 (b). \$3065. D 55. \$3111. D 118. \$3156. E 27. \$3006. D 6 (b). \$3067. D 53. \$3110. D 13. \$3167. D 23. \$3167. D 23. <td< th=""><th>0.001</th><th></th><th></th><th></th><th>D 35 (a)</th><th></th><th></th><th></th><th>E 11 (a)</th></td<>	0.001				D 35 (a)				E 11 (a)
\$2999. C 110. \$3041. D 37. \$3093. D 96. \$3144. E 13. \$2990. C 111. \$3042. D 38. \$3095. D 97. \$3144. E 13. \$2990. C 111. \$3044. D 40. \$3095. D 98. \$3144. E 15. \$2992. C 117. \$3044. D 40. \$3095. D 98. \$3144. E 13. \$2992. C 117. \$3044. D 40. \$3096. D 101. \$3147. E 16. \$2995. D 1 (b) 1. \$3047. D 43. \$3098. D 108. \$3144. E 13. \$2995. D 1 (b) 2. \$3048. D 44. \$3099. D 104. \$3150. E 10. \$2995. D 2 (a). \$3045. D 45. \$3101. D 106. \$3155. E 24. \$3001. D 108. \$3145. E 12. \$3000. D 3 (a). \$3085. D 40. \$3104. D 109. \$3155. E 24. \$3004. D 109. \$3155. E 25. \$3105. D 111. \$3156. E 25. \$3106. D 112. \$3157. E 25 (b). \$3004. D 6 (a). \$3065. D 51. \$3106. D 112. \$3156. E 27. \$3006. D 52. \$3106. D 113. \$3156. E 27. \$3006. D 10. \$3066. D 55. \$3111. D 118. \$3160. E 25. \$3106. D 12. \$3164. E 13. \$3006. D 10. \$3006. D 56. \$3111. D 12. \$3164. E 13. \$3065. D 57. \$3006. D 11. \$3066. D 57. \$3111. D 12. \$3164. E 33. \$3016. E 27.					· · · ·				
\$2990. C111. \$3042. D 38. \$3094. D 97. \$3145. E 14. \$2990. C111. \$3044. D 40. \$3096. D 98. \$3145. E 14. \$2998. C117. \$3044. D 40. \$3098. D 10. \$3147. E 16. \$2998. C118. \$3045. D 41. \$3099. D 10. \$3145. E 17. \$2998. D 1 (b). \$3045. D 43. \$3099. D 10. \$3145. E 17. \$2999. D 1 (b). \$3048. D 44. \$3099. D 10. \$3151. E 20. \$2999. D 2 (b). \$3061. D 47. \$3100. D 106. \$3151. E 21 (a). \$2999. D 2 (b). \$3061. D 47. \$3103. D 108. \$3154. E 22. \$3000. D 3 (a). \$3082. D 48. \$3104. D 109. \$3155. E 24 (a). \$3002. D 4. \$3064. D 50. \$3108. D 11. \$3156. E 25 (a). \$3003. D 5. \$3065. D 51. \$3107. D 11. \$3156. E 27 (b). \$3004. D 6 (a). \$3067. D 53. \$3109. D 11. \$3156. E 27 (a). \$3006. D 7. \$3086. D 54. \$3110. D 118. S156. E 24 (a). \$3007. D 8. \$3060. D 55. \$3111. D 118. S156. E 27 (a). \$3006. D 7. \$3086. D 54. \$3109. D 11. \$3156. E 27. \$3006. D 7. \$3086. D									
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82999. D 2 (b). 83051. D 47. 83103. D 108. 83154. E 22. 83000. D 3 (a). 83052. D 48. 83104. D 109. 83155. E 24. 83001. D 3 (b). 83053. D 49. 83105. D 111. 83156. E 25 (a). 83002. D 4. 83065. D 51. 83107. D 113. 83156. E 25 (a). 83006. D 6 (a). 83065. D 52. 83109. D 117. 83159. E 27. 83006. D 6 (b). 83065. D 55. 83110. D 118. 83169. E 28. 83007. D 8. 83065. D 56. 83111. D 119. 83161. E 29. 83006. D 9. 83065. D 56. 83114. D 123. 83164. E 33. 83001. D 11. 83062. D 56. 83114. D 123. 83164. E 33. 83011. D 12. 83063. D 56. 83114. D 123. 83164. E 33. 83013. D 14. 83064. D 59. 83114. D 123. 83164. E 33. 83014. D 15. 83066. D 62. 83118. D 127. (a). 83167. E 36. 83015. D 14. 83064. D 63. 83119. D 127. (b). 83164. E 37. 83014. D 17. 83064. D 64. 83120. D 127. (c). 83164. E 37. 83015. D 20. 83071. D 67. 83124. D 130. 83173. E 44.		82997.	D1 (c).	83049.	D 45.	83101.	D 106.	83152.	E 21 (a).
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83002, D 4. 83054, D 50. 83106, D 112. 83157, E 25 (b). 83003, D 5. 83055, D 51. 83106, D 112. 83157, E 25 (b). 83004, D 6 (a). 83057, D 53. 83100, D 113. 83158, E 26 83005, D 6 (b). 83057, D 53. 83100, D 118. 83150, E 27. 83006, D 7. 83057, D 55. 83110, D 118. 83160, E 28. 83007, D 8. 83069, D 55. 83111, D 119. 83164. E 29. 83009, D 10. 83061, D 57. 83114, D 128. 83164. E 33. 83009, D 10. 83062, D 58 (a). 83114, D 128. 83164. E 33. 83011, D 12. 83064. D 59. 83115, D 124. (spring). 83014, D 15 (a). 83006, D 62. 83118. D 127 (a). 83166, E 35. 83014, D 15 (b). 83007. D 66. 83112, D 128. 83164. E 37. 83016, D 17. 83006, D 62. 83112, D 127 (b). 83164. E 37. 83016, D 17. 83007. D 66. 83122, D 129 (b). 83177. E 36. 83017, D 18. 83070, D 66. 83122, D 129 (b). 83174. E 41. 83022, D 23 (a). 83076, D 73. 83126, D 131 (a). 83174. E 44.		83000.	D3 (a).	83052.	D 48.	83104.	D 109.	83155.	E 24.
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\$3029. D 28 (a). \$3081. D 79. \$3132. E 2. \$3182. E 53. \$3030. D 28 (b). \$3082. D 80. \$3133. E 3. \$3183. E 54. \$3031. D 29. \$3083. D 81. \$3134. E 4. \$3184. E 55. \$3032. D 30. \$3084. D 84. \$3135. E 5. \$3185. E 56. \$3033. D 31. \$3086. D 88. \$3136. E 6. \$\$186. E 58. \$3034. D 33 (a). \$3086. D 89. \$\$137. E 7. \$\$3188. E 60. \$3036. D 34. \$\$3088. D 91. \$\$3139. E 9. \$\$3189. E 61. \$3037. D 35 (a). \$3089. D 92. \$\$3140. E 10. \$\$3190. E 62.		83028.	D 27.	83080.	D 78.			83181.	E 52.
83031. D 29. 83083. D 81. 83134. E 4. 83184. E 55. 83032. D 30. 83084. D 84. 83135. E 5. 83185. E 56. 83033. D 31. 83085. D 88. 83136. E 6. 83186. E 58. 83034. D 33 (a). 83086. D 89. 83137. E 7. 83187. E 59. 83035. D 33 (b). 83087. D 90. 83138. E 8. 83189. E 61. 83036. D 34. 83088. D 91. 83139. E 9. 83189. E 61. 83037. D 35 (a). 83089. D 92. 83140. E 10. 83190. E 62.		83029.	D 28 (a).	83081.	D 79.			83182.	E 53.
83032. D 30. 83084. D 84. 83135. E 5. 83185. E 56. 83033. D 31. 83085. D 88. 83136. E 6. 83185. E 58. 83034. D 33 (a). 83086. D 89. 83137. E 7. 83187. E 59. 83035. D 33 (b). 83087. D 90. 83138. E 8. 83189. E 60. 83036. D 34. 83088. D 91. 83139. E 9. 83189. E 61. 83037. D 35 (a). 83089. D 92. 83140. E 10. 83190. E 62.		83030.	D 28 (b).	8308 2 .	D 80.	83133.	E 3.	•	
83033. D 31. 83085. D 88. 83136. E 6. 85186. E 58. 83034. D 33 (a). 83086. D 89. 83137. E 7. 83187. E 59. 83035. D 33 (b). 83087. D 90. 83138. E 8. 83188. E 60. 83036. D 34. 83088. D 91. 83139. E 9. 83189. E 61. 83037. D 35 (a). 83089. D 92. 83140. E 10. 83190. E 62.		83031.	D 29.	83083.	D 81.	83134.	E 4.	83184.	E 55.
83034. D 33 (a). 83086. D 89. 83137. E 7. 83187. E 59. 83035. D 33 (b). 83087. D 90. 83138. E 8. 83188. E 60. 83036. D 34. 83088. D 91. 83139. E 9. 83189. E 61. 83037. D 35 (a). 83089. D 92. 83140. E 10. 83190. E 62.		83032.	D 30.	83084.	D 84.	83135.	E 5.	83185.	E 56.
83035. D 33 (b). 83087. D 90. 83138. E 8. 83188. E 60. 83036. D 34. 83088. D 91. 83139. E 9. 83139. E 61. 83037. D 35 (a). 83089. D 92. 83140. E 10. 83190. E 62.						83136.	E 6.	83186.	E 58.
83036. D 34. 83088. D 91. 83139. E 9. 83189. E 61. 83037. D 35 (a). 83089. D 92. 83140. E 10. 83190. E 62.						83137.	E 7.	83187.	E 59.
83037. D 35 (a). 83089. D 92. 83140. E 10. 83190. E 62.			. ,			83138.	E 8.	83188.	E 60.
83038. D 35 (b). 83090. D 93. 83141. E 11. 83191. E 63.					1				
		83038.	D 35 (b).	83090.	D 93.	83141.	E 11.	83191.	E 63.

82681 to 83682-Contin	han	82681 to 83682-Contin	ned
83192. E 64.	83226. F 3 (b) 2.	83276. G 7.	83295. G 24,
83193. E 65.	83227. F 4.	83279. G 8.	83296. G 25.
83194. E 66.	83228, F 5.	83280. G 9.	83297. G 26.
83195. E 67.	83229. F 6.	83281. G 10.	83298. G 27.
83196, E 68.	83230. F 7.	83282. G 11.	83299. G 28.
83197, E 69.	83231, F 8.	83283. G 12.	83300, G 29,
83198. E 70.	83232. F 9.	83284. G 13.	83301. G 30.
83199, E 71.	83233. F 10.	83285. G 14.	83302. G 31.
83200. E 72.	83234. F 11.	83286. G 15.	83303. G 32.
83201. E 73.	83235. F 12.	83287. G 16.	83304. G 33.
83202. E 74.	83236. F 13.	83288. G 17.	83305, G 35,
63203. E 75.	83237. F 14.	83289. G 18.	83306. G 36.
83204, E 76.	83238. F 15.	83290, G 19.	83307. G 37.
83205. E 77.	83239, F 16.	83291. G 21.	83308, G 38.
83206. E 78.	83240. F 17 (a).	83292. G 22.	83309. H1 (a).
83207. E 79.	83241. F 17 (b).	88293, G 23 (a).	83310. H1 (b).
83208. E 80.	83242. F 18.	83294. G 23 (b).	000201 11 2 (0)1
83209. E 81.	83243. F 19.	83311. TRITICUM DUR	пм Т.
83210. E 83 (a).	83244. F 20.		Durum wheat.
83211. E 83 (b).	83245. F 21.	H 2 (a).	
83212. E 84.	83246. F 22.	83312. TRITICUM AES gare Vill.).	Common wheat.
83213. E 85.	83247. F 23.	H 2 (b).	
83214. E 86	83248. F 24.		
(spring). 83215, E 87.	83249. F 25.	83313. TRITICUM DUB	Durum wheat.
83216, E 88.	83250. F 26.	H 3 (a) 1.	
83217. E 89.	83251. F 27.	83314 to 83318. TRIT	
83218. F1 (a).	83252. F 28.	(T. vulgare Vill.).	
83219. F1 (b).	83258. F 29.	83314. H 3 (a) 2.	88817. H 3 (c) 1.
83220. F2(a).	83254. F 30.	83315. H 3 (a) 3.	83318. H 3 (c) 2.
83221. F 2 (b) 1.	83255. F 31.	83316. H 3 (b).	_
88222. F 2 (b) 2.	83256. F 32. 83257. F 33.	83319, TRITICUM DUR	Durum wheat.
83223. F 2 (b) 3.	83258. F 34 (a).	H 4 (a).	-
83224. F 3 (a).	83259. F 34 (b).	83820 to 83328. TRIT (T. vulgare Vill.).	
88225. F 3 (b) 1.	88260. F 34 (c).	83320. H 4 (b).	83325. 日 6 (b).
83261. TRITICUM TUR	GIDUM L.	83321. H 4 (c).	83326. H 7 (a).
	Poulard wheat.	83322. H 5 (a).	83327. H 7 (b).
F 35 (a) 1.		83323, H 5 (b).	83328. H 7 (c).
83262. TRITICUM AES gare Vill.).	TIVUM L. (T. vul- Common wheat.	83324. H 6 (a).	
F 35 (b).		83329. TRITICUM DUR	UM L.
83268. TRITICUM DUR			Durum wheat.
	Hybrid wheat.	H 8 (a).	TOTIM ABOMINTIN T.
F 36 (a).		83330 to 83340. TRIT (<i>T. vulgare</i> Vill.).	Common wheat.
83264 to 83310. TRIT (<i>T. vulgare</i> Vill.).		83830. H8(b).	83336, H 10 (b).
83264. F 36 (b).	83271. G 2 (a) 2.	83331. H 9 (a).	83337. H 11 (a).
83265. F 37.	83272. G 2 (b).	88382. H9(b).	83338, H 11(b).
83266, F 38.	83273. G 3.	83333. H 9 (c).	83339. H 11 (c).
83267. F 82.	83274. G 4.	83334. H 10 (a) 1.	83340. H 12 (a).
83268, F 87 (a).	83275. G 6 (a).	83335. H 10 (a) 2.	
83269, G 1.	83276. G6 (b) 1.	83341. TRITICUM DUR	UM L. Durum wheat.
83270. G 2 (a) 1.	83277. G 6 (b) 2.	H 12 (b).	Durum wildas,

82681 to 83682--Continued. 83342 to 83357, TRITICUM AESTIVUM L. Common wheat. (T. vulgare Vill.). 83342. H 13 (a) 1. 83350, H 19. 83351. H 20. 83343. H 13 (a) 2. 83344. H 13 (b). 83352. H 21. 83353. H 22. 83345, H 14. 83346. H 15. 83354. H 23. 83347. H 16. 83355. H 24 (a). 83348. H 17. 83356. H 24 (b). 83357, H 25. 83349, H18. 83358. TRITICUM DURUM L Durum wheat. H 26. 83359 to 83370. TRITICUM AESTIVUM L. (T. vulgare Vill.). Common wheat. 83359. H 27. 83365. H 31 (b). 83366. H 32 (a). 83360, H 28 (a). 83361, H 28 (b). 83367. H 32 (b). 83362. H 29. 83368. H 33. 83363. H 30. 83369. H 34 (a). 83370. H 34 (b). 83364. H 31 (a). 83371. TRITICUM DURUM L. Durum wheat. H 35 (a). 83372 to 83378. TRITICUM AESTIVUM L. (T. vulgare Vill.). Common wheat. 83372. H 35 (b). 83376, H 38. 83377. H 39 (a). 83373. H 35 (c). 83374. H 36. 83378, H 39 (b). 83375. H 37. 83379. TRITICUM DURUM L Durum wheat. H 40 (a). 83380 to 83409. TRITICUM AESTIVUM L. (T. vulgare Vill.). Common wheat. 83396, 16. 83380. H 40 (b). 83381. H 41. 83397. 17. 83382. H 42. 83398. 18 (spring). 83383. H 43 (a). 83399. 19. 83384. H 43 (b). 83400, I 10. 83385. H 44. 83401. I 11. 83386. I1 (a). 83402. I 12. 83387. I1 (b). 83403. I 13. 83388. I1 (c). 83404. I 14. 83389, I 2 (a). 83405, I 15. 88390. I 2 (b). 83406. I 16. 83391. I 3 (a). 83407. I 17. 83392, I 3 (b). 83408. I 18. 83393. I 4 (a). 83409. I 19. 83394. I4 (b). 83895, I 5. 83410. TRITICUM DURUM L. Durum wheat. I 20.

82681 to 83682-Continued.

83411 to 83537. TRITI (T. vulgare Vill.).	CUM AESTIVUM L. Common wheat.
83411. I 21.	83461. J 9.
83412. I 22.	83462. J 10 (a).
83413. I 23.	83463. J 10 (b).
83414. I 24.	83464. J 10 (c).
83415. I 25.	83465. J 11.
83416. I 26.	83466. J 12.
83417. I 27.	83467. J 13.
83418. I 28.	83468. J 14.
83419, I 29 (1).	83469. J 15.
83420. I 29 (2).	83470. J 16.
83421. I 30.	83471. J 17.
83422. I 31.	83472. J 18.
83423. I 32.	83473. J 19 (a).
83424. I 33.	83474. J 19 (b).
83425. I 34.	83475. J 20.
83426. I 35.	83476. J 21.
83427. I 36.	83477. J 22.
83428. I 37.	83478. J 23.
83429. I 38.	83479. J 24 (a).
83430, I 39.	83480. J 24 (b).
83431. I 40.	83481. J 25.
83432. I 41.	83482. J 26.
83433. I 42.	83483. J 27 (a).
83434. I 43.	83504. K 10 (a).
83435, I 44.	83484. J 27 (b).
83436. I 45.	83485. J 28.
83437. I 46. 83438. I 47.	83486. K1 (a). 83487. K1 (b).
83439. I 48.	83488. K2 (a).
83440. I 49.	83489. K 2 (b) 1.
83441. I 50.	83490, K 3 (a) 1.
83442. I 51.	83491. K 3 (a) 2.
83443. I 56.	83492, K 3 (b).
83444. I 57 (a).	83493, K4 (a).
83445, I 57 (b).	83494. K 4 (b).
83446. I 58.	83495. K 5(a).
83447. J1 (a).	83496. K 5 (b).
83448. J1 (b) 1.	83497. K6 (a).
83449. J1 (b) 2.	83498, K 6 (b).
83450. J1 (b) 3.	83499. K 7 (a).
83451. J 2 (a).	83500. K7(b).
83452. J 2 (b).	83501. K8 (a).
83453. J 3 (a).	83502. K8(b).
83454. J 3 (b).	83503. K 9.
83455. J 4.	83505. K 10 (b).
83456. J 5.	83506. K 11.
83457. J 7.	83507. K 12.
83458. J 8 (a).	83508. K 13.
83459. J 8 (b).	83509. K14 (a).
83460. J 8(c).	83510. K14 (b).

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82681 to 83682-Continued.
       83511. K 15.
                           83525. L 10.
       83512. K 17.
                           83526. L 11.
       83513. K 18.
                           83527. L 12.
       83514. L1 (a).
                           83528. L 13.
       83515. L1 (b).
                           83529. L14.
       83516. L 2 (1).
                           83530. L 15.
       83517. L 2 (a).
                           83531. L16.
       83518. L3 (a).
                           83532. L17.
       83519. L3 (b).
                           83533. M 4.
       83520, L4.
                           83534. M 6.
       83521, L 5.
                           83535. M 7.
       83522. L 6.
                           83536. M 8 (early).
       83523, L 8.
                           83537. M 9.
       83524, L9.
     83538. TRITICUM DURUM L.
Durum wheat.
       M 11.
     83539 to 83557. TRITICUM AESTIVUM L.
(T. vulgare Vill.). Common wheat.
       83539, M 12.
                              83549, N 9.
       83540. M 13.
                              83550. N 10 (a).
        83541. N 1.
                              83551. N 10 (b).
       83542, N 2,
                              83552. O1 (a).
       83543. N 3.
                              83553. O1 (b).
                              83554, O 2 (a).
        83544, N 4.
        83545. N 5 (a).
                              83555. O 2 (b).
        83546. N 5 (b).
                              83556, O 3 (a) 1.
       83547. N 6.
                              83557. O 3 (a) 2,
        83548. N.S.
     83558. TRITICUM DURUM L.
                                 Durum wheat.
        O 3 (b).
     83559 to 83569. TRIT
(T. vulgare Vill.).
                      TRITICUM AESTIVUM L.
Vill.). Common wheat.
        83559. O4 (a).
                                83565. O6 (b).
        83560. O4 (b).
                                83566. O6 (c).
        83561. O 5 (a) 1.
                                83567. O7 (a).
        83562, O 5 (a) 2.
                                83568. O7 (b).
        83563. O 5 (b).
                                83569. O 8 (a).
        83564. O 6 (a).
     83570. TRITICUM DURUM L.
Durum wheat.
        08 (b).
     83571 and 83572. TRITICUM AESTIVUM L.
        (T. vulgare Vill.).
                               Common wheat.
        83571. 09 (a).
        83572. O9 (b).
     83573. TRITICUM DURUM L.
Durum wheat.
        O 10 (a).
     83574 to 83655. TRITICUM AESTIVUM L.
(T. vulgare Vill.). Common wheat.
                                83578. P1 (a).
        83574. O 10 (b).
        83575. 0 11 (1).
                                83579. P1 (b).
        83576. O 11 (a).
                                83580. P 2 (a).
                                88581. P 2 (b).
        83577. 0 12.
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82681 to 83682-Continued.
      83582. P3 (a).
                             83594. Q 6.
      83583, P3 (b).
                             83595. Q7(1).
      83584. P 4.
                             83596. Q7(2).
      83585. Q1 (a) 1.
                             83597, Q 8.
      83586, Q1 (a) 2.
                             83598, Q9.
      83587. Q1 (b).
                             83599. R 1.
      83588. Q 2 (a).
                             83600, R 2 (1).
      83589. Q 2 (b).
                             83601, R 2 (2).
      83590. Q3 (a).
                             83602. S 1.
       83591. Q3 (b).
                             83603. S 2 (1).
                             83604. S 2 (a).
       83592. Q 4.
                             83605. S 4.
       83593. Q 5.
       83606. No. 1. Anhwei.
       83607. No. 58. Anhwei.
       83608, No. 774. Anhwei.
       83609 to 83622. Chekiang.
         83609. No. 28.
                             83616. No. 252.
                             84617. No. 479.
         83610. No. 49.
                             84618. No. 482.
         83611. No. 131.
                             84619. No. 638.
         83612. No. 191.
         83613, No. 200.
                             84620, No. 54.
                             84621, No. 707.
         83614. No. 211.
         83615. No. 215.
                             84622. No. 712.
       83623. No. 32. From Chili.
       83624. No. 137. From Chili.
       83625. No. 236.
                        From Fukien.
       83626. No. 237.
                       From Fukien.
       83627 to 83632. From Honan.
         83627. No. 43.
                             83630, No. 113.
                             83631. No. 341.
         83628. No. 75.
                             83632. No. 420.
         83629. No. 88.
       83633. No. 78. From Hupeh.
       83634. No. 706.
                        From Hupeh.
       83635. No. 166.
                        From Kiangsi.
                        From Kiangsi.
       83636. No. 256.
       83637. No. 669.
                        From Kiangsi.
       83638, No. 66. From Kiangsu.
       83639. From Kiangsu, Taishin.
       83640 to 83645. From Kwangsi.
         83640. No. 7.
          83641. No. 203 (a).
          83642. No. 203 (b).
          83643. No. 230.
          83644. No. 236.
          83645. No. 649.
       83646. No. 24.
                       From Kweichow.
       83647. No. 224.
                        From Kweichow.
       83648. No. 601.
                        From Kweichow.
       83649. No. 150.
                         From Shansi.
       83650. No. 273.
                        From Shansi.
                         From Shantung.
       83651, No. 133.
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83652. No. 188.

From Shantung.

82681 to 83682—Continued. 83653. No. 54. From Shensi. 83654. No. 105. From Shensi. 83655. No. 260. From Shensi. 83656. TRITICUM DURUM L. Durum wheat. (A). From Sinkiang. 83657. TRITICUM TURGIDUM L. Poulard wheat. (B), From Sinkiang. 658 to 83674. TRITICUM AESTIVUM L. (T. vulgare Vill.). 83658 Common wheat. 83658 to 83663. From Szechwan. 83658, No. 16. 83661. No. 145. 83659. No. 18. 83662. No. 291. 83663. No. 452. 83660, No. 117. 83664. No. 162. From Manchuria. 83665 to 83669. From Yunnan. 83665. No. 187. 83666. No. 189 (a). 83667. No. 189 (b). 83668. No. 507. 88669. No. 556. 83670. No. 13. 83671. No. 14. 83672. No. 18. 88678. No. 129. 88674. No. 438. 88675. TRITICUM DURUM L. Durum wheat. No. 880. 83676 to 83682. TRITICUM AESTIVUM L. (T. vulgare Vill.). Common wheat. 83676. Fifth plot from end stake. 83677. Sixteenth plot from end stake. 83678. Seventeenth plot from end stake. 83679. Eighteenth plot from end stake. 83680. No. 47. 83681. Unknown. 83682. Unknown. 83683 to 83706. LENS ESCULENTA Moench. Fabaceae. Lentil. From Pusa, India. Seeds presented by F. J. F. Shaw, Officiating Imperial Eco-nomic Botanist, Agricultural Research Institute. Received January 3, 1930. 83683. No. 1. 83691. No. 19. 83684. No. 2. 83692. No. 20. 83685. No. 6. 83693. No. 21. 83686. No. 7. 83694. No. 26. 83687. No. 9. 83695. No. 27. 83688. No. 10. 83696. No. 28. 83689, No. 13. 83697. No. 32.

83690. No. 15.

83698. No. 34.

83683 to 83706-Continued.

83699.	No. 36.	88703.	No. 51.
83700.	No. 38.	837 04 .	No. 63.
83701.	No. 40.	83705.	No. 65.
83702.	No. 46.	83706.	No. 66.

⁸³⁷⁰⁷ to 83716.

- From Chosen. Scions collected by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received January 4, 1930.
 - 83707 to 83711. DIOSPYROS KAKI L. f. Diospyraceae. Kaki persimmon.

December 7, 1929. From the Narusada fruit farm on river-bottom land a short distance from Fusan.

- 83707. No. 3104. Fuyu. No. 5. Fruits large, flattened, golden yellow, and nonastringent. Ripens at Kiho in October.
- 83708. No. 3105. *Hachiya*. No. 4. The red fruits are pyramidal in shape, with peculiar markings at tip, astringent, and ripen in October or early November.
- 83709, No. 3108. Hana Fuyu or Yotsundani (4-lobed). No. 7. Fruits very large, thick, square, nonastringent and reddish golden yellow, but not considered of the best quality.
- 83710. No. 3112. Nukuawa. No. 8. The dark red, nonastringent fruits are large, flat, and square.
- 83711. No. 3113. A large, long, and square-shaped persimmon of unknown variety. It is nonastringent and ripens medium early.

83712. MALUS Sp. Malaceae.

No. 1963. Said to be a wild crab apple.

83713 to 83715. SALIX spp. Salicaceae. Willow.

83713. SALIX SD.

No. 1989. An attractive weeping willow in the compound of the Agricultural Society at Tansin. The tree is over 12 inches in diameter and 20 feet high, and the wood seemed very brittle.

83714. SALIX sp.

No. 1998. Keijo, December 3, 1929. A pussy willow which is commonly used in Japanese flower arrangements.

83715. SALIX sp.

No. 1999. Keijo, December 3, 1929. A pussy willow with reddish colored bark, commonly used in Japanese flower arrangements.

83716. VITIS sp. Vitaceae. Grape.

No. 1958. November 28, 1929. A wild grape from the Kingo Mountains of Japan; said to produce large bunches of rather large grapes.

83717 and 83718.

From Salisbury, Southern Rhodesia, Africa. Seeds presented by C. S. Cameron, Empire Cotton Growing Corporation, Department of Agriculture.

83717. GOSSYPIUM HIRSUTUM L. Malvaceae. Upland cotton. U 4. 83717 and 83718-Continued.

83718. GOSSYPIUM sp. Malvaceae. Cotton.

Cambodia.

83719 to 83723. AVENA spp. Poaceae. Oats.

- From Cowra, New South Wales, Australia. Seeds presented by A. R. Callaghan, Cowra Experiment Farm. Received Jan-uary 9, 1930.
 - 83719. AVENA BREVIS Roth.

C. 3759.

For previous introduction see No. 74023.

83720 to 83723. AVENA STRIGOSA Schreb.

83720. C. 3758. Variety glabrescens.

83721. C. 3758. Variety glabrescens.

83722. C. 3593. Variety pilosa.

83723. C. 3756. Variety orcadensis.

83724. ARECASTRUM sp. Phoenicaceae. Palm.

From Cali, Colombia. Seeds presented by M. J. Rivero. Received January 8, 1930.

A slender palm which attains a height of 25 or 30 feet, with a crown of pin-nate, strongly bow-shaped grayish green leaves which may be used for thatching. Of use as an ornamental for the warmest parts of the United States.

83725. MEDICAGO SATIVA L. Fabaceae. Alfalfa.

From Hungary. Seeds purchased from the Royal Hungarian Seed Control Station, Budapest, through H. L. Westover, agri-cultural explorer, Bureau of Plant Indus-try. Received January 15, 1930.

A specially selected strain.

83726 to 83733.

- rom Hungary. Seeds presented by Agri-cultural Experiment Station for Plant In-dustry, Magyaróvár, through H. L. West-over, agricultural explorer, Bureau of Plant Industry. Received January 14, 1020 From Hungary. 1930.
 - 83726 and 83727. AVENA SATIVA L. Poa-Oats. ceae.
 - 83726. Improved Hungarian oat. vaszpatona" white. " Lo-

83727. Improved Hungarian oat. "Lo-vaszpatona" yellow.

83728. MEDICAGO SATIVA L. Fabaceae Alfalfa.

1928 Hungarian alfalfa, crop. The most winter-hardy and prolific strain.

83729 to 83733, TRITICUM AES (T. vulgare Vill.). Poaceae. TRITICUM AESTIVUM L. Common wheat.

Hungarian spring wheat.

83729. Magyarovar No. 81.

83730. Magyarovar No. 98.

83781. Magyarovar No. 155.

83732. Tiszagyongye No. 163.

83733. Tiszagyongye No. 164.

83734 to 83758.

- rom Persia. Scions collected by W. E. Whitehouse, agricultural explorer, Bureau of Plant Industry. Received December 27, 1929. Numbered in January 1920 From
 - 83734 to 83750. PISTACIA VERA L. cardiaceae. P Ang-Pistache.
 - 83734 to 83740. October 8, 1929. From Hematabad, 12 miles from Rafsin-From Moderately large, ian. spreading type of tree.
 - 83734. No. 57. Tree fair to good size. Tree No. 1. Nuts of
 - 83735, No. 58. Tree No. 2. Nuts good.
 - 83736. No. 59. Tree No. 3. Nuts of good size.
 - 83737. No. 60. Tree No. 5. Nuts fairly good.
 - 83738. No. 61. Nuts round, of fairly good size, tree a heavy producer.
 - 83739. No. 62. Tree No. 7. Nuts of good size.
 - 83740, No. 63. Tree No. 8.
 - 83741 to 83744. October 6, 1929. Fro Abbasabad, 1 mile from Rafsinjan. From
 - 83741. No. 65. Tree No. 6. Nuts of fair size.
 - 83742. No. 66. Tree fair to good size. Tree No. 7. Nuts of
 - 83743. No. 67. Tree fair to good size. Tree No. 8. Nuts of
 - 83744. No. 68. Tree No. 9. Nuts of fair size.
 - 83745. No. 69. October 4, 19 Agda. Nuts fair to good. October 4, 1929. From
 - 83. 83746. No. November 18, 1929. From Abbasabad.
 - 83747 to 83749. November 19 and 20, 1929. From Hematabad.
 - 83747. No. 84. November 20, 1929. From Hematabad.
 - 83748. No. 300. An excellent spread-ing type of tree with large nuts; one of the best trees found.
 - 83749. No. 301. An excellent spread-ing type of tree with large nuts.

83750. No. 302. From Agda.

83751. PRUNUS ARMENIACA L. Amygdalaceae. Apricot.

No. D-1. November 8, 1929. From Damghan. The tree bears fruit excellent both in size and quality, according to the owner.

83752. PRUNUS ARMENIACA L. Amygdala-ceae. Apricot.

No. D-2. November 8, 1929. A large strong-growing tree; may prove of value for stock.

753 to 83758. PUNICA GRANATUM Punicaceae. Pomegran 83753 L. Pomegranate.

83753 to 83756. November 22, 1929. From Kuh Pa.

Large red fruits, vesicles large red, juicy, subacid, seed small, excellent quality.

83753. Tree No. 1.

83754. Tree No. 2.

83734 to 83758-Continued. 83755. Tree No. 3. 83756. Tree No. 4. 83757 and 83758. November 21, 1929. From Agda. Large pink fruits; vesicles large, red, juicy; flavor slightly subacid; seeds small, quality excellent. 83757. No. 303. 83758. No. 304. 83759 to 83772. FRAGARIA spp. Rosaceae. Strawberry. From Orleans, France. Plants presented by Edmond Versin. Received January 15, 1930. 83759. FRAGARIA Sp. Ameliorée Caennaise. 88760. FRAGARIA SP. Ananas de Guemene. 83761. FRAGARIA Sp. Belle de Meaux. 83762. FRAGARIA SP. Beraer. 83763. FRAGARIA SP. Comtesse Pierre de Brye. 83764. FRAGARIA Sp. Espoir. 83765. FRAGARIA Sp. Janus amelioree. 83766. FRAGARIA Sp. Goliath. 83767. FRAGARIA Sp. Lucida Perfecta. 83768. FRAGARIA SD. Merveille de France. 83769. FRAGARIA Sp. Mirabilis. 83770. FRAGARIA SD. Monstreuse caennaise. 83771. FRAGARIA Sp. Saint Antoine. 83772. FRAGARIA Sp. Victoire Française. Thunb. 83773. LILIUM CORDIFOLIUM Lily. Liliaceae. From India. Seeds purchased from the Chandra Nursery, Rhenock, Sikkim, Ben-gal. Received January 18, 1930. A Japanese lily, 4 to 7 feet high, with pendulous leaves 12 to 18 inches long and nearly as wide, and a raceme of 4 to 10 fragrant white flowers, which are often 6 inches long. For previous introduction see No. 75677. 83774 to 83776. From Hanoi, Indo-China. Seeds presented by Mr. Pollane, Institut des Recherches Agronomique de l'Indochine. Received January 2, 1930.

83774 to 83776-Continued. 83774. DIOSPYROS Sp. Diospyraceae. 83775. ELAEOCARPUS sp. Elaeocarpaceae. 83776. ELAEOCARPUS sp. Elaeocarpaceae. 83777 to 83954. com Chosen and Japan. Seeds and scions collected by P. H. Dorsett and W. J. Morse, agricultural explorers, Bu-reau of Plant Industry. Received Janu-From ary 6, 1930. 83777 to 83794. From Chosen. 83777. ACER TSCHONOSKII Maxim. Acer-aceae Maple. No. 1960. From Onseiri, Novem-ber 28, 1929. A graceful shrubby tree 20 feet or less high, native to Japan. The leaves turn bright yellow in the autumn. For previous introduction see No. 77822. 83778. ARUNDINELLA ANOMALA Steud. Poaceae. Grass. No. 2037. From Kanko, November 23, 1929. Dry rocky hillside. A tall coarse grass 3 to 5 feet high, which grows in large spreading masses. For previous introduction see No. 57276. 83779. CLERODENDRUM sp. Verbenaceae. No. 1952. From Kongo Mountain, near Onseiri, November 28, 1929. A hardy deciduous shrub with opposite entire leaves and terminal panicles of showy cylindrical flowers, followed by attractive fruits. 83780. CROTALARIA Sp. Fabaceae. No. 1777. From a hillside near Fusanmen, about 20 miles from Heijo. Plants very branching and from 12 to 18 inches high. May be of value as green manure on acid soils. 83781. CYMBOPOGON Sp. Poaceae. Grass.

> No. 1937. From the village of Kanko, Chosen, November 23, 1929. A large stout, rather coarse perennial grass with solid stems and large flower heads; extensively used in bouquets by the Japanese.

> 83782. DIERVILLA Sp. Caprifoliaceae. Weigela.

> No. 1947. From Onseiri, November 27, 1929. From canyons in the Kongo Mountains; said to have pink flowers.

> 83783 to 83792. DIOSPYROS KAKI L. f. Diospyraceae. Kaki persimmon.

> Scions from the fruit farm of Mr. Narusada, on river-bottom land not far from Fusan.

83783. No. 3101. Fruits rather small, pointed, golden yellow; 1 inch through and about 2 inches long; asiringent and used as a stock.

83784. No. 3102. Fruits flat, square, red, of intermediate size, astringent; ripen late.

83785. No. 3103. An unnamed early variety, possibly Wase. Fruits nonastringent, of medlum size; at first red, but becoming dark later in the season.

83777 to 83954-Continued.

- 83786. No. 3106. Fruits round, yel-low, of medium size, astringent, ripening late in October.
- 83787. No. 3107. Hyakume. Fruits round, yellow, medium to large and nonastringent.
- 83788. No. 3109. The small red fruits are of a peculiar shape. good for stock and perhaps for juice.
- 83789. No. 3110. Emon. The flat medium-sized fruits are red, non-astringent, and ripen late.
- **3790.** No. **3111.** *Jiro.* The yellow fruits are medium sized, somewhat pointed, nonastringent, and ripen early in October. 83790. No. 3111.
- 83791. No. 3114. Fruits large, red-dish, shaped like the Fuyu, non-astringent, and late ripening.
- 792. No. 3115. A seedling of Fuyu; fruits of medium size, yellowish red, somewhat flattened, nonas-83792. No. 3115. tringent, ripening in midseason.
- 83793. HORDEUM PALLIDUM VULGARE Seringe. Poaceae. Six-rowed barley.

No. 1990. From Tansen, Chosen, De-cember 1, 1929. Ponpasi. A spring barley.

794. Hordbum vulgare pallidum Seringe. Poaceae. Six-rowed barley. 83794. HORDEUM

No. 1992. From Tansen, Chosen, December 1, 1929. Ponpan. A spring barley. The temperature goes to zero barley. The temp F. in this region.

83795. ILEX LATIFOLIA Thunb. Aquifoliaceae Holly.

No. 3155. From Tokyo, Japan, De-cember 13, 1929. A Japanese holly, one of the most attractive of the genus, which sometimes develops into a tree 60 feet tall. The glossy green leaves, 3 to 7 inches long, are oval or narrowly ob-long and the red berries, about one-third of an inch in diameter, are pro-duced in dense clusters.

For previous introduction see No. 67362.

83796 to 83801. LESPEDEZA spp. Faba-Bushclover.

The lespedezas are small hardy shrubby plants with racemes or heads of pea-shaped flowers. Certain species are of value as forage.

83796. LESPEDEZA SP.

No. 1970. From Tansen, Chosen, December 1, 1929. Plants 20 to 30 inches high, seeds borne in buttonlike clusters along stems. Very heavy seeder, good forage plant.

83797. LESPEDEZA SD.

No. 1971. From Tansen, Chosen, December 1, 1929. Plants 15 to 24 inches high, seed in small clusters; a prolific seeder.

83798. LESPEDEZA Sp.

No. 2036. From Kanko, Chosen, November 23, 1929. Plants 8 to 18 inches high. This is undoubtedly a strain of Korean lespedeza which was found growing in dry rocky soil.

83777 to 83954-Continued.

83799. LESPEDEZA Sp.

No. 2058. From the Diamond Mountains, near Onseiri, Chosen, No-vember 28, 1929. Plants 5 to 8 feet high and woody.

83800. LESPEDEZA SD.

No. 2059. From the Mountains, November 2 Plants 4 to 6 feet high. e Diamond 28, 1929.

83801. LESPEDEZA SD

No. 2060. From near Tansen, Cho-sen, November 30, 1929.

83802. LIGUSTRUM Sp. Oleaceae. Privet.

No. 3157. From Tokyo, Japan, Decem-ber 13, 1929. A small tree about 20 feet high; a late-blooming variety with large clusters of very showy flowers and later clusters of small bluish black fruits. A good ornamental.

83803. LILIUM AURATUM Lindl. Goldband lily.

No. 3152. Yama yuri. From Suba-shiri, Shizuoka Ken, Mount Fuji, Japan, December 12, 1929. A lily with large white fragrant flowers.

83804. LILIUM CORDIFOLIUM Thunb.

No. 3133. Uba-uri. From a forest farm, Sapporo, Hokushu, Japan, Decem-ber 12, 1929.

88805. LILIUM DAU (Kunth) Wilson. DAURICUM VENUSTUM

No. 3150. Fuji Hirato. From Subashiri, Shizuoka Ken, Mount Fuji, Japan, De-cember 12, 1929. A form of L. dauricum which is distinguished by clear apricot-colored flowers without spots.

88806. LILIUM MEDEOLOIDES A. Gray. Wheel lily.

No. 3151. Hime karuma. From Su-bashiri, Shizuoka Ken, Mount Fuji, Japan, December 12, 1929. A lliy with a smooth stem 1 to 2 feet high bearing one or two whorls of lanceolate leaves near the middle and a few scattered leaves above. The one to six bright orange-red flowers are dotted purple and have red anthers. Native to Japan.

83807. LYSIMACHIA sp. Primulaceae. Loosestrife.

No. 1946. From the Diamond Moun-tains, near Onseiri, Chosen, November 27, 1929. A plant which sometimes grows over 4 feet high and produces a single spike of white flowers 6 to 8 inches in length.

83808 to 83810. PHASEOLUS spp. Faba-Bean. ceae.

83808. PHASEOLUS ANGULARIS (Willd.) W. F. Wight. Adsuki bean.

No. 1973. From the Grain Investiation Laboratory, Tansen, Chosen, December 1, 1929. Beans medium large and dark marcon; used in mak-ing adsuki confections.

809. PHASEOLUS ANGULARIS (Willd.) W. F. Wight. Adsuki bean. 83809.

No. 2049. Chapatsu. Mixed varie-ties obtained at a store in Genzan, Chosen, November 26, 1929. Mixtures such as these are ground and used as cattle feed.

83777 to 83954 Continued.

83810. PHASEOLUS AUREUS Roxb. Mung bean.

No. 2048. Charokuto. Obtained at a store in Genzan, Chosen, November 26, 1929. Mixed green and yellow mung beans used for bean sprouts.

83811. PHYSOCARPUS AMURENSIS Maxim. Rosaceae. Ninebark.

No. 3147. From the Imperial University Botanic Garden, Hokushu, Japan. A shrub about 10 feet high, closely resembling the common ninebark, *P. opulifolius*, but the doubly serrate, 3 to 5-lobed leaves are larger, as are also the loose umbels of white flowers. It is a native of Manchuria and Chosen.

83812. RHODODENDRON sp. Ericaceae.

December 12, 1929. From Chosen.

[Received without information.]

83813. PYRUS sp. Malaceae. Pear.

No. 3116. Bansan Kichi or Okusan Kichi. From Kiho, Chosen, December 7, 1929. Scions from the Narusada fruit farm on river-bottom land not far from Fusan. A very late russet pear; said to be the largest in Japan.

83814. PYRUS Sp. Malaceae. Pear.

No. 3117. Imamura. From Kiho, Chosen, December 7, 1929. Scions from the Narusada fruit farm on river-bottom land not far from Fusan; large russet Japanese pear.

83815 to 83829. RHODODENDRON spp. Ericaceae. Azalea.

83815. RHODODENDRON ALBRECHTII Maxim.

No. 3145. From the Botanic Garden, Imperial University, Sapporo, Hokushu, Japan, December 12, 1929. A deciduous shrub 4 to 5 feet high with obovate leaves 2 to 5 inches long, clustered at the ends of the purple brown branchlets. The rotate-campanulate, red-purple flowers are about 2 inches across and appear with the leaves which turn yellow in the autumn. Native to Japan.

83816. RHODODENDRON BRACHYCARPUM D. Don. Fujiyama rhododendron.

D. Don. Fujiyama rhododendron. No. 3143. From the Botanic Garden. Imperial University, Sapporo, Hokushu, Japan, December 12, 1929. An evergreen shrub about 12 feet high with gray-tomentose branchlets and oblong-lanceolate often auriculate leaves, 3 to 8 inches long, dark green and reticulated above, and covered beneath with dun-colored tomentum. The broadly funnelform flowers, about 2 inches across, are white or yellowish, striped and flushed pink, and spotted with green or brown. It is native to Japan and Chosen.

83817. RHODODENDRON SCHLIPPEN-BACHII Maxim. Royal azalea.

No. 3142. From the Botanic Garden, Imperial University, Sapporo, Hokushu, Japan, December 12, 1929. A beautiful deciduous shrub 15 feet high, with large clear pink flowers appearing before the leves in the spring. The broadly obovate leaves, 2 to 4 inches long, are dark green above, paler beneath, and change to yellow, orange, and crimson in the 83777 to 83954-Continued.

autumn. Native to Manchuria, Chosen, and Japan.

For previous introduction see No. 78411.

83818. RHODODENDRON sp.

No. 1934. From Keijo, Chosen, November 22, 1929. An azalea with medium-sized narrow leaves, from the grounds of the Keijo Government Railway Hotel.

83819. RHODODENDRON sp.

No. 1935. From Keijo, Chosen, November 22, 1929. An azalea with rather small narrow leaves, from the grounds of the Government Railway Hotel.

83820. RHODODENDRON sp.

No. 1939. From the Botanical Garden, Keijo, Chosen, November 26, 1929. 88821. RHODODENDRON sp.

No. 1940. From the Botanical Garden, Keijo, Chosen, November 26, 1929. 83822. RHODODENDRON SP.

No. 1941. From the Botanical Garden, Keijo, Chosen, November 26, 1929. Plants growing in a small area in one corner of the garden, which resemble those sent in under No. 1940 [No. 83821].

83823. RHODODENDRON Sp.

No. 1942. From Keijo, Chosen, November 26, 1929.

83824. RHODODENDRON sp.

No. 1943. From Keljo, Chosen, November 26, 1929.

83825, RHODODENDRON sp.

No. 1944. From Keijo, Chosen, November 26, 1929.

83826. RHODODENDRON sp.

No. 1945. From Onseiri, Chosen, November 27, 1929. From a mountain side near the village. Plants 3 inches high.

83827. RHODODENDRON sp.

No. 1948. From a mountain side near the village of Onseiri, Chosen, November 27, 1929. A plant producing long narrow seed pods, guite different from No. 1945 [No. 83826].

83828. RHODODENDRON sp.

No. 1954. From Kongo Mountain, near Onseiri, Chosen, November 28, 1929. An azalea with rather long slender seed pods; not so common as No. 1945 [No. 83826].

83829. RHODODENDRON Sp.

No. 2000. From Suigen, Chosen, Agricultural Experiment Station, December 5, 1929. From plants about 3 inches high with a small, hairy seed pod and a 5-parted persistent calyx.

83830. RHUS sp. Anacardiaceae. Sumac.

No. 1962. November 28, 1929. From Onseiri, Chosen. A shrubby sumac which resembles the well-known *Rhus copallina* of the eastern United States.

83831 to 83947. SOJA MAX (L.) Piper (Glycine hispida Maxim.). Fabaceae. Sovbean.

83777 to 83954-Continued.

- 83831. No. 1964. Chonte. From Chosen. November 30, 1929. From near Tansen. A medium-sized, greenish yellow bean with a pale hilum; used as green manure and sold largely to the southern Japanese islands.
- 83832. No. 1965. Chirigunkon. November 30, 1929. From near Tansen. A very small, nearly round black variety, used for bean sprouts.
- 83833. No. 1966. Chonkon. November 30, 1929. From near Tansen. A medium-sized, greenish yellow variety with a pale hilum.
- 83834. No. 1967. Pakute. November 30, 1929. From near Tansen. Seeds medium sized, oval, varying from yellow to greenish yellow. Used as boiled beans in the home and also used as cattle feed.
- 83835. No. 1968, *Chonte.* November 30, 1929, Purchased in the market in Tansen. Medium sized, greenish yellow with pale hilum.
- 83836. No. 1969. Zakkon (mixture). November 30, 1929. Purchased from the market in Tansen. A mixture of green, black, yellow and yellowish green varieties which are boiled and used as cattle feed.
- 83837 to 83844. Obtained December 1, 1929, from the Grain Investigation Laboratory, Tansen.
 - 83837. No. 1974. Pakute. Large, nearly round, yellow with pale hilum. Used on main island for candied beans ald other soybean confections.
 - 83838. No. 1975. Oiarukon. Very large, oval, yellow with pale hilum. Used on main island for candied beans and other soybean confections.
 - 83839. No. 1976. Chonte. Seed medium sized, oval yellowish green with pale hilum. Used for green manure on the main and southern Japanese islands.
 - **83840.** No. 1977. Anpenkon. Medium large, nearly round, glossy yellow with pale hilum. Used for making bean curd.
 - 83841. No. 1978. Pakute. Large, nearly round, glossy yellow with pale hilum. Used on main Japanese island for confections.
 - 83842. No. 1979. Tanchonkon, Medium sized, yellowish green, with pale hilum. Used on main island and southern Japanese islands as a green manure.
 - 83843. No. 1980. Tanchonkon. Medium sized, yellowish green, oval, with pale hilum. Used on main and southern Japanese islands as a green manure. This sample is typical Tanchonkon.
 - 83844. No. 1981. Orugibarukon. Medium sized, oval, glossy yellow with pale hilum. Used for soy sauce, bean curd, miso, and natto.
- 83845 to 83851. Obtained December 1, 1929, from a farmer near Tansen.
 - 83845. No. 1982. Oiarukon. Medium large, oval, glossy yellow with pale hilum. Used for bean curd, miso, soy sauce, and natto.

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83777 to 83954-Continued.

- **83846.** No. 1983. Chondarekon. Medium sized, oval, yellowish green, with pale hilum. This variety resembles the Tanchon very closely and is used on the main and southern Japanese islands as a green manure.
- 83847. No. 1984. *Chonte*. Medium sized, yellowish green with pale hilum. Used as a green manure.
- 83848. No. 1985. Chomutari. Medium small, oval, yellowish green and green with a black hilum. Used for bean sprouts.
- 83849. No. 1986. *Oiarukon*. Medium large, nearly round, glossy yellow with pale hilum. Used for bean curd.
- 83850. No. 1987. Chonte. Medium sized, oval, yellowish green with a pale hilum. Used as a green manure.
- 83851. No. 1988. Tanchon. Medium sized, oval, yellowish green with a pale hilum. Used on main and southern Japanese islands as a green manure.
- 83852. No. 1993. Chirugun. December 1, 1929. Obtained from a merchant in Tansen. Very small round black variety with a yellow hilum. Used for bean sprouts.
- 83853 to 83856. November 23, 1929. Obtained from the Grain Inspection Office, Seihyoko.
 - 83856. No. 2024. Ryuzan. Medium small, oval, glossy yellow with a pale hilum. Used for bean curd, natto, miso, and soy sauce.
 - 83854. No. 2025. Ryuzan. A thirdgrade soybean, medium sized, nearly round, glossy yellow with a pale bilum; slight admixture of yellow with other colors of hilum. Used for natto, soy sauce, miso, and bean curd.
 - 83855. No. 2026. Ryuzan. A firstgrade soybean, medium sized, oval, nearly round, yellow with a pale hilum. Used for making bean curd, natto, soy sauce, and miso.
 - 83856. No. 2027. Ryuzan. A secondgrade soybean, medium sized, nearly round, glossy yellow with a pale hilum. Used for bean curd, soy sauce, natto, and miso.
- 83857 and 83858. November 23, 1929. Purchased from a store in Ojuri.
 - 83857. No. 2028. Kiriqunkon. Very small, round, yellow, varying somewhat in size; hilum in most of sample pale. Used for sprouts.
 - 83858. No. 2029. Pakute. Medium to medium large, oval, yellow, with a pale hilum. Used for bean curd, natto, soy sauce, and miso.
- 83859 to 83864. November 23, 1929. Obtained from a grain merchant in Seihyoko.
 - 83859. No. 2030. Chechonkon. A fourth-grade soybean. Medium sized, oval, glossy yellow, varying in color of hilum. Used for natto, soy sauce, bean curd, and miso.

83777 to 83954-Continued.

- 83860. No. 2031. Chechonkon. Medium sized, oval, glossy yellow, with hilum varying from light brown to slate black. Used for bean curd, soy sauce, natto, and miso.
- 83861. No. 2032. Munmaku. Graded as No. 3. Medium sized, glossy yellow. oval, and with a pale hilum. Used in making natto, miso, bean curd, and soy sauce.
- 83862. No. 2033. Mumanikon. Grade mixed sample of oval, glossy yellow strains, varying from medium to medium large; hilums vary from pale to dark brown. Used for soy sauce, natto, miso, and bean curd.
- 83663. No. 2034. Mumanikon. Grade No. 1. Medium large, nearly round, glossy yellow, with a pale hilum. Used for natto, miso, soy sauce, and bean curd.
- 83864. No. 2035. Munmakukon. Medium sized, oval, glossy yellow with a dark-brown hilum. Used for natto, bean curd, miso, and soy sauce.
- 83865 and 83866. November 25, 1929. Received through Dr. T. Nagai, Suigen Agricultural Experiment Station.
 - 83865. No. 2038. A handle-shaped, stemmed variety with large bunch of pods at top of stem, stems 2-3 inches broad and about one-fourth of an inch thick. Seed medium small, yellow, more or less mottled. One of the most peculiar varieties we have ever seen.
 - 83866. No. 2039. A belt-shaped, stemmed variety with bunches of pods scattered along the wide thin stem. Seed black and greenish yellow (mottled). A very peculiar variety which was developed by Dr. Nagai.
- 83867. No. 2041. Pakute. November 26, 1929. Purchased from a grain store in Genzan. Mixed sample of medium-sized yellow beans, varying in color of hilums. Used for miso, natto, and boiled beans.
- 83868 to 83871. November 26, 1929. Obtained from a warehouse in Genzan.
 - 83868. No. 2042. Anpenkon. Excellent grade. Large, nearly round, yellow variety with a pale hilum. Used for bean curd, miso, and soy sauce.
 - 83869. No. 2043. Anpenkon. First grade. Medium sized nearly round, yellow with a pale hilum. Used for bean curd, soy sauce, and miso.
 - 83870. No. 2044. Anpenkon. Second grade. Medium sized, oval, yellow with a pale hilum. Used for bean curd, soy sauce, and miso.
 - 83871. No. 2045. Punsenkon. Third grade. Medium sized, oval, glossy, more or less cloudy yellow with a pale hilum. Used as boiled beans and in making home soy sauce and miso.
- 83872. No. 2046. Kirugunkon. Purchased from a bean sprout store in Genzan November 26, 1929. A

83777 to 83954-Continued.

mixed sample of yellow varieties, varying in size, shape, and in color of hilum. Used for soybean sprouts.

- 83873. No. 2047. Kurugunkonfankon. November 26, 1929. Purchased from a grain store in Genzan. Very small, black with yellow hilum; admixture of small, round, brown, very similar to Brownie (No. 17256). Said to be used for sprouts.
- 83874 to 83877. November 29, 1929. Obtained from a grain merchant in Kote.
 - 83874. No. 2050. Chinuikon. Medium small, oval, yellow, with a pale hilum. Some admixture of brown hilum beans. Used for bean sprouts, bean curd, miso, and soy sauce.
 - 83875. No. 2051. *Iyonkon*. Medium sized, nearly round, glossy yellow, with a pale hilum. Used for bean curd, soy sauce, natto, and miso. Classed as excellent grade.
 - 83876. No. 2052. *Iyontekon*. Medium sized, nearly round, glossy yellow, with a pale hilum. Used for soy sauce, bean curd, miso, and natto.
 - 83877. No. 2053. *Iyontekon*. Third grade. Medium large, oval, yellow, with a brown hilum. Used for bean curd, miso, soy sauce, and natto.
- 83878 to 83881. November 29, 1929. Obtained from a grain merchant at the Genzan wharf.
 - 83878. No. 2054. Odamakon. First grade. Medium large, oval, glossy yellow, with a pale hilum. Used for bean curd, soy sauce, miso, and natto.
 - 83879. No. 2055. Orugibarukon. Third grade. Medium sized, oval, somewhat cloudy, glossy yellow, with a pale hilum. Used for soy sauce, miso, and natto.
 - 83880. No. 2056. Orugibarukon. Fourth grade. Medium small, oval, somewhat cloudy, glossy yellow, with a pale hilum. Used for soy sauce, miso, and natto.
 - 83881. No. 2057. Orukon. An earlymaturing variety with medium large, oval, somewhat flattened seed. Used for making candied beans and bean paste.
- 83882 to 83947. December 2, 1929. From Dr. T. Nagai, Agricultural Experiment Station, Suigen.
 - 83882. No. 2061. Suigen No. 1. Medium sized, nearly round, yellow, with a pale hilum and much mottled.
 - 83883. No. 2062. Suigen No. 5. Medium large, oval, yellow, with a light-brown hilum. Some brown mottling.
 - 83884. No. 2063. Suigen No. 8. Mediam sized, nearly round, glossy yellow, with a pale hilum.
 - 83885. No. 2064. Suigen No. 9. An excellent variety, medium sized, nearly round, glossy yellow, with a pale hilum.

83777 to 83954—Continued.

- 83886. No. 2065. Suigen No. 10. Medium sized, oval, yellow, with a brown hilum. Much mottling.
- 83887. No. 2066. Chotan Shiromejunkei. Medium sized, glossy yellow, with a pale hilum.
- 83888. No. 2067. Oiarukonjunkei. Medium large, oval, yellow, with hilum varying from pale to brown.
- 83889. No. 2068. Hotadai. Medium large, oval yellow, with a brown hilum. Much mottled with brown.
- 83890. No. 2069. Ekizan. Medium sized, oval, yellow with a russetbrown hilum. The seed is more or less flattened.
- 83891. No. 2070. *Tansern*. Large, oval, yellow, with a pale hilum and more or less brown mottling.
- 83892. No. 2071. Akagara. Medium sized, oval, yellow, with a darkbrown hilum.
- 83893. No. 2072. *Quanpadai*. Medium sized, oval, yellow, with a pale hilum and mottled with dark brown.
- 83894. No. 2073. Ange chaji. Medium sized, oval, yellow, with a pale hilum and some brown mottling.
- 83895. No. 2074. Sonbizebikon. Large, greenish yellow with brown saddle, slightly flattened.
- 83896. No. 2075. Tamazukuri. Medium sized, nearly round, glossy yellow, with a pale hilum.
- 83897. No. 2076. Geizitsu. Medium sized, oval, yellow, with a brown hilum.
- 83898. No. 2077. Sangoro. Medium large, nearly round, yellow, with a pale bilum and some brown marking.
- 83899. No. 2078. Chadaizu. Medium sized, oval, brown.
- 83900. No. 2079. Anpen. Medium sized, nearly round, glossy yellow, with a pale slate hilum.
- 83901. No. 2080. Tansentanryoku. Large, greenish yellow, with a pale hilum. Used as a green manure.
- 83902. No. 2081. Urusan. Medium sized, somewhat elongated and flattened, yellow with brown hilum and some mottling.
- 83903. No. 2082. Koshuchuryu. Medium sized, oval, glossy yellow, with a pale slate hilum.
- 83904. No. 2083. *Heizya*. Medium large, nearly round, yellow, with a pale hilum and slight mottling.
- 83905. No. 2084. Chuseidai. Medium sized, oval, glossy yellow, with a pale hilum.
- 83906. No. 2085. Pakuarukon. Medium large, nearly round, yellow, with a pale to light brown hilum.
- 83907. No. 2086. Fukushima. Medium sized, nearly round, yellow, with a brown hilum and much mottled with brown.

83777 to 83954-Continued.

- 83908. No. 2087. Fimadaizu. Medium sized, oval, black and white (black testa split more or less irregularly on each side).
- 83909. No. 2088. *Madai*. Medium dium sized, oval, slightly flattened, yellow with brown hilum, considerably mottled with brown.
- 83910. No. 2089. Chotan chame. Medium sized, oval, yellow, with a large pronounced brown hilum. Rather a striking seed.
- 83911. No. 2090. Kurodaizu. Medium large, oval, black.
- 83912. No. 2091. Ryokisetsu. Medium large, oval, glossy, yellow with a pale hilum and slightly mottled with brown.
- 83913. No. 2092. Kinto. Medium sized, oval, very pale yellow, with a russet-brown hilum.
- 83914. No. 2093. Orugibal. Medium sized, nearly round, glossy yellow, with a pale-brown hilum.
- 83915. No. 2094. Shokeimeidai. Medium small, nearly round, yellow, slightly mottled with brown and black and with a brown hilum.
- 83916. No. 2095. Shihakudai. Medium sized, oval, glossy yellow, with a pale hilum and slightly mottled with brown.
- 83917. No. 2096. Suigen ao. Medium sized, oval, green, with a pale brown to brown hilum.
- 83918. No. 2097. Chuhokushiro. Medium sized, nearly round, cloudy yellow, with a brown hilum and some brown mottling.
- 83919. No. 2098. *Mizukugari*. Medium sized, oval, yellow, with a brown hilum and much mottled with brown.
- 83920. No. 2099. Hakusei chadaizu. Medium sized, olive brown, with green cotyledons.
- 83921. No. 2100. *Rikuu No. 3*. Medium sized, oval, green, with a pale brown hilum.
- 83922. No. 2101. Rikuu No. 6. Medium sized, nearly round, yellow, more or less mottled with brown and a russet brown hilum.
- 83923. No. 2102. Rikuu No. 10. Medium sized, nearly round, glossy yellow, with a brown hilum.
- 83924. No. 2103. *Rikuu No. 19.* Medium sized, round, glossy yellow, with a brown hilum.
- 83925. No. 2104. Rikuu No. 22. Medium small, nearly round, yellow, heavily mottled with brown and having a brown hilum.
- 83926. No. 2105. *Rikuu No.* 23. Medium small, nearly round, glossy yellow, with a deep-brown hilum and slight mottling of brown.
- 83927. No. 2106. *Rikuu No.* 27. Medium sized, nearly round, glossy yellow, with a prominent brown hilum and some brown mottling.
- 83928. No. 2107. Rikuu No. 28. Medium sized, nearly round, glossy yellow, with a dark-brown hilum.

83777 to 83954-Continued.

- 83929. No. 2108. *Kurozaya*. Medium sized, greenish yellow, oval, with a russet-brown hilum.
- 83930. No. 2109. Sennari. Medium small, nearly round, glossy yellow, with a dark-brown hilum which is quite prominent; mottled with brown.
- 83931. No. 2110. Kurodaizu. Medium large, much flattened, black, with a slight dent which is peculiar to this variety.
- 83932. No. 2111. Chogetsu. Medium sized, oval, yellow, with a brown hilum; heavily mottled with brown.
- 83933. No. 2112. Takiya. Medium sized, oval, glossy yellow, with a light russet-brown hilum.
- 83934. No. 2113. Yukino shita. Varies from medium small to medium large, oval, yellow, heavily mottled, with a brown hilum.
- 83935. No. 2115. Karimame. Medium small, somewhat flattened, greenish yellow, with a brown hilum and very heavily mottled with brown.
- 83936, No. 2116. *Aozaya*. Large flat, yellowish green, with a black hilum. Very similar to Hato [No. 40118]. An excellent variety for a green vegetable bean.
- 83937. No. 2118. Akazaya. Medium sized, oval, yellow, with a dark-brown hilum.
- 83938. No. 2119. Echo No. 5. Medium large, oval, olive green, with a black hilum.
- 83939, No. 2120. Echo No. 6. Medium sized, oval, glossy yellow, with a dark-brown hilum.
- 83940. No. 2121. Echo No. 24. Medium small, oval, yellow, with a small hilum.
- 83941. No. 2122. Yoshioka churyu. Medium small, oval, greenish yellow, with a slate-black hilum and slight black mottling.
- 83942. No. 2123. Kuro churyu. Medium small, black, slightly flattened.
- 83943. No. 2124. Yukiware. More or less mixed sample of brown seed varying from very small to medium sized.
- 83944. No. 2128. Oiarukonkii. Large, nearly round, glossy yellow with a pale hilum. Slight admixture of medium sized yellow with brown hilum.
- 83945. No. 2129. Dairyu Tsurunoko. Very large, oval, yellow, with pale brown hilum and much brown mottling.
- 83946. No. 2130. Kongo shoryu. Medium sized, oval, glossy yellow, with a pale hilum.
- 83947. No. 2131. Kongo dairyu. Medium large, nearly round, glossy yellow, with a pale-brown hilum.

83777 to 83954-Continued.

83948. STEPHANANDRA sp. Rosaceae.

No. 1949. From Onseiri, Chosen, November 27, 1929. A more or less decumbent, rather finely branched ornamental shrub, with netted leaves; closely related to spirea.

83949. TRIFOLIUM PRATENSE L. Fabaceae. Red clover.

No. 1972. From Tansen, Chosen, December 1, 1929. From plants near the Grain Investigation Building.

83950. VIBURNUM sp. Caprifoliaceae.

No. 1951. From Onseiri, Chosen, November 27, 1929. A red-berried shrub 4 to 6 feet tall.

83951. ZANTHOXYLUM PIPERITUM (L.) DC. Rutaceae. Japanese prickly-ash.

No. 3153. Sancho. December 12, 1929. From Subashiri, Shizouka Ken, Mount Fuji, Japan. A shrub or small tree armed with slender prickles. The compound leaves are made up of 11 to 19 ovate leaflets, and the small corymbs of greenish flowers are followed by glanddotted reddish fruits which open and expose the black seeds. Native to Japan.

83952. (Undetermined.)

No. 1782. From Fusanmen, Chosen, November 17, 1929. A much-branched perennial, 24 to 36 inches high.

83953. CALLICARPA JAPONICA Thunb. Verbenaceae. Japanese beautyberry.

No. 1953. From Onseiri, Chosen, November 28, 1929. The plants were well loaded with lavender pink fruits, which, in contrast with the grayish stems, presented a very attractive appearance.

83954. (Undetermined.)

No. 1997. From Onseiri, Chosen, November 28, 1929. An undetermined shrub.

83955 and 83956.

- From Honolulu, Hawaii. Seeds presented by the Hawaiian Sugar Planters' Association. Received January 18, 1930.
 - 83955. ALBIZZIA CHINENSIS (Osbeck) Merr. (A. stipulata Boiv.). Mimosaceae.

A large, rapidly growing tree, native to the subtropical regions of India. It is said to have been found very satisfactory in Assam as a shade for tea. The roots do not penetrate the soil deeply and the foliage does not make a dense shade.

For previous introduction see No. 63582.

83956. CORDIA SUBCORDATA Lam. Boraginaceae.

A tree up to 50 feet high with subcordate leaves 5 to 6 inches long and short terminal and lateral cymes of large orange campanulate flowers. The soft, light, durable wood is used for cabinetwork, exhibiting wavy ribbons of light and dark brown when polished. Native to the Hawaiian and other tropical islands.

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83957 to 84251.

From southwestern China. Seeds collected by Dr. J. F. Rock, National Geographic Society, Washington, D. C. Received January 10, 1930.

83957. ABIES Sp. Pinaceae. Fir.

No. 18487. November, 1929. The following material was collected in southwestern Szechwan Province, west of the Yalung, in Muli territory, on Mount Siga, northwest of Kulu Monastery. Tree 50 to 80 feet high, bark pale brown, leaves long, pale green, white beneath; cones smooth with tips dull brownish blue. This species occurs at lower elevations, 9,500 to 10,500 feet, in company with pines (*Pinus sinemsis yunnanensis*) on the drier slopes. The wood is said to be valuable.

83958 to 83961. ACER spp. Aceraceae. Maple.

83958. ACER sp.

No. 18230. Forests of Karadi, altitude 11,500 feet. Tree 25 to 30 feet high.

83959. ACER sp.

No. 18417. Western slope of Mount Sitsa, Salwin Valley, at 12,500 feet altitude. Tree 35 to 40 feet; leaves deeply three lobed.

83960. ACER sp.

No. 18419. Western slope of Mount Sitsa, Salwin Valley. Tree 25 feet high; leaves oblong, slightly lobed at base; fruits small in short raccmes.

83961. ACER sp.

No. 18425. Western slope of Mount Sitsa, Salwin Valley. Tree 30 to 40 feet; leaves large, pubescent beneath; fruit in long racemes. Found in forests at 12,500 feet altitude.

33962 to 93965. ACONITUM spp. Ranunculaceae. Monkshood.

83962. ACONITUM Sp.

No. 18121. A species with purple flowers, collected at an altitude of 13,500 feet in alpine meadows.

83963. ACONITUM sp.

No. 18276. A beautiful climber with blue flowers, found growing at 14,000 feet altitude on Mount Giboh, south of Mull.

83964. ACONITUM sp.

A plant 4 to 5 feet tall, with blue flowers and deeply lobed leaves. Found on the Likiang Snow Range at 11,000 feet altitude.

83965. ACONITUM Sp.

A plant several feet tall, with very large leaves and purplish blue flowers. Found in alpine meadows in the Likiang Snow Range at 11,500 feet altitude.

83966. ANDROSACE sp. Primulaceae.

No. 18166. A plant with pink flowers, found in alpine meadows at 13,500 feet altitude in the Kulu Mountains, west of Yalung. Collected in September and October, 1929.

83967. ANEMONE sp. Ranunculaceae.

83957 to 84251-Continued.

No. 18248. An anemone with a small red flower, found in alpine meadows at 14,500 feet altitude on Mount Mitzuga, September and October, 1929.

83968. ASTER sp. Asteraceae.

No. 18218. An aster with large purplish blue flowers, found in alphae meadows at 12,500 feet altitude in the mountains of Kulu in eastern Muli territory, but west of Yalung and north of the Litang River. Collected in September and October, 1929.

and October, 2011 83969. BENZOIN sp. Lauraceae. Spicebush.

No. 18259. Mount Mitzuga, Muli, October, 1929. A tree 20 feet high, with fragrant yellow flowers, found in forests.

83970. CEPHALOTAXUS Sp. Taxaceae. Plum-yew.

No. 18478. September and October, 1929. Forests of Lutien, below Litiginy, west of Yaungtze, at an altitude of 10,-500 feet. A tree 80 to 100 feet high, with bluish green, plumlike fruits.

83971. COLUTEA sp. Fabaceae.

Bladder-senna.

No. 18126. September and October, 1929. Southwestern Szechwan Province, west of the Yalung, in Muli territory on Mount Siga, northwest of Kulu Monastery. A species with yellow flowers, found in alpine meadows at 14,500 feet altitude.

83972. PIPTANTHUS sp. Fabaceae.

No. 18266. September and October, 1929. Mount Mitzuga, western slopes back of Muli Monastery. A shrub with yellow flowers, found in alpine meadows at 13,000 feet altitude.

83973 to 83976. COTONEASTER Spp. Malaceae.

83973. COTONEASTER Sp.

No. 18154. September and October, 1929. Mount Siga western slopes, back of Muli Monastery. A prostrate shrub with red flowers, found in alpine meadows at 13,500 feet altitude.

83974. COTONEASTER Sp.

No. 18250. September and October, 1929. Slopes of Mount Mitzuga, Muli territory. A shrub 5 to 6 feet high; found in alpine meadows at 13,000 feet altitude.

83975. COTONEASTER Sp.

No. 18279.

83976. COTONEASTER Sp.

Likiang Snow Range, 10,000 to 12,-000 feet altitude. A shrub 6 to 10 feet high, with white flowers and red fruits.

83977. DEBREGEASIA Sp. Urticaceae.

No. 18261. October, 1929. Muli Monastery, 9,600 feet altitude. An urticaceous shrub, 5 to 10 feet high, found along streams. The fruits are orange colored.

83978. DELPHINIUM LIKIANGENSE Franch. Ranunculaceae. Larkspur.

Likiang Snow Range, 13,000 feet altitude, November, 1929. One of the finest larkspurs; the dark-green glossy leaves are in cushionlike rosettes; the large,

rich blue flowers are 1 inch across, and there are several spikes on a plant at one time. Found in glacier gravel.

Ranunculaceae. 88979. DELPHINIUM SD. Larkspur.

Eastern slopes of Likiang Snow Range, at 14,500 feet altitude, November, 1929. A plant 6 inches high, with rather large blue flowers; found in alpine meadows among rocks.

83980, DEUTZIA sp. Hydrangeaceae.

No. 18358. Mount Fuchuan, west of the Mekong River and west of Weihsi, northwestern Yunnan, on the Mekong-Salwin Divide, October, 1929. A shrub 10 to 15 feet high, with purple flowers; found in forests at 12,000 feet altitude.

33981 to 83983. DIDISSANDRA spp. Gesneriaceae.

83981, DIDISSANDRA SERICEA Craib.

No. 18269. Muli Mountain, 10,000 feet altitude, September and October, 1929. A very handsome rock plant, with blue flowers and silvery leaves which grow in rosettes.

83982. DIDISSANDRA' SERICEA Craib.

Nyarophy Island in Lake Yunging, Yunnan. A rock plant with blue flowers and leaves forming rosettes.

83983. DIDISSANDRA Sp.

Yunnan, September and October, 1929. A gesneriaceous rock plant with large dark-green leaves which form rosettes and large cream-colored flow-ers; found on moist rocky shady banks in the forests along the lake shore at 9,600 feet altitude.

83984. DIPELTA sp. Caprifoliaceae.

No. 18262. Forests of Muli, Mount Mitzuga, September and October, 1929. A shrub 6 to 10 feet high, with large whitish flowers, mauve colored to pink; collected at 12,000 feet altiude.

83985 to 83989. ENKIANTHUS SDD. Erica-

Western slopes of Mount Sitsa, Sal-win Valley, September and October, 1929. Sal-

83985. ENKIANTHUS Sp.

No. 18422. A tree 10 to 15 feet high with striped brick-red flowers; found in open forests at 11,000 feet altitude.

83986, ENKIANTHUS sp.

No. 18423. A tree 10 to 15 feet high, with pale yellow flowers; found in open forests at 12,500 feet altitude.

83987. ENKIANTHUS Sp

No. 18426. A tree 10 to 15 feet high, with pale yellow flowers which are not striped; found in fir and spruce for-ests at 12,500 feet altitude.

83988. ENKIANTHUS sp.

No. 18470. West of Litiping. A tree 10 to 15 feet high, with white flowers tinged with purple at the apex of the petals; also faintly striped. Found at 10,000 feet altitude.

83989. ENKIANTHUS sp.

No. 18472. West of Litiping, at 10,000 feet altitude. A tree 10 to 15 feet high, with brick-red flowers hav-ing yellow stripes.

83957 to 84251-Continued.

83990 to 83994. GENTIANA SPD. Gentian-Gentian. aceae.

83990. GENTIANA Sp.

No. 18133. Southwest Szechwan, west of the Yalung, in Muli territory on Mount Siga, northeast of Kulu Monastery, in alpine meadows at 14,000 feet altitude. September and October, 1929. A plant with pale-purple flowers.

83991. GENTIANA Sp.

No. 18193. Mountains of Kulu, in eastern Muli territory, west of Yalung and north of the Litang River, Sep-tember and October, 1929. An herb with blue flowers collected in alpine-meadows at 14,000 feet altitude.

83992. GENTIANA Sp.

No. 18202. Mountains of Kulu, in eastern Muli territory, west of Yalung and north of the Litang River, Sep-tember and October, 1929. A plant 12 to 18 inches high, with rich blue flowers; it forms very handsome clumps on the outskirts of forests at 14,500 feet altitude.

83993. GENTIANA SD.

Likiang Snow Range. A plant 18 inches high, with large purple flowers; found in alpine meadows at 10,000 feet altitude.

83994. GENTIANA Sp.

Likiang Snow Range. A prostrate-herb with blue flowers; found in gravel at 14,500 feet altitude.

83995, HESPERIS Sp. Brassicaceae.

No. 18265. Mizuga, September and October, 1929. A plant with pink flowers. and a long rootstock; found growing in alpine scree at 15,500 feet altitude.

83996. HYDRANGEA Sp. Hydrangeaceae.

No. 18229. Karadi, east of Kulu, west No. 18229. Karadi, east of Kuld, west of Yalung, southwestern Szechwan, Sep-tember and October, 1929. A tree 15 to 20 feet high, with large cream-colored floral bracts; found in spruce forests at 11,500 feet altitude.

83997. HYDRANGEA Sp. Hydrangeaceae.

No. 18231. Karadi, east of Kulu, west of Yalung, southwestern Szechwan, Sep-tember and October, 1929. A tree 15 to 20 feet high, with cream-colored floral bracts which are smaller than those of the preceding number (No. 83996); found in a spruce forest at 11,000 feet altitude.

83998. INCARVILLEA sp. Bignoniaceae.

No. 18122. Yetsi, north of Kulu, Sep-tember and October, 1929. A plant 3-feet tall; found in alpine meadows at 13,000 feet altitude.

83999 to 84002. IRIS spp. Iridaceae.

83999, IRIS sp.

No. 18201. Mount Kulu, September and October, 1929. A plant 3 feet tall, with very handsome blackish blue flowers; found in wet alpine meadows at 14,000 feet altitude.

84000, IRIS sp.

No. 18203. Kulu Mountains, Sep-tember and October, 1929. A plant with bluish purple flowers; found in alpine meadows in forest clearings at 13,500 feet altitude.

84001. IRIS Sp.

No. 18235. Forests of Karadi, east of Kulu, September and October, 1929. A plant 2 feet high with large bluish purple flowers; found in spruce forests at 11,000 feet altitude.

84002. IRIS SP.

No. 18236. Karadi, September and October, 1929. A plant with purple flowers; found in forests at 11,000 feet altitude.

84003. (Undetermined.)

No. 18263.

84004. LIGUSTRUM sp. Oleaceae. Privet.

Likiang Snow Range, November, 1929. A shrub 10 to 15 feet high, with small leaves, fragrant white flowers, and small bluish black fruits.

84005 to 84009. LONICERA spp. Capri-foliaceae. Honeysuckle.

84005. LONICERA sp.

No. 18249. Mount Mitzuga. Muli. Szechwan Frovince, September and Oc-tober, 1929. Shrubs 3 to 4 feet high, with yellow flowers and black fruis; collected in alpine meadows at 13,000 feet altitude.

84006. LONICERA Sp.

No. 18221. Mountains of Kulu, Szech-wan Province, September and Octo-ber, 1929. A shrub 4 to 6 feet high, with yellow flowers; found along streams at 13,000 feet altitude.

84007. LONICERA Sp.

No. 18245. Mount Mitzuga, Muli, Szechwan Province, September and Oc-tober, 1929. A shrub I foot high, with large yellow flowers; found on moun-tain slopes at 13,500 feet altitude.

84008. LONICERA SD.

No. 18247. Mount Mitzuga, Muli, Szechwan Province, September and Oc-tober, 1929. A shrub 1 to 2 feet high; found on alpine slopes at 14,500 feet altitude.

84009. LONICERA Sp.

No. 18479. Mount Fuchuan, Yunnan Province, October, 1929. A shrub 4 to 5 feet high, with bluish black fruits; found in spruce and fir forests at 13,-000 feet altitude.

84010. MAGNOLIA sp. Magnoliaceae.

No. 18340. East of the Mekong and west of Weihsi, Yunnan Province, Octo-ber, 1929. A spreading tree, 30 to 40 feet high, with very handsome white flowers; found in forests at 11,000 feet altitudé.

84011 to 84019. MECONOPSIS Spp. Papaveraceae.

84011. MECONOPSIS INTEGRIFOLIA (Maxim.) Franch.

Yellow Chinese-poppy.

Likiang Snow Range, November, 1929. A yellow poppy found in alpine meadows at 13,000 feet altitude.

For previous introduction see No. 58374.

84012. MECONOPSIS sp.

83957 to 84251-Continued.

No. 18129. Southwestern Szechwan Province, west of the Yalung River, in Muli territory, on Mount Siga, northwest of Kulu Monastery, Sep-tember and October, 1929. A spiny plant with deep-blue flowers; found on gravelly alpine slopes at 14,500 feet altitude.

84013. MECONOPSIS SD.

No. 18241. Western slopes of Mount Mitzuga, back of Muli Monas-tery, Szechwan Province, September and October, 1929. A plant with large yellow flowers, resembling *M. integri-folia*; found in alpine meadows at 13,500 feet altitude.

84014. MECONOPSIS Sp.

No. 18258. Mount Mitzuga, Szech-wan Province, September and October, 1929. A plant with dark-blue single flowers; found in alpine meadows at 14,500 feet altitude.

84015. MECONOPSIS Sp.

No. 18267. Mount Mitzuga, Szech-wan Province, September and October, 1929. A plant with deep-blue flowers; found on alpine screes at 15,000 feet altitude.

84016. MECONOPSIS SD.

No. 18361. Mount Fuchuan, Yun-nan Province, October, 1929. A plant with dark-blue flowers; found in alpine meadows at 14,500 feet altitude.

84017. MECONOPSIS Sp.

No. 18363. Mount Fuchuan, Yun-nan Province, October, 1929. A plant with blue flowers; found in gravel and scree at 15,000 feet altitude.

84018. MECONOPSIS Sp.

No. 18364. Mount Fuchuan, Yun-nan Province, October, 1929. A plant with lyrate spiny leaves and large blue flowers; found in gravel and scree at 15,000 feet altitude.

84019. MECONOPSIS SD.

Likiang Snow Range, Yunnan Prov-ince, November, 1929. A plant with blue flowers; found on scree and gravel at 14,500 feet altitude.

84020. NOMOCHARIS PARDANTHINA Franch. Liliaceae.

No. 18368. Mount Fuchuan, Yunnah Province, October, 1929. A beautiful liliaceous plant with large white flowers 3 inches across, which are spotted with purple; found in a scrub forest at 11,000 feet altitude.

84021, OLEA Sp. Oleaceae. Olive.

No. 18348. Mount Fuchuan, west of the Mekong River and west of Weishi, northwestern Yunnan, on the Mekong-Salwin Divide, October, 1929. A large tree, 40 to 50 feet high; found on dry slopes.

84022. PAEONIA sp. Ranunculaceae

Peony.

Likiang Snow Range, Yunnan Prov-ince, November, 1929. A shrub 5 feet high, with deep carmine to blackish red single flowers; found on gravelly slopes at 12,500 feet altitude.

84023. PICEA LIKIANGENSIS (Franch.) E. Pritz, Pinaceae. Spruce.

No. 18526. Eastern slopes of the Likiang Snow Range, Yunnan Province, November, 1929. A tree from 50 to 100 feet high, with very small (aciculate) glaucous needles and oblong, slender, drab-colored cones; found at 11,500 feet altitude.

84024. PICEA sp. Pinaceae. Spruce.

No. 18489. Eastern slopes of the Likiang Snow Range, Yunnan Province, November, 1929. A tree 40 to 50 feet high, with very short dark-green small needles and ovate short cones; found in the forests of Gaba, north of Likiang, at 11,000 feet altitude.

84025. PICEA sp. Pinaceae. Spruce.

No. 18490. Eastern slopes of the Likiang Snow Range, Yunnan Province, November, 1929. A tree 50 to 60 feet high, with needles larger than the preceding (No. 84024) and cones very much larger; found in the forests of Gaba, north of Likiang, at 11,000 feet altitude.

84026. PIERIS sp. Ericaceae.

Eastern slopes of the Likiang Snow Range, Yunnan Province, November, 1929. A handsome shrub, 5 to 8 feet high, with erect branches, elliptical leaves, and spikes of white flowers; found at altitudes between 10,000 and 11,000 feet on dry slopes growing with *Pinus sinensis*.

84027. PINUS ARMANDI Franch. Pinaceae. Armand pine.

Likiang Snow Range, Yunnan Province, November, 1929. A tall pine 60 to 100 feet high, with trunks often 6 feet in diameter; found growing between 9,000 and 10,000 feet altitude, in moist regions. It is well adapted to San Franciscan, Oregon, and the redwood belt.

84028 to 84047. PRIMULA spp. Primulaceae. Primrose.

84028. PRIMULA FORRESTII Balf. f.

Likiang Snow Range, Yunnan Province, November, 1929. A very handsome woody perennial with orangeyellow flowers and leaves having the fragrance of apples; found on dry limestone cliffs at 11,000 feet altitude. The plant is said to live for 100 years.

For previous introduction see No. 59710.

84029. PRIMULA sp.

No. 17401. Drunisregouka, north of Kulu, in the Yetse Valley, Szechwan Province, September and October, 1929. A small woody Primula, related to the group to which *P. forresti* belongs, but very distinct. The large, deep-orange flowers are single, on short peduncles, and droop; the leaves are smaller and darker green; found at 10,000 feet altitude.

Nos. 84030 to 84038 were collected in southwestern Szechwan Province, west of the Yalung River, in Muli territory, on Mount Siga, northeast of Kulu Monastery, September and October, 1929.

84030. PRIMULA Sp.

No. 18120. A plant with purple flowers; found in alpine meadows at 14,000 feet altitude.

83957 to 84251-Continued.

84031. PRIMULA Sp.

No. 18123. A plant with flowers so deep blue as to be almost indigo; found in alpine meadows at 13,500 feet altitude.

84032. PRIMULA Sp.

No. 18124. A primula with white flowers; found in alpine meadows at 13,500 feet altitude.

84033. PRIMULA SD.

No. 18128. A primula with yellow flowers; found in alpine meadows at 14,500 feet altitude.

84034. PRIMULA sp.

No. 18134. A primula with large single bluish purple flowers; found in alpine meadows at 14,000 feet altitude.

84035. PRIMULA Sp.

No. 18137. A primula with pink flowers; found in alpine meadows at 13,500 feet altitude.

84036. PRIMULA sp.

No. 18145. A primula with flowers which vary from pinkish purple to blue; found on crags at 14,500 feet altitude.

84037. PRIMULA Sp.

No. 18146. A plant with reddish purple flowers; found in swampy meadows between 12,000 and 12,500 feet altitude.

84038. PRIMULA Sp.

No. 18151. One of the largest and handsomest primulas of the entire region. The mauve-pink to bluish lavender flowers, the size of a half dollar, have white calices and grow in large umbels. The leaves are white beneath. Found in mossy rhododendron and open fir forests at 14,500 feet altitude.

84039. PRIMULA SP.

No. 18198. Mountains of Kulu, in eastern Muli territory, but west of Yalung and north of the Litang River, September and October, 1929. A primula with yellow flowers; found along brooks and in swampy meadows at 14,000 feet altitude.

84040. PRIMULA sp.

No. 18210. Mountains of Kulu, in eastern Muli territory, but west of Yalung and north of the Litang River, September and October, 1929. The blue flowers are in long spikes with carmine calices; found in alpine meadows between 12,000 and 14,000 feet altitude.

84041. PRIMULA sp.

No. 18242. Mount Mitzuga, Muli, Szechwan Province, September and October, 1929. A plant 2 feet high, with large mauve-pink to blue flowers the size of a half dollar; found in mossy fir and rhododendron forests at 13,500 to 14,000 feet altitude.

84042. PRIMULA sp.

No. 18264. Mount Mitzuga, Muli, Szechwan Province, September and October, 1929. A plant with very handsome bluish pink flowers; found on dry banks in pine forests at 12,000 feet altitude.

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Nos. 84043 to 84046 were collected on Mount Fuchuan, west of the Mekong River and west of Weihsi, northwestern Yunnan, on the Mekong-Salwin Divide, October, 1929.

84043. PRIMULA sp.

No. 18360. A primula with large indigo-blue flowers; found in alpine meadows at 14,000 feet altitude.

84044. PRIMULA sp.

No. 18362. A primula with large leaves and dark-blue flowers; found in alpine meadows at 14,500 feet altitude.

84045. PRIMULA Sp.

No. 18374. A primula with reddish purple flowers and dentate leaves which are yellow beneath; found in alpine meadows at 14,500 feet altitude.

84046. PRIMULA sp.

No. 18392. A primula with yellow flowers; found in alpine meadows at 14,500 feet altitude.

84047. PRIMULA Sp.

No. 18401. Mount Sitsa, west of the Mekong and north of Weishi, September and October, 1929. A primula with large blue flowers found in the Salwin Valley in a mossy fir forest at 13,000 feet altitude.

84048. PRUNUS MAJESTICA Koehne. Amygdalaceae.

No. 18256. Muli, September and October, 1929. A cherry tree 20 feet high, with pink flowers; found in spruce forests at 11,500 feet altitude.

84049. RHEUM ALEXANDRAE Batal. Polygonaceae. Bhubarb.

No. 18200. Kulu Mountains, September and October, 1929. A handsome plant 2 to 3 feet tall, with large creamcolored bracts; found in swampy alpine meadows at 14,500 feet altitude.

84050 to 84215. RHODODENDRON spp. Ericaceae.

84050. RHODODENDRON HELIOLEPIS Franch.

From the Likiang Snow Range, Yunnan.

For previous introduction see No. 59715.

84051 to 84073. Mount Siga, southwestern Szechwan, September and October, 1929.

84051. RHODODENDRON Sp.

No. 18119. A shrub 10 to 12 feet high, with purplish pink flowers; found in forests at 14,000 feet altitude.

84052. RHODODENDRON Sp.

No. 18125. An ornamental herb with pale purple flowers; found in alpine meadows at 13,500 feet altitude.

84053. RHODODENDRON Sp.

No. 18138. A shrub or small tree 10 to 15 feet high, with white flowers; found on alpine slopes at 14,500 feet altitude.

84054. RHODODENDRON Sp.

No. 18139. A shrub 5 to 8 feet high; found on alpine slopes at 14,500 feet altitude. 83957 to 84251-Continued.

84055. RHODODENDRON sp.

No. 18140. A shrub 4 to 5 feet high, with pale-purple flowers; found on forested slopes at 13,000 feet altitude.

84056. RHODODENDRON sp.

No. 18141. A shrub 6 to 10 feet high, with pink flowers; found in alpine meadows at 14,500 feet altitude.

84057. RHODODENDRON sp.

No. 18142. A shrub or small tree 8 to 10 feet high, flowers not seen; found in alpine regions among rocks at 14,500 feet altitude.

84058. RHODODENDRON SP.

No. 18143. A shrub 1 to 2 feet high, with deep purplish blue flowers; found in alpine regions among rocks at 14,-500 feet altitude.

84059. RHODODENDRON sp.

No. 18144. A shrub 1 to 2 feet high, with rich-yellow flowers; found on alpine slopes at 15,000 feet altitude.

84060. RHODODENDRON Sp.

No. 18149. A tree 10 to 20 feet high, with very large purple flowers; found in fir forests at 14,000 feet altitude.

84061. RHODODENDRON sp.

No. 18150. A shrub 10 feet high; found in alpine regions among bowlders.

84062. RHODODENDRON sp.

No. 18152. A shrub 6 feet high; found in alpine regions at 15,000 feet altitude.

84063. RHODODENDRON Sp.

No. 18153. A small tree 10 to 12 feet high, with purplish red flowers; found in alpine regions at 15,000 feet altitude.

84064. RHODODENDRON sp.

No. 18155. A compact shrub, 4 to 5 feet high, with white flowers; found in alpine regions at 15,000 feet altitude.

84065. RHODODENDRON Sp.

No. 18156. A small tree 8 to 10 feet high, with pink flowers; found in fir forests at 14,500 feet altitude.

84066. RHODODENDRON Sp.

No. 18157. A compact shrub 5 to 6 feet high, with pink flowers; found among limestone and crags at 15,000 feet altitude.

84067. RHODODENDRON sp.

No. 18158. A shrub or small tree 10 to 15 feet high, with purple flowers; found in fir forests at 14,500 feet altitude.

84068. RHODODENDRON Sp.

No. 18159. A shrub 5 to 10 feet high, with large white flowers; found in fir forests at 14,500 feet altitude.

84069, RHODODENDRON sp.

No. 18160. A shrub 4 to 6 feet high, with purple flowers; found among bowlders at 15,000 feet altitude.

84070, RHODODENDRON SD.

No. 18161. A shrub 6 to 8 feet high, with pink flowers; found forming thickets in alpine regions at 14,600 feet altitude.

84071. RHODODENDRON Sp.

No. 18162. A shrub 5 to 8 feet high, with pink flowers; found in rhododendron forests at 14,500 feet altitude.

84072. RHODODENDRON SP.

No. 18163. A shrub 1 foot high, with deep reddish purple to purplish blue flowers; found among rocks at 15,000 feet altitude.

84073. RHODODENDRON Sp.

No. 18164. A shrub 6 to 8 feet high, with purple flowers; found in alpine regions at 15,000 feet altitude.

84074. RHODODENDRON SD.

No. 18168. A shrub 6 to 8 feet high, with white flowers; found in a spruce forest on the mountains of Kulu at 13,500 feet altitude.

84075. RHODODENDRON Sp.

No. 18169. A tree 25 feet tall; found in fir forests at 14,500 feet altitude.

84076. RHODODENDRON sp.

No. 18170. A tree 10 feet tall with purplish flowers; found on the mountains of Kulu in fir forests at 14,500 feet altitude.

84077. RHODODENDRON Sp.

No. 18171. A small tree 15 to 18 feet high, with white flowers growing above fir forests in a rhododendron forest at 15,000 feet altitude in the mountains of Kulu.

84078. RHODODENDRON sp.

No. 18172. A shrub 6 to 8 feet high, with thick brown leaves, woolly beneath, and white flowers. Found in the alpine regions of the mountains of Kulu at 15,000 feet altitude.

84079. RHODODENDRON SP.

No. 18173. A tree 10 to 15 feet high, with purplish pink flowers; found in fir forests in the mountains of Kulu at 14,500 feet altitude.

84080. RHODODENDRON Sp.

No. 18174. A shrub 4 to 5 feet high, with white flowers; found in alpine regions in the Kulu Mountains at 15,000 feet altitude.

84081. RHODODENDRON sp.

No. 18175. A shrub 6 to 8 feet high, with pink flowers; found in the alpine regions of the Kulu Mountains.

84082. RHODODENDRON Sp.

No. 18176. A shrub 6 to 8 feet high, with pink flowers; found in alpine regions at 15,000 feet altitude.

84083. RHODODENDRON Sp.

No. 18177. A shrub 4 to 5 feet high, with pink flowers; found in fir forests on the Kulu Mountains at 14,-500 feet altitude.

83957 to 84251-Continued.

84084. RHODODENDRON sp.

No. 18178. A shrub 6 to 8 feet high, with pink flowers; found in the mountains of Kulu at 14,500 feet altitude.

84085. RHODODENDRON Sp.

No. 18179. A shrub 8 to 10 feet high, with white flowers; found in the alpine regions of the mountains of Kulu at 15,000 feet altitude.

84086. RHODODENDRON Sp.

No. 18180. A shrub 10 feet high, with white flowers; found in a rhododendron forest at 15.000 feet altitude in the mountains of Kulu.

84087. RHODODENDRON SD.

No. 18181. A small shrub, 2 feet high, with white flowers; found in the alpine regions of the mountains of Kulu at 14,500 feet altitude.

84088. RHODODENDRON sp.

No. 18182. A shrub 10 feet high, with white flowers; found at 15,000 feet altitude in the alpine regions of the Kulu Mountains.

84089. RHODODENDRON sp.

No. 18185. A shrub or small tree 10 to 15 feet high, with pink flowers; found in fir forests on the Kulu Mountains at 14,000 feet altitude.

84090. RHODODENDRON sp.

No. 18186. A shrub 4 to 5 feet high, with pinkish flowers; found in the alpine regions of the Kulu Mountains at 15,000 feet altitude.

84091. RHODODENDRON sp.

No. 18187. A small shrub, 2 feet high, with yellowish pink flowers; found in the alpine regions of the Kulu Mountains at 15,000 feet altitude.

84092. RHODODENDRON sp.

No. 18189. A shrub 8 to 10 feet high, with pinkish purple flowers; found in spruce forests on the Kulu Mountains at 13,500 feet altitude.

84093. RHODODENDRON sp.

No. 18222. A small shrub 2 feet high, with dark blue flowers; found at 13,500 feet altitude in the alpine regions of the Kulu Mountains.

84094. RHODODENDRON sp.

No. 18223. A small shrub 1 to 2 feet high, with reddish purple flowers, found in alpine regions between 13,500 and 14,000 feet altitude.

84095. RHODODENDRON sp.

No. 18224. A shrub 2 feet high, with dark-blue flowers; found between 13,500 and 14,000 feet altitude in the alpine regions of the mountains of Kulu.

84096. RHODODENDRON sp.

No. 18226. A shrub or small tree 10 to 12 feet high; found in hemlock forests at 11,500 feet altitude on Karadi, east of Kulu.

84097. RHODODENDRON Sp.

No. 18227. A shrub or small tree 10 to 12 feet high, with large yellow

flowers; found in the spruce forests of Karadi east of Kulu Monastery and west of Yalung at 11,500 feet altitude.

84098. RHODODENDRON sp.

No. 18228. A shrub 6 to 8 feet high, with leaves, petioles, and pedicels covered with red hairs; found in spruce forests of Karadi, east of Kulu, at 11,500 feet altitude.

\$4099. RHODODENDRON Sp.

No. 18234. A tree 15 to 25 feet high; the leaves, 2 feet long, are dark green above and chocolate colored beneath; the large, exceedingly handsome flowers are a rich pink. Found in the forests of Karadi at 11,500 feet altitude.

84100. RHODODENDRON sp.

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No. 18275. A very handsome shrub 3 to 5 feet high, with flowers varying from white to pink, bluish pink, and purple; found on dry slopes in pine forests as undergrowth, also found in the open country of Sili at 11,000 feet altitude, on the northern slopes of Mount Gibboh and south of Muli.

34101. RHODODENDRON sp.

No. 18277. A shrub 4 to 5 feet high, with pink flowers; found in the alpine regions of Kulu at 15,000 feet altitude.

84102. RHODODENDRON Sp.

No. 18281. A small tree, 15 feet high, with pink flowers and leaves which are silvery beneath; found north of Tokesher in the Yangtze loop, northwestern Yunnan, at 11,000 feet altitude.

84103 to 84141. From Mount Fuchuan, west of the Mekong River and west of Weihsi, northwestern Yunnan, on the Mekong-Salwin Divide, October, 1929.

84103. RHODODENDRON Sp.

No. 18331. A tree 30 feet high, with leaves several feet long and silvery beneath, and large yellow flowers in huge corymbs the size of a man's head; found at 12,500 feet altitude.

84104. RHODODENDRON Sp.

No. 18332. A shrub 7 to 8 feet high, with glabrous leaves and yellow flowers; found in forests at 12,000 feet altitude.

84105. RHODODENDRON Sp.

No. 18333. A shrub 6 to 8 feet high, with elliptical leaves and yellow flowers; found in forests at 12,000 feet altitude.

84106. RHODODENDRON sp.

No. 18336. A tree 15 to 20 feet high, with large elliptical leaves which are brown beneath and large yellow flowers; found in forests at 12,000 feet altitude.

84107. RHODODENDRON sp.

No. 18337. A tree 15 to 20 feet high, with large leaves which are brown beneath and very large yellow flowers; found in forests at 12,000 feet altitude.

83957 to 84251-Continued.

84108. RHODODENDRON Sp.

No. 18338. A tree 10 to 15 feet high, with oblong leaves, fawn colored beneath and pale yellow flowers; found in forests at 12,000 feet altitude.

84109. RHODODENDRON Sp.

No. 18339. A tree 10 to 15 feet high, with elliptical leaves, brown beneath, and pink flowers; found in forests at 12,000 feet altitude.

84110. RHODODENDRON sp.

No. 18341. A small shrub 2 feet high, with elliptical leaves which are glaucous beneath and white flowers; found in forests at 12,500 feet altitude.

84111. RHODODENDRON Sp.

No. 18350. A shrub 10 feet high, with pink flowers and broadly elliptic oblong leaves; found at an altitude of 13,000 feet.

84112. RHODODENDRON SP.

No. 18351. A shrub 8 to 10 feet high, with blue flowers; found in alpine regions at 13,000 feet altitude.

84113. RHODODENDRON Sp.

No. 18352. A shrub 1 foot high, with plnk flowers and small elliptic glabrous leaves; found in alpine regions at 13,000 feet altitude.

84114. RHODODENDRON Sp.

No. 18353. A shrub 8 to 10 feet high, with dark-green leaves and yellow flowers; found in alpine regions at 13,500 feet altitude.

84115. RHODODENDRON sp.

No. 18354. A shrub 2 to 3 feet high, with pink flowers; found in alpine regions at 13,500 feet altitude.

84116. RHODODENDRON Sp.

No. 18355. A shrub 3 to 4 feet high, with pink flowers; found in alpine regions at 13,500 feet altitude.

84117. RHODODENDRON Sp.

No. 18356. A shrub 2 to 4 feet high, with pink flowers; found in alpine regions at 13,500 feet altitude.

84118. RHODODENDRON sp.

No. 18357. A shrub 2 to 4 feet high, with rich-red flowers; found in alpine regions at 13,500 feet altitude.

84119. RHODODENDRON Sp.

No. 18359. A shrub 5 to 6 feet high, with deep reddish to black flowers; found in alpine regions at 13,000 feet altitude.

84120. RHODODENDRON Sp.

No. 18365. A small shrub 1 to 2 feet high, with dark-blue flowers; found in alpine regions at 14,500 feet altitude.

84121. RHODODENDRON Sp.

No. 18366. A shrub 4 to 6 feet high, with white flowers and dense woolly brown leaves; found in alpine regions at 14,500 feet altitude.

84122. RHODODENDRON sp.

No. 18367. A small shrub 2 to 3 feet high, with large purplish red flowers; found in alpine meadows among bowlders at 14,500 feet altitude.

84123. RHODODENDRON Sp.

No. 18369. A shrub 6 to 8 feet high, with yellow flowers; found in alpine regions at 13,500 feet altitude.

84124. RHODODENDRON sp.

No. 18373. A shrub 4 to 6 feet high, with yellow flowers; found in alpine regions at 14,000 feet altitude.

84125. RHODODENDRON sp.

No. 18375. A shrub 6 to 8 feet high, with pink flowers; found in alpine regions at 14,500 feet altitude.

84126. RHODODENDRON Sp.

No. 18376. A shrub 6 to 8 feet high, with pink flowers; found in alpine regions at 14,500 feet altitude.

84127. RHODODENDRON Sp.

No. 18377. A shrub 5 to 6 feet high, with yellow flowers; found in alpine regions at 14,500 feet altitude.

84128. RHODODENDRON sp.

No. 18378. A shrub 6 to 8 feet high, with red flowers; found in alpine regions at 14,500 feet altitude.

84129. RHODODENDRON sp.

No. 18379. A shrub 3 to 5 feet high, with red flowers; found in alpine regions at 14,500 feet altitude.

84130. RHODODENDRON sp.

No. 18380. A shrub 2 to 3 feet high, with purple flowers; found in alpine regions at 14,500 feet altitude.

84131. RHODODENDRON Sp.

No. 18381. A shrub 1 to 3 feet high, with purple flowers; found in alpine regions at 14,000 feet altitude.

84132. RHODODENDRON Sp.

No. 18382. A shrub 5 to 6 feet high, with dark-red flowers; found in alpine regions at 14,000 feet altitude.

84133. RHODODENDRON Sp.

No. 18383. A shrub 6 to 8 feet high, with yellow flowers; found in alpine regions at 14,000 feet altitude.

84134. RHODODENDRON sp.

No. 18384. A shrub or small tree 15 to 18 feet high, with large purple flowers; found in spruce forests at 13,500 feet altitude.

83957 to 84251-Continued.

84135. RHODODENDRON sp.

No. 18385. A tree 15 to 18 feet high, with large white flowers and leaves which are drab colored when young and white beneath when they are old; found in spruce forests at 13,500 feet altitude.

84136. RHODODENDRON sp.

No. 18386. A tree 15 to 16 feet high, with red flowers and hairy petioles; found in spruce forests at 12,000 feet altitude.

84137. RHODODENDRON sp.

No. 18387. A shrub 6 to 10 feet high, with red (?) flowers; found in spruce forests at 12,000 feet altitude.

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84138. RHODODENDRON Sp.

No. 18388. A shrub 2 to 3 feet high, with small yellow flowers; found in a canebrake at 13,000 feet altitude.

84139. RHODODENDRON Sp.

No. 18389. A shrub 1 to 2 feet high, with pink flowers; found in alpine regions at 14,500 feet altitude.

84140. RHODODENDRON sp.

No. 18390. A tree 25 feet high, with large yellow flowers and rustred fruits. The large leaves are rust red beneath. Found in rhododendron forests at 14,500 feet altitude.

84141. RHODODENDRON SD.

No. 18391. A tree 15 to 20 feet high, with large pink flowers and large obovate oblong leaves which are red brown beneath; found in alpine regions at 14,500 feet altitude.

84142 to 84164. From Mount Sitsa, west of the Mekong River and north of Weihsi, northwestern Yunnan, September and October, 1929.

84142. RHODODENDRON Sp.

No. 18395. (Flowering specimen No. 17054.) A shrub 3 to 5 feet high, with yellow flowers and oval glaucous leaves which are glabrous beneath; found in spruce forests at 12,000 feet altitude.

84143. RHODODENDRON sp.

No. 18396. (Flowering specimen No. 17052.) A tree 15 to 18 feet high, with large pink flowers and large leaves which are pale brown beneath; found in alpine regions at 14,000 feet altitude.

84144. RHODODENDRON sp.

No. 18397. (Flowering specimen No. 17053.) A tree 25 feet high, with yellow flowers and large leaves which are pale brown beneath; found in alpine regions at 14,000 feet altitude.

84145. RHODODENDRON sp.

No. 18399. A tree 6 to 8 feet high, with very large white flowers and large ovate-oblong leaves which are grayish black beneath and have prominent veins; found on a forest slope at 10,000 feet altitude.

84146. RHODODENDRON SD.

No. 18400. A shrub 6 to 10 feet high, with white flowers and rich-green elliptical leaves which are gray beneath; found in forests at 10,000 feet altitude.

84147. RHODODENDBON Sp.

No. 18402. A tree or shrub 8 to 10 feet high, with white flowers and lanceolate leaves which are brown tomentoge beneath; found at 12,500 feet altitude.

84148, RHODODENDRON SP.

No. 18403. (Flowering specimen No. 17070.) A tree 25 feet high, with red flowers and elliptical leaves; found in open forests at 12,500 feet altitude.

84149. RHODODENDRON Sp.

No. 18404. (Flowering specimen No. 17088.) A shrub 8 to 10 feet high, with large ovate leaves and large white flowers; found at 12,000 feet altitude.

84159. RHODODENDRON Sp.

No. 18405. A shrub 5 to 8 feet high, with suborbicular thin glabrous leaves and yellow flowers; found in alpine regions at 18,500 feet altitude.

84151. RHODODENDRON sp.

No. 18406. (Flowering speci-men No. 17096.) A small shrub 4 feet high, with deep blackish red flowers and obovate leaves which are brown woolly beneath; found in alpine regions at 14,500 feet altitude.

84152. RHODODENDRON SD.

No. 18407. (Flowering speci-men No. 17081.) A small tree 10 to 12 feet high, with large white flowers and large oblong, pale-green leaves which are pale brown be-neath; found at 12,500 feet altitude.

84153, RHODODENDRON SP.

No. 18408. (Flowering specimen No. 17078.) A shrub 2 to 4 feet high, with small elliptical dark gray leaves and pale red to purplish flowers; found at 12,500 feet altitude.

84154. RHODODENDRON sp.

No. 18409. (Flowering specimen No. 17060.) A small shrub 2 to 5 feet high, with linear leaves, gray beneath, and small yellow flowers.

84155. RHODODENDRON Sp.

No. 18410. A shrub 6 to 8 feet high, with white flowers; found in spruce forests at 12,000 feet altitinde.

84156. RHODODENDRON Sp.

No. 18411. (Flowering specimen No. 17066.) A small tree 10 feet high, with elliptical leaves which are gray drab beneath and white flowers; found in forests at 12,000 feet altitude.

84157. RHODODENDRON SD.

No. 18412. (Flowering specimen No. 17093.) A shrub 3 to 4 feet

83957 to 84251-Continued.

high, with small lanceolate leaves, gray beneath, and white flowers; found in alpine regions between 13,500 and 14,000 feet altitude.

84158. RHODODENDRON SD.

No. 18413. A shrub 2 to 4 feet high, with narrow linear leaves, dark gray beneath, and red flowers; found in forests at 12,500 feet altitude.

84159. RHODODENDRON SP.

No. 18415. (Flowering specimen No. 17095.) A shrub 5 to 6 feet high, found in alpine regions at 14,000 feet altitude.

84160. RHODODENDRON sp.

No. 18416. A shrub 5 to 6 feet high, with glabrous leaves and pink flowers, found in alpine regions at 13,500 feet altitude.

84161. RHODODENDRON SD.

No. 18418. A shrub 6 feet high, with pink flowers; found in forests at 11,000 feet altitude.

84162. RHODODENDRON SD.

No. 18420. A small tree 10 to 12 No. 18420. A small tree 10 to 12 feet high, with leaves, petioles, and peduncles covered with red hairs and red flowers; found in forests at 12,000 feet altitude.

84163. RHODODENDRON SD.

No. 18421. A small shrub 2 to 4 feet high, with small elliptical pale-green leaves and large white flow-ers on slender peduncles; found on dry, open slopes at 12,500 feet alti-tude.

84164. RHODODENDRON sp.

No. 18424. A shrub 2 to 4 feet high, with leathery leaves, woolly beneath, which have veins deeply impressed and large white flowers with a brown woolly calyx; often epiphytic on fir trees at 12,500 feet altitude.

84165 to 84186. From Mount Tapao, be tween Weihsi and the Mekong River, northwestern Yunnan, September and October, 1929.

84165. RHODODENDRON Sp.

No. 18433. A tree 15 to 18 feet high, with large oblong leaves, brown beneath, and pale pink flow-ers, found in forests at 12,500 feet altitude

84166. RHODODENDRON SP.

No. 18434. A shrub 6 to 8 feet high, found in spruce forests at 11,000 feet altitude.

84167. RHODODENDRON sp.

No. 18435. A shrub 2 feet high, with pure-white flowers and linear leaves having revolute margins; found on the summit of a spur at 13,500 feet altitude.

84168. RHODODENDRON SP.

No. 18436. A shrub 4 to 6 feet high, with pale-yellow flowers and elliptical leaves which are densely dark rufous tomentose; found in alpine regions at 13,500 feet altitude.

84169. RHODODENDRON Sp.

No. 18437. A shrub 8 to 10 feet high, with white flowers and elliptic-oblong leaves covered with palebrown tomentum beneath; found in alpine regions at 13,500 feet altitude.

84170. RHODODENDRON Sp.

No. 18438. A shrub 5 to 6 feet high, with oblong, cordate leaves and rich pink flowers; found in alpine regions at 14,500 feet altitude.

84171. RHODODENDRON sp.

No. 18439. A shrub 5 to 7 feet high, with white flowers and oval leaves which are rust brown beneath; found in alpine regions at 14,500 feet altitude.

84172. RHODODENDRON Sp.

No. 18440. A tree 10 to 15 feet high, with large oblong subglabrous leaves and pale pink flowers in large globose corymbs; found in fir forests at 12,500 feet altitude.

84173. RHODODENDRON Sp.

No. 18441. A shrub 6 to 8 feet high, with white flowers; found in alpine regions at 14,000 feet altitude.

84174. RHODODENDRON sp.

No. 18442. A small shrub 1 to 2 feet high, with small oval glabrous leaves and purplish blue flowers; found in alpine meadows at 14,000 feet altitude.

84175. RHODODENDRON Sp.

No. 18443. A tree 12 to 15 feet high, with white flowers and large leaves, glaucous above and covered with fine tomentum beneath; found in alpine regions at 13,500 feet altitude.

84176. RHODODENDRON sp.

No. 18444. A shrub 6 to 8 feet high, with ovate oblong acute leaves, finely tomentose beneath, and large white flowers; found in alpine regions at 14,500 feet altitude.

84177. RHODODENDRON SP.

No. 18445. (Received without notes.)

84178. RHODODENDRON sp.

No. 18446. A shrub 5 to 7 feet high, with oblong cordate leaves and rich pink flowers; found in alpine regions at 14,500 feet altitude.

84179. RHODODENDRON sp.

No. 18447. A tree 15 to 18 feet high, with large white flowers, rich green oblong leaves, alternate at the base and covered with brown tomentum beneath; found in alpine regions at 14,000 feet altitude.

84180, RHODODENDRON sp.

No. 18448. A shrub 5 to 6 feet high, with purplish red flowers, broadly oblong leaves, cordate at the base, and matted with a gravish tomentum; found in alpine regions at 14,500 feet altitude.

83957 to 84251-Continued.

84181. RHODODENDRON SD.

No. 18449. A tree 15 to 18 feet high, with large red flowers and long lanceolate leaves with hirsute petioles and margins; found in fir forests at 12,500 feet altitude.

84182. RHODODENDRON Sp.

No. 18450. A small shrub about a foot high, with small elliptical leaves, gray beneath, and large purplish blue flowers; found in alpine regions at 14,000 feet altitude.

84183. RHODODENDRON sp.

No. 18451. A tree 15 to 20 feet high, with large oblong-obovate leaves covered with rich brown tomentum beneath, and large white flowers; found in fir forests at 12,-500 feet altitude.

84184. RHODODENDRON Sp.

No. 18452. A tree 25 feet high, with large purplish red flowers and large oblong leaves covered with rufous tomentum beneath; found in fir forests at 12,500 feet altitude.

84185. RHODODENDRON Sp.

No. 18453. A shrub 1 to 2 feet high, with small elliptical leaves which are dark brown beneath, and deep bluish purple flowers with a dark carmine calyx; found in alpine regions at 14,000 feet altitude.

84186. RHODODENDRON Sp.

No. 18454. A shrub 2 feet high, found in alpine meadows at 14,000 feet altitude.

84187 to 84192. From Mount Hung Myai, north of Litiping, Yangtze-Mekong Divide, northwestern Yunnan, September and October, 1929.

84187. RHODODENDRON Sp.

No. 18455. A shrub 8 to 10 feet high, with oblong, pale glabrous leaves and lemon-yellow flowers; found in spruce forests at 11,500 feet altitude.

84188. RHODODENDRON SP.

No. 18456. A shrub 8 to 10 feet high, with purple flowers and small oval glabrous leaves, acute at both ends; found in fir and spruce forests at 11,000 feet altitude.

84189. RHODODENDRON Sp.

No. 18457. A shrub 5 to 8 feet high, with small elliptical, glabrous, cordate leaves and small pale blue flowers; found in spruce forests at 11,500 feet altitude.

84190. RHODODENDRON sp.

No. 18458. A shrub 1 to 2 feet high, with small narrow elliptical leaves, brown beneath, and blue flowers; found in alpine meadows at 11,-000 feet altitude.

84191. RHODODENDRON SP.

No. 18459. A tree 15 to 18 feet high, with large, oblong leaves, red brown woolly beneath; found at the foot of cliffs in spruce forests at 12,000 feet altitude.

84192. RHODODENDRON SP.

No. 18460. A shrub 2 to 3 feet high, with narrow elliptical leaves, dark brown beneath, and pale-blue flowers; found in alpine meadows at 11,500 feet altitude.

84193 to 84195. From Shanmakou, north of Weihsi and east of the Mekong River, northwestern Yunnan, September and October, 1929.

84193. RHODODENDRON Sp.

No. 18462. A shrub 2 to 4 feet high, with pink flowers; found in alpine meadows at 14,000 feet altitude.

84194. RHODODENDRON Sp.

No. 18463. A shrub 3 to 4 feet high, with red flowers and leaves covered beneath with dark-gray tomentum; found in alpine meadows at 13,500 feet altitude.

84195. RHODODENDRON sp.

No. 18464. A shrub 3 to 5 feet high, with red flowers and leaves white tomentose beneath; found in alpine meadows between 13,500 and 14,000 feet altitude.

84196 to 84200. From Shanmakou, west of Weihsi, northwestern Yunnan, September and October, 1929.

84196. RHODODENDRON Sp.

No. 18465. A shrub 4 feet high, with linear leaves, brown woolly beneath, and deep-red flowers; found on dry slopes at 11,000 feet altitude.

84197. RHODODENDRON Sp.

No. 18466. A shrub 3 to 5 feet high, with red flowers; found on mountain slopes at 10,500 feet altitude.

84198. RHODODENDRON sp.

No. 18467. A shrub 3 to 5 feet high, with linear lanceolate leaves, thickly matted with a woolly tomentum, and red flowers; found on slopes at 10,500 feet altitude.

84199. RHODODENDRON Sp.

No. 18468. A shrub 2 to 4 feet high, with rich crimson flowers and linear lanceolate leaves covered beneath with a dirty white tomentum; found on slopes at 10,500 feet altitude.

84200. RHODODENDRON Sp.

No. 18469. A shrub 2 to 4 feet high, with red flowers and linear lanceolate leaves covered beneath with pale brown tomentum.

84201. RHODODENDRON Sp.

No. 18471. A shrub or small tree 10 feet high, with thin glabrous leaves, bright green on both sides, and pale pink flowers; found at the foot of Litiping, Yangtze-Mekong Divide, at 10,500 feet altitude.

84202. RHODODENDRON sp.

No. 18473. A shrub 2 to 5 feet high, with leaves bright green on both sides, and purplish red flowers; found west of Litiping at 10,500 feet altitude.

83957 to 84251-Continued.

84203 to 84206. From the alpine regions of Mount Sitsa, western slopes of the Salwin Valley, at 14,000 feet altitude.

84203. RHODODENDRON sp.

No. 18474. A tree 18 to 20 feet high, with oblong obovate leaves, brown to fawn colored flocculose beneath.

84204. RHODODENDRON sp.

No. 18475. A shrub 5 to 6 feet high, with dark-green leaves which are glaucous.

84205. RHODODENDRON sp.

No. 18476. A shrub 2 to 3 feet high, with dull-green glaucous leaves.

84206. RHODODENDRON sp.

No. 18477. A tree 10 to 15 feet high, with oblong acute leaves which are dull dark green above and dull brown beneath.

84207 to 84215. From the Likiang Snow Range, northwestern Yunnan, November, 1929.

84207. RHODODENDRON SP.

A tree 10 feet high, with glabrous leaves and pale-pink flowers; found on moist slopes at 11,000 feet altitude.

84208. RHODODENDRON Sp.

A shrub 8 to 10 feet high, with small elliptical leaves and white flowers an inch long; found in spruce forests at 11,500 feet altitude.

84209. RHODODENDRON sp.

A shrub 3 to 4 feet high, with thick leathery leaves, brown beneath, and large pink flowers; found on rocky slopes at 14,500 feet altitude.

84210. RHODODENDRON sp.

A shrub 2 to 3 feet high, with very small leaves and blue flowers; found on cliffs at 13,000 feet altitude.

84211. RHODODENDRON sp.

A shrub 6 to 12 feet high, with glabrous leaves which are pale beneath, and pink flowers; found in fr forests at 12,500 feet altitude.

84212. RHODODENDRON sp.

A shrub 10 feet high, resembling *R. heliolepis*, with small dark-green leaves on bright-red petioles, and purple flowers; found on mountain slopes at 13,500 feet altitude.

84213. RHODODENDRON sp.

A shrub 2 to 4 feet high, with elliptical leaves and very large purplish blue flowers; found along a glacier stream.

84214. RHODODENDRON sp.

A tree 15 feet high, with glabrous leaves and large pink flowers; found in gorges between 11,000 and 15,000 feet altitude.

84215. RHODODENDRON sp.

A shrub 4 to 6 feet high, with rather large white flowers, tinged

with pink; found at 14,500 feet altitude.

Nos. 84216 to 84221 came from Mount itzuga. Szechwan Province. September Mitzuga, and October, 1929.

84216 to 84219. RIBES spp. Grossularia-0090

84216. RIBES SP.

No. 18136. A shrub 4 to 5 feet bigh, found on mountain slopes at 13,000 feet altitude.

84217. RIBES Sp.

No. 18251. A shrub 4 to 5 feet high, found in alpine regions at 13,500 feet altitude.

84218. RIBES SD.

No. 18252. A shrub 6 feet high, found in alpine regions at 13,500 feet altitude.

84219. RIBES Sp.

No. 18253. A shrub 10 feet high, with large leaves and black fruits in drooping racemes; found in Muli forests at 13,000 feet altitude.

\$4220 to \$4224. ROSA spp. Rosaceae. Rose.

84220. Rosa sp.

No. 18220. A shrub 6 to 8 feet high, with white flowers; found in the forests of Kulu at 13,000 feet altitude.

84221. Rosa sp.

No. 18232. A shrub 6 to 10 feet high, with red flowers; found in the forests of Karadi at 11,500 feet altitude.

84222. ROSA sp.

No. 18342. A shrub 2 feet high, with large leaves, pink flowers, and large red spiny fruits; found in a bamboo canebreak at 12,500 feet alti-tude on Mount Fuchuan in north-western Yunnan, in October, 1929.

84223. ROSA Sp.

No. 18430. A shrub 6 feet high, with large white flowers, the peduncles supported by deep purple bracts; found on dry slopes at 10,000 feet altitude on Mount Tapao, between Weihsi and the Mekong River, in northwestern Yunnan.

84224. Rosa sp.

No. 18431. A shrub 6 feet high, with red flowers which have green bracts; found on dry slopes at 10,000 feet altitude on Mount Tapao, between Weihsi and the Mekong River, north-western Yunnan, in October, 1929.

84225. RUBUS sp. Rosaceae.

No. 18257. An erect shrub 3 to 4 feet high, with white flowers, and sweet, yellowish red fruits which are edible; found as undergrowth in clearings in the Muli forests at 12,000 feet elevation.

84226. SAUSSUREA sp. Asteraceae.

No. 18127. A composite with purple flowers, found in alpine meadows at 14,500 feet altitude on Mount Siga, September and October, 1929.

83957 to 84251-Continued.

84227. SAUSSUREA Sp. Asteraceae. No. 18278.

84228. SAXIFRAGA Sp. Saxifragaceae.

No. 18188. A plant 1 to 2 feet high, with deep-red flowers; found in alpine regions at 15,000 feet altitude in the mountains of Kulu.

84229. SAXIFRAGA sp. Saxifragaceae Saxifrage.

A yellow flower, found growing in clumps on cliffs in the Likiang Snow Range at 11,000 feet altitude.

84230. SCHEFFLERA sp. Araliaceae.

No. 18270. A stout climber with orange fruits, found in Muli forests at 10,000 feet altitude.

84231, SCHIZANDRA sp. Magnoliaceae.

No. 18233. A climber, 30 to 40 feet high, with red flowers; found in the forests of Karadi at 11,500 feet altitude.

84232 to 84236. Sorbus spp. Malaceae. Mountain-ash.

84232. SORBUS Sp.

No. 18190. A tree 10 to 20 feet high, with red flowers; found in spruce forests at 14,000 feet altitude in the mountains of Kulu.

84233. SORBUS SD.

No. 18191. A tree 20 to 25 feet high, with large leaves and white flowers; found in fir forests at 14,500 feet altitude in the mountains of Kulu.

84234. SORBUS SD.

No. 18192. A tree 15 to 20 feet high, with pale pink to white flowers; found in the spruce forests of Kulu at 13,500 feet altitude.

84235. SORBUS Sp.

No. 18371. A shrub 10 feet high, with small red flowers and reddish fruits; found in alpine regions in the Fuchuan Mountains, west of Weihsi, at 14,000 feet altitude.

84236. SORBUS SD.

No. 18372. A tree 15 to 20 feet high, with red flowers and reddish fruits; found in alpine regions in the Fuchuan Mountains, west of Weihsi, at 14,000 feet altitude.

84237. SPIRAEA SD. Rosaceae. Spirea.

No. 18213. A shrub 5 feet high, with white flowers; found along streams at 12,500 feet altitude in the Kulu Mountaíns.

84238. STRANVAESIA Sp. Malaceae.

No. 18165. A shrub 1 foot high, with flowers, white to pinkish; found in spruce forests of Mount Siga at 12,500 feet altitude.

84239. STRANVAESIA sp. Malaceae.

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A very handsome tree, 10 to 20 feet high, with white flowers in ample co-rymbs. Both leaves and fruits turn crim-son in the autumn. Found in the for-ests of Saba, eastern slopes of the Liki-ang Snow Range, at 11,200 feet altitude, in November, 1929.

84240. TAXUS Sp. Taxaceae. Yew. No. 18502. Yunnan.

84241. TEUCRIUM sp. Menthaceae.

No. 18135. A plant with pale-yellow flowers, spotted with purple, and large yellow to purple, labiate floral bracts; found in alpine meadows on Mount Siga at 14,000 feet altitude.

84242. TSUGA YUNNANENSIS (Franch.) Masters. Pinaceae. Yunnan hemlock.

No. 18491. Trees from 100 to 180 feet tall, with trunks 6 to 7 feet in diameter; found on the Likiang Snow Range on the eastern and western slopes, at 11,000 feet altitude.

84243. (Undetermined.)

No. 18130. A composite with pale purple to white flowers, found in wet gravelly alpine regions on Mount Siga, at 14,500 feet altitude.

84244. (Undetermined.)

No. 18131. A composite with yellow flowers, found in alpine meadows of Mount Siga, at 14,000 feet altitude.

84245. (Undetermined.)

No. 18132. A composite with purple flowers, found in alpine meadows on Mount Siga, at 14,500 feet altitude.

84246. (Undetermined.)

No. 18183.

84247. (Undetermined.)

No. 18215.

84248. (Undetermined.)

No. 18254. A composite plant with yellow flowers; found on gravelly alpine slopes and scree at 15,000 feet altitude on Mount Mitzuga.

84249. (Undetermined.)

No. 18255. A very handsome myrsinaceous tree 25 to 30 feet high with yellow flowers, found in the Muli Mountains at 11,500 feet altitude.

84250. (Undetermined.)

No. 18343. A composite with purple flowers, found in wet gravelly alpine meadows at 14,500 feet altitude on Mount Fuchuan, northwestern Yunnan, in October, 1929.

84251. (Undetermined.)

No. 18461. An ornamental tree, 15 to 20 feet high, with white flowers in erect racemes; found among spruces and canebrake at 11,000 feet altitude in Mount Shan, north of Weihsi and east of the Mekong River, in northwestern Yunnan.

84252 to 84553.

From the Union of Socialistic Soviet Republics. Seeds collected by H. L. Westover, agricultural explorer, Bureau of Plant Industry. Received January 8, 1930.

84252. AELUROPUS LITTOBALIS (Gouan) Parl. Poaceae. Grass.

No. 307. From Amu-Darya District, Turkestan, September 27, 1929. A grass found on salty lands along the Amu-Darya River.

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84252 to 84553-Continued.

84253. AGROPYRON CRISTATUM (L.) Gaertn. Poaceae. Wheatgrass.

No. 169. From Tashkent, Turkestan, September 4, 1919. An annual species found growing on dry plains.

- 84254 to 84258. AGROPYBON REPENS (L.) Beauv. Poaceae. Couch grass.
 - Found growing in very dry localities.
 - 84254. No. 46. From the Alma Ata Experiment Station, northeastern Turkestan, August 20, 1929.
 - 84255. No. 49. From the Alma Ata Experiment Station, northeastern Turkestan, August 21, 1929.
 - 84256. No. 87. From near Issyk, northeastern Turkestan, August 22, 1929. Found along a roadside.
 - 84257. No. 97. From Issyk, northeastern Turkestan, August 22, 1929. Found in the mountains south of the town.

84258. No. 106. From Frunze, northeastern Turkestan, August 26, 1929.

84259 to 84263. AGROPYRON spp. Poaceae. Grass.

84259. AGROPYRON Sp.

No. 8. From the Krassny Koot Dry-Land Experiment Station, Volga German Republic, August 7, 1929

84260. AGROPYRON Sp.

No. 9. From the Krassny Koot Dry-Land Experiment Station, Volga German Republic, August 7, 1929.

84261. AGROPYRON Sp.

No. 38. From the Krassny Koot Dry-Land Experiment Station, Volga German Republic, August 16, 1929. Said to be an important constituent of native lands at higher altitudes.

84262. AGROPYRON Sp.

No. 82. From Issyk, northeastern Turkestan, August 22, 1929.

84263. AGROPYRON Sp.

No. 91. From the mountains south of Issyk, northeastern Turkestan, August 22, 1929.

84264 to 84267. AGROSTIS spp. Poaceae. 84264. AGROSTIS PALUSTRIS Huds.

. Redtop.

84265 to 84267. AGROSTRIS STOLONI-FERA L. Creeping bentgrass.

No. 101. From the mountains south of Issyk, northeastern Turkestan, August 22, 1929.

84265. No. 44. From the mountains south of Alma Ata, northeastern Turkestan, August 20, 1929.

84266. No. 45. From the mountains south of Alma Ata, northeastern Turkestan, August 20, 1929.

- 84267. No. 177. From a single plant growing along an irrigation ditch in a Mohammedan cemetery at Vooadyl, south of Ferghana, September 6, 1929.
- 84268 to 84271. ALLIUM CEPA L. Liliaceae. Onion.

84252 to 84553—Continued.

- 84268. No. 161. Obtained in the old Samarkand market, September 8, 1929.
- 84269. No. 180. Obtained in the old Samarkand market, September 8, 1929.
- 84270. No. 205. Obtained in the old Shardfui market, September 16, 1929.
- 84271. No. 304. Obtained in the Chimbai market, September 24, 1929.
- 84272. AMYGDALUS PERSICA L. (Prunus persica Stokes). Amygdalaceae. Peach.

No. 166. Obtained in the market at Vooadyl, 15 miles south of Ferghana, September 6, 1929. A very delicious freestone, white-fleshed peach of medium size.

84273. AMYGDALUS PERSICA NECTARINA Ait. Amygdalaceae. Nectarine.

No. 279. Obtained in the Chimbai market, September 23, 1929. A very red, smooth-skinned peach of delicious flavor.

84274. ANDROPOGON ISCHAEMUM L. Poaceae. Grass.

No. 104. From near Tokmak, August 26, 1929. Found along an irrigation ditch.

84275. ANTHYLLIS VULNERARIA L. Fabaceae. Kidney vetch.

A perennial herb, found throughout Europe, northern Africa, and Asia, which is grown for sheep fodder and is particularly recommended for lime soils.

For previous introduction see No. 67163.

84276. APOCYNUM VENETUM L. Apocy naceae.

No. 301. Kendyr. From the Chimbai Experiment Station, September 25, 1929. A fiber plant, grown quite extensively in some sections.

- 84277 and 84278. ARISTIDA PUNGENS Desf. Poaceae. Grass.
 - 84277. No. 214. From the Agricultural Museum, Chardjui, September 16, 1929. A tall, vigorous-growing grass.
 - 84278. No. 269. Grass from sand dunes 18 miles northeast of Chimbai on the road to Takhtakupur, September 24, 1929.
- 84279. BRACHYPODIUM SYLVATICUM (Huds.) Beauv. Poaceae. Grass.

No. 59. From the mountains south of Alma Ata, northeastern Turkestan, August 21, 1929.

84280. BROMUS MACROSTACHYS TRIARISTA-TUS Hack. Poaceae. Bromegrass.

No. 35. From the Krassny Koot Dry-Land Experiment Station, Volga German Republic, August 16, 1929. An annual species that furnishes good winter and spring grazing.

84281. BROMUS Sp. Poaceae. Bromegrass.

No. 168. From south of Tashkent, Turkestan, September 4, 1929. An annual grass from the dry plains of the Golodnaya Steppes, 31 miles south of **Tashkent**.

84252 to 84553—Continued.

84282. CALAMAGROSTIS EPIGEJOS (L.) Roth. Poaceae. Grass.

No. 75. From the mountains south of Issyk, northeastern Turkestan, August 22, 1929.

84283. CARTHAMUS TINCTORIUS L. Asteraceae. Safflower.

No. 33. From the Krassny Koot Dry-Land Experiment Station, Volga German Republic, August 16, 1929. Used for oil and dye.

84284. CEPHALARIA sp. Dipsacaceae.

No. 57. From the mountains south of Alma Ata, August 21, 1929. A plant with very attractive globular heads of blue flowers.

84285. CHAETOCHLOA ITALICA (L.) Scribn. (Setaria italica Beauv.). Poaceae. Millet.

No. 163. From Ferghana District, September 5, 1929. Obtained in the old Margelau market.

84286. CHAETOCHLOA ITALICA (L.) Scribn. (Setaria italica Beauv.). Poaceae. Millet.

No. 297. From the village of Mangite, Khiva region, September 26, 1929. Types of millet found in one field.

- 84287 to 84290. CITRULLUS VULGARIS Schrad. Cucurbitaceae. Watermelon.
 - 84287. No. 194. Obtained at Samarkand, September 8, 1929. A delicious dark-green watermelon.
 - 84288. No. 225. Obtained 93 miles north of Chardziu, September 17, 1929. A watermelon with pale-pink flesh and many seeds, not very good quality, but, because of its thick rind, it is used for preserves.
 - 84289. No. 280. From the village of Mangite, Khiva region, September 25, 1929.

84290. No. 302. From Chimbai, September 24, 1929.

- 84291 to 84299. CUCUMIS MELO L. Cucurbitaceae. Melon.
 - 84291. No. 165. Obtained in the market at Vooadyl, 15 miles south of Ferghana, September 6, 1929. A delicious melon with white flesh, dark green rind, decidedly segmented, and somewhat flattened at the ends.
 - 84292. No. 167. From near Kokand, Turkestan, September 7, 1929. A very delicious oval melon with sweet and juicy white fiesh. The rough yellow find is marked with irregular green stripes.
 - 84293. No. 195. From the vicinity of Urgoot, 22 miles south of Samarkand, Turkestan, September 8, 1929. A yellow, oblong netted type of melon with crisp flesh which is not particularly sweet.
 - 84294. No. 209. Amery melon. From the old Chardjui market, September 16, 1929. Grown for local use, but not suitable for shipping.
 - 84295. No. 210. Gulaby melon, From the old Chardjui market, September 16, 1929. An autumn variety, grown for export.

84252 to 84553-Continued.

- 84296. No. 215. From the old Chardjui market, September 16, 1929. An uncommon variety of the globular type with dark-green skin and very delicious salmon-colored flesh.
- 84297. No. 218. From north of Chardjui, September 17, 1929. A melon with i.regular light-green and darkgreen stripes, sweet and juicy salmon-colored flesh, and a small seed cavity.
- 84298. No. 228. From New Urgenj, September 19, 1929. A very large, but not particularly good-flavored melon.
- 84299. No. 303. From Chimbai, September 24, 1929. A long darkgreen, unusual type of melon, with white flesh.
- 84300 to 84303. CYNODON DACTYLON (L.) Pers. Poaceae. Bermuda grass.
 - 84300. No. 24. From the Tashkent Plant Breeding Station, August 13, 1929. A much coarser and lightercolored variety than that grown in the United States.
 - 84301. No. 31. From the Krassny Koot Dry Land Experiment Station, Volga German Republic, August 16, 1929. A dry-land type which thrives under drier and colder conditions than are found in the United States.
 - 84302. No. 34. From the Plant Breeding Station, Tashkent, August 15, 1929.
 - 84303. No. 109. From the Frunze Experiment Station, northeastern Turkestan, August 27, 1929.
- 84304. DACTYLIS GLOMERATA L. POAceae. Orchard grass.

No. 61. From south of Alma Ata, August 21, 1929. Found growing abundantly in the mountains; a more vigorous type than that found in the United States.

84305. ECHINOPS sp. Asteraceae. Globethistle.

No. 121. From northeastern Turkestan, August 22, 1929. A plant with beautiful blue flowers in globular heads.

84306 to 84308. FESTUCA spp. Poaceae. Grass.

84306. FESTUCA Sp.

No. 84. From the mountains of Issyk, northeastern Turkestan, August 22, 1929.

84307. FESTUCA sp.

No. 94. From the mountains of Issyk, northeastern Turkestan, August 22, 1929.

84308. FESTUCA sp.

No. 105. Found along an irrigation ditch near Tokmak, northeastern Turkestan, August 26, 1929.

84309 to 84315. HORDEUM spp. Poaceae. Grass.

84309. HORDEUM BULBOSUM L.

No. 37. From the Krassny Koot Dry-Land Experiment Station, Volga German Republic, August 16, 1929.

84252 to 84553-Continued.

84310. HORDEUM SPONTANEUM Koch. Wild barley.

No. 32. From the Krassny Koot Dry-Land Experiment Station, Volga German Republic, August 16, 1929.

- 34311 to 84315. Hordeum vulgare Pallidum Seringe. Six-rowed barley.
 - 84311. No. 232. Obtained in the Chavat market, between Khiva and Tashans, August 20, 1929.
 - 84312, No. 249. From Chimbai, August 22, 1929.
 - 84313. No. 261. From Chimbai region, August 23, 1929.
 - 84314. No. 292. Obtained in the Gurlen market, Khiva region, August 26, 1929.
- 84315. No. 293. Obtained in the Gurlen market, Khiva region, August 26, 1929. Spring barley.

84316. LATHYRUS sp. Fabaceae.

No. 102. From near Djonechar, northeastern Turkestan, August 23, 1929.

84317. LIMONIUM sp. Plumbaginaceae. Sea-lavender.

No. 173. From south of Tashkent, September 4, 1929. A plant with beautiful blue flowers, found on the dry steppes of Golodnaya. It is used for tanning.

- 84318 to 84320. LINUM USITATISSIMUM L. Linaceae. Flax.
 - 84318. No. 131. From the village of Uzum Agach, 25 miles northeast of Frunze, Turkestan, August 25, 1929.
 - 84319. No. 246. From Porsu, Turkestan, August 21, 1929.
 - 84320. No. 290. Obtained in the Gurlen market, Khiva region, August 26, 1929.
- 84321 to 84323. LUPINUS ANGUSTIFOLIUS L. Fabaceae. Lupine.

[Sent in from Warsaw, Poland, without notes.]

84324. LUPINUS LUTEUS L. Fabaceae. European yellow lupine.

[Sent in from Warsaw, Poland, without notes.]

- 84325 to 84454. MEDICAGO spp. Fabaceae. Alfalfa.
 - 84325 to 84336. MEDICAGO FALCATA L. Yellow-flowered alfalfa.
 - 84325. No. 10. From the Krassny Koot Dry-Land Experiment Station, Volga German Republic, August 7, 1929. Selection No. 1202.
 - 84326. No. 11. From the Ukraine branch of the Botanical Institute, Volki, August 4, 1929. Wild plants.
 - 84327. No. 14. From near Orenburg. August 10, 1929. Found along the railway track.
 - 84328. No. 48. From the Alma Ata Experiment Station, northeastern Turkestan, August 21, 1929.
 - 84329. No. 58. From south of Alma Ata, August 21, 1929. A single wild plant found growing along an irrigation ditch.

84252 to 84553-Continued.

- 84330. No. 62. From south of Alma Ata, August 21, 1929. A single wild plant growing along an irrigation ditch.
- 84331. No. 68. From the mountains south of Alma Ata, northeastern Turkestan, August 21, 1929.
- 84332. No. 74. From the mountains of Issyk, northeastern Turkestan, August 22, 1929.
- 84333. No. 78. From near Tolgar, August 22, 1929. A single plant.
- 84334. No. 98. From the mountains of Issyk, northeastern Turkestan, August 22, 1929.
- 84335. No. 115. From the mountains of Alma Ata, August 21, 1929.
- 84336. No. 204. From the railroad right of way near Orenburg, August 29, 1929.
- 84337 to 84451, MEDICAGO SATIVA L.
 - 84337. No. 5. From the Sophronia Experiment Station branch of Vereley Podol, August 1, 1929.
 - 84338. No. 13. From the Satatov Experiment Station, August 6, 1929. Acclimatized French alfalla, introduced in 1912.
 - 84339. No. 15. From the Kharkof Experiment Station, August 2, 1929. Ukraine alfalfa No. 623.
 - 84340. No. 16. From the Kharkof Experiment Station, August 2, 1929. Ukraine alfalfa No. 228.
 - 84341. No. 17. From the Kharkof Experiment Station, August 2, 1929. Ukraine alfalfa No. 270.
 - 84342. No. 18. From the Kharkof Experiment Station, August 2, 1929. Ukraine alfalfa No. 627.
 - 84343. No. 19. From the Kharkof Experiment Station, August 2, 1929. Ukraine alfalfa No. 242.
 - 84344. No. 20. From the Kharkof Experiment Station, August 2, 1929. Ukraine alfalfa No. 628.
 - 84345. No. 21. From the Kharkof Experiment Station, August 2, 1929. Ukraine alfalfa No. 265.
 - 84346. No. 21-B. From the Kharkof Experiment Station, August 2, 1929. Ukraine alfalfa No. 265.
 - 84347. No. 22. From the Kharkof Experiment Station, August 2, 1929. Ukraine alfalfa No. 625.
 - 84348. No. 23. From the Kharkof Experiment Station, August 2, 1929. Ukraine alfalfa No. 234.
 - 84349. No. 25. From near Tashkent, August 15, 1929. Wild alfalfa from the Uzbekistan Experiment Station.
 - 84350. No. 27. From near Tashkent, August 15, 1929. Wild alfalfa from the Middle Asia Plant Breeding Institute.
 - **\$4351.** No. 30. From near Tashkent, August 15, 1929. Wild alfalfa from the Middle Asia Plant Breeding Institute.

84252 to 84553-Continued.

- 84352. No. 36. From the Krassny Koot Dry-Land Experiment Station, Volga German Republic, August 16, 1929. A wild species.
- 84353, No. 39. From Tashkent, August 17, 1929. Obtained in the old Tashkent market; originally grown in the Turbat district, 25 miles northeast of Tashkent.
- 84354. No. 40. From Tashkent, August 17, 1929. Obtained in the old Tashkent market; originally grown in Sharapkhana, near Chunbent.
- 84355. No. 41. From the Tashkent market, August 17, 1929. Obtained in the old Tashkent market; originally grown in the Keler district.
- 84356. No. 42. From the Krassny Koot Dry-Land Experiment Station, Volga German Republic. No. 3125, August 7, 1929.
- 84357. No. 107. From the Frunze Experiment Station, August 27, 1929. A wild alfalfa with small purple flowers and very small straight pods.
- 84358. No. 108. From the Frunze Experiment Station, August 27, 1929. A wild plant.
- 84359. No. 111. From the Frunze Experiment Station, August 27, 1929. A wild plant.
- 84360. No. 112. From Issyk, northeastern Turkestan, August 23, 1929. Grown locally.
- 84361. No. 113. From the village of Farauchi, 25 miles east of Alma Ata, August 24, 1929.
- 84362. No. 114. From Tolgar, northeastern Turkestan, August 22, 1929.
- 84363. No. 116. From near Malovodnaya, northeastern Turkestan, August 23, 1929. From a field nearly 7 years old.
- 84364. No. 117. From east of Alma Ata, northeastern Turkestan, August 22, 1929.
- 84365. No. 118. From near Malovodnaya, northeastern Turkestan, August 23, 1929.
- 84366. No. 119. From Malovodnaya, northeastern Turkestan, August 23, 1929.
- 84367. No. 120. From Turgen, 25 miles east of Alma Ata, northeastern Turkestan, August 22, 1929.
- 84368. No. 123. From Issyk, northeastern Turkestan, August 22, 1929. From a 20-year-old field.
- 84369. No. 124. From the village of Krassny Reche, 20 miles east of Frunze, on the road to Tokmak, August 27, 1929.
- 84370. No. 125. From the village of Georgievka, 10 miles northeast of Frunze, August 25, 1929.
- 84371. No. 126. From the village of Djonashar, 25 miles east of Alma Ata, August 23, 1929.

84252 to 84553-Continued.

- 84372. No. 127. From Tfouashar, 25 miles east of Alma Ata, August 23, 1929.
- 84373. No. 128. From the village of Kerkelen, between Alma Ata and Frunze, northeastern Turkestan, August 24, 1929.
- 84374. No. 129. From the village of Turgen, 25 miles east of Alma Ata, northeastern Turkestan, August 21, 1929.
- 84375. No. 130. From the village of Malovodnaya, northeastern Turkestan, August 22, 1929. From a 20-year-old field.
- 84376. No. 132. From the village of Georgievka, 10 miles northeast of Frunze, August 25, 1929. A wild plant.
- 84377. No. 133. From the village of Djartepe, Tashkent region, Turkestan, September 1, 1929. A nonshattering spring alfalfa.
- 84378. No. 134. From the village of Djartepe, Tashkent region, Turkestan, September 1, 1929.
- 84379. No. 150. From the Pacta Aral Cotton Estate, September 3, 1929. Obtained from the threshers.
- 84380. No. 151. From the Malik Cotton Estate, September 3, 1929. Obtained from the threshers.
- 84381. No. 152. From Margelan, Ferghana District, September 5, 1929. Obtained in the old market; originally from the Albi Arik region.
- 84382. No. 153. From Margelan, Ferghana District, Scptember 5, 1929. Seed grown locally, obtained in the old market.
- 84383. No. 154. From Golodnaya, September 4, 1929.
- 84384. No. 155. From Margelan, Ferghana District, September 5, 1929. Obtained in the market; originally grown near Kokand.
- **84385.** No. 156. From the village of Aovgal, 6 miles south of Ferghana. September 6, 1929. From an old alfalfa field.
- 84386. No. 157. From Vooadyl, 15 miles south of Ferghana. Obtained in the market; origin unknown.
- 84387. No. 158. From Samarkand, September 8, 1929. Obtained in the Samarkand market, but originally grown in Chalak, 25 miles south.
- 84388. No. 159. From Samarkand, September 8, 1929. Obtained in the market, but originally from the village of Yany-Koorgan, 31 miles southeast of Samarkand.
- 84389. No. 160. From Samarkand, September 8, 1929. Obtained in the old market, but originally from the village of Dovi.
- 84390. No. 170. From the Golodnaya Steppes, 30 miles south of Tashkent, September 4, 1929. Obtained from a few surviving plants in a 10-year-old unirrigated alfalfa field.

84252 to 84553-Continued.

- 84391. No. 175. From the Golodnaya Steppes, 30 miles south of Tashkent, September 4, 1929, Wild alfalfa, collected from a plant growing along an irrigation ditch.
- 84392. No. 179. From Vooadyl, 6 miles south of Ferghana, September 6, 1929. Found along an old irrigation ditch in a Mohammedan cemetery.
- 84393. No. 181. From near the village of Chalak, 22 miles north of Samarkand, September 9, 1929. From the threshers at Uzbek farm.
- 84394. No. 182. From Chalak, 22 miles north of Samarkand, September 9, 1929. From a field near the village.
- 84395. No. 183. From Chalak, 22 miles north of Samarkand, September 9, 1929. From the cooperative organization.
- 84396. No. 184. From southeast of Samarkand, September 10, 1929.
- 84397. No. 185. From near Urgoot, 22 miles southeast of Samarkand, September 10, 1929.
- 84398. No. 186. From near Urgoot, 22 miles southeast of Samarkand, September 10, 1929.
- 84399. No. 187. From the market at Urgoot, 22 miles southeast of Samarkand, September 10, 1929.
- 84400. No. 188. From the market at Urgoot, 22 miles southeast of Samarkand, September 10, 1929.
- 84401. No. 189. From the market at Urgoot, 22 miles southeast of Samarkand, September 10, 1929.
- 84402. No. 191. From Issbaskent, September 5, 1929. Obtained in the market, but grown at Usgen, east of Ferghana, near the Chinese boundary.
- 84403. No. 192. From Issbaskent, September 5, 1929. Originally from Kokand, Turkestan.
- 84404. No. 193. From Arapache, near Massy, northeast of Ferghana, September 9, 1929. From a farmer's field.
- 84405. No. 197. From near Gedjoovan, 45 miles northeast of Bokhara, September 14, 1929. From a peasant's field.
- 84406. No. 198. From near Gedjoovan, 45 miles northeast of Bokhara, September 14, 1929. From a peasant's field.
- 84407. No. 199. From Gedjoovan, September 14, 1929. Obtained in the market.
- 84408. No. 200. From Vodkent, 25 miles north of Bobbana, September 14, 1929. From a peasant's field.
- 84409. No. 201. Obtained in the market at Gedjoovan, 45 miles northeast of Bokhara, September 14, 1929.
- 84410. No. 202. From Vodkent, 25 miles north of Bobbana, September 14, 1929. From a peasant's field.

84252 to 84553--Continued.

- 84411. No. 203. From Vodkent, 25 miles north of Bobbana, Septem-14, 1929. From a peasant's field.
- 84412. No. 207. Obtained in the Chardfin market, September 16, 1929, but originally from Tash-Kufruk village.
- 84413. No. 208. Obtained in the old Chardjui market, September 16, 1929; grown in a near-by village.
- 84414. No. 220. From Denay, 25 miles north of Chardjui, September 17, 1929.
- 84415. No. 229. From the village of Takhta, September 20, 1929, obtained from the Tashans Cooperative Seed Growers.
- 84416. No. 230. Obtained in the Chavat market, between Khiva and Tashans, September 20, 1929.
- 84417. No. 231. From the Tashans Cooperative Seed Growers, September 20, 1929; originally grown near Porsu.
- 84418. No. 233. From the Tashans Cooperative Seed Growers, September 20, 1929; originally grown near Kunyatugench.
- 84419. No. 234. From the Polsu Cooperative Seed Growers, September 21, 1929; grown at the village of Menlibay.
- 84420. No. 235. From the Kunyatugench Cooperative Seed Growers, September 21, 1929; originally grown in the village of Tasazab.
- 84421. No. 238. From the Tashans Cooperative Seed Growers, September 21, 1929; originally grown at the village of Illgalli.
- 84422. No. 239. From the Kunyatugench Cooperative Seed Growers, September 21, 1929; originally grown at the village of Uzbashi.
- 84423. No. 242. From the Kunyatugench Cooperative Seed Growers, September 21, 1929; grown at the village of Dishki.
- 84424. No. 243. From the Kunyatugench Cooperative Seed Growers, September 21, 1929; grown at the village of Takedjik.
- 84425. No. 245. From the Tashans Cooperative Seed Growers, September 21, 1929; grown at the village of Koctoy.
- 84426. No. 247. From the Khodjeli Cooperative Seed Growers, September 22, 1929; grown at the village of Gaurdjab.
- 84427. No. 248. From the Khodjeli Cooperative Seed Growers, September 22, 1929; grown at the village of Neimandjab.
- 84428. No. 250. From the Khodjeli Cooperative Seed Growers, September 22, 1929; grown at the village of Djandjab.
- 84429. No. 251. From the Khalkabad, Chimbai region, September 23, 1929.
- 84430. No. 252. From Chimbai, September 23, 1929.

84252 to 84553-Continued.

- 84431. No. 253. From the Chimbai Seed Growers' Union, September 23, 1929; grown near Khodjeli.
 - 84438. No. 254. From Nazarkhan, Chimbai region, September 23, 1929.
 - 84433. No. 255. From Kezelinsky, Chimbai region, September 23, 1929.
 - 84434. No. 256. From Aspan, Chimbai region, September 23, 1929.
 - 84435. No. 262. From Takhtakupur County No. 9, September 24, 1929.
 - 84436. No. 263. From Takhtakupur County No. 11, September 24, 1929.
 - 84437. No. 264. From Takhtakupur County No. 9, September 24, 1929.
 - 84438. No. 266. Obtained 12 miles northeast of Chimbai on the road to Takhtakupur, September 24, 1929. From a farmer's field.
 - 84439. No. 267. Obtained 12 miles northeast of Chimbai on the road to Takhtakupur, September 24, 1929. From a farmer's field.
 - 84440. No. 268. Obtained 12 miles northeast of Chimbai on the road to Takhtakupur, September 24, 1929.
 - 84441. No. 270. From the Kegehusky region, near Chimbai, September 24, 1929.
 - 84442. No. 271. From the Kegehusky region near Chimbai, September 24, 1929.
 - 84443. No. 272. From the Khalkabad region near Chimbai, September 24, 1929.
 - 84444. No. 273. From Takhtakupur, 25 miles northeast of Chimbai, September 24, 1929.
 - 84445. No. 281. From Mangite, Khiva region, September 25, 1929.
 - 84446. No. 305. From the village of Yangi-Arik, near Denau, between Chardjui and Urgeneb, September 27, 1929.
 - 84447. No. 306. From the village of Kabahli, between Denan and Dagnata, on the road from Chardjui to Urgeneb.
 - 84448. From Fekete Bros., Budapest, H ungary. [Received without notes.]
 - 84449. From Basil Benzin, Prague, Czechoslovakia.
 - 84450. From the Arnstein Seed Co., Bologna, Italy.
 - 84451. From Warsaw, Poland.
- 84452 to 84454. MEDICAGO SATIVA VARIA (Mart.) Urban.
 - 84452. No. 66. From the mountains of Alma Ata, northeastern Turkestan, August 21, 1929.
 - 84453. No. 110. From the Frunze Experiment Station, August 27, 1929. A natural hybrid between *M. sativa* and *M. falcata*.
 - 84454. From the Seed Laboratory, Prague, Czechoslovakia.

84252 to 84553-Continued.

84455. MELICA ALTISSIMA L. Poaceae.

Grass.

No. 79. From the mountains south of Issyk, northeastern Turkestan, August 22, 1929.

84456. MELICA CILIATA L. Poaceae. Grass.

No. 95. From the mountains south of syk, northeastern Turkestan, August Issyk, no 22, 1929.

84457 to 84460. MELILOTUS spp. Fabaceae.

84457. MELILOTUS ALBA Desr. White sweetclover.

No. 77. From Tolgar, northeastern Turkestan, August 22, 1929. A vigor-ous plant found growing along the roadside.

84458. MELILOTUS ALBA Desr. White sweetclover.

No. 103. Near Djonechar, north-eastern Turkestan, August 23, 1929. A very vigorous plant.

84459. MELILOTUS OFFICINALIS (L.) Sweetclover. Lam.

No. 64. From the mountains south of Alma Ata, northeastern Turkestan, August 21, 1929.

84460. MELILOTUS OFFICINALIS (L.) Sweetclover. Lam.

No. 76. From the mountains south of Issyk, northeastern Turkestan, August 22, 1929.

84461. MILIUM EFFUSUM L. Poaceae. Millet grass.

No. 81. From the mountains south of Issyk, northeastern Turkestan, August 22, 1929.

84462. MILIUM EFFUSUM L. Poaceae. Millet grass.

No. 92. From the mountains south of syk, northeastern Turkestan, August Issyk, no 22, 1929.

84463. ONOBRYCHIS ARENARIA DC. Fabaceae.

No. 4. From the Sophronia Experi-ment Station branch of Vesely Podol, August 1, 1929. A forage plant of much promise, which is said to make more rapid growth the first year than the ordinary sort ordinary sort.

84464 to 84466. ORYZA SATIVA L. Poa-Rice. ceae.

84464. No. 217. From the village of Urgench, September 19, 1929.

84465. No. 226. From the village of Pitnak, 85 kilometers south of Urgench, September 17, 1929.

84466. No. 291. From the Gurlen mar-ket, Khiva region, September 26, 1929. Seed grown locally.

84467 to 84471. PANICUM MILIACEUM L. Poaceae. Proso.

84467. No. 219. From the village of Kurnya Urgench, September 19, 1929.

84468. No. 237. From Kurnya Urgench, September 21, 1929.

84469. No. 259. From the Chimbai re-gion, September 23, 1929.

84252 to 84553-Continued.

- 84470. No. 260. From the Chimbai re-gion, September 23, 1929.
 - 84471. No. 297. Found in one field near the village of Mangite, Khiva region, September 26, 1929.
- 84472. PHASEOLUS AUREUS Roxb. Faba-ceae. Mung bean.

No. 294. Khiva region, September 24, 1929.

84473 to 84475. PHLEUM PANICULATUM Huds. Poaceae. Timothy.

84473. No. 51. From the mountains south of Alma Ata, northeastern Turkestan, August 21, 1929.

84474. No. 85. From the mountains south of Issyk, northeastern Turke-stan, August 22, 1929.

84475. No. 171. From the dry plains of the Golodnaya Steppes, 30 miles south of Tashkent, September 14, 1929.

84476. PHLEUM PHLEOIDES (L.) Karst. Timothy.

No. 93. A single plant found in the mountains south of Issyk, northeastern Turkestan, August 22, 1929.

84477 to 84480. POA spp. Poaceae.

Bluegrass. Bluegrass. 84477. POA BULBOSA L.

No. 29. From the Krassny Koot Dry-Land Experiment Station, near Tash-kent, Volga German Republic, August 16, 1929.

84478. POA PRATENSIS L.

Kentucky bluegrass.

No. 12. From near Saratov, Russia, August 6, 1929. Found growing wild along the roadway.

84479. POA PRATENSIS L. Kentucky bluegrass.

No. 98. From the mountains south of Issyk, northeastern Turkestan, Au-gust 22, 1929.

84480. Poa sp.

No. 55. From the mountains south of Alma Ata, northeastern Turkestan, August 21, 1929.

84481, PRUNUS Sp. Amygdalaceae. Plum. •

From the village of Turrenne, near Brire, France.

84482, SALVIA sp. Menthaceae. Sage.

No. 63. From the mountains south of Alma Ata, northeastern Turkestan, Au-gust 21, 1929. A wild plant with inter-esting blue flowers.

84483. SAUSSUREA sp. Asteraceae.

No. 172. From the Golodnaya Steppes, 31 miles south of Tashkent, September 4, 1929. A species with blue flowers.

84484. SECALE CEREALE L. POAceae. Rye.

No. 56. From Alma Ata, northeastern Turkestan, August 21, 1929.

84485. SECALE CEREALE L. Poaceae. Rye.

kye. No. 90. From near Frunze, northeast-ern Turkestan, August 22, 1929. From a peasant's field.

84252 to 84553—Continued.

84486 to 84510. SORGHUM VULGARE Pers. Sorghum.

- 84486. From the Chimbai market, August 22, 1929. White durra (no head sample); very flat seed.
- 84487. From Samarkand, Turkestan, September 10, 1929. Crookneck white durra with large compact head.
- 84488. No. 162. From Margelan, near Ferghana, September 5, 1929.
- 84489. No. 190. From near Vooadyl, 15 miles south of Ferghana, September 5, 1929. Gooseneck type.
- 84490. No. 196. From near Ferghana, Turkestan, September 6, 1929.
- 84491. No. 206. From the old Chardjui market, September 16, 1929. Native name Alty Ilik, meaning 6-months' maturity. A dwarf white durra. (No head sample.)
- 84492. No. 211. From the old Chardjui market, September 16, 1929. Local name Uch-Ilik, meaning three months. White durra.
- 84493. No. 213. From the vicinity of Chardjui, September 16, 1929. Brown durra seeds, large, red brown, flat.
- 84494. No. 216. From the village of Darganata, 25 miles south of Kurnya Urgench, September 18, 1929. White durra, mid-compact small head.
- 84495. No. 221. From the village of Pitnak, 53 miles south of Kurnya Urgench, September 18, 1929. Gooseneck white durra; seeds midsize.
- 84496. No. 227. From the village of Kraznarasp, 45 miles south of Kurnya Urgench, September 18, 1929. Gooseneck white durra with large plump seeds.
- 84497. No. 240. From the village of Kurnya Urgench, September 21, 1929. Crookneck white durra, a small compact head.
- 84498. No. 241. From the village of Kurnya Urgench, September 21, 1929. Crookneck brown durra with medium-sized, compact head.
- 84499. No. 274. Type grown as feed for stock in the Khiva district, especially Tashans; September 24, 1929.
- 84500. No. 275. From the Chimbai region, September 24, 1929. White durra (probably erect heads) with mid-compact small heads.
- 84501. No. 276. From the Khiva Experiment Station, September 20, 1929. Red milo, rather small seeds.
- 84502. No. 277. From the Khiva Experiment Station, September 20, 1929. Black-glumed sorghum with angular white seeds.
- 84503. No. 278. From the village of Chavat, Khiva region, September 20, 1929. Broomcorn.
- 84504. No. 282. From the village of Mangite, Khiva region, September 25, 1929. A variety with black glumes and angular seeds.

84252 to 84553-Continued.

- 84505. No. 285. From the village of Mangite, Khiva region, September 25, 1929. A variety with reddish brown glumes.
- 84506. No. 286. From the Gurlen market, September 26, 1929. White durra with large plump seeds like milo.
- 84507. No. 298. From Urgench, September 27, 1929. Variety Kalty-Bash. A dwarf white durra with rather plump seeds.
- 84508. No. 299. From Urgench, September 27, 1929. Variety Elly. A white durra with large plump seeds. Medium size.
- 84509. No. 300. From Urgench, September 27, 1929. Variety Katty Bash. A tall white durra with large plump seeds.
- 84510. No. 310. From the Charabudinshu Experiment Station, near old Bokhara. Dwarf broomcorn with dark red-brown glumes which differ in glume color from the type grown in the United States.
- 84511. STIPA CAPILLATA L. Poaceae. Feathergrass.

No. 100. From near Tolgar, northeastern Turkestan, August 22, 1929. Found along the roadside.

84512. TAMARIX sp. Tamaricaceae.

No. 308. September 27, 1929. A tamarix with very beautiful purple flowers; found on salty lands along the Amu-Darya.

- 84513 to 84522. TRIFOLIUM spp. Fabaceae. Clover.
 - 84513. TRIFOLIUM FRAGIFERUM L. Strawberry clover.

No. 53. From the mountains south of Alma Ata, northeastern Turkestan, August 21, 1929. Found in abundance along irrigation ditches.

- 84514 to 84517. TRIFOLIUM PRATENSE L. Red clover.
 - 84514. No. 28. From the Uzbekistan Experiment Station, near Tashkent, August 16, 1929. A wild red clover.
 - 84515. No. 83. From the mountains south of Issyk, northeastern Turkestan, August 22, 1929. A wild red clover.
 - 84516. From Prague, Czechoslovakia.
 - 84517. From Prague, Czechoslovakia.
- 84518 to 84521. TRIFOLIUM REPENS L. White clover.
 - 84518. No. 67. From the mountains south of Alma Ata, northeastern Turkestan, August 21, 1929.
 - 84519. No. 71. From the mountains south of Issyk, August 22, 1929. Found on very dry land.
 - 84520. No. 80. From the mountains south of Issyk, northeastern Turkestan, August 22, 1929.
 - 84521. No. 88. From the mountains south of Issyk, northeastern Turkestan, August 22, 1929.
- 84522. TRIFOLIUM FRAGIFERUM L. Strawberry clover.

84252 to 84553—Continued.

No. 26. From the Uzbekistan Experiment Station near Tashkent, August 16, 1929.

84523 to 84538. TRITICUM spp. Poaceae. Wheat.

84523 to 84536. TRITICUM AESTIVUM L. (T. vulgare Vill.). Common wheat.

84523. No. 52. From the mountains south of Alma Ata, northeastern Turkestan, August 21, 1929.

- 84524. No. 72. From near Issyk, northeastern Turkestan, August 22, 1929. From a peasant's field.
- 84525. No. 73. From near Issyk, northeastern Turkestan, August 22, 1929. From a peasant's field.

84526. No. 133-A. From the village of Djartepe, Tashkent region, Turkestan, September 1, 1929. A nonshattering spring wheat.

84527. No. 176. South of Ferghana, Turkestan, September 6, 1929. Sample taken from the hopper of an old mill.

- 84528. No. 212. From the old Chardjin market. Chardjin region, Turkestan, September 16, 1929. Winter wheat.
- 84529. No. 224. From the village of Dnay, north of Chardjin, September 17, 1929. Winter wheat.
- 84530. No. 236. From Porsu, Khiva region, Turkestan, September 21, 1929. Winter wheat.
- 84531. No. 257. From the Chimbai region, September 23, 1929. Winter wheat.
- 84532. No. 258. From the Chimbai region, September 23, 1929. Winter wheat.
- 84533. No. 284. From the village of Mangite, Khiva region, September 26, 1929.
- 84534. No. 287. From the village of Mangite, Khiva region, September 26, 1929. Winter wheat.
- 84535. No. 288. From the Gurlen market, Khiva region, September 26, 1929. Winter wheat.
- 84536. No. 289. From the village of Mangite, Khiva region, September 26, 1929.
- 84537 and 84538. TRITICUM DURUM Desf. Durum wheat.

From the Krassny Koot Dry Land Experiment Station, Volga German Republic, August 7, 1929. Selections of spring wheat.

84537. No. 6.

84538. No. 7.

84539 to 84549. VICIA spp. Fabaceae. Vetch.

84539 and 84540. VICIA SATIVA L. Common vetch.

From Warsaw. [Received without notes.]

84541 and 84542. VICIA VILLOSA Roth. Hairy vetch.

84252 to 84553-Continued.

From Warsaw. [Received without notes.]

84543. VICIA sp.

No. 43. From Frunze, Turkestan, August 20, 1929.

84544. VICIA sp.

No. 50. From the mountains south of Alma Ata, northeastern Turkestan, August 21, 1929.

84545. VICIA sp.

No. 54. From the mountains south of Alma Ata, northeastern Turkestan, August 21, 1929. Found abundantly.

84546. VICIA sp.

No. 69. From the mountains of Alma Ata, northeastern Turkestan, August 21, 1929.

84547. VICIA sp.

No. 70. From near Abacl station, August 19, 1929. Found along the railroad.

84548. VICIA sp.

No. 86. From the mountains south of Issyk, northeastern Turkestan, August 22, 1929. Rare.

84549, VICIA sp.

No. 99. From the mountains south of Issyk, northeastern Turkestan, August 22, 1929. Abundant.

84550. VIGNA SINENSIS (Torner) Savi. Fabaceae. Cowpea.

No. 283. From the village of Mangite, Khiva region, September 25, 1929.

- 84551 to 84553. ZEA MAYS L. POAceae. Corn.
 - 84551. No. 164. From the Golodnaya Steppes, 31 miles south of Tashkent, September 4, 1929.
 - 84552 and 84553. From the village of Mangite, Khiva region, September 26, 1929. Seldom seen, and grown only for the amusement of children. 84552. No. 295.

84553, No. 296.

- 84554. ABIES FORRESTII Craib. Pinaceae. Fir.
- From southwestern China. Seeds collected by Dr. J. F. Rock, National Geographic Society, Washington, D. C. Received January 10, 1930.

From the Likiang Snow Range, Yunnan, November, 1929. A handsome tree, 70 to 80 feet in height, with a trunk 2 feet or more in diameter, common on moist mountain meadows and steep limestone slopes at altitudes between 10,000 and 13,500 feet. The needles are white beneath, and the comes are purplish blue to black.

For previous introduction see No. 58641.

- 84555. CALLITRIS CUPRESSIFORMIS Vent. (C. rhomboidea R. Br.). Pinaceae.
- From Hobart, Tasmania. Seeds presented by L. A. Evans, Department of Agriculture. Received January 10, 1930.

An Australian evergreen tree reaching a height of 50 feet, with slender drooping branches and globular cones.

For previous introduction see No. 76922.

From southwestern China. Seeds collected by Dr. J. F. Rock, National Geographic Society, Washington, D. C. Received January 10, 1930.

No. 18488. From the eastern slopes of the Likiang Snow Range, November, 1929. A tree 50 to 80 feet high with pale-brown bark, long pale-green leaves, white beneath, and yellowish brown cones about 6 inches long. Found between 9,500 and 10,500 feet altitude in company with pines. The wood is said to be valuable.

84557. CANNA sp. Cannaceae.

From Brazil. Seeds collected by Mrs. Agnes Chase, United States Department of Agriculture. Received January 7, 1930.

Araruama, Rio de Janeiro, December 11, 1929. A canna with bright yellow flowers, found on moist sandy ground.

- 84558. LEUCAENA TRICHODES (Jacq.) Benth. Mimosaceae.
- From Tahara, Piura, Peru. Seeds presented by Oscar Haught. Received January 9, 1930.

An evergreen shrub with bipinnate leaves having two to three pairs of pinnae and three to five pairs of ovate leaflets. The small whitish flowers are in dense heads which are borne in pairs on axillary peduncles. Native to Peru.

84559. Coffea arabica L. Rubiaceae. Arabian coffee.

From Trinidad, British West Indies. Seeds presented by R. O. Williams, Superintendent and Assistant Botanist, Botanic Garden, Department of Agriculture. Received January 24, 1930.

San Ramon.

84560 to 84562. CITRUS spp. Rutaceae.

From Acireale, Sicily. Seeds presented by Dr. H. S. Fawcett, University of California. Received January 9, 1930.

84560. CITRUS NOBILIS DELICIOSA (Ten.) Swingle. Mandarin orange.

No. 22. From Villa Maltese, Portici, Italy, December 9, 1929. A mandarin, superior in size and color.

84561. CITRUS SP.

No. 39.

84562. CITRUS sp.

No. 21. From the Agricultural School, Portici, Italy, December 9, 1929. A large flat-fruited, sour orange.

- 84563. CITRUS MIARAY Wester. Rutaceae. Miaray.
- From Manila, Philippine Islands. Seeds presented by P. J. Wester, Bureau of Agriculture, Manila. Received January 6, 1930.

A handsome ornamental tree suggested as a stock for cultivated citrus fruits. It has slender drooping willowy branches, dark-green leaves, and fruits resembling the lime in appearance and flavor. Native to the Philippine Islands.

For previous introduction see No. 81995.

84564. CITRUS sp. Rutaceae.

From Valencia, Spain. Seeds presented by R. Planelles Granell, through H. J.

Fir. | 84564—Continued.

Quayle, at the request of Dr. H. S. Fawcett, University of California. Received January 4, 1930.

No. 32. From near Seville. Sour orange.

84565. CITRUS Sp. Rutaceae.

From Holguin, Cuba. Seeds presented by Thomas R. Towns. Received January 9, 1930.

Shaddock. A variety used as stock for the navel orange, but not considered as good for grapefruit.

- 84566 to 84568. PSIDIUM GUAJAVA L. Myrtaceae. Guava.
- From Aguascalientes, Mexico. Seeds presented by Mrs. Julia C. de Diaz. Received January 24, 1930.

84566. China limpia.

84567. Media China. (Light.)

84568. Media China. (Dark.)

84569 to 85023.

- From Chosen and Japan. Seeds collected by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received January 20, 1930.
 - 84569. FAGOPYRUM ESCULENTUM Moench. Polygonaceae. Buckwheat.

No. 3118. From Kiho, Chosen, December 7, 1929. Secured from a grain dealer.

84570. HORDEUM VULGARE PALLIDUM Seringe. Poaceae. Six-rowed barley.

No. 3230. Zairailo. From Keijo, Chosen, December 12, 1929. From the Keikido-Nando Seed and Nursery Farm. Original green barley.

- 84571 to 84577. PHASEOLUS ANGULARIS (Willd.) W. F. Wight. Fabaceae. Adsuki bean.
 - 84571. No. 3430. Manchuria select. Shimonosiki, Japan, December 8, 1929. Small brownish red beans, used for sprouts and also for confections.
 - 84572 to 84577. From the Saitama Agricultural Experiment Station, Urawa, December 12, 1929. Varieties which should be tried for sprouting.
 - 84572. No. 3489. Maruba asuk. Small glossy red beans with a prominent white hilum; used for making various confections.
 - 84573. No. 3490. Usuaka asuki. Small pinkish buff colored beans used for making confections.
 - 84574. No. 3491. Akahihaku azuki. Medium-small red and white beans; used for confections.
 - 84575. No. 3492. Chunagon azuki. A small glossy red bean with a prominent white hilum; used for making confections.
 - 84576. No. 3493. Kintok azuki. A medium small glossy red bean; used for making confections.
 - 84577. No. 3494. Kensaki. A medium small glossy red bean with prominent white hilum; used for making confections.

- 84578 to 85023. SOJA MAX (L.) Piper (Glycine hispida Maxim.). Fabaceae. Sovbean.
 - 84578 to 84904. Collected at the Suigen Agricultural Experiment Station, December 2, 1929.
 - 84578. No. 2132. Station No. S-1. Medium-sized oval black bean with green hilum.
 - 84579. No. 2133. Station No. S-2. Medium-sized, oval, black; similar to the Ebony variety (No. 17254).
 - 84580. No. 2134. Station No. S-3. Medium-sized, oval, cloudy green bean with black hilum.
 - 84581. No. 2135. Station No. S-4. Medium-sized, oval, cloudy green 'bean, with brown hilum.
 - 84582. No. 2136. Station No. 8-5. Medium-small, oval, slightly flattened green bean heavily mottled with brown, which has a brown hilum.
 - 84583. No. 2137. Station No. S-6. A medium-large long oval green bean, heavily mottled with brown, which has a brown hilum.
 - **84584.** No. 2138. Station No. S-7. A medium-small, nearly round, glossy green bean, slightly mottled with brown, which has a darkbrown hilum.
 - 84585. No. 2139. Station No. S-8. A medium-sized, nearly round, glossy yellow bean with a lightbrown hilum.
 - **84586.** No. 2140. Station No. S-9. A medium-small, nearly round green bean, slightly mottled with brown, and which has a brown hilum.
 - 84587. No. 2141. Station No. S-10. A medium-small oval green bean, slightly mottled with brown and having a brown hilum.
 - 84588. No. 2142. Station No. S-11. A medium-sized oblong green bean with a long and rather wide darkbrown hilum.
 - 84589. No. 2143. Station No. S-12. A medium-sized, oval, slightly flattened green bean with a light olive green saddle and a brown hilum.
 - 84590. No. 2144. Station No. S-13. A medium-sized oval green bean with a brown hilum.
 - **84591.** No. 2145. Station No. S-14. A medium-large oval green bean, slightly mottled with brown and having a brown hilum.
 - 84592. No. 2146. Station No. S-15. A medium-small, much flattened, glossy black bean, very similar to the Peking variety (No. 17852-B).
 - 84593. No. 2147. Station No. S-16. A medium-small, slightly flattened oval black bean.
 - 84594. No. 2148. Station No. S-17. A medium-oblong, slighty flattened back bean, very similar to the Jet variety (No. 17861).

- 84569 to 85023-Continued.
 - 84595. No. 2149. Station No. S-18. A medium-small, oral, dark cloudy brown bean with the testa split on nearly all the seeds.
 - 84596. No. 2150. Station No. 8–19. A medium-large, oval, slightly flattened black bean.
 - 84597. No. 2151. Station No. S-20. A medium-small oval black bean, very similar to the Ebony variety (No. 17254).
 - 84598. No. 2152. Station No. S-21. A medium-sized, oblong, slightly flattened black bean.
 - 84599. No. 2153. Station No. S-22. Medium-sized, oblong, much flattened black beans, most of which have a slight depression or dent peculiar to this variety.
 - 84600. No. 2154. Station No. S-23. A very small round black bean with a yellow hilum. It should be of value for sprouts.
 - 84601. No. 2155. Station No. S-24. A small oval black bean with a yellow hilum.
 - 84602. No. 2156. Station No. 8-25. A medium-small oblong black bean with a yellow hilum.
 - 84603. No. 2157. Station No. S-26. A small, oval, much-flattened black bean.
 - 84604. No. 2158. Station No. S-27. A medium-small, oblong, muchflattened black bean.
 - 84605. No. 2159. Station No. S-28. A very small, oval, much-flattened black bean.
 - 84606. No. 2160. Station No. S-29. A very small round black bean with a yellow hilum.
 - 84607. No. 2161. Station No. S-30. A very small, oblong, much-flattened black bean with a yellow hilum.
 - 84608. No. 2162. Station No. S-31. A large oval green bean, mottled with brown, with a brown hilum.
 - 84609. No. 2163. Station No. S-32. A medium-small, oblong, muchflattened black bean with brown about the hilum.
 - 84610. No. 2164. Station No. S-33. A small. oval, much-flattened black bean with a brownish hilum.
 - 84611. No. 2165. Station No. S-34. A medium-small. oblong, muchflattened black bean.
 - 84612. No. 2166. Station No. S-35. A medium-small, very much flattened black bean, very similar to the Laredo variety (No. 40658).
 - 84613. No. 2167. Station No. S-36. A medium-sized, oval, slightly flattened black bean.
 - 84614. No. 2168. Station No. S-38. A large wrinkled greenish yellow bean, with many purple spots and a slate-black hilum.
 - 84615. No. 2169. Station No. S-39. A medium-small oval black bean very similar to the variety Ebony (No. 17254).

- 84616. No. 2170. Station No. S-40. A medium-sized oval reddish brown bean with a brown hilum.
- 84617. No. 2171. Station No. S-41. A medium-small, nearly round, coffee-brown bean, very similar to the variety Baird (No. 22333).
- 84618. No. 2172. Station No. S-42. A medium-large oval greenish yellow bean, heavily mottled with black and with a black hilum.
- 84619. No. 2173. Station No. S-43. A large oval bluish green bean, heavily mottled with dark brown and purple spots and with a slate-black hilum.
- 84620. No. 2174. Station No. S-44. A medium-sized, oval, slightly flattened black bean with a yellow hilum.
- **84621.** No. 2175. Station No. S-46. A medium-sized oval greenish yellow bean slightly mottled with brown, with large dark-brown hilum.
- **84622.** No. 2176. Station No. S-47. A medium-sized oval glossy yellowish green bean, heavily mottled with brown and with a rather large dark-brown hilum.
- 84623. No. 2177. Station No. S-48. A medium-small oval black bean with a yellow hilum.
- 84624. No. 2178. Station No. S-49. A medium-large oblong, slightly flattened, greenish yellow bean, heavily mottled with brown and with a dark-brown hilum.
- 84625. No. 2179. Station No. S-50. A medium-large, oval, slightly flattened black bean with a yellow hilum.
- **84626.** No. 2180. Station No. S-51. A medium-large oval glossy greenish yellow bean, heavily mottled with brown; hilum brown.
- 84627. No. 2181. Station No. S-52. A medium-large, oval, slightly flattened, greenish yellow bean with a large brown hilum.
- 84628. No. 2182. Station No. S-53. A medium-small oval glossy yellow bean with a russet hilum.
- 84629. No. 2183. Station No. S-54. A medium-sized oval glossy greenish yellow bean, heavily mottled with brown, with a pale hilum.
- 84630. No. 2184. Station No. S-55. A medium-sized oval greenish yellow bean, heavily mottled with brown, with a pale hilum. Very similar to the Shingto variety (No. 21079).
- 84631. No. 2185. Station No. S-56. A medium-sized oval greenish yellow bean, heavily mottled with dark brown, with a pale hilum.
- 84632. No. 2186. Station No. S-57. A medium-sized oval glossy greenish yellow bean with a pale bilum.
- 84633. No. 2187. Station No. S-58. A medium-sized oval dark-brown bean.
- 84634. No. 2188. Station No. S-59. A medium-sized oval yellow bean,

- very heavily mottled with black; black hilum.
- 84635. No. 2189. Station No. S-60. A medium-sized oval pale-yellow bean, heavily mottled with dark brown.
- 84636. No. 2190. Station No. S-61. A medium-sized oval glossy yellow bean, slightly mottled with brown, with a brown hllum.
- 84637. No. 2191. Station No. S-62. A medium-small to medium-large yellow bean, more or less flattened, heavily mottled with brown, with a brown hilum.
- 84638. No. 2192. Station No. (?) A medium-sized oval yellow bean with a dark-brown hilum.
- 84639, No. 2193. Station No. S-64. A medium-small, long oval, muchflattened, light yellow bean, heavily mottled with black, with a black hilum.
- 84640. No. 2194. Station No. S-65. A medium-small oval yellow bean, very heavily mottled with dark brown, with a dark-brown hilum.
- 84641. No. 2195. Station No. S-66. A medium-large oval light-yellow bean, slightly mottled with brown, with a brown hilum.
- 84642. No. 2196. Station No. S-67. A medium-small, nearly round yellow bean, heavily mottled with brown, with a brown hilum.
- 84643. No. 2197. Station No. S-68. A medium-sized, oval, very pale yellow bean with a light russetbrown hilum.
- 84644. No. 2198. Station No. S-69. A medium-sized, oval, slightly flattened yellow bean, slightly mottled with brown, with a dark-brown hilum.
- 84645. No. 2199. Station No. S-70. A medium-small, nearly round, glossy yellow bean, slightly mottled with brown, with a darkbrown hilum.
- 84646. No. 2200. Station No. S-71. A medium-sized oval pale-yellow bean, heavily mottled with brown, with a dark-brown hilum.
- 84647. No. 2201. Station No. S-72. A medium-sized oval yellow bean with a light-brown hilum.
- 84648. No. 2202. Station No. S-73. A medium-large oval light-yellow bean with a long, large darkbrown hilum.
- 84649. No. 2203. Station No. S-74. A very small round yellow bean, more or less mottled with brown, with a dark-brown hilum.
- 84650. No. 2204. Station No. S-75. A very small oval, glossy yellow bean, very heavily mottled with brown, with a dark-brown hilum. This variety should make an excellent sort for sprouting.
- 84651. No. 2205. Station No. 8-76. A medium-sized round glossy yellow bean with a dark-brown hilum.

- 84652. No. 2206. Station No. S-77. **A medium-sized oval pale-yellow** bean with a russet-brown hilum.
- 84653. No. 2207. Station No. S-78. A medium-sized long oval paleyellow bean with a brown hilum.
- 84654. No. 2208. Station No. S-79. A medium-sized oval glossy yellow bean with a russet-brown hilum.
- 84355. No. 2209. Station No. S-80. A medium-sized oval pale-yellow bean, heavily mottled with brown, with a pale hilum.
- 84656. No. 2210. Station No. S-81. A medium-small long oval yellow bean, heavily mottled with brown, with a light-brown hilum.
- 84657. No. 2211. Station No. S-83. A medium-sized long oval pale glossy yellow bean with a russetbrown hilum.
- 84558. No. 2212. Station No. S-85. A medium-small oval glossy yellow bean, slightly mottled with brown, with a brown hilum.
- 84659. No. 2213. Station No. S-86. A medium-sized oval pale-yellow bean, slightly mottled with brown, with a russet-brown hilum.
- 84660. No. 2214. Station No. S-87. A medium-sized long oval glossy yellow bean with a russet-brown hilum.
- 84661. No. 2215. Station No. S-88. A medium-sized oval glossy yellow bean, mottled with brown, with a pale-brown hilum.
- 84662. No. 2216. Station No. S-90. A medium-sized long oval paleyellow bean, heavily mottled with brown, with a light-brown hilum.
- 84663. No. 2217. Station No. S-91. A medium-sized oval glossy yellow bean with a pale hilum.
- 84664. No. 2218. Station No. S-92. A medium-sized oval glossy yellow bean with a pale hilum.
- 84665. No. 2219. Station No. S-93. A medium-large oval light-yellow bean, heavily mottled with brown, with a brown hilum.
- 84666. No. 2220. Station No. S-94. A medium-sized, oval, slightly flattened yellow bean, heavily mottled with brown, with a pale-brown hilum.
- 84667. No. 2221. Station No. S-95. A medium-sized oval glossy yellow bean with a pale hilum.
- 84668. No. 2222. Station No. S-96. A medium-sized oval wrinkled palevellow bean, heavily mottled with brown, with a pale-brown hilum.
- 84969. No. 2223. Station No. S-97. A medium-sized oval yellow bean with a pale to light russet-brown hilum.
- 84670. No. 2224. Station No. S-98. A medium-sized oval yellow bean with a light-brown hilum.
- 84671. No. 2225. Station No. S-09. A medium-sized oval glossy yellow bean heavily mottled with black, with a black bilum.

- 84672. No. 2226. Station No. S-100, A medium-small, nearly round to oval black bean with a yellow Filum. Very similar to Ebony or Black Beauty (No. 17254).
- 84673. No. 2227. Station No. E-1, A medium-sized oval black bean with a green hilum.
- 84674. No. 2228. Station No. E-2, A medium-sized, oval, slightly flattened, black bean with a green hilum.
- 84675. No. 2229. Station No. E-4, A medium-sized, oval, slightly flattened black bean with a yellow hilum.
- 84676. No. 2230. Station No. E-7, A medium-large, nearly round, glossy yellow bean, heavily mottled with black, with a black hilum.
- 84677. No. 2231. Station No. E-8, A medium-large, oval, wrinkled, cloudy yellow bean with a pale hilum.
- 84678. No. 2232. Station No. E-9, A medium-large oval wrinkled yellow bean with a pale hilum.
- 84679. No. 2233. Station No. E-10, A medium-large, oval, somewhat cloudy pale-yellow bean with g pale hilum.
- 84680. No. 2234. Station No. E-12, A medium-sized, nearly round, yellow bean with black and brown saddle and a black hilum.
- 84681. No. 2235. Station No. E-13, A medium-sized oval yellow begn with a black hilum.
- 84682. No. 2236. Station No. E-14, A medium-sized oval glossy yellow bean with a slate-black hilum,
- 84683. No. 2237. Station No. E-15, A medium-sized oval glossy yellow bean with a brown hilum.
- 84684. No. 2238. Station No. E-16, A medium-large oval grayish yellow bean with a pale hilum; seed coat more or less wrinkled, and there are prominent brown spots at the end of the hilum.
- 84685. No. 2239. Station No. E-17, A medium-sized oval glossy cloudy yellow bean with a brown hilum,
- 84686. No. 2240. Station No. E-19, A medium-sized oval light-yellow bean with a dark-brown hilum, The seed coat is more or less wrinkled.
- 84687. No. 2241. Station No. E-20, A medium-sized long oval glossy yellow bean with a hilum which varies from light to dark brown,
- 84688. No. 2242. Station No. E-21, A medium-sized oval pale-yellow bean with many purple spots and with a slate-black hilum.
- 84689. No. 2243. Station No. E-22, A medium-sized oval yellow bean with a long black hilum.
- 84690. No. 2244. Station No. E-23 A medium-sized round yellow bean, mottled with brown, with a brown hilum.

- 84691. No. 2245. Station No. E-25. A medium-sized, nearly round, pale-yellow bean, more or less mottled with brown, with a brown hilum.
- 84692. No. 2246. Station No. E-26. A medium-sized round yellow bean, heavily mottled with brown, and with a light brown hilum.
- **84693.** No. 2247. Station No. LG-1. A large oval greenish yellow bean, mottled with black, with a black hilum.
- 84694. No. 2248. Station No. LG-2. A large, oval, slightly flattened, greenish yellow bean with a black hilum.
- 84695. No. 2249. Station No. LG-3. A medium-large oval greenish yellow bean, mottled with black, with a black hilum.
- 84696. No. 2250. Station No. LG-4. A medium-sized oval greenish yellow bean with a black hilum. Mottled with black and the seed testa more or less split.
- 84697. No. 2251. Station No. LG-5. A medium-large, oval, glossy, light greenish yellow bean with a pale slate-black hilum.
- 84698. No. 2252. Station No. LG-6. A medium-large long oval greenish yellow bean, mottled with brown, with a thin, dry, wrinkled seed coat and a brown hilum.
- 84699. No. 2253. Station No. LG-7. A medium-sized oval greenish yellow bean with a slate-black hilum.
- 84700. No. 2254. Station No. LG-8. A medium-large, oval, glossy, greenish yellow bean with a slateblack hilum.
- 84701. No. 2255. Station No. LG-9. A medium-small oval black and yellow bean.
- 84702. No. 2256. Station No. LG-10. A medium-small, oval, glossy, greenish yellow bean, much mottled with brown, with a brown hilum.
- 84703. No. 2257. Station No. LG-11.
 A medium-large oval greenish yellow bean with a black hilum.
 The testa is more or less split.
- 84704. No. 2258. Station No. LG-12. A medium-sized, oval, slightly flattened, light-green bean with a yellow germ and a large elongated dark-brown hilum.
- **84705.** No. 2259. Station No. LG-13. A medium-sized, oval, glossy, greenish yellow bean, slightly motfled with brown, with a brown hilum.
- 84706. No. 2260. Station No. LG-14. A medium-small, oval, glossy, greenish yellow bean. slightly mottled with brown, with a brown hilum.
- 84707. No. 2261. Station No. LG-15. A medium-sized, oval, cloudy, greenish yellow bean with a brown hilum.
- 84708. No. 2262. Station No. LG-16. A medium-small oblong greenish yellow bean with a brown hilum.

- 84569 to 85023-Continued.
 - 84709. No. 2263. Station No. LG-17. A medium-small, oblong, slightly flattened greenish yellow bean, mottled with brown, with a brown hilum.
 - 84710. No. 2264. Station No. LG-18. A medium-sized, oval, light, cloudy greenish yellow bean with a brown hilum.
 - 84711. No. 2265. Station No. LG-19. A medium-sized, oval, light, greenish yellow bean, slight brown mottling, with a light-brown hilum.
 - 84712. No. 2266. Station No. LG-20. A medium-small, oval, glossy, greenish yellow bean with a darkbrown hilum.
 - 84713. No. 2267. Station No. LG-21. A medium-sized, oval, cloudybrown greenish yellow bean with a brown hilum.
 - 84714. No. 2268. Station No. LG-22. A medium-sized, oval, dark cloudy greenish yellow bean with a brown hilum.
 - 84715. No. 2269. Station No. LG-23. A medium-sized, oval, slightly cloudy greenish yellow bean, slightly mottled with brown, with a light-brown hilum.
 - 84716. No. 2270. Station No. LG-24. A medium-sized oval greenish yellow bean, slightly clouded with brown, with a brown hilum.
 - 84717. No. 2271. Station No. LG-25. A medium-small oval greenish yellow bean, mottled with brown, with a brown hilum.
 - 84718. No. 2272. Station No. LG-26. A medium-small oval greenish yellow bean with a brown hilum. Similar to Lexington variety (No. 17862-E).
 - 84719. No. 2273. Station No. LG-27. A medium-small oval greenish yellow bean with a brown hilum.
 - 84720. No. 2274. Station No. LG-28. A medium small oval greenish yellow bean with a brown hilum. Very similar to the Lexington variety (No. 17862-E).
 - 84721. No. 2275. Station No. LG-29. A medium-large, nearly round, glossy, bright greenish yellow bean, slightly mottled with brown.
 - 84722. No. 2276. Station No. LG-30. A medium-small, nearly round, pale greenish yellow bean, slightly mottled with brown, with a dark brown hilum.
 - 84723. No. 2277. Station No. LG-31. A medium-sized, oval, yellow to pale greenish yellow bean, slightly mottled with brown, with a brown hilum.
 - 84724. No. 2278. Station No. LG-32. A medium-sized oval greenish yellow bean, slightly mottled with brown, with a dark-brown hilum.
 - 84725. No. 2279. Station No. LG-34. A medium-small oval greenish yellow bean, mottled with brown, with a russet-brown hilum.
 - 84726. No. 2280. Station No. LG-33.
 A medium-small oval greenish yellow bean, much mottled with brown, with a brown hilum.

- 84727. No. 2281. Station No. LG-35. A medium-small oval greenish yellow bean, mottled with brown, with a russet-brown hilum.
- 84728. No. 2282. Station No. LG-36. A large oval greenish yellow bean, mottled with dark brown, with a dark-brown hilum.
- 84729. No. 2283. Station No. LG-37. A medium-large oval greenish yellow bean, heavily mottled with dark brown, with a light-brown hilum.
- 84730. No. 2284. Station No. LG-38. A medium-large, nearly round, greenish yellow bean, mottled black and brown and with a palebrown hilum occasionally marked with black.
- 84731. No. 2285. Station No. LG-39. A medium-large oval slightly flattened, greenish yellow bean with a light-brown hilum; slightly mottled with brown, and the testa is slightly cracked.
- 84732. No. 2286. Station No. LG-40. A medium-large oval yellowish green bean, mottled slightly with brown, with a pale hilum.
- 84733. No. 2287. Station No. LG-41. A medium-sized oval yellowish green bean, slightly clouded with brown, with a light-brown hilum.
- 84734. No. 2288. Station No. LG-42. A medium-large oval yellowish green bean, slightly clouded with brown, with a light russet-brown hilum.
- 84735. No. 2289. Station No. LG-43. A medium-large oval light cloudy brown, greenish yellow bean with a pale bilum.
- 84736. No. 2290. Station No. LG-44. A medium-sized oval greenish yellow bean, slightly clouded with brown, with a very light brown hilum.
- 84737. No. 2291. Station No. LG-45. A medium-large oval yellowish green bean, slightly clouded with brown, with a very light brown hilum.
- 84738. No. 2292. Station No. LG-46. A medium-large oval light yellowish green bean, with a light-brown hilum; testa split in some beans.
- 84739. No. 2293. Station No. LG-47. A large oval glossy yellowish green bean with a pale hilum.
- 84740. No. 2294. Station No. LG-48. A medium-large oval yellowish green bean with a pale-brown hilum. The seed coat is split in most cases and slightly clouded with brown.
- 84741. No. 2295. Station No. LG-49. A medium-large oval greenish yellow bean, slightly mottled with brown, with a pale-brown hilum.
- 84742. No. 2296. Station No. LG-50. A medium-sized oval yellowish green bean, heavily mottled with brown and with a light-brown hilum.
- 84743. No. 2297. Station No. LG-51. A medium-large glossy yellow bean with a pale hilum.

- 84744. No. 2298. Station No. LG-52. A medium-large oval yellowish green bean, slightly clouded with brown, with a pale-brown hilum.
- 84745. No. 2299. Station No. LG-53. A large oval yellowish green bean, slightly clouded with brown, and with a brown hilum.
- 84746. No. 2300. Station No. LG-54. A medium-sized oval glossy yellowish green bean, heavily mottled with dark brown, with a pale hilum.
- 84747. No. 2301. Station No. LG-55. A medium-sized oval yellowish green bean, heavily mottled with dark brown, with a pale-brown hilum.
- 84748. No. 2302. Station No. LG-56. A medium-sized oval yellowish green bean, heavily mottled with dark brown, with a pale hilum.
- 84749. No. 2303. Station No. LG-57. A medium-sized long oval yellowish green bean, slightly clouded with brown, with a light-brown hilum.
- 84750. No. 2304. Station No. LG-58. A medium-sized oval slightly fiattened, yellowish green bean, more or less clouded with brown. Hillum is light brown.
- 84751. No. 2305. Station No. LG-59. A medium-sized oval glossy yellowish green bean, mottled with dark brown, with a pale hilum.
- 84752. No. 2306. Station No. C-2. A medium-sized oval brown bean, marked with black arranged in concentric rings. Similar to Meyer (No. 17852) type.
- 84753, No. 2307. Station No. C-3. A medium-sized oval brown bean with black concentric rings. Similar to the Meyer (No. 17852).
- 84754. No. 2308. Station No. C-4. A medium-sized oval black and brown bean.
- 84755. No. 2309. Station No. C-5. A medium-sized oval slightly flattened brown bean with black concentric bands. Similar to the Meyer (No. 17852) type.
- 84756. No. 2310. Station No. C-6. A medium-sized oval brown bean with black concentric rings. Of the Meyer (No. 17852) type.
- 84757, No. 2311. Station No. C-7. A medium-sized oval glossy brown bean with black arranged in concentric rings. Of the Meyer (No. 17852) type.
- 84758. No. 2312. Station No. C-8. A medium-small oval slightly flattened brown bean with black in concentric rings. Of the Meyer (No. 17852) type. 84759 No. 2210
- 84759, No. 2313, Station No. C-9. A medium-sized oval glossy olivebrown bean marked with black concentric rings.
- 84760. No. 2314. Station No. C-10. A medium-large oval slightly flattened brown bean with black in concentric rings and the testa more or less split. Of the Meyer (No. 17852) type.

- **761.** No. 2315. Station No. C-11. A medium-small oval slightly flat-tened brown bean with faint black concentric rings. 84761. No. 2315.
- 762. No. 2316. Station No. C-12. A medium-small oval brown bean with faint black concentric bands. 84762. No. 2316.
- 84763. No. 2317. Station No. C-13. A medium-sized oval glossy brown bean with faint black concentric marking.
- 764. No. 2318. Station No. C-14. A medium-sized oval brown bean marked with black in concentric rings. Of the Meyer (No. 17852) 84764. No. 2318. type.
- **765.** No. 2319. Station No. C-15. A medium-sized oval brown bean with black in concentric bands. Of the Meyer (No. 17852) type. 84765, No. 2319.
- 84766. No. 2320. Station No. C-16. A medium-sized oval brown bean with black arranged in concentric bands. Of the Meyer (No. 17852) type.
- 84767. No. 2321. Station No. C-17. A medium-small oval glossy brown bean with a few faint concentric black bands.
- 768. No. 2322. Station No. C-18. A medium-small glossy brown seed marked with faint black concen-84768. No. 2322. tric rings.
- 84769. No. 2323. Station No. C-19. A medium-sized oval dark reddish brown seed.
- 84770. No. 2324. Station No. C-20. A large oval brown bean with black markings arranged in concentric bands.
- 1771. No. 2325. Station No. C-21. A medium-sized oval brown bean with black markings arranged in concentric bands. Of the Meyer 84771. No. 2325. (No. 17852) type.
- 84772. No. 2326. Station No. C-22. A medium-sized oval brown bean marked with black in concentric bands. Of the Meyer (No. 17852) type.
- 84773. No. 2327. Station No. C-23. A medium-sized oval brown bean marked with black in concentric hands.
- 84774. No. 2328. Station No. C-24. A medium-sized brown bean with some cloudy (black) markings.
- 84775. No. 2329. **775.** No. 2329. Station No. C-25. A medium-small round brown bean with black markings in concentric bands.
- 84776. No. 2330. Station No. C-26. A medium-small round brown bean marked with rather faint concen-tric black bands.
- 777. No. 2331. Station No. C-27. A medium-sized oval glossy yellow bean, heavily mottled with brown, with a pale hilum. 84777. No. 2331.
- **4778.** No. 2332. Station No. C-29. A medium-sized oval yellow bean with brown markings; some have black and brown markings. The hilum is light brown with a prominent brown dot at one end. 84778. No. 2332.

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- 84779. No. 2333. Station No. C-30. A medium-sized nearly round glossy dark-brown and yellow bean with a light-brown hilum.
- 84780, No. 2334. Station No. C-31. ed nearly round A medium-sized nearly round glossy yellow and black bean with a brown hilum.
- 84781. No. 2335. Station No. C-32. Medium-sized oval slightly flat-tened black beans with some brown.
- 84782. No. 2336. Station No. C-33. A medium-sized oval slightly flat-tened black and yellow bean.
- 84783. No. 2337. Station No. C-34. A medium-sized, oval, slightly flattened black bean with yellow markings and a black hilum.
- 84784. No. 2338 Station No. C-35. A medium-large, much flattened black bean with greenish yellow markings along the edge of the seed.
- 84785. No. 2339. Station No. C-36. A medium-large flat black seed with markings of olive green. May have value as a green vegetable.
- 84786. No. 2340. Station No. (?) 37. A medium-large, long oval, slight-ly flattened black bean with greenish yellow markings.
- 84787. No. 2341. Station No. C-38. A large oval black and olive-brown bean with the testa split on some seeds.
- 84788. No. 2342. 788. No. 2342. Station No. C–39. A medium-sized oval glossy coffeebrown seed.
- 84789. No. 2343. Station No. C-40. A medium-small oval glossy coffee-brown seed.
- 84790. No. 2344. Station No. C-41. A medium-large, much-flattened, oval black bean with yellow mark-ings along the edge.
- 791. No. 2345. Station No. C-42. A medium-small oval reddish brown bean with yellow markings. 84791. No. 2345.
- No. 2346. Station No. medium-sized, oval, sli 84792, No. 2346. C-1 A medium-sized, oval, slightly flattened brown bean marked with black concentric rings. Of the Meyer (No. 17852) type.
- 2347. Station No. Q-1. ll round yellow bean. 84793. No. A small round yellow bean, slightly mottled with brown and with a blown hilum. This should be an excellent variety for sprouts.
- 84794. No. 2348. Station No. Q-2. A medium-sized oval glossy yel-low bean, slightly mottled with brown, with a slate-black hilum.
- 84795. No. 2349. Station No. Q-3. A medium-small oval greenish vellow bean, slightly mottled with black and having a long black hilum
- 796. No. 2350. Station No. Q-4. A medium-small oval light-green bean, slightly mottled with brown, with a brown hilum. 84796. No. 2350.

- 84797. No. 2351. Station No. Q-5. A medium-sized oval yellow bean, mottled with brown, with a brown hilum.
 - 84798. No. 2352. Station No. Q-6. A medium-sized oval light-yellow bean, mottled with dark brown and with a long dark hilum.
 - 84799. No. 2353. Station No. Q-7. A medium-small oval yellow bean, much mottled with brown, with a dark-brown hilum.
 - 84800. No. 2354. Station No. ?. A medium-sized, long oval, slightly flattened glossy black bean.
 - 84801. No. 2355. Station No. Q-9. A small oval glossy yellow bean with light-brown hilum. It is slightly mottled with brown and should make an excellent variety for sprouting.
 - 84802. No. 2356. Station No. I-1. A medium-sized oval green bean, mottled with black and with a black hilum.
 - 84803. No. 2357. Station No. I-2. A medium-sized oval yellowish green bean with a black hilum and mottled with black.
 - 84804. No. 2358. Station No. I-3. A medium-sized oval glossy olivegreen bean with a black hilum and mottled with black.
 - 84805. No. 2359. Station No. I-4. A medium-large oval olive-green bean with a black hilum. Mottied with black.
 - 84806. No. 2360. Station No. I-5. A medium-sized oval olive-green bean, mottled with brown and with a black bilum.
 - 84807. No. 2361. Station No. I-6. A medium-small oval olive-green bean, mottled with black and with a black hllum.
 - 84808. No. 2362. Station No. I-7. A medium-sized oval brown bean, marked with black in concentric bands, similar to the Meyer variety (No. 17852).
 - 84809. No. 2363. Station No. I-8. A medium-sized oval glossy olivegreen bean, mottled with black and with a black hilum.
 - **84810.** No. 2364. Station No. I-9. A large oval bluish black and olive-green bean with a black hilum.
 - 84811. No. 2365. Station No. I-10. A medium-sized oval glossy olivegreen bean with a black hilum.
 - **84812.** No. 2366. Station No. I-11. A medium-sized, oval, bluish olivegreen (indigo) bean, mottled with black, with a black hilum.
 - **84613.** No. 2367. Station No. I-12. A medium-sized oval olive-green bean, mottled with black and with a black hilum.
 - **84814.** No. 2368. Station No. I-13. A medium-sized, bluish black, olive-yellow bean with a black bilum.
 - 84815. No. 2369. Station No. I-14. A medium-sized, nearly round, 61034-31-4

- bluish olive-green bean, mottled with black and with a black hilum.
- 84816. No. 2370. Station No. I-15. A medium-sized oval olive-green bean, mottled with black and with a black hilum.
- 84817. No. 2371. Station No. I-16. A medium-sized, oval, bluish olivegreen (indigo) bean with a black hilum.
- 84818. No. 2372. Station No. I-17. A medium-large, oval, bluish olivegreen (indigo) bean with a black hilum.
- 84819. No. 2373. Station No. I-18. A medium-sized bluish black (indigo) bean with a black hilum.
- 84820. No. 2374. Station No. I-19. A medium-small oval bluish black (indigo) and olive-green bean with a black hilum.
- 84821. No. 2375. Station No. I-20. A medium-sized, nearly round bluish green (indigo) bean.
- 84822. No. 2376. Station No. I-21. A medium-sized oval bluish black (indigo) bean, tinged with olive green and with a black hilum.
- 84823. No. 2377. Station No. I-22. A medium-sized bluish olive-green bean with a black bilum. Classed as Indigo.
- 84824. No. 2378. Station No. I-23. A medium-large glossy greenish yellow bean with a black hilum.
- 84825. No. 2379. Station No. I-24. A medium-sized oval glossy olivegreen bean, mottled with black and with a black hilum.
- 84826. No. 2380. Station No. I-25. A medium-large bluish olive-green (indigo) bean with a black hilum.
- 84827. No. 2381. Station No. I-26. A medium-large oval bluish olivegreen (indigo) bean with a black hilum.
- 84828. No. 2382. Station No. I-27. A medium-sized oval olive-green bean, mottled with black and with a black hilum.
- 84829. No. 2383. Station No. I–28. A medium-sized, nearly round, bluish black (indigo) bean.
- 84830. No. 2384. Station No. I-29. A medium-large oval black and olive-green bean with a black hilum.
- 84831. No. 2385. Station No. I-30. A large bluish yellow-green, nearly round bean, with a black hilum.
- 84832. No. 2386. Station No. Br.-1. A medium-sized oval light yellowish brown bean with a brown hillum.
- 84833. No. 2387. Station No. Br.-2. A medium-sized oval yellowish brown bean with a dark-brown hilum.
- 84834. No. 2388. Station No. Br.-3. A medium-large oval light yellowish brown bean with a darkbrown bium.

- 84835. No. 2389. Station No. Br.-4. A very small round cinnamonbrown bean which should be a good variety for sprouts.
- 84836. No. 2390. Station No. Br.-5. A medium-sized, nearly round, reddish brown bean with a darkbrown hilum.
- 84837. No. 2391. Station No. Br.-6. A medium-sized oval reddish brown bean with a brown hilum.
- 84838. No. 2392. Station No. Br.-7. A medium-sized, nearly round, reddish brown bean with a darkbrown hilum.
- 84839. No. 2393. Station No. Br.-8. A medium-sized oval reddish brown bean with a brown hilum.
- 84840. No. 2394. Station No. Br.-9. A medium-sized, oval, slightly flattened brown bean.
- 84841. No. 2395. Station No. Br.-10. A medium-sized oval glossy olive-brown bean.
- 84842. No. 2396. Station No. Br.-11. A medium-sized oval yellowish brown bean.
- 84843. No. 2397. Station No. Br.-12. A medium-sized, oval, slightly flattened brown bean tinged with vellow.
- 84844. No. 2398. Station No. Br.-13. A medium-sized long oval brown (yellowish) bean.
- 84845. No. 2399. Station No. Br.-15. A medium-small, nearly round, coffee-brown bean which may be of value for sprouts.
- 84846. No. 2400. Station No. Br.-16. A medium-sized oval coffee-brown bean.
- 84847. No. 2401. Station No. Br.-17. A small, oval, much-flattened brown bean.
- 84848. No. 2402. Station No. Br.-18. A medium-sized, oval, glossy, slightly flattened, reddish brown bean.
- 84849. No. 2403. Station No. Br.-19. A medium-small, oval, slightly flattened brown bean.
- 84850. No. 2404. Station No. Br.-20. A medium-sized oval glossy brown bean.
- 84851. No. 2405. Station No. Br.-21. A medium-small oval glossy darkbrown bean.
- 84852. No. 2406. Station No. Br.-22. A medium-small oval glossy brown bean.
- 84853. No. 2407. Station No. Br.-23. A medium-sized, oval, slightly flattened, reddish brown bean.
- 84854. No. 2408. Station No. Br.-24. A medium-sized, oval, slightly flattened brown bean.
- 84855. No. 2409. Station No. Br.-25. A medium-large, oval, dark glossy brown bean.
- 84856. No. 2410. Station No. Br.-26. A medium-large, oval, slightly flattened, dark-brown bean with a yellow tinge on the sides.

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- 84857. No. 2411. Station No. Br.-27. A medium-large oval dark-brown bean with a yellow tinge on the sides.
- 84858. No. 2412. Station No. Br.-29. A medium-sized oval dark-brown bean.
- 84859. No. 2413. Station No. Br.-30. A large oval dark-brown bean with a yellowish tinge on the sides.
- 84860. No. 2414. Station No. Br.-31. A medium-large oval dark-brown bean, tinged with yellow on the sides.
- 84861. No. 2415. Station No. Br.-32. A medium-sized oval dark-brown bean with a yellow tinge on the sides.
- 84862. No. 2416. Station No. Br.-33. A medium-sized oval dark-brown bean with a yellow tinge on the sides.
- 84863. No. 2417. Station No. Br.-34, A medium-large dark-brown bean with slightly split testa.
- 84864. No. 2418. Station No. Br.-35. A medium-small, oval, much flattened, dark-brown bean.
- 84865. No. 2419. Station No. Br.-36. A medium-sized oval dark-brown bean with a yellow tinge on the sides.
- 84866. No. 2420. Station No. Br.-37. A medium-sized oval dark-brown bean with a yellow tinge about the hilum.
- 84867. No. 2421. Station No. Br.-38. A medium-large oval dark-brown bean with slightly split testa.
- 84868. No. 2422. Station No. Br.-39. A medium-large oval dark-brown bean.
- 84869. No. 2423. Station No. Br.-40. A medium-sized oval glossy darkbrown bean.
- 84870. No. 2424. Station No. Br.-41. A medium-sized oval glossy brown bean.
- 84871. No. 2425. Station No. Br.-42. A medium-sized oval dark-brown bean with a yellow tinge on the sides.
- 84872. No. 2426. Station No. Br.-43. A medium-large oval dark-brown bean with the testa slightly split.
- 84873. No. 2427. Station No. Br.-44. A medium-large oval dark-brown bean with a slight yellow tinge on the sides.
- 84874. No. 2428. Station No. Br.-45. A medium-sized, nearly round dark-brown bean.
- 84875. No. 2429. Station No. Br.-46. A medium-sized oval dark-brown bean with a yellow tinge on the sides.
- 84876. No. 2430. Station No. Br.-47. A medium-sized oval dark-brown bean.
- 84877. No. 2431. Station No. Br.-48. A medium-large oval dark-brown bean with a yellow tinge on the sides.

- 84878. No. 2432. Station No. Br.-49. A medium-sized oval dark-brown bean with a yellow tinge on the sides.
- 84879. No. 2433. Station No. Br.-50. A medium-sized oval dark-brown bean with a yellow tinge about the sides and the hilum.
- 84880. No. 2434. Station No. Br.-51. A medium-large oval dark-brown bean with yellow marks on the sides and about the hilum.
- 84881. No. 2435. Station No. Br.-52. A medium-sized oval dark-brown bean with a slight yellowish tinge about the hilum.
- 84882. No. 2436. Station No. Br.-53. A medium-sized oval dark-brown bean.
- 84883. No. 2437. Station No. Br.-54. A medium-sized oval dark-brown bean with a yellow tinge on the sides.
- 84884. No. 2438. Station No. Br.-55. A medium-large oval dull darkbrown bean with the testa more or less split.
- 84885. No. 2439. Station No. Br.-56. A medium-large oval brown bean with a yellow-tinged edge and the testa split on the sides.
- 84886. No. 2440. Station No. Br.-57. A medium-large oval dark-brown bean.
- 84887. No. 2453. Station No. Br.-70. A medium-sized oval glossy yellow bean, tinged with darker yellow.
- 84888. No. 2454. Station No. Br.-71. A medium-sized oval dark-brown bean.
- 84889. No. 2455. Station No. Br.-72. A medium-small oval glossy brown bean.
- 84890. No. 2456. Station No. Br.-73. A medium-sized glossy brown bean, slightly tinged with yellow.
- 84891. No. 2457. Station No. Br.-74. A medium-sized oval glossy brown bean.
- 84892. No. 2458. Station No. Br.-75. A medium-small oval glossy brown bean, tinged with yellow.
- 84893. No. 2459. Station No. Br.-76. A medium-large oval brown bean with the testa more or less split.
- 84894. No. 2460. Station No. Br.-77. A medium-large oval glossy coffeebrown bean with a yellow tinge on the sides.
- 84895. No. 2461. Station No. Br.-78. A medium-large oval coffee-brown bean with the testa split more or less on the sides.
- 84396. No. 2462. Station No. Br.-79. A medium-sized oval dark-brown bean with the testa split on the sides into a fine network.
- 84897. No. 2463. Station No. Br.-80. A medium-sized oval reddish brown bean, tinged with yellow on the sides.

- 84569 to 85023-Continued.
 - 84898. No. 2464. Station No. Br.-81. A medium-large, long oval, slightly flattened bean with the testa split on the sides into a fine network.
 - 84899. No. 2465. Station No. Br.-82. A medium-sized oval brown bean with the testa split on the sides into a fine network.
 - 84900. No. 2466. Station No. Br.-83. A medium-sized oval brown bean with the testa split on the sides into a fine network.
 - 84901. No. 2467. Station No. Br.-84. A medium-sized, oval, slightly flattened bean with the testa on the sides split into a fine network.
 - 84902. No. 2468. Station No. Br.-85. A medium-sized. oval. slightly flattened. glossy brown bean with the testa split into a fine network.
 - 84903. No. 2469. Station No. Br.-86. A medium-large oval brown bean with the testa on the sides split into a fine network.
 - 84904. No. 2470. Station No. Br.-87. A medium-sized oval brown bean with the testa on the sides split into a fine network.
 - 84905 to 84933. From the Heisan-Nando Seed and Nursery Farm, Heijo, Chosen, December 12, 1929.
 - 84905. No. 3201. Suigen Juyo. A medium-large, nearly round yellow bean with a dark-brown hilum; more or less mottled with brown and the testa split in some cases.
 - 84906. No. 3202. Annen. A mediumsized, nearly round glossy greenish-yellow bean with a light-brown hilum.
 - 84907. No. 3203. Gishu Tansen. A medium-sized oval glossy yellow bean with a pale hilum and the testa more or less split.
 - 84908. No. 3204. Chotan Shirome (called Chotan white eye). A medium-sized oval glossy yellow bean with a pale hilum.
 - 84909. No. 3205. Akazaya. A medium-small to medium-sized oval bean with a dark-brown hilum.
 - 84910. No. 3206. *Tsurunoko*. A medium-sized oval yellow bean with a pale hilum.
 - 84911. No. 3207. Hakuo Seizu. A medium-sized oval glossy greenish yellow bean with a brown hilum.
 - 84912. No. 3208. Gin Daizu. A medium-sized oval yellow bean with a hilum varying from light to dark brown.
 - 84913. No. 3209. Kuro Churu. A medium-sized much-flattened oval black bean.
 - **84914.** No. 3210. Ngoiju. A mediumsmall round yellow bean, very heavily mottled with brown and with a brown hilum.
 - 84915. No. 3211. Tansen Usuao. A medium-sized oval glossy yellow bean with a light bluish black hilum.

- 84916. No. 3212. Chotan. A mediumsized oval glossy yellow bean with a pale hilum. Used for bean curd, miso, natto, and soy sauce.
- 84917. No. 3213. Oyachi. A mediumsized oval glossy yellow bean, heavily mottled with dark brown and with a brown hilum.
- 84918. No. 3214. Ragai Seizu. A mixture of medium-large oval green and yellowish green beans with black hilums.
- 84919. No. 3215. Oiarukon. A medium-large oval glossy yellow bean with a pale to light-brown hium. The testa is more or less split.
- 84920. No. 3216. Amekisetsu. A medium-sized oval glossy ycllow bean with a pale hilum. Used in making bean curd, miso, soy sauce, and natto.
- 84921. No. 3217. Koshurei. A medium-small oval pale-yellow bean with a pale hilum which has a small brown dot at the chalazal end.
- 84922. No. 3218. *Heijo*. A mediumsized oval glossy yellow bean with a pale to light-brown hilum. Used for bean curd, natto, miso, and soy sauce.
- 84923. No. 3219. Yoshioka Chüryü. A medium-sized oval greenish yellow bean, slightly mottled with black and with a black hilum.
- 84924. No. 3220. *Heihoku dai*. A medium-large oval yellow bean with the testa more or less split and a pale to light-brown hilum.
- 84925. No. 3221. Hokkaido. A medium-large oval glossy yellow bean with the hilum varying from pale to light slate black.
- 84926. No. 3222. Kinkou. A medium-siz-d oval glossy yellow bean with a brown hilum. Used for bean curd, miso, soy sauce, and natto.
- 84927. No. 3223. Tetsuzaya Aozu. A medium-sized, nearly round, greenish yellow bean with a darkbrown hilum.
- 84928. No. 3224. Kanro. A mediumsized, nearly round, dull yellow bean, slightly mottled with brown, with a pale hilum.
- 84929. No. 3225. Ishikari haku. A medium-small, oval, slightly flattened, yellow to greenish yellow bean with a pale to dark-brown hilum.
- 84930. No. 3226. Kuro Saya. A mixture of medium-small oval greenish yellow beans and medium-sized round yellow beans, with brown hilums.
- 84931. No. 3227. Chōtan Chame (Chotan brown eye). A mediumlarge oval glossy yellow bean with a long rather wide dark-brown hilum.
- **84932.** No. 3228. Ekizen. A medium-sized oval glossy yellow bean with a pale hilum. Used for bean curd, miso, natto, and soy sauce.

- 84933. No. 3229. Chōtan Shirome. A medium-sized oval glossy yellow bean with a pale hilum. Used for bean curd, miso, natto, and soy sauce.
- 84934 to 84950. From a Korean grain store in Fusan, December 7, 1929.
 - 84934. No. 3401. Kirugunkon. A medium-small oval green bean with a brown hilum. Used for sprouting.
 - 84925. No. 3402. Chunkon. A medium-sized oval yellow bean with a brown hilum. Used for soy sauce, bean curd, and soy miso.
 - 84936. No. 3403. Konkirukon. A medium-small green oval bean with a brown hilum; used for sprouting.
 - 84937. No. 3404. Pakute. A large, nearly round, yellow bean with a pale bilum; used for miso and as a boiled bean with other foods.
 - 84938. No. 3405. Kaundō pakute. A medium-large, nearly round, yellow bean with a pale hilum; used for miso, bean curd, and soy sauce.
 - 84939. No. 3406. Kaundokon. A mixed sample of yellow varieties which are used for miso.
 - 84940. No. 3407. Kaundokon. A mixed sample of yellow varieties which are used for miso.
 - 84941. No. 3408. Komujankon. A medium-large oval black bean; used as candied beans.
 - 84942. No. 3409. Chankon. A mixture of medium-sized oval yellow beans with a brown hilum and yellow beans with a pale hilum. They are used for miso, bean curd, and soy sauce.
 - 84943. No. 3410. Kirugunkon. A medium-sized, oval, slightly flattened yellow bean with a brown hilum; used for miso.
 - 84944. No. 3411. Hinkon. A medium-sized, nearly round yellow bean with a pale hilum; used for miso, bean curd, and soy sauce.
 - 84945. No. 3412. Purukon. A mixed sample of yellow strains, varying from medium small to very large, which are used for miso.
 - 84946. No. 3413. Kandökon. A large, nearly round yellow bean with a pale hilum; used for miso and as boiled beans with other foods.
 - 84947. No. 3414. Kirugunkon. A medium-sized, oval, somewhat flattened greenish yellow bean with a brown hilum; is used for bean sprouts.
 - 84948. No. 3415. Chiyonkon. A medium-sized, oval, somewhat flattened greenish yellow bean with a brown hilum; is used for bean sprouts.
 - 84949. No. 3416. Taikyu Hinkon, A medium-sized oval yellow bean with a brown hilum; used for miso, soy sauce, and bean curd.
 - 84950. No. 3417. Chinkon. A mixed sample of yellow varieties which are used for bean curd, miso, and soy sauce.

- 84951 to 84955. From a grain warehouse in Kiho, Chosen, December 7, 1929.
 - 84951. No. 3418. Rakutonkon. A mixed sample of yellow varieties which vary in size, shape, and color of hilum. They are used for miso and as boiled beans.
 - 84952. No. 3419. *Parankon*. A mixed sample of yellow varieties, varying in size, shape, color of seed, and color of hilum. They are used in making miso and as boiled beans.
 - 84953. No. 3420. Chirugunkon. A medium-small, oval, slightly flattened green bean with a brown hilum; used for bean sprouts.
 - 84954. No. 3421. Hinkon. A mixed sample of yellow varieties which vary in size, shape, and color of the hilum. They are used for making miso, natto, and soy sauce.
 - 849:5. No. 3422. Komujonkon. A large, oval, much flattened black bean, used in making candied beans and bean paste.
- 84956 to 84962. From a grain merchant in Shimonoseki, Japan, December 8, 1929.
 - 84956. No. 3423. Kinko-daizu. A. mixture of medium-sized glossy yellow beans with pale hilums and larger yellow beans with brown hilums; used for natto, miso, and soy sauce.
 - 84957. No. 3424. Yamki-daizu. A mixture of yellow varieties, varying from medium small to medium in size, used for miso and natto.
 - 84958. No. 3425. Joshin-daizu. A medium-large glossy yellow bean with a pale hilum; used for bean curd, miso, and soy sauce. The sample contains a few other yellow beans.
 - 84959. No. 3426. Shingishu-daizu. A medium-small, nearly round glossy yellow bean with a slate-black hilum; used for natto, miso, and soy sauce.
 - 84960. No. 3427. Hakusen daizu. A medium-sized oval glossy yellow bean with a pale hilum; used for miso, soy sauce, and natto. The sample contains a few beans with brown hilums.
 - 84961. No. 3428. Joshin-daizu. A medium-large oval glossy yellow bean with a pale hilum; used for bean curd, soy sauce, miso, and natto.
 - 84962. No. 3429. *Chōtan-daizu*. A medium-sized oval glossy yellow bean with a pale hilum; used for bean curd, soy sauce, miso, and natto.
- 84963 to 84969. From a grain merchant in Kobe, Japan, December 9, 1929.
 - 84963. No. 3431. Genzan. A medium-sized oval glossy yellow bean with a pale hilum; used for bean curd, m.so, and natto.
 - 84964. No. 3432. Manchurian Improved. A medium-sized nearly round yellow bean with a pale hilum.

- 84965. No. 3433. *Kwainei*. A medium-small to medium-sized oval yellow bean with a pale hilum; used for miso, soy sauce, and natto.
- 84966. No. 3434. Chinan. Classified as fourth grade. A mixed sample of yellow varieties, which vary in size, shape, and color of the hilum.
- 84967. No. 3435. Shariin. Classified as third grade. A medium-sized oval glossy yellow bean with a pale hilum; used for bean curd, soy sauce, miso, and natto.
- 84968. No. 3436. Genzan. Classified as third grade. A medium-sized oval glossy yellow bean with a pale hilum; used for soy sauce and miso.
- 84969. No. 3437. Joshin. A mediumsized nearly round glossy yellow bean with a pale hilum; used for bean curd, soy sauce, miso, and natto.
- 84970 and 84971. From a merchant in the Kyoto market, Kyoto, Japan, December 10, 1929.
 - 84970. No. 3438. Hokkaido Black. A very large oval black bean which is used for soybean confections.
 - 84971. No. 3439. Hokkaido Tsurunoko. A very large oval yellow bean with a pale hilum; used for miso, soy sauce, bean curd, and soybean confections.
- 84972 to 85017. From the Saitama Agricultural Experiment Station, Urawa, Japan, December 11, 1929.
 - 84972. No. 3443. *Mizu kuguri*. A medium-sized oval yellow bean with a brown hilum.
 - 84973. No. 3444. Takiya. A mediumsmall bean with a brown hilum.
 - 84974. No. 3445. Ichii. A mediumsized pale dull-yellow bean with a brown hilum.
 - 84975. No. 3446. Aodaizo. A medium-sized oval green bean with a brown hitum.
 - 84976. No. 3447. Breeding Station selection. A medium-small oval yellow bean with a brown hilum.
 - 84977. No. 3448. Tamanishiki. A medium-sized oval pale dull yellow bean with a russet-brown hilum.
 - 84978. No. 3449. Kimusume. A medium-small oval yellow bean with a dark-brown hilum.
 - 84979. No. 3450. Shakkin Nashi. A medium-sized oval yellow bean with a pale hilum.
 - 84980. No. 3451. Itachi. A mediumsmall oval yellow bean with a russet-brown hilum.
 - 84981. No. 3452. Okita. A mediumsized round yellow bean, somewhat mottled with brown, which has a dark-brown hilum.
 - 84982. No. 3453. Junin Zuki. A mesized round glossy yellow bean with a russet-brown hilum.

- 84983. No. 3454. *Toppa*. A mediumsmall, somewhat flattened, pale yellow bean with a pale hilum.
- 84984. No. 3455. Akazaya (red pod). A medium-sized round dull-yellow bean, slightly mottled with brown and with a dark-brown hilum.
- 84985. No. 3456. Shirohadaka Ju Nigo, White Smooth No. 12. A medium-small to medium-sized oval yellow bean with a brown hilum.
- 84986. No. 3457. Deki Sugi. A medium-sized round yellow bean with a prominent brown hilum.
- 84987. No. 3458. Oni hadaka. A medium-small oval glossy yellow bean with a brown hilum.
- 84988. No. 3459. Shirobana Ichizo. A medium-sized oval yellow bean with a pale hilum.
- 84989. No. 3460. Kefuri. A mediumsized oval yellow bean with a brown hilum.
- 84990. No. 3461. Doruma nigo. A medium-sized, somewhat flattened, yellow bean with a pale-brown hilum.
- 84991. No. 3462. Kinozaya. A small nearly round yellow bean with a pale-brown hilum.
- 84992. No. 3463. Shirobana nigo. A medium-sized oval yellow bean with a pale-brown bilum.
- 84993. No. 3464. Asahi. A mediumsized round glossy yellow bean with a russet-brown hilum.
- 84994. No. 3465. Sakidaizu. A medium-large oval yellow bean with a brown hilum.
- 84995. No. 3466. Dairin. A mediumsized, nearly round yellow bean with a dark-brown hilum.
- 84996. No. 3467. Shimabara Wase. A medium-small oval yellow bean with a russet-brown hilum.
- 84997. No. 3468. Kochi Kimusume. A medium-sized oval yellow bean with a brown hilum.
- 84998. No. 3469. Bankoshi. A medium-small oval yellow bean with a brown hilum.
- 84999. No. 3470. Shirome Sanju Co. White Eye No. 35. A mediumsmall oval pale yellow bean with a pale hilum.
- 85000. No. 3471. Saitama Kiizaya. A medium-small dull yellow bean with a brown hilum.
- **85001.** No. 3472. *Iwate Yagi Ichigo, No. 1.* A medium-sized yellow bean with a brown hilum.
- **85002.** No. 3473. *Kizaya*. A mediumsmall, nearly round pale yellow bean with a dark-brown hilum.
- 85003. No. 3474. Akasaga. A medium-sized round pale yellow bean with a brown hilum.
- 85004. No. 3475. Bonhaku. A medium-small oval pale yellow bean with a light-brown hilum.

- **85005.** No. 3476. Shiro tama. A medium-small round pale-yellow bean with a pale hilum.
- 85006. No. 3477. Gion Sanyu Ichigo, Gion No. 31. A medium-small oval pale-yellow bean with a pale hilum.
- 85007. No. 3478. Aoji. A mediumsmall pale-yellow bean with a prominent dark-brown hilum.
- 85008. No. 3479. Chujiku (middle season). A medjum-sized round yellow bean with a russet-brown hilum.
- **85009.** No. 3480. *Maruba daizu*. A medium-small oval pale-yellow bean with a light-brown hilum.
- 85010. No. 3481. Yagi. A mediumsized, nearly round, somewhat cloudy yellow beans with hilums which vary from pale to dark brown.
- 85011. No. 3482. Ani (brother). A medium-sized round glossy yellow bean with a dark-brown hilum.
- 85012. No. 3483. Kurozaya Kin. A medium-small pale-yellow bean with a pale hilum.
- 85013. No. 3484. Akidaizu (fall soybean). A medium-large oval yellow bean with a pale hilum.
- 85014. No. 3485. Kindaizu. A medium-small pale-yellow bean with a dark-brown hilum.
- 85015. No. 3486. Kuro daizu. A medium-large, nearly round black bean, which is used for confections.
- 85016. No. 3487. Robiki daizu. A medium-small oval glossy yellow bean with a russet-brown hilum.
- 85017. No. 3488. Gin daizu. A medium-sized, oval, somewhat flattened yellow bean with a brown hilum.
- 85018 to 85033. From the Heisan-Nando Seed and Nursery Farm, Heijo Chosen, December 12, 1929.
- 85018. No. 3495. *Kinpai*. A mediumlarge round glossy yellow bean with a long brown hilum and the testa more or less split. A few of the beans have a slate-black hilum.
- 85019. No. 3496. Kohouju. A medium-small round yellow bean, very much mottled with brown, which has a brown hilum.
- 85020. No. 3497. *Hakuta*. A mediumsized oval glossy yellow bean with a pale hilum and the testa more or less split.
- 85021. No. 3498. Hoten Shirome. A medium-sized oval pale-yellow b(an, more or less motted with brown, with a pale hilum.
- 85022. No. 3499. Yaki. A mediumsized nearly round glossy yellow bean with a brown hilum.
- 85023. No. 3500. Youtou. A mediumlarge oval yellow bean with a pale hilum and the testa much split.

85024 to 85026.

From Japan. Seeds presented by T. Watanbe, Forest Experiment Station, Keijo, Chosen, through P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received December 26, 1929. Numbered in January, 1930.

85024. CASTANEA CRENATA Sieb. and Zucc. Fagaceae. Japanese chestnut.

Variety dulcis. From Hosen.

85025. QUERCUS MONGOLICA Fisch. Fagaceae. Mongolian oak.

From Keizanchin. A tall handsome oak, native to northeastern Asia, becoming 100 feet tall. The short-stemmed, dark-green, coarsely toothed leaves, 6 to 8 inches long, are crowded toward the ends of the twigs.

For previous introduction see No. 70788.

85026. (Undetermined.)

- 85027. Lycopersicon esculentum Mill. Solanaceae. Tomato.
- From Lima, Peru. Seeds presented by J. Gaudron, Estacion Central Agronomica. Received January 30, 1930.

Wild tomatoes from near Lima, Peru.

- 85028. ATALANTIA MISSIONIS (Wight) Oliver. Rutaceae.
- From Colombo, Ceylon. Seeds presented by S. Anthonipellari, Office of Medical and Sanitary Service. Received January 27, 1930.

A small tree, much resembling an orange tree in habit, with pale-gray bark and branches armed with short stiff spines, rather large stiff leaves with indistinct veining, and very sweet, white flowers. The fruit is like a small dark orange. The pale, yellowish white wood is close-grained, smooth, and suitable for cabinetwork, picture frames, and furniture.

85029. FAGELIA POLYRHIZA (Cav.) Kuntze (*Calceolaria polyrhiza* Cav.). Scrophulariaceae. Calceolaria.

From Herts, England. Seeds purchased from Clarence Elliott (Ltd.), Stevenage. Received January 25, 1930.

A dwarf, tufted, herbaceous perennial with lanceolate leaves and dark-yellow, saclike flowers with purple spots. Native to South America.

85030. UAPACA KIRKIANA Muell. Arg. Euphorbiaceae.

From Mount Silinda, Southern Rhodesia, Africa. Seeds presented by Dr. W. L. Thompson, American Board Mission. Received January 13, 1930.

Majanji. A robust, umbrella-shaped tree with stout branchlets, thinly coriaceous obovate leaves 3 to 10 inches long, undulate on the margin, and fascicles of inconspicuous flowers followed by subglobose, edible fruits about an inch in diameter. It is native to the Mozambique district of tropical Africa.

For previous introduction see No. 54967. 85031. AGROSTIS Sp. Poaceae. Grass.

From Fauresmith, Union of South Africa. Seeds presented by M. Henrici, Officer in

85031—Continued.

Charge, Veld Reserve. Received January 29, 1930.

Received as *Puccinellia angusta*, but the seeds do not agree with the description of that species.

85032 to 85039.

From Tunis, Tunisia. Scions presented by the Director, Jardin d'Essais, Sfax. Received February 8, 1930.

85032. AMYGDALUS PERSICA L. (Prunus persica Stokes). Amygdalaceae. Peach.

No. 59. Pêcher Townsi.

85033. AMYGDALUS PERSICA L. (Prunus persica Stokes). Amygdalaceae. Peach.

No. 60. Pêcher tardif de Sfax (late Sfax).

- 85034. PRUNUS sp. Amygdalaceae. Plum, No. 58. Prunier cerise, variete tunisienne.
- 85035 to 85039. PRUNUS ARMENIACA L. Amygdalaceae. Apricot,

85035. Abricotier le plus précoce.

85036. Abricotier Chechi.

85037. Abricotier Senaddui.

85038. Abricotier Oblong.

85039. Abricotier musque indigène.

85040. AESCHYNOMENE Sp. Fabaceae.

- From Mandalay, Burma. Seeds presented by D. Rhind, Esq., I. A. S., Economic Botanist. Received January 31, 1930.
- Collected December, 1929, from Hurawbi, Lower Burma.

Received as Smithia sensitiva, but the material does not agree with that genus.

- 85041 to 85046. VITIS VINIFERA L. Vitaceae. European grape.
- From Enfield, Middlesex, England. Cuttings purchased from Stuart Low Co., Bush Hill Park. Received January 31, 1930.

85041. Ascot citronella.

85042. Black muscadine.

85043. Canon Hall muscat.

85044. Grove End Sweetwater.

85045. Muscat of Hungary.

85046. White Nice.

85047 to 85052.

From Acircale, Sicily. Bud sticks presented by Dr. H. S. Fawcett, University of California. Received February 1, 1930.

85047 to 85050. CITRUS spp. Rutaceae.

85047. CITRUS AURANTIUM L.

Seville orange.

No. 34. From the R. Stazione Sperimentale de Agricultura. A sour orange of average standard type, which is used here for nursery stock.

85048. CITRUS LIMONIA Osbeck. Lemon.

No. 33. From the R. Stazione Sperimentale de Agricultura. A good

standard type of lemon, trees vigorous; fruit good shape and fairly uniform on tree. The tree as grown here is intermediate in form between Lisbon and Eureka as grown in California. Bud union not overgrown with the sour stock.

85049. CITRUS MEDICA L. Citron.

No. 35. A good, well-shaped type, the best they have at the R. Stazione Sperimentale de Agricultura.

85050. CITRUS NOBILIS DELICIOSA (Ten.) Swingle. Mandarin orange.

No. 36. From Catania, Sicily. A large, well-shaped, flat mandarin orange of good flavor and high color. The leaves seem broader and the fruits much better than any similar mandarins now growing at the California Agricultural Experiment Station.

85051. PRUNUS ARMENIACA L. Amygdalaceae. Apricot.

No. 37. A seedling of the second generation, selected by Dr. Gulio Savastano on the Van Mon's theory. The tree produces a crop of good fruit every year. It is smaller than the other seedlings, perhaps due to the heavy bearing of fruit.

85052. PRUNUS ARMENIACA L. Amygdalaceae. Apricot.

No. 38. An apricot said by Dr. Fenzi to be a natural hybrid.

85053 to 85673.

From Chosen and Japan. Seeds collected by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received January 30, 1930.

- 85053 to 85671. SOJA MAX (L.) Piper (Glycine hispida Maxim.). Fabaceae. Soybean.
 - 85053 to 85660. From the Agricultural Experiment Station, Suigen, Chosen, December 2, 1929.
 - 85053. No. 2441. Station No. Br. 58. A medium-sized oval dark-brown bean.
 - 85054. No. 2442. Station No. Br. 59. A medium-sized oval glossy brown bean.
 - 85055. No. 2443. Station No. Br. 60. A small oval glossy, dark-brown bean, which may be of value for sprouts.
 - 85056. No. 2444. Station No. Br. 61. A medium-sized, oval, slightly flattened glossy brown bean.
 - 85057. No. 2445. Station No. Br. 62. A medium-small, slightly flattened, oval, glossy brown bean.
 - 85058. No. 2446. Station No. Br. 63. A medium-sized oval glossy brown bean, tinged with yellow.
 - 85059. No. 2447. Station No. Br. 64. A medium-small oval, slightly flattened, glossy brown bean.
 - 85060. No. 2448. Station No. Br. 65. A medium-sized oval brown bean.
 - 85061. No. 2449. Station No. Br. 66. A medium-sized, slightly flattened brown bean.
 - 85062. No. 2450. Station No. Br. 67. A medium-large oval glossy brown bean.

- 85063. No. 2451. Station No. Br. 68. A medium-large oval glossy brown bean.
- 85064. No. 2452. Station No. Br. 69. A medium-sized, oval, slightly-flattened glossy brown bean.
- 85065. No. 2471. Station No. G-1. A medium-sized oval dark-brown bean with a green germ.
- 85066. No. 2472. Station No. G-2. A medium-sized dark-brown bean with a green germ.
- 85067. No. 2473. Station No. G-3. A medium-sized dark-brown bean with a green germ.
- 85068. No. 2474. Station No. G-4. A medium-sized oval dark-brown bean with a green germ.
- 85069. No. 2475. Station No. G-5. A medium-sized oval dark-brown bean with a green germ.
- 85070. No. 2476. Station No. G-6. A medium-sized, very dark brown bean with a green germ.
- 85071. No. 2477. Station No. G-9. A medium-large oval green bean with a black hilum.
- 85072. No. 2478. Station No. G-10. A medium-small greenish yellow bean, much mottled with green; hilum brown.
- 85073. No. 2479. Station No. G-11. A medium-sized oval green bean slightly mottled with black; hilum black; germ green.
- 85074. No. 2480. Station No. G-12. A medium-sized yellowish green bean; hilum black; germ green.
- 85075. No. 2481. Station No. G-13. A medium-sized oval green bean; hilum black; germ green.
- 85076. No. 2482. Station No. G-14. A medium-sized oval yellowish green bean; hilum slate black; germ green.
- 85077. No. 2483. Station No. G-15. A medium-sized oval green bean; hilum slate black; germ green.
- 85078. No. 2484. Station No. G-16. A medium-large oval yellowish green bean; hilum light slate black; germ green.
- 85079. No. 2485. Station No. G-17. A medium-sized oval yellowish green bean slightly mottled with black; hilum slate black; germ green.
- 85080. No. 2486. Station No. G-18. A medium-sized oval yellowish green bean with a slate-black hilum and a green germ.
- 85081. No. 2487. Station No. G-19. A medium-sized oval greenish yellow bean with a slate-black hilum and a green germ.
- 85082. No. 2488. Station No. G-20. A medium-sized oval yellowish green bean with a light slateblack hilum and a green germ.
- 85083. No. 2489. Station No. G-21. A medium-sized oval yellowish green bean with a slate-black hilum and a green germ.

- 85084. No. 2490. Station No. G-22. A medium-sized oval green bean with a green germ and a slate-black hilum.
- 85085. No. 2491. Station No. G-23. A medium-sized oval green bean slightly mottled with brown; hilum brown; germ green.
- 85086. No. 2492. Station No. G-24, A medium-sized oval yellowish green bean slightly mottled with brown: hilum slate black; germ green.
- 85087. No. 2493. Station No. G-25. A medium-large oval yellowish green bean with a slate-black hilum.
- 85088. No. 2494. Station No. G-26. A medium-sized oval yellowish green bean slightly mottled with brown; hilum black.
- 85089. No. 2495. Station No. G-27. A medium-sized oval yellowish green bean mottled with black; hilum black; germ green.
- **85090.** No. 2496. Station No. G-28. A medium-sized oval green bean slightly mottled with dark brown; hilum dark brown.
- **85091.** No. 2497. Station No. G-29. A medium-sized oval green bean mottled with brown; hilum brown; germ green.
- 85092. No. 2498. Station No. G-30. A medium-sized oval green bean mottled with dark brown; hilum brown; germ green.
- 85093. No. 2499. Station No. G-32. A medium-sized oval yellowish green bean with the testa very wrinkled, the hium brown, and the germ green.
- 85094. No. 2500. Station No. G-33. A medium-sized oval yellowish green bean mottled with dark brown; germ green; hilum long, large, and dark brown.
- 85095. No. 2501. Station No. G-34. A medium-large oval yellowish green bean slightly mottled with brown; hilum large and dark brown; germ green.
- 85096. No. 2502. Station No. G-35. A medium-sized oval greenish yellow bean slightly mottled with brown; hilum dark brown; germ green.
- **85097.** No. 2503. A medium-small oval slightly flattened green bean with a dark brown hilum and a green germ.
- 85098. No. 2504. Station No. G-37. A medium-small oval yellowish green bean mottled with dark brown; hilum dark brown; germ green.
- 85099. No. 2505. Station No. G-38. A medium-small oval glossy yellowish green bean slightly mottled with dark brown; hilum brown; germ green.
- 85100. No. 2506. Station No. G-39. A medium-small oval yellowish green bean slightly mottled with brown; hllum brown; germ green.

- 85101. No. 2507. Station No. G-40. A medium-sized oval green bean heavily mottled with dark brown; hilum large and dark brown; germ green.
- 85102. No. 2508. Station No. G-41. A medium-small, nearly round, yellowish green bean slightly mottled with dark brown; hilum dark brown; germ green.
- 85103. No. 2509. Station No. G-42. A medium-small, nearly round, yellowish green bean heavily mottled with dark brown; hilum dark brown; germ green.
- 85104. No. 2510. Station No. G-43. A medium-large oval glossy yellowish green bean with a brown hilum and a green germ.
- 85105. No. 2511. Station No. G-44. A medium-sized yellowish green bean with a dark-brown hilum and a green germ.
- 85106. No. 2512. Station No. G-45. A medium-sized oval glossy yellowish green bean with a black hilum and a green germ.
- 85107. No. 2513. Station No. G-46. A medium-sized oval olive-green bean mottled heavily with black; hilum black; germ yellow.
- 85108. No. 2514. Station No. G-47. A medium-large oval yellowish green bean slightly mottled with brown; hilum long and brown; germ green.
- 85109. No. 2515. Station No. G-48. A medium-small oval slightly flattened greenish yellow bean mottled with brown; hilum dark brown; germ green.
- 85110. No. 2516. Station No. G-49. A medium-small oval green bean mottled with brown; hilum russet brown; germ green.
- 85111. No. 2517. Station No. G-50. A medium-large oval green bean with a dark-brown hilum and a green germ.
- 85112. No. 2518. Station No. G-51. A medium-sized oval yellowish green bean heavily mottled with brown; hilum large and dark brown.
- 85113. No. 2519. Station No. G-52. A medium-sized oval green bean marked with dark-brown stripes; hilum dark brown; germ green.
- 85114. No. 2520. Station No. G-53. A medium-small oval yellowish green bean slightly mottled with brown; hilum russet brown; germ green.
- 85115. No. 2521. Station No. G-54. A medium-small oval yellowish green bean slightly mottled with brown; hilum brown; germ green.
- 85116. No. 2522. Station No. G-55. A medium-small oval green bean slightly mottled with brown; hilum brown; germ green.
- 85117. No. 2523. Station No. G-56. A small, nearly round, green bean slightly mottled with brown; hilum russet brown; germ green.

- 85118. No. 2524. Station No. G-57. A medium-small oval green bean slightly mottled with brown; hilum brown; germ green.
- 85119. No. 2525. Station No. G-58. A small, nearly round yellowish green bean slightly motiled with brown; bilum pale brown; germ green. It may be of value for 'sprouting.
- 85120. No. 2526. Station No. G-59. A medium-small, nearly round green bean mottled with brown; hilum light russet brown; germ green.
- 85121. No. 2527. Station No. G-60. A medium-sized oval yellowish green bean with the testa wrinkled and slightly split; hilum russet brown; germ green.
- 85122. No. 2528. Station No. G-61. A medium-sized oval green bean with the testa slightly split; hilum brown; germ green.
- 85123. No. 2529. Station No. G-62. A medium-sized oval green bean with the testa slightly split; the hilum is russet brown and the germ green.
- 85124. No. 2530. Station No. G-63. A medium-sized oval green bean with russet-brown hilum and green germ.
- 85125. No. 2531. Station No. G-66. A medium-sized oval greenish yellow bean with russet-brown hilum and green germ.
- 85126. No. 2532. Station No. G-67. A medium-large oval yellowish green bean slightly mottled with brown; hilum brown; germ green.
- **85127.** No. 2533. Station No. G-68. A medium-sized oval green bean with long dark-brown hilum and green germ.
- 85128. No. 2534. Station No. G-69. A medium-large oval green bean with the testa more or less split and mottled with brown; hilum large and brown; germ green.
- 85129. No. 2535. Station No. G-70. A medium-large oval yellowish green bean with the testa slightly split and sparsely mottled with brown; hilum large, long, and brown; germ green.
- **85130.** No. 2536. Station No. G-71. A large oval yellowish green bean with the testa slightly split; hilum large and russet brown; germ green.
- **85131.** No. 2537. Station No. G-72. A large oval yellowish green bean with a long large brown hilum and yellowish green germ.
- **85132.** No. 2538. Station No. G-73. A medium-sized oval yellowish green bean slightly mottled with brown; hilum russet brown; germ green.
- 85133. No. 2539. Station No. G-74. A medium-large oval yellowish green bean slightly mottled with brown; hilum brown; germ green.
- 85134. No. 2540. Station No. G-75. A medium-sized oval green bean with a brown hilum.

- 85135. No. 2541. Station No. G-76. A medium-sized oval yellowish green bean slightly mottled with brown; hilum brown; germ green.
- 85136. No. 2542. Station No. G-77. A medium-sized oval greenish yellow bean with brown hilum and a green germ.
- 85137. No. 2543. Station No. G-78. A small oval yellowish green bean slightly mottled with brown; bilum russet brown; germ green.
- 85138. No. 2544. Station No. G-79. A medium-small oval yellowish green bean mottled with brown; hilum russet brown; germ green.
- 85139. No. 2545. Station No. G-80. A medium-sized oval green bean with russet-brown hilum and green germ.
- 85140. No. 2546. Station No. G-81. A medium-sized oval yellowish green bean with russet-brown hilum and green germ.
- 85141. No. 2547. Station No. G-82. A medium-sized oval yellowish green bean with brown hilum and green germ.
- 85142. No. 2548. Station No. G-83. A large oval yellowish green bean with the testa more or less wrinkled, slightly split, and sparsely mottled with brown; hilum large and dark brown; germ green.
- 85143. No. 2549. Station No. G-84. A medium-sized oval yellowish green bean with russet-brown bilum and green germ.
- 85144. No. 2550. Station No. G-85. A medium-sized oval greenish yellow bean mottled with brown; hilum long, large, and brown; germ green.
- 85145. No. 2551. Station No. G-86. A medium-sized, nearly round yellowish green bean mottled with brown; hilum brown; germ yellow.
- 85146. No. 2552. Station No. G-87. A medium-sized oval green bean slightly mottled with brown; hilum dark brown; germ green.
- 85147. No. 2553. Station No. G-88. A medium-sized oval yellowish green bean slightly mottled with brown; hilum brown; germ green.
- 85148. No. 2554. Station No. G-89. Medium-small oval yellowish green bean with russet-brown hilum.
- 85149. No. 2555. Station No. G-90. A medium-large oval yellowish green bean with the testa more or less wrinkled and split; bilum brown and germ green.
- 85150. No. 2556. Station No. G-91. A medium-small oval yellowish green bean with russet hilum and green germ.
- 85151. No. 2557. Station No. G-92. A small oval yellowish green bean slightly mottled with brown; hilum brown.
- 85152. No. 2558. Station No. G-93. A medium-sized oval yellowish green bean with a large split in the testa; brown hilum and green germ.

- 85153. No. 2559. Station No. G-94. A medium-small, oval, slightly flattened yellowish green bean heavily mottled with brown; hilum russet brown.
- 85154. No. 2560. Station No. G-95. A medium-sized oval greenish yellow bean with russet-brown hilum and green germ.
- 85155. No. 2561. Station No. G-96. A medium-sized oval green bean heavily mottled with dark brown; hilum light brown; germ green.
- 85156. No. 2562. Station No. G-97. A medium-small oval green bean mottled with brown; hilum brown; germ green.
- 85157. No. 2563. Station No. G-98. A medium-sized oval green bean with the testa streaked with white and slightly mottled with brown; hilum brown; germ green.
- 85158. No. 2564. Station No. G-99. A very small oval green bean slightly mottled with brown; bilum brown; germ green. It should be an excellent variety for sprouting.
- 85159. No. 2565. Station No. G-100. A medium-large oval greenish yellow bean mottled with brown; hilum brown; germ green.
- 85160. No. 2566. Station No. G-101. A medium-small oval greenish yellow bean slightly mottled with brown; hilum brown; germ green.
- **85161.** No. 2567. Station No. G-102. A medium-sized oval yellowish green bean heavily mottled with brown; hilum light brown; germ green.
- 85162. No. 2568. Station No. G-103. A medium-sized oval yellowish green bean heavily mottled with brown; bilum dark brown; germ green.
- 85163. No. 2569. Station No. G-104. A medium-sized oval green bean with pale-brown hilum and green germ.
- 85164. No. 2570. Station No. G-105. A medium-sized oval glossy yellowish green bean mottled with brown; hilum brown; germ green.
- 85165. No. 2571. Station No. G-108. A medium-sized, oval, slightly flattened, yellowish green bean mottled with brown; hilum pale; germ green.
- 85166. No. 2572. Station No. B-1. A medium-small oval dull-black bean with a yellow germ.
- 85167. No. 2573. Station No. B-2. A large, nearly round, glossy black bean with the testa slightly split and a green germ.
- 85168. No. 2574. Station No. B-3. A medium-sized, oval, slightly flattened, dull-black bean with a yellow germ.
- 85169. No. 2575. Station No. B-4. A medium-large, nearly round, dull-black bean.
- 85170. No. 2576. Station No. B-5. A medium-large oval dull-black bean with a yellow germ.

- 85171. No. 2577. Station No. B-6. A medium-large, oval, slightly flattened, dull-black bean with a yellow germ.
- 85172. No. 2578. Station No. B-7. A medium-sized, oval, slightly flattened black bean with a yellow germ.
- 85173. No. 2579. Station No. B-8. A medium-sized, oval, slightly flattened, dull-black bean with a yellow germ.
- 85174. No. 2580. Station No. B-9. A medium-sized, oval, slightly flattened, glossy black bean with a yellow germ.
- 85175. No. 2581. Station No. B-10. A large oval dull-black bean with a yellow germ.
- 85176. No. 2582. Station No. B-11. A medium-sized. oval, slightly flattened, glossy black bean.
- 85177. No. 2583. Station No. B-12. A medium-sized oval dull-black bean.
- **85178.** No. 2584. Station No. B-13. A medium-sized. oval. slightly flattened, glossy black bean with a yellow germ.
- 85179. No. 2585. Station No. B-14. A medium-large oval dull-black bean.
- 85180. No. 2586. Station No. B-15. A medium-sized oval dull-black bean.
- 85181. No. 2587. Station No. B-16. A medium-large oval glossy black bean with a yellow germ.
- 85182. No. 2588. Station No. B-17. A medium-sized, oval. slightly flattened, glossy black bean with a yellow germ.
- 85183. No. 2589. Station No. B-18. A medium-large, oval, slightly flattened, glossy black bean.
- 85184. No. 2590. Station No. B-19. A medium-sized oval glossy black bean with a green germ.
- 85185. No. 2591. Station No. B-20. A medium-sized oval glossy black bean with a yellow germ.
- 85186. No. 2592. Station No. B-21. A medium-sized oval slightly flattened dull-black bean.
- 85187. No. 2593. Station No. B-22. A medium-small oval dull-black bean.
- 85188. No. 2594. Station No. B-23. A medium-sized oval slightly flattened dull-black bean.
- 85189. No. 2595. Station No. B-24. A medium-sized oval slightly flattened glossy black bean.
- 85190. No. 2596. Station No. B-25. A medium-sized oval slightly flattened glossy black bean.
- 85191. No. 2597. Station No. B-26. A medium-sized oval dull-black bean with a yellow germ.
- 85192. No. 2598. Station No. B-27. A medium-small, nearly round, dull-black bean.

- 85193. No. 2599. Station No. B-28. A medium-large oval dull-black bean with a yellow germ.
- 85194. No. 2600. Station No. B-29. A medium-sized oval slightly flattened glossy black bean with a yellow germ.
- 85195. No. 2601. Station No. B-30. A medium-sized oval slightly flattened glossy black bean with a yellow germ.
- 85196. No. 2602. Station No. B-31. A medium-sized oval slightly flattened dull-black bean with a yellow germ.
- 85197. No. 2603. Station No. B-32. A medium-sized oval slightly flattened glossy black bean with the testa slightly split and the germ yellow.
- 85198. No. 2604. Station No. B-33. A medium-sized oval dull-black bean with a yellow germ.
- 85199. No. 2605. Station No. B-34. A medium-sized oval slightly flattened glossy black bean with a yellow germ.
- 85200. No. 2606. Station No. B-35. A medium-sized oval glossy black bean with a yellow germ.
- 85201. No. 2607. Station No. B-36. A medium-sized oval glossy black bean with a yellow germ.
- **85202.** No. 2608. Station No. B-37. A medium-sized oval slightly flattened glossy black bean with a yellow germ.
- 85203. No. 2609. Station No. B-38. A medium-small oval slightly flattened. dull-black bean with a yellow germ.
- 85204. No. 2610. Station No. B-39. A medium-large nearly round shiny black bean with a yellow germ.
- 85205. No. 2611. Station No. B-40. A medium-sized, oval, slightly flattened, dull-black bean with a yellow germ.
- 65206. No. 2612. Station No. B-41. A medium-sized, oval, slightly flattened, glossy black bean with a yellow germ.
- 85207. No. 2613. Station No. B-42. A medium-sized, oval, glossy black bean with the testa slightly split and the germ yellow.
- 85208. No. 2614. Station No. B-43. A medium-small, oval, slightly flattened, glossy black bean with a yellow germ.
- 85209. No. 2615. Station No. B-44. A medium-small, oval, slightly flattened, dull-black bean with a yellow germ.
- 85210. No. 2616. Station No. B-45. A medium-sized oval glossy black bean with a yellow germ.
- 85211. No. 2617. Station No. B-46. A medium-sized, oval, slightly flattened, glossy black bean with a yellow germ.
- 85212. No. 2618. Station No. B-47. A medium-sized, oval, slightly flattened, glossy black bean with a yellow germ.

- 85053 to 85673—Continued.
 - 85213. No. 2619. Station No. B-48. A medium-large, oval, slightly flattened, glossy black bean with a yellow germ.
 - 85214. No. 2620. Station No. B-49. A medium-sized, oval, slightly flattened, glossy black bean with a yellow germ.
 - 85215. No. 2621. Station No. B-51. A medium-sized, oval, slightly flattened, dull-black bean with a yellow germ.
 - 85216. No. 2622. Station No. B-52. A medium-sized, oval, slightly flattened, glossy black bean with a yellow germ.
 - 85217. No. 2623. Station No. B-53. A medium-sized, oval, slightly flattened, glossy black bean with a yellow germ.
 - 85218. No. 2624. Station No. B-24. A medium-sized oval dull-black bean with a yellow germ.
 - 85319. No. 2625. Station No. B-55. A medium-sized, oval, slightly flattened, dull-black bean with a yellow germ.
 - 85220. No. 2626. Station No. B-56. A medium-sized, oval, slightly flattened, dull-black bean with a yellow hilum.
 - 85221. No. 2627. Station No. B-57. A medium-sized, oval, slightly flattened, glossy black bean with a yellow germ.
 - 85222. No. 2628. Station No. B-58. A large oval dull-black bean with the testa slightly split and the germ yellow.
 - 85223. No. 2629. Station No. B-59. A medium-sized oval dull-black bean with a yellow germ and brown markings about the hilum.
 - 85224. No. 2630. Station No. B-60. A medium-sized oval glossy black bean with a yellow germ.
 - 85225. No. 2631. Station No. B-61. A medium-sized, oval, slightly flattened, glossy black bean with a yellow germ.
 - 85226. No. 2632. Station No. B-62. A medium-sized, oval slightly flattened, shiny black bean with a yellow germ.
 - 85227. No. 2633. Station No. B-63. Medium-sized oval glossy black beans with yellow germs, and the testa split on a few of the beans.
 - 85228. No. 2634. Station No. B-64. A medium-sized, oval slightly flattened, dull-black bean with a yellow germ.
 - 85229. No. 2635. Station No. B-65. A medium-sized, oval, slightly flattened, dull-black bean with a yellow germ.
 - 85230. No. 2636. Station No. B-66. A medium-small, oval. slightly flattened, glossy black bean with a yellow germ.
 - 85231. No. 2637. Station No. B-67. A medium-small oval black bean with a yellow germ.

- 85232. No. 2638. Station No. B-68. A small, nearly round black bean with a yellow germ. It may be of value for sprouts.
- 85233. No. 2639. Station No. B-69. A small round black bean with a yellow germ; may be of value for sprouts.
- 85234. No. 2640. Station No. B-70. A small round black bean with a yellow germ; may be of value for sprouts.
- 85235. No. 2641. Station No. B-72. A small oval glossy black bean with a yellow germ.
- 85236. No. 2642. Station No. B-73. A small, nearly round, glossy black bean with a yellow germ.
- 85237. No. 2643. Station No. B-74. A medium-small, much flattened, glossy black bean with a yellow germ.
- 85238. No. 2644. Station No. B-75. A small, oval, slightly flattened, glossy black bean with a yellow germ.
- 85239. No. 2645. Station No. B-76. A medium-small, oval, much-flattened, glossy black bean with a yellow germ.
- 85240. No. 2646. Station No. B-77. A small oval glossy black bean with a yellow germ.
- 85241. No. 2647. Station No. B-78. A small, nearly round, dull-black bean with a yellow germ.
- 85242. No. 2648. Station No. B-79. A very small oval glossy black bean with a yellow germ.
- 85243, No. 2649. Station No. B-80. A very small, nearly round, glossy black bean with a yellow germ; may be of vaue for sprouts.
- 85244. No. 2650. Station No. B-81. A small oval dull-black bean with a yellow germ.
- 85245. No. 2651. Station No. B-82. A medium-small, nearly round, glossy black bean with a yellow germ.
- 85246. No. 2652. Station No. B-83. A small, nearly round, glossy black bean with a yellow germ.
- 85247. No. 2653. Station No. B-84. A medium-small, oval, muchflattened, shiny black bean with a yellow germ.
- 85248. No. 2654. Station No. B-55. A medium-sized, oval, slightly flattened, glossy black bean with a yellow germ.
- 85249. No. 2655. Station No. B-86. A medium-small, oblong, muchflattened. shiny black bean with a yellow germ.
- 85250. No. 2656. Station No. B-87. A medium-small, oblong, muchflattened, glossy black bean with a yellow germ.
- 85251. No. 2657. Station No. B-88. A small round glossy black bean with a yellow germ; may be of value for sprouts.

- 85252. No. 2658. Station No. B-89, A medium-sized, oval, slightly flattened, glossy black bean with brown markings about the hilum and a yellow germ.
- 85253. No. 2659. Station No. B-90. A small oval glossy black bean with a yellow germ.
- 85254. No. 2660. Station No. B-91. A medium-sized, oval, slightly flattened, dull-black bean with a yellow germ.
- 85255. No. 2661. Station No. B-92. A medium-sized, oval, much flattened, glossy black bean with a yellow germ.
- 85256. No. 2662. Station No. B-93. A medium-small oval shiny black bean with a yellow germ. Very similar to the Ebony variety (No. 17254).
- 85257. No. 2663. Station No. B-94. A medium-small, oval to nearly round, glossy black bean with a yellow germ.
- 85258. No. 2664. Station No. B-95. A medium-small oval glossy black bean with a yellow germ.
- 85259. No. 2665. Station No. B-96. A medium-small oval dull-black bean with a yellow germ.
- 85260. No. 2666. Station No. B-97. A small oval glossy black bean with a yellow germ; may be of value for sprouts.
- 85261. No. 2667. Station No. B-98. A medium-small oval dull-black bean with a yellow germ.
- 85262. No. 2668. Station No. B-99. A very small oval glossy black bean with a yellow germ; may be of value for sprouts.
- 85263. No. 2669. Station No. B-100. A medium-large oval dull-black bean with the testa slightly split and the germ yellow.
- 85264. No. 2670. Station No. B-101. A medium-large oval glossy black bean with the testa on most of the seeds split on the sides into a fine network; germ yellow.
- 85265. No. 2671. Station No. B-102. A medium-large, oval, slightly flattened, glossy black bean with a yellow germ.
- 85266. No. 2672. Station No. B-103. Large oval black beans with brown markings; testa split more or less; germ green.
- 85267. No. 2673. Station No. B-104. A medium-sized, oval, slightly flattened, glossy black bean with the testa slightly split and the germ yellow.
- 85268. No. 2674. Station No. B-105. A medium-large oval glossy black bean with the testa slightly split on the sides and the germ yellow.
- 85269. No. 2675. Station No. B-106. A medium-sized, oval, glossy black, slightly flattened bean with a yellow germ.

- 86270. No. 2676. Station No. B-107. Medium-sized, oval, slightly flattened, glossy black beans, some of which have the testa slightly split; germ yellow.
- 85271. No. 2677. Station No. B-108. A medium-sized oval glossy black bean; germ yellow.
- 85272. No. 2678. Station No. B-109. A medium-sized, oval, glossy black, slightly flattened bean with a yellow germ.
- 85273. No. 2679. Station No. B-110. A medium-large oval glossy black bean with a yellow germ.
- 85274. No. 2680. Station No. B-111. A medium-large oval glossy black bean with a yellow germ and brown markings about the hilum.
- 85275. No. 2681. Station No. B-112. A medium-sized oval glossy black bean with a yellow germ.
- 85276. No. 2682. Station No. B-113. A large oval dull-black bean with a yellow germ and the testa slightly split.
- 85277. No. 2683. Station No. B-114. A medium-sized oval glossy black bean with a yellow germ and the testa split on sides into a fine network.
- 85278. No. 2684. Station No. B-115. Large oval shiny black beans with brown markings and the testa split more or less; germ yellow.
- 85279. No. 2685. Station No. B-116. A large, oval, slightly flattened, glossy black bean with the testa split on the sides into a fine network; germ yellow.
- 85280. No. 2686. Station No. B-117. A medium-sized oval dull-black bean with the testa split on the sides into a fine network; germ yellow.
- 85281. No. 2687. Station No. B-118. A medium-sized, oval, slightly flattened, glossy black bean with the testa split on the sides into a fine network; germ yellow.
- 85282. No. 2688. Station No. B-119. A medium-sized, oval, slightly flattened, glossy black bean with the testa split on the sides into a fine network; germ yellow.
- 85283. No. 2689. Station No. B-120. A medium-sized, oval, slightly flattened, glossy black bean with the testa split on the sides into a fine network; germ yellow.
- 85284. No. 2690. Station No. B-121. A medium-large oval dull black bean with brown markings; testa split on the sides into a coarse network; germ yellow.
- 85285. No. 2691. Station No. B-122. A medium-sized, oval, slightly flattened, dull-black bean; testa split on the sides into a fine network; germ yellow.
- 85286. No. 2692. Station No. B-124. A medium-sized oval dull-black bean; testa split on the sides into a fine network; germ yellow.

- 85287. No. 2693. Station No. B-125. A medium-large, oval, slightly flattened, dull-black bean with the testa split into a fine network and the germ yellow.
- 85288. No. 2694. Station No. B-128. A medium-sized, oval, slightly flattened, dull-black bean; testa split on the sides into a fine network; germ yellow.
- 85289. No. 2695. Station No. B-127. A medium-sized, oval, slightly flattened, dull-black bean with the testa split into a fine network; germ yellow.
- 85290. No. 2696. Station No. B-128. A medium-sized, oblong, slightly flattened, dull-black bean with the testa split into a fine network; germ yellow.
- **85291.** No. 2697. Station No. B-129. A medium-sized, nearly round, dull black bean with the testa split on the sides into a coarse network; germ yellow.
- 85292. No. 2698. Station No. B-130. A medium-large oblong dull-black bean with the testa split on the sides into a fine network; germ yellow.
- 85293. No. 2699. Station No. B-131. A medium-large oval slightly flattened, glossy black bean with the testa split on the sides into a fine network; germ yellow.
- 85294. No. 2700. Station No. B-132. A medium-sized oval dull-black bean with a yellow germ.
- 85295. No. 2701. Station No. B-133. A medium-large, oval, slightly flattened, glossy black bean; testa split on the sides into a fine network; germ yellow.
- 85296. No. 2702. Station No. B-134. A medium-large, oval, slightly flattened, glossy black bean; testa split on the sides into a fine network; germ yellow.
- 85297. No. 2703. Station No. B-135. A medium-sized, oval, slightly flattened, glossy black bean; testa split on the sides into a fine network; germ green.
- 85298. No. 2704. Station No. B-136. A large, oval, slightly flattened, dull-black bean; testa split on the sides into a fine network; germ yellow.
- 85299. No. 2705. Station No. B-137. A medium-sized, oval, slightly flattened, dull-black bean; testa split into a fine network; germ yellow.
- 85300. No. 2706. Station No. B-138. A medium-sized, oval, slightly flattened, shiny black bean; testa split on the sides into a fine network; germ yellow.
- 85301. No. 2707. Station No. B-139. Medium-sized oval glossy black beans with the testa more or less split and the germ yellow.
- 85302. No. 2708. Station No. B-140. A medium-sized, oval, slightly flattened, shiny black bean; testa split on the sides into a fine network; germ yellow.

- 85303. No. 2709. Station No. B-141. A very large, oval, slightly flattened, dull-black bean; testa split on the sides into a fine network; germ yellow.
- 85304. No. 2710. Station No. B-142. A medium-sized, oval, slightly flattened, glossy black bean; testa split on the sides into a fine network; germ yellow.
- 85305. No. 2711. Station No. B-143. A medium-sized, oval, slightly flattened, dull-black bean; testa split on the sides into a fine network; germ yellow.
- **85306.** No. 2712. Station No. B-144. A very large, oval, slightly flattened, dull-black bean; testa split on the sides into a fine network; germ green.
- 85307. No. 2713. Station No. B-145. A large, oblong, slightly flattened, glossy black bean; testa split on the sides into a fine network; germ yellow.
- 85308. No. 2714. Station No. B-146. A medium-large, oval, slightly flattened, glossy black bean; testa split on the sides into a rather coarse network; germ yellow.
- 85309. No. 2715. Station No. B-147. Medium-large oval black beans with the testa split on the sides into a network; germ yellow.
- 85310. No. 2716. Station No. B-148. A medium-sized, oval, slightly flattened, black bean; testa split into a fine network; germ yellow.
- 85311. No. 2717. Station No. B-149. A medium-sized oval black bean with the testa split into a fine network; germ yellow.
- 85312. No. 2718. Station No. B-150. A medium-large, oval, slightly flattened, glossy black bean; testa split into a fine network; germ yellow.
- 85313. No. 2719. Station No. B-151. A medium-sized, oval, slightly flattened, black bean with the testa on the sides split into a fine network.
- 85314. No. 2720. Station No. Y-1. A medium-sized, oval, much-flattened, cloudy, dull-greenish yellow bean, much mottled with black and brown; hilum black.
- 85315. No. 2721. Station No. Y-2. A medium-sized, oval, slightly flattened, glossy greenish yellow bean heavily mottled with black; hilum black.
- 85316. No. 2722. Station No. Y-3. A medium-small, nearly round, slightly cloudy, glossy yellow bean, somewhat mottled with black and brown; hilum black.
- 85317. No. 2723. Station No. Y-4. A medium-small yellow bean, slightly mottled with black; hilum black.
- 85318. No. 2724. Station No. Y-5. A very small, round, slightly cloudy, glossy yellow bean with black hium; may be of value for sprouting.

- 85319. No. 2725. Station No. Y-6. A very small, nearly round, slightly cloudy, glossy yellow bean, slightly mottled with brown; hilum black. It should be an excellent variety for sprouting.
- 85320. No. 2726. Station No. Y-7. A very small, round, slightly cloudy, glossy yellow bean, very slightly mottled with black; hilum black.
- 85321. No. 2727. Station No. Y-8. A small, round, slightly cloudy, glossy yellow bean, mottled with black; hilum black.
- 85322. No. 2728. Station No. Y-9. A very small, round, black, cloudy, glossy yellow bean, slightly mottled with black; hilum black; should be of value for sprouting.
- 85323. No. 2729. Station No. Y-10. A small, round, cloudy, black glossy yellow bean, mottled with black; should be of value for sprouts.
- 85324. No. 2730. Station No. Y-11. A very small, nearly round, slightly cloudy, black, glossy yellow bean with a black hilum; may be of value for sprouting.
- 85325. No. 2731. Station No. Y-12. A small, nearly round, black cloudy, glossy yellow bean. mottled with black; hilum black; should be of value for sprouts.
- 85326. No. 2732. Station No. Y-13. A small, round, slightly black cloudy, glossy yellow be 'n, slightly mottled with black; bilum black.
- 85327. No. 2733. Station No. Y-14. A small round yel.ow bean, slightly mottled with black; hilum black; may be of value for sprouting.
- 85328. No. 2734. Station No. Y-15. A medium-small. oval, dull, cloudy black, yellow bean, mottled with brown and black; hilum black.
- 85329. No. 2735. Station No. Y-16. A very small round yellow bean, much mottled with black; hilum black; should be an excellent variety for sprouting.
- 85330. No. 2736. Station No. Y-17. A very small, nearly round, glossy yellow bean, much mottled with black; should be of value for sprouting.
- 85331. No. 2737. Station No. Y-18. A large oval glossy yellow bean, mottled with black; hilum black.
- 85332. No. 2738. Station No. Y-19. A medium-large, oval, slightly fiattened, glossy yellow bean with a black hilum.
- 85333. No. 2739. Station No. Y-20. A medium-large glossy yellow bean with large black hilum.
- A medium-sized, oval, slightly flattened, glossy yellow bean with long, large, black hilum.
- 85335. No. 2741. Station No. Y-22. A medium-sized oval glossy yellow bean, slightly mottled with black; hilum large and black.

- 85336. No. 2742. Station No. Y-23. A large, oval, slightly flattened yellow bean with a large black hilum.
- 85337. No. 2743. Station No. Y-24. A medium-sized oval yellow bean, heavily mottled with black; hilum black.
- 85338. No. 2744. Station No. Y-25. A medium-small round yellow bean, mottled with black; hilum black; should be of value for sprouting.
- 85339. No. 2745. Station No. Y-26. A medium-sized oval, slightly flattened, glossy yellow bean with long, black hilum.
- 85340. No. 2746. Station No. Y-27. A medium-small, oval, slightly flattened, glossy yellow bean, mottled with black; hilum black.
- 85341. No. 2747. Station No. Y-28. A medium-sized round yellow bean, mottled with dark brown; hilum dark brown.
- 85342. No. 2748. Station No. Y-30. A large oval yellow bean, mottled with brown; testa wrinkled and split; hilum black.
- 85343. No. 2749. Station No. Y-31. A medium-large oval glossy lightyellow bean with slate-black hilum.
- 85344. No. 2750. Station No. Y-32. A medium-sized oval yellow bean, slightly mottled with black; hilum long, large, and black.
- 85345. No. 2751. Station No. Y-34. A small, nearly round, yellow bean, mottled with black and brown; hilum black; may be of value for sprouting.
- 85346. No. 2752. Station No. Y-35. A small round yellow bean with black hilum; should be of value for sprouts.
- 85347. No. 2753. Station No. Y-36. A medium-sized oval yellow bean, slightly clouded with brown; hilum brown.
- 85348. No. 2754. Station No. Y-38. A medium-large oval cloudy yellow bean, slightly mottled with brown; hilum slate black.
- 85349. No. 2755. Station No. Y-39. A medium-sized oval yellow bean, heavily mottled with brown and black; hilum slate black.
- 85350. No. 2756. Station No. Y-41. A large oval glossy light yellow bean, slightly mottled with black; hilum slate black.
- 85351. No. 2757. Station No. Y-43. A medium-large oval glossy yellow bean with slate-black hilum.
- 85352. No. 2758. Station No. Y-44. An extra-large oval glossy yellow bean, very slightly mottled with brown; hilum slate black.
- 85353. No. 2759. Station No. Y-45. A medium-sized oval yellow bean, heavily mottled with brown; hilum slate black.

- 85053 to 85673-Continued.
 - 85354. No. 2760. Station No. Y-46. A large oval glossy yellow bean with pale slate-black hilum.
 - 85355. No. 2761. Station No. Y-47. A large, nearly round yellow bean with black hilum.
 - 85356. No. 2762. Station No. Y-48. Large oval light-yellow beans with the testa more or less wrinkled and split; hilum slate black, tinged with brown about the edges.
 - 85357. No. 2763. Station No. Y-49. A medium-sized oval glossy light yellow bean; hilum light slate black.
 - 85358. No. 2764. Station No. Y-51. A medium-sized oval yellow bean, slightly mottled with brown; hilum light brown.
 - 85359. No. 2765. Station No. Y-53. A medium-sized oval glossy yellow bean, clouded with brown; hilum long, large, and dark brown.
 - **85360.** No. 2766. Station No. Y-54. A medium-sized, oval, slightly flattened yellow bean, heavily mottled with brown; hilum dark brown.
 - 85361. No. 2767. Station No. Y-55. A large oval glossy yellow bean, slightly mottled with brown; hilum very dark brown.
 - 85362. No. 2768. Station No. Y-56. A medium-large oval glossy yellow bean, slightly mottled with brown; hilum dark brown.
 - 85363. No. 2769. Station No. Y-57. A medium-large, oval, slightly flattened yellow bean with long, very dark-brown hilum.
 - 85364. No. 2770. Station No. Y-58. A medium-small, oval, slightly flattened, glossy yellow bean, heavily mottled with brown; hilum dark brown.
 - 85365. No. 2771. Station No. Y-59. A medium-small, oval, slightly flattened, glossy brown bean, heavily mottled with brown; hilum dark brown.
 - 85366. No. 2772. Station No. Y-63. A medium-large, oval, slightly flattened yellow bean, heavily mottled with dark brown; hilum long, large, and dark brown.
 - 85367. No. 2773. Station No. Y-65. A medium-sized oval glossy yellow bean, heavily mottled with brown; hilum dark brown.
 - 85368. No. 2774. Station No. Y-67. Medlum-sized oval to nearly round yellow beans, heavily mottled with dark brown; hilums dark brown.
 - 85369. No. 2775. Station No. Y-68. A medium-sized, oval. slightly flattened light-yellow bean, heavily mottled with dark brown; hilum dark brown.
 - 85370. No. 2776. Station No. Y-69. A medium-large oval yellow bean, mottled with dark brown; hilum long, large, and very dark brown.

- 85371. No. 2777. Station No. Y-71. A medium-sized oval yellow bean, heavily mottled with brown; bilum brown.
- 85372. No. 2778. Station No. Y-72. A medium-small oval yellow bean, heavily mottled with brown; hilum dark brown.
- 85373. No. 2779. Station No. Y-73. A medium-sized oval yellow bean, much mottled with brown; hilum brown.
- 85374. No. 2780. Station No. Y-74. A medium-large oval slightly flattened glossy yellow bean, much mottled with brown; hilum dark brown.
- 85375. No. 2781. Station No. Y-75. A medium-small oval slightly flattened, glossy yellow bean, much mottled with brown; hilum dark brown.
- 85376. No. 2782. Station No. Y-76. A medium-sized oval glossy yellow bean with long large dark-brown hilum.
- 85377. No. 2783. Station No. Y-77. A medium-small oval yellow bean, slightly mottled with brown; hilum dark brown.
- 85378. No. 2784. Station No. Y-79. A small oval yellow bean, much mottled with brown; hilum brown.
- 85379. No. 2785. Station No. Y-80. A very small round glossy yellow bean, slightly mottled with brown; hilum dark brown; should be of value for sprouting.
- 85380. No. 2786. Station No. Y-81. A very small round glossy yellow bean, mottled with brown; hilum dark brown; should be of value for sprouting.
- 85381. No. 2787. Station No. Y-82. A medium-sized oval yellow bean, mottled with brown; hilum dark brown.
- 85382. No. 2788. Station No. Y-83. A medium-small oval slightly flattened yellow bean, much mottled with brown; hilum large and brown.
- 85383. No. 2789. Station No. Y-85. A medium-large oval light-yellow bean, much mottled with brown; hilum brown.
- 85384. No. 2790. Station No. Y-87. A large oval slightly flattened light-yellow bean, mottled with brown; hilum long, large, and brown.
- 85385. No. 2791. Station No. Y-89. A medium-large oval light-yellow bean, much mottled with brown; hilum brown.
- 85386. No. 2792. Station No. Y-90. Medium-sized oval slightly flattened, light yellow beans, mottled with brown; hilums vary from light to dark brown.
- 85387. No. 2793. Station No. Y-91. A medium-small oval slightly flattrned yellow bean, slightly mottled with brown; hilum large, brown.

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- 85388. No. 2794. Station No. Y-92. A medium-small oval light-yellow bean, much mottled with brown;
 hilum brown.
- 85389. No. 2795. Station No. Y-93. A medium-sized oval yellow bean, mottled with brown; hilum brown.
- 85390. No. 2796. Station No. Y-95. A medium-sized oval glossy yellow bean with a rather large, brown hilum.
- 85391. No. 2797. Station No. Y-97. A large oval glossy yellow bean with a pale hilum.
- 85392. No. 2798. Station No. Y-98. A medium-sized oval yellow bean, much mottled with brown; testa split on each side of the brown hilum.
- 85393. No. 2799. Station No. Y-99. A medium-sized oval dull-yellow bean, much mottled with brown; hilum dark brown.
- 85394. No. 2800. Station No. Y-100. A medium-sized oval light-yellow bean, mottled with brown; hilum brown.
- 85395. No. 2801. Station No. Y-101. A medium-sized oval yellow bean, slightly mottled with brown; hilum brown.
- 85396. No. 2802. Station No. Y-102. A medium-sized oval slightly flattened yellow bean, much mottled with brown; hilum brown.
- 85897. No. 2803. Station No. Y-103. A medium-sized oval glossy lightbrown bean, mottled with brown; hilum russet brown.
- 85398. No. 2804. Station No. Y-104. A small oval glossy yellow bean, mottled with brown; hilum brown.
- 85399. No. 2805. Station No. Y-105. Medium-large oval light yellow beans, slightly mottled with brown; testa split more or less about the brown hilum.
- 85400. No. 2806. Station No. Y-106. A small oval slightly flattened yellow bean with dark-brown hilum.
- 85401. No. 2807. Station No. Y-107. A medium-small oval glossy yellow bean, slightly mottled with brown; hilum brown.
- 85402. No. 2808. Station No. Y-108. A medium-small oval yellow bean, slightly mottled with brown; hilum dark brown.
- 85403. No. 2809. Station No. Y-109. A medium-small oval yellow bean, mottled with brown; hilum dark brown.
- 85404. No. 2810. Station No. Y-110. A medium-sized oval slightly flattened straw-yellow bean, slightly mottled with brown; hilum dark brown; testa slightly split.
- 85405. No. 2811. Station No. Y-111. A medium-sized oval yellow bean, mottled with dark brown; hilum rather large, long, and dark brown.

- 85406. No. 2812. Station No. Y-112. A very small, nearly round, glossy yellow bean, mottled with brown; hilum dark brown; should be of value for sprouts.
- 85407. No. 2813. Station No. Y-114. A medium-small oval light-yellow bean with brown hilum.
- 85408. No. 2814. Station No. Y-115. A medium-large oval light-yellow bean, slightly mottled with brown; hilum long, large, and brown.
- 85409. No. 2815. Station No. Y-116. A medium-sized, oval, slightly flattened yellow bean, mottled with dark brown; hilum dark brown.
- 85410. No. 2816. Station No. Y-117. A medium-sized, oval, slightly flattened yellow bean with brown hilum.
- 85411. No. 2817. Station No. Y-118. A medium-sized oval light yellow bean, slightly mottled with brown; hilum brown.
- 85412. No. 2818. Station No. Y-119. A medium-small, oval, slightly flattened yellow bean, much mottled with dark brown; hilum dark brown.
- 85413. No. 2819. Station No. Y-121. A medium-sized oval glossy yellow bean, slightly mottled with brown; hilum long, large, and brown.
- 85414. No. 2820. Station No. Y-122. A medium-sized oval yellow bean with russet-brown hilum.
- 85415. No. 2821. Station No. Y-126. A medium-large, nearly round, glossy yellow bean with brown hilum.
- 85416. No. 2822. Station No. Y-127. A medium-sized, nearly round, glossy yellow bean with brown hilum.
- 85417. No. 2823. Station No. Y-128. Large yellow oval beans with the testa more or less split; hilum brown.
- 85418. No. 2824. Station No. Y-131. A medium-small oval glossy yellow bean with pale hilum.
- 85419. No. 2825. Station No. Y-132. Large oval light-yellow beans, mottled with brown and having the task more or less split; hilum pal
- 85420. No. 2826. Station No. Y-136. A medium-sized oval yellow bean, much mottled with brown; hilum pale.
- **85421.** No. 2827. Station No. Y-138. A medium-large oval dull-yellow bean, much mottled with brown; hilum brown.
- 85422. No. 2828. Station No. Y-139. A medium-small, nearly round yellow bean, slightly mottled with brown; hilum dark brown.
- 85423. No. 2829. Station No. Y-140. A small oval glossy yellow bean, much mottled with brown; hilum dark brown.

- 85424. No. 2830. Station No. Y-141. A medium-sized oval glossy yeliow bean, mottled with brown; hilum brown.
- 85425. No. 2831. Station No. Y-142. A medium-sized, nearly round glossy yellow bean, slightly mottled with brown; hilum light brown.
- 85426. No 2832. Station No. Y-143. A medium-small, nearly round yellow bean, much mottled with dark brown; hilum dark brown.
- 85427. No. 2833. Station No. Y-145. A very small round dull-yellow bean with light-brown hilum; excellent for sprouting.
- 85428. No. 2834. Station No. Y-147. A medium-large, oval, slightly flattened yellow bean with brown hilum.
- 85429. No. 2835. Station No. Y-153. A medium-large oval glossy yellow bean with long brown hilum.
- 85430. No. 2836. Station No. Y-154. A medium-sized oval light-yellow bean, slightly mottled with brown; hilum russet brown.
- 85431. No. 2837. Station No. Y-161. A medium-sized, oval, much-flattened, light-yellow bean, mottled with brown; hilum brown.
- 85432. No. 2838. Station No. Y-162. Medium-sized oval glossy yellow beans, mottled with brown; hilums vary from light to dark brown.
- 85433. No. 2839. Station No. Y-165. A medium-sized oval yellow bean, very slightly mottled with brown; hilum brown.
- 85434. No. 2840. Station No. Y-167. A medium-sized oval light-yellow bean, slightly mottled with brown; hilum brown.
- 85435. No. 2841. Station No. Y-168. A medium-sized, oval, slightly flattened, light-yellow bean, slightly mottled with brown; hilum russet brown.
- 85436. No. 2842. Station No. Y-169. A medium-large oval glossy yellow bean, mottled with brown; hilum brown.
- 85437. No. 2843. Station No. Y-171. A medium-sized oval glossy yellow bean, slightly mottled with brown; bilum pale.
- 85438. No. 2844. Station No. Y-172. A medium-sized, oval, slightly flattened yellow bean with a long brown hilum.
- 85439. No. 2845. Station No. Y-173. A medium-sized, oval, slightly flattened, glossy yellow bean, mottled with brown; hilum pale.
- 85440. No. 2846. Station No. Y-175. A medium-sized. oval, slightly flattened, light-yellow bean with a long brown bilum.
- 85441. No. 2847. Station No. Y-176. A medium-sized oval yellow bean with a russet-brown hilum.

- 85442. No. 2848. Station No. Y-178. A medium-sized oval light-yellow bean, slightly mottled with a purple spot; hilum brown.
- 85443. No. 2849. Station No. Y-179. A medium-sized oval yellow bean with a long brown hilum.
- 85444. No. 2850. Station No. Y-181. A medium-small oval glossy yellow bean, slightly mottled with brown; hilum brown.
- 85445. No. 2851. Station No. Y-182. Medium-sized oval yellow beans, slightly mottled with brown and the testa more or less split; hilums brown.
- 85446. No. 2852. Station No. Y-183. A medium-large, oval, slightly flattened, glossy yellow bean, slightly mottled with brown; hilum brown.
- 85447. No. 2853. Station No. Y-185. A medium-sized, oval, slightly flattened yellow bean with brown hilum.
- 85448. No. 2854. Station No. Y-186. A medium-small, oval, glossy yellow bean with brown hilum.
- 85449. No. 2855. Station No. Y-187. A small, nearly round, greenish yellow bean, slightly mottled with brown; hilum light brown.
- 85450. No. 2856. Station No. Y-189.
 A medium-sized oval glossy yellow bean, mottled with brown; bilum light brown.
- 85451. No. 2857. Station No. Y-191. A medium-sized, oval, slightly flattened, glossy yellow bean, heavily mottled with brown; hilum brown.
- 85452. No. 2858. Station No. Y-193. A medium-large oval yellow bean with testa slightly split and hilum pale brown.
- 85453. No. 2859. Station No. Y-195. A medium-sized, oval, slightly flattened yellow bean with pale hilum.
- 85454. No. 2860. Station No. Y-197. Medium-sized oval glossy yellow beans, slightly mottled with brown; hilums vary from pale to dark brown.
- 85455. No. 2861. Station No. Y-202. A medium-small, oval, slightly flattened, dull-yellow bean, much mottled with brown; hilum brown.
- 85456. No. 2862. Station No. Y-203. Medium-sized oval glossy yellow beans, mottled with brown; hilums pale to brown.
- 85457. No. 2863. Station No. Y-207. A medium-large, oval, slightly flattened, glossy yellow bean with a long brown hilum.
- 85458. No. 2864. Station No. Y-208. A medium-sized oval glossy yellow bean with a dark-brown hilum and testa slightly wrinkled.
- 85459. No. 2865. Station No. Y-209. A medium-sized oval light-yellow bean, slightly mottled with brown; hilum russet brown.
- 85460. No. 2866. Station No. Y-212. A medium-sized oval light-yellow bean with a brown hilum.

- 85461. No. 2867. Station No. Y-213. A medium-sized, nearly round yellow bean, slightly mottled with brown; hilum long and brown.
- 85462. No. 2868. Station No. Y-215. A medium-small, oval, muchflattened yellow bean, heavily mottled with brown; hilum long and brown.
- 85463. No. 2869. Station No. Y-216. A very small round glossy yellow bean with a brown hilum; excellent variety for sprouts.
- 85464. No. 2870. Station No. Y-217. A medium-small, oval, slightly flattened yellow bean, much mottled with brown; hilum brown.
- 85465. No. 2871. Station No. Y-218. A small, oval, much flattened, glossy yellow bean, heavily mottled with brown; hilum brown.
- 85466. No. 2872. Station No. Y-219. A small oval light-yellow bean with russet-brown hilum; should be of value for sprouts.
- 85467. No. 2873. Station No. Y-221. A medium-small oval light-yellow bean with russet brown hilum.
- 85468. No. 2874. Station No. Y-224. A medium-sized oval light-yellow bean, mottled with brown; bilum russet brown.
- 85469. No. 2875. Station No. Y-227. A medium-sized oval light-yellow bean, slightly mottled with brown; hilum light brown.
- 85470. No. 2876. Station No. Y-231. A medium-sized oval glossy yellow bean, mottled with brown; hilum brown.
- 85471. No. 2877. Station No. Y-233. A medium-sized oval dull-yellow bean, slightly mottled with brown; hilum brown.
- 85472. No. 2878. Station No. Y-233. A medium-sized, oval, slightly flattened yellow bean, mottled with brown; hilum dark brown.
- 85473. No. 2879. Station No. Y-288. A medium-sized, nearly round yellow bean, slightly spotted with brown; hllum brown.
- 85474. No. 2880. Station No. Y-240. A medium-small, oval, slightjy flattened, light glossy yellow bean with russet brown hilum.
- 85475. No. 2881. Station No. Y-243. A medium-sized, oval, slightly mottled yellow bean with pale hllum.
- 85476. No. 2882. Station No. Y-244. A medium-small oval yellow bean with brown hilum.
- 85477. No. 2883. Station No. Y-247. A medium-small, nearly round, light-yellow bean, slightly mottled with brown; hilum brown.
- 85478. No. 2884. Station No. Y-248. A medium-sized oval glossy yellow bean with brown hilum.
- 85479. No. 2885. Station No. Y-249. A medium-small oval glossy yellow bean with a brown hilum.

- 85480. No. 2886. Station No. Y-250. A medium-small oval yellow bean with brown hilum.
- 85491. No. 2887. Station No. Y-251. A medium-small, oval, slightly flattened yellow bean with brown hilum.
- 85482. No. 2888. Station No. Y-255. A medium-small oval yellow bean, slightly mottled with brown; hilum brown.
- 85483. No. 2889. Station No. Y-256. A medium-small oval glossy yellow bean with brown hilum.
- 85484. No. 2090. Station No. Y-257. A medium-sized, oval, slightly flattened yellow bean, mottled with brown; hilum russet brown.
- 85485. No. 2891. Station No. Y-260. A medium-sized, oval, much-flattened, light-yellow bean with a brown hilum.
- 85486. No. 2892. Station No. Y-262. A medium-small, nearly round yellow bean, slightly mottled with brown; hilum brown.
- 85487. No. 2893. Station No. Y-264. A medium-sized oval light-yellow bean, mottled with brown; hilum brown.
- 85488. No. 2894. Station No. Y-265. A medium-sized, oval, slightly flattened, glossy yellow bean with a russet-brown hilum.
- 85439. No. 2895. Station No. Y-267. A medium-sized, oval, slightly flattened, light-yellow bean, much mottled with brown; hilum light brown.
- 85490. No. 2896. Station No. Y-269. A medium-small oval glossy yellow bean, mottled with brown; hilum brown.
- 85491. No. 2897. Station No. Y-271. A medium-small oval light-yellow bean, very slightly mottled with brown; hilum light brown.
- 85492. No. 2898. Station No. Y-272. A medium-small oval light-yellow bean, slightly mottled with brown; hilum brown.
- 85493. No. 2899. Station No. Y-273. A medium-sized oval glossy lightyellow bean with a pale hilum.
- 85494. No. 2900. Station No. Y-274. A medium-sized oval light-yellow bean with a brown hilum.
- 85495. No. 2901. Station No. Y-275. A medium-small, oval, slightly flattened yellow bean, slightly mottled with brown; hilum brown.
- 85496. No. 2902. Station No. Y-276. A medium-small, oval, slightly flattened yellow bean, mottled with brown; hilum brown.
- 85497. No. 2903. Station No. Y-278. A medium-small oval yellow bean, mottled with brown; hilum pale.
- 85498. No. 2904. Station No. Y-280. A medium-sized oval yellow bean with a light-brown hilum.
- 85499. No. 2905. Station No. Y-281. A medium-sized oval yellow bean, much motiled with brown; hilum brown.

- 85500. No. 2906. Station No. Y-282. A medium-small oval light-yellow bean with a brown hilum.
- 85501. No. 2907. Station No. Y-283. A medium-small oval light-yellow beam, mottled with brown; hilum pale.
- 85502. No. 2908. Station No. Y-286. A medium-sized oval light-yellow bean with a brown hilum.
- 85503. No. 2909. Station No. Y-287. A medium-small round glossy yellow bean with a brown hilum; may be of value for sprouts.
- 85504. No. 2910. Station No. Y-288. A medium-sized, oval, slightly flattened yellow bean, much mottled with brown; hilum light brown.
- 85505. No. 2911. Station No. X-290, A very small round yellow beau, much mottled with brown; hilum brown. This is the smallest seeded variety we have ever seen; some of the seeds are as small as mung beans; should be an excellent variety for sprouts.
- 85506. No. 2912. Station No. Y-291. A medium-sized oval glossy yellow bean, mottled with brown; hilum pale.
- 85507. No. 2913. Station No. X-295. A medium-sized, nearly round, glossy yellow bean, slightly motfled with brown; hilum light brown.
- 85508. No. 2914. Station No. Y-297. A medium-sized oval glossy yellow bean, mottled with brown; hilum light brown.
- 85509. No. 2915. Station No. Y-298. A large oval yellow bean with pale-brown hilum and the testa much split.
- 85510. No. 2916. Station No. Y-300. A medium-sized oval yellow bean, slightly mottled with brown; hilum pale.
- 85511. No. 2917. Station No. Y-301. A medium-sized oval, glossy yellow bean, slightly mottled with yellow; hilum light brown.
- 85512. No. 2918. Station No. Y-302. A medium-large oval yellow bean, somewhat mottled with brown; hilum light brown; the testa slightly split.
- 85513. No. 2919. Station No. Y-303. A medium-large oval yellow bean, slightly mottled with brown; testa somewhat wrinkled and split; hilum brown.
- 85514. No. 2920. Station No. Y-304. A medium-sized oval glossy yellow bean, slightly mottled with brown; hilum pale.
- 85515. No. 2921. Station No. Y-305. Medium-sized oval light-yellow beans, slightly mottled; hilums vary from pale to brown.
- 85516. No. 2922. Station No. Y-306. A medium-large oval light-yellow bean, slightly mottled; hilum light brown.
- 85517. No. 2923. Station No. Y-307. A medium-sized oval yellow bean with pale hilum.

- 85518. No. 2924. Station No. Y-308. A medium-sized, oval, slightly flattened, glossy yellow bean with a light-brown hilum.
- 85519. No. 2925. Station No. Y-309. A medium-sized oval glossy yellow bean, much mottled with brown; hilum light brown.
- 85520. No. 2926. Station No. Y-310. A medium-sized oval glossy yellow bean, much mottled with brown; hilum pale brown.
- 85521. No. 2927. Station No. Y-311. A medium-sized oval glossy yellow bean, much mottled with brown; hilum light brown.
- 85522. No. 2928. Station No. Y-312. A medium-sized, oval, slightly flattened, glossy yellow bean with a brownish black hilum.
- 85523. No. 2929. Station No. Y-313. A medium-sized oval glossy yellow bean, much mottled with brown; hilum brown.
- 85524. No. 2930. Station No. Y-314. A medium-sized oval glossy bean, mottled with brown; hilum pale brown.
- 85525. No. 2931. Station No. Y-315. A medium-small oval glossy yellow bean, slightly mottled with brown; hilum light slate black.
- 85526. No. 2932. Station No. Y-316. A medium-small oval glossy yellow bean with a pale hilum.
- 85527. No. 2933. Station No. Y-317. A medium-sized oval glossy lightyellow bean with a pale hilum.
- 85528. No. 2934. Station No. Y-318. A small oval yellow bean, much mottled with brown; hilum brown.
- 85529. No. 2935. Station No. Y-319. A medium-sized oval glossy yellow bean slightly mottled with brown; hilum pale.
- 85580. No. 2936. Station No. Y-320. A large oval yellow bean, slightly mottled with brown; testa much split; hilum brown.
- 85531. No. 2997. Station No. Y-321. Medium-sized, oval, greenish yellow to yellow, much mottled beans; hilums vary from pale brown to brown.
- 85532. No. 2938. Station No. Y-322. A medium-sized oval glossy brown bean, much mottled with brown; hilum light brown.
- 85533. No. 2939. Station No. Y-323. Large oval yellow beans, slightly mottled with brown; testa much split, hilums vary from pale to brown.
- 85534. No. 2940. Station No. Y-324. A medium-sized oval yellow bean, much mottled with brown; hilum pale.
- 85535. No. 2941. Station No. Y-325. A medium-sized oval glossy light yellow bean with pale hilum.
- 85536. No. 2942. Station No. 327. A medium-sized oval glossy yellow bean, mottled with brown; hilum pale.

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- 85053 to 85673-Continued.
 - 85587. No. 2943. Station No. Y-328. A medium-sized oval yellow bean, mottled with brown; hilum brown.
 - 85538. No. 2944. Station No. Y-329. A medium-sized oval yellow bean, slightly mottled with brown; hilum pale.
 - 85539. No. 2945. Station No. Y-330. A medium-sized oval glossy yellow bean, slightly motiled with brown; hilum light brown.
 - A medium-small, oval, much flattened, glossy yellow bean with pale hilum.
 - 85541. No. 2947. Station No. Y-332. Medium-large oval yellow beans, slightly mottled with brown and with the testa more or less wrinkled; hilum brown.
 - 85542. No. 2948. Station No. Y-333. Medium-sized oval glossy yellow beans, much mottled with brown; hilums vary from pale brown to brown.
 - 85543. No. 2949. Station No. Y-334. A medium-small oval light-yellow bean, slightly mottled with brown; hilum pale.
 - 85544. No. 2950. Station No. Y-335. A medium-sized oval glossy yellow bean, slightly mottled with brown; hilum pale.
 - 85545. No. 2951. Station No. Y-336. A medium-sized oval glossy yellow bean, much mottled with brown; hilum light brown.
 - 85546. No. 2952. Station No. Y-339. A medium-sized, oval, slightly flattened yellow bean, much mottled with brown; hilum pale.
 - 85547. No. 2953. Station No. Y-340. A medium-sized, oval, slightly flattened, glossy yellow bean, somewhat mottled with brown; hilum pale.
 - 85548. No. 2954. Station No. Y-341. A medium-small oval yellow bean, much mottled with brown; hilum light brown.
 - 85549. No. 2955. Station No. Y-342. A medium-sized oval yellow bean, much mottled with brown; hilum pale.
 - 85550. No. 2956. Station No. Y-343. A medium-small, oval, slightly flattened, glossy yellow bean, somewhat mottled with brown; hilum light brown.
 - 85552. No. 2958. Station No. Y-345. A medium-sized, oval, slightly flattened, glossy yellow bean, somewhat mottled with brown; hilum pale.
 - 85552. No. 2858. Station No. Y-345. A medium-sized, oval, yellow bean, slightly mottled with brown; hilum pale.
 - 85553. No. 2959. Station No. Y-346. A medium-sized oval glossy brown bean, mottled with brown; hilum pale.
 - 85554. No. 2960. Station No. Y-347. A medium-small, oval, slightly flattened, glossy yellow bean with a pale hilum.

- 85555. No. 2961. Station No. Y-348. A medium-large oval yellow bean, slightly mottled with brown; hilum light brown.
- 85556. No. 2962. Station No. Y-349. A medium-sized, oval, slightly flattened yellow bean, mottled with brown; hilum pale.
- 85557. No. 2963. Station No. Y-350. A medium-sized, oval, slightly flattened yellow bean, somewhat mottled with brown; hilum dark brown.
- 85558. No. 2964. Station No. Y-351. A large oval light-yellow bean with the testa slightly split; somewhat mottled with brown; hilum light brown.
- 85559. No. 2965. Station No. Y-352. A medium-sized, oval, slightly flattened, light yellow bean, somewhat mottled with brown; hilum pale.
- 85560. No. 2966. Station No. 353. Medium-large oval yellow beans, slightly mottled with brown and the testa more or less split; hilum light brown.
- 85561. No. 2967. Station No. Y-355. A large oval yellow bean, very slightly mottled with brown; hilum light brown; testa slightly split about h'lum.
- 85562. No. 2968. Station No. Y-356. A medium-sized oval glossy yellow bean, mottled with brown; hilum pale brown.
- 85563. No. 2969. Station No. Y-357. A medium-sized oval light-yellow bean, slightly mottled with brown; hilum very pale brown.
- 85564. No. 2970. Station No. 359. A medium-sized oval glossy yellow bean with light-brown hilum.
- 85565. No. 2971. Station No. Y-360. A medium-small, ovai, slightly flattened yellow bean, much mottled with brown; hilum pale brown.
- 85566. No. 2972. Station No. Y-361. Medium-sized oval glossy yellow beans, mottled with brown; hilums pale to dark brown.
- 85567. No. 2973. Station No. Y-362. A medium-sized oval glossy yellow bean, much mottled with brown; hilum pale.
- 85568. No. 2974. Station No. 363. A medium-large oval glossy yellow bean, slightly mottled with brown; hilum pale.
- 85569. No. 2975. Station No. Y-364. A medium-large, oval, slightly flattened yellow bean, somewhat mottled with brown; hilum pale.
- 85570. No. 2976. Station No. Y-365. A large oval yellow bean, somewhat mottled with brown and with the testa slightly split; hilum, light brown.
- 85571. No. 2977. Station No. Y-366. A large oval yellow bean, slightly mottled with brown; testa much split; hilum pale.

- 85572. No. 2978. Station No. Y-367. Large oval yellow beans, slightly mottled with brown; testa more or less split; hilum brown.
- 85573. No. 2979. Station No. 368. Medium-large oval yellow beans, mottled with brown; testa more or less split; hilum large and pale.
- 85574. No. 2980. Station No. 369. A medium-large oval yellow bean, slightly mottled with brown; hilum pale.
- 85575. No. 2981. Station No. Y-370. A medium-sized oval yellow bean with pale hilum.
- 85576. No. 2982. Station No. Y-371. A medium-large oval glossy yellow bean, much mottled with brown; hilum pale brown.
- 85577. No. 2983. Station No. Y-373. A medium-sized, oval, slightly flattened, glossy yellow bean with a pale hilum.
- 85578. No. 2984. Station No. Y-374. Medium-large oval greenish yellow beans, with very slight markings of brown; testa more or less split; hilum pale.
- 85579. No. 2985. Station No. Y-375. A medium-large oval glossy yellow bean, very slightly mottled with brown; hilum pale.
- 85580. No. 2986. Station No. Y-376. A medium-sized oval glossy yellow bean, mottled with brown; hilum pale.
- 85581. No. 2987. Station No. Y-377. A medium-large oval light-yellow bean, mottled with brown; bilum pale brown.
- 85582. No. 2988. Station No. Y-378. A medium-large oval glossy yellow bean, very slightly mottled with brown; hilum pale.
- 85583. No. 2989. Station No. Y-379. A medium-large oval yellow bean, mottled with brown; hilum brown.
- 85584. No. 2990. Station No. Y-380. A medium-sized, oval, slightly flattened yellow bean, somewhat mottled with brown; hilum brown.
- 85585. No. 2991. Station No. Y-381. A very large oval light-yellow bean, mottled with brown; testa much split and wrinkled; hilum brown.
- 85586. No. 2992. Station No. Y-382. A medium-large oval greenish yellow bean, slightly mottled with brown; hilum pale brown.
- 85587. No. 2993. Station No. Y-383. A medium-sized oval slightly flattened yellow bean, mottled with brown; hilum light brown.
- 85588. No. 2994. Station No. Y-384. A large oval light-yellow bean, very slightly mottled with brown; hilum light brown.
- 85589. No. 2995. Station No. Y-385. A medium-large oval glossy yellow bean, very slightly mottled with brown; hilum pale brown.

- 85590. No. 2996. Station No. 386. A medium-large oval light-yellow bean, mottled with brown; hilum brown.
- 85591. No. 2997. Station No. Y-387. A medium-sized oval yellow bean, heavily mottled with brown; hilum brown.
- 85592. No. 2998. Station No. Y-388. A medium-sized, oval, slightly flattened yellow bean, very slightly mottled with brown; bilum light brown.
- 85593. No. 2999. Station No. Y-389. A medium-sized, oval, cloudy brown yellow bean, mottled with brown; hilum brown.
- 85594. No. 3000. Station No. Y-390. A medium-sized oval glossy yellow bean, very slightly mottled with brown; hilum pale brown.
- 85595. No. 3001. Station No. Y-391. A medium-large oval glossy yellow bean, much mottled with brown; hilum brown.
- 85596. No. 3002. Station No. Y-392. A medium-sized oval glossy yellow bean, much mottled with brown; hilum brown.
- 85597. No. 3003. Station No. Y-393. A medium-sized oval glossy yellow bean, mottled with brown; testa slightly split; hilum brown.
- 85598. No. 3004. Station No. Y-394. A medium-sized oval glossy yellow bean, slightly mottled with brown; hilum pale.
- 85599. No. 3005. Station No. Y-395. A medium-sized oval glossy yellow bean, much mottled with brown; hilum pale.
- 85600. No. 3006. Station No. Y-396. A medium-sized oval glossy yellow bean with a pale hilum.
- 85601. No. 3007. Station No. Y-397. A medium-sized, nearly round, glossy yellow bean, much mottled with brown; hilum brown.
- **85602.** No. 3008. Station No. Y-400. A medium-sized oval light-brown bean, slightly mottled with brown; hilum brown.
- 85603. No. 3009. Station No. Y-401. A medium-small oval glossy yellow bean, mottled with brown; hilum brown.
- 85604. No. 3010. Station No. Y-402. A medium-sized, oval, slightly flattened yellow bean with a palebrown hilum.
- 85605. No. 3011. Station No. Y-403. A medium-large oval glossy yellow bean, slightly mottled with brown; hilum light brown.
- 85606. No. 3012. Station No. Y-404. A medium-sized, oval, slightly flattened, glossy yellow bean, somewhat mottled with brown; hilum pale brown.
- 85607. No. 3013. Station No. Y-405. A medium-sized, oval, slightly flattened, glossy yellow bean, much mottled with brown; hilum pale brown.

- 85608. No. 3014. Station No. Y-406. A medium-sized, oval, slightly flattened, glossy yellow bean, mottled with brown; hilum light brown.
- 85609. No. 3015. Station No. Y-407. A medium-sized, oval, slightly flattened, glossy yellow bean, much mottled with brown; hilum pale brown.
- 85610. No. 3016. Station No. Y-408. A medium-small oval, slightly flattened, glossy yellow bean with a pale hilum.
- 85611. No. 3017. Station No. Y-409. A medium-small. oval, slightly flattened, light yellow bean, much mottled with brown; hilum brown.
- 85612. No. 3018. Station No. Y-410. A medium-sized, nearly round, light yellow bean, much mottled with brown; hilum brown.
- 85613. No. 3019. Station No. Y-411. A medium-small, oval, somewhat flattened, glossy yellow bean, very slightly mottled with brown; hilum brown.
- 85614. No. 3020. Station No. Y-412. A medium-small, oval, slightly flattened, glossy yellow bean, mottled with brown; hilum light brown.
- 85615. No. 3021. Station No. Y-413. A medium-small oval yellow bean, mottled with brown; hilum light brown.
- 85616. No. 3022. Station No. Y-414. A medium-small, oval, slightly flattened, glossy yellow bean with a pale hilum.
- 85617. No. 3023. Station No. Y-415. A medium-sized oval glossy yellow bean with a pale hilum.
- 85618. No. 3024. Station No. Y-416. A medium-sized, oval, somewhat flattened, glossy yellow bean, very slightly mottled with brown; hilum pale.
- 85619. No. 3025. Station No. Y-417. A medium-small, oval, slightly flattened, glossy yellow bean, much mottled with brown; hilum brown.
- 85620. No. 3026. Station No. Y-418. A medium-sized, oval, somewhat glossy yellow bean, slightly mottled with brown; hilum pale.
- 85621. No. 3027. Station No. Y-419. A medium-sized oval yellow bean, much mottled with brown; hilum light brown.
- 85622. No. 3028. Station No. Y-420. A medium-small oval glossy yellow bean with a pale hilum.
- 85623. No. 3029. Station No. Y-422. A medium-sized oval yellow bean, much mottled with brown; hilum brown.
- 85624. No. 3030. Station No. Y-423. A medium-sized, oval, slightly flattened, glossy yellow bean with a pale hilum.
- 85625. No. 3031. Station No. Y-424. A medium-small, oval, somewhat flattened, light-yellow bean, slightly mottled with brown; hilum pale.

- 85626. No. 3032. Station No. Y-425. A medium-small oval light-yellow bean, slightly mottled with brown; hilum pale.
- 85627. No. 3033. Station No. Y-426. A medium-sized oval glossy yellow bean, slightly mottled with brown; hilum pale.
- 85628. No. 3034. Station No. Y-427. A medium-small, oval, somewhat flattened, glossy yellow bean, slightly mottled with brown; hilum pale.
- 85629. No. 3035. Station No. Y-428. A medium-sized oval yellow bean, much mottled with brown; hilum brown.
- 85630. No. 3036. Station No. Y-429. A medium-small, oval, alightly flattened, light-yellow bean with a pale-brown hilum.
- 85631. No. 3037. Station No. Y-430. Medium-small oval yellow beans, much mottled with brown; hilums vary from pale to brown.
- 85632. No. 3038. Station No. Y-431. Medium-small, oval, slightly flattened, glossy yellow beans, much mottled with brown; hilums vary from pale to brown.
- 85633. No. 3039. Station No. Y-432. A medium-large oval glossy yellow bean, mottled with brown; hilum pale.
- 85634. No. 3040. Station No. Y-434. A medium-large oval light-yellow bean, motiled with dark brown; testa slightly split; hilum dark brown.
- 85635. No. 3041. Station No. Y-435. A medium-large, oval, slightly flattened yellow bean, much mottled with dark brown; hilum brown.
- **85636.** No. 3042. Station No. Y-436. A medium-small, nearly round, light-yellow bean, much mottled with brown; hilum pale.
- 85637. No. 3043. Station No. Y-437. A medium-small oval yellow bean, much mottled with brown; hilum brown.
- **85638.** No. 3044. Station No. Y-438. A very large oval light-yellow bean with the testa split into network on the sides; hilum pale brown.
- 85639. No. 3045. Station No. Y-439. A medium-sized, nearly round, light-yellow bean, much mottled with brown; hilum brown.
- 85640. No. 3046. Station No. Y-440. A medium-large, oval, slightly flattened, light-yellow bean, much mottled with brown; hilum brown.
- **85641.** No. 3047. Station No. Y-441. A medium-sized, nearly round, glossy yellow bean, much mottled with brown; hilum pale.
- 85642. No. 3048. Station No. Y-442. A medium-small, nearly round, light-yellow bean, very slightly mottled with brown; bilum pale brown.

85053 to 85673-Continued.

- 85643. No. 3049. Station No. Y-448. A medium-small oval light-yellow bean, much mottled with brown; hilum light brown.
- 85644. No. 3050. Station No. Y-444. Large yellow oval beans, slightly mottled with brown; testa somewhat split; bilum light brown.
- 85645. No. 3051. Station No. Y-445. A medium-small oval yellow bean, much mottled with brown; hilum brown.
- 85646. No. 3052. Station No. Y-446. A medium-sized oval yellow bean, much mottled with brown; hilum pale brown.
- 85647. No. 3053. Station No. Y-447. A medium-small oval yellow bean, mottled with brown; hilum brown.
- 85648. No. 3054. Station No. Y-448. A medium-small, nearly round, yellow bean, much mottled with brown; hilum brown.
- 85649. No. 3055. Station No. Y-449. A medium-small oval light-yellow bean, much mottled with brown; hilum brown.
- 85650. No. 3056. Station No. Y-450. A medium-small oval yellow bean, much mottled with brown; hilum brown.
- 85651. No. 3057. Station No. Y-451. A medium-small, nearly round, yellow bean, much mottled with brown; hilum brown.
- 85652. No. 3058. Station No. 452. A large oval yellow bean, mottled with brown; testa much wrinkled and split; hlum brown.
- 85653. No. 3059. Station No. Y-453. A medium-large oval light-yellow bean, slightly mottled with brown; hilum brown.
- 85654. No. 3060. Station No. Y-454. A large, oval, slightly flattened, glossy yellow bean, somewhat mottled with brown; hilum light brown.
- 85655. No. 3061. Station No. Y-455. A medium-sized oval glossy yellow bean, much mottled with brown; hilum pale.
- 85656. No. 3062. Station No. Y-457. A medium-large oval glossy yellow bean, mottled with brown; hilum light brown.
- 85657. No. 3063. Station No. Y-458. A medium-sized, small, oval, slightly flattened yellow bean, much mottled with brown; hilum pale brown.
- 85658. No. 3064. Station No. Y-459. A medium-sized, nearly round, glossy yellow bean, much mottled with brown; hilum brown.
- 85659. No. 3065. Station No. Y-460. A medium-large oval glossy yellow bean, much mottled with brown; hilum pale brown.
- 85660. No. 3066. Station No. Y-461. A medium-sized, oval, slightly flattened yellow bean with a pale hllum.

85661 to 85671. From Tokyo.

85053 to 85673-Continued.

- **85661.** No. 3067. A very large, nearly round, yellow bean with a pale hilum; used entirely for food purposes.
- 85662. No. 3068. A large, flat, black bean with a yellow germ; it appears identical with the variety Flat King (No. 17252).
- 85663. No. 3069. A very large, nearly round, glossy black bean with a yellow germ; used in making soybean confections.
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- 85665. No. 3084. Hokkaido Kuro Daizu. Obtained in a grocery store, January 6, 1930. A very large, oval, slightly flattened black bean with a yellow germ; used in making candied beans.
- **85666.** No. 3085. Hokkaido Tsurunoko. Obtained in a grocery store, January 6, 1930. A very large oval yellow bean with a pale hilum. This is one of the largest seeded yellow varieties and is used only for food purposes.
- 85667. No. 3088. Chosen Acodama. Obtained in a bean-curd factory, January 6, 1930. A medium-sized oval greenish yellow bean with a slate-black hilum. It is mixed with yellow varieties and used in making bean curd.
- 85668. No. 3087. Obtained in a beancurd factory, January 6, 1930. A mixed sample of medium-sized, greenish yellow and yellow beans, used for making bean curd. In winter the mixed varieties are used for making bean curd; in summer they use the yellow beans. These varieties came from Manchuria.
- 85669. No. 3088. Chosen Daizu. Obtained in a bean-curd factory, January 6, 1930. Medium-sized oval yellow beans with pale hilums; there are a few greenish yellow beans in the sample. Used in making bean curd.
- 85670. No. 3089. Akita Daizu. Obtained in a natto factory, January 6, 1930. A medium-large, nearly round yellow bean with a large brown hilum; used in making string natto.
- 85671. No. 3098. Obtained from the Nodashoyu Co., Nodamachi, Japan, January S, 1930. A mixed sample of medium-small to medium-sized oval to nearly round yellow beans; used in making soy sauce. Seed grown in Manchuria. This company uses 20,000 bushels of soybeans a year in the manufacture of soy sauce. It is the largest soy-sauce company in the Orient.

85672. STEPHANANDRA Sp. Rosaceae. No. 3166. December 15, 1929. Near the Imperial University's branch bo-

85053 to 85673-Continued.

tanical garden, Nikko, Japan. The stephanandras are deciduous shrubs with slender branches, alternate, serrate, and usually lobed leaves, and terminal corymbs or panicles of small white flowers. Closely related to the common ninebark, *Physocarpus opuli*folus.

85673. THALICTRUM ROCHEBBUNIANUM Franch. and Sav. Ranunculaceae. Meadowrue.

No. 3160. December 16, 1929. From the branch botanical garden of the Imperial University, near Nikko, Japan. A herbaceous plant with a spray of purplish pink flowers. It may prove to be a fine ornamental.

- 85674. JUGLANS BOLIVIANA (C. DC.) Dode. Juglandaceae. Walnut.
- From Santiago, Chile. Seeds presented by Señor Salvador Izquierdo. Received February 4, 1930.

Negra de Bolivie. A large tree resembling the North American Juglans migra, with compound leaves 2 to 3 feet long, made up of about 11 pairs of smooth, ovate leaflets 5 to 8 inches long. The nuts closely resemble those of the black walnut in size, shape, and color. It is native to Bolivia.

85675 and 85676.

- From India. Seeds purchased from the Chandra Nursery, Rhenock, Sikkim, Bengal. Received January 18, 1930.
 - 85675. HIBISCUS PUNGENS Roxb. Malvaceae. Rosemallow,

An erect bristly annual or perennial native to the tropical Himalayas, with roundish heart-shaped deeply lobed leaves 5 to 8 inches long and purple-centered yellow flowers 5 inches in diameter.

For previous introduction see No. 68338.

85676. MAGNOLIA CAMPBELLII Hook. f. and Thoms. Magnoliaceae.

A beautiful deciduous magnolia from the Himalayas where it ascends to 8,000 feet above sea level. It reaches a height of 80 feet, has very dark bark, large elliptical dark-green leaves. and flowers (usually white) 10 inches in diameter. This magnolia has flowered freely in southern France and Italy.

For previous introduction see Nos. 77975-77977.

85677 to 85691.

From Japan. Seeds purchased from the Chugai Shokubutsu Yen, nurserymen. Received January 29, 1930.

85677 to 85680. ACER spp. Aceraceae. Maple.

85677. ACER CARPINIFOLIUM Sieb. and Zucc. Hornbeam maple.

A small tree, up to 30 feet high, with oblong, sharp-pointed doubly serrate leaves 3 to 5 inches long, short racemes of greenish flowers, and glabrous fruits about an inch long. The bright green hornbeamlike leaves turn bright brownish yellow in autumn. Native to Japan.

85678. ACER CISSIFOLIUM (Sieb. and Zucc.) Koch.

85677 to 85691-Continued.

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

For previous introduction see No. 43810.

85679. ACER CRATAEGIFOLIUM Sieb. and Zucc.

A small tree 30 to 35 feet high, with purplish branchlets, subcordate leaves with two to four short lobes near the base, racemes of yellowish white flowers, and fruits with nearly horizontal wings. Native to Japan.

85680. ACER DISTYLUM Sieb. and Zucc.

A deciduous tree about 50 feet high, with deeply cordate, serrulate leaves 4 to 8 inches long, and panicles of yellowish flowers followed by upright panicles of winged fruits. Native to Japan.

85681. HAMAMELIS JAPONICA Sieb. and Zucc. Hamamelidaceae. Witch-hazel.

A shrub or small tree up to 30 feet high with broadly ovate or obovate leaves 2 to 4 inches long and flowers an inch across, with revolute sepals purple inside and bright yellow petals, appearing in January and February. Native to Japan.

85682. LEUCOTHOE KEISKEI Miquel. Ericaceae.

A slender evergreen Japanese shrub with ovate-oblong, remotely crenate-serrate leaves 1 to 3 inches long, and axillary and terminal racemes of white cylindrical flowers, closely resembling the American L. racemosa.

85583. LILIUM CORDIFOLIUM Thunb. Liliaceae. Lily.

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

For previous introduction see No. 75677.

85684. LILIUM JAPONICUM Thunb. Liliaceae. Japanese lily.

A species rather delicate in cultivation with a globular, white or pale yellow bulb 2 inches in diameter, purpledotted smooth stems 2 to 4 feet high, 15 to 20 horizontal, lanceolate leaves about 8 inches long, and 1 to 7 deliciously fragrant rose-pink tubular flowers 5 to 7 inches long and wide. Native to Japan.

85685 to 85691. RHODODENDRON spp. Ericaceae.

85685. RHODODENDRON INDICUM (L.) Sweet. Indica azalea.

Variety macranthum hybridum.

85686. RHODODENDRON KEISKEI Miquel.

A low, sometimes procumbent, evergreen shrub with elliptic to lanceolate leaves 3 inches long, dull-green above and scaly beneath. The broadly fun-

85677 to 85691-Continued.

nelform, pale-yellow flowers, 2 inches across, are in clusters of two to five. Native to Japan.

85687. RHODODENDRON LINEARIFOLIUM MACROSEPALUM (Maxim.) Makino. Azalea.

A laxly branched, spreading shrub, or up to 10 feet high, with narrowly ovate leaves which are dull green during summer and turn rich vinous purple in autumn. The broadly funnelshaped, rose-pink, fragrant flowers, 2 inches across, are in clusters of 2 to 10. This belongs to the tsutsusi section and is native to Japan.

85688. RHODODENDRON PENTAPHYLLUM Maxim. (R. quinquefolium roseum Rehder). Five-leaf azalea.

A deciduous shrub of the rhodora section, up to 20 feet high, with usually five elliptic-lanceolate leaves at the ends of the branches. The rose-pink flowers, 1 to 2 inches across, are solitary or in twos, appearing before or with the leaves, which turn orange to crimson in the autumn. Native to Japan.

85689 and 85690. RHODODENDRON RETIC-ULATUM D. Don. Rose azalea.

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

85689. Received as Azalea dilatatum.

85690. Received as Azalea rhombicum.

85691. RHODODENDRON SERPYLLIFOLIUM Miquel. Wildthyme azalea.

A low, much-branched shrub of the tsutsusi section, with narrowly obovate leaves less than half an inch long, crowded at the ends of the branches. The rose-red flowers are solitary and are about an inch across. Native to Japan.

85692. SAGITTARIA SAGITTIFOLIA L. Alismaceae. Old-world arrowhead.

From Chosen. Corms collected by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received December 23, 1929. Numbered in January, 1930.

No. 1930. November 21, 1929. Water nut, secured from the market. This is very good cooked and served with sweet sauce.

For previous introduction see No. 61884.

85693 and 85694.

- From Soledad, Cienfuegos, Cuba. Seeds presented by R. M. Grey, Director, Harvard Botanical Garden. Received February 7, 1930.
 - 85693. CITRUS MITIS Blanco. Rutaceae. Calamondin.

A small, somewhat spiny Philippine tree, 13 to 20 feet high, with oblong elliptic leaves nearly 4 inches long; axil-

65693 and 85694—Continued

lary, usually solitary, white, fragrant flowers about 1 inch wide, and globular, orange-yellow, smooth-skinned fruits about 2 inches in diameter, with orange-colored, acid, juicy pulp containing large, smooth seeds.

For previous introduction see No. 44140.

85694. CITRUS Sp. Rutaceae.

Said to be a hybrid between Fortunella (Citrus) japonica and C. grandis (decumana).

85695 to 85697.

From Likiang, Yunnan, China. Seeds collected by Dr. J. F. Rock, National Geographic Society, Washington, D. C. Received February 7, 1930.

85695. ABIES sp. Pinaceae. Fir.

No. 18527. Likiang Snow Range, November, 1929. A tree 40 to 50 feet high with large broad needles, silvery beneath, and short ovoid cones which are of even width. The species is quite different from *Abies forresti*, and occurs at 14,500 feet altitude.

85696. KETELEERIA sp. Pinaceae.

November, 1929, Yangtse Gorges, west of the Likiang Snow Range, between 7,000 and 8,000 feet altitude. A tree 50 to 60 feet high with far-spreading crown when it is old. The straw-colored cones are erect as in the Abies, but persistent; the needles also resemble the Abies.

85697. PINUS YUNNANENSIS Franch. Pinaceae. Yunnan pine.

November, 1929, Likiang Snew Range. One of the most common trees of Yunnan, varying in height from 30 to 80 feet and with a very straight or crooked trunk, depending on the location and exposure. It prefers well-drained soils, and grows at altitudes ranging from 9,000 to 11,000 feet.

For previous introduction see No. 59427.

85698 to 85724.

From Japan. Seeds and scions collected by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received February 10, 1930.

85698 to 85722. DIOSPYROS KAKI L. f. Diospyraceae. Kaki persimmon.

Scions received through Dr. K. Nagai, Chief in Research, Imperial Horticultural Experiment Station, Okitsu, Shizuokaken. January 17, 1930.

85698. Aizı		3368. irazu.	Station	No.	02930.
85699. Aka	No. dang		Station	No.	04430.
85700. Amo		3348. ume.	Station	No.	00930.
85701. Ego		3343 .	Station	No.	00430.
85702. Emo		3366.	Station	No.	02730.
85703. Gosi		3388.	Station	No.	04930.
85704. Han	No. a Ga		Station	No.	01830.

85698 to 85724-Continued.

85705. No. 3382. Handai.	Station	No.	04330.
85706. No. 3376. Hiragaki.	Station	No.	03730.
85707. No. 3375. Hoshuhachiya.	Station	No.	03630.
85708. No. 3354. Garan.	Station	No.	01530.
85709. No. 3355. Mizushima.	Station	No.	01630.
85710 . No. 3373. Fufugaki.	Station	No.	0 3430.
85711. No. 3384. Onidango.	Station	No.	04530 <i>.</i>
85712. No. 3378. Otani.	Station	No.	039 3 0.
85713. No. 3363. Saijo.	Station	No.	02430.
85714. No. 3347. <i>Tsukiyo</i> .	Station	No.	00830.
85715. No. 3350. Shogatsu.	Station	No.	01130.
85716. No. 3359. Yotsudani.	Station	No,	02030.
85717. No. 3351. Tohachi.	Station	No.	01230.
85718. No. 3356. Toyooka.	Station	No.	0173 0 .
85719. No. 3360. Tokudagosho.	Station	No.	02130.
85720. No. 3369. Yokono.	Station	No.	03030.

85721. No. 3342. Station No. 00330. Yotsudani.

85722. No. 3349. Station No. 01030. Zenj m ru.

85723. CASTANEA HENRYI (Skan) Rehd. and Wils. Fagaceae. Chestnut.

No. 3391. Seed obtained from the Chugai Shokubutsu Yen, seed merchants and nurserymen, January 19, 1930. A Chinese chestnut which grows 25 to 90 feet high, with oblong lanceolate, longacuminate leaves, green on both sides. The burs are either solitary or two in a bunch and contain usually but one nut.

For previous introduction see No. 78503.

85724. LITHOCARPUS EDULIS (Makino) Rehder. Fagaceae.

No. 3502. Seed obtained from the Chugai Shokubutsu Yen, seed merchants and nurserymen, January 19, 1930. An evergreen tree native to Japan, with ovate-oblong, short-pointed, entire leaves 3 to 7 inches long, and oblong-ovoid acorns an inch long in very shallow cups.

For previous introduction see No. 78655.

85725. Avena sativa L. Poaceae.

From Dublin, Ireland. Seeds presented by M. Caffrey, University College. Received February 8, 1930.

Glasnevin Sonas. A new stiff-strawed oat variety which originated as a selection from a cross between Banner and Black Tartarian oats.

Oats.

85726 to 85729.

- From Sicily and Tunisia. Seeds presented by Dr. H. S. Fawcett, University of California. Received February 8, 1930.
 - 85726 to 85728. CITRUS AURANTIUM L. Rutaceae. Seville orange.
 - **35726.** No. 43. Palermo, Sicily, January 13, 1930. Seeds of large fruits from an especially healthy tree, 50 to 75 years old, growing in clay soil at 1,000 feet altitude.
 - 85727. No. 44. From Menzel bon Zelf, east of Tunis, January 16, 1930. A large healthy tree said to be from 80 to 100 years old, growing in an Arab's orchard.
 - 85728. No. 45. From Nabeul, southeast of Tunis, January 16, 1930. This tree differs from the ordinary sour orange in its habit of growth, its flattened type of fruit, and the smallness of the leaf petiole. In the south of France its flowers are especially prized for their fragrance.
 - :35729. CITRUS SINENSIS (L.) Osbeck. Rutaceae. Orange.

No. 46. Beldi, meaning in Arabic "fruit of the land." From Menzel bon Zelf. east of Tunis, January 16, 1930. Said to be the original variety cultivated by the Arabs. Tree said to be 120 to 140 years old; fruits round with a high **color**, but probably lack sufficient acid for the American taste.

85730 to 85740.

From Japan. Seeds collected by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received in November and December, 1929. Numbered in January, 1930.

85730. AMPELOPSIS BREVIPEDUNCULATA MAXIMOWICZII Rehder. Vitaceae.

No. 1410. Shiraoi, Hokushu, September 29, 1929. A vigorous climbing, deciduous grapelike, woody vine with broadly cordate, deeply 3-lobed to 5-lobed leaves, which are coarsely serrate; dark green above and lighter beneath. The cymes of inconspicuous flowers are followed by fruits about a quarter of an inch across, changing from pale lilac to verdigris color and finally to bright blue. Native to eastern Asia.

85731. ARALIA ELATA (Miquel) Seem. Araliaceae.

No. 1099. Near Nikoro, Hokushu, September 24, 1929. A small hardy Manchurian tree resembling Aralia spinosa (Hercules-club) but more treelike, with few spines. It does not form many branches, but the large bipinnate leaves cast a good shade. The greenish white flowers are borne in large panicles, and the berries are dark red when ripe, producing a very pleasing effect.

For previous introduction see No. 75670.

85732. CELTIS SINENSIS Pers. Ulmaceae. Chinese hackberry.

No. 1447. Chiaki Park, Akita, October 11, 1929. A tree native to China and Japan, which grows to a height of 60 feet. The broadly ovate leaves, 2 to 4 inches long, are cordate at the base and acuminate at the apex, with a serratedentate margin. The dull orange-red 85730 to 85740-Continued.

fruits are borne on stout pedicels. This tree has proved hardy at the Arnold Arboretum.

85733. COCCULUS TRILOBUS (Thunb.) DC. Menispermaceae. Japanese snailseed,

No. 1453. Chiaki Park, Akita, October 11, 1929. A shrubby vine bearing round clusters of purple fruits.

For previous introduction see No. 82420.

85734. EUONYMUS OXYPHYLLUS Miquel. Celastraceae.

No. 1097. Near Nikoro, Hokushu, September 24, 1929. A Japanese shrub or small tree with ovate pointed leaves and many-flowered cymes of dark-red ribbed fruits and bright-red seeds.

For previous introduction see No. 75673.

85735. ILEX SERRATA Thunb. Aquifoliaceae.

No. 1450. Chiaki Park, Akita, October 11, 1929. A slender ornamental, deciduous Japanese shrub about 15 feet high, with oval, finely serrate leaves and small bright-red berries.

For previous introduction see No. 77832.

85736. TILIA JAPONICA Simonk. Tiliaceae. Japanese linden.

No. 1446. Chiaki Park, Akita, October 11, 1929. A tree up to 60 feet high with sharply serrate, broadly cordate leaves 2 to 4 inches long, which are light bluish green and pubescent on the veins beneath. Native to Japan.

Native to Japan. 85737. VITIS THUNBERGII Sieb. and Zucc. Vitaceae. Grape.

No. 1474. Near Kawazoe, October 12, 1929. A slender woody vine with rustytomentose angled branches, cordate, deeply 3-lobed to 5-lobed and irregularly toothed leaves often 7 inches across, turning crimson in autumn. The panicles of black fruits with purplish bloom are made up of berries nearly half an inch in diameter. Native to Japan and China.

85738. HYDRANGEA PETIOLARIS Sieb. and Zucc. (H. scandens Maxim., not Ser.). Hydrangeaceae. Climbing hydrangea.

No. 3400. Tokyo, January 19, 1930. A handsome climbing shrub, up to 75 feet, clinging to walls and tree trunks by aerial roots. The broadly cordate, serrate leaves 2 to 5 inches long, are dark green and lustrous above, and the corymbs of white flowers are often 10 inches across. Native to Japan and China.

85739. SYRINGA OBLATA DILATATA (Nakai) Rehder. Oleaceae. Lilac.

No. 3393. Near Kobe, January 19, 1929. A loosely branched shrub up to 12 feet high, with ovate, long-pointed leaves 6 inches long, and loose clusters of pale purple-lilac flowers. Native to Chosen.

For previous introduction see No. 78412.

85740. VACCINIUM BRACTEATUM Thunb. Vacciniaseae.

No. 3396. An evergreen shrub 3 to 5 feet high, with remotely serrulate, elliptic leaves, 1 to 3 inches long and leafy

85730 to 85740-Continued.

bracted racemes of reddish flowers followed by red fruits which are said to be edible. Native to Japan and China.

85741 and 85742.

- From Giza, Egypt. Seeds presented by Thomas W. Brown. Received January 24, 1930.
 - 85741. HYPHAENE THEBAICA (L.) Mart. Phoenicaceae. Doum palm.

A paim about 30 feet high, which is noted as the only branching paim. It grows in sandy and clay soils and is distributed from Upper Egypt to central Africa. The stems of old trees are sometimes forked three to four times. The beautiful yellowish brown fruits are borne in long clusters of 1 to 200. In Upper Egypt people of the poorer classes eat the fibrous busk which tastes much like gingerbread, but is rather hard. The hard tough wood is used for domestic utensils. It is one of the most striking and picturesque of the palms and is capable of withstanding severe droughts.

For previous introduction see No. 70958.

85742. LIVISTONA CHINENSIS (Jacq.) R. Br. Phoenicaceae, Chinese fan palm.

A palm, native to China, with a short thick trunk up to 6 feet high and a foot thick, having a crown of many reniform palmately divided leaves 4 to 6 feet across on petioles about 5 feet long, which are armed below the middle with recurved brown spines more than an inch long.

For previous introduction see No. 80187.

85743. PRUNUS ARMENIACA L. Amygdalaceae. Apricot.

From Tunis, Tunisia. Scions presented by the Director, Jardin d'Essais, Sfax. Received February 8, 1930.

No. 5409. Abricotier gros indigène.

85744. AMYGDALUS PERSICA L. (Prunus persica Stokes). Amygdalaceae. Peach.

From Palermo, Sicily. Scions presented by Dr. H. S. Fawcett, University of California. Received February 12, 1930.

No. 48. Intravaia. In suburb of Montreale, 1,000 feet above sea level, January 13, 1930. Said to be yellow fleshed. The tree was holding its leaves, or most of them, when all other peach trees near by had shed.

- 85745. CITRUS SINENSIS (L.) Osbeck. Rutaceae. Orange.
- From Tunis, Tunisia. Scions presented by Dr. H. S. Fawcett, University of California. Received February 12, 1930.

No. 47. Beldi, meaning in Arabic "fruit of the land." Bud wood from same tree, as described under Fawcett No. 46 [No. 85729].

- 85746. MEIBOMIA TRIFLORA (L.) Kuntze (Desmodium triflorum DC). Fabaceae.
- From Mayaguez. Porto Rico. Seeds presented by T. B. McClelland, Agricultural Experiment Station. Received February 13, 1930.

85746—Continued.

A small herbaceous annual which covers the ground with a dense mat resembling white clover.

85747. GENISTA MONOSPERMA (L.) Lam. Fabaceae. Bridal-veil broom.

From Casablanca, Morocco. Seeds presented by H. Earle Russell, American consul. Received February 14, 1930.

An ornamental leguminous shrub, native to Spain, about 10 feet high, with slender grayish branches and small, very narrow leaves. The fragrant white flowers are in short lateral racemes.

For previous introduction see No. 78902.

- 85748. KHAYA NYASICA Stapf. Meliaceae.
- From Mount Silinda, Southern Rhodesia, Africa. Seeds presented by Dr. W. L. Thompson. Received February 15, 1930.

The red mahogany is one of the most valuable timber trees of Rhodesia, and is also widely distributed over Mozambique. It is fairly rapid in growth, though not equal to some of the eucalypts in this respect. It is found most often growing near streams, but it also occurs on high ground at a distance from water. The timber is very durable and is not attacked by white ants or borers.

For previous introduction see No. 78257.

- 85749. SACCHARUM OFFICINARUM [•] L. Poaceae. Sugarcane.
- From Baragua, Cuba. / Cuttings presented by D. L. Van Dine, Director, Cuba Sugar Club Experiment Station, through E. W. Brandes, Bureau of Plant Industry. Received February 18, 1930.

Canna Criolla.

- 85750. CITRUS WEBBERII Wester. Rutaceae. Alsem.
- From Manila, Philippine Islands. Seeds presented by P. J. Wester, Bureau of Agriculture, Manila. Received February 13, 1920.

Kalpi. A small handsome tree, 15 to 20 feet high, which is very drought resistant. It is particularly abundant in the Mountain Province, Nueva Viscaya, and southern Luzon. The better forms have oblate, very juicy, acid fruits somewhat like the mandarin orange in appearance and between 2 and 3 inches in diameter; these may be used like the lemon.

For previous introduction see No. 80662.

- 85751. MEDICAGO SATIVA L. Fabaceae. Alfalfa.
- From Moscow, Union of Socialistic Soviet Republics. Seeds purchased from the Pan-Russian Pure Seed Agricultural Cooperative Association, through H. L. Westover, Bureau of Plant Industry. Received February 17, 1930.

Khivinskkhya lucern.

85752 to 85766.

From Indo-China. Seeds presented by M. Pollane, Institut des Recherches Agronomiques de l'Indochine, Division der Botanique. Received February 15, 1930.

85752 to 85766-Continued.

85752. ANEMONE sp. Ranunculaceae.

Collected near Pakha, altitude 5,000 feet, in the mountains near the Chinese border, Tonking, French Indo-China.

85753. CASSIA sp. Caesalpiniaceae.

Collected near Pakha, altitude 3,330 feet, in the mountains of north-central Tonking, French Indo-China.

85754. CASSIA sp. Caesalpiniaceae.

Collected near Laokay, in the mountains forming the northern boundary of Tonking Province, French Indo-China. Altitude unknown.

85755, CASSIA sp. Caesalpiniaceae.

Collected near Pakha, altitude 3,300 feet, in the mountains of north-central Tonking, French Indo-China.

85756. CROTALARIA Sp. Fabaceae.

Collected near Pakha, altitude 3,300 feet, in the mountains of north-central Tonking, French Indo-China.

85757, DOLICHOS Sp. Fabaceae.

Collected near Pakha, altitude 3,300 feet, in the mountains of north-central Tonking, French Indo-China.

85758. DOLICHOS Sp. Fabaceae.

Collected near Pakha, altitude 3,300 feet, in the mountains of north-central Tonking, French Indo-China.

85759 to 85763. MEIBOMIA spp. Fabaceae.

85759. МЕІВОМІА sp.

Collected near Laokay, altitude 5,000 feet, in the mountains of north-central Tonking, French Indo-China.

85760 to 85763. MEIBOMIA spp.

Collected near Pakha, altitude 3,300 feet, in the mountains of north-central Tonking, French Indo-China.

85760. MEIBOMIA sp.

85761. MEIBOMIA SD.

85762. MEIBOMIA SD.

85763. MEIBOMIA Sp.

85764. SOJA MAX (L.) Piper (Glycine hispida Maxim.). Fabaceae. Soybean.

Seeds bought at the market of Pakha, altitude 3,300 feet, in the mountains of north-central Tonking, French Indo-China.

85765 and 85766. ZEA MAYS L. Poaceae. Corn.

From the Pakha region, altitude 3,300 feet, in the mountains of north-central Tonking, French Indo-China.

85765. Yellow corn.

85766. White corn.

85767 to 85804. CASTANEA CRENATA Sieb. and Zucc. Fagaceae.

Japanese chestnut.

- From Japan. Seeds obtained by R. K. Beattie, Bureau of Plant Industry. Received November 29, 1929.
 - 85767. No. 853. Collected September 27, 1929, at Gifu Ken, Masuta Gun, Shinohara Mura, by the Agricultural Association at Hida-dani. Trees 30 feet high, 16 inches D. B. H.

85767 to 85804-Continued.

- 85768. No. 854. Collected September 27, 1929, at Miyagi Ken, Shibata Gun, Kumaiaki Mura, by the Sendai Eirinsho.
- 85769. No. 855. Collected September 26, 1929, at Iwate Ken by the Iwaizumi Eirinsho.
- 85770. No. 856. Collected September 27, 1929, at Nagano Ken, Shimoina Gun, Kizawa Mura, Kodogi, by the Imperial Forest Bureau, Iida branch office. Trees 50 feet high, 8 inches D. B. H.
- 85771. No. 857. Collected September 28 and October 6, 1929, at Miyagi Ken, Katta Gun, Fukuoka Mura, Fukaya, by the Shiraishi Eirinsho. Trees 45 feet high, 8 to 11 inches D. B. H.
- 85772. No. 858. Collected September 29 and 30, 1929, at Iwate Ken, Shimohei Gun, Iwaizumi, Sawamawari, by the Iwaizumi Eirinsho. Trees 48 feet high, 18 inches D. B. H.
- 85773. No. 859. Collected September 29, 1929, at Iwate Ken, Iwate Gun, Ippoi Mura, by the Mumakunai Eirinsho. Trees 45 feet high, 14 inches D. B. H.
- 85774. No. 860. Collected September 30, 1929, at Iwate Ken, Iwate Gun, Mido Mura, Kogakai, by the Mumakunai Eirinsho. Trees 40 feet high, 12 inches D. B. H.
- 85775. No. 861. Collected September 30 and October 3, 1929, at Yamagata Ken, Higashitagawa Gun, Hongo Mura, by the Hongo Agricultural Association. Trees 60 feet high.
- 85776. No. 862. Collected September 29, 1929, at Iwate Ken, Ezashi Gun, Komezato Mura, Hitokubi, by the Mizusawa Eirinsho. Tree 51 feet high, 13 inches D. B. H.
- 85777. No. 863. Collected September 29, 1929, at Nagano Ken, Shimoina Gun, Kizawa Mura, Ajima, by the Imperial Forest Bureau, Iida branch office. Tree 50 feet high, 9 inches D. B. H.
- 85778. No. 864. Collected October 3, 1929, at Miyagi Ken, Katta Gun, Obara Mura, Akasaka, by the Shiraishi Eirinsho. Tree 48 feet high, 11 inches D. B. H.
- 85779. No. 865. Collected October 1, 1929, at Iwate Ken, Ezashi Gun, Yanagawa Mura, Kurifuzawa, by the Mizusawa Eirinsho. Tree 51 feet high, 12 inches D. B. H.
- 85780. No. 866. Collected in October, 1929, at Nagano Ken, Kitasaku Gun, Kamizawa, Nagakura Yama National Forest (rimpan No. 1), Higashi, by the Iwamurata Elrinsho. Trees 35 feet high, 7 inches D. B. H. Mother trees were planted 25 years ago.
- 85781. No. 867. Collected October 5, 1929, at Miyagi Ken, Miyagi Gun, Nenoshiraishi Mura, Hozawa, Nishikakoe, by the Sendai Eirinsho. Trees 45 feet high, 8 inches D. B. H.
- 85782. No. 868. Collected October 6, 1929. at Miyagi Ken, Shibata Gun, Kawasaki Mura, by the Sendai Eirinsho. Trees 32 feet high, 10 inches D. B. H.
- 85783. No. 869. Collected October 4, 7, 10, 1929, at Miyagi Ken, Natori Gun, Akiho Mura. Trees 50 feet high, 12 inches D. B. H.

85767 to 85804—Continued.

- 85784. No. 870. Collected October 1, 1929, at Iwate Ken, Shimohei Gun, Akka Mura, in the Nen-nenyama, Matsugasawa, Hanjoshi, by the Kuji Eirinsho. Trees 50 to 70 feet high, 18 to 36 inches D. B. H.
- 85785. No. 871. Collected October 9, 1929. at Nagano Ken, Shimoina Gun, Yamoka Mura, No-obata, by the Iida Eirinsho. Trees 61 feet high, 11 inches D. B. H.
- 85786. No. 872. Collected October 7, 9, 10, and 11, 1929, at Wakayama Ken, near Okunsin (Koyasen Temple Forest; rimpan Nos. 5, 6, 12, 14). Trees 45 to 50 feet high, 16 inches D. B. H. Mother trees are very straight and tall.
- 85787. No. 873. Collected October 9, 1929, at Miyagi Ken, Tamazukuri Gun, Kawatabi Mura, by the Kawatabi Eirinsho. Trees 42 feet high, 25 inches D. B. H.
- 85788. No. 874. Collected October 5, 1929, at Iwate Ken, Kamihei Gun, Tsukemoshi Mura, by the Tono Eirinsho. Trees 55 feet high, 18 inches D. B. H.
- 85789. No. 875. Tana-guri. Presented October 6, 1929, by Yataro Sato, Miyagi Ken, Katta Gun, Fukuoka Mura, Fukaya. Trees 45 feet high, 12 inches D. B. H.
- 85790. No. 876. Collected October 6, 1929, at Miyagi Ken, Igu Gun, Hippoi Mura. Also collected September 30, 1929, at Kawashimo-kakoe ni, by the Shiraishi Eirinsho. Trees 48 feet high, 18 inches D. B. H.
- 85791. No. 877. Collected October 6, 1929, at Miyagi Ken, Katta Gun, Obara Mura, Akedo, by the Shiraishi Eirinsho. Trees 42 feet high, 12 inches D. B. H.
- 85792. No. 878. Collected October 6, 1929, at Miyagi Ken, Katta Gun, Shichigashiku Mura, Watasase, by the Shiraishi Eirinsho. Trees 45 feet high, 12 inches D. B. H.
- 85793. No. 879. Collected October 1, 1929, at Yamaguchi Ken, Kuga Gun, Sakanye Mura, by Shigeo Hayashi. Trees 55 feet high, 8 inches D. B. H.; nuts small in size.
- 85794. No. 880. Collected at the same time and place as No. 879 [No. 85793], from a different type of tree with smaller nuts than No. 879.
- 85795. No. 881. Collected October 9, 1929. at Hokkaido, Kameta Gun, Yunokawa Mura, Kameo Mura, Noddappu, by Yunokawa Shinrin-Jinusho. Trees 55 feet high, 13 to 24 inches D. B. H.
- 85796. No. 882. Collected October 9, 1929, at the same place as No. 881 [No. 85795], from extra tall mother trees, by Yunokawa Shinrin-Jimusho. Trees 78 to 91 feet high, 24 to 37 inches D. B. H.
- 85797. No. 883. Collected October 10 and 11, 1929, at Nagano Ken. Kitasaku Gun, Kamizawa, Nishiyama National Forest, Higashi (60 To and 61 Ro), by the Iwamurata Eirinsho. Trees 45 feet high, 18 inches D. B. H.
- 85798. No. 884. Collected October 12 and 13, 1929, at Nagano Ken, Kitasaku Gun, Nishinagakura Mura, Hoji, Ohira National Forest, by the Iwamurata Eirinsho. Trees 40 feet high, 45 inches D. B. H. Mother trees were planted 25 years ago. Growing mixed with Larix leptolepis (karu matsu).

85767 to 85804-Continued.

- 85799. No. 885a. Collected October 18, 1929, at Akita Ken, Senhoku Gun, Konamiuchi National Forest, by the Kakudate Eirinsho. Trees 45 feet high, 20 inches D. B. H.
- 85800. No. 885b. Collected at the same place as No. 885a [No. 85799].
- 85801. No. 886. Collected October 13 and 17, 1929, at Fukushima Ken, Minami-Aizu Gun, Arami Mura, by Gen Odagiri. Trees 30 feet high, 14 inches D. B. H.
- 85802. No. 888a. Collected October 23, 1929, at Kyoto Fu. Soraku Gun, Toonoo Mura, Mori, by Ryotaro Oura. Trees 20 feet high, 5 inches D. B. H.; nuts of large size.
- 85803. No. 888b. Collected in the same region as No. 888a [No. 85802]; nuts of medium size.
- 85804. No. 888c. Collected in the same region as No. 888a [No. 85802]; nuts small in size.
- 85805. CASTANEA MOLLISSIMA Blume. Fagaceae. Hairy chestnut.
- From Chosen. Seeds purchased by R. K. Beattie, Bureau of Plant Industry. Beceived December 12, 1929. Numbered in January, 1930.

No. 887. *Heijo guri*. From Seisen Gun, Seisen, 125 miles northeast of Heijo, October 25, 1930.

- 85806 to 85808. CASTANEA MOLLISSIMA Blume. Fagaceae. Hairy chestnut.
- From China. Seeds obtained by R. K. Beattie, Bureau of Plant Industry. Received January 20, 1930.

Collected November 16, 1929, by Peter Liu at Fa Hua Ssu Temple, north of Pelping.

85806. Han lu, Chinese chestnut.

85807. Tiger paw chestnut.

85808. Pai-lu, Chinese chestnut.

- 85809 and 85810. Gossypium spp. Malvaceae. Cotton.
- From Coroata (Maranhao), Brazil. Seeds presented by the Administrador, Ministerio da Agricultura, Industria e Commercio, Servico do Algodao, Fazenda de Sementes em Coroata. Received February 12, 1930.

85809. GOSSYPIUM sp.

Quebradinho or Brasileiro, a kidney cotton.

85810. GOSSYPIUM sp.

Verdao or Riqueza.

- 85811 to 85834. DIOSPYROS KAKI L. f. Diospyraceae. Kaki persimmon.
- From Japan. Scions collected by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received February 17, 1930.

Obtained through the kindness of Dr. K. Nagai, Chief in Research, Imperial Horticultural Experiment Station, Okitsu, Shizuoka Ken.

85811. No. 3362. Ama Yotsumizo, January 18, 1930. 85811 to 85834-Continued. 85812. No. 3372. Beni Emon, January 18, 1930 85813, No. 3364. Dojo Hachiya. 85814. No. 3353. Fukuro Gosho. 85815, No. 3365. Fuji. 85816. No. 3340. Fuyu. 85817. No. 3367. Gionbo. 85818. No. 3381. Hira Tanenashi. 85819. No. 3371. Inayama. 85820. No. 3352. Jiro. 85821. No. 3344. Kanro. 85822. No. 3379. Kawabata. 85823. No. 3380. Kuramitsu. 85824. No. 3387. Miyazaki Tanenashi. 85825, No. 3377. Mombei. 85826. No. 3346. Obishi. 85827. No. 3358. O Gosho. 85828. No. 3386. Okubo. 85829, No. 3345. Oku Gosho. 85830, No. 3385. Onihira. 85831. No. 3361. Shimofuri. 85832, No. 3374. Takura. 85833. No. 3341. Teniin Gosho. 85834. No. 3370. Yotsumizo.

- 85835. PRUNUS ARMENIACA L. Amygdalaceae. Apricot.
- From Damascus, Syria. Scions presented by Joseph Dabbous, Bab Touma, Damascus. Received February 15, 1930.
 - Hamway apricot.
- 85836. MEDICAGO SATIVA L. Fabaceae. Alfalfa.

From Valence, France. Seeds purchased from Tezler Frères, Valence. Received February 20, 1930.

Luzerne.

- 85837. GARCINIA GIBBSIAE S. MOORE. Clusiaceae.
- From Brisbane. Australia. Seeds presented by C. T. White, Government Botanist, through the Arnold Arboretum. Received February 24, 1930.

A wild relative of the mangosteen, which grows in forests in the Bellenden Ker Hills at an altitude of about 2,000 feet. The leaflets are oval, with mucronate tips, and the flowers, in clusters of two or three, are green, later turning brown.

For previous introduction see No. 56698.

85838 and 85839.

- From Yucatan, Mexico. Tubers presented by Señor Eduardo Martinez C., Archeological Inspector of the State of Yucatan, Merida, Yucatan. Received February 15, 1930.
 - 85838. DIOSCOREA ALATA L. Dioscoreaceae. Winged yam.

Ek-Macal. A short, broad, irregularshaped yam. It has white flesh and, although somewhat coarse in texture, is

85838 and 85839-Continued.

of good quality when cooked. The tubers received weighed about 2 pounds each.

85839. XANTHOSOMA sp. Araceae. Yautia.

Yautia. Macul. A yautia with short, thick, white-fleshed tubers of good quality. The tubers received are short and thick and weigh about 4 ounces each. The flesh is white and is very firm, but of agreeable flavor when the tubers are baked or boiled.

- 85840. ANCYLOCLADUS FIRMUS (Blume) Kuntze (Willughbeia firma Blume). Apocynaceae.
- From Buitenzorg, Java. Seeds presented by the Director, Botanic Gardens. Received February 28, 1930.

A strong-growing woody vine with a stem 3 to 4 inches in diameter, native to Sumatra. It has long slender tendrils, coriaceous, elliptic leaves 4 inches long, and cymes of small, white, fragrant flowers. A possible source of rubber.

- 85841 to 85845. NICOTIANA TABACUM L. Solanaceae. Tobacco.
- From Tokyo, Japan. Seeds presented by Mr. Tsukada, Tobacco Monopoly Bureau, Tokyo, through W. W. Garner, Bureau of Plant Industry. Received February 26, 1930.

Crop of 1929.

- 85841. Variety petiolata. Kokubuhakokubu.
- 85842. Variety virginiana. Enshuhanagashima.
- 85843. Variety virginica. Darumahaodaruma.
- 85844. Variety petiolata. Suifuha-kataikari.
- 85845. Variety petiolata. Hatanohahatano.
- 85846. VITIS VINIFERA L. Vitaceae. European grape.
- From Calvaruso, Italy. Cuttings presented by A. Sergi, through Joseph Sergi, Oakland, Calif. Received February 21, 1930. Magliola di Uva Corniola.
- 85847. CYNODON DACTYLON (L.) Pers. Poaceae. Bermuda grass.
- From Union of Socialistic Soviet Republics. Plants collected by H. L. Westover. Bureau of Plant Industry. Received January 8, 1930.

No. 265. From northeastern Chimbai.

- 85848 to 85864.
- From Edinburgh, Scotland Seeds presented by W. Wright Smith, Regius Keeper, Royal Botanic Garden. Received February 25, 1930.
 - 85848 to 85851. ENKIANTHUS CAMPANULA-TUS (Miquel) Nicholson. Ericaceae. Redvein enkianthus.
 - 85848. Variety palibinii. A Japanese shrub with the branches often verticillate, oblanceolate green leaves, paler beneath, and drooping red bellshaped flowers in a short terminal raceme.
 - For previous introduction see No. 78921.

85848 to 85864—Continued.

85849. Variety pallidiflorus. A shrub with its branches usually verticil-late, narrow green leaves, paler be-neath, up to 1½ inches long, and sessile terminal racemes of nearly white flowers. Native of Japan.

or previous introduction see No. 78922. For

- 85850. Variety recurvus. A Japanese shrub with the branches usually ver-ticillate, lanceolate paper leaves up to 2 inches long, and pink ticiliate, lanceolate paper leaves up to 2 inches long, and pink flowers nearly half an inch across, in terminal clusters.
 - For previous introduction see No. 78923.
- 85851. Variety *tectus*. A shrub native to Japan, with usually whorled branches, leaves of variable shape up to an inch long, and sessile racemes of pink flowers.

For previous introduction see No. 78925.

85852. ENKIANTHUS CHINENSIS Franch. (E. sinohimalaicus Craib). Ericaceae.

A shrub native to China, with elon-gated branches, lanceolate leaves up to 2 inches long, and salmon-red flowers in shortened racemes.

previous introduction see No. For 78924.

85853. ERICA TETRALIX L. Ericaceae. Crossleaf heath.

Variety *rubra*. A low shrub with its leaves in whorls of four and bearing umbellate clusters of rosy flowers. Native to western Europe.

For previous introduction see No. 79157.

85854 to 85856. ERICA VAGANS L. Erica-ceae. Cornish heath.

A low shrub, native to Europe, a foot or more high, with the leaves in whorls of four or five, and bearing pale purplish red flowers.

For previous introduction see No. 79991.

85854. Variety alba multiflora.

85855. Variety kevernensis.

85856. Variety leucantha.

85857. HEMEROCALLIS PLICATA Hort. Daylily.

A herbaceous perennial with linear leaves and large lilylike flowers.

For previous introduction see No. 78941.

85858, RHODODENDRON AMBIGUUM Hemsl. Ericaceae.

A low evergreen shrub, native to China, with lanceolate leaves 2 to 3 inches long, and flowers, pale-yellow spotted with greenish yellow, 2 inches across.

For previous introduction see No. 77015.

85859. RHODODENDRON TSCHONOSKII Maxim. Ericaceae.

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

For previous introduction see No. 79043.

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85848 to 85864-Continued.

85860. SYRINGA KOMABOWI SARGENTIANA C. Schneid. Oleaceae. Sargent lilac.

A shrubby lilac up to 15 feet high, native to China, with rugose, ovate-lan-ceolate leaves, 4 to 6 inches long, pube-scent beneath, and very crowded nod-ding panicles of salmon-rose flowers. It is generally similar to S. reflexa.

For previous introduction see No. 78556.

C. (85861. SYRINGA REFLEXA Schneid. Nodding lilac. Oleaceae.

A shrub 12 to 15 feet high, with rough ovate leaves 3 to 6 inches long, and nearly cylindrical drooping panicles crowded with small flowers which are deep carmine in bud, fading as the flow-ers open to pink outside and white inside. Native to central China.

For previous introduction see No. 45920.

85862. SYRINGA SWEGINZOWII Koehne and Ling. Oleaceae. Chengtu lilac.

An attractive hardy lilac, about 10 feet high, native to western China. The dark-green oval leaves are 2 to 4 inches long, and the fragrant white flowers, brownish rose in the bud, are borne in June in terminal panicles up to 10 inches in leaved. in length.

For previous introduction see No. 79051.

85863. SYRINGA TOMENTELLA BUR. Franch. (S. adamiana Balf. Smith). Oleaceae. Felty I and and Felty lilac.

A bushy shrub, about 10 feet high, with elliptic leaves which are hairy be-neath, and loose, long-branched spikes of fine mauve-pink flowers, produced in late May and early June. The shrab is na-tive to western China.

For previous introduction see No. 78159.

85864. SYRINGA YUNNANENSIS Franch. Oleaceae. Yunnan lilac.

A handsome species of open spreading growth, related to Syringa wilsonii, but with pale-pink flowers in large panlcles, produced in June. The downy leaves have a distinct red midrib, the color being continued through the leafstalk. Native to China.

For previous introduction see No. 76277.

85865. DYERA COSTULATA (Miquel) Hook. f. Apocynaceae.

From Buitenzorg, Java. Seeds presented by the Director, Botanic Garden, Buiten-zorg. Received February 28, 1930.

A large tree up to 250 feet high and nearly 7 feet in diameter. The large coriaceous oblong-ovate leaves are borne in whorls of six to eight, and the cymes of small white salver-shaped flowers appear after the leaves have dropped. Native to the Malay Peninsula.

For previous introduction see No. 31362.

85866 to 85868.

From Japan. Seeds collected by P. H. Dor-sett and W. J. Morse, agricultural ex-plorers, Bureau of Plant Industry. Re-ceived October 21, 1929. Numbered in February, 1930.

85866 to 85868—Continued.

85866. EUONYMUS MACROPTERUS Rupr. Celastraceae.

No. 1336. Collected near Odomari, Sakhalin Island, September 12, 1929. A shrub or small tree, about 20 feet high, with narrowly oval, wedge-shaped leaves, dense clusters of yellowish flowers, and pink fruits. Native to northeastern Asia.

For previous introduction see No. 72409.

85867. LONICERA CHAMISSOI Bunge. Caprifoliaceae. Honeysuckle.

No. 1332. Collected near Odomari, Sakhalin Island, September 12, 1929. A deciduous shrub from the alpine regions of middle and southern Europe, of stiff, rounded habit, reaching a height of 3 to 5 feet, with mostly oval leaves up to 2 inches in length. The pink flowers are produced in pairs from the axils, and the berries are black. It is of little value in gardens.

For previous introduction see No. 43854.

85868. SORBUS SAMBUCIFOLIA (Cham. and Schlecht.) Roem. Malaceae.

Mountain-ash.

No. 1335. Collected near Odomari, Sakhalin Island, September 12, 1929. A shrub 6 to 9 feet high, with compound leaves made up of 9 to 11 ovate-lanceolate leaflets 2 to 3 inches long and clusters of white flowers followed by red fruits half an inch in diameter. Native to Japan.

85869 to 85905.

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From Japan. Seeds collected by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received February 20, 1930.

85869, CAMPANULA PUNCTATA Lam. Campanulaceae. Spotted bellflower.

No. 3903. Obtained from Matsuzo Kawashima, Kunozon Shiun, Kuno Village, near Shizuoka, January 23, 1930. A herbaceous perennial about a foot high covered with long loose hairs. The sharply toothed leaves are nearly sessile, and the nodding, cylindrical, white flowers, in clusters of one to four, are spotted inside, strongly ribbed and over 2 inches long. Native to Siberia and Japan.

85870. ILEX sp. Aquifoliaceae. Holly.

No. 3904. Obtained in a village near Shizuoka, January 24, 1930. A small amount of seed from a tree 6 inches in diameter and about 20 feet tall. It was loaded with small red berries. The seed is different from any holly we have thus far collected.

85871. RHODODENDRON sp. Ericaceae.

No. 3901. Collected in Kuno Village, January 25, 1930. Seeds from a native azalea on the mountains at Kunozon Shiun, near Shizuoka.

85872 to 85903. SOJA MAX (L.) Piper (Glycine hispida Maxim.). Fabaceae. Soybean.

Nos. 85872 to 85895 are from the Iwate Experiment Station, Morioka, January 25, 1930.

85872. No. 3701. Chotan Kon. Medium sized, oval, light yellow, with pale hilum. 85869 to 85905-Continued.

- 85873. No. 3702. Tsurunoko. Large, oval, yellow with pale-brown hilum.
- 85874. No. 3703. Cross Kawanagare × Enoki; (F.⁵ × 1³). Mediumsized, oval, yellow with a pale hilum.
- **85875.** No. 3704. Crossbred = Kawanagare \times Chotanoteu. (F⁵ \times 29). Medium large, oval, glossy yellow with a pale hilum.
- 85876. No. 3705. Akazaya (red pod). Medium small, oval, yellow with a dark-brown hilum.
- 85877. No. 3706. Shirozaya. Medium sized, oval, light-yellow with a pale hilum.
- 85878. No. 3707. Karihatakiya No. 28. Medium small, oval, glossy yellow with a light-brown hilum.
- 85879. No. 3708. Ginta (silver). Medium sized, oval, glossy yellow with a pale hilum.
- 85880. No. 3710. Hachigatsu Mame (August bean). Medium sized, oval, yellow with a dark-brown hilum.
- 85881. No. 3711. Rikun No. 27. Medium sized, round, glossy yellow with large dark-brown hilum.
- 85882. No. 3712. Chotankou × Kawanagare (F⁵×38). Medium sized, light yellow, oval, pale hilum.
- 85883. No. 3714. Iwate Shirotama No. 1. Medium sized, nearly round, light yellow with a light-brown hilum.
- 85884. No. 3715. *Toukicht.* Medium sized, nearly round, yellow, with a brown hilum.
- 85885. No. 3717. *Kyonen Shirazu* (good yield). Medium sized, oval, light yellow, with a russet-brown hilum.
- 85886. No. 3718. Tamatsukuri. Medium sized, nearly round, cloudy (brown) yellow with a cloudy brown hilum.
- 85887. No. 3719. Iwate Shakkinkire No. 1. Medium sized, oval, glossy yellow with a large dark-brown hilum.
- 85888. No. 3720. *Chuson*. Medium sized, oval, light yellow with a light-brown hilum.
- 85889. No. 3721. Konhai Daiichigo (cross No. 1). Medium sized, oval, cloudy yellow with a dark-brown hilum.
- 85890. No. 3723. Iwate Yagi ichigo (Iwate Yagi No. 1). Medium sized, round, cloudy (brown) yellow with a large dark-brown hilum.
- 85891. No. 3724. Iwate Shirotama No.
 Medium sized, nearly round, cloudy (brown) yellow with a palebrown hilum.
- 85892. No. 3725. Iwate No. 1. Medium sized, oval, yellow with large dark-brown hilum.
- 85893. No. 3726. Self F.⁷ No. 6. Medium sized, oval, yellow, brown hilum.
- 85894. No. 3727. Self F.' No. 9. Medium sized, oval, yellow with a palebrown hilum.

85869 to 85905-Continued.

- 85895. No. 3728. Self F.⁴ No. 3. Medium small, oval, glossy yellow with a brown hilum.
- 85896. No. 3733. Chasengoku kugo. Obtained from the Shizuoka Experiment Station, Shizuoka, January 24, 1930. Small olive brown, oval, much flattened. Used at the station for green manure. Matures in about 150 days and is much like the Kurosengoku in habit.
- 85897. No. 3734. Koshoku Akidaizu (yellow fall). Obtained from a small grain store in Shizuoka, January 24, 1930. Medium sized, oval, yellow, with large dark brown hilum.
- 85898. No. 3735. Station No. 208. Obtained from the Tokachi Branch Experiment Station, Obihiro, Hokkaido, January 20, 1930. Medium sized, oval, light yellow with russet brown hilum.
- 85899. No. 3736. Kurosengoku. Obtained from the Shizuoka Experiment Station, Shizuoka, January 24, 1930. Medium small, oval, slightly flattened; black. Used as a greenmanure crop in mulberry plantations. Considered the best greenmanure variety. Matures in 170 to 180 days and is of the Otoonton type of growth.
- 85900. No. 3737. Obtained from a bean-sprout factory in the suburbs of Tokyo, January 28, 1930. Sample of mixed yellow varieties used for bean sprouts. Seed is said to have come from Chosen.

Nos. 85901 to 85903 were obtained from the Iwate Experiment Station, Morioka, January 25, 1930.

- 85901. No. 3738. Mixed sample No. 1. Medium sized, oval, yellow, russet to dark-brown hilum.
- 85902. No. 3739. Mixed sample No. 2. Medium sized, oval, cloudy (brown) yellow, with russet to dark-brown hilum.
- 85903. No. 3740. Mixed yellow sample No. 3. Medium small to medium large, light yellow with pale hilum.

85904. VICIA FABA L. Fabaceae. Broadbean.

No. 3905. B-5-4 Issun Soramame. Obtained from Dr. K. Noro, Pomologist of the Agricultural Experiment Station, Shizuoka Ken, January 24, 1930. It came originally from the Osaka Agricultural Experiment Station.

85905. VICIA FABA L. Fabaceae.

Broadbean.

No. 3906. Otafukumame. Obtained from Dr. K. Noro. Pomologist, Agricultural Experiment Station, Shizuoka Ken.

85906 to 85928. PISTACIA VERA L. Anacardiaceae. Pistache.

From Khirghiz Republic, eastern Turkestan, Union of Socialistic Soviet Republics. Seeds collected in the Alampa Pass by W. E. Whitehouse, agricultural explorer, Bureau of Plant Industry, September 4, 1929, Received January 6, 1930.

85906 to 85928-Continued.

Indigenous in the foothills of the mountains near Isbaskent and Andijan, Kirghiz Republic, Union of Socialistic Soviet Republics. Trees small, not over 8 feet high in most cases. The practice of cutting them back for firewood results in branching at the base, giving them a bushy appearance and partially accounting for the small size of the trees. Nuts are small, ranging from three-eighths to seven-eighths of an inch in width and from five-eighths of eleven-sixteenths of an inch in length.

- 85906. A very plump nut with an isodiametric base and a blunt apex, slightly wider than the base. Shells dark in color with a prominent suture. No splitting.
- 85907. A small plump nut, variable in shape, with a usually pointed apex; shell dark, kernel yellowish green; 15 per cent of the nuts are split.
- 85908. A very small plump nut. variable in shape, with a dark shell; kernel yellowish green; 15 per cent of the collection has split shells.
- 85909. A small nut, variable in size, with a smooth dark-colored shell and a prominent suture.
- 85910. Nut medium size, dark color, and smooth; apex acuminate. Very few of the nuts are split.
- 85911. Medium to large nut, uniform in size, especially wide at the basal end, apex pointed. Few of the dark, smooth shells are split.
- 85912. Medium to large plump nut with a blunt apex. Shell dark and slightly sculptured at the base. None of the nuts are split.
- 85913. A very small dark-shelled pointed nut. Very few of the nuts show splitting.
- 85914. A large, fairly plump nut with a slightly sculptured shell and a pronounced suture. This nut is the largest of the collection and shows about 15 per cent splitting.
- 85915. A smooth-shelled nut with an acuminate apex. The well-developed kernel is uniformly green.
- 85916. Similar in size to No. 85914, but with a more pointed apex; kernel dark green. About 4 per cent of the nuts show splitting.
- 85917. A long narrow smooth-shelled nut with an acute apex; kernel uniformly light green in color; 25 per cent of the nuts show splitting.
- 85918. A smooth dark-colored nut, slightly darker at the base than at the apex; 10 per cent of the nuts show splitting.
- 85919. A broad plump nut with a slightly sculptured base and a prominent suture; kernel light green; 5 per cent of the nuts show splitting.
- 85920. A short, very plump nut with an isodiametric base and a blunt apes; the dark shell is very much sculptured; kernel light green. Only 2 per cent of the nuts show splitting.
- 85921. A long narrow flat nut with a usually pointed apex and a smooth, dark shell, which may be slightly sculptured at the base; kernel light green. About 20 per cent of the nuts show splitting.

85906 to 85928--Continued.

- 85922. A small nut, variable in size and shape with a smooth, dark shell; ker-nel uniformly green. Splitting of the shell is rare.
- 85923. A medium sized plump nut with a pointed apex and a smooth, dark shell with a prominent suture. Very little splitting is observed.
- 924. A medium sized, long, narrow, sharply pointed nut, uniform in size, with a smooth dark shell having a 85924. A prominent suture.
- 85925. A large plump nut with a blunt apex and a prominent suture; shell sculptured at the base and dark in color.
- 85926. No. 1. A smooth plump nut, broad at the base, narrowing to a point at the apex; 5 per cent of the nuts show splitting.
- 927. No. 2. A smooth, white, rather bluntly pointed nut with a pronounced suture. No splitting was observed. 85927. No. 2.
- 85928. No. 3. A plump white-colored nut, very uniform in size and shape, with a somewhat prominent suture; kernel uniformly green and moderately oily in taste. Very few of the nuts show splitting.
- 85929 to 85932. Gossypium spp. Mal-Cotton. vaceae.
- From Segou, French West Africa. Seeds presented by E. Barthaburu, Chef du Service Agronomique, Segou. Received February 27, 1930.

85929 and 85930. GOSSYPIUM HIRSUTUM L. Upland cotton.

85929. Variety Cambodia.

85930. Variety Cawnpore American.

85931. GOSSYPIUM Sp.

Variety Karangani.

85932. GOSSYPIUM PUNCTATUM Schum. and Thonn. Variety Kowniba.

- 85933 and 85934. ORYZA SATIVA L. Po-Rice. aceae.
- From Burma, India. Seeds presented by A. McKernal, Director of Agriculture, Burma, through the Deputy Director of Agriculture, Southern Circle, Rangoon. Received March 5, 1930.

85933. Variety Kalamkathi.

85934. Variety Rupakhil.

85935 to 85965.

- From Leningrad, Union of Socialistic So-viet Republics. Seeds presented by Prof. A. Kol, Chief, Institute of Applied Bot-any and New Cultures. Received Febru-ary 25, 1930.
 - 85935. PISTACIA VERA L. Anacardiaceae. Pistache.

No. 110213. Collected by G. Roobizov, from West Tianshan, Fergana Chain.

85936 to 85953. PRUNUS ARMENIACA Amygdalaceae. Apricot.

Nos. 85936 to 85950 were collected by Kostina and Lintchevsky, Middle Asia, Fergana Chain; the valley of the River Asia, Kara Su.

85936, No. 110092. 85937. No. 110105.

85935 tc 85965-Continued.

85988, No. 110107.	PEO/E N. 110100
60636 , NO. 110107.	85945. No. 110128.
85939. No. 110108.	85946. No. 110133.
85940. No. 110116.	85947. No. 110134.
85941. No. 110120.	85948. No. 110135.
85942. No. 110124.	85949, No. 110138,
85943. No. 110125.	85950, No. 110148,

85944. No. 110126.

- 85951. No. 110165. Collected by N. I. Vavilov, Middle Asia, Fergana Chain; the valley of the River Kara Su.
- 85952. No. 111268. Collected by Kos-tina and Lintchevsky, Middle Asia, Fergana Chain; the valley of the River Kara Su.
- 85953. No. 108864. Collected by N. I. Vavilov, Middle Asta, Kazakstan Tssyk kul.
- 85954 and 85955. PRUNUS CERASIFERA Ehrh. Amygdalaceae. Myrobalan plum.
 - 85954. No. 111262. Collected by Kos-tina and Lintchevsky, Middle Asia, Fergana Chain; the valley of the River Kara Su.
 - 85955. No. 111263. Collected by Kos-tina and Lintchevsky, Middle Asia, Fergana Chain, Tscharvak.
- 85956 to 85961. PRUNUS CERASIFERA DI-VARICATA (Ledeb.) C. Schneid. Amygdalaceae. Plum.

85956. No. 438/c. Collected by G. Roobt-zov, Middle Asia, Djala Abad.

Nos. 85957 to 85961 were collected by G. Roobtzov, North Caucasus,

85957. No. 112010.

85958. No. 112011.

85959. No. 9414. Alycha.

85960. No. 9413.

85961. No. 112012.

85962. PRUNUS DOMESTICA L. Amygdala-Common plum. Amygdala-

No. 9742. Collected by G. Roobtzov, North Caucasus.

85963. PRUNUS INSITITIA L. Amygdala-ceae. Bullace.

No. 9412. Ternowka. Collected by G. Roobtzov, North Caucasus.

85964. PYRUS COMMUNIS L. Malaceae. Common pear.

- No. 112007. Edible variety, wild. Collected by G. Roobtzov, North Caucasus.
- 85965. PYRUS HETEROPHYLLA Regel and Schmalh. Malaceae. Pear. and

No. 112008. Collected by G. Roobt-zov, Middle Asia, Fergana Chain.

- 85966 to 85968. NICOTIANA TABACUM L. Solanaceae. Tobacco.
- om Argentina. Seed presented by E. H. Mathewson, Bompland, Misiones, through W. W. Ganner, Bureau of Plant Industry. From Argentina. Received March 1, 1930.
 - 85966. Havana (so-called) from Chile.

85967. Habana Colorado (1927 seed).

85968. Whong Kong (1928 seed).

85969 to 85979.	CASTANEA	CRENATA
Sieb. and Zucc.	Fagaceae.	
	Japanese	chestnut.
From Japan. Scio	ns_obtained	by R. K.
Beattie, Bureau o	of Plant Indu	istry. Re-
ceived March 3, 1	930.	•

For previous introduction see No. 85804. 85969. No. 1001. Ogawa Tetenchi. 85970, No. 1002. Obi-wase. 85971. No. 1003. Yakko 85972. No. 1004. Bon I. 85973, No. 1005. Gosho. 85974. No. 1006. Gora. 85975. No. 1007. Kosoji. 85976. No. 1008. Tsunchisa. 85977. No. 1009. Ogawa Ichigo. 85978, No. 1010. Daihachi. 85979. No. 1011. Terai.

85980 to 85991.

- From Japan. Scions and tubers obtained by P. H. Dorsett and W. J. Morse, agri-cultural explorers, Bureau of Plant Indus-try. Received March 2, 1090 Received March 3, 1930. trv.
 - 85980 to 85983. DIOSPYROS KAKI L. f. Di-ospyraceae. Kaki persimmon.
 - 85980. No. 3914. Hagakushi. From the Fukuoka Ken Agricultural Experiment Station, Izumi Mura, Miyako Gun, Fukuoka Ken, January Fukuoka 31, 1930.
 - 85981. No. 3915. Toyoo Ka. From the Agricultural Experiment Station, Ky-oto Fu, January 28, 1930. They advise that while this variety is not considered the best, it is, how-ever, extensively grown in this prefecturate.
 - 85982. No. 3916. Kubo (small fruit). From the Kyoto Fu Agricultural Experiment Station, January 28, 1930. This form matures much earlier than the large-fruited form of this variety.
 - 983. No. 3917. Kubo (large fruited). From the Agricultural Experiment Station, Shimogamo, Kyoto Fu, Jan-uary 28, 1930. They advise that this is a large-fruited form of Kubo. 85983. No. 3917. (No. 3916.)
 - 85984 to 85991. IFUMUL. Poir. Convolvulaceae. 85991. IPOMOEA BATATAS (\mathbf{L}_{i}) Sweetpotato.

From the Saitama Agricultural Experiment Station, at Urawa, Saitama Ken, February 25, 1930.

- 85984. No. 3946. Genji.
- 85985. No. 3945. Hana Sakigake.
- 85986. No. 3943. Kioranda (Dutch yellow).
- 85987. No. 3944. Tai Haku (large white).
- 85988. No. 3939. Me warai.
- 85989. No. 3940. Shin Guro (black heart).
- 85990, No. 3941. Beni aka, Kan sho, or Satsuma imo.
- 85991. No. 3942. Beni Oita or Crim-son Oita.

85992 to 85998.

- From Bologna, Italy. Seeds presented by Ditta Ernesto Pini, through H. L. West-over, Bureau of Plant Industry. Re-ceived March 4, 1930.
 - 85992 to 85995. MEDICAGO SATIVA L. Faba-ceae. Alfalfa.
 - 85992. Lucern No. 1. Umbria, and Marche. From Toscana.
 - 85993. Lucern No. 2. From Medio Veneto, and Polesine. From Ferrara.
 - 85994. Lucern No. 4. From Emilia and Romagna.
 - 85995. Lucern No. 5. From Piemonte Friuli.
 - 85996 to 85998. TRIFOLIUM PRATENSE L. Fabaceae. Red clover.
 - 85996, No. 1. From Toscana, Umbria, and Marche.
 - 85997. No. 2. From Emilia and Romagna.
 - 85998, No. 3. From Piemonte.
- 85999. DIOSCOREA Sp. Dioscoreaceae.
- From Gold Coast, west Africa. Tuber ob-tained by David Fairchild, agricultural explorer with the Allison V. Armour ex-pedition. Received April 29, 1927. Numbered in March, 1930.

No. 1214. Variety Beiyere in the Twi language. Grown in Togoland. Collected in the market at Akkra, where it forms an important article of diet. The tubers are the largest I have ever seen, being at least 3 feet long and 4 inches in diameter.

- 86000. CITRUS SINENSIS (L.) Osbeck. Rutaceae. Orange.
- From Giza, Egypt. Plants presented by Dr. Rahmet Bey, Horticultural Section, Ministry of Agriculture, through Charles R. Crane, Indio, Calif. Received March 10, 1930.

Blood orange.

86001. (Undetermined.)

From Africa. Seeds presented by Dr. W. L. Thompson, Mount Silinda, Southern Rhodesia. Received March 6 and 29, L. Thomp Rhodesia. 1930.

Potato-nut. Seeds of one of our large timber trees, which is 3 to 4 feet in diam-eter and has cherrylike wood. The seeds are about the size and shape of acorns; the flavor of the kernel reminds one of a raw potato.

For previous introduction see No. 52809.

- 86002 to 86154. SOJA MAX (L.) Piper (Glycine hispida Maxim.). Faba-Soybean. ceae.
- rom Japan. Seeds obtained by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received February 26, 1930. From Japan.
 - 002. No. 3327. Purchased at the food department of a large department store in Mitsukoshi, January 14, 1930. Medium large, greenish yellow. seed with black hium, germ yellow. Used for food nurnoes 86002, No. 3327. for food purposes.
 - 86003. No. 3330. *Tsurunoko*. Obtained from the Chikuma Miso Co., Tokyo, January 17, 1930. This seed is ob-Obtained

86002 to 86154-Continued.

tained from Hokushu and is used in making a special high-grade miso. Seed large, nearly round, with a light-brown hilum.

Nos. 86004 to 86145 were obtained from the Tokachi Branch Experiment Station, Obihiro, Hokushu, January 20, 1930.

- 86004. No. 3504. Isabera. Medium large, oval, brown, yellow germ.
- 86005. No. 3505. Chiya Shoryu (small brown). Branch Station No. 682. Small, slightly flattened, oval, glossy brown, yellow germ.
- 86006. No. 3506. Kito Shokuzu (Station No. 1384). Very small, much flattened, glossy, early, brown; yellow germ.
- 86007. No. 3507. Chadaizu. Very large, oval. seal brown. Used for greenvegetable purposes.
- 86008. No. 3508. Chadaizu. Large, oval, brown, yellow germ. Used as a green vegetable.
- 86009. No. 3509. Yamagato Zairai. Medium sized, oval, green; green germ, black hilum.
- 86010. No. 3510. Aodaizu (Station No. 1767). Medium sized, oval, slightly clouded with brown about the hilum, green; brown hilum; germ green.
- 86011. No. 3511. Aodairyu (Station No. 946). Large, oval, greenish yellow with black hilum, yellow germ.
- 86012. No. 3512. Aodairyu. Medium sized, oval, green with white hilum.
- 86013. No. 3513. Kikozu. Medium small, nearly round, green with black hilum.
- 86014. No. 3514. Aohiki (Station No. 1257). Medium small, nearly round, green with black hilum; green germ.
- 86015. No. 3515. Aodaizu. Medium sized, oval, green with russet-brown hilum, germ green.
- 86016. No. 3516. Aodairyu. Medium large, slightly flattened green, oval with dark-brown hilum, green germ.
- 86017. No. 3517. Medium sized, oval, green with brown hilum, green germ.
- 86018. No. 3518. Hiyama (Branch Station No. 16) (Tokachi No. 223). Medium sized, oval, yellow, with russetbrown hilum.
- 86019. No. 3519. Kurakake B. (Station No. 655). Very large, oval, much flattened, greenish yellow with black hilum, yellow germ. Very much like the Hato variety (No. 40118).
- 86020. No. 3520. Aoshirozu. Large, light green, oval, pale hilum, green germ.
- 86021. No. 3521. Aoyu. Large, oval. yellowish green with brown hilum; yellow germ.
- 86022. No. 3522. Ao Tsurunoko (green Tsurunoko). Medium sized, oval, green with dark-brown hilum.
- 86023. No. 3523. Goyou Kurakake (five lives saddle). Large oval, much flattened, greenish yellow, yellow germ, black hilum.

86002 to 86154-Continued.

- 86024. No. 3524. Daidzuhinshu satei. Medium large, bluish green, much flattened, oval, black hilum; yellow germ.
- 86025. No. 3525. O Sadefuri (Station No. 1197). Large, oval greenish yellow, black hilum; yellow germ.
- 86026. No. 3526. Tokachi (Station No. 1865). Medium sized, yellowish green, oval, pale hilum.
- 86027. No. 3527. Tsuryoku Shoryu (Station No. 673). Medium small, yellowish green, oval, yellow germ, pale hilum.
- 86028. No. 3528. Aemimame. Medium small, nearly round, yellow with black hilum.
- 86029. No. 3529. Manchuria. Medium sized, nearly round, yellowish green with pale hilum. Much like Shingto (No. 21079); yellow germ.
- 86030. No. 3530. Wilson Black (new). Medium small, much flattened, oval, black; yellow germ.
- 86031. No. 3531. Koshurei Marugata daizu (Koshurei round). Medium sized, oval, glossy black; germ green.
- 86032. No. 3532. Chusei Kurodaidsu (from the Oshima Branch Station). Large, oval, black with yellow germ.
- 86033. No. 3533. Kurosho. Small, round, black, green germ. Seed appears identical with the Kingston (No. 17255).
- 86034. No. 3534. Oriibu Rokku. Medium small, nearly round, yellow with brown hilum.
- 86035. No. 3535. Kuroshoryu (Station No. 691). Small, round, black; green germ. Seed appears the same as *Kingston* (No. 17255).
- 86036. No. 3536. Manshu (Station No. 1863). Medium sized, oval, yellowish green with russet-brown hilum; yellow germ.
- 86037. No. 3537. Kuroshoryu (Station No. 872). Small, round, black; green germ. Seed very similar to Kingston (No. 17255).
- S6038. No. 3538. Kurodaizu. Large, oval, slightly flattened, black.
- 86039. No. 3539. Kurodaizu. Large, nearly round, black; yellow germ.
- 86040. No. 3540. Kurodaizu (from Makubetsu Branch Station). Medium large, oval, black with yellow germ.
- 86041. No. 3541. Kurozu. Large, oval, black; yellow germ.
- 86042. No. 3542. Kurodaizu. Medium sized, nearly round, black; yellow germ.
- 86043. No. 3543. Katsuka honen gocho daizu. Large, nearly round, black; yellow germ.
- 86044. No. 3544. Kurodaizu (Station No. 1839). Very large, oval, black; yellow germ.
- 86045. No. 3545. Kokuonshokuzu (Station No. 1094). Very small, much flattened, black, oval; yellow germ.
- 86046. No. 3546. Genshin Koku ou.) Medium small, slightly flattened, dull (sooty) black; yellow germ.

86002 to 86154—Continued.

- 86047. No. 3547. Kurodaizu. Medium large, black, oval; yellow germ.
- 86048. No. 3548. Kuroshoryu (Station No. 1181). From Oshima Branch Station originally. Medium small, nearly round, black; yellow germ.
- 86049. No. 3603. Hadakadaizu (Station No. 517, nonhair). Medium sized, oval, yellow, with russet-brown hilum.
- 86050. No. 3604. Rasuto San. Medium sized, oval, yellow, with brown hilum.
- 86051. No. 3605. Akazaya B-1 (red pod B-1). Medium sized, oval, yellow, with large brown hilum.
- 86052. No. 3606. Irakudaizu (Station No. 1360). Medium sized, nearly round, yellow, brown hilum.
- 86053. No. 3607. Station No. 1215. Medium sized, oval, glossy yellow, with dark-brown hilum.
- 86054. No. 3608. (Tokachi Branch Station No. 1869.) Medium sized, nearly round, yellowish green, with darkbrown hilum.
- 86055. No. 3609. Akazaya B (red pod-B). Medium sized, oval, yellow, with brown hilum.
- 86056. No. 3610. Kojiro (Tokachi Station No. 1415). Medium sized, oval, yellow, with brown hilum.
- 86057. No. 3611. Akazaya (red pod). (Main Station No. 197.) Medium sized, oval, yellow, dark-brown hilum.
- 86058. No. 3612. Tokachi (Station No. 1183). Medium sized, oval, yellow, with brown hilum.
- 86059. No. 3613. Akazaya (from Hiroshima). Medium sized, oval, yellow with brown hilum.
- 86060. No. 3614. Honen Akazaya Konnin B. Medium sized, oval, yellow, with brown hilum.
- 86061. No. 3615. Tokachi 1928-220 (77). No. 1190. Medium large, oval, yellow, with brown hilum.
- 86062. No. 3616. Daizu Hinshu satei (Station No. 1874). Medium sized, oval, glossy yellow, with dark-brown hilum.
- 86063. No. 3617. Sangaku (Kotoni Station No. 3414). Medium sized, oval, yellow, with russet-brown hilum.
- 86064. No. 3618. Shoryu bo (Tokachi Station No. 188). Medium sized, oval, glossy yellow, with brown hilum.
- 86065. No. 3619. *Tokachi* (Station No. 1206). Medium sized, oval, glossy yellow, with brown hilum.
- 86066. No. 3620. Tokachi (Station No. 1000). Medium sized, oval, yellow, with pale hilum.
- 86067. No. 3621. Tsurunoko (Tokachi Station No. 390). Medium sized, oval, glossy yellow, with russet-brown hilum.
- 86068. No. 3622. Hadakadaizu. Medium small, oval, glossy yellow, with russet-brown hilum.
- 86069. No. 3623. Datehadakadaizu (Tokachi Station No. 595). Medium sized, oval, glossy yellow, with russetbrown hilum.

- 86002 to 86154-Continued.
 - 86070. No. 3624. Orugiboru (Iwate). Medium sized, oval, yellow, with russet-brown hilum.
 - 86071. No. 3625. Akazaya Konnin (Hiroo). Medium sized, oval, yellow, with russet-brown hilum.
 - 86072. No. 3626. Ortibu Rokku. Medium small, nearly round, glossy yellow, with russet-brown hilum.
 - 86073. No. 3628. Hadakadaizu (smooth). (Station No. 1870.) Medium sized, oval, yellow, with russet-brown hilum.
 - 86074. No. 3629. *Tamatsukuri* (Station No. 997). Medium sized, oval, yellow, hilum pale to dark brown.
 - 86075. No. 3630. Mizukugurigunma to Kudai (Station No. 598). Medium sized, oval, glossy yellow, with brown hilum.
 - 86076. No. 3631. Shoryu i (small grain). Medium small, oval, light yellow, with pale-brown hilum.
 - 86077. No. 3632. Akazaya Konnin A (red-pot mixture A). (Station No. 753.) Medium sized, oval, glossy yellow, with russet-brown hilum.
 - 86078. No. 3633. Shoryu A (small grain A). Medium sized, oval, yellow, with brown hilum.
 - 86079. No. 3634. Tokachi No. 1403. Medium sized, oval, yellow, with russet-brown hilum.
 - 86080. No. 3635. Suigen No. 10 (Oshima) (Tokachi No. 1007). Medium sized, oval, yellow, with pale hilum.
 - 86081. No. 3636. *Hadakadaizu* (glabrous). Medium sized, oval, yellow, with russet-brown hilum.
 - 86082. No. 3637. Nezumizaya (Kotini Station No. 6028). Medium sized, oval, glossy yellow, with russet-brown hilum.
 - 86083. No. 3638. *Gindaizu* (silver soybean). Medium sized, oval, yellow, with russet-brown hilum.
 - 86084. No. 3639. Nanbu Kuro Saya (Tokachi Station No. 721). Medium small, oval, yellow, with russet-brown hilum.
 - 86085. No. 3640. Kariha Kairyo (Hidaka). Medium sized, oval, glossy yellow, with russet-brown hilum.
 - 86086. No. 3641. Angechichi Kon (Tokachi Station No. 1797). Medium sized, oval, yellow, with pale hilum.
 - 86087. No. 3642. Shinohensan (Tokachi Station 606; Main Station No. 124). Medium sized, oval, light yellow, with russet-brown hilum.
 - 86088. No. 3643. Kenashidaizu (nonhair). Medium sized, oval, very light yellow, with russet-brown hilum.
 - 86089. No. 3644. Daizu Hinshu Satei (Station No. 192). Medium small, oval, yellow, with russet-brown hilum.
 - 86090. No. 3645. Geihaku (Tokachi Station No. 1798). Medium small, oval, yellow, with russet-brown hilum.
 - 86091. No. 3646. Station No. 152 (184). Medium sized, oval, yellow, with brown hilum.

86002 to 86154-Continued.

- 86092. No. 3647. Shoryu B (Station No. 772). Medium sized, oval, glossy yellow, with russet-brown hilum.
- 86093. No. 3648. Iwate Shiro Tama No. I. Medium sized, oval, yellow, with dark-brown hilum.
- 86094. No. 3649. Yun Katsu (Oshima Station No. 1174). Medium sized, oval, yellow, with brown hilum.
- 86095. No. 3650. Shoryushirodaizu (small white) (Station No. 1076). Medium small, oval, yellow, with brown hilum.
- 86096. No. 3651. Kawarakedaizu (smooth). Medium sized, oval, yellow, with dark-brown hilum.
- 86097. No. 3652. Sedakadaizu. Medium sized, nearly round, glossy yellow, with dark-brown hilum.
- 86098. No. 3653. *Mizukuguri* (Station No. 599). Medium small, oval, glossy yellow, with dark-brown hilum.
- 86099. No. 3654. Kiihoshu (Station No. 1423). Medium sized, nearly round, very light yellow, with russet-brown hilum.
- 86100. No. 3655. Oyachi. Large, oval, light yellow, with hilum varying from pale to russet brown.
- **86101.** No. 3656. Houtenhakuft. Medium sized, oval, light yellow, with pale hilum; brown spots at end of hilum. Very similar to the *Ito Son* variety (No. 17268).
- 86102. No. 3657. Konshurei No. 254 (Station No. 1420). Medium sized, oval, light yellow; pale to light brown hilum.
- 86103. No. 3658. Station No. 266. Large, oval, light yellow, with pale hilum.
- 86104. No. 3659. Konshurci. Medium large, oval, light yellow, with pale hilum.
- 86195. No. 3660. Yun Katsu. Medium sized, oval, light yellow, with dark-brown hilum.
- **86106.** No. 3661. Shiryu Kii (yellow four-seed in pod). Medium sized, nearly round, light yellow, with palebrown hilum.
- 86107. No. 3662. Annen (Station No. 1777). Medium small, greenish yellow, with pale hilum.
- **86108.** No. 3663. Shinhonen (Station No. 703). Medium sized, oval, yellow, with russet-brown hilum.
- 86109. No. 3664. Sorachidaizu. Medium small, oval, glossý, light yellow, with russet-brown hilum.
- 86110. No. 3665. Kurozaya Honen (black pod, good yield). Medium sized, oval, glossy yellow, with russet-brown hilum.
- 86111. No. 3666. *Taishodaizu* (Station No. 1824). Medium sized, oval, yellow, with dark-brown hilum.
- 86112. No. 3667. Hadakadaizu. Medium small, oval, glossy yellow, with black hilum.
- **86113.** No. 3668. Oyachi senshitsadairyu (black eye Oyachi, selected large seed). Medium large, oval, yellow, with black hlum.

86002 to 86154-Continued.

- 86114. No. 3669. Hoten Kuroheso (Mukden Black eye). Medium sized, oval, yellow, with black hilum.
- 86115. No. 3670. Shihyockuroheso (Black eye) (Station No. 1422). Medium sized, oval. glossy yellow, with black hilum. Seed is very much like blackhilum Manchu.
- 86116. No. 3671. Tokachi Station No. 671. Medium sized, nearly round, greenish yellow, with black hilum.
- 86117. No. 3672. Oyachi. Medium large, oval, glossy yellow, with dark-brown hilum.
- 86118. No. 3673. Kurozaya (black pod) (Kotoni Station No. 6025). Small, oval, greenish yellow, with russetbrown hilum.
- 86119. No. 3674. Wase Hadaka (early smooth). Medium sized, nearly round, yellow. with dark-brown hilum.
- 86120. No. 3675. Nonfrost. Medium sized, nearly round, glossy yellow, with brown hilum.
- 86121. No. 3676. Toiku rokugo (Station No. 6). Medium sized, nearly round, very light yellow, with prominent russet-brown hilum.
- 86122. No. 3677. Hata hikari (Oshima Station No. 1237). Medium large, nearly round, light yellow, with palebrown hilum.
- 86123. No. 3678. Selected Oyachi. Medium sized, nearly round, yellow, with pale-brown hilum.
- 86124. No. 3679. Station No. 117-B. Medium small, glossy yellow, with large dark-brown hilum.
- 86125. No. 3680. Oyachi Ickigo. Medium large, oval, glossy yellow, with large brown hilum.
- 86126. No. 3681. Chiusei Hadaka (middle smooth). Medium small, oval, glossy yellow with large dark-brown hilum.
- 86127. No. 3682. Kenashidaizu (smooth). Medium sized, nearly round, light yellow, with brown hilum.
- 86128. No. 3683. Karijuto. Medium sized, oval, yellow with large darkbrown hilum.
- 86129. No. 3684. Toiku Shichigo (Station No. 7). Medium large, nearly round, light yellow, with russet-brown hilum.
- 86130. No. 3685. Ran Koshi. Medium sized, oval, glossy yellow, with russetbrown hilum.
- 86181. No. 3686. Nobokadaizu. Medium small, oval, yellow, with large brown hilum.
- 86132. No. 3687. Toiku Kugo. Medium sized, oval, glossy yellow, with darkbrown hilum.
- 86133. No. 3688. Chusei Kurodairyu (middle black large). Large, oval, slightly flattened, black; yellow germ.
- 86184. No. 3689. Kurodaizu. Very large, black, oval; yellow germ.
- 86135. No. 3690. Kuromame. Very large, oval, black; yellow germ.

86002 to 86154—Continued.

- 86136. No. 3691. Kuromame. Large, slightly flattened, black; yellow germ. Large,
- 86137, No. 3692. Chusei Kurodaizu. Large, oval, slightly flattened, black; yellow germ.
- dium small, oval, yellow, with russet-brown hilum. 86138. No. 3693.
- oval, glossy yellow, with large dark-brown hilum. 86139. No.
- 86140, No. 3695. No. 3695. Tokachi Station No. Medium sized, oval, yellow, with 1415. dark-brown hilum.
- 86141. No. 3696. Oyachi Makubetsu. Large, oval, glossy yellow, with long dark-brown hilum.
- 86142. No. 3697. Akazaya (red pod). Medium large, oval, glossy, cinnamon brown.
- 86143. No. 3698. Akazayadaizu pod) (Station No. 1845). Me large, oval, cinnamon brown. (red Medium
- 144. No. 3699. Chairomame. Me-dium sized, oval, cinnamon brown; yellow germ. 86144. No.
- 86145. No. 3700. Monbetsu Nagaba daizu (Monbetsu long leaf). Medlum sized, oval, glossy brown with concentric bands of black; yellow germ.

Nos. 86146 to 86150 were obtained from the Iwate Experiment Station, Mori-oka, January 25, 1930.

- 86146. No. 3709. Kawanagare. Medium sized, oval, yellow, with pale hilum.
- 147. No. 3713. Koushu Shirome (Koushu white eye). Medium large, oval, light yellow, with light-brown 86147. No. hilum.
- 125. No. 3716. Kimusume. Medium small, oval, glossy yellow, with russet-brown hilum. 86148. No. 3716.
- 86149. No. 3722. No. 2). Med 3722. Kouhaidainigo (cross Medium sized, oval, yellow, with pale-brown hilum.
- 86150. No. 3729. Iwafune takiya. Me-dium small, oval, light yellow, with pale-brown hilum.
- 3730. 86151. No. Edamame Furisode. 151. No. 3730. Edamame Furisode. From the Shizuoka Experiment Sta-tion, Shizuoka, January 24, 1930. Medium large, oval, light yellow; mixed as to hilum color; some with pale hilum and some with dark-brown hilum. Used to a very considerable extent in Shizuoka Prefecture as a green vege-table bear. table bean.
- Aodaizu. 86152, No. 3731. From я 102. No. 3731. Addatzu. From a small grain store in Shizuoka, January 24, 1930. Large, greenish yellow, oval, with black hilum. Used extensively in this section as a green vegetable.
- 86153. No. 3732. Hongoku. From a grain store in Shizuoka, January 24, 1930. Medium large, oval. glossy yel-low, with a large brown hilum. Grown extensively in this section as a green needed. vegetable.
- 86154. No. 3627. Akazaya Konnin (red good mixed). From the Tokachi Branch Experiment Station, Oblhiro, January 30, 1930. Medium small, oval, glossy yellow, with a russet-brown hilum.

- 86155. EUONYMUS MACROPTERUS Rupr. Celastraceae.
- rom Japan. Cuttings obtained by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received October 12, 1929. Numbered in February, 1930. From Japan.
- No. 1336. From near Odomari, Sakalin Island, September 12, 1929.

For previous introduction see No. 85866.

- 86156 and 86157. FRAGABIA spp. Ro-Strawberry. saceae.
- rom Japan. Plants obtained by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received March 10, 1930. From Japan.
 - 86156. FRAGARIA SP.

4133. Showa. No. Agricultural Ex-14, 1930. We understand that this variety is quite hardy.

86157. FRAGARIA Sp.

86157. FRAGARIA SP. No. 4132. Fukuba. From the Tokyo Fu Agricultural Experiment Station, Tochikawa, February 14, 1930. This is a winter-forcing variety. Berries sometimes 2 inches or more in length. Quite conical in shape; good, attractive red color which extends well into the berry. The fruit in January and Feb-ruary, here at Tokyo, is really of very good quality. The A-1 berries are at-tractive and apparently sell quite readily at from 5 to 8 cents apiece American gold. This introduction may prove of interest and value to our experts as well as to strawberry growers.

86158 to 86162.

- From Naples, Italy. Cuttings presented through P. E. Caloia, Los Angeles, Calif. Received March 12, 1930.
 - 86158 and 86159. MALUS spp. Malaceae. Apple.

86158. MALUS Sp.

Limonizella.

86159. MALUS Sp.

Mele Rose.

86160 to 86162. PYRUS spp. Malaceae. PART.

86160. PYRUS Sp.

Ipodone.

86161. PYRUS Sp.

Del Carpino.

86162, Pyrus sp.

30 Ourie.

86163 and 86164. ORYZA SATIVA L. Rice. Poaceae.

- From Lower Burma, India. Seeds pur-chased from U. Saw Shwe, Assistant Botanist, Agricultural Station, Hmawbi, Insein District, through A. McKerral, Director of Agriculture, Rangoon. Re-ceived March 7, 1930.
 - 163. Thitat Emata; strain No. A 22-53. A long, slender, hard and translucent rice which ripens in about 86163. 160 days.

86163 and 86164-Continued.

- 86164. Emata; strain No. A 16-34. Similar to No. 86163, but ripening in about 150 days.
- 86165. ALBUCA NELSONI N. E. Brown. Lilaceae.
- From South Africa. Seeds presented by Miss Olive Abernathy, Lismore, Umtata, Cape of Good Hope. Received March 4, 1930.

A herbaceous perennial with a globose bulb 3 to 4 inches in diameter, four to six bright-green lanceolate leaves 4 feet long and 2 inches wide at the base, and a stout erect peduncle 3 feet high bearing a lax raceme a foot long, of white flowers, 1 to 2 inches long, broadly banded with greenish or reddish brown. The three outer petals are spreading and the three inner are shorter and joined together. Native to South Africa.

- 86166. CHAMAEDOREA ELATIOR Mart. Phoenicaceae. Palm.
- From Vera Cruz, Mexico. Seed presented by Dr. C. A. Purpus, Zacuapam, Huatusco. Received March 8, 1930.

A low palm with a flexuous stem 10 to 15 feet high and pinnate leaves 6 to 8 feet long. Native to Mexico.

- 86167. AMYGDALUS PERSICA L. (Prunus persica Stokes). Amygdalaceae. Peach.
- From Italy. Scions presented by Dr. Mario Calvino, San Remo. Received February 28, 1929. Numbered in March, 1930.

86168. AMYGDALUS PERSICA L. (Prunus persica Stokes). Amygdalaceae. Peach.

From Spain. Plants presented by Mr. Juan Leyva, La Quinta, Granada. Received March 19, 1929. Numbered in March, 1930.

Admirable Jaune.

- 86169. FICUS CARICA L. Moraceae. Common fig.
- From Lerida, Spain. Cuttings presented by Ramon Sala Roqueta, Enginyer Agricola, Balaguer, through Ira J. Condit, University of California, Berkeley, Calif. Received March 11, 1930.

Carabasseta.

86170. ZEA MAYS L. Poaceae. Corn.

From Germany. Seeds presented by Dr. Tage Ellinger, of the Union Stock Yards & Transit Co. of Chicago, through E. W. Sheets, Bureau of Animal Industry. Received March 17, 1930.

For use in experimental corn-borer research work.

- 86171 to 86174. SACCHARUM SPONTA-NEUM L. Poaceae.
- From India. Cuttings presented by T. S. Venkatraman, Government Sugarcane Expert, Lawley Road Port, Colmbatore, through E. W. Brandes, Bureau of Plant Industry. Received March 14, 1930.

86171. Dacca.

86172. Lahore

86171 to 86174-Continued.

86173. Rella Gaddi.

86174. Geha Bon.

- 86175. AGROSTIS LACHNANTHA Nees. Poaceae. Bentgrass.
- From South Africa. Seeds presented by the officer in charge, Veld Reserve, Fauresmith, Orange Free State, through H. N. Vinall, Bureau of Plant Industry. Received March 17, 1930.

A grass with stems up to 2 feet high, linear leaves 8 inches long, and contracted panicles up to a foot long. Native to South Africa.

86176 to 86210.

- From Leningrad, Union of Socialistic Soviet Republics. Seeds presented by A. Kol, Chief, Bureau of Introduction, Institute of Applied Botany and New Cultures. through John H. Parker, Bureau of Plant Industry. Received March 8, 1930.
 - 86176 to 86183. AVENA SATIVA L. Poaceae. Oats.

86176. No. 1329.	86180, No. 25570.
86177. No. 9452.	86181. No. 25572.
86178, No. 25537.	86182. No. 25582.
86179. No. 25569.	86183. No. 49415.

86184. AVENA SATIVA ORIENTALIS (Schreb.) Richter. Oats.

No. 70276.

86185. HORDEUM DISTICHON NIGBICANS Seringe. Poaceae. Two-rowed barley. No. 39789

86186 and 86187. HORDEUM DISTICHON NUDUM L. Poaceae. Two-rowed barley. 86186. No. 10250.

86187. No. 10283.

86188 and 86189. HORDEUM DISTICHON PALMELLA Harlan. Poaceae. Two-rowed barley.

86188. No. 10251.

86189, No. 41101-a.

- 86190. HORDEUM VULGARE NIGRUM (Willd.) Beaven. Poaceae. Six-rowed barley. No. 10247.
- 86191. HORDEUM VULGARE PALLIDUM Seringe. Poaceae. Six-rowed barley. No. 10246
- 86192 to 86197. SECALE CEREALE L. Poaceae. Rys.
 - 86192.No. 69912.86195.No. 73367.86193.No. 69913.86196.No. 73432.
 - 86194. No. 73089. 86197. No. 73407.

86198 to 86210. TRITICUM AESTIVUM L. (T. vulgare VIII.). Posceae.
86198. No. 6984.
86205. No. 73339.
86199. No. 36107.
86206. No. 73368.
86200. No. 39776.
86207. No. 73426.
86201. No. 41045.
86208. No. 73422.
86202. No. 41063.
86209. No. 73424.
86203. No. 73013.
86210. No. 73087
86204. No. 73380.

90

86211. Gossypium sp. Malvaceae. Cotton.

om Brazil. Seeds presented by Mr. Oc-tavio Lamartine, Delegacia do Servico do Algodao Natal, Rio Grande do Norte, through O. F. Cook, Bureau of Plant Industry. Received March 13, 1930. From Brazil

Maca The Moco cotton is one of the most important long-staple native Brazilian types.

86212. CARICA PAPAYA L. Papayaceae. Papaya.

rom Java. Seeds presented by M. M. Magillse, the Tuinbouwkundig Ambtenaar, P. O. McCornelis. Pascar Minggoe, through David Fairchild, Bureau of Plant Industry. Received March 19, 1930. From

A hermaphrodite variety.

86213 to 86230. Gossypium spp. Malvaceae. Cotton.

From Tashkent, Turkestan. Seeds from the Turkestan Plant Breeding Station, through the Texas Agricultural Experi-ment Station, College Station, Tex. Re-ceived March 8, 1930.

86313 to 86219. GOSSYPIUM HERBACEUM L.

86213. No. 455-a. Origin West Pamir.

86214. No. 454. Jorno-Bukharskaja.

86215. No. 2522-b. Origin Khoresm.

86216. No. 2929. Origin Afghanistan. Kharsbad.

86217. No. 3101. Origin Khoresm.

86218, No. 5028. Origin Asia Minor, vil Ajdin.

86219. No. 7172. Origin Kashghar Artysh,

86220 to 86228. GOSSYPIUM HIRSUTUM L. Upland cotton,

86220. No. 0100. Navrotsky.

86221. No. 169. Dekhcar.

86222, No. 182. Ak-Dimra

86223, No. 0251. Triumph Navrotsky.

86224. No. 508. Batyr.

86225. No. 1306. Shreder.

86226. No. 1838.

86227. No. 2005.

86228. No. 2017.

86229. GOSSYPIUM Sp.

No. 407. Kuldja.

86230. GOSSYPIUM sp.

No. 0937. Million Dollar. Origin China.

86231 to 86237. KALANCHOE spp. Crassulaceae.

rom Cambridge, England. Seeds pre-sented by the Director, Botanic Garden, University of Cambridge. Received March 12, 1930. From

86231. KALANCHOE CARNEA N. E. Brown.

A succulent perennial with simple stems about 2 feet high, oval to obovate crenate-dentate leaves, and branched cymes of light rose or pink, very fragrant flowers. Native to southern Africa.

86231 to 86237-Continued.

86232. KALANCHOE FELTHAMENSIS Hort.

Said to be a hybrid between K. flam-mea and K. kirkii.

86233. KALANCHOE GRANDIFLORA Wall.

A herbaceous perennial with a glau-cous stem 2 to 3 feet high, broadly ovate, crenate leaves 2 to 3 inches long, and large compound cymes of greenish yel-low flowers. Native to India.

86234. KALANCHOR KIRKII N. E. Brown.

A handsome succulent, native to Mo-zambique, with terete stems 2 to 4 feet high, simple or branched, leafy about half way up. The opposite, green un-spotted lcaves are pubescent, and the brilliant orange-scarlet flowers are in corymbose cymes 3 to 6 inches across.

86235. KALANCHOE ROTUNDIFOLIA Haw.

A succulent perennial. 1 to 3 feet high, with a slender stem which has a few leaves at the base and is naked above. The fleshy leaves, 1 to 2 inches long, vary in shape from broadly obovate to spatulate, and are entire or crenate. The small orange or yellow flowers are borne in flat-topped panicles. Native to South Africa Africa.

86236. KALANCHOE SPATHULATA DC.

A succulent perennial 1 to 4 feet high with the lower leaves spatulate-oblong, crenate, 3 to 10 inches long, and the upper leaves, 3 to 4 inches long, very narrow and sometimes trifoliolate. The clear yellow flowers are in flattish cor-ymbs. Native to tropical Asia.

86237. KALANCHOE VERTICILLATA S. Elliott.

An erect herb a foot high with terete fleshy leaves, 1 to 2 inches long, tipped with three linear erect teeth and two broad reflexed teeth. The scarlet flow-ers are in terminal clusters. Native to Madagascar.

86238. DIOON EDULE Lindl. Cycadaceae.

From Vera Cruz, Mexico. Seeds purchased from Dr. C. A. Purpus. Received March 17, 1930.

Plants with a trunk up to about 6 feet high, pinnately compound leaves 3 to 5 feet long, made up of about 200 linear-lanceolate, sharp-pointed leaflets and ovoid cones 8 to 12 inches long, containing large chestnutike seeds which are roasted or boiled and eaten. Native to Mexico.

86239. PRUNUS ARMENIACA L. Amygdalaceae. Apricot.

From Wellington, New Zealand. Seeds and scions presented by J. A. Campbell, Di-rector of the Horticulture Division. Re-ceived March 19, 1930.

Roxburg Red.

86240 to 86263. CORYLUS spp. Betulaсеяе.

om Berlin-Baumschulenweg, Plants presented by L. Spath. March 19, 1930. From Germany. Received

March 10, 2001 86240 to 86262. CORYLUS AVELLANA L, Filbert.

86240. The normal form.

86241. Variety aurea.

86242. Variety multiflora.

86240 to 86263-Continued. 86243. Variety pendula.

86244. Variety urticifolia.

86245. Variety Barcelonaer von Loddiges.

86246. Variety Blumberger Zellernuss.

86247. Variety Buttners Zellernuss.

86248. Variety Cosford.

86249. Variety Daviana.

86250. Variety Fichtwerdersche Zellernuss.

86251. Variety Gubener Barcelonaer.

86252. Variety Gubener Zellernuss.

86253. Variety Gunslebener Zellernuss.

86254. Variety Gustavs Zellernuss.

86255. Variety Hallische Riesennuss.

86256. Variety Kaiserin Eugenia.

86257. Variety Kunzemullers Zellernuss.

86258. Variety Kurzhullige Zellernuss.

86259. Variety Minnas Zellernuss.

86260. Variety Neue Riesennuss.

86261. Variety Prolifique a coque serree.

86262. Variety Weisse Lambertanuss.

86263. CORYLUS COLURNA L. Turkish hazel.

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

For previous introduction see No. 72888.

- 86264. SACCHARUM OFFICINARUM L. Poaceae. Sugarcane.
- rom Porto Rico. Cuttings presented by Nel T. Cook, Insular Experiment Station. Received March 26, 1930. From

86265. OLEARIA ARGOPHYLLA (Labill.) F. Muell. Asteraceae.

From Richmond, Australia. Seeds pre-sented by F. H. Baker. Received March 27, 1980.

A tree 20 to 25 feet high, emitting a strong musky odor. The alternate, ovate to lanceolate, entire or denticulate leaves, 3 to 5 inches long, are reticulate above and clothed with silvery silky hairs beneath. The small bluish white asterlike flower heads are in large terminal corymbs. It is native to Australia.

- 86266 to 86271. VITIS VINIFERA L. VI-· taceae. European grape.
- From Vaprio d'Adda, Italy. Cuttings pre-sented by Luigi Pirovano. Received March 8, 1930.

86266. Citretello.

86267. F. P. 27. Vilmeria.

86268. Mon. d'Alexandria.

86269. Mon. Deludda.

86270. Pirovano.

86271. Sultana blanca.

86272 to 86277. CITRUS spp. Rutaceae.

From Sicily. Scions collected by Dr. H. S. Fawcett, University of California. Re-ceived March 20, 1930.

86272. CITRUS NOBILIS DELICIOSA (Ten.) Swingle. Mandarin orange.

No. 67. Lentini, Sicily. A good type, fairly seedy.

- 86273 to 86277. CITRUS SINENSIS (L.) OS-Orange. beck.
 - 86273 to 86275. From Lentini, Sicily. Collected in the orchard of Brogna Guiseppe.
 - 86273. No. 62. Variety Mori. Most of the fruits are blood red both inside and outside, and about 60 inside and ourside, and about 60 per cent of the fruits are seedless. This is considered their best variety by the Sicilians. best

86274. No. 63. Variety Mori. Fruits from a tree with an unusual amount of blood color.

- 275. No. 64. Variety Torocco. Fruits blood red inside, but not on the outside; a very good qual-ity, but the tree is smaller than most other varieties here and does not been heavily. 86275. not bear heavily.
- 86276. No. 65. Francefonte, Sicily. Va-riety Torocco. A different strain and the color is differently placed from that of No. 64 [No. 86275].
- 277. No. 66. Lentini, Sicily. Variety Calabrise. A late, oval orange with few seeds; considered the best of the Brondo class. In shape, color, and texture it seems to be very like the California Valencia. 86277.
- 86278. PENNISETUM BENTHAMI Steud. Poaceae. Grass.
- rom Casteau, Belgian Congo, Africa. Seeds presented by the Director, Outil-lage Agricole. Received March 28, 1930. From

A coarse grass 6 to 8 feet high with lanceolate leaves. 2 to 3 feet long, and spikes a foot long of dull tawny flowers. Native to the Congo region in Africa, where it is used as a forage plant.

For previous introduction see No. 62915.

- 86279 to 86400.
- From Persia and the Union of Socialistic Soviet Republics. Seeds collected by W.
 E. Whitehouse, agricultural explorer, Bureau of Plant Industry. Received March 5, 1930.

86279 to 86304. From Persia.

- 86279 to 86282, ALLIUM CEPA L. Lilia-Onion.
 - 86279. No. 86. From a bazaar at Kashan, October 15, 1929. One of the best onions raised in Persia.
- 86280. No. 3280. No. 152. Damghan, Novem-ber 8, 1929. Locally grown seed. 86281. No. 114. Tehran, Novem-ber 2, 1929. Locally grown seed. •86282. No. 153. Samnan, November 9, 1929. Locally grown seed.

86283. ALLIUM sp. Liliaceae. Onion.

No. 128. *Tarch.* Tehran, November 2, 1929. A leafy vegetable eaten raw or cooked. The narrow leaves are 8 to 10 inches long.

86279 to 86400-Continued.

- 86284 to 86302. A MYGDALUS spp. Amygdalaceae.
 - 36284 to 86293. AMYGDALUS COM-MUNIS L. (Prunus amygdalus Stokes). Almond.
 - 86284. No. 48. Tabriz, October 28, 1929. Gift of a Swedish missionary. These almonds are especially noted for their thin shells, which are easily cracked with the fingers.
 - 86285. No. 76. Agda, October 12, 1929. Locally grown seed.
 - 86286. No. 77. Ispahan, October 14, 1929. A variety with bitter seed, from seedling trees.
 - 86287. No. 78. Ispahan, October 14, 1929. Almonds with sweet kernels, from seedling trees growing around the city.
 - 86288. No. 79. Yezd, October 12, 1929. Almonds with sweet kernels, from seedling trees growing in near-by villages.
 - 86289. No. 80. Sultanabad, October 19, 1929. Almonds with sweet kernels, from seedling trees growing in near-by villages.
 - 86290. No. 110. Tehran, November 2, 1929. Almonds with sweet kernels, from seedling trees growing in near-by villages.
 - 86291. No. 111. Tehran, November 2, 1929. Papershelled almonds similar to No. 48 (No. 86284).
 - 86292. No. 160. Samnan, November 9, 1929. Almonds with sweet kernels from seedling trees. Almonds from this place are said to be the best in Persia.
 - 86293. No. 161. Samnan, November 9, 1929. Small papershelled almond, grown locally. Similar to No. 48 (No. 86284).
 - 86294 to 86301. AMYGDALUS PERSICA L. (Prunus persica Stokes). Peach.
 - 86294. No. 46. Tehran, September 29, 1929. A seedling.
 - 86295. No. 81. Ispahan, October 14, 1929. From seedling trees growing in gardens of near-by villages.
 - 86296. No. 82. Agda, October 12, 1929. Locally grown seed from seedling trees.
 - 86297. No. 83. Tehran, October 30, 1929. Fruits 2 to 3 inches in diameter. (Freestone in shape and in appearance like the Elberta.) Flesh yellow tinged with red around the pit.
 - 86298. No. 109. Tehran, November 2, 1929. From seedling trees growing in gardens of the city.
 - 86299. No. 141, Chimron, November 4, 1929. From locally grown seedling trees.

86279 to 86400-Continued.

- 86300. No. 309. Agda, November 20, 1929. From locally grown seedling trees.
- 86301. No. 310. Agda, November 20, 1929. From a seedling tree.
- 86302. A MYGDALUS SPINOSISSIMA Bunge. Wild almond.
- No. 308. Agda, November 20, 1929. From the near-by hills.
- 86303. ANETHUM GRAVEOLENS L. Apiaceae. Dill.
- No. 118. Shoveed. Tehran, November 2, 1929. A leafy vegetable which is cooked and eaten with rice.
- 86304. BETA VULGARIS L. Chenopodiaceae. Beet.
- No. 126. Tehran, November 2, 1929. A variety grown locally.
- 86305. BETA VULGARIS L. Chenopodiaceae. Beet.
- No. 312. Tashkent, Turkestan, August 14, 1929. A variety grown locally.
- 86306. BRASSICA OLERACEA CAPITATA L. Brassicaceae. Cabbage.
- No. 124. Tehran, Persia, November 2, 1929. A variety grown locally.
- 86307. BRASSICA OLERACEA CAPITATA L. Brassicaceae. Cabbage.
- No. 137. Tehran, Persia, November 2, 1929. A variety grown locally.
- 86308. BRASSICA sp. Brassicaceae.

No. 136. Shalghan. Tehran, Persia, November 2, 1929.

86309, CARUM CARVI L. Apiaceae.

Caraway. No. 318. Tashkent, Turkestan, August,

1929.

86310. CICER ARIETINUM L. Fabaceae. Chickpea.

No. 87. Nokhood. Kasvin, Persia, September 28, 1929. Said to be one of the best varieties grown in Persia.

- 86311 to 86321. CITBULLUS VULGARIS Schrad. Cucurbitaceae. Watermelon.
 - 86311. No. 99. Alma Alta, Turkestan, August 22, 1929. A variety grown locally.
 - 86312. No. 33. Kaskelen, Turkestan, August 25, 1929. A small lightgreen watermelon with red flesh; very seedy and of fair quality.
 - 86313. No. 34. Kaskelen, Turkestan, August 29, 1929. A small lightgreen watermelon with dark-green stripes, light-red flesh of fair quality, and numerous seeds.
 - 86314. No. 39. Frunze, Turkestan, August 26, 1929. A small round light-green watermelon with stripes scarcely discernible; the sweet pink flesh is of fair quality.
 - 86315. No. 40. Frunze, Turkestan, August 26, 1929. A small round watermelon, mottled light-green color, covered with dark-green stripes which narrow at the apex; the sweet pink fiesh is of fair quality.

86279 to 86400-Continued.

- 86316. No. 41. Frunze, Turkestan, August 26, 1929. A fairly large light-green watermelon with darkgreen stripes, thin rind, and pink, sweet, juicy fiesh of fair quality.
- 86317. No. 42. Near Damghan, Persia, September 20, 1929. A watermelon with red seeds.
- **36318.** No. 43. Ursatieyskaya, Turkestan, September 10, 1929. A very large watermelon, 12 to 15 inches long and 12 inches wide, but of poor quality and coarse texture.
- 86319. No. 85. *Hindyvarneh.* Kesvin, Persia, September 28, 1929. A moderately large round light-green variety with dark-green stripes, sweet very juicy pink flesh of excellent quality, and a thin rind; considered the best watermelon in Persia.
- 86320. No. 102. Alma Ata, Turkestan, September 22, 1929.
- 86321. No. 104. Frunze, Turkestan, August 27, 1929. A small round light-green watermelon with distinct thin stripes and sweet juicy pink flesh of fair quality.
- 86322. CORIANDRUM SATIVUM L. Apiaceae. Coriander.

No. 122. Geshnidje. Tehran, Persia, November 2, 1929. A leafy vegetable whose leaves are used both cooked and raw.

- 86323 to 86338. CUCUMIS MELO L. Cucurbitaceae. Melon.
 - 86323. No. 31. Near Alma Ata, Turkestan, August 22, 1929.
 - 86324. No. 32. Kaskelon, Turkestan, August 25, 1929. A small yellow oblong oval melon of fair quality.
 - 86325. No. 35. Kaskelon, Turkestan, August 25, 1929. A long narrow green melon with orange-colored flesh of good quality.
 - 86326. No. 36. Kaskelon, Turkestan, August 25, 1929. A large yellow melon with cream-colored flesh of good quality.
 - 86327. No. 37. Frunze, Turkestan, August 26, 1929. A medium-sized cream-colored melon of fair quality, with white flesh, tinged with green.
 - 86328. No. 38. Frunze, Turkestan, August 26, 1929. A large roundish oval melon with moderately juicy cream-colored flesh of good quality.
 - 86329. No. 97. Alma Ata, Turkestan, August 22, 1929. A small roundish oval firm melon with juicy cream to orange-colored flesh. The rind is moderately thick and the seeds are like those of an apple.
 - 86330. No. 98. Alma Ata, Turkestan, August 22, 1929.
 - 86331. No. 100. Alma Ata, Turkestan, August 22, 1929.
 - 86332. No. 113. Tehran, Persia, November 2, 1929. A small early melon of fair quality.
 - 86333, No. 147, Ayyanki, Persia, November 6, 1929. A large oval yellow melon, heavily netted, 12 to 14 inches long, but somewhat variable in size; the firm crisp juicy fiesh is cream to orange in color; rind mod-

86279 to 86400-Continued.

erately thin. The season is from June 15 to October 15, and the melon will keep in storage until December.

- 86334. No. 148. Ayvanki, Persia, November 6, 1929. A large greenish yellow oval melon, 12 to 14 inches long, heavily netted with gray netting. The firm julcy cream to yellow-colored flesh is of good quality.
- 86335. No. 167. Gorgob. Ispahan Road, Tehran, Persia, November 15, 1929. A large light-yellow to creamcolored melon covered with a heavy gray netting. The firm, juicy, finetextured flesh is cream colored and of excellent quality.
- 86336. No. 168. Damghan, Persia, November 8, 1929. In shape and appearance this is similar to cantaloupes grown in America.
- 86337. No. 173. Ispahan Road, Tehran, Persia, November 15, 1929. A medum to small yellowish green oval melon with cream-colored flesh of fair quality.
- 86338. No. 84. Gorgob. Ispahan Road, Tehran, Persia, October 2, 1929. A large lightyellow to cream-colored melon covered with a heavy gray netting. The firm, juicy, fine-textured flesh is cream colored and of excellent quality.
- 86339. CUCUMIS SATIVUS L. Cucurbitaceae. Cucumber.
- No. 125. Tehran, Persia, November 2, 1929.
- 86340. CUCUMIS SATIVUS L. CUCUPItaceae. Cucumber.

No. 130. Kyar sabs (green cucumber). Tehran, Persia, November 2, 1929.

86341. CUCURBITA MOSCHATA Duchesne. Cucurbitaceae. Cushaw.

No. 120. Tehran, Persia, November 2, 1929.

- 86342. CUCURBITA PEPO L. CUCUrbitaceae. Pumpkin.
- No. 117. Tehran, Persia, November 2, 1929. Locally grown.
- 86343. CUCURBITA PEPO L. Cucurbitaceae. Pumpkin.

No. 166. Rafsinjan, Persia, November 18, 1929. Originally grown at Reshat, Persia.

86344. CYDONIA OBLONGA Mill. (Pyrus cydonia L.). Malaceae. Quince.

No. 298. Vooadyl, Turkestan, August 6, 1929. Collected by H. I., Westover in the village of Vooadyl, 15 miles south of Fergana.

86345. DAUCUS CAROTA L. Apiaceae. Carrot.

No. 129. Havidje. Tehran, Persia, November 2, 1929.

86346 and 86347. JUGLANS REGIA L. Juglandaceae. Persian walnut.

Moderately large walnuts with light kernels, from trees apparently fairly hardy and drought resistant.

86346. No. 139. Damovand, near Tehran, Persia, November 4, 1929.

86279 to 86400—Continued.

86347. No. 140. Chimron, near Tehran, Persia, November 4, 1929.

86348. LACTUCA SATIVA L. Cichoriaceae. Garden lettuce.

No. 134. Kahu. Tehran, Persia, November 2, 1929.

86349. LAGENARIA LEUCANTHA (Duchesne) Rusby (L. vulgaris Seringe). Cucurbitaceae. Calabash gourd.

No. 131. Tehran, Persia, November 2, 1929.

86350. LEPIDIUM SATIVUM L. Brassicaceae. Garden cress.

No. 133. Taratizeh. Tehran, Persia, November 2, 1929. Used as a salad and eaten with rice.

86851. LYCOPERSICON ESCULENTUM Mill. Solanaceae. Tomato.

No. 121. Tehran, Persia, November 2, 1929.

86352. MALUS SYLVESTRIS Mill. (Pyrus malus L.). Malaceae. Apple.

No. 101. Alma Ata, Turkestan, August 23, 1929. A wild apple collected on a mountain side near Alma Ata; indigenous to this region.

86353 to 86362. MEDICAGO SATIVA L. Fabaceae. Alfalfa.

86353. No. 112. Tehran, Persia, November 2, 1929.

86354. No. 143. Chimron, Persia, November 4, 1929.

86355. No. 154. Damghan, Persia, November 8, 1929.

86356. No. 155. Samnan, Persia, November 9, 1929.

86357. No. 165. Rafsinjan, Persia, November 19, 1929.

86358. No. 169. Dilijan, Persia, November 16, 1929.

86359. No. 171. Ardekan, Persia, November 17, 1929.

86360. No. 172. Yezd, Persia, November 20, 1929.

86361. No. 176. Agda, Persia, November 21, 1929.

86362. No. 307. Assadabad, Persia, November 24, 1929.

86363. PETROSELINUM HORTENSE Hoffm. Apiaceae. Parsley.

No. 115. Jaffarri. Tehran, Persia, November 2, 1929. The leaves are cooked with other food and eaten.

86364 to 86367. PHASEOLUS VULGARIS L. Fabaceae. Common bean.

Grown locally around Kasvin, Persia.

86364. No. 88. October 29, 1929. A long narrow cream-colored bean.

- 86365. No. 89. October 28, 1929. Red, splashed-cream colored bean.
- 86366. No. 90. October 28, 1929. A red bean.

86367. No. 91. October 28, 1929. A small white bean.

86868 to 86379. PISTACIA VERA L. Anacardiaceae. Pistache.

86279 to 86400-Continued.

- 86368. No. 49. From Bueen, a small village near Kasvin, Persia, September 28, 1929.
- 86369. No. 50. Agda, Persia, October 12, 1929. Nuts locally grown and sent as they are sold, without sorting.
- 86370. No. 51. Nain, Persia, October 12, 1929. Locally grown nuts from the gardens of Nain.
- 86371. No. 52. Ardekan, Pezsia, October 5, 1929. Nuts of average quality as grown in gardens of Ardekan.
- 86372. No. 53. Rafsinjan, Persia, October 8, 1929. Locally grown in near-by villages; selected by a Persian grower.
- 86373. No. 54. Rafsinjan, Persia, October 8, 1929. Grade MM No. 1. Large white nuts selected by a Persian grower, which are easily hulled by hand; these represent the best grade exported to Germany and America.
- 86374. No. 55. Rafsinjan, Persia, October 8, 1929. Locally grown seed.
- 86375. No. 56. Rafsinjan, Persia, October 8, 1929. Grade M No. 1. Selected nuts which are hulled with fails and washed. The nuts are not bright colored and are the second-best grade exported to America.
- 86376. No. 57. Hematabad, Persia, October 8, 1929. Locally grown seed. Scions of this tree were sent in under No. 83734.
- 86377. No. 151. Damghan, Persia, November 8, 1929. From trees of which scions were sent in under Nos. 82028-82031.
- 86378. No. 157. Damghan, Persia, November 8, 1929.
- 86379. No. 170. Rafsinjan, Persia, November 19, 1929. Orchard run from which M. R. No. 1 grade nuts were sorted.
- 86380 to 86390. PRUNUS spp. Amygdalaceae.
 - 86380 to 86387. PRUNUS ARMENIACA L. Apricot.
 - Seeds grown locally.
 - 86380. No. 71. Ispahan, Persia, October 14, 1929. Nuts with bitter kernels.
 - 86381. No. 72. Ispahan, Persia, October 14, 1929. Nuts with sweet kernels.
 - 86382. No. 73. Yezd, Persia, October 10, 1929. Nuts with sweet kernels.
 - 86383. No. 74. Rafsinjan, Persia, October 8, 1929. A mixture of bitter and sweet-kerneled seed from fruit grown in local gardens.
 - 86384. No. 75. Agda, Persia, October 12, 1929. Nuts with sweet kernels.
 - 86385. No. 158. Damghan, Persia, November 11, 1929.
 - 86386. No. 159. Samnan, Persia, November 9, 1929.
 - 86387. No. 306. Dilijan, Persia, Novemb r 22, 1929.

86279 to 86400-Continued.

86388. PRUNUS CERASIFERA DIVARICATA (Ledeb.) C. Schneid. Plum.

No. 106. Turkestan, August 11, 1929. wild plum collected at a railway station.

86389. PRUNUS CERASUS L. Sour cherry.

No. 142. Chimron, Persia, November 4, 1929. From trees growing in local gardens.

86390. PRUNUS DOMESTICA L. Common plum.

No. 47. Tehran, Persia, September 28, 1929. A medium-sized yellow-green plum, somewhat like the green 28, gage in appearance.

86391 and 86392. RAPHANUS SATIVUS L. Radish. Brassicaceae.

Seeds grown locally.

86391. No. 132. 7 vember 2, 1929. Tehran, Persia, No-

86392. No. 319. August, 1929. Tashkent, Turkestan,

86393. SATUREJA HORTENSIS L. Mentha-Summer savory. сене.

No. 116. Marzeh. mber 2, 1929. Tehran, Persia, No-Grown locally in vember gardens.

gargens. 86394. SOLANUM MELONGENA L. Solana-Eggplant.

No. 119. Tehran, Persia, November 2, 1929. A long and narrow variety which is grown locally and eaten with rice.

86395. SPINACIA OLERACEA L. Chenopodi-aceae. Common spinach.

No. 127. Tehran, Persia, November 2, 1929

86396 and 86397. TRIFOLIUM RESUPINATUM L. Fabaceae. Persian clover.

Seed grown locally.

86396. No. 107. ber 28, 1929. Tehran, Persia, Octo-

86397. No. 156. S vember 9, 1929. Semnan, Persia, No-

86398. TRIGONELLA FOENUM-GRAECUM Fenugreek. Fabaceae.

No. 138. Shamballileh. Tehran, sia, November 2, 1929. A leafy table used by the natives as food. Tehran, Per-A leafy vege-

86399. ZEA MAYS L. Poaceae. Corn.

No. 123. Tehran, Persia, November 2, 1929.

86400. PHASEOLUS VULGARIS L. Fabaceae. Common bean.

From Arpachi, Turkestan.

- 86401. LUPINUS PILOSUS Murray. Fabaceae. Lupine.
- From Perth, Western Australia. Seeds presented by C. A. Gardner, Government Botanist, Department of Agriculture, March 24, 1930.

In Western Australia the naturalized blue lupines have proved to be of inesti-mable value to the pastoralist, particularly the sheep farmer. Stock should not be per-mitted access to lupines during the young stages of growth, since grazing is fatal to the young plants. If there is an abun-

86401-Continued.

dance of other green food, stock will not eat the lupine in a green condition. In the summer when the seeds have fallen, it is estimated that a lupine paddock will carry esumateu that a lupine paddock will carry up to four sheep per acre and fatten them. Not only is the lupine valuable as a fodder plant but also as a soil renovator and fertilizer. Lupines succeed best in light sandy soils, provided the bacteria are present present.

For previous introduction see No. 39198.

- 86402. EUCALYPTUS MARGINATA J. E. Smith. Myrtaceae.
- From Perth, Western Australia. Seeds pre-sented by S. L. Kessell, Conservator of Forests. Received March 25, 1930.

The best form of Jarrah, from gravelly ironstone ridges in the Darling Range, about 25 miles from the coast. An Austra-lian shrub or small tree often clear of branches for two-thirds of its height. The hard, durable wood is used for timber, piles, and railway ties. The tree will grow in a great variety of soils, but prefers moist, well-drained situations.

For previous introduction see No. 75636.

86403 to 86519.

From Japan. Seeds collected by P. H. Dor-sett and W. J. Morse, agricultural ex-plorers, Bureau of Plant Industry. Received March 17, 1930.

86403, DAUCUS CAROTA L. Apiaceae. Carrot.

No. 3976. Kyoto. Hon beni. ninjin. A large, long, red carrot. Kintoki

86404 to 86519. SOJA MAX (L.) Piper (Gly-cine hispida Maxim.). Fabaceae. Soybean.

Nos. 86404 to 86409 were obtained from the seed and nursery farm, near Keijo, Chosen, January 31, 1930.

- 404. No. 3772. Chantan Shirome. Medium sized, oval, glossy light yel-low, with pale hilum. Used for bean curd, miso, and natto. 86404.
- 86405. No. 3773. Chantan Chame. Me-dium sized, oval, glossy yellow, with large-brown hilum. Used for bean curd, miso, soy sauce, and natto.
- 86406. No. 3774. Ekizan. Medium sized, oval, glossy yellow, with pale hilum. Used for bean curd, miso, and natto.
- 86407. No. 3775. Kozu. Medium sized, oval, glossy light yellow, with pale hilum. Used for bean curd, miso, and natto.
- 86408. No. 3776. Kongo. Medium-large, oval, glossy yellow, with pale hilum. Used for bean curd, miso, and natto.
- 86409. No. 3777. Rensen Chame. Me-dium sized, oval, glossy yellow, with light-brown hilum. Used for bean curd, miso, and natto.
- 410. No. 3794. Sodefuri. Purchased from a small store in Nakano, Tokyo Prefecture, February 7, 1930. Medium sized, oval, greenish yellow, with black hilum. Used to a very considerable extent in the Tokyo Prefecture trucking sections as a 86410. No. 3794. green vegetable bean.

86403 to 86519—Continued.

- 86411. No. 3795. Guiuchi Mame (Devil Chaser bean). Purchased from a small store in Nakano, Tokyo Prefecture, February 5, 1930. Medium sized, oval, yellow, with large darkbrown hilum. Used when boiled with other vegetables and roasted.
- 86412. No. 3796. Hirakuro daizu. Purchased from the food department of a store in Yokohama, February 7, 1930. Medium large, much flattened, black. Very similar to Flat King (No. 17252). Used as a boiled bean in vegetable mixtures and as a boiled bean in sirup.
- 86413. No. 3797. Aodaizu. Obtained from a store in Karmata, February 7, 1930. Medium sized, oval, greenish yellow, with black hilum. Resembles very closely the Sodefuri variety, No. 3794. Used as a green vegetable bean.
- 86414. No. 3798. Obtained from a market in Sourchun, Chulla N.ndo, February 7. 1930. Sample of mixed native Korean varieties.
- 86415. No. 3799. Obtained from a market in Soonchun, Cbulla Nando, February 6, 1930. Medium small, oval, slightly flattened, brown, with concentric black rings. Selected out of sample No. 3798.
- 86416. No. 3800. Aodatryu. Obtained from the Saitama Ken Agricultural Experiment Station, Urawa, February 8, 1930. Medium sized, greenish yellow, oval, with black hilum. Used as a green vegetable bean.
- 86417. No. 3801. Aoshoryu. Obtained from the Saitama Ken Agricultural Experiment Station, Urawa, February 8, 1930. Medium sized, oval, greenish yellow, with black hilum. Used as a green vegetable bean.
- 86418. No. 3848. Nakateosaya (medium large pod). Obtained from the Tokyo Prefecture Experiment Station, Tachikana, Tokyo, February 15, 1930. Medium large, oval, yellow, with light-brown hilum. Used as an early green vegetable bean in Tokyo Prefecture.
- 86419. No. 3850. Kurochuryu (black middle side). Obtained from the Karafuto (Sakhalin Island) Experiment Institute and Department of Agriculture, Toyohara, Karafuto, February 17, 1930. Medium sized, slightly flattened, black. A very early sort grown on Sakhalin Island.

Nos. 86420 to 86517 were obtained from the Ou Experiment Farm, Imperial Japanese Department of Agriculture and Forestry, Omagari, February 14, 1930.

- 86420. No. 4001. *Rikuu No.* 28. Medium sized, nearly round, glossy yellow, with russet-brown hilum.
- 86421. No. 4002. *Rikuu No. 30.* Medium sized, oval, glossy yellow, with brown hilum.
- 86422. No. 4003. *Rikuu No.* 29. Medium sized, oval, glossy yellow, with orown hilum.
- 86423. No. 4004. Kurosayakin. (Black pod gold.) Medium small, oval, light yellow, with light-brown hilum. 61034-31-7

- 86403 to 86519-Continued.
 - 86424. No. 4005. Hayata Kiya. Medium sized, oval, light yellow, with a light-brown hilum.
 - 86425. No. 4006. Mizukuguri. Medium small, oval, glossy, light yellow, with brown hilum.
 - 86426. No. 4007. Rikuu No. 3. Medium: sized, oval, glossy, light yellow, with. light-brown hilum.
 - 86427. No. 4008. Rikuu No. 6. Medium a sized, round, light yellow, with palebrown hilum.
 - 86428. No. 4009. *Rikuu No. 11*. Medium sized, oval, deep glossy yellow, with large dark-brown hilum. Slightly: mottled with brown.
 - 86429. No. 4010. Rikuu No. 8. Mediums sized, oval, deep glossy yellow, with large dark-brown hilum.
 - 86430. No. 4011. *Rikuw No. 9.* Medium³ sized, oval, glossy yellow, with large dark-brown hilum.
 - 86431. No. 4012. Rikuu No. 4. Mediums sized, oval, glossy yellow, with brown hilum; slightly mottled with brown.
 - 86432. No. 4013. Rikuu No. 25. Medium sized, nearly round, deep glossy yellow, with large dark-brown hilum.
 - 86433. No. 4014. *Rikuu No. 6.* Medium large, oval, glossy light yellow, with light-brown hilum.
 - 86434. No. 4015. Rikuu No. 17. Mediumsmall, oval, light yellow, with palebrown hilum.
 - 86435. No. 4016. Rikuu No. 22. Medium sized, oval, yellow (glossy) with palebrown hilum.
 - 86436. No. 4017. *Rikuu No.* 7. Small, oval, glossy yellow, with brown: hilum. Should be of value for sprouts.
 - 86437. No. 4048. Rikuw No. 15. Medium large, oval, glossy yellow, with palehilum.
 - 86438. No. 4019. Rikuu No. 18. (Station-Bred No. 18.) Large, oval, glossy yellow, with russet-brown hilum.
 - 86439. No. 4020. *Rikuu No.* 24. Mediumsized, oval, glossy yellow, with brown hilum.
 - 86440. No. 4021. *Rikuu No. 21.* (Station Bred No. 21.). Medium large, oval, glossy greenish yellow, with darkbrown hilum.
 - 86441. No. 4022. Shiheigaihakubi. (Shiheigai white.) Medium sized, oval, yellow, with pale-brown hilum.
 - 86442. No. 4023: *Rikuu No. 20*. Médium sized, oval, light yellow, with brown hilum.
 - 86443: No. 4024. Soroshi. Medium: sized, oval, yellow, with pale hilum.
 - 86444: No. 4025. Rikuu No. 19. (Station, Bred No. 19.) Medium sized, nearly round, glossy yellow, with largebrown hilum.
 - 86445. No. 4026. Koshurei hakubi (Koshurei white-eye). Medium sized, oval, glossy yellow, with pale hilum.
 - 86446. No. 4027. Daruma No. 2. Medium sized, oval, glossy.yellow, with brown hilum.

86403 to 86519—Continued.

- 86447. No. 4028. Koshurci No. 224. Medium sized, oval, light yellow, with pale hilum.
- 86448. No. 4029. Asahi No. 60. (Sun No. 60.) Medium sized, oval, light yellow, with dark-brown hilum.
- .86449. No. 4030. Shiheiga Kuroheso. (Shiheiga Blackeye.) Medlum sized, oval, light glossy yellow, with black hilum.
- 86450. No. 4031. Kiihoju. (Yellow jewel.) Medium sized, nearly round, yellow, with pale bilum.
- 86451. No. 4032. Mejiro No. 1. (Whiteeye No. 1.) Medium large, oval, deep yellow, with pale hilum.
- .86452. No. 4033. Koshurei No. 35. Medium sized, oval, light yellow, with light-brown hilum.
- 86453. No. 4034. Kaigen Shirobana. Medium sized, oval, glossy light yellow, with pale-brown hilum.
- 86454. No. 4035. Shokuroheso. (Small blackeye.) Medium small, oval, glossy yellow, with brownish black hilum.
- 86455. No. 4036. Hotenhakubi. (Mukden White.) Medium sized, oval, light yellow, with pale hilum.
- 86456. No. 4037. Kakukwazoshi. Medium sized, oval, glossy yellow, with pale hilum.
- **86457.** No. 4038. *Kazusa*. Medium sized, nearly round, light glossy yellow, with russet-brown hilum.
- 86458. No. 4039. Shirohachikoku No. 2. Large, oval, yellow, with lightbrown hilum.
- (286459. No. 4040. Shiroke No. 9. (Whitehair No. 9.) Medium large, oval, glossy yellow, with light-brown hilum.
- 86460. No. 4041. Kefuri No. 1. Mediumsized, oval, glossy deep yellow, with large dark-brown hilum.
- **:86461.** No. 4042. *Karihatakiya*. Medium small, oval, glossy yellow, with pale to dark-brown hilum.
- **(86462.** No. 4043. *Kimusume*. Medium small, nearly round, greenish yellow, with russet-brown hilum.
- (36463, No. 4044. Bonhaku No. 55. (Summer White No. 55.) Medium sized, oval, light yellow, with lightbrown hilum.
- **186464.** No. 4045. *Ou No. 1.* Medium sized, oval, deep yellow, with dark-brown hilum.
- 86465. No. 4046. *Itachi.* (Mink.) Medium small, oval, yellow, with russet-brown hilum.
- 86466. No. 4047. *Itachikawa*. (Mink skin.) Medium small, nearly round, greenish yellow, with russet-brown hilum.
- 86467. No. 4048. Ou No. 2. Medium sized, oval, glossy yellow, with brown hilum.
- 86468. No. 4049. Gionbo No. 3. Medium small, oval, yellow, with palebrown hilum.

86403 to 86519-Continued.

- 86469. No. 4050. Ginnan Gingko. Medium sized, oval, yellowish green, with russet-brown hilum.
- 86470. No. 4051. Meshiro No. 3. (Whiteeye No. 3.) Medium small, oval, light yellow, with pale-brown hilum.
- 86471. No. 4052. Dekisugi. (Over yield.) Medium sized, nearly round, yellow, with large brown hilum.
- 86472. No. 4053. Ou No. 4. Medium large, nearly round, deep glossy yellow, with large russet-brown hilum.
- 86473. No. 4054. *Ou No. 6.* Medium large, oval, glossy greenish yellow, with dark-brown hilum.
- 86474. No. 4055. Okuechigo. Medium small, oval, glossy yellow, with brown hilum.
- 86475. No. 4056. Onihadaka. (Smooth Devil.) Very small, oval, glossy yellow, with brown hilum.
- 86476. No. 4057. Shirohana No. 1. (White flower No. 1.) Medium sized, oval, light yellow, with lightbrown hilum.
- 86477. No. 4058. *Tochiki*. Međium large, oval, light yellow, with pale hilum.
- 86478. No. 4059. Rangi. Medium sized, oval, glossy light yellow, with very light-brown hilum.
- 86479. No. 4060. Ishikarishiro. (Ishikari White.) Medium small, oval, glossy yellow, with light-brown hilum.
- 86480. No. 4061. *Miyashiro* (shrine). Medium sized, oval, yellow, with pale hilum.
- 86481. No. 4062. *Tamatsukuri*. Medium sized, ovai, yellowish green, with slate-black hilum.
- 86482. No. 4063. Toyonaga. Medium sized, oval, glossy yellow, with brown hilum.
- 86483. No. 4064. *Oyachi*. Medium large, oval, slightly glossy, yellow, with dark-brown hilum.
- 86484. No. 4065. Shakkinnashi. Medium sized, oval, light yellow, with pale hilum.
- 86485. No. 4066. Oyachi No. 1. Medium sized, oval. yellow, with light to dark-brown hilum.
- 86486. No. 4067. Koshiro (small white). Small. oval, light yellow with lightbrown hilum.
- 86487. No. 4068. Yogetsu No. 1. Medium sized, oval, light yellow, with russet-brown hilum.
- 86488. No. 4069. Akita No. 1. Medium sized, nearly round, glossy deep yellow, with large dark-brown hilum.
- 86489. No. 4070. Kuromeosaya (blackeye large pod). Medium large, oval, glossy deep yellow, with large brown hilum.
- 86490. No. 4071. *Shirohadaka* (smooth white). Medium small, nearly round, glessy yellow, with russetbrown hilum.

86403 to 86519—Continued.

- **86491.** No. 4072. Chotan. Mediumsized, nearly round, glossy yellow, with pale hilum.
- 86492. No. 4073. Kohachigatsu. Medium sized, oval, glossy yellow, with large dark-brown hilum.
- 86493. No. 4074. Asahi (Sun). Medium large, nearly round, glossy yellow, with russet-brown hilum.
- 86494. No. 4075. *Takiya*. (Early Takiya.) Medium sized, oval, light yellow, with pale-brown hilum.
- 86495. No. 4076. *Tsurunoko.* (Young crane.) Large, oval, light yellow, with very light-brown hilum. Used for food.
- 86496. No. 4077. *Gindaizu*. (Silver.) Medium sized, oval, yellow, with light-brown hilum.
- 86497. No. 4078. *Tokichi*. Medium large, oval, glossy yellow, with brown hilum.
- 86498. No. 4079. Shirotama. (White ball.) Medium large, nearly round, glossy yellow, with large russetbrown hilum.
- 86499. No. 4080. Yagi No. 1. Medium sized, nearly round, glossy deep yellow, with large dark-brown hilum.
- 86500. No. 4081. Nishitsugaruzairaishu. Medium sized, oval, glossy yellow, with pale-brown hilum.
- 86501. No. 4082. Shiryukii. (Four seeds yellow.) Medium small, round, yellow, with pale-brown hilum.
- 86502. No. 4083. Kaigenshirohana. Medium sized, oval, light glossy yellow, with pale hilum.
- 86503. No. 4084. *Taniki*. Medium large, nearly round, glossy yellow, with large dark-brown hilum.
- 86504. No. 4085. Chinko. Medium sized, oval. deep glossy yellow, with russetbrown hilum.
- 86505. No. 4086. Akita. Medium sized, nearly round, glossy yellow, with pale hilum. This variety is extensively grown in northern Japan. Used for food purposes.
- 86506. No. 4087. Kurosaya (black pod). Medlum sized, nearly round, glossy deep yellow, with large dark-brown hilum.
- 86507. No. 4088. Kobinkatagi. Medium large, oval, deep yellow, with large dark-brown hilum.
- 86508. No. 4089. Takiya. Medium sized, oval, yellow, with light-brown hilum.
- 86509. No. 4090. Ani. (Brother.) Medium sized, nearly round, dark yellow, with large dark-brown hilum.
- 86510. No. 4091. Shirosaya. (White pod.) Medium sized, oval, light yellow, with pale hilum.
- 86511. No. 4092. Niuchan. Medium sized, oval, very light yellow, with pale hilum.
- 86512. No. 4093. Sanryuiri. (Threeseeded pod.) Medium sized, oval, light yellow, with dark-brown hilum.
- **86513.** No. 4094. Ou No. 5. Large, oval, yellow (glossy), with brown hilum.

86403 to 86519-Continued.

- 86514. No. 4095. Rikuu No. 26. Medium sized, nearly round, glossy deep yellow, with pale hilum.
- 86515. No. 4096. *Rikuu No.* 27. Medium small. nearly round, glossy light yellow, with dark-brown hilum.
- 86516. No. 4097. Aochi. (Green land.) Medium small, oval, yellowish green, with russet-brown hilum.
- 86517. No. 4098. Senbon. Medium small, oval, light yellow, with russetbrown hilum.
- brown mass. 86518. No. 4099. Wase o saya. (Early large pod.) Obtained from the Tokyo Prefecture Experiment Station, Tachikawa, February 15, 1930. Medium large, oval, yellow, with brown hilum. Used in the Tokyo Prefecture as an early vegetable bean.
- 85519. No. 4100. Kuro wase. (Early black.) Obtained from the Tokyo Prefecture Agricultural Experiment Station, Tachikawa, February 15, 1930. Medium sized, black, slightly flattened. Used as an early green vegetable bean in Tokyo Prefecture.

86520 and 86521.

- From Summit, Canal Zone. Seeds presented by J. E. Higgins, Director, Canal Zone Experiment Gardens. Received March 20, 1930.
 - 86520. ACROCOMIA SCLEROCARPA Mart. Phoenicaceae. Macauba palm.

A graceful, spiny, tropical American palm, 30 to 45 fect high, with a terminal cluster of narrow, pinnate leaves. When mature, the inside of the trunk furnishes excellent starch, equal in quality to that of the cassava plant. The leaves yield strong fiber, utilized by the natives of Paraguay for making hammocks. From the yellowish fruits, about an inch in diameter, an excellent edible oil is expressed.

For previous introduction see No. 61385.

86521. ARRABIDAEA ROTUNDATA Bur. Bignoniaceae.

A woody vine with large panicles of deep rose flowers which make a fine display of color during the dry season on the Pacific slope of the Canal Zone. The compound leaves have two coriaceous ovate leaflets, 2 to 6 inches long, covered with dense white tomentum beneath.

- 86522 to 86664. MEDICAGO SATIVA L. Fabaceae. Alfalfa.
- From the Union of Socialistic Soviet Republics. Seeds presented by the Divison of Alfalfa Investigation of the Turkestan Breeding Station. Tashkent. Turkestan, through H. L. Westover, agricultural explorer, Bureau of Plant Industry. Received March 21, 1930.
- From the District of Chimkent, Country of Syr-Darya, Kazak.

86522. No. 1793. Village of Kara-Murt. 86523. No. 1794. Village of Kara-Murt.

86524 to 86529. From the village of Kara-Murt, to the east of Chimkent.

86524.	No. 1795.	86526.	No. 1797.
86525.	No. 1796.	86527.	No. 1798.

86522 to 86664-Conti	nued.
86528. No. 1799.	86529, No. 1800
86530 to 86542. From t	he village of Tastak.
86530, No. 1801.	86537. • No. 1808.
86531. No. 1802.	86538. No. 1809.
86532. No. 1803.	86539. No. 1810.
86533, No. 1804.	86540. No. 1811.
86534, No. 1805.	86541. No. 1812.
86535, No. 1806.	86542. No. 1813.
86536, No. 1807.	
	the village of Test.
86543. No. 1814.	86546. No. 1817.
86544, No. 1815.	86547. No. 1818.
86545. No. 1816.	86548. No. 1819.
	he village of Badam,
	st of Chimkent.
86549. No. 1820.	86554. No. 1825.
86550. No. 1821.	86555. No. 1826.
86551. No. 1822.	86556, No. 1827.
86552. No. 1823.	86557. No. 1828.
86553. No. 1824.	
86558 to 86567. From t	the village of Sasik.
86558, No. 1829.	86563. No. 1834.
86559. No. 1830.	86564. No. 1835.
86560, No. 1831.	86565. No. 1836.
86561. No. 1832.	86566. No. 1837.
86562. No. 1833.	86567. No. 1838.
86568 to 86577. From th to the east of Chin	he village of Sairam, nkent.
86568. No. 1839.	86573. No. 1844.
86569. No. 1840.	86574. No. 1845.
86570. No. 1841.	86575. No. 1846.
86571. No. 1842.	86576. No. 1847.
86572. No. 1843.	86577. No. 1848.
86578 to 86606. From	the village of Doro-
feewka, to the sout	
86578. No. 1849.	86593. No. 1864.
86579. No. 1850. 86580. No. 1851	86594. No. 1865.
	86595. No. 1866. 86596. No. 1867.
86581, No. 1852.	
86582. No. 1853.	86597. No. 1868.
86583, No. 1854. 86584, No. 1855.	86598. No. 1869. 86599. No. 1870.
86584. No. 1855. 86585. No. 1856.	86600, No. 1870.
86586, No. 1857.	86601. No. 1872.
	86602. No. 1873.
86587. No. 1858. 86588. No. 1859.	86603. No. 1875.
86589. No. 1860.	86604, No. 1874.
86590. No. 1861.	86605. No. 1876.
86591. No. 1862.	86606, No. 1877.
86592. No. 1863.	50000i 110. 1011,
86607 to 86611. From	Parkent District,

- 86607 to 86611. From Parkent District, Tashkent County, Uzbek, to the southwest of Tashkent.
 - 86607. No. 1215. Village of Sukuk, to the south of Parkent.

86522 to 86664—Continued. 86608. No. 1216. Village of Teshu. 86609. No. 1225. Village the south of Tashkent. Village of Ushun, to 610. No. 1233. Village of Toy-Tube, to the south of Tashkent. 86610. 86611. No. 1271. Village of Disudruk. 86612 to 86628. From the Keless District, County of Tashkent, Uzbek, to the east of Tashkent. 86612 to 86615. Village of Ishan-Bazar, northwest of Tashkent. 86612. No. 2264. 86614. No. 2266. 86613. No. 2265. 86615. No. 2267. 86616. No. 2268. Village No. 3. 86617. No. 2269. Village No. 22. 86618. No. 2270. Villa, mune of Goloshekin. Village No. 22, com-86619 to 86621. Village No. 23. 86619. No. 2272. 86620. No. 2273. 86621. No. 2275. 86622 to 86624. Village No. 26. 86622. No. 2279. 86623. No. 2280. 86624. No. 2281. 86625. No. 2283. Village No. 24. 86626. No. 2293. Village No. 3. 86627 and 86628. Sharap-Hana, north-east of Tashkent. 86627. No. 2321. 86628. No. 2322. 86629 to 86633. From the Karatash Dis-trict, County of Tashkent, Uzbek, northeast of Tashkent. 86629. No. 2333. Village No. 24. 86630. No. 2335. Village of Kara-Bog. 86631. No. 2336. Village of Kara-Bog. 86632. No. 2337. Turbat, northeast of Tashkent. 86633. No. 2338. Turbat, northeast of Tashkent. 86634 to 86640. From the District of Keless. 86634. No. 2340. Village northeast of Tashkent. Village of Tobolino, 86635. No. 2341. Village northeast of Tashkent. Village of Tobolino, 86636 to 86638. Village of Kaufmanskoe, northeast of Tashkent. 86636. No. 2342. 86637. No. 2344. 86638. No. 2345.

> 86639. No. 2346. Village of Chicherino, northeast of Tashkent.

> 86640. No. 2347. Village of Kaplanbek, University farm.

86641 to 86664. From the District of Parkent, County of Tashkent, Uzbek, southwest of Tashkent. 86522 to 86664—Continued.

86641 to 86650. Village of Bosh-Kizil-Say.

86641.	No. 2501.	86646.	No. 2506.
86642.	No. 2502.	86647.	No. 2507.
86643.	No. 2503.	86648.	No. 2508.
86644.	No. 2504.	86649.	No. 2509.
86645.	No. 2505.	86650.	No. 2510.

 86651 to 86657. Village of Isarak, north of Parkent.
 86651. No. 2511.
 86655. No. 2515.

86652.	No. 2512.	86656.	No. 2516.
86653.	No. 2513.	86657.	No. 2517.
86654.	No. 2514.		

86658 to 86661. Village of Parkent, south of Tashkent.

86658. No. 2518. 86660. No. 2520.

86659. No. 2519. 86661. No. 2521.

- 86662 and 86663. Village of Namdanak, south of Parkent.
 - 86652. No. 2522. 86663. No. 2523.

86664. No. 2524. Village of Zarkent, south of Parkent.

86665 to 86689.

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From Darjiling, India. Seeds presented by the Curator, Lloyd Botanic Garden. Received March 15, 1930.

86665. ACTINIDIA STRIGOSA Hook. f. and Thoms. Dilleniaceae.

A woody vine, resembling A. callosa, with strigose-hispid ovate leaves 5 inches long, axillary cymes of white flowers nearly an inch across, and ovoid edible fruits. Native to India.

86666. ALLIUM VICTORIALIS L. Liliaceae. Onion.

One of the most distinct species of European Allium, with stems about 2 feet high, leaves resembling those of lily-of-the-valley, and white or greenish white flowers.

For previous introduction see No. 66434.

86667 to 86669. BERBERIS spp. Berberidaceae. Barberry.

86667. BERBERIS ANGULOSA Wall.

A handsome shrub, native of India, 4 to 5 feet high, with 1-parted and 5-parted spines, obovate spiny leaves which are whitish beneath, large solitary globose orange-yellow flowers half an inch wide, and ellipsoid red fruits.

For previous introduction see No. 79151.

86668. BERBERIS WALLICHIANA DC.

A somewhat tender evergreen barberry from temperate regions in the Himalayas, where it ascends to about 10,000 feet. The shining black-purple berries are produced in dense clusters.

For previous introduction see No. 65756.

86669. BERBERIS Sp.

86670. CALLICARPA VESTITA Wall.

86665 to 86689-Continued.

A medium-sized tree, often 30 feet high, with a thick trunk and ovate, acute leaves with silky white lower surfaces, 4 to 10 inches long. The lavender flowers are in axillary cymes. It is a native of Nepal and Sikkim, India, where it ascends to 4,000 feet.

For previous introduction see No. 47652.

86671. ERIOBOTRYA HOOKERIANA Decaisne. Malaceae.

A small, stout-branched tree with thick, leathery, oblong, sharply toothed leaves up to a foot in length; large panicles of small white flowers, and eggshaped yellow fruits about an inch long. Native to the eastern Himalayas between 6,500 and 8,000 feet altitude.

For previous introduction see No. 65252.

86672. Evodia Roxburghiana Benth. Rutaceae.

A small tree with opposite branches, trifolioiate leaves having oblanceolate to obovate leaflets 2 to 5 inches long, and dense cymes of small yellowish green flowers. Native to southeastern Asia.

86673 to 86675. FICUS spp. Moraceae. Fig.

86673. FICUS HIRTA Vahl.

A shrub or small tree with leaves 5 to 12 inches long, varying from ovate to lanceolate and entire or three lobed to five lobed. Native to south-eastern Asia.

86674. FICUS HOOKERI Miquel.

A subtropical tree with large oval leaves up to 11 inches long, native to the temperate Himalayas of northeastern India. It is of possible use as a shade tree for the warmer parts of the Gulf States and California.

For previous introduction see No. 68336.

86675. FICUS ROXBURGHII Wall.

A low spreading evergreen tree, native to India, 20 to 30 feet high, with broadly ovate, cordate, entire or toothed leaves and russet-brown or purple fruits 2 inches in diameter.

For previous introduction see No. 77952.

86676. GERBERA KUNZEANA Braun and Aschers. Asteraceae.

A herbaceous perennial with a rosette of oblong to ovate, lyrate-pinnatifid leaves 5 to 10 inches long, and bracted scapes a foot high, bearing white or pink asterlike flower heads 1 to 3 inches across. Native to temperate slopes of the Himalayas in India.

For previous introduction see No. 39017.

86677. ILEX FRAGILIS Hook. f. Aquifoliaceae. Holly.

A small tree with bright, deep-green leaves which are more membranous than any of the other Indian species, and fieshy, globular red fruits. Native to the mountains of Sikkim and Bhutan, India.

For previous introduction see No. 47697.

86678. ILEX WIGHTIANA Wall. Aquifoliaceae. Holly.

86665 to 86689-Continued.

A large tree with a trunk 6 feet in diameter, oblong-ovate coriaceous leaves 2 to 5 inches long, small umbels of minute white flowers, and smooth round berries one-fourth of an inch in diame-ter. Native to India and Ceylon.

86679. INDIGOFERA Buch.-Ham. DOSUA Fabaceae. Indigo.

A low shrub with woody branches, covered with short, gray or brownish pu-bescence. The leaves, 1 to 3 inches long, bear leaflets less than half an inch long, which are dull green above and glaucous below. The racemes of bright-red flowers are 1 to 3 inches long with lanceolate-cuspidate silky bracts.

For previous introduction see No. 75961.

86680. INDIGOFERA PULCHELLA Roxb. Indigo. Fabaceae.

A shrub 4 to 6 feet high with com-pound leaves 3 to 6 inches long, made up of 13 to 17 subcoriaceous oblong leaflets 1 inch long, and racemes 3 inches long of bright red flowers. Native to the lower slopes of the Himalayas in India.

86681. IRIS CLARKEI Baker. Iridaceae. Clarke iris.

Clarke iris. A curiously local Himalayan iris, native to a circumscribed area in the Sikkim and Bhutan region at altitudes between 6,000 and 11,000 feet, in ground that is swampy half the year and frozen hard under snow during most of the remaining months. The narrow leaves, 2 feet long, droop at the tops; the upper surface is polished and shiny, the under side glau-cescent. The solid stem is 2 feet long and bears one or two lateral heads. The falls are reflexed laterally. The upper part of the haft is marked with while, are poised almost horizontally. The styles form the highest point of the flowers; they are keeled, very convex, and 1½ inches long. For previous introduction see No 76251.

For previous introduction see No. 76251.

- 86682 to 86684. MEIBOMIA spp. Fabaceae.
 - 86682. MEIBOMIA CEPHALOTES (Roxb.) Kuntze (Desmodium cephalotes Wall.).

A tall shrub with densely silky, acutely angled, zigzag branches and compact umbels of deep-red flowers. It is native to the eastern Himalayas. Cattle and goats are said to be fond of the leaves.

For previous introduction see No. 61612.

86683. MEIBOMIA CONFERTA Kuntze (Desmodium con (DC.) confertum DC.).

A shrubby plant with trifoliolate leaves made up of oblong to obovate entire leaflets 3 to 6 inches long, and axillary or terminal racemes of rather large flowers. Native to northern India

86684. MEIBOMIA FLORIBUNDA (D. Don.) Kuntze (Desmodium floribundum D. Don.).

A woody, thickly pubescent Hima-layan plant with very copious axillary and terminal racemes of red flowers.

86665 to 86689—Continued.

For previous introduction see No. 47721.

86685. PANDANUS FURCATUS Roxb. Pan-Screwpine. danaceae.

One of the most ornamental of the screwpines, which attains a height of about 20 feet, with dark green spiny leaves over 10 feet long, gracefully arch-ing and somewhat spirally arranged. The whitish gray inflorescence emits a very agreeable odor. Native to the East Indies. of the most ornamental

For previous introduction see No. 72603.

86686. STYRAX HOOKERI C. B. Clarke. Snowbell.

A tree often 40 feet high, native to Sikkim and Bbutan, at altitudes ranging from 6,000 to 7,000 feet. The white flowers, 1 inch long, are tomentose out-side, and the young branches are stellate-pubescent. The wood is white, close-grained, and moderately hard.

For previous introduction see No. 80087.

86687 to 86689, THALICTRUM Spp. Ranun-Meadowrue, Meadowrue,

86687. THALICTRUM CHELIDONII DC.

A very beautiful ornamental plant, 15 inches high, with lovely pale-green foliage, pubescent beneath. The deli-cate, silvery lavender flowers, over an inch across, are borne in graceful sprays.

For previous introduction see No. 50338.

86688. THALICTRUM CULTRATUM Wall.

A glabrous herbaceous perennial 2 to 4 feet high, with compound leaves made up of oboyate leaflets half an inch long, and lax panicles of greenish white flowers. Native to the temperate Himalayas in India.

86689. THALICTRUM ELEGANS Wall.

A herbaceous perennial a foot high, with decompound leaves made up of small, suborbicular, 3-lobed leaflets and sparingly branched panicles of small greenish purple flowers. Native to the temperate slopes of the Hima-layas in India.

For previous introduction see No. 50339.

86690 to 86692.

From Darjiling, India. Seeds presented by the Curator, Lloyd Botanic Garden. Re-ceived March 28, 1930.

86690. EVODIA FRAXINIFOLIA (D. Don.) Hook. f. Rutaceae.

A small, much-branched, densely leafy tree, smelling, when bruised, much like caraway. The bright-green compound leaves are 8 to 12 inches long; the white flowers are borne in axillary and ter-minal cymes, and the red fruits are less than an inch in diameter. In Sikkim, India, where this tree is native, the soft white wood is used for posts of huts.

For previous introduction see No. $47\hat{6}8\hat{2}$.

86691. MEIBOMIA SEQUAX (Wall.) Kuntze (Desmodium sequax Wall.). Fabaceae.

86690 to 86692-Continued.

A shrub, 2 to 20 feet high, with the branches covered with thick gray or brown pubescence and with red flowers in copious racemes. It is native to the Himalayas from Simla to Sikkim, India.

For previous introduction see No. 60652.

86692. MEIBOMIA TILIAEFOLIA (D. Don) Kuntze (Desmodium tiliaefolium D. Don). Fabaceae.

A hardy and more or less ornamental deciduous shrub, with slender terete branches, thick green trifoliolate leaves about 4 inches long, and red flowers in lax racemes often a foot long. It is native to the Himalayas from 3,000 to 9,000 feet altitude. The bark yields an excellent fiber which is used for rope making; the leaves are good fodder, and the roots are used medicinally as a tonic and diuretic.

For previous introduction see No. 47726.

86693 to 86695.

From Honolulu, Hawaii. Seeds presented by Mr. Harold L. Lyon, in charge, Department of Botany and Forestry, Hawaiian Sugar Planters' Association. Received March 25, 1930.

83693. ACACIA KOA A. Gray. Mimosaceae. Koa.

A large spreading tree, up to 60 feet ligh, native to the Hawaiian Islands. The coriacrous falcate phyllodes are 5 to 7 inches long, and the small white flowers are in globular heads gathered into axillary racemes. The wood, which is called Hawaiian mahogany, is excellent for veneers, and the bark is used for tanning.

86694. CASSIA SURATTENSIS Burm. f. (C. glauca Lam.). Caesalpiniaceae.

A tropical leguminous shrub or small tree with pale-green compound leaves and clusters of pale-yellow flowers. Native to the East Indies.

For previous introduction see No. 68847.

86695. STYLONNA THURSTONI (Muell. and Drude) O. F. Cook (Pritchardia thurstoni Muell. and Drude). Phoenicaceae. Palm. Palm.

A tall palm with a slender, ringed trunk crowned by a cluster of spreading fan-shaped 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.

86696. MEDICAGO SATIVA L. Fabaceae. Alfalfa.

From Moscow, Union of Socialistic Soviet Republics. Seeds purchased from the All-Russian Seed Association of Agricultural Cooperatives. Received March 17, 1930.

Collected in the Dzhetysuisk region, Kazar Republic, Semirechenskaia, Turkestan.

86697 to 86699. MEDICAGO SATIVA L. Fabaceae. Alfalfa.

From Berlin, Germany. Seeds purchased from the German Agricultural Society. Received March 26, 1930. 86697 to 86699-Continued.

86697. Frankische luzern.

86698. Pfalzer luzern.

86699. Thuringer luzern.

86700 to 86706.

From Anam, Indo-China. Seeds presented by M. Poilane. Received March 25, 1930.

86700. AESCHYNOMENE Sp. Fabaceae.

86701. BAUHINIA sp. Caesalpiniaceae.

86702. CASSIA sp. Caesalpiniaceae.

- 86703. NICOTIANA TABACUM L. Solanaceae. Tobacco.
- 86704. POUPARTIA AXILLARIS (Roxb.) King and Prain. Anacardiaceae.

A rather common tree at low altitudes in the valleys of western China, growing to a height of 50 to 80 feet and having a trunk often 3 feet in diameter near the base. It has gray bark, massive branches, deciduous leaves, and inconspicuous flowers. The yellow oval fruits, which are about an inch long, are eaten by the Chinese.

For previous introduction see No. 71252.

86705. STRYCHNOS Sp. Loganiaceae.

86706. CROTALARIA SPECTABILIS Roth. Fabaceae.

A stout shrub, 3 to 5 feet high, native to India, and sometimes cultivated for the sake of its yellowish purple flowers, which are produced in dense lax racemes often 20 inches in length.

For previous introduction see No. 75877.

86707 to 86718.

- From Perth, Western Australia. Seeds presented by Miss Ida W. Richardson. Received March 26, 1930.
 - 86707. ALYOGYNE HAKEAEFOLIA (Giordano) Alefeld (Fugosia hakeaefolia Hook.). Malvaceae.

An erect evergreen shrub, native to Australia, with narrow lobed or deeply cut leaves and large purple-lilac flowers. It is closely related to Gossypium.

For previous introduction see No. 79930.

86708. ANIGOZANTHOS MANGLESIT D. DOn. Amaryllidaceae.

An amaryllidaceous plant native to the Swan River country of southwestern Australia. It bears scorpoid racemes, nearly a foot long, on stout, woolly, bright-red stems. The lustrous green, tomentose flowers, 3 inches long, are tubvlar in bud, but split nearly to the base on opening, with the tips recurved, and bear the yellow stamens on the curve.

For previous introduction see No. 81671.

86709. BOSSIAEA sp. Fabaceae.

A low shrub with yellow and brown pea-shaped flowers.

86710. CHAMAELAUCIUM UNCINATUM Schauer. Myrtaceae.

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

:86707 to 86718—Continued.

EXAMPLE II. CLIANTHUS DAMPIERI A. CUNN. Fabaceae. Glory pea.

An Australian semishrubby perennial 2 to 4 feet high with ascending or procumbent branches covered with long soft hairs. The compound leaves are made up of 15 to 21 obovate leaflets an inch long; and the flowers, four to six in pendent racemes, are 3 inches long and crimson or scarlet, with a handsome purple-black spot at the center.

For previous introduction see No. 76863.

:86712. EUCALYPTUS FICIFOLIA \times CALO-PHYLLA. Myrtaceae,

Red flowering gum. A beautiful tree from 15 to 40 feet high, which grows well in sandy soil. The tree has not yet become stabilized, and from the seeds of one tree one may obtain as many as 16 -different colors.

286713. HOVEA CHORIZEMAEFOLIA DC. Fabaceae.

A small shrub with prickly toothed leaves and violet flowers. It grows in ironstone soil and blooms in Australia from June through August.

(86714. KENNEDIA COCCINEA Vent. Fabaceae.

A handsome trailing or twining woody vine, native to Australia. If the Carea or five evate leaflets, and the market flowers are in long-stemmed clasters of 15 to 20.

For previous introduction see No. 75564.

86715. KENNEDIA COMPTONIANA (Andrews) Link (Hardenbergia c om p t o n i a n a Benth.). Fabaceae.

A twining, herbaceous or subshrubby Australian vine with three to five cordate linear to ovate leaflets and long sprays of deep violet-blue flowers.

For previous introduction see No. 77288.

86716. KENNEDIA PROSTRATA R. Br. Fabaceae.

A prostrate pubescent Australian vine with leaves composed of three cordate broadly obovate leafiets an inch long and axillary peduncles bearing two to four searlet flowers.

For previous introduction see No. 77289.

36717. LABICHEA LANCEOLATA Benth. Fabaceae.

An erect shrub 6 to 10 feet hig'n, native to Western Australia. The shining coriaceous leaves usually have one lanceolate leaflet 2 to 4 inches long, and two very small leaflets at the base of the petiole, but may have all three leaflets nearly the same size. The small yellow flowers are in loose racemes nearly as long as the leaves.

86718. LESCHENAULTIA sp. Goodeniaceae.

This genus, represented by 13 species in Western Australia, contains herbs, undershrubs, and shrubs with scattered or crowded, narrowly linear, heathlike leaves, and terminal clusters of small red, white, blue, or yellow flowers.

86719 to 86741. SOJA MAX (L.) Piper (*Glycine hispida* Maxim.). Fabaceae. Soybean.

86719 to \$6741-Continued.

- From Japan. Seeds collected by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received March 26, 1920.
 - 86719 to 86723. Received from the Fukuoka Ken Agricultural Experiment Station, February 24, 1930. Grown as green manure.
 - 86719, No. 3893. Kurosengoku No. 3. (Black 500 bushel No. 3.) A small black, oval, slightly flattened bean.
 - 86720. No. 3894. Koshoku Akidaizu No. 34. (Yellow fall bean No. 34.) An oval medium-sized yellow bean with large brown hilum.
 - 86721. No. 3895. Chasengoku No. 81. (Brown 500 bushel No. 81.) A medium-small, oval, slightly flattened, olive-brown bean.
 - 86722, No. 3896. Chasengoku No. 9. (Brown 500 bushel No. 9.) A very small, oval, much flattened, olivebrown bean.
 - 86723. No. 3897. Chasengoku No. 12. (Brown 500 bushel No. 12.) A very small, oval, much flattened, olivebrown bean.
 - 86724 to 86736. From the Japanese Imperial Department of Agriculture, Espe.im.ut. Farm, Konesu, Japan. 1 cordary 25, 1930. Growa as green m.nure.
 - 83724. No. 4201. Yoshoka Akidaizu No. 34. (Yellow fall bean No. 34.) A medium-sized oval yellow bean, heavily mottled with brown; hilum brown.
 - 86725. No. 4202. Kurokasudaizu. (Black cake bean.) A medium-sized, oval, much-flattened black bean with yellow germ; originally from the Nagasaki Frefecture.
 - 86726. No. 4203. Shiro o yarin. (Large white ring.) A large oval yellow bean, mottled with brown and black; hilum large and dark brown.
 - 86727. No. 4204. Kurosengoku Kinai No. 1. (Black 500 bushel, Kinai No.
 1.) A medium-sized oval, muchflattened black been with yellow germ.
 - 86728. No. 4205. Miyazaki Akidaizu. (Miyazaki fall bean.) A mediumsmall, oval, mucl-flattened yellow bean, heavily mottled with brown; hilum brown.
 - 83729, No. 4206, Kurosengoku No. 3. (Black 500 bushel No. 3.) A medium-sized, oval, much-flattened black bean.
 - 86730. No. 4207. Chiwata san. (Chiwata product.) A medium-sized oval yellowish green bean with brown hilum; originally from the Nagasaki Prefecture.
 - 86731. No. 4208. Enoura san. (Enoura product.) A medium-sized oval yellow bean, heavily mottled with brown; hilum brown; originally from the Nagasaki Prefecture.
 - 86732. No. 4209. Kurosengoku Kinai No. 4. (Black 500 bushel Kinai No. 4.) A medium-small to mediumsized much-flattened oval black bean with yellow germ.

86719 to 86741-Continued.

- 86733. No. 4210. Kurosengoku No. 3. (Black 500 bushel No. 3.) A medium small much-flattened oval black bean.
- 86734. No. 4211. Kurosengoku. (Black 500 bushel.) A medium-small much-flattened oval black bean with yellow germ; originally from the Miyazaki Prefecture.
- 86735. No. 4212. Aohi mame. (Green skin bean.) A medium-small greenish yellow bean, heavily mottled with brown; hilum brown; originally from Taiwan (Formosa).
- 86736. No. 4213. *Izari mame Kinai No.* 1. (Lame bean, Kinai No. 1.) A medium-small oval much-flattened, yellow bean, heavily mottled with brown.
- 86737 to 83739. From the Ibaragi Ken Agricultural Experiment Station, Mito, Japan, February 26, 1930.
 - 86737. No. 4222. Gosha. A medium sized, slightly flattened, oval yellow bean with light-brown to dark-brown hilum.
 - 86738. No. 4223. Kimusume Maide No. 1. A medium-small yellow oval bean with brown hilum.
 - 86739. No. 4224. Gekka Ibaragi No. 1. A medium-small oval yellow bean, with bilum varying from light brown to slate black.
- 86740. No. 4228. Chuzu. (Mouse bean.) Heijo, Chosen, February 27, 1930. A mixture of small yellow and greenish yellow varieties, more or less mottled.
- 86741. No. 4229. Manshu daizu. From the T. Asada Miso Factory, Tokyo, Japan, February 28, 1930. A mixture of medium-sized yellow-seeded varieties, grown in southern Manchuria; used in the manufacture of soybean miso.
- 86742. ALBIZZIA BROWNEI Walp. Mimosaceae.

From Freetown, Sierra Leone, Africa. Seeds presented by the Director of Agriculture. Received March 27, 1930.

A tropical tree up to 30 feet high with bipinnate leaves having shining reticulate ovate to obovate leaflets 1 to 3 inches long. The small flowers, with exserted stamens, are in small heads which are grouped together in broad corymbose racemes 3 to 4 inches long. It is native to tropical Africa.

- 86743 to 86747. ORYZA SATIVA L. Poaceae. Rice.
- From Mandalay, Burma, India. Seeds purchased from D. Rhind, Economic Botanist. Received March 28, 1930.

83743, Emata A 16-34.

86744. Letywezin B 15-1.

86745. Theikpan Ngayunwa (15).

86746. Theikpan Shweat.

86747. Theikpan Taungdeikpan.

- 86748. LINUM USITATISSIMUM L. Linaceae. Flax.
- From Sorau N/L. Germany. Seeds presented by the Forschungs Institut. Received March 28, 1930. Soraner Feinfarks.

86749 and 86750. RHODODENDRON spp. Ericaceae.

From Miyazaki-shi, Japan. Seeds presented by Mr. B. Miyazawa, Phytotechnical Institute, Miyazaki College of Agriculture. Received March 28, 1930.

86749. RHODODENDRON ALBRECHTH Maxim.

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

For previous introduction see No. 30850.

86750. RHODODENDRON BRACHYCARPUM D. Don. Fujiyama rhododendron.

A shrub 10 to 15 feet high with elliptic to oblanceolate leaves 3 to 9 inches long, cuncate to auriculate at the base, dark green and reticulated above, and gray tomentose beneath. The broadlyfunnelform flowers, about 2 inches across, are white or yellow, striped and flushed pink, and spotted greenish brown. It is native to Japan and Chosen.

For previous introduction see No. 53727.

86751. SOJA MAX (L.) Piper (Glycine hispida Maxim.). Fabaceae.

Soybean.

From Tokyo, Japan. Seeds collected by P. H. Dorsett and W. F. Morse, agricultural explorers, Bureau of Plant Industry. Received March 31, 1930.

No. 3862. Kuro mame. A very small, round, black bean with green germ; used for confectionery purposes.

86752 to 86754. OLEA EUROPAEA L. Oleaceae. Common olive.

From Marrakech, Morocco. Cuttings collected by Dr. F. T. Bioletti, University of California. Received March 31, 1930.

86752. Menara.

86753. Meslale. Said to be a fine large pickling olive.

86754. Zitoum.

- 86755. TRIPSACUM LAXUM Nash. Poaceae. Guatemala grass.
- From Oaxaca, Mexico. Seeds presented by Emil Makrinius. Received March 31, 1930.

A plant found between 900 and 1,200 feet altitude in warm dry situations where it has plenty of light. It grows in clumps which are often 10 to 15 feet high and its stalks are as thick as ordinary corn. The pollenized flowers develop into kernels, arranged in the form of a small ear, which has given the plant the common name of wild corn. The grains, however, do not set in floral bracts, but hang loosely, so that they are easily shaken off. The stalks and leaves of the plant, because of their sweet juice, are much liked by cattle and horses and form a valuable forage when all other grasses are dried up.



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