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Plant Inventory No. 142



UNITED STATES DEPARTMENT OF AGRICULTURE
Washington, D. C. August 1950

PLANT MATERIAL INTRODUCED BY THE DIVISION OF PLANT EXPLORATION AND INTRODUCTION, BUREAU OF PLANT INDUSTRY,¹ JANUARY 1 TO MARCH 31, 1940 (Nos. 134736 to 136369)

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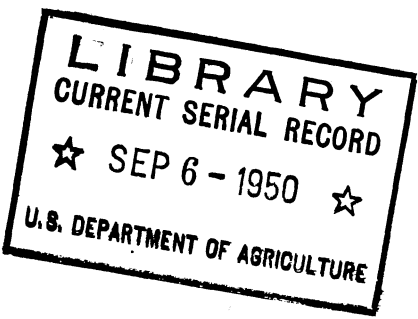
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This inventory, No. 142, lists plant material (Nos. 134736 to 136369) received by the Division of Plant Exploration and Introduction during the period from January 1 to March 31, 1940. It is a historical record of plant material introduced for Department and other specialists, and is not to be considered as a list of plant material for distribution.

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*Plant Industry Station,
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¹ Now Bureau of Plant Industry, Soils, and Agricultural Engineering, Agricultural Research Administration, United States Department of Agriculture.



INVENTORY

134736 to 134743. GOSSYPIUM. Malvaceae. Cotton.

From the British West Indies. Seeds presented by Dr. R. A. Silow, Genetics Department, Cotton Research Station, Empire Cotton Growing Corp., Trinidad. Received January 4, 1940.

- | | |
|--------------------------|---------------------------|
| 134736. <i>ATB. 1 a.</i> | 134740. <i>H.T. 12 a.</i> |
| 134737. <i>ATB. 1 b.</i> | 134741. <i>H.T. 12 b.</i> |
| 134738. <i>ATI. 2 a.</i> | 134742. <i>H.T. 15 a.</i> |
| 134739. <i>ATI. 2 b.</i> | 134743. <i>H.T. 15 b.</i> |

134744. CROTON sp. Euphorbiaceae.

From Mexico. Seeds collected by Cornelius H. Muller, Bureau of Plant Industry, United States Department of Agriculture. Received January 8, 1940.

No. 3248. September 10, 1939. From Sierra de la Madera, Canon del Agua, Coahuila. A shrub up to 2 feet high, found on open rocky ridges.

134745. TARCHONANTHUS MINOR Less. Asteraceae.

From the Union of South Africa. Seeds presented by the McGregor Museum, Kimberley. Received January 8, 1940.

A resin-scented shrub up to 7 feet high, with attractive woolly flower heads. It is drought-resistant and is excellent stock feed.

134746. TRITICUM AESTIVUM L. Poaceae. Common wheat.

From Colombia. Seeds presented by Gervasio Obregon, Departamento de Agricultura, Estación Agrícola Experimental Nacional de "La Picota," Bogotá. Received January 3, 1940.

Bola. One of the best Colombian varieties; it is grown throughout the whole wheat zone of the country.

134747 and 134748. ARACHIS HYPOGAEA L. Fabaceae. Peanut.

From China. Seeds collected by W. W. Moss, National Agricultural Research Bureau, Yunnan Province, and presented through L. A. Wheeler, Director of Foreign Agricultural Relations, United States Department of Agriculture. Received January 4, 1940.

134747. A large peanut of unknown origin. Its protein yield is high, but the oil content is low.

134748. A small native peanut with a high oil content, but a low yield.

134749. JUGLANS REGIA L. Juglandaceae. Persian walnut.

From Czechoslovakia. Seeds presented by A. Spaldák, Olomouc-Nova. Received January 4, 1940.

134750 to 134752.

From Afghanistan. Material collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received January 2, 1940.

134750. FICUS sp. Moraceae. Fig.

No. 4173. From Kabul, 6,000 feet altitude, November 21, 1939. Cuttings from vines on which the fruit does not develop because the summers are too cool. The plant, however, survives below-zero temperatures; some winters are said to be -30°F .

134751. GLADIOLUS sp. Iridaceae.

No. 4888. Corms collected in the Burchao Pass at 9,000 feet altitude, October 16, 1939. Found on a dry shale slope.

134752. VITIS sp. Vitaceae. Grape.

No. 5073. From Kandahar, November 23, 1939. Apparently a cultivated plant.

134753 to 134755. CITRUS spp. Rutaceae.

From Cuba. Bud sticks presented by Thomas R. Towns, Holguin. Received January 8, 1940.

134753. CITRUS SINENSIS (L.) Osbeck. Orange.

Washington Navel.

134754. CITRUS SINENSIS (L.) Osbeck. Orange.

Town's Cuban Navel. A bud sport of *Washington Navel*, ripening its fruits earlier than the parent variety.

134755. CITRUS AURANTIFOLIA (Christm.) Swingle. Lime.

West Indian lime.

134756 to 134760. MEDICAGO TRUNCATULA Gaertn. Fabaceae. Medic.

From Australia. Seeds presented by W. L. Waterhouse, University of Sydney, Sydney, New South Wales. Received January 5, 1940.

134756. From Swan Hill, Victoria. Grown in good soil, where there is an average of 18 inches of annual rainfall, mostly in winter.

134757. From Murray Bridge, South Australia. Grown in shallow limestone soil, where there is an average of 12 inches of annual rainfall, which falls in the winter.

134758. From Werribee, Victoria. Grown in good soil, where there is an average of 24 inches of annual rainfall, mostly in the winter.

134759. From Roseworthy, South Australia. Grown in alkaline loam, where there is an average of 17 inches of annual rainfall, mostly in the winter.

134760. From Singleton, New South Wales. Grown in good loam, where there is an average of 29 inches of rainfall evenly distributed throughout the year.

134761. PRUNUS ARMENIACA L. Amygdalaceae. Apricot.

From England. Plants purchased from J. Cheal & Sons, The Nurseries, Crawley, Sussex. Received January 12, 1940.

Blenheim.

134762 to 134773. TRIFOLIUM spp. Fabaceae. Clover.

From Australia. Seeds presented by the Waite Agricultural Research Institute, Glen Osmond, South Australia. Received January 9, 1940.

134762 to 134770. TRIFOLIUM FRAGIFERUM L. Strawberry clover.

134762. *Benbecula.*

134767. *Shearman's.*

134763. *Camperdown.*

134768. *Swan Hill.*

134764. *Koondrook.*

134769. *Tarwei.*

134765. *Palestine.*

134770. *Werribee.*

134766. *Parklands.*

134771. TRIFOLIUM GLOMERATUM L.

Cluster clover. A clover that grows fairly well in sour soils, and also in soils of low phosphate content. It is useful as a planting when soils first come under cultivation.

For previous introduction see 102000.

134772 and 134773. TRIFOLIUM SUBTERRANEUM L. Subterranean clover.

134772. *Bacchus Marsh.*

134773. *Springhurst.*

134774 to 134778. MYRCIARIA spp. Myrtaceae. Jaboticaba.

From Brazil. Plants purchased from Dierberger & Companhia, São Paulo. Received January 16, 1940.

134774 to 134788—Continued

- | | |
|---------------------------------------|-------------------------------|
| 134774. <i>Baranca Blanca.</i> | 134777. <i>Rajada.</i> |
| 134775. <i>Paulista.</i> | 134778. <i>Sabara.</i> |
| 134776. <i>Pintada.</i> | |

134779 and 134780. *VITIS VINIFERA L.* Vitaceae. **European grape.**

From Afghanistan. Cuttings collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received January 11, 1940.

134779. No. 4972. From Akcha, at 1,500 feet altitude, October 27, 1939. *Bedana* or *Khishmish-i-siya*. A large blue-black grape of excellent flavor. It is larger than the red or white seedless variety and appears to be confined to the western part of the Turkish area of Afghanistan. Probably tender in areas of heavy frost.

134780. No. 5053. November 1, 1939. *Khishmish-i-siya*. Presented by the Hakim of Tukzar and said to be a black seedless raisin grape. It is not a heavy bearer, but it yields large bunches of berries, each $\frac{3}{4}$ inch long, black, seedless, and of splendid flavor. This superior strain will tolerate mild winters, probably to near zero.

134781. *PALAUQUIUM GUTTA (Hook.) Burck.* Sapotaceae. **Guttapercha tree.**

From Africa. Seeds presented by the East African Agricultural Research Station, Amani, Tanganyika Territory. Received January 16, 1940.

A tree up to 100 feet high, native to the Malay Peninsula, and a source of guttapercha. The oblanceolate, coriaceous leaves, 3 to 5 inches long, are dark green above and golden coppery beneath. The small white flowers, in clusters of 3 to 5 in the axils or on the bare parts of the branches, are followed by oblong, red, pubescent fruits nearly 1 inch long.

For previous introduction see 103748.

134782. *POA PRATENSIS L.* Poaceae. **Kentucky bluegrass.**

From Denmark. Seeds presented by the Director, Botanic Garden, Copenhagen. Received January 3, 1940.

Collected in Greenland in 1932.

134783 to 134794. *ORYZA SATIVA L.* Poaceae. **Rice.**

From Ceylon. Seeds presented by the Department of Agriculture, Peradeniya. Received January 17, 1940.

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|--------------------------------------|------------------------------------|
| 134783. <i>Genathumba El.</i> | 134789. <i>Pannithi.</i> |
| 134784. <i>Gonabaru.</i> | 134790. <i>Polayal.</i> |
| 134785. <i>Halhuduwi.</i> | 134791. <i>Puwakmal El.</i> |
| 134786. <i>Indipathel.</i> | 134792. <i>Rathkarayal.</i> |
| 134787. <i>Kuru El.</i> | 134793. <i>Sudu El.</i> |
| 134788. <i>Nandu El.</i> | 134794. <i>Weraniya El.</i> |

134795. *MELILOTUS ELEGANS Salzm.* Fabaceae. **Sweetclover.**

From Italy. Seeds presented by Dr. Antonio Biraghi, R. Stazione di Patologia Vegetale, Rome. Received January 18, 1940.

For previous introduction see 129699.

134796. *PHASEOLUS ANGULARIS (Willd.) W. F. Wight.* Fabaceae. **Adsuki bean.**

From the Philippine Islands. Seeds collected by the Archbold-Fairchild Expedition in the Province of Luzon. Received January 18, 1940.

No. 118. A mung bean grown by the Igorots of Sabarigan, who grow their crops on terraces with irrigation.

134797 to 134800.

From Maryland. Plants purchased from the Tingle Nursery Co., Pittsville. Received January 18, 1940.

134797. CHAENOMELES. Malaceae.

Marmorata.

134798. PHILADELPHUS INCANUS Koehne. Hydrangeaceae. **Gray mockorange.**

A late-flowering species up to 6 feet high, with oval leaves, dull grayish beneath. The white flowers are produced 5 to 9 together on racemes about 2 inches long, at the end of short leafy shoots, and have an odor like that of hawthorn. The flowering season is from the middle of late July. Received under the varietal name *sargentii*, for which a place of publication has not been found.

For previous introduction see 134717.

134799. WEIGELA. Caprifoliaceae.

Stelzneri (*W. hortensis* × *florida*).

134800. DIERVILLA. Caprifoliaceae.

Van Houtte.

134801 and 134802.

From Georgia. Plants purchased from the Fruitland Nurseries, Augusta. Received January 18, 1940.

134801. PHILADELPHUS LAXUS Schrad. Hydrangeaceae.

For previous introduction see 131775.

134802. DIERVILLA. Caprifoliaceae.

Mt. Blanc.

134803 and 134804. HIPPEASTRUM spp. Amaryllidaceae.

From the Philippine Islands. Bulbs presented by Dr. W. Dwight Pierce. Received July 23, 1930. Numbered in January 1940.

134803. *Cuban.*

134804. *Large Cuban.*

134805. HIPPEASTRUM REGINAE (L.) Herbert. Amaryllidaceae.

From Peru. Bulbs presented by Dr. Cesar Vargas, Cuzco. Received September 10, 1938. Numbered January 18, 1940.

A tropical-American hippeastrum with strap-shaped leaves, 2 feet long and 2 inches wide, developed after the flowers. The 2 to 4 flowers, each with short tube and bright-red limb 4 to 5 inches long, have a whitish star in the throat.

For previous introduction see 129368.

134806 to 134833.

From Switzerland. Plants purchased from Baumschulen Hans Zulauf Wildi, Schinznach-Dorf. Received January 19, 1940.

134806 to 134810. MALUS SYLVESTRIS Mill. Malaceae. **Apple.**

134806. *Edelrosen.*

134809. *Oetwiler Renette.*

134807. *Goldreinetten v. Cazis.*

134810. *Stafner Rosen.*

134808. *Glocken.*

134811. × PRUNUS EFFUSA (Host) Schneid. Amygdalaceae. **Duke cherry.**

Schöne von Sceaux.

134812. PYRUS COMMUNIS L. Malaceae.

Common pear.

Neue William.

134806 to 134833—Continued

- 134813 to 134818. RHEUM RHAPONTICUM L.** Polygonaceae. **Common rhubarb.**
 134813. *Bottners Rotstieliger.* **134816. Frühe Monsdorfer.**
 134814. *Elmsfeuer.* **134817. Kusnachter Riesen Verbesserter.**
 134815. *Elmsjubiläum.* **134818. Metzgers Verbesserter Victoria Riesen.**
- 134819 to 134824. MALUS SYLVESTRIS Mill.** Malaceae. **Apple.**
 134819. *Aargauer Jubiläums.* **134822. Niederlenzer.**
 134820. *Brünnerling.* **134823. Tobiässler.**
 134821. *Herzogin Olga.* **134824. Waldhöfler.**
- 134825 to 134830. PRUNUS spp.** Amygdalaceae.
 134825. × *PRUNUS EFFUSA (Host) Schneid.* **Duke cherry.**
Fruhe Mai.
 134826 and 134827. *PRUNUS AVIUM L.* **Sweet cherry.**
 134826. *Mischler.*
 134827. *Muskateller.*
 134828. × *PRUNUS EFFUSA (Host) Schneid.* **Duke cherry.**
Rosmarin.
 134829 and 134830. *PRUNUS CERASUS L.* **Sour cherry.**
 134829. *Schumacher.*
 134830. *Zweitfrühe.*
- 134831 to 134833. PYRUS COMMUNIS L.** Malaceae. **Common pear.**
 134831. *Bariker.*
 134832. *Gelbmostler.*
 134833. *Marxen.*

134834 to 134836.

From Afghanistan. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received January 11, 1940.

- 134834. CYDONIA sp.** Malaceae. **Quince.**
 No. 4934. From Maimana, October 21, 1939, at 2,000 feet altitude. Bushes usually from 8 to 10 feet high; fruits yellow, up to 4 inches long, slightly acid.
- 134835. CYDONIA sp.** **Quince.**
 No. 4988. From Kabul, November 15, 1939, at 7,000 feet altitude. Bush 10 feet high, withstands severe winters; fruit 4 inches long, lemon yellow, sweet.
- 134836. PYRUS sp.** Malaceae. **Pear.**
 From Gurzan, October 4, 1939, at 9,000 feet altitude. Shrubs growing among junipers on a dry slope. Fruits about 2 inches in diameter, somewhat flattened, with very pleasant flavor.

134837 to 134850.

From Australia. Seeds presented by Dr. Alexander McTaggart, Senior Research Officer, Plant Introduction, Canberra. Received January 10, 1940.

- 134837. ANDROPOGON SERICEUS R. Br.** Poaceae. **Grass.**
Australian bluegrass. A grass that grows 3 feet high on good soil and 1 foot high on very poor soil. In Australia this grass keeps green all the year round and is scarcely affected by drought or frost. It is an excellent forage grass.

For previous introduction see 126470.

134837 to 134850—Continued

- 134838 to 134841. *ASTREBLA* spp. Poaceae. Grass.
Mitchell grasses are valued for their drought-resistant qualities.
134838. *ASTREBLA ELYMOIDES* Bailey and F. Muell.
 For previous introduction see 130889.
134839. *ASTREBLA LAPPACEA* (Lindl.) Domin.
Curley Mitchell grass.
 For previous introduction see 130890.
134840. *ASTREBLA PECTINATA* (Lindl.) F. Muell.
 For previous introduction see 124891.
134841. *ASTREBLA SQUARROSA* Hubbard.
 For previous introduction see 94275.
134842. *ATRIPLEX SEMIBACCATA* R. Br. Chenopodiaceae. Saltbush.
 A vigorous, rapid-growing, much-branched Australian perennial that forms a dense mat over the ground to a depth of 1 to 2 feet. The leaves are small, about 1 inch long, and coarsely toothed along the margins. The plant has been known to flourish on the poorest soil. It has great frost resistance, palatability, heavy yield, sand-binding qualities, and the habit of spreading freely.
 For previous introduction see 126475.
134843. *ATRIPLEX VESICARIA* Howard.
 An erect bushy shrub, covered throughout with a scaly tomentum. The very small, oblong-lanceolate leaves are less than an inch long. Native to southern Australia.
 For previous introduction see 106699.
134844. *CYNODON DACTYLON* (L.) Pers. Poaceae. Bermuda grass.
Couch grass.
134845. *DACTYLIS GLOMERATA* L. Poaceae. Orchard grass.
Akaroa cocksfoot.
134846. *DANTHONIA SEMIANNULARIS* (Labill.) R. Br. Poaceae. Wallaby grass.
 A perennial, fine-leaved, tussocky grass, 1 to 2 feet high, which provides feed for the greater part of the year. It is said to be a good winter grass, will stand a great amount of grazing, and its palatability both for cattle and sheep is well known.
 For previous introduction see 126480.
134847. *LOLIUM SUBULATUM* Vis. Poaceae. Ryegrass.
Wimmera ryegrass. An annual grass, native to Europe.
134848. *PANICUM ANTIDOTALE* Retz. Poaceae. Grass.
Giant Panic grass. A tall coarse grass with flaccid leaves, having much the same habit as guinea grass.
 For previous introduction see 126487.
134849. *PHALARIS TUBEROSA* var. *STENOPTERA* (Hack.) Hitchc. Poaceae.
Toowoomba Canary grass. A grass which has become naturalized in New South Wales.
 For previous introduction see 22961.
134850. *RHAGODIA SPINESCENS* R. Br. Chenopodiaceae.
 A shrub, usually low and straggling or prostrate, sometimes erect and attaining a height of several feet, the smaller branches often spiny. The oblong, ovate, or almost round leaves are $\frac{1}{4}$ to $\frac{1}{2}$ inch long. The species of *Rhagodia* are useful fodder plants. Native to Australia.

134851 to 134962. TRITICUM spp. Poaceae.**Wheat.**

From Portugal. Seeds presented by Prof. A. Camara, Director, Estação Agronómica Nacional, Edifício dos Jerónimos, Belem, Lisbon. Received January 23, 1940.

134851 to 134903. TRITICUM AESTIVUM L.**Common wheat.**

134851. *Barbarosa*. No. 2790.

134852 to 134871. *ErythrospERMum*.

134852. No. 2700.

134862. No. 2723.

134853. No. 2701.

134863. No. 2724.

134854. No. 2708.

134864. No. 2725.

134855. No. 2704.

134865. No. 2727.

134856. No. 2712.

134866. No. 2729.

134857. No. 2713.

134867. No. 2731.

134858. No. 2716.

134868. No. 2733.

134859. No. 2718.

134869. No. 2734.

134860. No. 2719.

134870. No. 2736.

134861. No. 2720.

134871. No. 2738.

134872. *Erythroleucon*.

134873 to 134890. *Ferrugineum*.

134873. No. 2743.

134882. No. 2772.

134874. No. 2744.

134883. No. 2773.

134875. No. 2749.

134884. No. 2775.

134876. No. 2752.

134885. No. 2776.

134877. No. 2753.

134886. No. 2779.

134878. No. 2757.

134887. No. 2780.

134879. No. 2758.

134888. No. 2782.

134880. No. 2750.

134889. No. 2784.

134881. No. 2761.

134890. No. 2787.

134891. *Graecum*. No. 2699.

134892. *Hostianum*. No. 2789.

134893 to 134899. *Lutescens*.

134893. No. 2676.

134897. No. 2683.

134894. No. 2678.

134898. No. 2684.

134895. No. 2679.

134899. No. 2686.

134896. No. 2680.

134900 to 134903. *Milturum*.

134900. No. 2687.

134902. No. 2698.

134901. No. 2688.

134903. No. 2695.

134904. TRITICUM COMPACTUM Host.

Creticum. No. 2791.

134905 to 134944. TRITICUM DURUM Desf.**Durum wheat.**

134905 to 134908. *Affine*.

134905. No. 2843.

134907. No. 2850.

134906. No. 2874.

134908. No. 2891.

134851 to 134962—Continued

134909 to 134911. *Africanum*.

134909. No. 2910.

134910. No. 2912.

134911. No. 2915.

134912 and 134913. *Alexandrinum*.

134912. No. 2883.

134913. No. 2884.

134914. *Apulicum*. No. 2917.134915 and 134916. *Coerulescens*.

134915. No. 2924.

134916. No. 2927.

134917 and 134918. *Erythromelan*.

134917. No. 2880.

134918. No. 2882.

134919. *Fulvo-obscurum*. No. 2898.134920. *Fulvo-provinciale*. No. 2890.134921. *Hordeiforme*. No. 2869.134922 and 134923. *Leucomelan*.

134922. No. 2854.

134923. No. 2858.

134924 and 134925. *Leucurum*.

134924. No. 2835.

134925. No. 2837.

134926 to 134928. *Libycum*.

134926. No. 2928.

134927. No. 2929.

134928. No. 2930.

134929 to 134932. *Melanopus*.

134929. No. 2901.

134930. No. 2904.

134933 to 134936. *Murciense*.

134933. No. 2870.

134934. No. 2871.

134931. No. 2906.

134932. No. 2909.

134935. No. 2874.

134936. No. 2875.

134937. *Niloticum*. No. 2920.134938. *Obscurum*. No. 2893.134939 to 134941. *Provinciale*.

134939. No. 2886.

134940. No. 2887.

134941. No. 2888.

134942 to 134944. *Reichenbachii*.

134942. No. 2860.

134943. No. 2863.

134944. No. 2865.

134851 to 134962—Continued

- 134945.** TRITICUM POLONICUM L. Polish wheat.
Martinari. No. 2932.
- 134946 to 134962.** TRITICUM TURGIDUM L. Poulard wheat.
134946. *Buccalae.* No. 2823.
134947 and 134948. *Gentile.*
134947. No. 2927.
134948. No. 2800.
- 134949 to 134951.** *Iodurum.*
134949. No. 2830. **134951.** No. 2833.
134950. No. 2831.
- 134952 and 134953.** *Lusitanicum.*
134952. No. 2793.
134953. No. 2795.
- 134954.** *Megalopolitanum.* No. 2817.
- 134955 and 134956.** *Melanatherum.*
134955. No. 2801.
134956. No. 2803.
- 134957.** *Mertensii.* No. 2814.
- 134958.** *Nigrobarbatum.* No. 2809.
- 134959.** *Pseudo-cervinum.* No. 2834.
- 134960.** *Pseudo-mirabile.* No. 2824.
- 134961.** *Rubroatrum.* No. 2827.
- 134962.** *Speciosum.* No. 2810.

134963 to 134977. LILIUM spp. Liliaceae.

Lily.

From Japan. Seeds purchased from K. Wada, Hakoneya Nurseries, Numazu-shi.
 Received January 29, 1940.

- 134963.** LILIUM LONGIFLORUM var. ALEXANDRAE (Wallace) Wilson.
- 134964.** LILIUM AURATUM × LONGIFLORUM var. ALEXANDRAE.
- 134965.** LILIUM AURATUM × JAPONICUM.
- 134966.** LILIUM AURATUM Lindl. Goldband lily.
 For previous introduction see 91519.
- 134967.** LILIUM AURATUM var. PLATYPHYLLUM Baker.
 For previous introduction see 7849.
- 134968.** LILIUM AURATUM var. PLATYPHYLLUM × L. Crimson Queen.
- 134969.** LILIUM CONCOLOR var. BUSCHIANUM (Lodd.) Baker.
 For previous introduction see 64774.
- 134970.** LILIUM DISTICHUM Nakai.
- 134971.** LILIUM HENRYI Baker.
 For previous introduction see 66089.
- 134972.** LILIUM LEICHTLINII var. MAXIMOWICZII (Regel) Baker.
Wadai.
- 134973.** LILIUM SPECIOSUM var. GLORIOSOIDES Baker.
 For previous introduction see 124712.

134963 to 134977—Continued

134974. *LILIUM SPECIOSUM* var. *KRAETZERI* Duchartre.

For previous introduction see 11587.

134975. *LILIUM SPECIOSUM* Thunb.

Rubrum.

134976. *LILIUM SPECIOSUM* f. *RUBRUM MAGNIFICUM* × *AURATUM*.

134977. *LILIUM SPECIOSUM PUNCTATUM* × *AURATUM*.

134978. *TAXODIUM MUCRONATUM* Ten. Pinaceae.

Montezuma baldcypress.

From Mexico. Seeds presented by C. F. Edwards, Los Mochis, through the Fairchild Tropical Garden, Coconut Grove, Fla. Received January 29, 1940.

For previous introduction see 1761.

134979 to 135021.

From the Philippine Islands. Seeds collected by the Archbold-Fairchild Expedition. Received in October and November 1939. Numbered in January 1940.

134979. *ALOCASIA MACRORHIZA* (L.) Schott. Araceae.

No. 35. Collected along the road from Los Banos to Laguna, Luzon, October 30, 1939.

For previous introduction see 32093.

134980. *AMOMUM* sp. Zingiberaceae.

No. 30. From San Pablo, Luzon, October 19, 1939. A handsome species that grows in clumps, becoming 2 feet high. Flowers bright red.

134981. *AMORPHOPHALLUS CAMPANULATUS* (Roxb.) Blume. Araceae.

No. 34. From the economic garden of the agricultural school, Laguna, Luzon, October 30, 1939. The corm of this plant grows as large as a cabbage and is used as food in most parts of India.

For previous introduction see 80996.

134982. *ANTIDESMA BUNIUS* (L.) Spreng. Euphorbiaceae.

Banau.

No. 17. *Bignai*. A small evergreen tree, up to 30 feet high, native to the Malay Peninsula. The leaves are dark green, and the small dark-red, pleasant-flavored fruits are borne in racemes, like the currant. The tree is widely distributed throughout the Tropics.

For previous introduction see 102363.

134983. *ARTOCARPUS BLANCOI* (Elmer) Merr. Moraceae.

No. 21. From the Mount Makiling National Park, Laguna, Luzon. A strictly wild species, endemic to the Philippines. Sometimes confused with the true breadfruit, it is not good except when cooked as a vegetable.

For previous introduction see 100647.

134984. *CALAMUS ORNATUS* Blume. Phoenicaceae.

Rattan.

No. 28. Tagalog name *limuran*. Collected in the Mount Makiling National Park, Laguna, Luzon, October 28, 1939. A very large, climbing species, sometimes producing stems 300 feet long. The elongated leaf rachis or flagellum is 25 feet long, but the quality of the rattan is inferior.

For previous introduction see 112266.

134985. *CARYOTA CUMINGII* Lodd. Phoenicaceae.

Palm.

No. 39. *Pugahan*. A palm with a tall, stout, spineless, ringed trunk, about 20 feet high, crowned with a few spreading bipinnate leaves. The small globular fruits are purple. Native to the Philippine Islands.

For previous introduction see 106143.

134979 to 135021—Continued

134986. *CERIOPS ROXBURGHIANA* Arnott. Rhizophoraceae.

No. 25. From Puerto Real, Luzon.

134987. *COSTUS* sp. Zingiberaceae.

No. 70. From Mount Makiling National Park, Laguna, Luzon, October 20, 1939. A handsome red-flowered species growing 6 to 8 feet tall, with heads of deep-red flowers 6 to 8 inches long and 4 inches across.

134988. *DAEMONOROPS OCHROLEPIS* Beccari. Phoenicaceae. **Rattan.**

No. 29. *Ditan*. From the Mount Makiling National Park, Luzon, October 29, 1939. A rattan with very decorative light-yellow fruits borne in long clusters.

134989. *EUONYMUS JAVANICUS* Blume. Celastraceae.

No. 36. From Mount Makiling National Park, Luzon, October 31, 1939. A very handsome small tree with pink fruits that hang in clusters and exhibit orange arils and almost black seeds.

134990. *FICUS CAUDATIFOLIA* Warb. Moraceae. **Fig.**

No. 69. From the Volcano Mayon, Luzon, November 9, 1939. An epiphytic fig that finally develops a self-supporting trunk 25 feet high.

134991. *FICUS MEGACARPA* Merr. **Fig.**

No. 85. From Mount Makiling National Park, Laguna, Luzon, November 17, 1939. A woody climbing vine with slender reddish-brown branchlets and ovate leaves 2 inches long. The pear-shaped green fruits, with white spots, are borne singly or in pairs on the main trunk. Native to the Philippines.

For previous introduction see 90720.

134992. *FICUS MINAHASSAE* (Teysm. and De Vr.) Miquel. **Fig.**

No. 83. From Mount Makiling National Park, Laguna, Luzon, November 16, 1939. One of the most strikingly curious of the figs, which bears its clusters of red fruits on pendulous fruiting branches, sometimes more than 10 feet long.

For previous introduction see 95369.

134993. *FICUS NOTA* (Blanco) Merr. **Fig.**

No. 92. From near Magat Forestry Station, Bayombong, Nueva Vizcaya, Luzon, November 21, 1939. An edible tropical fig with fruits nearly 2 inches across, borne in great clusters on a tree of medium size.

For previous introduction see 95370.

134994. *FREYCINETIA MAXIMA* Merr. Pandanaceae.

No. 38. Collected October 22, 1939, between Laguna and Infanta, Luzon. A handsome scandent shrub with sparingly branched stems 1 inch thick, smooth, yellowish-gray bark, spiny, dark-green leaves 1½ to 3 feet long, very showy red floral bracts, and large, scarlet, aggregate fruits. Endemic in Luzon at low and medium altitudes.

134995. (Undetermined.)

No. 66. Collected in virgin forest of Cadwallader-Gibson Concession, Tandoc, Luzon, November 12, 1939. An epiphytic aroid with large leaves and a large white spathe 14 inches long, much larger than that of a calla.

134996. *FREYCINETIA MULTIFLORA* Merr. Pandanaceae.

No. 71. Collected on the Bulusan Volcano, Sorgoson, Luzon, November 8, 1939. An attractive scandent shrub with rigid, widely branching stems about ½ inch thick, linear or narrow-lanceolate leaves 8 to 16 inches long, showy salmon-pink floral bracts, and orange aggregate fruits. Endemic in Luzon up to 2,700 feet altitude.

134997. *FREYCINETIA* sp.

No. 11. Collected en route from Laguna to Infanta, Luzon. A vine with very handsome foliage and scarlet fruits.

134979 to 135021—Continued

134998. FREYCINETIA sp.

No. 72. From Tandoc, Camarine, Luzon, November 12, 1939. Similar to *F. multiflora*, but with fruits having fine protuberances.

134999. GARDENIA PSEUDOPSIDIUM (Blanco) Vill. Rubiaceae.

No. 10. *Kasipas*. From Mount Makiling National Park, Laguna, Luzon, October 20, 1939. A small tree 9 to 12 feet high, native to the Philippine Islands. The opposite leaves are lanceolate and acuminate, and the solitary, axillary white flowers are followed by round fruits resembling guavas, but not edible.

For previous introduction see 100649.

135000. LEEA MANILLENSIS Walp. Vitaceae.

No. 98. A species with bright-red flowers in corymbs, followed by red fruits.

135001. LIVISTONA ROBINSONIANA Beccari. Phoenicaceae.

No. 84. From the Mount Makiling National Park, Laguna, Luzon, November 1, 1939.

135002. NAUCLEA ORIENTALIS L. Rubiaceae.

No. 45. *Bangkal*. From Tandoc, Luzon, November 13, 1939. A large tree capable of living where salt spray reaches it.

For previous introduction see 30961.

135003. ONCOSPERMA GRACILIPES Beccari. Phoenicaceae. Palm.

No. 90. A slender feather palm, up to 30 feet high, with numerous long sharp spines on the trunk. The leaves, without the sheath, are about 6 feet long, with smooth, straight, ensiform leaflets, the intermediate ones being about 2 feet long. The spadix, with few, clustered floriferous branches, bears globose fruits about $\frac{1}{2}$ inch in diameter. Endemic to the Philippines.

135004 to 135008. PANDANUS spp. Pandanaceae.

135004 and 135005. PANDANUS COPELANDI Merr.

A tall, shrubby, highly decorative plant, with leaves up to 8 feet long and 3 to 4 inches wide and pineapple-like spiny fruits 9 inches long.

135004. No. 20. From near Louisiana Village, Luzon, October 20, 1939.

135005. No. 78. Collected along the road between Legaspe and Sorsogon, Luzon, November 9, 1939.

135006. PANDANUS sp.

No. 22. From Puerto Real, Tayabas, Luzon, November 7, 1939. A brilliant red-fruited species growing near the shore. Fruit 18 inches through, with fruitlets protruding. Leaves narrow and spiny.

135007. PANDANUS sp.

No. 93. Collected along the Baler-Bongabon road, November 20, 1939. A species with slender leaves 4 feet long, having spiny margins. Fruit not more than 3 inches across and light-red color.

135008. PANDANUS sp.

No. 95. From the Campus Forestry School, Mount Makiling National Park, November 25, 1939. A small graceful plant with narrow spiny leaves and scarlet fruits, not more than 3 inches long, in clusters of four.

135009. PARARTOCARPUS WOODII Merr. Moraceae.

No. 19. From Mount Makiling National Park, Laguna, Luzon, October 24, 1939.

135010. PINANGA INSIGNIS Beccari. Phoenicaceae. Palm.

No. 20. From Mount Makiling, Luzon, October 24, 1939. A rather small Philippine palm, with a slender smooth trunk about 6 inches in diameter, graceful feathery leaves, and oval reddish fruits 2 inches in length.

For previous introduction see 105354.

134979 to 135021—Continued

135011. *PINANGA PHILIPPINENSIS* Beccari.

Palm.

No. 30. From the Mount Makiling National Park, Laguna, Luzon, October 29, 1939. A Philippine palm with smooth, slender, greenish stems up to 25 feet high, thin, ascending pinnate leaves 3 to 5 feet long, and pendulous panicles of red fruits. It grows in exposed forest ridges and ravines at altitudes of 2,000 to 5,000 feet.

135012. *PITHECELLOBIUM* sp. Mimosaceae.

No. 50. From Mount Makiling National Park, Laguna, Luzon, October 20, 1939. A small attractive tree growing in the open.

135013. *PITOSPORUM PENTANDRUM* (Blanco) Merr. Pittosporaceae.

No. 90. From Bongabong, Northern Ecija, Luzon, November 21, 1939. A tree sometimes 60 feet high, but sometimes shrubby, with small white fragrant flowers and handsome straplike leaves with wavy margins. The fruits are in showy clusters of pretty orange berries.

For previous introduction see 20492.

135014. *POTHODIUM LOBBIANUM* Schott. Araceae.135015. *RHIZOPHORA MUCRONATA* Lam. Rhizophoraceae.

No. 25. A large evergreen shrub or tree, with oblong-elliptic, shiny leaves up to 6 inches long, and clusters of 3 to 7 white to cream-colored flowers. It forms mangrove swamps on Old World tropical shores.

135016. *STRONGYLODON MACROBOTRYS* A. Gray. Fabaceae.

No. 26. *Tayabak*, or "jade vine." From the Mount Makiling National Park, Laguna, Luzon, October 27, 1939. A slender-stemmed vine that bears large hanging clusters of blue-green flowers, each 2 inches long.

135017. *TABERNAEMONTANA PANDUCAQUI* Poir. Apocynaceae.

No. 88. From the roadside between San Miguel de Mayuno and Cabanatuan, Luzon. A small shrub 3 to 12 feet high, with small glossy leaves and small jasmine-like flowers nearly an inch across. Native to New Guinea.

135018. *TERMINALIA NITENS* Presl. Combretaceae.

No. 42. From Mount Makiling National Park, Laguna, Luzon, November 5, 1939. A forest tree, native from the lower to the alpine forests in the Philippines. It is a good timber tree, and the bark is used as straw-colored dye.

For previous introduction see 100657.

135019. *TETRASTIGMA* sp. Vitaceae.

No. 10. Collected between Laguna and Infanta, Luzon. A vine with clusters of handsome pink fruits.

135020. *UVARIA SCANDENS* C. B. Robinson. Annonaceae.

No. 97. From near Bongabong, November 20, 1939.

135021. *VITEX PARVIFLORA* Juss. Verbenaceae.

No. 27. *Molave*. From Mount Makiling National Park, Laguna, Luzon, October 28, 1939. An important timber tree, with clusters of blue flowers; found growing near the coast in dry rocky soils.

For previous introduction see 101451.

135022. *LYCOPERSICON ESCULENTUM* Mill. Solanaceae. Tomato.

From Colombia. Seeds presented by Jaime Villegas D., California. Received January 22, 1940.

135023 and 135024.

From Manchuria. Bulbs presented by B. V. Skvortzov, Harbin. Received January 30, 1940.

135023 to 135024—Continued

135023. *LILIUM CALLOSUM* Sieb. and Zucc. Liliaceae. Lily.

No. 97. Collected in meadows along the Ashihe River in northern Harbin. A martagon lily with slender stems 1 to 2½ feet high, scattered strap-shaped or linear leaves usually 1 to 3 inches long, and dull-red or orange-red solitary nodding flowers or racemes of 2 to 9. Native to eastern Asia and Taiwan.

For previous introduction see 131059.

135024. *SCILLA THUNBERGII* Miyabe and Kudo. Liliaceae.

No. 94. A scilla with 2 or 3 fleshy leaves 6 to 12 inches long and 1 to 3 erect scapes with many small rose-purple flowers borne in racemes. Native to Japan.

For previous introduction see 131904.

135025. *CEANOTHUS VEITCHIANUS* Hook. Rhamnaceae.

From California. Plants purchased from the California Nursery Co., Niles. Received January 30, 1940.

An evergreen shrub about 10 feet high with deep-blue flowers. Said to be a hybrid of *Ceanothus rigidus* and *C. thyrsiflorus*.

135026 to 135028.

From the Philippine Islands. Plants collected by the Archbold-Fairchild Expedition. Received January 31, 1940.

135026. *DENDROCALAMUS MERRILLIANUS* Elmer. Poaceae. Bamboo.

No. 111. *Bayog*. From Laguna, Makiling National Park, Luzon, December 11, 1939. A small clump bamboo not more than 30 to 40 feet high, with culms up to 3 inches in diameter, which have very thick walls.

For previous introduction see 124969.

135027. *SCHIZOSTACHYUM LUMAMPAO* (Blanco) Merr. Poaceae. Bamboo.

No. 134. *Boho*. From Angeles, Luzon, December 23, 1939. This thin-walled bamboo is the species chiefly utilized in making building matting, known as "sawale." It is also used for making baskets, fences, fish corrals, fishing poles, flutes, and for many other purposes. It is reported to have been investigated as a paper-making material.

For previous introduction see 124971.

135028. *SCHIZOSTACHYUM* sp.

No. 135. From the nursery of Mount Makiling National Park, Laguna, Luzon, December 23, 1939.

135029 to 135033.

From England. Plants purchased from H. Merryweather & Sons, Ltd., The Nurseries, Southwell, Notts. Received February 1, 1940.

135029 and 135030. *MALUS SYLVESTRIS* Mill. Malvaceae. Apple.

135029. *John Waterer*.

135030. *Northern Greening*.

135031 and 135032. *PRUNUS* spp. Amygdalaceae. Plum.

135031. *Black Bullace*.

135032. *Red Pershore*.

135033. *RHEUM RHAPONTICUM* L. Polygonaceae. Common rhubarb.

Early Red Champagne.

135034 to 135090.

From Afghanistan. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received February 3, 1940.

Unless otherwise mentioned, all of this material was collected in Afghanistan.

135034 to 135090—Continued

- 135034 to 135086. TRITICUM AESTIVUM L. Poaceae. Common wheat.
135034. No. 4510. *Gandum*. From Dasht-i-sufed, at 6,000 feet altitude, August 24, 1939. Spring-sown, irrigated.
135035. No. 4517. *Gandum*.
135036. No. 4518. *Gandum-i-sufed*.
135037. No. 4528. *Gandum*. From Hajar, at 8,000 feet altitude, August 28, 1939. Spring-sown.
- 135038 and 135039. From Aoi Khurak, at 9,000 feet altitude, August 28, 1939. Spring-sown.
135038. No. 4553. Irrigated.
135039. No. 4557. *Gandum Lalim*. Not irrigated.
- 135040 and 135041. *Gandum*. From Sarasia, at 9,000 feet altitude, August 29, 1939. Spring-sown.
135040. No. 4563. Irrigated.
135041. No. 4564. Unirrigated.
- 135042 and 135043. From Shanbashak Pass, at 9,300 feet altitude, August 31, 1939. Spring-sown, unirrigated.
135042. No. 4573.
135043. No. *Siya Khusha*.
- 135044 and 135045. From Binimang-icharaolia, at 8,000 feet altitude, September 1, 1939. Spring-sown, unirrigated.
135044. No. 4580. *Surkhcha*.
135045. No. 4581. *Sufedcha*.
135046. No. 4598. *Kazilsarak*. From Chabaraolia, September 5, 1939. Spring-sown, unirrigated. Said to have husk.
- 135047 and 135048. From Kala Sarkari, September 7, 1939. Spring-sown.
135047. No. 4614. *Sufedak-i-aoi*.
135048. No. 4617. Unirrigated.
135049. No. 4649. *Karakoltok* or *Khoshosiya*. From Chigzar, at 9,000 feet altitude, September 1939. Spring-sown, unirrigated.
- 135050 to 135053. From Tukzar, September 15, 1939. Spring-sown, unirrigated.
135050. No. 4693. 135052. No. 4695.
135051. No. 4694. 135053. No. 4714.
- 135054 to 135056. From Zehnadir, September 25, 1939, at 8,000 feet altitude.
135054. No. 4745. *Sufedak*, *Aoi*, or *Tirnisi*. Said to be a fall-sown, irrigated, slow-growing variety that matures in 12 months.
135055. No. 4746. *Surklak-i-bahari*. Spring-sown, unirrigated.
135056. No. 4749. *Sufedakiso-i-bahari*. Spring-sown, unirrigated.
- 135057 and 135058. From Sujak, September 27, 1939, at 8,000 feet altitude. Spring-sown, unirrigated.
135057. No. 4751.
135058. No. 4752.
- 135059 to 135072. From Alinj, October 1, 1939, at 10,000 feet altitude. Spring-sown.
135059. No. 4672. Irrigated; beardless, with white tomentose husks.
135060. No. 4763. Unirrigated; long heads with purple-black husk.
135061. No. 4764. Irrigated.

135034 to 135090—Continued

- 135062.** No. 4765. Unirrigated.
135063. No. 4766. Unirrigated.
135064. No. 4767. Irrigated.
135065. No. 4768. Unirrigated.
135066. No. 4769. Irrigated.
135067. No. 4770. Irrigated.
135068. No. 4771. Irrigated.
135069. No. 4772. Unirrigated.
135070. No. 4773. Irrigated; heavy heads irregularly placed, 3 inches long, white husk.
135071. No. 4774. Irrigated; white, long heads.
135072. No. 4775. Irrigated; heads 3½ inches long, red, tomentose.
135073 to 135076. From Mak, October 3, 1939, at 8,500 feet altitude. Spring-sown, irrigated.
135073. No. 4776.
135074. No. 4780.
135075. No. 4782. Said to have long heads and red husk.
135076. No. 4784.
135077 to 135079. From Dukanshah, October 4, 1939, at 7,500 feet altitude Spring-sown, unirrigated.
135077. No. 4788. Heavy yield.
135078. No. 4791.
135079. No. 4792.
135080 and 135081. From Gurzan, October 5, 1939. Spring-sown.
135080. No. 4806. Unirrigated, 9,000 feet altitude.
135081. No. 4807. Irrigated, 8,500 feet altitude.
135082 and 135083. From Shorak, at 7,500 feet altitude, October 8, 1939. Spring-sown, unirrigated.
135082. No. 4831.
135083. No. 4833.
135084. No. 4891. From Khoshbai, at 7,500 feet altitude, October 16, 1939. Spring-sown, unirrigated.
135085. No. 4917. From Khwajaebichagalak, October 19, 1939, at 7,000 feet altitude. Spring-sown, unirrigated.
135086. No. 5100. From Quetta, Baluchistan, November 28, 1939. Said to be fall-sown and irrigated.
135087 to 135090. *ZEA MAYS L.* Poaceae. **Corn.**
135087. No. 4716. *Jaudar*. From Tukzar, October 15, 1939. Said to grow 6 feet tall, to have 3 or 4 ears on a stalk, and to ripen in 90 days.
135088. No. 4468. From Peshawar, North-West Frontier Province, India, September 7, 1939. Stalks 5 to 6 feet high; ears 7 inches long; said to mature in 60 days and to require much rain.
135089 and 135090. From Quetta, Baluchistan, November 27, 1939.
135089. No. 5093.
135090. No. 5147. Probably a quick-maturing sort.
135091. *PSIDIUM GUAJAVA L.* Myrtaceae. **Guava.**
 From the British West Indies. Seeds presented by the Department of Science and

135091—Continued

Agriculture, Barbados, through David Fairchild, Coconut Grove, Florida. Received December 14, 1939. Numbered in February 1940.

French guava. The fruits of this guava are larger and have a better flavor when raw than the common guava, although it is not so good for making jelly.

For previous introduction see 134544.

135092 to 135118.

From California. Plants purchased from the Clarke Nursery, San Jose. Received February 6, 1940.

135092 to 135107. CHAENOMELES. Malaceae. **Flowering quince.**

135092. No. 304. Flowers deep vermilion-red.

135093. No. 309. *Superba*. Flowers between brick and orange.

135094. No. 310. *Rosemary*. Flowers deep rose.

135095. No. 314. *Sunset Glow*. Large pink flowers.

135096. No. 317. Deep rose-colored flowers.

135097. No. 319. Deep rosy-red flowers.

135098. No. 321. *Japonica*. Flowers bright ruddy orange.

135099. No. 323. Flowers light rose.

135100. No. 325. Flowers soft salmon or coral, an unusual color.

135101. No. 326. Flowers rosy scarlet.

135102. No. 327. Flowers rose and red; exceptionally free bloomer.

135103. No. 328. *Enchantress*. Flowers shell pink.

135104. No. 330. Flowers large, orange.

135105. No. 335. *Mount Everest*.

135106. No. 338. Apple-blossom coloring.

135107. No. 340. Flowers tomato red.

135108 and 135109. CEANOTHUS. Rhamnaceae.

135108. *Autumnal Blue*.

135109. *Delight*.

135110. CHAENOMELES. Malaceae.

Flowering quince.

Crimson and Gold.

135111 to 135116. CHAENOMELES LAGENARIA (Loisel.) Koidz. Malaceae.

Japanese quince.

135111. *Apple blossom*.

135114. *Foliis Rubris*.

135112. *Bonfire*.

135115. *Japanese Scarlet*.

135113. *Double Vermilion*.

135116. *Versicolor*.

135117 and 135118. × CHAENOMELES SUPERBA (Frahm) Rehder. Malaceae.

135117. *Atrococcinea*.

135118. *Coral Glow*.

135119 to 135124.

From New Zealand. Seeds purchased from Arthur Yates & Co., Ltd., Auckland. Received January 22, 1940.

135119. BRASSICA NAPUS L. Brassicaceae.

Rape.

Mustard Spinach.

For previous introduction see 55381.

135119 to 135124—Continued

- 135120.** CITRULLUS VULGARIS Schrad. Cucurbitaceae. **Watermelon.**
Ice Cream.
- 135121 to 135123.** CUCUMIS SATIVUS L. Cucurbitaceae. **Cucumber.**
- 135121.** *African Horn.*
- 135122.** *App'e Shape.*
- 135123.** *Yates Crystal Apple.*
- 135124.** TETRAGONIA EXPANSA Murray. Aizoaceae. **New Zealand spinach.**
For previous introduction see 118351.
- 135125 to 135130.** PANICUM spp. Poaceae. **Grass.**
From the Union of South Africa. Seeds presented by the Prinshof Grass-Breeding Station, Pretoria. Received January 25, 1940.
- 135125 to 135129.** PANICUM spp.
- 135125.** *Makarikari Strain C. 79.* **135128.** *Makarikari Strain 11-4.*
- 135126.** *Makarikari Strain C. 80.* **135129.** *Makarikari Strain 11-12.*
- 135127.** *Makarikari Strain 10-5.*
- 135130.** PANICUM COLORATUM L.
- 135131.** LOTUS ULIGINOSUS Schkur. Fabaceae.
From New Zealand. Seeds presented by A. Bruce Levy, Grassland Division, Plant Research Bureau, Palmerston North. Received January 29, 1940.
(A1, 41.) A herbaceous perennial pasture plant that grows in wet swampy ground.
For previous introduction see 91983.
- 135132 to 135261.** CITRULLUS VULGARIS Schrad. Cucurbitaceae. **Watermelon.**
From Afghanistan and India. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received February 10, 1940.
Unless otherwise stated, this material was collected in Afghanistan.
- 135132.** Received without notes.
- 135133.** No. 4461. From Peshawar, North-West Frontier Province, India, August 6, 1939. Fruit 15 by 6 inches; rind pea green, $\frac{1}{2}$ inch thick; flesh rose, good texture, fair flavor.
- 135134 to 135136.** Received without notes.
- 135137.** No. 4495. From Kabul, August 16, 1939. Fruit subglobose, 8 inches in diameter; rind green white, obscurely reticulated with darker green, $\frac{1}{2}$ to 1 inch thick; flesh clear pink, of good quality.
- 135138.** No. 4503. From Charikar, August 22, 1939, at 5,000 feet altitude. Fruit globose, 10 inches in diameter; rind 1 inch thick, pea green, mottled and clouded darker; flesh bright rose, of good quality.
- 135139.** No. 4587. From Terak, September 2, 1939. A mixed sample of melons grown without irrigation. Probably as near an unselected, nearly wild strain as can be found. Fruits globose, 6 to 8 inches across, very seedy; flesh faintly colored pink, lacks sweetness, but has excellent texture.
- 135140.** No. 4606. From Kala Sarkari, September 6, 1939. Fruit subglobose, 10 inches in diameter; rind $\frac{3}{4}$ inch thick; flesh rose, of good quality.
- 135141.** No. 4626. *Tarbuza.* From Kala Sarkari, September 8, 1939. A mixed sample. The fruits here are of a different quality, but may have been picked green.
- 135142 to 135146.** From Tukzar, September 13 and 14, 1939.
- 135142.** No. 4665. Fruits about 9 by 5 inches, pale green with broken reticulations of darker green; rind $\frac{1}{2}$ inch thick; bright-pink flesh of good texture and high quality.

135132 to 135261—Continued

135143. No. 4667. Fruit subglobose, 9 inches in diameter, pale green with broken reticulations darker; rind $\frac{1}{2}$ inch thick; flesh pale pink, quality excellent.
135144. No. 4672. Fruit 18 by 8 inches, very dark green with cloudings of paler green in broken stripe; rind 1 inch thick; flesh a beautiful pink, somewhat stringy, but of fine flavor.
135145. No. 4680. Fruit globose, 8 inches in diameter, pale green with broken reticulations of darker green; rind $\frac{3}{8}$ inch thick; flesh bright pink, of good texture and flavor.
135146. No. 4681. Fruit globose, 7 inches in diameter, dark green; rind $\frac{1}{2}$ inch thick; flesh deep pink, good texture and quality.
- 135147 to 135149. From Garzan, October 4, 1939, but fruit said to have come from Laorlash.
135147. No. 4786. Fruit globose, 8 inches in diameter, white green with irregular ribbon stripes of pea green; rind $\frac{3}{8}$ inch thick; flesh bright pink, of fine quality.
135148. No. 4787. Fruit 12 by 6 inches, blotched stripes of very dark green and paler green; rind $\frac{1}{4}$ inch thick; flesh pink, of good quality.
135149. No. 4790. Fruit subglobose, 8 inches in diameter, grass green, reticulated sparingly with darker green; rind $\frac{1}{2}$ inch thick; flesh dull pink, of fine quality.
135150. No. 4810. From Laorlash, October 7, 1939, and said to have been grown without irrigation. Fruit globose 8 inches in diameter, pea green with darker reticulations; rind $\frac{1}{4}$ inch thick; flesh bright pink, of good quality.
- 135151 to 135184. From Sharak, October 7 and 8, 1939, at 7,500 feet altitude. Grown without irrigation.
135151. No. 4811. Fruit irregular in size, pear-shaped, 17 by 12 inches, irregular rib stripes of black green and pea green; rind $\frac{1}{2}$ inch thick; flesh bright pink, good quality, few seeds.
135152. No. 4812. Fruit subglobose, 12 inches in diameter, sea green with narrow broken-rib stripes of black green; rind $\frac{1}{2}$ inch thick; flesh attractively mixed yellow and pink, of good quality.
135153. No. 4813. Fruit 14 by 18 inches, black green; rind $\frac{3}{8}$ inch thick; flesh attractively mixed yellow and pale pink, of good quality.
135154. No. 4814. Fruit subglobose, 10 inches in diameter, black green; rind $\frac{3}{4}$ inch thick; flesh pink, of good quality.
135155. No. 4815. Fruit subglobose, 12 inches in diameter, sea green with narrow reticulated stripes of darker green; rind $\frac{1}{2}$ inch thick; flesh bright pink, very sweet, seedy.
135156. No. 4816. Fruit subglobose, 12 inches in diameter, grass green, reticulated darker and with line stripes of darker green; rind $\frac{1}{2}$ inch thick; flesh yellow, of good quality.
135157. No. 4819. Fruit subglobose, 10 inches in diameter, grass green, reticulated darker and with line stripes of darker green; rind $\frac{1}{2}$ inch thick; flesh apricot, of good quality.
135158. No. 4820. Fruit 15 by 6 $\frac{1}{2}$ inches, grass green with narrow stripes of darker green; rind $\frac{1}{2}$ inch thick; flesh rose and very sweet.
135159. No. 4822. Fruit subglobose, 9 inches in diameter, yellow green; rind $\frac{3}{8}$ inch thick; flesh bright pink, good quality.
135160. No. 4823. Fruit 12 inches in diameter, pale green with scattered fine dots and netting of darker green; rind $\frac{1}{2}$ inch thick.
135161. No. 4824. Fruit subglobose, 11 inches in diameter, black green with narrow irregular stripes of pale green; rind $\frac{3}{4}$ inch thick; flesh rose, firm, slightly stringy, good flavor, sweet.
135162. No. 4826. Fruit 8 by 5 $\frac{1}{2}$ inches, grass green with irregular, broad, blotched stripes of paler green; rind $\frac{1}{4}$ inch thick; flesh rose, of good quality.

135132 to 135261—Continued

135163. No. 4827. Fruit sea green, hard shell, subglobose, 10 inches in diameter; rind $\frac{1}{2}$ inch thick; flesh pale pink, of good quality.
135164. No. 4828. Fruit 12 inches in diameter, pea green; rind 1 inch thick; flesh bright pink, very sweet, good texture, few seeds.
135165. No. 4829. Fruit globose, 10 inches in diameter, pale green, handsomely striped with irregular dark green; rind $\frac{3}{4}$ inch thick; flesh rose, of fair quality.
135166. No. 4835. Fruit 12 by 10 inches, sea green reticulated with darker green; rind $\frac{1}{2}$ inch thick; flesh rose, firm, good flavor; a good keeper.
135167. No. 4838. Fruit 12 by 13 inches, pea green, reticulated with darker green; rind $1\frac{1}{2}$ inches thick; flesh bright pink, of first quality.
135168. No. 4839. Fruit 14 by 7 inches, grass green with narrow, irregular, blotched stripes of paler green; rind $\frac{1}{2}$ inch thick; flesh yellow, of good quality.
135169. No. 4840. Fruit 13 by 7 inches, grass green with irregular blotched stripes of pea green; rind $\frac{1}{2}$ inch thick; flesh rose, sweet but somewhat stringy.
135170. No. 4841. Fruit subglobose, pale green; rind $\frac{3}{8}$ inch thick, hard shell; flesh bright pink, first class.
135171. No. 4842. Fruit 14 by 10 inches, alternate stripes of black and grass green; rind 2 inches thick; flesh bright pink, of good quality.
135172. No. 4843. Fruit 14 by 10 inches, with alternate stripes of black and grass green; rind 2 inches thick; flesh bright pink, of good quality.
135173. No. 4844. Fruit in cross section often triangular, subglobose, 10 inches in diameter, grass green clouded paler; rind $\frac{1}{2}$ inch thick; flesh yellow, of fair quality; curious seeds.
135174. No. 4845. Fruit globose, 8 inches in diameter, yellow green; rind $\frac{3}{8}$ inch thick, hard shell; flesh bright pink, excellent quality.
135175. No. 4846. Fruit subglobose, 14 inches in diameter, sea green, reticulated; rind $\frac{3}{4}$ inch thick; flesh pink, good quality.
135176. No. 4847. Fruit 14 inches in diameter, grass green with narrow irregular stripes of black; rind $\frac{1}{2}$ inch thick; flesh bright pink, of good quality.
135177. No. 4848. Fruit globose, 10 inches in diameter, sea green with narrow irregular stripes of black green; rind $\frac{1}{2}$ inch thick; flesh apricot pink, very sweet.
135178. No. 4849. Fruit tapering to end, subglobose, 12 inches in diameter, pea green with darker broken reticulations; rind $\frac{1}{2}$ inch thick; flesh bright pink, of fine quality.
135179. No. 4950. Fruit globose, grass green, reticulated with darker green and with narrow black ribs; rind $\frac{1}{2}$ inch thick; flesh pink, of good quality.
135180. No. 4851. Fruit subglobose, 10 inches in diameter, green black with faint cloudings of paler green; rind $\frac{1}{2}$ inch thick; flesh yellow, tinged apricot, of excellent quality.
135181. No. 4852. Fruit globose, 11 inches in diameter with indented ribs; rind $\frac{1}{2}$ inch thick; flesh rose, of good quality.
135182. No. 4853. Fruit subglobose, 10 inches in diameter, alternately striped pea and black green; rind $\frac{1}{2}$ inch thick; flesh rose, of fair quality.
135183. No. 4854. Fruit pale green, 10 inches in diameter; flesh pale pink, of good quality.
135184. No. 4855. Fruit subglobose, 11 inches in diameter, pale green with dotting and reticulation of darker green; rind $\frac{1}{2}$ inch thick; flesh pale rose, of good texture but low in sugar.

135132 to 135261—Continued

135185 to 135193. From Bandar, October 9 and 10, 1939, at 7,500 feet altitude. Grown without irrigation.

135185. No. 4856. Fruit 12 by 7 inches, grass green clouded with paler green; rind $\frac{1}{2}$ inch thick; flesh yellow, of fine quality.

135186. No. 4857. Fruit subglobose, 12 inches in diameter, sea green with traces of vermiculated darker green; rind $\frac{1}{2}$ inch thick; flesh light pink, of good quality.

135187. No. 4858. Fruit 10 by 8 inches, grass green, vermiculated with darker green; rind $\frac{1}{2}$ inch thick; flesh pink, of good quality.

135188. No. 4860. Fruit 6 by 4 $\frac{1}{2}$ inches, grass green with narrow stripes of paler green; rind $\frac{1}{4}$ inch thick; flesh rose, of fine quality.

135189. No. 4861. Fruit the elongate sort, 8 inches long, pale green with coarse reticulations; flesh pink; said to be an excellent melon.

135190. No. 4862. Fruit up to 15 inches in diameter, pale green; rind 1 inch thick; flesh firm, bright pink, of good quality with few seeds. Fruits weigh 25 pounds each; some fruits nearly seedless.

135191. No. 4863. Fruit 12 by 7 inches, very dark green with few cloudings of paler green; rind $\frac{3}{8}$ inch thick; flesh bright pink, of fine quality.

135192. No. 4864. Fruit 12 by 8 inches tapering to the stem end, somewhat pale green; rind $\frac{1}{2}$ inch thick; flesh bright pink, almost seedless (only 42 seeds in the melon).

135193. No. 4865. Fruit 12 by 10 inches, grass green and very dark green in irregular stripes of equal width; rind $\frac{1}{2}$ inch thick; flesh yellow, tinted a beautiful pink around the seeds; of good texture but low in sugar.

135194 to 135205. From Khwajarbichajalak, October 17 and 18, 1939, at 7,000 feet altitude. Fruit grown without irrigation.

135194. No. 4893. Fruit subglobose, 8 inches in diameter, green white with chain stripes of darker green; rind $\frac{1}{2}$ inch thick; flesh yellow, of fine quality.

135195. No. 4894. Fruit very pale green, subglobose, 10 inches in diameter; rind $\frac{3}{4}$ inch thick; flesh deep pink, of good quality.

135196. No. 4897. Fruit globose, 8 inches in diameter, very dark green spotted with pale green; rind $\frac{1}{4}$ inch thick; flesh rose, of good quality.

135197. No. 4896. Fruit subglobose, pale green, 10 inches in diameter; rind $\frac{3}{8}$ inch thick; flesh rich deep pink, of fine quality, with few seeds.

135198. No. 4895. Fruit greenish white, subglobose, 12 inches in diameter; rind $\frac{1}{2}$ inch thick; flesh pink, of good quality.

135199. No. 4901. Fruit very dark green, subglobose, 10 inches in diameter; rind $\frac{1}{2}$ inch thick; flesh yellow, tinted apricot, of good quality.

135200. No. 4907. Fruit globose, 10 inches in diameter, pea green; rind $\frac{1}{2}$ inch thick; flesh yellow, of good quality.

135201. No. 4908. Fruit 12 by 7 inches, pea green with broken reticulations; rind $\frac{1}{2}$ inch thick; flesh yellow, of good quality.

135202. No. 4912. Fruit globose, 10 inches in diameter, pea green, reticulated with darker green; rind $\frac{1}{2}$ inch thick; flesh bright pink, of fine quality.

135203. No. 4913. Fruit globose, 12 inches in diameter, pale green with a spreading chain stripe of very dark green; rind $\frac{1}{4}$ inch thick; flesh bright pink, of excellent quality.

135204. No. 4914. Fruit pale green reticulated, subglobose, 10 inches in diameter; rind 1 inch thick; flesh pink, of good quality.

135205. No. 4916. Fruit subelongate, 10 inches in diameter, green white; rind $\frac{1}{4}$ inch thick; flesh deep pink, of excellent quality.

135132 to 135261—Continued

- 135206 to 135208. From Maimana, October 21 and 22, 1939, at 3,000 feet altitude.
135206. No. 4923. Fruit subglobose, 12 inches in diameter, pea green with traces of reticulations; rind $\frac{3}{4}$ inch thick; flesh pink, of good quality.
135207. No. 4924. Fruit 12 by 7 inches, pea green; rind $\frac{3}{8}$ inch thick; flesh pink, of good quality.
135208. No. 4925. Fruit globose, 1 foot in diameter, alternate stripes of very dark green and pea green; rind $\frac{3}{4}$ inch thick; flesh bright rose, of good quality.
- 135209 to 135240. From Akcha, October 25 to 27, 1939, at 1,500 feet altitude.
135209. No. 4937. Fruit 22 by 11 inches, pea green, faintly reticulated; rind $\frac{1}{2}$ inch thick; flesh pink, of fine quality.
135210. No. 4938. Fruit globose, 14 inches in diameter, sea green with vermiculations; rind $\frac{3}{4}$ inch thick; flesh bright pink, of fine quality.
135211. No. 4939. Fruit subglobose, 14 inches in diameter, grass green with darker veining; rind 1 inch thick; flesh rose, of good quality.
135212. No. 4940. Fruit subglobose, 14 inches in diameter, alternate stripes of sea green and grass green; rind $\frac{3}{4}$ inch thick; flesh rose, of good quality.
135213. No. 4941. Fruit 16 by 12 inches, alternately striped sea and grass green; rind $\frac{3}{4}$ inch thick; flesh rose, of good quality.
135214. No. 4942. Fruit globose, 14 inches in diameter, sea green with vermiculations of darker green; rind $\frac{3}{4}$ inch thick; flesh rose, of good quality.
135215. No. 4943. Fruit 14 by 11 inches, alternately striped sea and grass green; rind $\frac{1}{2}$ inch thick; flesh deep pink, of fine quality.
135216. No. 4944. Fruit globose, 13 inches in diameter, blotch stripes pea green and grass green; rind $\frac{1}{2}$ inch thick; flesh rose, of good quality.
135217. No. 4945. Fruit globose, 11 inches in diameter, blotch stripes of sea green and grass green; rind $\frac{3}{4}$ inch thick; flesh bright pink, of fine quality.
135218. No. 4946. Fruit subglobose, 12 inches in diameter; sea green with broken vermiculations and narrow stripes of darker green; rind 1 inch thick; flesh pink, of good quality.
135219. No. 4948. Fruit 17 by 8 inches, pea green with broken vermiculations of darker green; rind $\frac{1}{2}$ inch thick; flesh pink, of good quality.
135220. No. 4949. Fruit 18 by 8 inches, sea green with broken vermiculations of darker green; rind $\frac{1}{2}$ inch thick; flesh pink, of good quality.
135221. No. 4950. Fruit 15 by 8 inches, pea green clouded with darker green; rind $\frac{1}{2}$ inch thick; flesh pink, of good quality.
135222. No. 4951. Fruit 15 by 8 inches, pea green, faintly marked with darker green; rind $\frac{1}{2}$ inch thick; flesh pale pink, of good quality.
135223. No. 4952. Fruit globose, 13 inches in diameter, pea green; rind $\frac{3}{4}$ inch thick; flesh pink, of good quality.
135224. No. 4953. Fruit subglobose, 12 inches in diameter, pea green with faint reticulations; rind $\frac{3}{4}$ inch thick; flesh deep rose, of good quality.
135225. No. 4955. Fruit subglobose, 12 inches in diameter, very dark green; rind $\frac{3}{4}$ inch thick; flesh deep rose, of good quality.
135226. No. 4956. Fruit globose, 12 inches in diameter, very dark green; rind $\frac{3}{4}$ inch thick; flesh deep rose, of good quality.
135227. No. 4957. Fruit 15 by 10 inches, striped grass green and sea green; rind $\frac{3}{4}$ inch thick; flesh rose, of good quality.
135228. No. 4958. Fruit 17 by 10 inches, broken-blotch stripes of grass green and sea green; rind $\frac{3}{4}$ inch thick; flesh apricot, of good quality.
135229. No. 4959. Fruit 15 by 9 inches, striped pea green and grass green; rind $\frac{1}{2}$ inch thick; flesh pink, of fine quality.

135132 to 135261—Continued

135230. No. 4960. Fruit 18 by 8 inches, very dark green with deep stripes of pale green; rind 1 inch thick; flesh pink, of fine quality.
135231. No. 4961. Fruit 17 by 8 inches, very dark green, clouded with paler green; rind $\frac{3}{4}$ inch thick; flesh pink with yellow streaks, of fine quality.
135232. No. 4962. Fruit 18 by 8 inches, very dark green with deep stripes of paler green; rind 1 inch thick; flesh bright pink with streaks of yellow, of fine quality.
135233. No. 4963. Fruit 18 by 9 inches, very dark green, clouded with paler green; rind $\frac{3}{4}$ inch thick; flesh rose, of good quality.
135234. No. 4964. Fruit 15 by 10 inches, grass green; rind $\frac{7}{8}$ inch thick; flesh rose, of good quality.
135235. No. 4966. Fruit 16 by 9 inches, grass green reticulated with darker green; rind $\frac{3}{4}$ inch thick; flesh pink, of fine quality.
135236. No. 4967. Fruit subglobose, 12 inches in diameter, grass green, clouded and reticulated with darker green; rind $\frac{3}{4}$ inch thick; flesh rose, of good quality.
135237. No. 4968. Fruit 14 by 10 inches, grass green; rind $\frac{1}{2}$ inch thick; flesh pink, of good quality.
135238. No. 4969. Fruit subglobose, 12 inches in diameter, pea green, marbled darker green; rind $\frac{3}{4}$ inch thick; flesh rose, of good quality.
135239. No. 4973. Fruit 23 by 17 inches, grass green with irregular deep stripes of paler green; rind $\frac{1}{2}$ inch thick; flesh rose, of good quality.
135240. No. 4975. Fruit globose, 18 inches in diameter, alternate stripes of pea green and very dark green; rind $\frac{3}{4}$ inch thick; flesh first yellow, then pink, of good quality, not coarse.
- 135241 to 135246. From Balkh, October 29 to 31, 1939, between 1,200 and 1,500 feet altitude.
135241. No. 4978. Fruit subglobose, 10 inches in diameter, alternately striped with pale green and grass green; rind $\frac{3}{4}$ inch thick; flesh apricot, of good quality.
135242. No. 4983. Fruit 20 by 9 inches, pale green with broken vermiculations of darker green; rind $\frac{3}{4}$ inch thick; flesh orange pink, of good quality.
135243. No. 4984. Fruit 16 by 8 inches, pale green with darker vermiculations; rind $\frac{3}{4}$ inch thick; flesh pink, of good quality.
135244. No. 4989. Fruit subglobose, $3\frac{1}{3}$ inches in diameter, pale green with broken stripes of darker green; flesh greenish, sour, bitter. A wild variety used as medicine.
135245. No. 4991. Fruit 14 by 7 inches, pea green, reticulated with darker green and with irregular narrow stripes of paler green; rind $\frac{3}{4}$ inch thick; flesh pink, of good quality.
135246. No. 4992. Fruit globose, 10 inches in diameter, pea green, reticulated with darker green; rind $\frac{3}{4}$ inch thick; flesh pink, of good quality; hollow heart, a rare condition in Afghan melons.
135247. No. 4997. From Mazarisharif, November 1, 1939. Fruit globose, 10 inches in diameter, green white with traces of darker green vermiculations; rind $\frac{3}{4}$ inch thick; flesh rose, of fine quality.
135248. No. 5014. From Tashkurchan, at 1,500 feet altitude, November 3, 1939. Fruit 14 by 7 inches, dark green with paler green, blotched stripes; rind $\frac{1}{2}$ inch thick; flesh rose, of good quality.
- 135249 and 135250. From Puli Komri, November 5 and 7, 1939.
135249. No. 5019. Fruit 13 by 9 inches, very dark green with narrow stripes of grass green; rind $\frac{1}{2}$ inch thick; flesh bright pink, of good quality.

135132 to 135261—Continued

135250. No. 5027. Fruit subglobose, 11 inches in diameter, very dark green; rind $\frac{1}{2}$ inch thick; flesh bright pink, of excellent quality.

135251 to 135254. From Dashi, November 9, 1939.

135251. No. 5029. Fruit globose, 10 inches in diameter, very dark green; rind $\frac{1}{2}$ inch thick; flesh rose, of good quality.

135252. No. 5030. Fruit tapering elongate, 18 by 9 inches, coarsely reticulated and with irregular stripes of darker green; rind $\frac{1}{4}$ inch thick; flesh rose, very sweet.

135253. No. 5031. Fruit 15 by 10 inches, pea green with heavy coarse reticulations; rind $\frac{3}{4}$ inch thick; flesh rose, of good quality.

135254. No. 5032. Fruit subglobose, 12 inches in diameter, very pale green with irregular line stripes of darker green; rind $\frac{3}{4}$ inch thick; flesh pink, of very good quality.

135255 to 135257. From Kabul, November 12 and 20, 1939.

135255. No. 5036. Fruit globose, 11 inches in diameter, pale greenish white with irregular stripes of dark green; rind $\frac{2}{8}$ inch thick; flesh pink, firm, fairly sweet; a good keeper.

135256. No. 5038. Fruit 8 by 9 inches, green white; rind $\frac{1}{2}$ inch thick; flesh pink, of good quality; a good keeper.

135257. No. 5068. Fruit elongate, 15 by 8 inches, pale green; rind $\frac{3}{4}$ inch thick; flesh pink, of good quality.

135258 and 135259. From Khalat, November 22, 1939.

135258. No. 5071. Fruit subglobose, pea green, 15 inches in diameter; rind $\frac{3}{4}$ inch thick; flesh rose, good texture and flavor, very sweet.

135259. No. 5072. Fruit subglobose, pea green, 12 inches in diameter; rind 1 inch thick; flesh rose, of good texture and flavor, very sweet.

135260. No. 5076. From Spin Baldak, November 24, 1939. Fruit globose, $3\frac{1}{2}$ inches in diameter, lemon yellow, more or less marbled with green; flesh whitish, bitter. The plant grows in the desert, is 6 feet across, and bears 20 to 30 fruits.

135261. No. 5083. From Kalat-i-ghilzai, November 22, 1939. Fruit pear-shaped, 13 inches high, grass green; flesh rose, of good quality.

135262. JUGLANS HONOREI Dode. Juglandaceae. **Walnut.**

From California. Tree growing in the United States Plant Introduction Garden, Chico. Numbered February 12, 1940.

A wild walnut, native to the highlands of South America, which closely resembles the black walnut of the United States.

For previous introduction see 108822.

135263. DIERVILLA. Caprifoliaceae.

From Virginia. Plants purchased from Greenbrier Farms, Inc., Norfolk. Received February 17, 1940.

Bris de Mai.

135264. AMYGDALUS PERSICA L. Amygdalaceae. **Peach.**

From New York. Scions presented by James F. A. Brannan, West River Road, Fulton. Received February 12, 1940.

A seedling peach.

135265 to 135267.

From Brazil. Seeds presented by Jorge Ramos de Otero, Division of Agrostology, Ministerio da Agricultura, Deodoro. Received January 25, 1940.

135265. DESMODIUM ASPERUM (Poir.) Desv. Fabaceae.

A tropical American perennial legume, with virgate stems 3 to 5 feet high and racemes of small, purple flowers.

135265 to 135267—Continued

135266. *DESMODIUM DISCOLOR* Vogel (*Meibomia discolor* Kuntze).

A shrubby, erect, hairy plant from southern Brazil, with oval membranous leaflets and large panicles of light-blue flowers. Cultivated in Brazil for forage and silage; it is cut while young, as it becomes woody with age.

For previous introduction see 133429.

135267. *DESMODIUM LEIOCARPUM* (Spreng.) Don (*Meibomia leiocarpa* (Spreng.) Kuntze).

In northern Argentina and southern Brazil this native leguminous plant is eaten readily by stock. It becomes 6 feet or more in height, more or less branched, with trifoliolate leaves 2 inches or more long.

For previous introduction see 64217.

135268 to 135403.

From Afghanistan. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received February 12, 1940.

135268. *BENINCASA HISPIDA* (Thunb.) Cogn. Cucurbitaceae. Wax gourd.135269 to 135343. *CUCUMIS MELO* L. Cucurbitaceae. Muskmelon.

135269 and 135270. Collected in Dasht-i-sufed, August 24, 1939, at 6,000 feet altitude. Grown under irrigation. *Kharbuz* is the vernacular name for melon in Afghanistan.

135269. No. 4507. Fruit semiglobose, 10 inches in length, green yellow with blotches of green black; rind smooth; flesh greenish, $1\frac{1}{2}$ inches thick, and sweet.

135270. No. 4508. Fruit globose, 6 inches in diameter; rind golden yellow, hard and smooth; flesh white, $1\frac{1}{4}$ inches thick, and sweet. Excellent keeper.

135271 and 135272. Collected in Kamard, August 24, 1939, at 6,000 feet altitude. Grown under irrigation.

135271. No. 4511. Fruit football-shaped, 10 inches in length; rind yellow with little net; flesh greenish, $1\frac{1}{2}$ inches thick, and sweet.

135272. No. 4513. Fruit semiglobose, 8 inches in length; rind pale yellow, ribbed, greenish netted; flesh white, $1\frac{1}{2}$ inches thick and sweet.

135273. No. 4514. From Kamard, August 25, 1939. Grown under irrigation. Fruit green yellow, 8 by 5 inches, netted; flesh white, $1\frac{1}{2}$ inches thick.

135274 and 135275. Collected at Dari Yusuf, August 30, 1939.

135274. No. 4569. Fruit yellow, dotted with pale yellow and green, faint net, 10 by 6 inches; flesh white, $1\frac{1}{2}$ inches thick.

135275. Fruit football-shaped, 10 inches in length; elongate blotches of dark and pale green, faint net; flesh $1\frac{1}{4}$ inches thick, white, crisp, and sweet.

135276 and 135277. Collected at Binimang, September 1, 1939.

135276. No. 4578. Fruit football-shaped, 10 inches in length; rind lemon yellow; flesh white, $1\frac{1}{4}$ inches thick, soft, juicy, and sweet. Grown under irrigation.

135277. No. 4586. Fruit subglobose, 8 inches in length; rind yellow, unnetted; flesh salmon color, $1\frac{1}{2}$ inches thick, soft, juicy, and sweet. Said to be grown without water.

135278. No. 4588. From Terak, September 2, 1939. Fruit elongate, 10 by 6 inches; rind heavily netted, blotched yellow and orange; flesh white, $1\frac{3}{4}$ inches thick, and sweet. Said to be grown without water.

135279 to 135303. Collected in Kala Sarkari, September 1939.

135279. Fruit football-shaped, 7 inches in length; trace of net on rind, blotched grass green and orange, with broad unindented ribs of pale green; flesh white, $1\frac{1}{2}$ inches thick, and sweet.

135268 to 135403—Continued

135280. No. 4600. Fruit pale yellow; rind dotted heavily with green, heavily netted; flesh green, $1\frac{1}{2}$ inches thick, fine quality.
135281. No. 4603. Fruit subglobose, 8 inches in length; rind attractively and bizarrely striped with irregular stripes of black green reticulated with white; flesh white, 2 inches thick, and sweet.
135282. No. 4604. Fruit subglobose, 8 inches in length; rind white cream, smooth, except for narrow, faintly indented ribs; flesh white, $1\frac{1}{4}$ inches thick, and sweet.
135283. No. 4605. Fruit subglobose, 6 inches in length; rind firm, heavily netted, blotched green and yellow; flesh white, crisp, sweet, and $1\frac{3}{4}$ inches thick.
135284. No. 4607. Fruit globose, tapering to blossom, 10 inches in length; rind ribbed, coarse netted, blotched yellow, orange, and green; flesh white, 2 inches thick, and sweet.
135285. No. 4608. Fruit flattened, 6 by 4 inches; rind strongly netted, conspicuously ribbed with grass green rib stripes, not indented, rest of surface pale green, dotted finely with yellow; flesh green, 2 inches thick, and fine flavored. Rare.
135286. No. 4609. Fruit globose, 8 inches in length; rind smooth, pale green, reticulated white; flesh white, $1\frac{1}{4}$ inches thick, and sweet.
135287. No. 4610. Fruit elongate football-shaped, 12 inches in length; rind heavily netted, pale yellow, mottled green; flesh $1\frac{3}{4}$ to 2 inches thick, white, crisp, and sweet.
135288. No. 4611. Fruit flattened, 8 by 6 inches, heavily netted, yellow with ribs of green, ribs not indented; flesh green, 2 inches thick, and sweet.
135289. No. 4612. Fruit elongate, 12 inches in length; rind coarse sparse net, pale yellow green, heavily and finely dotted pea green and with large elongate blotches of black green; flesh white, 2 inches thick, crisp, and sweet.
135290. No. 4613. Fruit globose, 8 inches in length; rind black green mottled paler, traces of net; flesh greenish, 2 inches thick, fine quality.
135291. No. 4622. Fruit globose, 8 inches in length; rind pale yellow, dotted finely with green, with broad bands of pale green, heavily netted; flesh green white, 2 inches thick, fine quality.
135292. No. 4626. Fruit subglobose, tapered to blossom, 10 inches in length; rind smooth, yellow, dotted green; flesh cream, 2 inches thick, and sweet.
135293. No. 4628. Fruit globose, spherical-triangular in cross section 10 inches in length; rind unnetted, yellow white with irregular blotching of green; flesh cream, 2 inches thick, and sweet.
135294. No. 4630. Fruit subglobose, 8 inches in length; rind coarse-netted, ground finely dotted with yellow and pale green, blotched with black green; flesh cream, 2 inches thick, and sweet.
135295. No. 4631. Fruit football-shaped, 14 inches in length; rind yellow and orange with faintly indented ribs of greenish white; flesh white, $1\frac{1}{2}$ inches thick, and sweet.
135296. No. 4632. Fruit elongated, 6 by 4 inches; rind heavily netted, mottled with yellow and green; flesh green, $1\frac{3}{4}$ inches thick, fine quality.
135297. No. 4633. Fruit 6 by 4 inches; rind netted, orange and yellow; flesh cream, $1\frac{3}{4}$ inches thick, and sweet.
135298. No. 4634. Fruit globose, 6 inches in length; rind white, dotted with green, with broad, slightly indented ribs of greenish white; flesh white, $1\frac{3}{4}$ inches thick, and sweet.
135299. No. 4635. Fruit 12 by 8 inches; rind gold and smooth; flesh white, 2 inches thick, and sweet.

135268 to 135403—Continued

135300. No. 4637. Fruit subglobose, 8 inches in length; rind gold, smooth, and firm; flesh white, $1\frac{1}{2}$ inches thick, and sweet. Said to be a Bokhara sort.
135301. No. 4638. Fruit subglobose, 7 inches in length; rind yellow, more or less dotted with green and with broad, unindented rib stripes of dark green, traces of net; flesh greenish white, $1\frac{3}{4}$ inches thick, and sweet.
135302. No. 4641. Fruit football-shaped, 10 inches in length; rind heavily wrinkled and furrowed, lemon color, more or less finely dotted with green, very firm; flesh white, 2 inches thick, and sweet. Good keeper.
135303. No. 4646. Fruit flattened, 4 inches by $2\frac{1}{2}$ inches; rind yellow, attractively mottled and splotched with brown; aromatic.
- 135304 to 135306. Collected in Akupruk, September 11, 1939.
135304. No. 4662. Fruit football-shaped, 15 inches in length; rind yellow, more or less clouded with green, slightly indented narrow ribs of green white, faint net; flesh white, 2 inches thick, and sweet. Not irrigated.
135305. No. 4663. Fruit football-shaped, 15 inches in length; rind heavily netted, blotched pea and black green; flesh white, 2 inches thick, firm, crisp, and sweet.
135306. No. 4664. Fruit elongate, 15 by 8 inches; rind greenish white, heavily netted; flesh white, 2 inches thick, and sweet.
- 135307 to 135329. Collected in Tukzar, September 13 and 14, 1939.
135307. No. 4670. Fruit subglobose, 7 inches in length; rind smooth, with unmarked indented ribs, pale yellow with long blotches of orange; flesh white, 2 inches thick, fine-grained, and sweet.
135308. No. 4671. Fruit football-shaped, 11 inches in length; rind heavily netted, pale yellow, dotted and blotched with green; flesh greenish white, 2 inches thick, crisp, and sweet.
135309. No. 4673. Fruit globose; 15 inches in diameter; rind yellow, firm, somewhat uneven; flesh white, 2 inches thick, and fine flavor. Good keeper.
135310. No. 4674. Fruit flattened, 8 by 6 inches; rind pale green, dotted with darker green, heavily netted with unnetted rib lines; flesh green, 2 inches thick, and sweet.
135311. No. 4675. Fruit flattened, 7 by 5 inches; rind smooth, pale yellow green, dotted with green; flesh greenish white, $1\frac{3}{4}$ inches thick, and sweet.
135312. No. 4676. Fruit tapered, 14 by 7 inches; rind heavily netted, irregular bands of black, green, and yellow; flesh greenish white, $1\frac{1}{2}$ inches thick, crisp, and sweet.
135313. No. 4677. Fruit 16 by 7 inches; rind lemon with traces of broad black-green stripes, traces of netting; flesh white, 2 inches thick, crisp, and sweet.
135314. No. 4678. Fruit globose, 10 inches in diameter; rind pale green, dotted with darker green, heavily indented ribs; flesh cream white, $2\frac{1}{2}$ inches thick, very sweet.
135315. No. 4679. Fruit tapered, 15 by 7 inches; rind orange, with broken black-green stripes, coarse-netted; flesh white, 2 inches thick, crisp, and sweet.
135316. No. 4682. Fruit subglobose, 8 inches in length; rind yellow white, grass-green blotches, sunken but unmarked ribs; flesh white, $1\frac{1}{2}$ inches thick, and sweet.
135317. No. 4683. Fruit subglobose, 1 foot in length; rind indented, unmarked ribs, elongate, irregular, blotched stripes of green and lemon; flesh white, 2 inches thick, and sweet.

135268 to 135403—Continued

135318. No. 4684. Fruit subglobose, 10 inches in length; rind greenish white dotted with darker green, indented ribs, heavy net; flesh white, 2¼ inches thick, and sweet.
135319. No. 4685. Fruit elongate football-shaped, 14 inches in length; rind heavily netted, pale yellow, obscured by blotches of black, green, and orange; flesh white, crisp, 2 inches thick, and sweet.
135320. No. 4686. Fruit 10 by 5 inches; rind smooth, grass green, spotted with yellow; flesh cream white, 1¾ inches thick, and sweet.
135321. No. 4687. Fruit subglobose, 12 inches in length; rind nearly smooth, pale lemon, heavily dotted with green; flesh white, 2¼ inches thick, and sweet.
135322. No. 4688. Fruit football-shaped, 1 foot in length; rind netted, pale green to lemon, dotted and blotched with dark green; flesh white, 2 inches thick, crisp, and sweet.
135323. No. 4689. Fruit flattened, 10 by 8 inches; rind furrowed, unnetted, lemon with raised blotches of orange; flesh greenish white, 1½ inches thick, and very sweet. Good keeper.
135324. No. 4690. Fruit top-shaped, 14 inches in length; rind orange, more or less dotted with green, smooth; flesh greenish white, 2½ inches thick, and sweet.
135325. No. 4698. Fruit subglobose, 7 inches in length; rind lemon with slightly indented ribs of green, smooth; flesh creamy white, 2 inches thick, and sweet.
135326. No. 4701. Fruit somewhat top-shaped, 14 inches in length; rind lemon, smooth; flesh cream white, 2 inches thick, and sweet.
135327. No. 4702. Fruit 10 by 5 inches; rind greenish white, finely dotted with green, smooth; flesh white, 1¾ inches thick, and sweet.
135328. No. 4706. Fruit top-shaped, 10 inches in length; rind yellow, dotted with green, broad indented ribs of green; flesh cream, 2 inches thick, and sweet.
135329. No. 4711. Said to have fruits 3 to 4 feet long.
135330. No. 4754. Bought in the market in Sufak. Fruits football-shaped, 1 foot in length; rind heavily netted, blotched with green and yellow; flesh cream white, 2 inches thick, crisp, and sweet. An excellent keeper.
- 135331 to 135335. Collected in Shorak, October 7 and 8, 1939. Grown without irrigation.
135331. No. 4821. Fruit football-shaped, 1 foot in length; rind gold, blotched with green; flesh white, 1½ inches thick, and sweet.
135332. No. 4825. Fruit football-shaped, 10 inches in length; rind grass green, heavily netted; flesh green, 2 inches thick, crisp, and sweet.
135333. No. 4830. Fruit football-shaped, 10 inches in length; rind gold, sparingly netted; flesh green, 2 inches thick, excellent flavored.
135334. No. 4836. Fruit football-shaped, 1 foot in length; rind mixed gold and black green, furrowed; flesh 2 inches thick, mellow and very sweet. Good keeper.
135335. No. 4837. Fruit subglobose, 8 inches in length; rind gold, blotched with green; flesh creamy white, 2 inches thick, very sweet.
- 135336 and 135337. Collected in Bandar, October 9 and 10, 1939.
135336. No. 4859. Grown without cultivation. Fruits not seen. Dry seed purchases. Probably several varieties.
135337. No. 4869. Grown without irrigation. Fruit globose, 6 inches in diameter, poorly grown; rind pale green, smooth; flesh white.
135338. No. 4870. From Shorak, October 9, 1939, at 7,500 feet altitude. Fruit

135268 to 135403—Continued

football-shaped, 10 inches in length; rind lemon, finely dotted green, coarsely netted; flesh green, $1\frac{1}{4}$ inches thick, crisp, and good quality.

135339. No. 4904. From Khwajaebrechajalak, October 17, 1939, at 7,000 feet altitude. Grown without irrigation. Fruit 10 by 6 inches; rind gold, smooth to slightly netted; flesh white, 2 inches thick, sweet, and rich. Good keeper.

135340. No. 4919. From Almar, October 19, 1939, at 3,000 feet altitude. Fruit subglobose, pointed at both ends, 10 inches in length; rind blotched green and gold brown, heavily netted; flesh green, 2 inches thick, firm, crisp, and sweet.

135341. No. 4927. From Maimana, October 21, 1939, at 3,000 feet altitude. Fruit football-shaped, 10 inches in length; rind green, heavily netted; flesh whitish, 2 inches thick, crisp, and sweet.

135342. No. 4932. From Andkhin, October 22, 1939, at 2,000 feet altitude. Fruit 12 by $7\frac{1}{2}$ inches; rind smooth, gold splashed with dark green; flesh cream, $2\frac{1}{2}$ inches thick, very sweet. Good keeper.

135343. No. 5033. From the foot of Shiba Pass, November 10, 1939. Fruit probably obtained from valley below. Fruit elongate, rounded, 12 by 7 inches; rind gold, coarsely netted; flesh white, $2\frac{1}{4}$ inches thick, very sweet. Apparently has good keeping qualities.

135344 to 135346. CUCUMIS SATIVUS L. Cucurbitaceae. Cucumber.

135344. No. 4623. *Badrang*. From Kala Sarkari, September 8, 1939. Fruit 7 by 4 inches; rind russet; reticulated.

135345. No. 4723. *Badrang*. From Tukzar, September 15, 1939. Fruit 1 foot by 5 inches; rind russet; reticulated by cracking.

135346. No. 4980. *Badrang*. From Akcha, September 29, 1939. Fruit 1 foot by 4 inches; rind pale russet; not conspicuously netted.

135347 to 135349. CUCUMIS MELO L. Cucurbitaceae. Muskmelon.

135347. No. 4935. From Andkhin, September 24, 1939. Apparently naturalized in a field, plant usually 3 to 4 feet across; prolific. Fruit egg-shaped, $2\frac{1}{2}$ inches in diameter; rind striped in 2 shades of green; tomentose; good keeper.

135348. No. 4976. From Balkh, October 29, 1939, at 1,500 feet altitude. Naturalized in field. Fruit ovoid, 4 inches long; rind pale green with broken stripes of dark green, hispid.

135349. No. 4994. From Balkh, October 31, 1939, naturalized. Fruit subglobose, 2 inches in length; rind yellow green with traces of narrow striping of grass green.

135350 to 135359. CUCURBITA MAXIMA Duchesne. Cucurbitaceae. Squash.

135350. No. 4710. From Tukzar, September 15, 1939. Fruit pear-shaped, 18 inches long; rind handsome salmon pink with narrow rib lines of green; flesh yellow, $3\frac{1}{2}$ inches thick, insipid.

135351. No. 4900. From Khwajaebrechajalak, September 17, 1939, at 7,000 feet altitude. Fruit slightly flattened, 14 inches in length; rind salmon pink; flesh yellow, 2 inches thick, fair quality.

135352. No. 4911. From Khwajaebrechajalak, October 17, 1939, at 7,000 feet altitude. Fruit slightly flattened, 15 inches in length; rind obscurely ribbed, gray green; flesh yellow, $2\frac{1}{2}$ inches thick, fair quality.

135353. No. 4921. From Alma. October 19, 1939, at 3,000 feet altitude. Fruit subglobose, slightly flattened, 18 inches in length; weight about 50 pounds; rind grayish green; flesh yellow, 3 inches thick, not very sweet.

135354. No. 5010. From Haibak, November 3, 1939. Fruit flattened, 10 by 5 inches, with large navel 3 inches across; rind grayish green with narrow stripes and blotches of paler green; flesh orange, $1\frac{1}{2}$ to 2 inches thick, fairly sweet.

135268 to 135403—Continued

135355. No. 5016. From Pulikomri, November 4, 1939. Fruit 24 by 10 inches; rind smooth, unribbed, handsome salmon pink with green belly; flesh 2½ inches thick, of good texture, and sweet.

135356 to 135359. Collected in Kabul, November 1939.

135356. No. 5037. Fruit flattened, 11 by 7 inches; rind orange red with obscure rib lines of cream, smooth; flesh orange, not very sweet, but of good texture.

135357. No. 5048. Fruit 20 by 10 inches; rind creamy white, smooth; flesh yellow, 3 inches thick, insipid.

135358. No. 5049. Fruit globose, 11 inches in diameter; rind creamy white, with indented ribs; flesh yellow, 2 inches thick, insipid.

135359. No. 5054. Fruit elongate, 24 by 10 inches, rind orange red with narrow-ribbed stripes and splashes of cream; flesh orange yellow; 1¼ inches thick, insipid.

135360 to 135376. CUCURBITA MOSCHATA Duchesne. Cucurbitaceae. Cushaw.

135360. No. 4618. *Kadu*. From Kala Sarkari, November 7, 1939. Fruit slightly flattened, 1 foot across; rind orange red, blotched with green, irregular indented ribs, almost white; flesh yellow, 2¼ inches thick.

135361. No. 4636. *Pilau Kadu*. From Kala Sarkari, November 8, 1939. Fruit elongated, 16 inches in length; rind orange red, blotched with layers of small, paler, orange-red blotches, deep ribs; flesh yellow, 1½ inches thick, sweet, fiberless; neck half solid.

135362 to 135364. Collected in Tukzar, September 14 and 15, 1939.

135362. No. 4699. Fruit pear-shaped, 10 inches in length; rind orange, spotted with yellow; flesh yellow, 1 inch thick, insipid.

135363. No. 4718. *Mekaekidu*. Fruit rounded elongate, 12 inches in length; rind ash gray, marbled with pink; flesh yellowish orange, 2 inches thick, insipid.

135364. No. 4722. Fruit elongate, 10 inches in length; rind irregular with indented ribs, pink buff, mottled more or less with green; flesh of bowl yellow, 1 inch thick, insipid.

135365 to 135368. Collected in Khwajaebrehjalak, October 17, 1939, at 7,000 feet altitude.

135365. No. 4902. Fruit somewhat flattened, 8 inches in length; rind orange red; flesh bright orange, 1½ inches thick, of fair quality.

135366. No. 4903. *Haluakadu*. Fruit pear-shaped, 10 inches in length; rind ribbed, pink buff, spotted with a paler pink buff; orange, 1½ inches thick, sweet, and of good texture.

135367. No. 4905. Fruit flattened, 6 by 10 inches; rind deeply ribbed, handsomely splashed and dotted with grass green and yellow buff; flesh orange, 3 inches thick, of fair quality.

135368. No. 4909. Fruit somewhat flattened, 8 inches in length; rind black green; flesh orange, 1½ inches thick, rather insipid.

135369. No. 4926. From Maimana, October 21, 1939. Altitude 3,000 feet. Fruit pear-shaped, 14 inches in length; rind conspicuously ribbed, gold brown, speckled with paler gold brown; flesh gold, 1½ to 2½ inches thick, sweet, and tender.

135370. No. 4929. From Karakul, October 22, 1939. Fruit 24 by 10 inches; rind battleship gray, shiny, faintly ribbed; flesh bright orange, of good quality, but not very sweet.

135371. No. 4947. From Akcha, October 26, 1939, at 1,500 feet altitude. Fruit globose with an exceptionally long neck (13 inches), 22 inches in length; rind gold buff with splashes of paler gold, faintly ribbed; flesh orange, sweet, and tender; seed cavity heart-shaped, 5 by 8 inches; an excellent variety.

135268 to 135403—Continued

135372. No. 4987. From Balkh, October 30, 1939, at 1,500 feet altitude. Fruit flattened, 10 by 12 inches; rind deeply ribbed, gold buff, with bloom; flesh orange, 1 to 2 inches thick, sweet, and of good texture.

135373. No. 5018. From Pulikomri, November 4, 1939. Fruit 14 by 9 inches; rind black green with blotches of Chinese red; flesh orange yellow, 2 to 2¼ inches thick, fair quality.

135374 to 135376. Collected in Kabul, November 1939.

135374. No. 5035. Fruit globose, 9 inches in diameter; rind pale yellow, faint and irregular rib indentations; flesh 1½ inches thick, insipid; eaten immature.

135375. No. 5050. Fruit subglobose, 12 inches in length; rind with heavily indented ribs, heavily and coarsely netted, salmon; flesh orange, 2½ inches thick, good texture, and sweet.

135376. No. 5058. *Tamasha Kadu*. Fruit globose, 3½ inches in diameter; rind orange yellow, nearly covered with excrescences; ornamental.

135377 to 135403. CUCURBITA PEPO L. Cucurbitaceae. **Pumpkin.**

135377. No. 4582. *Kadu*. From Binimang-i-Charaolia, September 1, 1939, at 8,000 feet altitude. Fruit 10 by 6 inches; rind with alternate irregular stripes of green and yellow; flesh 1¼ inches thick, yellow, insipid.

135378. No. 4639. *Tamasha Kadu*. From Kala Sarkari, September 8, 1939. Fruit globose, 3½ inches in diameter; rind orange with trace of rib stripes of darker orange; ornamental.

135379 to 135381. Collected in Tukzar, September 15 and 16, 1939.

135379. No. 4668. Fruit subglobose, 4 inches in length; rind gold, very warty; ornamental.

135380. No. 4719. Fruit subglobose, 8 inches in length; rind very hard, grass green, marbled with lighter green; flesh very firm, yellow, 1½ inches thick, rather insipid. Probably better eaten as a summer squash.

135381. No. 4721. Fruit subglobose, 10 inches in length; rind hard, black green, mottled with lighter green, broad irregular ribbons of lemon, green netted; flesh yellow, 2 inches thick, fairly sweet.

135382. No. 4725. From Katakala. Fruit flattened, 16 by 14 inches; rind orange pink, with broken blotches of green and white; flesh yellow, 2½ inches thick, insipid.

135383 to 135385. Collected in Sharak, October 7 and 8, 1939. Grown without irrigation.

135383. No. 4817. Altitude 7,000 feet. Fruit pumpkin-shaped, 13 by 7 inches; creamy buff; flesh yellow, 2 inches thick, very firm, rather sweet.

135384. No. 4818. Altitude 7,500 feet. Fruit pumpkin-shaped, 13 by 7 inches; rind with irregular broad broken stripes of grass green and orange yellow; flesh yellow, 2¼ inches thick, firm, rather sweet.

135385. No. 4834. Altitude 7,500 feet. Fruit somewhat flattened, subglobose, 6 to 8 inches long; rind orange, with more or less traces of broken broad green ribs; flesh yellow, 1½ inches thick, fairly sweet, no fiber.

135386. No. 4899. *Karakadu*. From Khwajaebrcchalak, October 17, 1939, at 7,000 feet altitude. Grown without irrigation. Fruit globose, 8 inches in diameter; rind mottled orange and green; flesh greenish yellow, 1 inch thick, of good quality.

135387. No. 4930. From Karakul, October 22, 1939. Fruit globose, 10 inches in diameter; rind white, faintly ribbed; flesh pale orange, 2 inches thick, insipid.

135388. No. 5023. *Tamashakadu*. From Pulikomri, November 6, 1939, at 4,000 feet altitude. Fruit flattened, 3 by 2½ inches; rind orange, netted with green, with slightly indented narrow rib lines of green; ornamental.

135268 to 135403—Continued

135389 to 135403. Collected in Kabul, November 15 to 20, 1939.

135389. No. 5045. Fruit like our summer scalloped squash, but of much less depth and bright orange, not white. Edges scalloped; size 7 by 2 inches, with broad wings and small belly.

135390. No. 5046. Fruit globose, 5 inches in diameter; rind very hard, yellow, heavily orange-veined; flesh yellow, $\frac{3}{4}$ inch thick, crisp, rather insipid. Probably eaten in immature state.

135391. No. 5047. Fruit elongate, $6\frac{1}{2}$ by $4\frac{1}{2}$ inches; rind orange, with rib bands and blotches of yellow; hard-shelled; flesh yellow, $\frac{3}{4}$ inch thick, firm, crisp, insipid.

135392. No. 5051. Fruit cylindrical, 6 by 3 inches; rind orange, heavily warted; ornamental.

135393. No. 5052. Fruit ovoid, 5 inches long; rind smooth, orange; ornamental.

135394. No. 5055. Fruit flattened, 5 by $1\frac{3}{4}$ inches; rind orange, with indented ribs; faintly scalloped edges.

135395. No. 5056. Fruit turban-shaped, $5\frac{1}{2}$ by $2\frac{1}{2}$ inches, heavily scalloped; rind creamy white.

135396. No. 5057. Fruit somewhat flattened, 10 by 9 inches; rind pea green, heavily indented ribs; flesh orange, 2 to 3 inches thick, fairly good.

135397. No. 5059. Fruit elongate, 11 inches in length; rind nearly smooth, hard, yellow; flesh yellow, $1\frac{1}{4}$ inches thick, insipid.

135398. No. 5060. Fruit club-shaped, 13 inches long; rind black green with narrow stripes of yellow; flesh yellow, 1 inch thick, insipid.

135399. No. 5061. Fruit club-shaped, 12 inches in length; rind yellow with conspicuously raised ribs; flesh yellow, 1 inch thick, insipid.

135400. No. 5064. Fruit subglobose, 5 inches in length; rind creamy white, with or without indented ribs; flesh yellow, $\frac{3}{4}$ inch thick, insipid.

135401. No. 5065. Fruit slightly pear-shaped, 4 inches in diameter; rind dark green spotted with yellow, more or less warty; ornamental.

135402. No. 5066. Fruit quince-shaped, 4 inches in diameter; rind creamy white, with irregular indented ribs.

135403. No. 5067. Fruit globose, $2\frac{1}{2}$ inches in diameter; rind orange, and smooth; ornamental.

135404 to 135407. CANNABIS SATIVA L. Moraceae. Hemp.

From the Union of Soviet Socialist Republics. Seeds presented by the Institute of Plant Industry, Leningrad. Received February 5, 1940.

135404. No. 1979. *Novgorod Severskaya*.

135405. No. 1990. *Severskaya Kavkas*.

135406. No. 102J/DJC/. *Barnaul'skaya*.

135407. No. 1981. *Solotonoshskaya*.

135408. DIERVILLA CORAEENSIS (Thunb.) DC. Caprifoliaceae. Korean weigela.

From Massachusetts. Seeds presented by F. W. Schumacher, Boston. Received February 7, 1940.

An ornamental Japanese shrub 6 to 10 feet high, with oval long-pointed leaves 3 to 5 inches long and flowers that are at first pale pink, later changing to carmine.

For previous introduction see 73275.

135409. PHILADELPHUS INCANUS var. SARGENTIANUS Koehne. Hydrangeaceae.

From Massachusetts. Seeds purchased from F. W. Schumacher, Boston. Received February 7, 1940.

A variety with yellowish or brownish branches and leaves with the lower surfaces pilose.

For previous introduction see 78942.

135410 to 135421. SACCHARUM. Poaceae.

Sugarcane.

From Hawaii. Cuttings presented by Dr. H. L. Lyon, Director, Experiment Station of the Hawaiian Sugar-Planters' Association, Honolulu. Received February 12, 1940.

- 135410. *Molokai*. No. 4360.
- 135411. *Molokai*. No. 4503.
- 135412. *Molokai*. No. 4575.
- 135413. *Molokai*. No. 4730.
- 135414. *Molokai*. No. 4826.
- 135415. *Molokai*. No. 4861.

- 135416. *Molokai*. No. 4972.
- 135417. *Molokai*. No. 5099.
- 135418. *Molokai*. No. 5193.
- 135419. *Molokai*. No. 5498.
- 135420. *Molokai*. No. 5549.
- 135421. *Molokai*. No. 5698.

135422 to 135455.

From the Philippine Islands. Seeds collected by the Archbold-Fairchild Expedition. Received in December 1939 and January 1940. Numbered in January 1940.

- 135422. *ARALIA BIPINNATA* Blanco. Araliaceae. **Palm.**

No. 107. From Mount Dana, Luzon, December 8, 1939, at 1,000 meters altitude. An attractive, small spiny tree resembling *Aralia spinosa*, with handsome terminal panicles of brown berries. Native to the Philippine Islands.

- 135423. *ARECA CATECHU* L. Phoenicaceae. **Betel palm.**

No. 33. From Mount Makiling National Park, Luzon, October 29, 1939.

For previous introduction see 133254.

- 135424. *ARECA IPOT* Beccari. **Palm.**

No. 80. *Bunga*. From Mount Makiling National Park, Luzon, November 16, 1939.

For previous introduction see 47619.

- 135425. *ARECA* sp. **Palm.**

No. 75. From Tandoc, near Naga, Luzon, November 18, 1939.

- 135426. *CORYPHA ELATA* Roxb. Phoenicaceae. **Buri palm.**

No. 79. From Pogbilao, Tayabas, November 5, 1939.

For previous introduction see 122837.

- 135427. *DESMODIUM* sp. Fabaceae.

No. 116. From the sand dunes of Pavay, Luzon, December 11, 1939.

- 135428. *DILLENIA PHILIPPINENSIS* Rolfe. Dilleniaceae.

No. 113. From Lamao Experiment Station, Luzon, December 17, 1939.

For previous introduction see 59274.

- 135429. *DIOSCOREA* sp. Dioscoreaceae. **Yam.**

No. 137. From Manila, December 8, 1939. Reported to be a purple-tubered species from which ice cream is made.

- 135430. *DIOSPYROS EBENASTER* Retz. Diospyraceae. **Black sapote.**

No. 101. From Lamao, Luzon, December 16, 1939. The tree is a vigorous grower of compact habit. The fruit, externally resembling a green tomato, has chocolate-colored flesh of pleasant flavor and good texture.

For previous introduction see 133380.

- 135431. *FERONIA LIMONIA* (L.) Swingle. Rutaceae. **Wood-apple.**

No. 102. From Lamao Experiment Garden, Luzon, December 16, 1939. The wood-apple or elephant tree of India. Fruit round, 3 inches in diameter; rind gray, corky; pulp dry, edible, used for medicinal purposes, contains many seeds.

- 135432. *FICUS CALOPHYLLOIDES* Elmer. Moraceae.

No. 128. *Balete*. From Mount Makiling National Park, Luzon, December 22,

135422 to 135455—Continued

1939, at low altitude. A large forest tree with light-colored bark, smooth, dark-green leaves, and yellow fruits the size of small plums.

135433. *FICUS ULMIFOLIA* Lam.

Elmleaf fig.

No. 117. From Luzon, December 11, 1939. This has very harsh leaves that are used in polishing wood surfaces.

For previous introduction see 50699.

135434. *FLACOURTIA* sp. Flacourtiaceae.

No. 109. From Lamao Experiment Station, Luzon, December 16, 1939. A large tree that bears good-sized edible fruit in large clusters.

135435. *FREYCINETIA MULTIFLORA* Merr. Pandanaceae.

No. 130. From Mount Makiling National Park, Luzon, December 22, 1939. Presented by Professor de la Cruz, who collected it at the mud spring of the National Park. A handsome, narrow leaved climbing native species, with showy bracts and pretty orange compound fruits.

For previous introduction see 134996.

135436 to 135440. *LIVISTONA* spp. Phoenicaceae.

Palm.

135436. *LIVISTONA* sp.

No. 49. *Swamp Anahan*. Collected 1 km. east of Naga, Luzon, November 10, 1939. Differs from *Livistona rotundifolia* in that it has flattened purplish or violet-colored fruits, instead of red or orange. Petioles very spiny; spines robust on bases of leaves of young plants; seeds almost spherical or slightly flattened.

135437. *LIVISTONA* sp.

No. 40. From grounds of Provincial capital, Batangas, Luzon, November 2, 1939. Leaves much like other species, but this has larger fruits that become mottled with orange.

135438. *LIVISTONA MERRILLII* Beccari.

Anahu palm.

No. 60. From Legaspe, Luzon, November 1939. A tall native palm, in the deep forest becoming more than 100 feet high with large flabellate-orbicular leaves, entire in the central part and with the periphery more or less deeply divided, the petioles in adult plants being unarmed or slightly spinose. The rather small, blackish fruits are in long racemes.

135439. *LIVISTONA COCHINCHINENSIS* (Blume) Mart.

N. 87. *Turan*. From Magat Forestry Station, Coogan Valley, above Bayombong, Luzon.

For previous introduction see 105730.

135440. *LIVISTONA ROBINSONIANA* Beccari.

No. 74. From Cadwallader-Gibson Concession "Tandoc," Luzon, November 12, 1939. A superb fan palm with a ringed trunk rising to nearly 100 feet in the dense forest. Differs from *Livistona rotundifolia* in having red, not violaceous fruits.

For previous introduction see 135001.

135441. *MELASTOMA* sp. Melastomaceae.

No. 122. From the highlands of the mountains back of Vigan, Luzon, near the Langangilang Forest Station, December 11, 1939.

135442. *NEPENTHES ALATA* Blanco. Nepenthaceae.

No. 110. From between Bontoc and Talubin, Luzon, December 9, 1939. A terrestrial or epiphytic climber, with stems up to 10 feet high; elliptic or lanceolate leaves with winged, clasping petioles and pitchers nearly 1 foot long on mature plants. Native to the Philippines.

135422 to 135455—Continued

135443 and 135444. *ORANIA PALINDAN* (Blanco) Merr. Phoenicaceae.

135443. No. 58. From virgin forest of Cadwallader-Gibson Concession "Tandoc," in Camarines Sur, Luzon, November 12, 1939. An upright endemic palm, up to 20 feet high, with leaves even more graceful than those of the coconut. The light-yellow globose fruits, borne in long racemes, are the size of golf balls, and are sometimes eaten after being cooked. The terminal bud is said to be poisonous.

For previous introduction see 105353.

135444. No. 81. *Palindan*. From Mount Makiling National Park, November 16, 1939. Fruits larger than those of No. 58; about 2 inches in diameter.

135445. *OROXYLON INDICUM* (L.) Vent. Bignoniaceae.

East Indian trumpetflower.

135446. *PANGIUM EDULE* Reinw. Flacourtiaceae.

No. 86. From Mount Makiling National Park, Laguna, Luzon, November 17, 1939.

For previous introduction see 80875.

135447. *PARKIA JAVANICA* (Lam.) Merr. Mimosaceae.

Kupang.

No. 131. From Mount Makiling National Park, Laguna, Luzon, December 22, 1939. Grown at low altitudes. Gift from Prof. H. M. Curran. A handsome leguminous tree, often planted. Native from India to Timor. The flowers, like small balls of yellow, are on long, pendent stalks. Grows in very wet soils and also stands drought very well.

For previous introduction see 72438.

135448. *PINANGA INSIGNIS* Beccari. Phoenicaceae.

Palm.

No. 59. From virgin forest at "Tandoc," Cadwallader-Gibson Concession, Luzon, November 11, 1939. A shade-loving palm, about 30 feet high, of slender habit, with graceful feathery leaves and large clusters of brilliant-red fruits.

135449. *PINANGA MACULATA* Porte.

No. 50. From near Forest Park Office on Bulusan Volcano, Luzon, November 1939. A sylvan palm with slender stems, deeply bilobed leaves, and blades about 1 foot long, green mottled with darker spots, and small fruits, salmon pink turning orange. Native to the Philippines.

135450. *PITHECELLOBIUM SCUTIFERUM* (Blanco) Benth. Mimosaceae.

No. 127. From Mount Makiling National Forest Park, Laguna, Luzon, December 22, 1939.

For previous introduction see 94198.

135451. *POLYSCIAS NODOSA* (Blume) Seem. Araliaceae.

No. 133. *Malapapaya*. From Mount Makiling National Forest Park, Laguna, Luzon, December 22, 1939. A lofty tree found in nearly every Province of the Philippine Islands. It sometimes reaches a height of 100 feet, with a straight trunk and compound leaves more than 3 feet in length. The purplish-green flowers are borne in immense clusters above the leaves. The yellowish-white, light, very soft wood is considered one of the best matchwoods and also is valuable for very light construction purposes:

For previous introduction see 54926.

135452 and 135453. *RHAPHIDOPHORA* spp. Araceae.

135452. No. 104. From between Bantoc and Banane, Luzon, December 9, 1939, at an altitude of 1,330 meters.

135453. No. 108. From La Union Province, Luzon, December 8, 1939, at an altitude of 1,000 meters.

135454. *SOLANUM* sp. Solanaceae.

No. 125. From along a mountain trail, Luzon, December 11 and 15, 1939. A handsome, many-flowered shrubby species that produces bunches of brilliant-red berries.

135455. *TERMINALIA CALAMANSANAI* (Blanco) Rolfe. Combretaceae.

No. 119. From the Forestry Station at Caniaw, east of Vigan, Luzon, December 11, 1939.

135456 to 135462. LINUM USITATISSIMUM L. Linaceae. Flax.

From Portugal. Seeds presented by Prof. A. Camara, Estação Agronômica Nacional, Belém, Lisbon. Received February 8, 1940.

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

135456 to 135459. Cultivated under irrigation, March and April.

135456. *Linho de Primavera E.* 112. **135458.** *Linho Molar E.* 449.

135457. *Linho Galego E.* 324. **135459.** *Linho Galego E.* 729.

135460 to 135462. Cultivated under irrigation, November and July.

135460. *Linho Mourisco E.* 730. **135462.** *Linho Mourisco E.* 1772.

135461. *Linho Abertico E.* 987.

135463 to 135466.

From the Philippine Islands. Seeds collected by David Fairchild, Bureau of Plant Industry, United States Department of Agriculture. Received February 2, 1940.

135463. MUSA GLAUCA Roxb. Musaceae. **Banana.**

No. 120. From Mount Makiling National Park, December 19, 1939. An Indian banana with a trunk 10 to 12 feet high, short-petioled lanceolate leaves 4 to 5 feet long, and a drooping spike of small flowers and inedible fruits that are hidden by the large bracts.

For previous introduction see 77980.

135464. PINUS INSULARIS Endl. Pinaceae. **Benguet pine.**

No. 124. From Cabonegan Reforestation Project, Luzon, December 11, 1939. A tall three-needled tropical pine that grows on the highlands of the Philippine Islands between 3,000 and 8,000 feet altitude. The flaccid leaves are 7 to 9 inches long, and the ovoid cones are about 3 inches in length.

For previous introduction see 103936.

135465. STRYCHNOS IGNATII Berg. Loganiaceae. **Saint Ignatius bean.**

No. 121. From Mount Makiling National Park, December 17, 1939. A large climbing shrub of the Visayan group of the Philippines. The large fruit contains several pebblelike seeds sold in the crude drug market as Saint Ignatius beans; these contain the alkaloids strychnine and brucine, for the extraction of which they are used to some extent.

135466. SWIETENIA MACROPHYLLA King. Meliaceae. **Mahogany.**

No. 136. From Mount Makiling National Park, Luzon, December 17, 1939. Presented by Prof. Hugh M. Curran. A large, attractive, well-formed tree, native to tropical America, with compound leaves made up of 3 to 5 pairs of elliptic-oblong leaflets 4 to 8 inches long, and small flowers in panicles. The ovoid woody fruits are 6 inches long and contain winged seeds 3 to 5 inches long.

For previous introduction see 123568.

135467 to 135470. CEANOTHUS spp. Rhamnaceae.

From California. Plants purchased from Leonard Coates Nurseries, San Jose. Received February 16, 1940.

135467. CEANOTHUS ARBOREUS Greene.

An evergreen shrub or small tree with light-gray bark, ovate, acute, serrate, or often crenate leaves, white-tomentose beneath, 2 to 4 inches long, and fragrant, pale- to deep-blue flowers in compound racemes. Native to California.

For previous introduction see 4838.

135468. CEANOTHUS DENTATUS var. **IMPRESSUS** Trelease.

A widespreading shrub up to 8 feet with alternate, persistent, broadly elliptic to round leaves 1 inch long and dark-blue flowers. Native to southern California.

135467 to 135470—Continued

135469. *CEANOTHUS JEPSONII* var. *PURPUREUS* Jepson.

An erect or spreading shrub, up to 4 feet high; leaves opposite, persistent, orbicular to broadly elliptic, sinuate, up to $\frac{3}{4}$ inch long, and glossy dark green; flowers deep blue to purple, in umbels about 2 inches across. Native to California.

135470. *CEANOTHUS THYRSIFLORUS* var. *GRISEUS* Trelease.

A variety with broad-ovate leaves, densely silky pubescent beneath; rather large but dense and compact panicles of pale-lilac flowers.

135471. *SCHIZOSTACHYUM* sp. Poaceae. **Bamboo.**

From the Philippine Islands. Plants collected by David Fairchild, Bureau of Plant Industry, United States Department of Agriculture, at Mabasila, Mindanao, January 22, 1940. Received February 20, 1940.

No. 170. A thin-walled large-sized species, grown extensively in parts of Mindanao. Resembles *Schizostachyum lumampao*, but has culms of larger diameter and is much taller, up to 60 feet in height. Grows at medium altitude on fertile soil.

135472. *MAGNOLIA CAMPBELLII* Hook. f. and Thoms. Magnoliaceae.

From England. Seeds purchased from Fox Hill Hardy Plant Nurseries, Keston, Kent, January 10, 1940. Received February 20, 1940.

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 85676.

135473 to 135481. *EUCALYPTUS* spp. Myrtaceae.

From Australia. Presented by F. H. Baker, Richmond, Victoria. Received February 21, 1940.

135473. *EUCALYPTUS CALOPHYLLA* Lindl. **Port Gregory gum.**

For previous introduction see 132626.

135474. *EUCALYPTUS CITRIODORA* Hook.

For previous introduction see 106708.

135475. *EUCALYPTUS EREMOPHILA* Maiden.

For previous introduction see 123772.

135476. *EUCALYPTUS ERYTHROCORYS* F. Muell.

For previous introduction see 125012.

135477. *EUCALYPTUS LEUCOXYLON* F. Muell. **White ironbark.**

For previous introduction see 38718.

135478. *EUCALYPTUS MACROCARPA* Hook.

For previous introduction see 125013.

135479. *EUCALYPTUS PYRIFORMIS* Turcz.

For previous introduction see 130707.

135480. *EUCALYPTUS TETRAGONA* (R. Br.) F. Muell.

For previous introduction see 130707.

135481. *EUCALYPTUS TETRAPTERA* Turcz.

For previous introduction see 49001.

135482. HIPPEASTRUM BLUMENAVIA (Carr.) Sealy. Amaryllidaceae.
From Brazil. Seed presented by Dr. F. C. Hoehne, Department of Botany, São Paulo. Received February 21, 1940.

A hippeastrum allied to *Hippeastrum vittatum*, with smaller narrow-oblong to broad-oblong-oval petiolate leaves and 4 or 5 white or pale-red-tinged flowers about 2 inches long. Native to southeastern Brazil.

For previous introduction see 118814.

135483. HORDEUM DISTICHON L. Poaceae. **Barley.**
From Canada. Seed presented by the University of Saskatchewan, Saskatoon. Received February 14, 1940.

Rex.

135484. AMYGDALUS PERSICA L. Amygdalaceae. **Peach.**
From Palestine. Seeds presented by Prof. Rudolph Samisch, Division of Horticulture, Agricultural Research Station, Rehovoth. Received February 20, 1940.

The parent tree of this peach, originally imported into Palestine from South Africa, is of excellent vigor and bears yellow-fleshed fruits.

135485. CHAENOMELES. Malaceae.
From California. Plants purchased from Toichi Domoto, Hayward. Received February 24, 1940.

Contorta.

135486. HIPPEASTRUM BLUMENAVIA (Carr.) Sealy. Amaryllidaceae.
From Brazil. Bulbs presented by F. C. Hoehne, Department of Botany, São Paulo. Received February 24, 1940.

For previous introduction see 135482.

135487. × PHILADELPHUS LEMOINEI Lemoine. Hydrangeaceae. **Lemoine mockorange.**
From Ohio. Plants purchased from the Siebenthaler Co., Dayton. Received February 26, 1940.

135488 and 135489. ARACHIS HYPOGAEA L. Fabaceae. **Peanut.**
From Uruguay. Presented by R. Salgueiro Silveira, Chief, Dirección de Agronomía, Montevideo. Received February 26, 1940.

135490 and 135491.

From Mississippi. Scions presented by Dr. C. H. Ragland, Agricultural Experiment Station, State College. Received February 26, 1940.

135490. MALUS SYLVESTRIS Mill. Malaceae. **Apple.**
Eckles.

135491. PYRUS COMMUNIS L. Malaceae. **Common pear.**
Pontotoe.

135492 to 135508.

From Manchuria. Scions purchased from L. Ptitsin, Harbin. Received February 26, 1940.

135492. × MALUS ROBUSTA Rehder. Malaceae. **Cherry crab.**

135493 to 135499. MALUS spp. Malaceae.

135493. MALUS sp.
Kupilov's Anissik.

135494. MALUS sp.
Mitchurin's Dessert.

135495. MALUS sp.
Olga Crab.

135496. MALUS sp.
Siberian Ranet.

135497. MALUS sp.
Tchistaikovka No. 1.

135498. MALUS sp.
Tchistaikovka No. 2.

135499. MALUS sp.
Tchistaikovka No. 3.

135492 to 135508—Continued

135500. PRUNUS ARMENIACA L. Amygdalaceae. Apricot.

135501 to 135506. PRUNUS SALICINA Lindl. Japanese plum.

Cultivated in Manchuria.

135504. Red, oval.

135501. *Ivanovka*.

135505. Red, sweet.

135502. Red, large.

135506. Yellow, large.

135503. Rose-yellow, large.

135507. PRUNUS USSURIENSIS Kovalev and Kostina.

Wild yellow plum, related to *Prunus salicina*. Native to eastern Asia.

135508. PYRUS. Malaceae.

Olga.

135509 to 135540.

From Afghanistan. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received February 8, 1940.

135509 and 135510. COTONEASTER spp. Malaceae.

135509. COTONEASTER sp.

No. 4524. From Lorinj, August 26, 1939, at 8,000 feet altitude. From plant growing prostrate on rock face; fruit crimson; mild winter.

135510. COTONEASTER sp.

No. 4800. From Gurzan, October 5, 1939, at 8,500 feet altitude. A handsome bush of open habit and about 8 feet high, growing on dry slopes, loaded with crimson, somewhat glaucous fruits.

135511 to 135515. CRATAEGUS spp. Malaceae.

135511. CRATAEGUS sp.

No. 4489. From Kabul, August 15, 1939. A small tree with clusters of 10 to 20 yellow to orange fruits $\frac{3}{8}$ inch in diameter.

135512. CRATAEGUS sp.

No. 4493. From Kabul, August 15, 1939. A tree about 15 feet in height; fruit probably red.

135513. CRATAEGUS sp.

No. 4795. From Gurzan, October 5, 1939, at an altitude of 8,500 feet. A well-formed bush 10 feet in height, growing along a stream, fruit golden yellow and small.

135514. CRATAEGUS sp.

No. 4796. From Gurzan, October 5, 1939. Altitude 8,500 feet. A well-formed bush 10 feet in height, growing along a stream; fruit abundant, small, and bright crimson.

135515. CRATAEGUS sp.

No. 4797. From Gurzan, October 5, 1939. Altitude 8,500 feet. A well-formed bush 8 feet in height, growing along a stream; fruit abundant, small, and red black.

135516 to 135540. ROSA spp. Rosaceae.

Rose.

135516. ROSA sp.

No. 4485. *Gul-i-sufed*. From Kabul, August 14, 1939. A bushy plant used as a hedge; it has clusters of small ($1\frac{1}{4}$ inches) semidouble fragrant flowers.

135517. ROSA sp.

No. 4521. From Banak, August 25, 1939. Altitude 6,000 feet. A bush 8 feet in height, growing along a watercourse; flowers probably pink or white.

135509 to 135540—Continued

135518. *ROSA* sp.

No. 4522. From Dasht-i-sufed, August 24, 1939. Altitude 6,000 feet. A bush 6 feet in height, growing along a watercourse.

Nos. 135519 to 135522. From Lorinj, altitude 8,000 feet.

135519. *ROSA* sp.

No. 4532. August 26, 1939. A bush 6 feet in height, growing along a stream.

135520. *ROSA* sp.

No. 4533. August 26, 1939. A bush 4 feet in height, growing on a dry slope. Fruits bristly.

135521. *ROSA* sp.

No. 4535. August 26, 1939. An attractive bush 8 feet in height, growing on a dry slope; hips flattened globose, about $\frac{1}{2}$ inch wide.

135522. *ROSA* sp.

No. 4545. August 27, 1939. A bushy rose, in clumps 4 feet high, growing on a dry slope; flowers probably small, single, and yellow.

135523. *ROSA* sp.

No. 4642. From Kala Sakari, September 8, 1939. A bush from a hedge 4 to 5 feet high, heavily loaded with large hips $\frac{3}{4}$ inch long.

135524. *ROSA* sp.

No. 4657. From Chigzar, September 10, 1939. Altitude 8,000 feet, growing on a dry slope. A plant 3 to 4 feet high; flowers probably single, yellow, and about 1 inch across.

135525. *ROSA* sp.

No. 4707. From Tukzar, September 15, 1939. A bush probably wild, 5 feet high, loaded with orange-red hips, $\frac{1}{2}$ to $\frac{3}{4}$ inch long.

135526. *ROSA* sp.

No. 4730. From Safed Sang, September 21, 1939. Altitude 10,000 feet. A well-formed bush about 6 feet high from a dry slope, with an abundance of large bright red hips; flowers single, white, 2 inches across, with heavy musty fragrance.

135527. *ROSA* sp.

No. 4734. From Safed Sang, September 24, 1939. Altitude 10,000 feet. A low shrub 1 to $1\frac{1}{2}$ feet high, found on very dry slopes; spreads from the roots; flowers yellow, probably single.

135528. *ROSA* sp.

No. 4737. From Sufak, September 27, 1939. A very drought-resistant, well-formed bush 5 feet high, with strongly scented leaves and an abundance of hips; flowers pink, single.

135529. *ROSA* sp.

No. 4756. From Bandichakawak, September 29, 1939. Altitude 9,000 feet. A bush 6 feet high, growing under dry conditions; flowers single, white, fragrant, about 3 inches across, delicate pink in bud.

135530. *ROSA* sp.

No. 4757. From Bandichakawak, September 29, 1939. Altitude 9,000 feet. A bush 5 feet high, growing under dry conditions, spreads from roots; hips bristly.

135531. *ROSA* sp.

No. 4760. From Karaghaitu, September 29, 1939. Altitude 8,000 feet. A low bush 3 feet high, growing along a river bottom; spreading from roots; hips smooth, red.

135509 to 135540—Continued

135532. *ROSA* sp.

No. 4781. From Mak, October 3, 1939. Altitude 8,500 feet. A well-formed bush 5 feet high, found along a stream.

135533. *ROSA* sp.

No. 4783. From Mak, October 3, 1939. Altitude 8,500 feet. A bush 4 feet high, found along a stream; spreads from roots.

135534. *ROSA* sp.

No. 4785. From Gharchi, October 3, 1939. Altitude 8,000 feet. A bush 4 feet high, found on a dry slope; leaves scented.

135535. *ROSA* sp.

No. 4793. From Gharchi, October 4, 1939. Altitude 8,500 feet. A bush 4 feet high, found along a stream; spreads by roots.

135536. *ROSA* sp.

No. 4798. From Gurzan, October 5, 1939. Altitude 8,500 feet. A rose 3½ feet high, covering more than 10 square rods of slope near a spring stream, apparently spreading from the roots; hips large, somewhat flattened; flowers probably yellow.

135537. *ROSA* sp.

No. 4799. From Gurzan, October 5, 1939. Altitude 8,500 feet. A bush 6 feet high, growing along a stream, scraggly; hips very large, 1½ inches long.

135538. *ROSA* sp.

No. 4804. From Gurzan, October 5, 1939. Altitude 9,000 feet. A bush 6 to 8 feet high, growing on a dry slope, hips globose, crimson; fruit in clusters.

135539. *ROSA* sp.

No. 5026. From Puli Komri, October 7, 1939. Altitude 4,000 feet. A bush 5 feet high, from the border of a field; flower said to be single, yellow.

135540. *ROSA CABULICA* Boiss.

No. 5069. From Kabul, November 20, 1939. A rose, that becomes 20 feet high, with virgate stems, leaves of 5 to 7 ovate leaflets and terminal white flowers 3 inches across, solitary or in corymbs. Related to *Rosa beggeriana*. Native to Afghanistan.

135541 to 135549. *LILIUM* spp. Liliaceae.

Lily.

From Japan. Seeds presented by K. Wada, Hakoneya Nurseries, Numazu-Shi. Received February 17, 1940.

135541 and 135542. *LILIUM AURATUM* Lindl.

Goldband lily.

135541. Late-flowering.

135542. Midseason.

For previous introduction see 134966.

135543. *LILIUM CERNUUM* Komar.

A martagon lily with a slender, rigid stem up to 2 feet high, the base and upper part naked, or nearly so, numerous, crowded, linear or strap-shaped leaves 2 to 7 inches long, and fragrant, nodding, lilac, purple-spotted flowers, solitary, in umbels, or racemes of 3 to 6. Related to *Lilium tenuifolium*, but with longer, more numerous leaves and much smaller fragrant flowers, nearly globose in shape. Native to eastern Asia.

135544. *LILIUM CORDIFOLIUM* Thunb.

Lily.

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

135545 and 135546. *LILIUM PHILIPPINENSE* var. *FORMOSANUM* (Baker) Wilson.

135545. *Leucanthum*.

135546. *Platyfolium*.

135541 to 135549—Continued

135547. *LILLIUM LEICHTLINII* var. *MAXIMOWICZII* (Regel) Baker.

Grandiflora.

135548. *LILIUM TENUIFOLIUM* Fisch.

Coral lily.

A martagon lily with stout gray-green stems 3 to 5 feet high, clothed with dense white scabrid pubescence, and linear to lanceolate leaves 2 to 4 inches long. The fragrant, nodding flowers, 2 inches long, are in subverticillate clusters of 2 to 12 and vary in color from purple-spotted white to pink.

For previous introduction see 102853.

135549. *LILIUM RUBELLUM* Baker.

Rubellum lily.

A miniature trumpet lily from Japan with slender green stems spotted with purple, rarely exceeding 2 feet in height, narrow leaves, and 1 to 8 smallish trumpets of rosy white, flushed darker without. It is more delicate than Kramer's lily (*Lilium japonicum*), and, like it, should be grown in a low shrubby undergrowth, where its head can rise to full sun.

For previous introduction see 78864.

135550 to 135635.

From Manchuria. Seeds presented by B. V. Skvortzov, Harbin. Received January 6, 1940.

Unless otherwise stated, the material was received as seeds.

135550. *AGROPYRON AMURENSE* Drobov. Poaceae.

Grass.

No. 39. From a desert steppe near Sartu, west of Harbin, October 19, 1939. A perennial grass native to the Amur district of eastern Asia.

For previous introduction see 131532.

135551 and 135552. *AGROPYRON CILIARE* (Trin.) Franch.

Grass.

A tall-growing, short-awned grass.

135551. No. 37. From Huangshan, September 12, 1939.

135552. No. 38. From a desert steppe near Sartu, west of Harbin, September 12, 1939.

For previous introduction see 109805.

135553. *AGROPYRON CRISTATUM* (L.) Gaertn.

Crested wheatgrass.

No. 49. From the desert steppe region of Anda, North Manchuria, September 10, 1939.

For previous introduction see 121787.

135554. *AGROSTIS CLAVATA* Trin. Poaceae.

Grass.

No. 29. From the Sungari River valley, near Harbin, August 12, 1939. A perennial grass native to northeastern Asia.

135555. *AGROSTIS* sp.

Grass.

No. 24. From near Maershan, east of Harbin, September 18, 1939.

135556. *ALOPECURUS LONGEARISTATUS* Maxim. Poaceae.

Grass.

No. 26. From near Hsiaoling, North Manchuria, September 10, 1939. An annual grass native to northeastern Asia.

135557. *ANEMONE DAHURICA* Fisch. Ranunculaceae.

No. 84. From grassy hills near Hsiaoling, July 1939. An anemone with stems up to 1 foot high, divided leaves, and salmon-pink to pale rose-purple flowers about 1½ inches across. Native to northeastern Asia.

135558. *AQUILEGIA OXYSEPALA* Trautv. and Meyer. Ranunculaceae.

Early columbine.

No. 83. From mountain meadows near Hsiaoling, east of Harbin, August 1939. A very early flowering herbaceous perennial 2 to 3 feet high, with large blue, yellow, and white flowers. The spurs are short and bent forward.

135550 to 135635—Continued

135559. *ARTHAXON HISPIDUS* (Thunb.) Makino. Poaceae. Grass.

No. 21. From a mountain river valley near Maoershan, east of Harbin, August 15, 1939. A slender branching annual grass with decumbent or creeping stems about 2 feet long. Native to Japan.

For previous introduction see 109810.

135560. *ARUNDINELLA ANOMALA* Steud. Poaceae. Grass.

No. 52. From the desert steppe region of Anda, North Manchuria, December 6, 1939. A wild grass, found on poor soil.

For previous introduction see 110153.

135561. *ASTRAGALUS MELILOTOIDES* var. *TENUIS* Ledeb. Fabaceae.

No. 63. From the desert steppe region of Anda, September 19, 1939. A biennial or perennial, native to eastern Asia.

135562. *AVENA SCHELLIANA* Trautv. Poaceae.

No. 13. From the desert district of Anda, North Manchuria, September 10, 1939. A perennial grass native to eastern Asia.

135563. *BECKMANNIA SYZIGACHNE* (Steud.) Fern. Poaceae. Grass.

No. 47. From a meadow near a stream in the Ashiho River valley, September 1, 1939.

For previous introduction see 131534.

135564. *BROMUS INERMIS* Leyss. Poaceae. Smooth bromegrass.

No. 46. From the steppe district of Anda, west of Harbin, September 11, 1939.

For previous introduction see 131535.

135565 to 135573. *CALAMAGROSTIS* spp. Poaceae. Grass.

135565. *CALAMAGROSTIS ANGUSTIFOLIA* Komar.

No. 10. From the Sungari River valley near Harbin, August 7, 1939. A perennial grass native to northeastern Asia.

135566. *CALAMAGROSTIS BRACHYTRICHA* Steud.

No. 11. From the Huangchan Hills, north of Harbin, October 19, 1939.

135567. *CALAMAGROSTIS CANADENSIS* (Michx.) Beauv.

No. 7. From grassy mountain slopes near Barim, Great Khingan Mountains, October 16, 1939.

135568 to 135573. *CALAMAGROSTIS EPIGEIOS* (L.) Roth.

135568. No. 1. From the desert steppe of Anda district, west of Harbin, August 0, 1939.

135569. No. 2. From the steppe district of Sartu, west of Harbin, August 12, 1939.

135570. No. 3. From dry mountain slopes near Maoershan, 200 miles east of Harbin, October 8, 1939.

135571. No. 4. From dry mountain slopes near Barim, Great Khingan Mountains, October 15, 1939.

135572. No. 5. From sandy hills along the Ashiho River valley, September 17, 1939.

135573. No. 8. From the steppe district of Sartu, west of Harbin, August 12, 1939.

135574. *CHLORIS VIRGATA* Swartz. Poaceae. Feather fingergrass.

No. 12. From the desert district of Anda, west of Harbin, September 10, 1939; grown on alkali soil.

For previous introduction see 110483.

135550 to 135635—Continued

135575. *CLEMATIS BREVICAUDATA* DC. Ranunculaceae.

No. 85. From along a mountain stream near Maoershan, east of Harbin, September 1939.

For previous introduction see 125284.

135576. *DIANTHUS CHINENSIS* L. Silenaceae. Chinese pink.

No. 81. From the dry hills near Huangshan, north of Harbin, August 1939.

For previous introduction see 98357.

135577. *DIGITARIA ISCHAEMUM* (Schreb.) Muhl. Poaceae. Grass.

No. 27. From slopes near Ashiho River valley, September 8, 1939.

For previous introduction see 109815.

135578 to 135583. *ELYMUS* spp. Poaceae. Grass.

135578. *ELYMUS DAHURICUS* Turcz.

No. 36. From the dry grassy hills of Huangshan, September 12, 1939.

For previous introduction see 113124.

135579 and 135580. *ELYMUS CHINENSIS* (Trin.) Keng.

135579. No. 18. From the desert region of Anda, west of Harbin, September 10, 1939.

135580. No. 19. From near the Ashiho River valley, north of Harbin, September 17, 1939.

135581 to 135583. *ELYMUS SIBIRICUS* L.

135581. No. 33. From a dry desert steppe near Anda, west of Harbin, September 11, 1939.

135582. No. 34. From the dry mountain slopes near Ashiho, north of Harbin, September 1, 1939.

135583. No. 35. From the dry grassy hills at Huangshan, September 12, 1939.

For previous introduction see 131578.

135584. *ERAGROSTIS PILOSA* (L.) Beauv. Poaceae. Grass.

No. 51. From a meadow near the Sungari River valley, September 7, 1939.

For previous introduction see 113159.

135585. *EUONYMUS* sp. Celastraceae.

No. 71. From the sand dunes along the Ashiho River, September 30, 1939.

135586. *FESTUCA EXTREMORIENTALIS* Ohwi. Poaceae. Grass.

No. 43. From the mountain meadows near Hsisoling, September 10, 1939. A tall perennial grass related to *Festuca gigantea*. Native to eastern Asia.

135587. *FESTUCA* sp.

No. 44. From the desert steppe region of Sartu, west of Harbin, August 12, 1939.

135588. *GLYCERIA* sp. Poaceae. Grass.

No. 20. From mountain river valley near Maoershan, east of Harbin, August 15, 1939.

135589 and 135590. *GLYCINE GRACILIS* Skvortzov. Fabaceae.

A procumbent or twining herb about 3 feet long, native to northern Manchuria, with bright-green, hairy, petioled leaves, and clusters of small white or reddish-violet flowers.

135589. No. 68. From the Sungari River valley, North Manchuria, October 27, 1939. Black seeds.

135590. No. 68-A. From the Sungari River valley, October 27, 1939. Brown seeds.

For previous introduction see 110490.

135550 to 135635—Continued

135591. *GLYCERIA* sp. Poaceae.

Grass.

No. 50. From the Ashiho River valley near a bog, September 1, 1939.

135592. *GLYCYRRHIZA URALENSIS* Fisch. Fabaceae.

No. 64. From an alkali desert steppe near Sartu, west of Harbin, October 18, 1939. An erect perennial plant with hairy stems; native to the Ural Mountains, Siberia.

For previous introduction see 61427.

135593. *HETEROPAPPUS HISPIDUS* (Thunb.) Less. Asteraceae.

No. 93. From the mountain slopes of the Great Khingan Mountains, Barim, October 1939. A perennial herb native to eastern Asia, with rough stems and linear leaves. The clear-blue asterlike flower heads are borne singly at the end of the branchlets, forming broad corymblike clusters 8 to 10 inches across.

For previous introduction see 110492.

135594. *HORDEUM BREVISUBLATUM* (Trin.) Link. Poaceae.

Grass.

No. 48. From the steppe district of Anda, west of Harbin, September 10, 1939.

For previous introduction see 131539.

135595. *IMPERATA CYLINDRICA* (L.) Beauv. Poaceae.

Blady grass.

No. 25. From the mountain slopes near Hsiaoling, east of Harbin, September 10, 1939. A perennial grass native to the plains and hills of central and western India. The blades of this grass become 4 to 5 feet long. It resembles very closely the *esparto* of Spain and northern Africa, and, when dried before making it into pulp, it yields as high as 68 percent of first-class paper-making pulp. In Queensland, Australia, this grass grows abundantly and three crops a year may be harvested.

For previous introduction see 107549.

135596. *INCARVILLEA SINENSIS* Lam. Bignoniaceae.

No. 89. From dry hills along the Sungari River, September 1939. Plants 1 to 2 feet high, with finely cut foliage and light-pink flowers.

For previous introduction see 89125.

135597 and 135598. *KOELERIA GRACILIS* Pers. Poaceae.

Grass.

135597. No. 40. From sandy hills along the Ashiho River, north of Harbin, September 1, 1939.

135598. No. 30. From the desert district of Anda, west of Harbin, September 10, 1939.

For previous introduction see 131540.

135599. *LESPEDEZA STRIATA* (Thunb.) Hook. and Arn. Fabaceae.

No. 65. From sandy hills near the Ashiho River, north of Harbin, October 9, 1939.

For previous introduction see 116138.

135600. *LILIUM CALLOSUM* Sieb. and Zucc. Liliaceae.

Lily.

No. 76. From a meadow in the Ashiho River valley, north of Harbin, September 1939. A martagon lily with slender stems 1 to 2½ feet high, scattered strap-shaped or linear leaves usually 1 to 3 inches long, and dully-red or orange-red solitary nodding flowers or racemes of 2 to 9. Native to eastern Asia.

For previous introduction see 135023.

135601. *LILIUM CONCOLOR* var. *BUSCHIANUM* (Lodd.) Baker.

No. 77. From the dry mountain slopes near Ertientientze, east of Harbin, September 1939. An upright red-flowered lily growing on the lower levels and occasionally on the sides of the hills. The petals of this lily do not recurve, and the flowers do not droop but stand erect.

For previous introduction see 134969.

135550 to 135635—Continued

- 135602. MALUS BACCATA (L.) Moench. Malaceae. Siberian crab.**
No. 55. From the Ashiho River valley, October 20, 1939.
- 135603. MANISURIS COMPRESSA (L. f.) Kuntze. Poaceae. Grass.**
No. 31. From a meadow along the Ashiho River, north of Harbin, September 1, 1939. A coarse leafy grass, 5 feet tall, which thrives in swamplands and on the margins of rivers.
For previous introduction see 131580.
- 135604 and 135605. MISCANTHUS SACCHARIFLORUS (Maxim.) Hack. Poaceae. Grass.**
A tall perennial Chinese grass with large, feathery, fan-shaped panicles; related to sugarcane.
135604. No. 42. From the mountain slopes near Hsiaoling, October 10, 1939.
135605. No. 41. From a sandy meadow in the Ashiho River valley, September 1, 1939.
For previous introduction see 90188.
- 135606 and 135607. MUHLENBERGIA JAPONICA Steud. Poaceae. Grass.**
A perennial grass with slender stems up to 3 feet high. Native to eastern Asia.
135606. No. 45. From the mountain meadows near Hsiaoling, east of Harbin, September 10, 1939.
135607. No. 53. From near Maoershan, east of Harbin, September 1939.
- 135608. OXYTROPIS MYRIOPHYLLA (Pall.) DC. Fabaceae.**
No. 66. From a desert steppe near Anda, west of Harbin, September 11, 1939. A stemless perennial with a large root, pinnate leaves about 8 inches long, and purplish flowers in racemes. Native to the mountains of Siberia.
For previous introduction see 110160.
- 135609. PLATYCODON GRANDIFLORUM (Jacq.) A. DC. Campanulaceae.**
No. 92. From the desert steppe region of Anda, September 1939.
- 135610 to 135613. POA spp. Poaceae. Grass.**
- 135610. POA PALUSTRIS L. Fowl meadowgrass.**
No. 32. From a mountain meadow near Hsiaoling, September 10, 1939.
For previous introduction see 115328.
- 135611. POA PRATENSIS L. Kentucky bluegrass.**
No. 23. From a meadow near Maoershan, East Harbin, September 18, 1939.
- 135612. POA SPHONDYLODES Trin. Bluegrass.**
No. 28. From a desert steppe near Anda, west of Harbin, September 10, 1939. Found on dry grassy mountain slopes.
For previous introduction see 131582.
- 135613. POA USSURIENSIS Roshev.**
No. 22. From a mountain meadow near Hsiaoling, September 18, 1939. A perennial grass native to eastern Asia.
- 135614. PRIMULA FISTULOSA Turkevicz. Primulaceae.**
No. 75. From the mountains near Hsiaoling, east of Harbin, July 1939. A primula with oblong or lanceolate, obtuse, denticulate leaves about 1½ inches long and a robust scape with an umbel of numerous rosy flowers. Native to eastern Asia.
- 135615. PRINSEPIA SINENSIS Oliver. Amygdalaceae. Cherry prinsepia.**
No. 61. From near Hsiaoling, east of Harbin, October 18, 1939.
For previous introduction see 65189.

135550 to 135635—Continued

135616 to 135621. *PRUNUS* spp. Amygdalaceae.135616. *PRUNUS ARMENIACA* L.

Apricot.

No. 54. From the Ashiho region, north of Harbin, October 1939. A small-fruited form.

135617. *PRUNUS MAACKII* Rupr.

Amur cherry.

No. 56. From a forest near Hsiaoling, east of Harbin, September 19, 1939. A Manchurian bird cherry, 40 feet or more in height, with very smooth brownish-yellow bark that peels off like that of a birch. The leaves are pointed and very finely toothed, and the white flowers are in short racemes borne on the previous season's wood.

For previous introduction see 77262.

135618. *PRUNUS PADUS* L.

European bird cherry.

No. 58. From large trees near Hsiaoling, east of Harbin, September 19, 1939.

For previous introduction see 112284.

135619. *PRUNUS SALICINA* Lindl.

Japanese plum.

No. 60. From cultivated trees in a Chinese garden near Ashiho, September 15, 1939.

135620. *PRUNUS TOMENTOSA* Thunb.

Manchu cherry.

No. 57. From cultivated shrubs in a Chinese garden near Ashiho, east of Harbin, September 15, 1939. Tree small, attractive, with curly bark on trunk and branches; fruit very pale pink, edible.

For previous introduction see 122194.

135621. *PRUNUS USSURIENSIS* Kovalev and Kostina.

No. 59. From near Hsiaoling, east of Harbin, September 18, 1939.

For previous introduction see 135507.

135622. *SCABIOSA FISCHERI* DC. Dipsacaceae.

No. 91. From the desert steppe region of Anda, September 19, 1939. A much-branched perennial scabiosa with pinnate leaves cut into linear, entire segments and bluish-purple flowers in showy heads. Native to eastern Asia.

135623. *SCILLA THUNBERGII* Miyabe and Kudo. (*S. japonica* Baker). Liliaceae.

No. 78. From the desert steppe district of Sartu, west of Harbin, September 1939. A scilla with 2 or 3 fleshy leaves 6 to 12 inches long and 1 to 3 erect scapes with many small rose-purple flowers borne in racemes. Native to Japan.

For previous introduction see 135024.

135624. *GLYCINE MAX* (L.) Merr.

Soybean.

No. 67. From the Sungari River valley, near Harbin, October 21, 1939.

135625. *SORBARIA SORBIFOLIA* (L.) A. Br. Rosaceae.

No. 69. From the mountains near Maoershan, east of Harbin, October 11, 1939.

For previous introduction see 122966.

135626. *SPODIOPOGON SIBIRICUS* Trin. Poaceae.

Grass.

No. 62. From the steppe region of Anda, west of Harbin, September 10, 1939.

For previous introduction see 90274.

135627. *STIPA BAIACALENSIS* Roshev. Poaceae.

Grass.

No. 14. From the desert district of Anda, west of Harbin, September 1939.

135628 and 135629. *STIPA SIBIRICA* (L.) Lam.

135628. No. 17. From the mountain forests near Hsiaoling, October 21, 1939.

135629. No. 16. From the steppe region of Sartu, October 20, 1939.

For previous introduction see 113254.

135550 to 135635—Continued

135630. *SWERTIA CHINENSIS* (Griseb.) Franch. Gentianaceae.

No. 87. From the dry hills along the Ashiho River valley, October 1939.

For previous introduction see 112286.

135631. *TROLLIUS CHINENSIS* Bunge. Ranunculaceae.

No. 82. From the meadows near Maoershan, September 1939. A tall perennial herb with stout striate stems, palmate leaves reniform in outline, and about 5 inches long by 7 inches wide, the lobed segments broad, oblanceolate, acute with a cuneate base, up to 3 inches long, and showy yellow, solitary, terminal flowers with petals about 1 inch long. Native to eastern Asia.

135632. *VALERIANA OFFICINALIS* L. Valerianaceae.

No. 90. From the meadows along the Ashiho River, September 13, 1939.

135633. *VERONICA SIBIRICA* L. Scrophulariaceae.

No. 88. From the mountain meadows near Hsiaoling, August 1939.

For previous introduction see 131065.

135634. *VITIS AMURENSIS* Rupr. Vitaceae. Amur grape.

No. 74. From a forest near Maoershan, east of Harbin, October 28, 1939.

For previous introduction see 131955.

135635. *ZIZANIA LATIFOLIA* (Griseb.) Stapf. Poaceae. Wildrice.

No. 15. From near a lake in the Sungari River valley, September 17, 1939.

For previous introduction see 69044.

135636. *SACCHARUM SPONTANEUM* L. Poaceae.

From Turkey. Seed presented by the Turkish Sugar Industry. Received February 28, 1940.

Collected on the plains of Adana.

For previous introduction see 124867.

135637 to 135650.

From France. Trees purchased from Philibert Moussier, Vienne (Isère). Received February 29, 1940.

135637 to 135643. *AMYGDALUS PERSICA* L. Amygdalaceae. Peach.

135637. *Henri Adenot.* 135641. *Superbe de Trévoux.*

135638. *Belle de Neuville.* 135642. *Tardive de Vindry.*

135639. *Entre.* 135643. *Willermoz.*

135640. *Madame Chanu.*

135644 to 135646. *MALUS SYLVESTRIS* Mill. Malaceae. Apple.

135644. *Pauline de Vigny.*

135645. *Reinette Jamin.*

135646. *Transparente de Croncels.*

135647. *PRUNUS ARMENIACA* L. Amygdalaceae. Apricot.

Bergeron Gabrielle.

135648 and 135649. *PRUNUS* spp. Cherry.

135648. *Griotte Dona Maria.*

135649. *Marmotte de l'Young.*

135650. *PYRUS COMMUNIS* L. Malaceae. Common pear.

Alexandrine Douillard.

135651 to 135654.

From California. Plants purchased from W. B. Clarke & Co., San Jose. Received March 5, 1940.

135651 to 135654—Continued

135651. CEANOTHUS GLORIOSUS J. T. Howell. Rhamnaceae.

A prostrate shrub with persistent, broad-oblong to round, dark-green, leathery, usually spinescent, leaves and clusters of deep-blue to purple flowers. Native to southern California where it grows on coastal slopes and mesas.

135652. CEANOTHUS DENTATUS var. IMPRESSUS Trelease.

A widespreading shrub up to 8 feet high, with alternate, persistent, broadly elliptic to round leaves 1 inch long and dark-blue flowers. Native to southern California.

For previous introduction see 135468.

135653 and 135654. CHAENOMELES. Malaceae.

135653. *Flowering quince No. 331.*

135654. *Flowering quince No. 315.*

135655 and 135656.

From England. Seed purchased from Thompson & Morgan, Ipswich. Received February 29, 1940.

135655. ACER GRiseum (Franch.) Pax. Aceraceae. **Paperbark maple.**

A handsome maple up to 30 feet in height, native to western China. The coarsely toothed, trifoliolate leaves are 1 to 2 inches long. The striking feature of this maple is the cinnamon-brown, papery bark that flakes off like that of the river birch.

For previous introduction see 132594.

135656. CEANOTHUS. Rhamnaceae.

Introduced under the name "azureus," a name of doubtful position.

135657 to 135660.

From France. Plants presented by Philibert Moussier, Vienne (Isère). Received February 29, 1940.

135657. AMYGDALUS PERSICA L. Amygdalaceae. **Peach.**

A seedling peach.

135658 to 135660. PRUNUS spp. Amygdalaceae.

135658. PRUNUS CERASIFERA Ehrh.

Prunier Myrobolan.

135659. PRUNUS INSITITIA L.

Prunier St. Julien.

135660. PRUNUS AVIUM L.

Cerisier (Merisier).

135661 to 135683. SECALE CEREALE L. Poaceae. **Rye.**

From Bulgaria. Seed presented by the Central Agricultural Experimental Institute, Sofia. Received February 29, 1940.

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|------------------------|-------------------------|
| 135661. No. 3. | 135671. No. 113. |
| 135662. No. 4. | 135672. No. 122. |
| 135663. No. 6. | 135673. No. 124. |
| 135664. No. 10. | 135674. No. 136. |
| 135665. No. 11. | 135675. No. 137. |
| 135666. No. 20. | 135676. No. 162. |
| 135667. No. 22. | 135677. No. 164. |
| 135668. No. 48. | 135678. No. 179. |
| 135669. No. 71. | 135679. No. 201. |
| 135670. No. 97. | 135680. No. 213. |

135661 to 135683—Continued135681. No. 362, *Improved Jadowo*.135682. *Uass*.

135683. Population from Sofia District.

135684 to 135693.

From Japan. Seeds and scions presented by Hokkaido Imperial University, Sapporo. Received March 1, 1940.

135684 and 135685. *MALUS PRUNIFOLIA* (Willd.) Borkh. Malaceae.

A small tree with pubescent branchlets, ovate to elliptic sharply serrate leaves 2 to 4 inches long, and clusters of white flowers 1 inch across, followed by ovoid yellow or red fruits that persist on the tree for a long time. Native to northeastern Asia.

For previous introduction see 92059.

135686 to 135693. *MALUS*. Malaceae.

The following were received as scions:

135686. *Fukuura*.135690. *Iwaki*.135687. *Gosho*.135691. *Kogen*.135688. *Hakko*.135692. *Tsugaru*.135689. *Heiya*.135693. *Umezawa*.**135694 to 135726.**

From Afghanistan. Seed collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received February 6, 1940.

135694. *AMYGDALUS PERSICA* L. Amygdalaceae.

Peach.

No. 4502. From Chardeh, August 22, 1939, at 8,000 feet altitude. Fruit subglobose, somewhat flattened, 1½ inches in diameter; color deep crimson; flesh yellow, of good flavor, semicling.

135695. *AMYGDALUS* sp.

No. 5041. From Bandar, October 10, 1939. A low-spreading semixerophytic shrub, 18 inches high, growing on the unwatered hillsides. Possibly ornamental.

135696. *AMYGDALUS PERSICA* var. *NECTARINA* Ait.

Nectarine.

No. 4484. From Kabul, August 14, 1939. Fruit 2¼ inches in diameter; color deep crimson; flesh white, clingstone, of good flavor.

135697. *JUGLANS REGIA* L. Juglandaceae.

Persian walnut.

No. 5044. *Chaharmagaz*. From Kabul, November 14, 1939, at 7,000 feet altitude, where the British Legation has reported a minimum temperature of 30° F. below zero. Produces papershell walnuts of good flavor.

135698. *MORUS* sp. Moraceae.

No. 4481. *Shahbut*. From Kabul, August 13, 1939. Fruit red black, 1 inch in diameter; flesh pleasantly acid, much like a blackberry.

135699. *NITRARIA SCHOBERI* L. Zygophyllaceae.

No. 4515. From Dasht-i-sufed, August 24, 1939, at 6,000 feet altitude. Bush 3½ feet high, found on a dry slope; has black globose, edible fruits.

For previous introduction see 113358.

135700 to 135715. *PRUNUS ARMENIACA* L. Amygdalaceae.

Apricot.

Nos. 135700 to 135702 are from Kabul.

135700. No. 4483. *Zardalu Ashtaki*. August 13, 1939. Fruit golden yellow with broad deep red wash over basal half; flesh firm and of good texture.

135701. No. 4474. *Zardalu Amiri*. August 12, 1939. Fruit 2 inches long, 1½ to 1¾ inches across; suture deep; pale yellow overspread with deep carmine blush; flesh white, very sweet, and of good texture.

135694 to 135726—Continued

135702. No. 4488. *Zardalu Amiri*. August 16, 1939. Fruit 2½ inches across; skin pale yellow with good crimson blush; flesh white, sweet, and of good texture. Stone loose, kernel sweet.
- Nos. 135703 to 135708 are from Hajar, August 26, 1939, at 8,000 feet altitude.
135703. No. 4536. *Zardalu Kaisi*. Fruit dried, almond-shaped, 1½ inches long; flesh probably white. Grown in mild climate.
135704. No. 4537. *Zardalu Said Mohamedi*. Fruit dried, almond-shaped, 1¼ inches long, yellow, sweet, of good texture; kernel sweet.
135705. No. 4538. *Zardalu Aoi Khurak*. Fruit dried, globose, 1 inch in diameter; flesh white, very sweet; kernel sweet. Grown in mild climate.
135706. No. 4539. *Zardalu Bajgai*. Fruit dried, almond-shaped, about 1½ inches long; flesh white, sweet; kernel sweet. Grown in mild climate.
135707. No. 4540. *Zardalu Saki*. Fruit dried, almond-shaped, about 1½ inches long; flesh white, very sweet; kernel sweet. Grown in a mild climate.
135708. No. 4541. *Zardalu Kasak*. Fruit dried, almond-shaped, 1¼ to 1½ inches long; flesh yellow, acid; kernel sweet.
135709. No. 4644. *Zardalu*. From Kala Sarkari, September 8, 1939. Flesh granular (not sticky), very sweet, like the Baltistan sort. One of the best dried apricots in the country.
135710. No. 4647. *Zardalu*. From Kala Sarkari, September 8, 1939. Fruit dried, 1¼ inches in diameter; flesh very sweet.
135711. No. 4697. *Zardalu*. From Tukzar. Fruits of varying sizes up to 1½ inches in diameter; flesh granular, very sweet.
135712. No. 4910. From Bandar, October 9, 1939, at 7,500 feet altitude. A mixture of large fruits from last year's crop, the largest (dried) 1¼ inches in diameter. Not as sweet as most of the Afghanistan apricots.
135713. No. 4986. *Zardalu*. From Balkh, October 30, 1939, at 1,500 feet altitude. Fruits dried, 1¼ inches high; flesh sweet and of good texture.
135714. No. 5008. From Tashkur, November 3, 1939, at 1,500 feet altitude. Fruit dried, 1½ inches long; color apparently pale yellow; flesh dry, mealy, very sweet; kernel sweet.
135715. No. 5009. From Shiburghan, November 3, 1939, at 1,500 feet altitude. Fruit dried, 1¼ inches across; color apparently yellow; flesh dried, very sweet, candylike, and sticky; kernel sweet.
135716. PRUNUS sp.
No. 4494. *Alubokhara*. From Kabul, August 15, 1939, at 7,000 feet altitude. Fruit globose, 1½ inches in diameter; color red purple; flesh sweet.
135717. PRUNUS sp.
No. 4500. *Alubokhara*. From Kabul, August 18, 1939. Fruit globose, 1¾ inches in diameter; color red purple mixed with green; flesh sweet.
135718. PRUNUS sp.
No. 4500. *Alubokhara*. From Kabul, August 18, 1939. Fruit globose, 1¾ inches in diameter; color red purple mixed with green; flesh sweet.
135719. PRUNUS sp.
No. 4931. From Andkhui, October 22, 1939, at 2,000 feet altitude. Fruit subglobose, 1½ inches across; color blue with bloom; flesh of good prune flavor and good texture. Late maturing and of excellent keeping qualities.
135720. PRUNUS sp.
No. 4936. From Andkhui, October 24, 1939, at 1,500 feet altitude. Fruit subglobose, 1½ inches across; color red purple with blue bloom; skin very tough; flesh of good flavor. A very late-maturing plum.
135721. PRUNUS sp.
No. 5000. From Mazarisharif, November 1, 1939, at 1,200 feet altitude. Fruit subglobose, 1½ inches across; color blue; skin rather tough; flesh with fine prune flavor, no acid next to pit. A very late-maturing plum.

135694 to 135726—Continued**135722. PRUNUS sp.**

No. 5075. *Alu*. From Kandahar, November 23, 1939. Fruit dried, globose, about 1 inch across; color black; flesh pleasantly acid flavored.

135723 and 135724. RUBUS spp. Rosaceae.**135723. RUBUS sp.**

No. 4504. From Doao, August 23, 1939, at 5,000 feet altitude, along a stream. A prostrate bush covered with white flowers and ripe fruits; fruit globose, compact, of good flavor.

135724. RUBUS sp.

No. 4802. From Gurzan, October 5, 1939, at 9,000 feet altitude, along a stream in a canyon. Bush 2 feet high and nearly erect; fruit with a blueberry bloom; rather acid.

135725. PYRUS sp. Malaceae.

No. 4801. From Gurzan, October 4, 1939, at 9,000 feet altitude. A bush growing on dry slopes, not more than 15 feet high with a trunk 2½ inches in diameter; fruits 2 inches in diameter, somewhat flattened, of good flavor.

135726. VITIS sp. Vitaceae.**Grape.**

No. 5058. From Kabul, November 18, 1939. A climbing wild grape that grows in the warm foothills of the northern mountains. It is apparently xerophytic and not cold resistant.

135727. HORDEUM VULGARE L. Poaceae.**Barley.**

From Australia. Seed presented by H. Wenholz, Director of Plant Breeding, Department of Agriculture, Sydney, New South Wales. Received February 28, 1940.

Bethges Victoria. Grown at the Wagga Experimental Farm, Bomen.

135728 to 135732.

From Morocco. Seed presented by E. Miège, Directeur du Centre de Recherches Agronomique, Rabat. Received February 29, 1940.

135728 to 135730. AVENA BYZANTINA K. Koch. Poaceae.

135728. A. C. 111.

135729. AM.-095.

135730. AM.-0238.

135731. AVENA SATIVA L. Poaceae.**Oats.**

AC.-248.

135732. AVENA. Poaceae.

AC.-153.

135733 to 135787.

From Afghanistan. Seed collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received February 5, 1940.

135733 to 135735. AGROPYRON spp. Poaceae.**Grass.****135733. AGROPYRON sp.**

No. 4653. From Chigzar, September 9, 1939. Collected from a dry summer area.

135734. AGROPYRON sp.

No. 5040. From Shanbashak Pass, August 31, 1939, at 9,000 feet altitude.

135735. AGROPYRON sp.

No. 4566. From Sabz Pass, August 29, 1939, at 11,000 feet altitude. A mixture of species growing on a dry slope.

135733 to 135787—Continued

135736. *AGROSTIS* sp. Poaceae. Grass.

From Chigzar, September 1939.

135737. *ARISTIDA PUNGENS* Desf. Poaceae. Grass.

No. 4971. From Akcha, October 27, 1939, at 1,500 feet altitude. A grass growing in clumps up to 4 feet high on the steppes.

For previous introduction see 120642.

135738. *ARUNDO DONAX* L. Poaceae. Giant reedgrass.

No. 5021. From Puli Komri, November 6, 1939, at 4,000 feet altitude. Plants erect, about 25 to 30 feet high; roots extend on top of the ground. From top to bottom the stem has a rank leaf growth like corn leaves, extending from two opposite sides; the second year it throws out branches. Found growing along canals and field borders.

135739. *BROMUS* sp. Poaceae. Grass.

From Chigzar, October 1939.

135740. *CYNDON DACTYLON* (L.) Pers. Poaceae. Bermuda grass.

No. 4974. From Akcha, October 27, 1939, at 1,500 feet altitude.

For previous introduction see 134844.

135741. *ELYMUS CAPUT-MEDUSAE* L. Poaceae. Grass.

From Chigzar, October 1939. An annual grass native to Europe.

For previous introduction see 134255.

135742. *ERIANTHUS* sp. Poaceae. Grass.

No. 5020. From Puli Komri, November 6, 1939, at 4,000 feet altitude. A clump grass 15 feet high, growing along canals and field borders, serving as roughage for cattle.

135743. *EUPHORBIA* sp. Euphorbiaceae.

No. 4744. From Safedsang, September 23, 1939, 10,000 feet altitude. Taken from a pigeon's crop.

135744 to 135746. *FERULA* spp. Apiaceae.

135744. *FERULA* sp.

No. 4735. From Zehnadir, September 26, 1939, at 10,000 feet altitude. A plant 6 feet high, growing on bare, dry, sunny slopes. The leaves, when dry, are eaten by cattle.

135745. *FERULA* sp.

No. 4890. From Burchao Pass, October 16, 1939, at 8,500 feet altitude. A plant 6 feet high, growing on barren slopes. Leaves apparently eaten by cattle.

135746. *FERULA* sp.

No. 4731. From Safedsang, September 22, 1939, at 10,000 feet altitude. A perennial 5 feet high, with a large fleshy root that yields *hing*. The dried plant is eaten by cattle. The leaves are used as a potherb.

135747. *FESTUCA* sp. Poaceae. Grass.

Selected from No. 4566. From Sabz Pass, August 29, 1939, at 11,000 feet altitude.

135748. *GLYCERIA* sp. Poaceae.

No. 4592. From Terak, September 3, 1939, at 10,000 feet altitude.

135749 to 135768. *HORDEUM* spp. Poaceae. Barley.

135749. *HORDEUM VIOLACEUM* Boiss.

Selected from No. 4566. From Sabz Pass, August 29, 1939, at 11,000 feet altitude.

For previous introduction see 64772.

135733 to 135787—Continued

135750. HORDEUM sp.

No. 4509. *Jao*. From Dasht-i-sufed, August 24, 1939, at 6,000 feet altitude. Sown in the spring and irrigated.

135751. HORDEUM sp.

No. 4519. *Jao*. From Kamard, August 24, 1939, at 6,000 feet altitude. Sown in the spring and irrigated.

135752. HORDEUM VULGARE var. PALLIDUM Ser.

No. 4616. From Kalassakari, September 7, 1939, sown in the spring and said not to be irrigated.

135753. HORDEUM VULGARE var. PALLIDUM Ser.

No. 4527. *Jao*. From Hajar, August 26, 1939, at 8,000 feet altitude. Sown in the spring and irrigated.

135754. HORDEUM VULGARE var. COELESTE L.

No. 4554. *Kaljao*. From Aoi Khurak, August 28, 1939, at 9,000 feet altitude. Sown in the spring and irrigated.

135755. HORDEUM VULGARE var. PALLIDUM Ser.

No. 4556. *Jao*. From Aoi Khurak, August 28, 1939, at 9,000 feet altitude. Sown in the spring and irrigated.

135756. HORDEUM VULGARE var. PALLIDUM Ser.

No. 4579. *Charpalu*. From Binimang, September 1, 1939, at 8,000 feet altitude. Sown in the spring and not irrigated.

135757. HORDEUM DISTICHON var. PALMELLA Harlan.

No. 4669. From Tukzar, September 12, 1939. Sown in the spring and not irrigated.

135758. HORDEUM VULGARE var. PALLIDUM Ser.

No. 4691. *Jao Charpalu*. From Tukzar, September 14, 1939. Sown in the spring and not irrigated.

135759. HORDEUM DISTICHON var. PALMELLA Harlan.

No. 4747. *Dopahlu bahan*. From Zehnadir, September 25, 1939, at 8,000 feet altitude. Sown in the spring and not irrigated.

135760. HORDEUM sp.

No. 4748. *Chaharpalu aoi*. From Zehnadir, September 25, 1939, at 8,000 feet altitude. Sown in the spring and irrigated.

135761. HORDEUM DISTICHON var. PALMELLA Harlan.

No. 4753. From Sufak, September 27, 1939, at 8,000 feet altitude. Sown in the spring and not irrigated.

135762. HORDEUM VULGARE var. PALLIDUM Ser.

No. 4777. From Mak, October 2, 1939, at 8,500 feet altitude. Sown in the spring and irrigated.

135763. HORDEUM sp.

No. 4805. From Gurzan, October 5, 1939, at 9,000 feet altitude. Sown in the spring and irrigated.

135764. HORDEUM sp.

No. 4832. *Dopahlu*. From Sharak, October 8, 1939, at 7,500 feet altitude. Sown in the spring and not irrigated.

135765. HORDEUM VULGARE var. PALLIDUM Ser.

No. 4892. From Khoshtai, October 16, 1939, at 7,500 feet altitude. Sown in the spring and not irrigated.

135766. HORDEUM VULGARE var. PALLIDUM Ser.

No. 5102. *Jau*. From Quetta, Baluchistan, November 28, 1939, at 5,000 feet altitude. Sown in the fall and irrigated. Probably adapted to alkali soil.

135733 to 135787—Continued

135767. *HORDEUM* sp.
"A."
135768. *HORDEUM* sp.
"B."
135769. *KOELERIA* sp. Poaceae. Grass.
From Shanbashak Pass, October 1939.
135770. *LINUM* sp. Linaceae.
No. 4559. From Aoi Khurak, August 28, 1939, at 9,000 feet altitude. Aero-
phytic perennial with blue-purple flowers 2 inches across.
- 135771 to 135774. *MEDICAGO SATIVA* L. Fabaceae. Alfalfa.
135771. No. 4542. From Lorinj, August 26, 1939, at 8,000 feet altitude. A
prostrate weed in field.
135772. No. 4918. *Rishka*. From Khwajaebichajalak, October 19, 1939, at
7,000 feet altitude. A fodder plant.
135773. No. 4715. *Rishka*. From Tukzar, September 15, 1939. When irri-
gated yields six crops; persists for 10 years or more.
135774. No. 4954. *Rishka*. From Akcha, October 26, 1939, at 1,500 feet
altitude. A strain adapted to the steppe climate; blooms at this season when
2 feet high.
135775. *MELICA CUPANI* Guss. Poaceae. Grass.
No. 4887. From Burchao Pass, October 15, 1939, at 10,000 feet altitude. A
good pasture grass that grows in high places on semibarren rubble slopes. Com-
mon in the Himalayas of the Punjab.
For previous introduction see 114262.
135776. *ORYZOPSIS* sp. Poaceae. Grass.
From Sabz Pass, October 1939.
135777. *OXYTROPIS* sp. Fabaceae.
No. 4736. From Zehnadir, September 26, 1939, at 10,000 feet altitude, and
on a dry slope. A decumbent plant much eaten by cattle.
135778. *PHRAGMITES COMMUNIS* Trin. Poaceae.
No. 4866. *Nai*. From Bandar, October 9, 1939, at 7,000 feet altitude. A
grass up to 18 inches high found on sand dunes; said to be eaten by cattle.
- 135779 and 135780. *POA BULBOSA* L. Poaceae. Grass.
An important pasture grass that grows over a large range of altitude.
135779. From Chigzar.
135780. From Shanbashak.
For previous introduction see 133161.
135781. *POA* sp.
From Sabz Pass.
135782. *PSORALEA DRUPACEA* Bunge. Fabaceae.
No. 4666. From Tukzar, November 12, 1939, at 5,000 feet altitude. A woody
perennial about 1 foot high, with roundish dentate leaflets nearly 1 inch long and
small white flowers in dense axillary racemes. Native to Turkistan.
For previous introduction see 111191
- 135783 to 135785. *STIPA* spp. Poaceae. Grass.
135783. *STIPA* sp.
From Chigzar.
135784. *STIPA* sp.
From Chigzar.
135785. *STIPA* sp.
From Sabz Pass.

135733 to 135787—Continued

135786 and 135787. *TRIFOLIUM* spp. Fabaceae.

135786. *TRIFOLIUM* sp.

No. 5004. From Mazarisharif, November 2, 1939, at 1,200 feet altitude. A fodder plant.

135787. *TRIFOLIUM* sp.

No. 4878. From Burchao Pass, October 13, 1939. A prostrate perennial growing along streams and meadows.

135788. *FICUS ROXBURGHII* Wall. Moraceae.

Fig.

From India. Plants presented by the Royal Botanical Garden, Sibpur, near Calcutta, through Dr. David Fairchild. Received March 5, 1940.

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 86675.

135789 to 135798.

From Massachusetts. Seeds purchased from F. W. Schumacher, Jamaica Plain, Boston. Received February 27, 1940.

135789. *ACANTHOPANAX LEUCORRHIZUS* var. *SCABERULUS* Harms and Rehder. Araliaceae.

A variety with 5 leaflets, smaller and narrower than those of the type, usually oblong-obovate, and doubly serrate.

135790. *AMORPHA BRACHYCARPA* Palmer. Fabaceae.

A slender erect shrub 2 to 3 feet high, somewhat like *Amorpha nana*, native to Missouri. The pinnate leaves with crowded small leaflets are rather numerous. The small, bright, violet-blue flowers are in dense spikelike racemes arranged like panicles, terminating the stems.

135791. *BETULA GROSSA* Sieb. and Zucc. Betulaceae.

A large handsome tree up to 50 feet high, with yellowish-brown bark, ovate, irregularly doubly serrate, long-acuminate leaves 2 to 3½ inches long. Native to Japan and Manchuria.

For previous introduction see 117054.

135792. *BETULA MANDSHURICA* (Regel) Nakai. Betulaceae.

Birch.

A white-barked birch up to 80 feet high, with the leaves often broadly wedge-shaped at the base. Native to Hopeh Province, China.

For previous introduction see 102740.

135793. *BETULA MAXIMOWICZIANA* Regel. Betulaceae.

135794. *BUDDLEIA JAPONICA* Hemsl. Loganiaceae. Japanese butterflybush.

A deciduous shrub 3 to 5 feet in height, sparsely branched and of an open habit. The very narrow dark-green leaves are up to 8 inches in length, and the pale-lilac flowers are densely crowded in terminal-branched panicles. This shrub is native to Japan and is rather striking in autumn with its long, dense, drooping panicles of fruit.

For previous introduction see 55077.

135795. *EVODIA DANIELLII* (Benn.) Hemsl. Rutaceae.

A bushy tree, 10 to 20 feet high, with unequally pinnate leaves up to 3 inches long, numerous corymbose panicles of whitish flowers that appear in June and July, and oblong or elongated fruit capsules that have a peculiar aromatic odor and a pungent bitter flavor.

For previous introduction see 93115.

135796. × *MAGNOLIA SOULANGEANA* Soul. Magnoliaceae.

Brozzoni.

135789 to 135798—Continued

135797. *PRINSEPIA SINENSIS* Oliver. Amygdalaceae. **Cherry prinsepia.**

For previous introduction see 135615.

135798. *VIBURNUM WRIGHTII* var. *HESSEI* (Koehne) Rehder. Caprifoliaceae.

135799 to 135804.

From India. Seeds presented by G. Ghose & Co., Town-end, Darjeeling. Received March 1, 1940.

135799 to 135802. *GAULTHERIA* spp. Ericaceae.

135799. *GAULTHERIA HOOKERI* C. B. Clarke.

135800. *GAULTHERIA NUMMULARIOIDES* D. Don.

A procumbent shrub, native to the Himalayas at altitudes up to 9,000 feet, where it covers banks with much-branched densely leafy stems. The leathery ovate leaves are $\frac{1}{2}$ inch long, and the small reddish or nearly white tubular flowers are solitary on densely bracted axillary pedicels; they are followed by small, fleshy, blue-black fruits.

For previous introduction see 111048.

135801. *GAULTHERIA PYROLOIDES* Hook. f. and Thoms.

A low evergreen shrub less than a foot high, with narrow-elliptic leaves 1 to 2 inches long and large blue-black berries. Native to the Himalayas.

For previous introduction see 99662.

135802. *GAULTHERIA TRICHOPHYLLA* Royle.

A low evergreen shrub of densely tufted habit, 3 to 6 inches high, spreading by means of underground shoots; the slender, wiry, bristly stems are densely covered with small leaves. The narrow-oblong, stalkless leaves, $\frac{1}{4}$ inch long and about $\frac{1}{8}$ inch wide, are smooth on both surfaces but bristly on the margins, glossy dark green above and pale beneath. The solitary bell-shaped pink flowers are borne in the leaf axils and are followed by blue-black fruits. Native to the Himalayas up to 13,000 feet altitude.

For previous introduction see 115979.

135803. *OPHIPOGON CLARKEI* Hook. f. Liliaceae.

For previous introduction see 133119.

135804. *OPHIPOGON INTERMEDIUS* D. Don.

For previous introduction see 133120.

135805 to 135857.

From Afghanistan. Collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received February 7, 1940.

Unless otherwise stated, the material was received as seeds.

135805 to 135815. *ALLIUM* spp. Liliaceae.

135805 to 135809. *ALLIUM CEPA* L.

Onion.

135805. No. 4621. *Pujaz*. From Kala Sarkari, September 8, 1939. Said to be flat and red purple.

135806. No. 4692. *Pujaz*. From Tukzar, September 14, 1939. Probably a mixture. The dominant type seen in gardens is flat, up to 5 inches in diameter, reddish purple, with inner leaves white.

135807. No. 4703. *Sir*. Bulbs from Tukzar, September 14, 1939.

135808. No. 4998. *Pujaz*. From Mazarisharif, November 1, 1939, at 1,200 feet altitude.

135809. No. 5005. From Tashkurghan, November 3, 1939, at 1,500 feet altitude.

135810. *ALLIUM SATIVUM* L.

Garlic.

No. 4625. *Sir*. Bulbs from Kala Sarkari, September 8, 1939.

135805 to 135857—Continued

135811 to 135815. ALLIUM spp.

135811 and 135812. ALLIUM sp.

From Sarasia, August 29, 1939, at 10,000 feet altitude. Plant found growing on dry slope, 2 feet in height; often has double umbels and 1 or 2 broad (2 inches) leaves at base.

135811. No. 4656. Bulbs.

135812. No. 4565-A. Seeds.

135813. ALLIUM sp.

No. 4596. From Terak, September 5, 1939, at 8,000 feet altitude. Bulbs of a plant that grows on dry slopes; it has 2 broad leaves at base and rose-purple flowers in an umbel on a stalk 18 inches high. No onion smell in bulb.

135814. ALLIUM sp.

No. 4654. From Chigzar, September 10, 1939. Bulbs of a plant 1 foot high, growing on dry ground.

135815. ALLIUM sp.

No. 4928. From Maimana, October 21, 1939, at 3,000 feet altitude. Bulbs of a plant 18 inches in height, growing on top of a dry mud wall; dense umbel, 2 inches in diameter; leaves $\frac{1}{2}$ inch wide.

135816 and 135817. ASPARAGUS spp. Convallariaceae.

135816. ASPARAGUS sp.

No. 4526. From Lorinj, August 26, 1939, at 8,000 feet altitude. Climbing in bushes along a stream; has small red fruits.

135817. ASPARAGUS sp.

No. 4562. From Sabz Pass, August 29, 1939, at 10,000 feet altitude. Plant 1 foot in height growing on dry slope; has red fruits.

135818. BETA VULGARIS L. Chenopodiaceae.

Common beet.

No. 4620. *Lablabu*. From Kala Sarkari, September 8, 1939. A long red variety with no fiber; quick growing.

135819 and 135820. BRASSICA OLERACEA var. CAPITATA L. Brassicaceae.

Cabbage.

135819. No. 4985. *Karam*. From Balkh, October 29, 1939, at 1,500 feet altitude. Heads globose, 8 inches high, and firm. Plant adapted to a hot climate.

135820. No. 5039. *Karam*. From Kabul, November 7, 1939. Heads large, up to 15 inches across, subglobose; quality good.

135821. BRASSICA RAPA L.

Turnip.

No. 5001. *Shelgam*. From Mazarisharif, November 2, 1939, at 1,200 feet altitude. Turnips on the market were flat, up to 4 inches across, and red purple.

135822 to 135828. CAPSICUM FRUTESCENS L. Solanaceae.

Redpepper.

135822. No. 4583. *Murch*. From Binimang-i-charaolia, September 1, 1939. Fruit bullnosed, flattened, 1 by $\frac{3}{4}$ inch, red, and mildly hot.

135823. No. 4629. *Murch*. From Kala Sarkari, September 8, 1939. Fruit bullnosed, subglobose, 2 inches in length, red, and mildly hot.

135824. No. 4705. *Murch*. From Tukzar, September 14, 1939. Fruit top-shaped, 1 $\frac{1}{2}$ inches in length, red, and mild.

135825. No. 4717. *Murch*. From Tukzar, September 15, 1939. Fruit 3 inches in length, pointed, red, and hot.

135826. No. 4920. From Almar, October 19, 1939, at 3,000 feet altitude. Fruit elongate bullnosed, 3 $\frac{1}{2}$ by 1 $\frac{3}{4}$ inches; red and sweet. Seeds only slightly peppery.

135827. No. 5002. *Murch*. From Mazarisharif, November 2, 1939, at 1,200 feet altitude. Fruit red, slightly flattened, $\frac{3}{4}$ inch across; flesh sweet; seeds mildly hot.

135805 to 135857—Continued

135828. No. 5062. From Kabul, November 19, 1939. Fruit scarlet, bullnosed, 6 by 3½ inches when semidried; flesh sweet and of good quality.
135829. DAUCUS sp. Apiaceae.
No. 4601. From Kala Sarkari, September 7, 1939. Plant grows in fields; up to 5 feet high.
135830. DAUCUS CAROTA L. Carrot.
No. 4713. *Zardak*. From Tuzkar, September 15, 1939. Roots well-formed, pale yellow, and about 1 foot long.
- 135831 to 135833. LACTUCA spp. Cichoriaceae.
135831. LACTUCA sp.
No. 4523. From Lorinj, August 26, 1939, at 8,000 feet altitude. Plant 2½ feet high, with yellow flowers; growing along a stream.
135832. LACTUCA sp.
No. 4530. From Lorinj, August 26, 1939, at 8,000 feet altitude. Perennial plant 3 feet high; growing on dry slopes; flowers rose.
135833. LACTUCA sp.
No. 4571. From Balijali Pass, August 30, 1939, at 9,000 feet altitude. Plant 3 feet high, with blue-purple flowers.
- 135834 to 135839. LAGENARIA LEUCANTHA (Duchesne) Rusby. Cucurbitaceae.
Calabash gourd.
135834. No. 4898. From Khwajaebrehagalak, October 17, 1939, at 7,000 feet altitude. Fruit obpyramidal, up to 1 foot long; smooth, greenish white; used to make water jars.
135835. No. 4915. From Khwajaebrehagalak, October 18, 1939, at 7,000 feet altitude. Fruit with a pronounced neck, 1 foot long; smooth, pale green. Used to dip water.
135836. No. 4977. From Balhk, October 29, 1939, at 1,500 feet altitude. Fruit crook-necked, bowl 6 inches in diameter, greenish white.
135837. No. 4996. From Mazarisharif, November 1, 1939, at 1,200 feet altitude. Fruits obpyramidal, 2½ inches long. Used as snuff boxes.
135838. No. 5015. From Pulikomri, November 4, 1939. Fruits pear-shaped, 1 foot long. Used as water containers.
135839. No. 5034. From Kabul, November 11, 1939. Fruit dipper type with short handle; 8 feet long.
- 135840 and 135841. LUFFA ACUTANGULA (L.) Roxb. Cucurbitaceae.
Singkwa towelgourd.
135840. No. 4615. *Ton*. From Kala Sirkari, September 7, 1939. Fruit 8 inches high; used as a vegetable when young.
135841. No. 4922. *Turai*. From Almar, October 20, 1939, at 3,000 feet altitude. Fruit 8 inches in height; used as a vegetable when tender.
- For previous introduction see 126466.
- 135842 to 135844. LYCOPERSICON ESCULENTUM Mill. Solanaceae. Tomato.
135842. No. 4627. *Banjanirunu*. From Kala Sarkari, September 8, 1939. Fruit flattened, 4 inches across, smooth, red; good quality.
135843. No. 4700. *Pomodoni*. From Tuzkar, September 14, 1939. Fruit flattened, 3 inches long, red, smooth.
135844. No. 4933. From Almar, October 19, 1939, at 2,000 feet altitude. Plant sprawling, with branches 7 feet long; fruit red, flattened, 2 to 3 inches across.
135845. PHASEOLUS AUREUS Roxb. Fabaceae. Mung bean.
No. 4970. *Mash*. From Akcha, October 27, 1939, at 1,500 feet altitude.
For previous introduction see 135269.

135805 to 135857—Continued

135846. *PISUM SATIVUM* L. Fabaceae. Pea.
No. 4552. *Mushung*. From Aoi Khurak, August 28, 1939, at 9,000 feet altitude.
135847. *RAPHANUS SATIVUS* L. Brassicaceae. Radish.
No. 4619. *Muli surkh*. From Kala Sarkari, September 8, 1939.
135848. *RHEUM* sp. Polygonaceae.
No. 4886. From Burchao Pass, October 15, 1939, at 9,000 feet altitude. A plant growing on barren shale slopes, with apparently very large petioles (now dry).
- 135849 to 135854. *SOLANUM* spp. Solanaceae.
- 135849 and 135850. *SOLANUM MELONGENA* L. Eggplant.
135849. No. 5063. From Kabul, November 19, 1939. Fruit globose, 5 inches in height, green washed with purple.
135850. No. 5017. *Benjan*. From Pulikomri, November 4, 1939. Fruit purple when immature; up to about 1 foot high and 4 inches across.
135851. *SOLANUM NIGRUM* L. Black nightshade.
No. 4643. From Kala Sarkari, September 8, 1939. Plant about 3 feet high, with white flowers and black fruits.
For previous introduction see 129359.
135852. *SOLANUM TUBEROSUM* L. Potato.
No. 5077. *Kachalu*. From Kandakar, November 24, 1939. Tubers of a middle-late hot-climate potato with yellow skin and white flesh; high yield, good for food and for industrial uses; starch content high.
135853. *SOLANUM* sp.
No. 4979. From Balkh, October 29, 1939, at 1,500 feet altitude. A very thrifty plant, forming a bush 6 feet across, with orange berries.
135854. *SOLANUM NIGRUM* L. Black nightshade.
No. 4516. From Kamard, August 24, 1939, at 6,000 feet altitude. Low herb with white flowers and orange fruits.
135855. *SPINACIA OLERACEA* L. Chenopodiaceae. Common spinach.
No. 5003. *Palak*. From Mazarisharif, November 2, 1939, at 1,200 feet altitude.
135856. *TRAGOPOGON PORRIFOLIUS* L. Cichoriaceae. Vegetable oyster.
No. 4558. From Aoi Khurak, August 28, 1939, at 9,000 feet altitude. A vigorous plant, 18 inches in height, growing on a dry plain.
For previous introduction see 125852.
135857. *VIGNA SINENSIS* (Torner) Savi. Fabaceae. Cowpea.
No. 4602. *Lobia*. From Kala Sarkari, September 7, 1939. A black-seeded, drought-resistant variety. Pods about 2 feet long, eaten when fresh; dried beans also edible.

135858 to 135860.

From South Australia. Seeds presented by I. F. Phipps, Waite Agricultural Research Institute, University of Adelaide, Adelaide. Received February 26, 1940.

135858. *MEDICAGO TRUNCATULA* var. *TRIBULOIDES* (Desr.) Burnat. Fabaceae.
Barrel Medic. A prostrate or ascending annual medic. Native to Europe.
135859. *TRIGONELLA ORNITHOPODIODES* (L.) DC. Fabaceae.
Fenugreek. A low annual legume with stems trailing about 1 foot long. Native to Europe and North Africa.
135860. *TRIGONELLA SUAVISSIMA* Lindl.
Sweet fenugreek. This cloverlike plant, called "Darling clover" in Australia, where it is native, has fragrant stems and foliage and in favorable locations is perennial, becoming 3 feet or more in height. If cut when in flower and properly cured, it makes good hay.

135861 to 135934.

From Asia. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received February 13, 1940.

Unless otherwise specified, this material was collected in the vicinity of Quetta, Baluchistan, November 27 and 28, 1939.

135861. *ABELMOSCHUS ESCULENTUS* (L.) Moench. Malvaceae. Okra.

No. 5151. *Bhindi*. Altitude 5,000 feet. Plants grow up to 6 feet in height; fruit 3 inches long.

135862 and 135863. *ALLIUM CEPA* L. Liliaceae. Onion.

135862. No. 5113. *Lal Piyaz*. Altitude 5,000 feet.

135863. No. 5144. *Safed Piyaz*. Altitude 5,000 feet.

135864. *ALLIUM PORRUM* L. Leek,

No. 5142. *Gandana* or *Piyaz-i-khorassani*. Altitude 5,000 feet; eaten as greens.

135865. *AMARANTHUS* sp. Amaranthaceae.

No. 5139. *Chaula*. Altitude 5,000 feet. Used as a potherb.

135866 and 135867. *AMYGDALUS PERSICA* L. Amygdalaceae. Peach.

135866. No. 5098. A mixture of seeds obtained from the Baluchistan Government Garden. The garden catalog lists 16 native varieties, all but one of which have white flesh.

135867. No. 4463. *Aru*. From Peshawar, North-West Frontier Province, India, August 6, 1939. Fruit $2\frac{1}{4}$ inches in diameter, skin yellow; flesh yellow, red at pit, very freestone.

135868. *ANETHUM GRAVEOLENS* L. Apiaceae. Dill.

135869. *ARUNDO DONAX* L. Poaceae. Giant reedgrass.

No. 5171. A grass that grows in clumps up to 20 feet high and tolerates temperatures as low as 12° F.

For previous introduction see 135738.

135870. *BETA VULGARIS* L. Chenopodiaceae. Common beet.

No. 5183. *Chukundi*. Altitude 5,000 feet. Probably acclimatized.

135871 and 135872. *BRASSICA RAPA* L. Brassicaceae. Turnip.

135871. No. 5124. *Lal Shelgam*. Altitude 5,000 feet. Said to be a red, round variety.

135872. No. 5132. *Safed Shelgam*. Altitude 5,000 feet. Said to be white and globose.

135873 and 135874. *CAPSICUM FRUTESCENS* L. Solanaceae. Redpepper.

135873. No. 5133. *Mirch*. Altitude 5,000 feet. Said to be long, red, and hot.

135874. No. 5148. *Mirch*. Altitude 5,000 feet. Fruits top-shaped, about 1 inch long, red, and hot.

135875 to 135883. *CITRULLUS VULGARIS* Schrad. Cucurbitaceae. Watermelon.

135875. No. 5091. Altitude 5,000 feet. Fruit subglobose, 10 inches across, pea green with faint reticulations; rind $\frac{1}{2}$ inch thick; flesh rose, of good quality.

135876. No. 4965. From Akcha, Afghanistan, October 26, 1939, at 1,500 feet altitude. Fruit 18 by 9 inches; rind grass green and $\frac{3}{4}$ inch thick; flesh pink, streaked with yellow, of good quality.

135877. No. 5092. Fruit 20 by $8\frac{1}{2}$ inches; rind pale green with broad chain stripes of black green, $\frac{1}{2}$ to $\frac{3}{4}$ inch thick; flesh bright pink, of good quality but rather seedy.

135878. No. 5094. Altitude 5,000 feet. Fruit 10 by 8 inches; rind grass green marbled with black green, $\frac{3}{8}$ inch thick; flesh bright pink, of fair quality.

135861 to 135934—Continued

135879. No. 5095. Fruit 15 by 6½ inches; rind pea green with traces of vermiculations; flesh bright pink, of good quality.
135880. No. 5096. Altitude 5,000 feet. Fruit globose, 8 inches in diameter; rind black green, with well-indented ribs, ¾ inch thick; flesh rose, of good quality.
135881. No. 5097. Altitude 5,000 feet. Fruit 14 by 10 inches; rind sea green with broad chain stripes of black green, ½ inch thick; flesh bright pink, of good quality.
135882. No. 5154. *Tarbuza*. Altitude 5,000 feet. Fruit globose, 8 inches in diameter; rind black green, ½ inch thick; flesh pink, of good quality.
135883. No. 5111. *Tinda*. Altitude 5,000 feet.
135884. *CORIANDRUM SATIVUM* L. Apiaceae. **Coriander**.
No. 5099. *Dania*. Altitude 5,000 feet. All parts of the plant are used in flavoring.
- 135885 and 135886. *CUCUMIS MELO* L. Cucurbitaceae. **Muskmelon**.
135885. No. 5118. *Sarda*. Altitude 5,000 feet. Good keepers.
135886. No. 5116. *Kharbuza*. Altitude 5,000 feet. Probably long keeping, but of indifferent quality.
- 135887 and 135888. *CUCUMIS SATIVUS* L. Cucurbitaceae. **Cucumber**.
135887. No. 5114. *Khira*. Altitude 5,000 feet.
135888. No. 5134. *Tar*. Altitude 5,000 feet. Fruit up to 3 feet long, excellent when young.
- 135889 to 135896. *CUCURBITA MAXIMA* Duchesne. Cucurbitaceae. **Squash**.
135889. No. 5084. Fruit subglobose, 15 inches long, faintly ribbed, creamy white; flesh pale orange, 1½ to 2½ inches thick, and insipid.
135890. No. 5085. Fruit subglobose, 19 inches long, weight 70 pounds; rind pale gray green, with deeply indented ribs; flesh orange, 2¾ inches thick, and insipid.
135891. No. 5086. Fruit elongate, 25 by 15 inches; rind salmon, mottled with paler salmon; flesh pale salmon, 2 inches thick, and insipid.
135892. No. 5087. Fruit flattened, 17 by 9 inches; rind Chinese red, deeply indented ribs; flesh orange, 2 to 3 inches thick, and insipid.
135893. No. 5088. Fruit subglobose, 17 inches long; rind salmon, with deeply indented ribs; flesh salmon, 2¾ inches thick, and insipid.
135894. No. 5107. Altitude 5,000 feet.
135895. No. 5109. *Lal Kadu*. Altitude 5,000 feet.
135896. No. 5119. Altitude 5,000 feet. Mixed seed.
- 135897 and 135898. *CUCURBITA MOSCHATA* Duchesne. Cucurbitaceae. **Cushaw**.
135897. No. 5089. Fruit flattened, 15 by 10 inches; rind salmon buff with heavy reticulations of green, often leaving small islands and blotches of ground color, with deeply indented ribs; flesh 2 to 3 inches thick, golden, and fairly sweet.
135898. No. 5090. Fruit elongate, 17 by 15 inches; rind orange brown, with blotches of buff and more or less prominent reticulations of green, deeply indented ribs; flesh golden, 2 to 3 inches thick, fairly sweet. Said to keep 1 year.
- 135899 and 135900. *DAUCUS CAROTA* L. Apiaceae. **Carrot**.
135899. No. 5130. *Kala Gajar*. Altitude 5,000 feet. Black roots.
135900. No. 5131. *Pila Gajar*. Altitude 5,000 feet. Yellow roots.
- 135901 to 135903. *LAGENARIA LEUCANTHA* (Duchesne) Rusby. Cucurbitaceae. **Calabash gourd**.

135861 to 135934—Continued

135901. No. 5103. *Mitha Tumba*. Altitude 5,000 feet. Fruit about 18 inches long and edible.
135902. No. 5082. Fruit flattened, 8 by 5 inches; shell tender; probably eaten when young.
135903. No. 5149. *Ghiya Kadu*. Altitude 5,000 feet. Fruit club-shaped, 28 by 4 inches; edible when tender.
135904. *LUFFA ACUTANGULA* (L.) Roxb. Cucurbitaceae. **Singkwa towelgourd.**
No. 5125. *Toria*. Altitude 5,000 feet. Fruit a popular vegetable when young and tender.
135905. *LUFFA AEGYPTIACA* (L.) Roemer. Cucurbitaceae. **Suakwa towelgourd.**
No. 5150. *Tori*. Fruit cylindrical, 8 by 4 inches; a popular vegetable when young.
135906. *LYCOPERSICON ESCULENTUM* Mill. Solanaceae. **Tomato.**
No. 4470. From Peshawar, North-West Frontier Province, India, August 8, 1939. Fruit flattened and red. Grown under daily temperatures of 100°F. or higher.
135907. *LYCOPERSICON ESCULENTUM* f. *PYRIFORME* (Dun.) C. H. Mull.
No. 5079. Fruit pear-shaped, 2½ by ¼ inches; red.
- 135908 and 135909. *LYCOPERSICON ESCULENTUM* Mill. **Tomato.**
135908. No. 5080. Fruit flattened, 2 inches long, red.
135909. No. 5140. Altitude 5,000 feet. Large-fruited; said to be acclimatized.
135910. *MEDICAGO SATIVA* L. Fabaceae. **Alfalfa.**
No. 5115. Said to be an imported Afghanistan strain.
- 135911 to 135914. *MOMORDICA CHARANTIA* L. Cucurbitaceae. **Balsam-pear.**
135911. No. 5105. *Karela*. A valued vegetable reputedly high in vitamins.
135912. No. 5117. *Karela*. Altitude 5,000 feet. Small fruits.
135913. No. 5121. *Karela*. Altitude 5,000 feet. Long fruits.
135914. No. 5143. *Karela*. Altitude 5,000 feet. Large, round fruits.
- 135915 to 135917. *PHASEOLUS VULGARIS* L. Fabaceae. **Common bean.**
135915. No. 5104. *Sem*. Altitude 5,000 feet.
135916. No. 5135. *Fras Bin*. Altitude 5,000 feet.
135917. No. 5137. Altitude 5,000 feet. Cultivated for the green pods and the dry beans.
135918. *PHYSALIS PERUVIANA* L. Solanaceae. **Peruvian groundcherry.**
No. 5126. Widely grown in India for its fruits; seeds probably from naturalized plants.
135919. *PISTACIA TEREBINTHUS* L. Anacardiaceae. **False terebinth.**
No. 5078. *Shne*. From Chaman, India. Tree with a trunk up to 3 feet in diameter, growing on dry mountains.
For previous introduction see 127869.
135920. *PISUM SATIVUM* L. Fabaceae. **Pea.**
No. 5106. *Matar*. Altitude 5,000 feet. An acclimatized variety.
- 135921 and 135922. *RAPHANUS SATIVUS* L. Brassicaceae. **Radish.**
135921. No. 5141. *Lal Muli*. Altitude 5,000 feet. Roots red.
135922. No. 5145. *Safed Muli*. Altitude 5,000 feet. Roots white.
135923. *RUMEX* sp. Polygonaceae.
No. 5129. *Katta Palaa*. Altitude 5,000 feet. Used as a potherb.

135861 to 135934—Continued

135924. SEMECARPUS ANACARDIUM L. f. Anacardiaceae.

No. 5172. *Balawa*. Purchased in the bazar. A tree with large oval leaves and yellow fruits that lose their astringency when fully ripe and are eaten after being roasted. The juice of this nut, mixed with lime, forms an indelible ink used for marking clothes.

For previous introduction see 123248.

135925 and 135926. SOLANUM MELONGENA L. Solanaceae. **Eggplant.**

135925. No. 5136. *Bengan*. Altitude 5,000 feet. Fruit purple and round.

135926. No. 5081. Fruit purple and round.

135927. SPINACIA OLERACEA L. Chenopodiaceae. **Common spinach.**

No. 5110. *Palag*. Altitude 5,000 feet. A native variety.

135928. TRIFOLIUM sp. Fabaceae.

No. 5146. *Shaftal*. Altitude 5,000 feet. Used for fodder. Flowers very fragrant.

135929 and 135930. TRIGONELLA FOENUM-GRÆCUM L. Fabaceae. **Fenugreek.**

135929. No. 5120. *Methi*. Altitude 5,000 feet. A potherb.

135930. No. 5122. *Methi*. Altitude 5,000 feet. A potherb, probably an Afghanistan strain.

135931 and 135932. VICIA FABA L. Fabaceae. **Broadbean.**

135931. No. 5101. *Bagla*. Altitude 5,000 feet.

135932. No. 5108. *Bagla*. Altitude 5,000 feet. Probably acclimatized.

135933 and 135934. VIGNA SINENSIS (Torner) Savi. Fabaceae. **Cowpea.**

135933. No. 5112. *Lobra*. Altitude 5,000 feet. Pods eaten green.

135934. No. 5128. *Lobra*. Altitude 5,000 feet. Pods eaten green.

135935 and 135936. VITIS. Vitaceae. **Grape.**

From Palestine. Scions presented by Zalman Rapoport, Department of Agriculture, Tel-Aviv. Received March 8, 1940.

135935. *Enuni*.

135936. *Shami*.

135937. CANNA EDULIS Ker. Cannaceae. **Edible canna.**

From Hawaii. Tubers presented by Dr. J. H. Beaumont, Director, Hawaii Agricultural Experiment Station, Honolulu. Received March 8, 1940.

For previous introduction see 92307.

135938 to 135954. GOSSYPIUM. Malvaceae. **Cotton.**

From the British West Indies. Seed presented by R. A. Silow, Cotton Research Station, Trinidad. Received March 9, 1940.

135938. *Contorta*.

135939. *Type 8. Green Lint Crinkled.*

135940. *Hsiho*.

135941. *Indore Crinkled.*

135942. *Indore Crinkled—type 23.*

135943. *WA7-2. Indore Normal.*

135944. *Meade Crinkled.*

135945. *Type 4. Pseudo-Normal.*

135946. *Religiosum RA8-2.*

135947. *Religiosum RA8-6.*

135938 to 135954—Continued

135948. *Religiosum* RA8-12.
 135949. BA1-8A. *St. Kitts Sea Island*.
 135950. T19. *Sea Island Crinkled*.
 135951. Type 18. *Sea Island Contorta*.
 135952. Type 1. *Super-Crinkled*.
 135953. BA1-1. *Sea Island Normal*.
 135954. *Super Okra*.

135955. AVENA SATIVA L. Poaceae.**Oats.**

From Sweden. Seed presented by Allmänna Svenska Utsädesaktiebolaget, Svalöf. Received March 7, 1940.

*Sun.***135956 and 135957. GOSSYPIUM. Malvaceae.****Cotton.**

From the Union of Soviet Socialist Republics. Seeds presented by Arthur M. Palmer, Office of Foreign Agricultural Relations, United States Department of Agriculture. Received January 26, 1940.

Collected in Kherson, Ukraine, and said to be typical of the cottons introduced into Turkistan from Iran about the twelfth century.

135956. *Guza Geratkaya*.
 135957. *Guza Kuldjinskaya*.

135958 and 135959. MELILOTUS ALBA Desr. Fabaceae.**White sweetclover.**

From Canada. Seed presented by the University of Saskatoon, Saskatoon, Saskatchewan. Received March 8, 1940.

135958. *Melana S-121*.
 135959. *Pioneer S-898*.

135960. POA SINAICA Steud. Poaceae.**Grass.**

From Syria. Seed collected by Dr. W. C. Lowdermilk, Soil Conservation Service, United States Department of Agriculture. Received March 4, 1940.

Collected on the Syrian steppe, about 258 miles east of Damascus. A perennial grass with erect, tufted stems about 1 foot high. Native to Syria.

135961 and 135962.

From Japan. Material presented by the Imperial Horticultural Experiment Station, Okitsu, Shizuokaken. Received March 13, 1940.

135961. *MALUS PRUNIFOLIA* (Willd.) Borkh. Malaceae.
 Scions.

135962. *MALUS PRUNIFOLIA* var. *RINKI* (Koidz.) Rehder. **Chinese apple.**

A handsome small tree, native to China, with obovate leaves, pink or pinkish-white flowers, and yellow edible apples often 2 inches in diameter. Seeds.

135963. PODOCARPUS NAGI (Thunb.) Pilger. Taxaceae.

From Japan. Seed purchased from the Chugai Nursery Co., Yamamoto, near Kobe. Received March 8, 1940.

For previous introduction see 71249.

135964. HORDEUM sp. Poaceae.

From Sweden. Seed presented by Dr. Gösta Tometorff, Allmänna Svenska Utsädesaktiebolaget, Svalöf. Received March 7, 1940.

135965 to 135972.

From Manchuria. Scions presented by A. Woeikoff, Harbin. Received March 15, 1940.

135965 to 135968. MALUS. Malaceae.

135965. *Michurin's Sinopka.*

135966. *Longfield* × *Malus baccata* var. *mandshurica.*

135967. *Aitoachus* × *Malus baccata* var. *mandshurica.*

135968. *Calville* × *Malus baccata* var. *mandshurica.*

135969. PERIPLOCA SEPIUM Bunge. Asclepiadaceae.

A deciduous twining shrub with lanceolate to oblong-lanceolate leaves 2 to 4 inches long and axillary or terminal cymes of few large, greenish-yellow flowers, brown purple within. Native to northern China.

135970. PRUNUS ARMENIACA L. Amygdalaceae. **Apricot.**

Ialchenko.

135971. PRUNUS sp. **Plum.**

Hudiakoff.

135972. PYRUS sp. Malaceae. **Pear.**

Olia.

135973 to 135979.

From England. Plants purchased from R. C. Notcutt, Woodbridge, Suffolk. Received March 15, 1940.

135973. DEUTZIA SCABRA Thunb. Hydrangeaceae. **Fuzzy deutzia.**

Purpurea Plana.

For previous introduction see 134449.

135974. CHAENOMELES JAPONICA (Thunb.) Lindl. Malaceae.

Euphrosyne.

For previous introduction see 40161.

135975. DIERVILLA. Caprifoliaceae.

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

135976. DIERVILLA.

Avalanche.

135977. DIERVILLA.

Coccinea.

135978. DIERVILLA FLORIBUNDA Sieb. and Zucc. **Crimson weigela.**

For previous introduction see 78143.

135979. DIERVILLA.

Styriaca Variegata.

135980 to 135985.

From Manchuria. Seed purchased from the Compagnie Orientale Francaise, Harbin. Received March 5, 1940.

135980. FRAGARIA ORIENTALIS A. Los. Rosaceae. **Strawberry.**

No. 125. From Maershan, eastern mountainous region. A wild strawberry, native to northern Korea, with erect hairy stems up to 8 inches high, broad, coarsely serrate, hairy leaflets, and small, red, conical or spheroidal fruits.

For previous introduction see 80713.

135980 to 135985—Continued

135981. MALUS sp. Malaceae. Apple.

No. 118. A mixture of cultivated apples, large-fruited forms.

135982. MALUS BACCATA (L.) Moench. Siberian crab.

No. 116.

135983. MALUS.

Kurosh sibirica × "*Belfleur*."

135984 and 135985. PYRUS spp. Malaceae. Pear.

135984. No. 114. *Ma-li*. From Ashiho, near Harbin.

135985. No. 115. *Men-San*.

135986. BERTHOLLETIA EXCELSA Humb. and Kunth. Lecythida-
ceae. Brazil nut.

From the British West Indies. Seed presented by Atherton Lee, Trinidad. Received February 16, 1940.

135987 to 136021.

From England. Trees purchased from T. Hilling & Co., Chobham, Woking, Surrey. Received March 20, 1940.

135987 and 135988. AMYGDALUS COMMUNIS L. Amygdalaceae. Almond.

135987. *Pollardii*.

135988. *Purpurea*. A form with purplish flowers.

135989 to 135995. AMYGDALUS PERSICA L. Peach.

135989. *Cambridge Carmine* (ornamental).

135990. *Dr. Hogg*.

135991. *Early Alfred*.

135992. *Libra*.

135993. *Noblesse*.

135994. *Foliis Purpureis*. An ornamental variety.

135995. *Russell's Red*. An ornamental variety.

135996. AMYGDALUS PERSICA var. NECTARINA Ait. Nectarine.

Etruge.

135997 and 135998. MALUS. Malaceae.

135997. *Malling II*.

135998. *Malling XIII*.

135999 to 136003. MALUS SYLVESTRIS Mill. Apple.

135999. *Bushy Grove*.

136000. *Duchess of York's Favourite*.

136001. *Herring's Pippin*.

136002. *St. Edmund's Russet*.

136003. *Washington*.

136004 to 136016. PRUNUS spp. Amygdalaceae.

136004 to 136006. PRUNUS ARMENIACA L. Apricot.

136004. *Blenheim*.

136005. *Hemskirk*.

136006. *Moorpark*.

136007. PRUNUS CERASIFERA Ehrh. Myrobalan plum.

Asplenifolia.

135987 to 136021—Continued

- 136008 to 136011. PRUNUS DOMESTICA L. Plum.
136008. *Blaisdon Red*. 136010. *Late Transparent*.
136009. *Bryanston Gage*. 136011. *Pershore Red*.
136012. PRUNUS CERASIFERA var. ATROPURPUREA Jager.
Pissardii Nigra.
136013. PRUNUS DOMESTICA L.
Prince of Wales.
136014. PRUNUS INSITITIA L.
Shepherd's Bullace.
136015. PRUNUS SPINOSA L.
Tricolor.
136016. PRUNUS DOMESTICA L.
Victoria.
136017. PYRUS COMMUNIS L. Malaceae. Common pear.
Beurre Van Geert.
136018. MALUS FLORIBUNDA Siebold. Malaceae. Japanese flowering crab.
Frau Luise Dittman.
136019. × MALUS MAGDENBURGENSIS Zimmerm. Apple.
A small tree with ovate leaves, pubescent beneath, semidouble pinkish flowers, and yellow fruits 1 inch in diameter.
For previous introduction see 76589.
136020. MALUS.
Oporto. An ornamental variety (*M. sylvestris* × *niedzwetskyana*).
136021. MALUS BACCATA (L.) Moench. Chinese flowering crab.
Lady Northcliffe.
For previous introduction see 128508.
136022. SOPHORA TETRAPTERA J. Miller. Fabaceae.
Fourwing sophora.
From Chile. Seed presented by Prof. G. Montero O., Temuco. Received March 20, 1940.
A large shrub or small tree up to 30 feet high. The green pinnate leaves and large clusters of yellow flowers make it an attractive ornamental. Native to New Zealand.
For previous introduction see 129801.
- 136023 to 136117.
From Afghanistan. Material collected by Walter Koelz, Bureau of Plant Industry United States Department of Agriculture. Received February 8, 1940.
Unless otherwise stated all material was received as seeds.
136023. ADONIS sp. Ranunculaceae.
No. 4576. From a dry slope at Shanbashak Pass, August 31, 1939, at 9,000 feet altitude. Plant growing in clumps 2 feet high; it has attractive foliage and a single terminal flower.
- 136024 and 136025. ALLIUM spp. Liliaceae.
From Safedsang, September 23, 1939, at 10,000 feet altitude. Plant growing up to 4 feet high, on dry soil, with umbels of rose-purple flowers. Stands a mild winter.
136024. No. 4743. Bulbs.
136025. No. 4743-A. Seeds.

136023 to 136117—Continued

136026 to 136031. *ALTHAEA ROSEA* (L.) Cav. Malvaceae. **Hollyhock.**

136026. No. 4640. From Kala Sakari, September 8, 1939. A plant 6 feet high, with double cerise flowers.

136027. No. 4981. From Balkh, October 29, 1939, at 1,500 feet altitude. Plant much branched from the main stalk and very floriferous, growing 6 to 7 feet high. Flowers single, white, pink, and crimson, and $4\frac{1}{2}$ inches across.

136028. No. 5012. From Haibak, November 3, 1939. Plant 4 to 5 feet in height, with single crimson flowers 4 inches across.

136029. No. 5007. From Mazarisharif, November 3, 1939, at 1,200 feet altitude. Plant 4 feet in height; the double flowers, 3 inches across, have pink crinkly petals.

136030. No. 5011. From Haibak, November 3, 1939. Plant freely branching from the root, 4 feet in height, with double crimson flowers $3\frac{1}{2}$ inches across.

136031. No. 4651. From a dry slope at Akupuk, September 11, 1939, at 8,000 feet altitude. Grows in clumps up to 5 feet high, with single rose-purple flowers 3 inches across. Plant much eaten by livestock; stands a mild winter.

136032 and 136033. *AQUILEGIA* spp. Ranunculaceae.

136032. *AQUILEGIA* sp.

No. 4794. From a bank of a stream in Gurzan, October 5, 1939, at 8,500 feet altitude. Plant 20 feet in height; flower small. Stands a mild winter.

136033. *AQUILEGIA* sp.

No. 4881. From along a stream in Burchao Pass, October 13, 1939, at 10,000 feet altitude. A perennial 18 inches in height.

136034 and 136035. *ARTEMISIA* spp. Asteraceae.

136034. *ARTEMISIA* sp.

No. 4761. From Kalashahr, September 30, 1939, at 8,000 feet altitude. The dominant plant growing on dry hills; it grows in clumps 2 feet high and is used for winter browsing for the domestic animals.

136035. *ARTEMISIA* sp.

No. 5070. From Khalat, November 22, 1939, at 6,000 feet altitude. A dominant shrub found on the dry plains; grows in clumps about 1 foot high.

136036. *ASTER ALTAICUS* Willd. Asteraceae.

No. 4656. From Chigzar, September 10, 1939. Plant much branched, 2 feet in height, with small purple-rayed heads $\frac{1}{2}$ inch across. Found growing on dry soil. Used for grazing and as an ornamental.

136037. *BERBERIS* sp. Berberidaceae.

Barberry.

No. 4803. From a dry slope at Laorlash, October 7, 1939, at 8,000 feet altitude. A well-formed bush 8 feet in height, with crimson fruits. Stands a mild winter.

136038. *CICER ARIETINUM* L. Fabaceae.

Chickpea.

No. 4695. *Nakhud*. From Terak, September 5, 1939, at 9,000 feet altitude. Grown without irrigation.

136039 to 136041. *CLEMATIS* spp. Ranunculaceae.

136039. *CLEMATIS* sp.

No. 4568. From a dry slope at Sabz Pass, August 29, 1939, at 10,000 feet altitude. An attractive shrub 3 feet high, with white fragrant flowers $\frac{1}{2}$ -to $\frac{3}{4}$ inch across.

136040. *CLEMATIS* sp.

No. 4742. From a dry slope at Safedsang, September 23, 1939, at 10,000 feet altitude. Bush up to 4 feet high, spreading from the roots, with fragrant white flowers 1 inch across.

136041. *CLEMATIS* sp.

No. 4882. From a thicket along a stream at Burchao Pass, October 15, 1939, at 9,000 feet altitude. An attractive climbing plant; stands a mild winter.

136023 to 136117—Continued

136042. *CODONOPSIS* sp. Campanulaceae.

No. 4560. From a damp meadow at Sabz Pass, August 28, 1939, at 10,000 feet altitude. Plant 3 feet in height.

136043. *COLUTEA* sp. Fabaceae.

No. 4889. From Burchao Pass, October 16, 1939, at 8,500 feet altitude. A shrub growing up to 8 feet in height; the leaves are eaten by cattle in the fall.

136044. *CORYDALIS* sp. Papaveraceae.

No. 4755. From the face of a shaded dry limestone cliff in Bandichakawak, September 29, 1939, at 9,000 feet altitude. Plant with fleshy pendulous leaves and upright flower stalks.

136045 to 136049. *COUSINIA* spp. Asteraceae.

136045. *COUSINIA* sp.

No. 4732. From Safedsang, September 24, 1939, at 10,000 feet altitude. A common thistly perennial 2½ feet high, found in dry places; flowers 2 inches across with white inner bracts forming an attractive involucre for the rose-anthered flowers. Collected and mashed for fodder.

136046. *COUSINIA* sp.

No. 4733. From dry places at Safedsang, September 24, 1939, at 10,000 feet altitude. A bristly perennial 18 inches in height with heads (1½ inches) of bright rose-purple flowers. Cattle eat the leaves when the thorns are crushed.

136047. *COUSINIA* sp.

No. 4868. From a dry slope at Bandar, October 9, 1939, at 7,000 feet altitude. An annual growing up to 6 feet in height; leaves long and spiny, arranged around the base of the stalk up to about 1 foot, and at the top a large open panicle with small flower heads, probably yellow. Rare and probably not weedy.

136048. *COUSINIA* sp.

No. 4877. From a dry slope at Khoshbai, October 16, 1939, at 8,000 feet altitude. An annual growing up to 2 feet high with a single stalk bearing globular clusters of 1-inch heads of rose-purple flowers, often arranged in a terminal umbel on long pedicels.

136049. *COUSINIA* sp.

No. 4883. From Burchao Pass, October 15, 1939, at 9,000 feet altitude. A low-branched annual 1 foot in height with large heads of rose-colored flowers.

136050. *DELPHINIUM* sp. Ranunculaceae.

No. 4727. From a dry-summer area in Safedsang, September 20, 1939, at 10,000 feet altitude. An attractive perennial 4 inches in height, with blue-purple flowers.

136051. *ELAEAGNUS* sp. Elaeagnaceae.

No. 4871. From along a torrent at Burchao Pass, October 11, 1939, at 9,000 feet altitude. A well-formed tree 20 feet high, with a trunk 1 foot in diameter, silvery leaves, and fruits about ½ inch long. Stands a mild winter.

136052. *EPHEDRA* sp. Gnetaceae.

No. 4544. From Lorinj, August 27, 1939, at 8,000 feet altitude. An attractive dense bush, 2 feet high, heavily loaded with orange fruits.

136053 to 136070. *EREMURUS* spp. Liliaceae.

Nos. 136053 to 136056 are from a dry slope at Lorinj Pass, August 27, 1939.

136053. *EREMURUS* sp.

No. 4548. Altitude 10,000 feet. Plant 3½ feet in height with leaves 1½ inches in length.

136054. *EREMURUS* sp.

No. 4549. Grows in clumps 4 feet high; spikes 18 inches long; leaves 1 inch in length.

136023 to 136117—Continued

136055. EREMURUS sp.

No. 4550. Altitude 12,000 feet. Plant with single stalk 4 feet high; leaves 1 inch long.

136056. EREMURUS sp.

No. 4551. Altitude 12,000 feet. Plant 4 feet high; spikes 18 inches in length; seed pods large.

136057. EREMURUS sp.

No. 4567. From a dry slope at Sabz Pass, August 29, 1939, at 11,000 feet altitude. Plant $3\frac{1}{2}$ feet in height; spike 1 foot in length; seed pods $\frac{1}{2}$ inch long.

136058. EREMURUS sp.

No. 4575. From Shanbashak Pass, August 31, 1939, at 9,300 feet altitude. Plant with stalks in clumps 4 feet high; spikes 1 foot long.

136059. EREMURUS sp.

No. 4585. From a dry plain at Shanbashak, September 1, 1939, at 9,000 feet altitude. Plant 4 feet in height; leaves narrow; spikes 18 inches long.

136060. EREMURUS sp.

No. 4589. *Seech*. From a dry slope at Terak, September 3, 1939, at 6,000 feet altitude. Plant up to 5 feet high, flower spike often $3\frac{1}{2}$ feet high.

136061. EREMURUS sp.

No. 4591. From Terak, September 3, 1939, at 10,000 feet altitude. Plant 4 feet in height, with flower clusters 1 foot long.

136062. EREMURUS sp.

No. 4648. From Chashmai Gawan, September 9, 1939, at 7,000 feet altitude. Plant 4 feet in height with flowers along the entire stalk. Stands a mild winter.

136063. EREMURUS sp.

No. 4652. From Chigzar, September 9, 1939, at 8,000 feet altitude. Plant endures a dry summer and mild winter. Basal leaves when dry are eaten by cattle and sheep.

136064. EREMURUS sp.

No. 4659. From Chigzar, September 10, 1939, at 8,000 feet altitude. Plant 4 feet high; spike 2 feet high; flowers probably white. Stands a mild winter.

136065. EREMURUS sp.

No. 4660. From a dry slope at Akupruk, September 11, 1939, at 8,000 feet altitude. Plant $3\frac{1}{2}$ feet high; spike 1 foot long.

136066. EREMURUS sp.

No. 4728. From a dry slope at Safedsang, September 20, 1939, at 10,000 feet altitude. Plant 2 feet tall, with flower spike about 1 foot long.

136067. EREMURUS sp.

No. 4740. From Safedsang, September 22, 1939, at 10,000 feet altitude. Plant 4 feet high, with spikes 18 inches long; flowers crowded, on very short pedicels.

136068. EREMURUS sp.

No. 4741. From Safedsang, September 23, 1939, at 10,000 feet altitude. Plant 4 feet high; spikes up to about 2 feet in length; seed pods large.

136069. EREMURUS sp.

No. 4759. From dry ground at Bandichakawak, September 29, 1939, at 9,000 feet altitude. Plant with 7 stalks in clumps 2 feet high; spike about 10 inches in length.

136070. EREMURUS sp.

No. 4867. From a dry slope at Bandar, October 9, 1939, at 7,000 feet altitude. Plants 4 feet high with flowers in clusters about 3 feet long; flowers large, probably white; flower stalk often bifid at the top; leaves narrow, 6 inches long.

136023 to 136117—Continued

136071 and 136072. *FERULA* spp. Apiaceae.

136071. *FERULA* sp.

No. 4577. *Gheghan*. From a dry slope at Shanbashak, August 31, 1939, at 9,000 feet altitude. A plant growing in clumps about 3 feet high.

136072. *FERULA* sp.

No. 4658. From a dry-summer area at Chigzar, September 10, 1939, at 8,000 feet altitude. Plant up to 8 feet high.

136073. *FRAXINUS* sp. Oleaceae.

Ash.

No. 4982. From Balkh, October 29, 1939, at 1,500 feet altitude. A quick-growing tree of good form, with 5 pinnate, coarsely toothed leaves.

136074. *HIPPOPHAE RHAMNOIDES* L. Elaeagnaceae. Common sea-buckthorn.

No. 4520. From along a stream at Kamard, August 25, 1939, at 6,000 feet altitude. A bush 8 feet in height, with orange fruits.

For previous introduction see 123057.

136075. *HORDEUM* sp. Poaceae.

No. 4739. From a dry-summer area at Safedsang, September 22, 1939, at 10,000 feet altitude. Grows in clumps with stems 2 feet in height. A pasture grass for places with mild winters and snow.

136076. *INDIGOFERA* sp. Fabaceae.

No. 4512. From along a watercourse in Dasht-i-sifed, August 24, 1939, at 6,000 feet altitude. An attractive, thorny, shrubby perennial 2 feet in height, with fragrant rose flowers.

136077. *INULA* sp. Asteraceae.

No. 4789. From a dry slope at Gharchi, October 4, 1939, at 8,000 feet altitude. A plant 6 feet in height; the large leaves are eaten by cattle.

136078 to 136081. *IRIS* spp. Iridaceae.

136078. *IRIS* sp.

No. 4486. From Kabul, August 14, 1939. A cultivated plant growing in clumps up to 4 feet high.

136079. *IRIS* sp.

No. 4505. From a river plain at Doao, August 23, 1939, at 5,000 feet altitude. Plant 2 feet in height; 4 to 5 flowers on a stalk; leaves $\frac{1}{2}$ inch wide. Stands a mild winter.

136080. *IRIS* sp.

No. 4546. From along a stream at Lorinj, August 27, 1939, at 8,000 feet altitude. Plant 1 foot high; said to be white-flowered.

136081. *IRIS* sp.

No. 4778. From a dry slope at Mak, October 2, 1939, at 8,500 feet altitude. Grows in clumps. Cattle eat the dry leaves. Stands a mild winter.

136082. *JUNIPERUS* sp. Pinaceae.

No. 4879. From Burchao Pass, October 13, 1939, at 9,000 feet altitude. Much-branched ornamental tree, very drought-resistant, but growing quickly if watered. Can be pruned and trimmed severely; bears a heavy crop of large fruits.

136083 to 136085. *LONICERA* spp. Caprifoliaceae.

136083. *LONICERA* sp.

No. 4506. From along a stream, but probably semixerophytic, in Doao, August 23, 1939, at 5,000 feet altitude. Bush 3 feet high, with orange-red fruits.

136084. *LONICERA* sp.

No. 4525. From along a stream in Lorinj, August 26, 1939, at 8,000 feet altitude. Bush 6 feet high, with abundant red fruits.

136023 to 136117—Continued

136085. LONICERA sp.

No. 4738. From a semiarid slope in Safedsang, September 21, 1939. A well-formed tree 15 feet high and 18 inches in diameter, with ornamental, white, translucent fruits that are eaten by the birds. Received as *Lonicera orientalis*, but the seeds do not agree with that species.

136086 to 136090. MALVA spp. Malvaceae.

136086. MALVA VERTICILLATA L.

No. 4491. From Kabul, August 15, 1939, at 7,000 feet altitude. An annual 2 feet high, with rose-purple flowers 1 inch across.

For previous introduction see 127683.

136087. MALVA sp.

No. 4492. From Kabul, August 15, 1939, at 7,000 feet altitude. An herb 4 feet in height, with rose-purple flowers.

136088. MALVA sp.

No. 4645. From Kala Sarkari, September 8, 1939. An herb 2 feet in height, with rose-purple flowers.

136089. MALVA sp.

No. 4993. From a field edge at Balkh, October 31, 1939, at 1,200 feet altitude. A perennial growing in clumps 5 feet high, with maplelike leaves 2 inches long; flowers probably small.

136090. MALVA sp.

No. 5043. From a garden in Maimana, October 22, 1939. A plant up to 2 feet high, with red-purple flowers $\frac{3}{4}$ inch across.

136091. MELOTHRIA sp. Cucurbitaceae.

No. 4758. Pendent from limestone cliff at Karaghaitu, September 29, 1939, at 8,000 feet altitude. Fruit round and black.

136092. NEPETA sp. Menthaceae.

No. 4873. From a dry slope at Burchao Pass, October 12, 1939, at 9,000 feet altitude. An attractive-scented shrubby perennial about 1 foot in height, with small tomentose leaves and an abundance of rose-lavender flowers in racemes. Stands a mild winter.

136093. OENOTHERA LAMARKIANA Ser. Onagraceae.

No. 4490. From Kabul, August 15, 1939, at an altitude of 7,000 feet. Plant 4 feet high, with yellow flowers 2 inches across. Probably an escape.

136094. OENOTHERA sp.

No. 5006. From Mazarisharif, November 3, 1939, at 1,500 feet altitude. Plant 4 feet high.

136095. ONOBRYCHIS sp. Fabaceae.

No. 4590. From Terak, September 3, 1939, at 10,000 feet altitude. Flowers said to be attractive.

136096. PAPAVER sp. Papaveraceae.

No. 4880. From a dry slope at Burchao Pass, October 13, 1939, at 9,000 feet altitude. An annual plant 18 inches high.

136097. PROSOPIS STEPHANIANA (Bieb.) Kunth. Mimosaceae.

No. 4995. From the fields and borders at Balkh, October 31, 1939, at 1,200 feet altitude. A low shrub about 1 foot in height; seed pods have a spicy odor. Used for fuel and camel fodder.

136098. RESEDA sp. Resedaceae.

No. 4543. From a dry slope at Lorinj, August 27, 1939, at 8,000 feet altitude. Plant grows in clumps 2 feet high.

136023 to 136117—Continued

136099. RUMEX PATIENTIA L. Polygonaceae.

No. 4884. From the edge of a dry river bed at Burchao Pass, October 15, 1939, at 8,000 feet altitude. Plant 5 feet in height, with large racemes of flowers.

136100 to 136103. SALVIA spp. Menthaceae.

136100. SALVIA sp.

No. 4501. From Shibar Pass, August 22, 1939, at 8,000 feet altitude. An attractive semixerophytic plant 3 feet in height, with large flowers, the hood blue purple and the lip yellow.

136101 to 136103. SALVIA spp.

136101. SALVIA PRATENSIS L.

Meadow sage.

No. 4534. From Lorinj, August 26, 1939, at 8,000 feet altitude. Attractive bushy perennial 2 feet in height, with large blue-purple flower spikes; withstands dry conditions.

136102. SALVIA sp.

No. 4593. From the edge of a spring torrent at Terak, September 4, 1939. Attractive plant up to 4 feet in height; yellow and purple flowers; leaves are eaten by cattle and goats.

136103. SALVIA SYLVESTRIS L.

No. 4726. From along a stream at Katakala, September 17, 1939. An attractive much-branched floriferous plant 3 feet in height; flowers rose purple.

136104. SESAMUM INDICUM L. (*S. orientale* L.) Pedaliaceae. Sesame.

No. 4712. From Tukzar, September 15, 1939. Grown without irrigation. A tall variety 4 feet in height that produces heavily.

136105 to 136107. SORGHUM VULGARE Pers. Poaceae. Sorghum.

136105. No. 4661. From Darai Yusuf, September 6, 1939. Grows about 7 feet high, with heads 12 by 7 inches.

136106. No. 4724. From Tukzar, September 15, 1939. Grown without irrigation. Fruiting stalks 20 inches long.

136107. No. 5042. *Jawari-i-Jharu*. From Tukzar, September 16, 1939.

136108. TETRAGONIA sp. Aizoaceae.

No. 4704. *Palag*. From Tukzar, September 14, 1939. A potherb.

136109. TULIPA sp. Liliaceae.

No. 4655. From a dry-summer area at Chigzar, September 10, 1939. Plant 1 foot in height; stands a mild winter.

136110 and 136111. TYPHA spp. Typhaceae.

136110. TYPHA sp.

No. 5022. November 6, 1939. Plant up to 4 feet in height, with cattails about 4 inches long. Ornamental where a low species is desired.

136111. TYPHA sp.

No. 5028. November 8, 1939. A species 3 to 4 feet tall with cattails 2 to 3 inches long and $\frac{3}{4}$ inch thick. A good plant for small pools.

136112 and 136113. UNGERNIA spp. Amaryllidaceae.

136112. UNGERNIA sp.

No. 4750. From a dry slope at Kotalibedak, September 26, 1939, at 10,000 feet altitude. A plant with a flower stalk 1 foot long and linear basal leaves about 1 inch wide.

136113. UNGERNIA sp.

No. 4808. From a dry slope at Gurzan, October 5, 1939, at 9,000 feet altitude. Bulbous monocot, with flower stalk 1 foot long; leaves about 1 foot long and 1 inch wide. Bulbs from Katal-i-Terak.

136023 to 136117—Continued**136114.** VICIA sp. Fabaceae.No. 4555. *Shakhal*. From Aoikhurak, August 28, 1939, at 9,000 feet altitude.**136115 and 136116.** VIOLA spp. Violaceae.**Violet.**

Nos. 4874 and 4875 were collected from a dry slope at Burchao Pass, October 13, 1939, at 10,000 feet altitude.

136115. VIOLA sp.

No. 4874. A rare low plant.

136116. VIOLA sp.No. 4875. From the face of a perpendicular limestone boulder, October 13, 1939. Grows in clumps; leaves in rosettes and lanceolate-linear, so that plant resembles a small *Bellis*; flowers blue purple and abundant.**136117.** (Undetermined.)No. 4597. *Sumbul*. From a dry slope at Terak, September 4, 1939, at 8,000 feet altitude. Bulbs of a plant with a stalk 8 inches long; flowers rose purplish with green ribs on the outer segments.**136118.** MALUS SYLVESTRIS Mill. Malaceae.**Apple.**

From Manchuria. Scions presented by L. Ptitsin, Harbin. Received March 22, 1940.

*Kurosh's Ranet.***136119.** PRUNUS ARMENIACA L. Amygdalaceae.**Apricot.**

From Palestine. Scions presented by the Chief Horticultural Officer, Department of Agriculture and Fisheries, Jaffa. Received March 23, 1940.

*Mustekawi.***136120 to 136129.**

From Australia. Seeds presented by W. Poggendorff, Rice Research Station, Leyton, New South Wales. Received March 25, 1940.

136120. LOLIUM SUBULATUM Vis. Poaceae.**Ryegrass.***Wimmera.*

For previous introduction see 134847.

136121 to 136128. ORYZA SATIVA L. Poaceae.**Rice.****136121.** *Cristal Y 5520*. Originally from Mozambique.**136122.** *Giza No. 29 Y 5496*. Originally from Mozambique.**136123.** *Iragi 6 Y 5501*. Originally from Egypt.**136124.** *Orealla Y 5477*. Originally from British Guiana.**136125.** *Pata de Gallinazo Y 5371*. A late variety originally from Ecuador.**136126.** *Sterje 144 Y 5370*. An early variety originally from Italy.**136127.** *No. 200 Y 5534*. A midseason variety originally from Argentina.**136128.** *Sathi Y 5525*. An early variety originally from the United Provinces, India.**136129.** TRIFOLIUM SUBTERRANEUM L. Fabaceae. Subterranean clover.

A midseason strain.

For previous introduction see 134735.

136130 and 136131.

From Ohio. Plants purchased from the Wayside Gardens Co., Mentor. Received March 25, 1940.

136130. COTONEASTER sp. Malaceae.

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

136130 to 136131—Continued**136131. CYDONIA.** Malaceae.*Masterpiece.***136132 and 136133. DIERVILLA.** Caprifoliaceae.

From England. Plants purchased from John Waterer Sons & Crisp, Bagshot, Surrey. Received March 26, 1940.

136132. Golden Horn.**136133. Waterers Ruby.****136134 to 136142.**

From England. Plants purchased from W. J. Marchant, Keeper's Hill Nursery, Staplehill, Wimborne, Dorset. Received March 26, 1940.

136134. × PHILADELPHUS INSIGNIS Carr. Hydrangeaceae.

A tall shrub with ovate or broad-ovate leaves 2 to 4 inches long and large panicles of fragrant flowers.

For previous introduction see 132040.

136135 to 136142. RUBUS spp. Rosaceae.**136135. RUBUS BIFLORUS** Buch.-Ham.

A rambling shrub with large leaves, woolly beneath, and subacid yellow berries about the size of a thimble. Native to the Himalayas.

For previous introduction see 104860.

136136. RUBUS BIFLORUS var. **QUINQUEFLORUS** Focke.

This ornamental shrub, native to western Szechwan, China, between 5,800 and 6,900 feet altitude, produces its clusters of orange-yellow berries through so long a period as to be almost everbearing. Because of its white wax-coated stems, it is one of the most striking plants in the garden in autumn and winter.

For previous introduction see 104861.

136137. RUBUS FLAGELLIFLORUS Focke.

An evergreen or partly deciduous, shrubby, climbing species about 8 feet high, with simple, heart-shaped leaves, white flowers, and medium-sized, glossy black fruits. Native to central and western China at altitudes of 4,000 to 6,000 feet.

For previous introduction see 59276.

136138. RUBUS GIRALDIANUS Focke.

A deciduous Chinese bramble with ornamental foliage and attractive, slender, white stems.

For previous introduction see 52944.

136139. RUBUS HENRYI var. **BAMBUSARUM** (Focke) Rehder.

An evergreen woody climber differing from the type in its ternate leaves. Native to central China.

136140. RUBUS LEUCODERMIS Dougl.An erect shrub 3 to 6 feet high, found in open woods in the northwestern United States. The leaves are usually trifoliolate, the small white flowers are in few-flowered corymbs, and the black hemispherical fruits are $\frac{1}{2}$ inch in diameter.

For previous introduction see 104650.

136141. RUBUS THYRSOIDEUS Wimm.*Flore Pleno.* A double-flowered white variety with erect, pyramidal panicles 6 to 8 inches high.**136142. RUBUS TRICOLOR** Focke.A prostrate shrub with bristly stems, simple, ovate, cordate leaves $2\frac{1}{2}$ to 4 inches long, irregularly toothed, dark green above, and white flowers, 1 inch

across, in short terminal racemes, followed by bright-red edible fruits. Native to western China at altitudes up to 10,000 feet.

136143. RHODODENDRON LINEARIFOLIUM var. MACROSEPALUM

(Maxim.) Makino. Ericaceae.

From Japan. Seeds presented by Chugai Nursery Co., Yamamoto, Kobe. Received March 22, 1940.

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

For previous introduction see 85687.

136144 to 136159.

From France. Plants purchased from Pépinières Rodolause, Tarne-et-Garonne. Received March 27, 1940.

136144 to 136154. AMYGDALUS PERSICA L. Amygdalaceae. Peach,

136144. *Angevine.*

136150. *Henri Adenot.*

136145. *Belle Illoise.*

136151. *La Plus Précoce de Saumachez.*

136146. *Chilon.*

chez.

136147. *Girerd No. 3.*

136152. *Madeleine Jaune.*

136148. *Girerd No. 4.*

136153. *Tardive d'octobre.*

136149. *Girerd No. 23.*

136154. *Triumpholicio.*

136155. MALUS SYLVESTRIS Mill. Malaceae.

Apple.

Reinette de Brive.

136156. PRUNUS AVIUM L. Amygdalaceae.

Sweet cherry.

Bigarreau Pelissier.

136157. PRUNUS sp.

Vernissee.

136158 and 136159. PYRUS COMMUNIS L. Malaceae.

136158. *Directeur Tisserand.*

136159. *Winoska-Saska (Beurré Montecat).*

136160 to 136163. PYRUS COMMUNIS L. Malaceae. Common pear.

From Sweden. Scions presented by Carl G. Dahl, Director, Experimentalfaltet, Akarp, Alnarp. Received March 27, 1940.

136160. *Cecilia.*

136161. *Experimentalfaltet Augustipäron.*

136162. *Fürstlight Taffelpäron.*

136163. *Johantorp.*

136164. PYRUS SEROTINA Rehder. Malaceae.

Late pear.

From Japan. Seeds purchased from Chugai Nursery Co., Yamamoto, Kobe, Received March 12, 1940.

For previous introduction see 119217.

136165. CALOPOGONIUM MUCUNOIDES Desv. Fabaceae.

From Brazil. Seeds presented by Dierberger & Co., São Paulo. Received March 30, 1940.

A small tropical-American vine with pale-blue flowers. It forms a mat of foliage 1 to 2 feet thick and is used as a cover crop.

136166 to 136229.

From Canada. Seeds presented by the McFayden Seed Co., Winnipeg, Manitoba.
Received March 28, 1940.

136166 and 136167. *CITRULLUS VULGARIS* Schrad. Cucurbitaceae. **Watermelon.**

136166. No. 13. *Meshedi*. Originally from the Department of Agriculture, Quetta, Baluchistan, India.

136167. No. 14. *Quetta Local*. Originally from the Department of Agriculture, Quetta, Baluchistan, India.

136168 to 136229. *CUCUMIS MELO* L. Cucurbitaceae. **Muskmelon.**

136168. No. 1. *Ukrainian* × *American*. Originally from Dufrost, Manitoba.

136169. No. 2. *Japanese* × *American*. Originally from the Tanaka Seed Co., Japan, as a Spasy variety.

136170. No. 3. *Arabian* × *Ukrainian*. Originally from Italy as an Arabian variety.

136171. No. 4. *Polish* × *Ukrainian*. Originally from Warsaw, Poland, as *Arctic Sweets*.

Nos. 136172 to 136175 originally came from Harbin, Manchuria.

136172. No. 5. Chinese.

136173. No. 6. Ashiho District.

136174. No. 7. Mixed.

136175. No. 8. Eastern Siberia.

Nos. 136176 to 136178. Ukrainian banana hybrids.

136176. No. 9. Originally from Million, Manitoba.

136177. No. 10. Originally from Milo, Saskatchewan.

136178. No. 11. Originally from Togo, Saskatchewan.

Nos. 136179 to 136181 originally came from the Department of Agriculture, Quetta, Baluchistan, India.

136179. No. 12. *Quetta Sarda*.

136180. No. 15. *Irani Sarda*.

136181. No. 16. *Duki Garma*.

136182. No. 17. *Kirkagatch*. Originally collected by E. K. Balls in Asia Minor, 1939.

136183. No. 18. *Ahunt*. Originally collected by E. K. Balls in Asia Minor, 1939.

136184. No. 19. *Calabazas Grandes*. Originally from Valparaiso, Chile, 1939.

136185. No. 20. *Ukrainian* × *American*. Originally from the Agricultural Experimental Station, Indian Head, Saskatchewan, 1939.

136186. No. 20-A. Originally from Harbin, Manchuria, 1939.

Nos. 136187 to 136189. *Ukrainian* × *American*.

136187. No. 21. Originally from the Agricultural Experiment Station, Medicine Hat, Saskatchewan, 1939.

136188. No. 22. Originally from the Agricultural Experimental Station, Rosthern, Saskatchewan, 1939.

136189. No. 23. Originally from Tolstoi, Manitoba, 1939.

136190. No. 24. Ukrainian-Persian type. Originally from Morden, Manitoba, 1939.

136191. No. 25. Ukrainian-Persian type. Originally from Morden, Manitoba, 1939.

136192. No. 26. Ukrainian-Persian type. Originally from Miami, Manitoba, 1939.

136166 to 136229—Continued

136193. No. 27. *Ukrainian* × *Honey Dew*. Originally from Hamilton, Ontario, 1939.
136194. No. 28. *Ukrainian* × *American*.
136195. No. 29. *Ukrainian* × *American*.
136196. No. 30. *Banana Ukrainian* × *American*. Originally from Marquis, Saskatchewan, 1939.
136197. No. 31. *Large Ukrainian* × *American*.
136198. No. 32. *Ukrainian* × *American*. Originally from Dufrost, Manitoba, 1939.
136199. No. 33. *Egyptian* × *American*. Originally from Cairo, Egypt.
- Nos. 136200 to 136204. *Ukrainian* × *American*.
136200. No. 34. Originally from Morden, Manitoba, 1939.
136201. No. 35. Originally from Valley River, Manitoba, 1939.
- Nos. 136202 to 136204 originally from North Portal, Saskatchewan.
136202. No. 36.
136203. No. 37.
136204. No. 38.
136205. No. 39. *Ukrainian Banana* × *American*. Originally from Gouldtown, Saskatchewan, 1939.
136206. No. 40. *Ukrainian* × *American*. Originally from Portage la Prairie, Manitoba, 1939.
136207. No. 41. *Hungarian* × *American*. Originally from Melville, Saskatchewan, 1939.
136208. No. 42. *Ukrainian* × *American*. Originally from Tisdale, Saskatchewan, 1939.
136209. No. 43. *Banana Ukrainian* × *American*. Originally from Kamsack, Saskatchewan, 1939.
- Nos. 136210 to 136229. *Ukrainian* × *American*.
136210. No. 44. Originally from Gonor, Manitoba, 1939.
136211. No. 45. Originally from Altona, Manitoba, 1939.
136212. No. 46. Originally from Winkler, Manitoba, 1939.
- Nos. 136213 to 136229 came originally from Keller, Saskatchewan, 1939.
- | | |
|-----------------|-----------------|
| 136213. No. 47. | 136222. No. 56. |
| 136214. No. 48. | 136223. No. 57. |
| 136215. No. 49. | 136224. No. 58. |
| 136216. No. 50. | 136225. No. 59. |
| 136217. No. 51. | 136226. No. 60. |
| 136218. No. 52. | 136227. No. 61. |
| 136219. No. 53. | 136228. No. 62. |
| 136220. No. 54. | 136229. No. 63. |
| 136221. No. 55. | |

136230 to 136237.

From England. Plants purchased from Sunningdale Nurseries, Windlesham, Surrey. Received March 29, 1940.

136230 to 136232. *CHAENOMELES LAGENARIA* (Loisel.) Koidz. Malaceae.

136230. *Carmine Queen*.

136232. *Salmon*.

136231. *Coral Red*.

136230 to 136237—Continued

136233. CHAENOMELES JAPONICA var. ALPINA Maxim.

A variety with procumbent stems and leaves up to 1 inch long.

136234. DEUTZIA sp. Hydrangeaceae.

136235 to 136237. PHILADELPHUS spp. Hydrangeaceae.

136235. PHILADELPHUS PEKINENSIS Rupr.

Peking mockorange.

For previous introduction see 132604.

136236. PHILADELPHUS sp.

Farrar.

136237. PHILADELPHUS sp.

Forrest a-2, 152, F-19, 133.

136238 to 136240.

From England. Plants purchased from Knap Hill Nursery Co., Woking, Surrey.
Received March 30, 1940.

136238. CHAENOMELES LAGENARIA (Loisel.) Koidz. Malaceae.

Japanese quince.

Philis Moore.

For previous introduction see 136232.

136239. DEUTZIA CORYMBOSA R. Br. Hydrangeaceae.

A deutzia with pure-white flowers.

For previous introduction see 132362.

136240. DEUTZIA MOLLIS Duthie.

A very distinct and beautiful species from central China. The white or pink-tinged flowers are in flat corymbose panicles.

For previous introduction see 132637.

136241 to 136275.

From France. Plants purchased from Pépinières A. Michel, Le Neubourg (Eure).
Received March 30, 1940.

136241 and 136242. AMYGDALUS PERSICA L. Amygdalaceae.

Peach.

136241. *Belle de Louveciennes.*

136242. *Octave Opoix.*

136243 to 136271. MALUS SYLVESTRIS Mill. Malaceae.

Apple.

136243. *Amzr Gauthier.*

136258. *Gros Doux d'Angers.*

136244. *Argile var. Peau d'Ane.*

136259. *Joly Rouge.*

136245. *Beauty of Kent.*

136260. *Long Bois de Neubourg.*

136246. *Beurrière.*

136261. *Michelin.*

136247. *Binet Violet.*

136262. *Pigeon Rouge d'Hiver.*

136248. *Blonde de Chamfort.*

136263. *Reinette de Bayeux.*

136249. *Chailleux (Chayeux).*

136264. *Reinette Fardel.*

136250. *Chataignier.*

136265. *Rétin.*

136251. *Doux-amer Gris.*

136266. *Rousse de l'Orne.*

136252. *Dous Normandie.*

136267. *Saint Laurent.*

136253. *Égrain de Picardie.*

136268. *Tardive de la Sarthe.*

136254. *Fleur de Juin.*

136269. *Transparente de Boisguillaume.*

136255. *Frèquin Lajoie.*

136270. *Vice-Président Heron.*

136256. *Frèquin Tardif.*

136271. *Villebéry.*

136257. *Gilet Rouge.*

136241 to 136275—Continued

136272 and 136273. *PRUNUS DOMESTICA* L. Amygdalaceae. Plum.

136272. *Reine Claude d'Oullins Hative.*

136273. *Reine Claude R., Tardive Diaphane.*

136274 and 136275. *PYRUS COMMUNIS* L. Malaceae. Common pear.

136274. *Fondante du Panisel.*

136275. *Président Mas.*

136276 and 136277.

From Argentina. Seeds presented by Dr. Carlos Storni, Director of Agriculture, Buenos Aires. Received March 25, 1940.

136276. *DESMODIUM CUNEATUM* Hook. and Arn. Fabaceae.

Pega-pega. An erect, pubescent, shrubby plant with ternate leaves of cuneate-oblong leaflets and dense terminal racemes. Native to southern South America.

136277. *DESMODIUM DISCOLOR* Vogel.

Mermelada de Caballo. A shrubby, erect, hairy plant from southern Brazil, with oval membranous leaflets and large panicles of light-blue flowers. Cultivated in Brazil for forage and silage, being cut while young, as it becomes woody with age.

For previous introduction see 135266.

136278 and 136279.

From the Union of Soviet Socialist Republics. Seed presented by the Mountain-Taiga Station, Far Eastern Branch of Academy of Sciences, Voroshilov-Ussuriaky. Received March 25, 1940.

136278. *LACTUCA RADDEANA* Maxim. Cichoriaceae.

For previous introduction see 125288.

136279. *LACTUCA SQUARROSA* (Thunb.) Miquel. (*L. laciniata* Mak.) Cichoriaceae.

A tall, erect annual with long, linear or linear-lanceolate, leaves and paniced yellow flower heads. Native to eastern Asia.

136280 and 136281.

From Switzerland. Seeds purchased from Corevon Fils, Floiraire, Chêne-Bourg, near Geneva. Received March 30, 1940.

136280. *RUBUS CHAMAEMORUS* L. Rosaceae.

The cloudberry is of circumpolar distribution, and the edible yellowish fruits are much prized by the natives of the subarctic regions. The plant is creeping in habit and is frequently found in peat bogs.

For previous introduction see 92294.

136281. *RUBUS SAXATILIS* L.

A low unarmed woody perennial with trifoliolate leaves about 6 inches long, found in a birch forest. The few fruits are scarlet, rather acid, but pleasant.

For previous introduction see 122948.

136282 to 136289. PRUNUS spp. Amygdalaceae.

From Manchuria. Seeds purchased from Compagnie Orientale Francaise, Ltd., Harbin. Received March 28, 1940.

136282. *PRUNUS MANDSHURICA* (Maxim.) Koehne. Manchurian apricot.

No. 140. Cultivated Manchurian apricot.

136283 to 136285. *PRUNUS DOMESTICA* L. Common plum.

136283. No. 128. *Ivanotka.*

136284. No. 129. Fruit large, red.

136285. No. 130. Local forms (mixed).

136282 to 136289—Continued

- 136286.** *PRUNUS MAACKII* Rupr. Amur cherry.
No. 136. From Hsiaoling.
- 136287.** *PRUNUS PADUS* L. European bird cherry.
No. 137.
- 136288.** *PRUNUS SALICINA* Lindl. Japanese plum.
No. 126. From Maoershan. Introduced under the varietal name "koreana," for which a valid place of publication (as a variety of *Prunus salicina*) has not been found.
- 136289.** *PRUNUS* sp.
No. 135. From Ashiho, near Harbin. A cultivated cherry.

136290 to 136369.

From Canada. Seeds presented by the Central Experimental Farm, Ottawa. Received March 23, 1940.

136290 to 136311. *AGROPYRON* spp. Poaceae.

136290 to 136298. *AGROPYRON CRISTATUM* (L.) Gaertn. Crested wheatgrass.

- | | |
|--------------------------|--------------------------|
| 136290. No. 653. | 136295. No. 1161. |
| 136291. No. 1082. | 136296. No. 1163. |
| 136292. No. 1155. | 136297. No. 1164. |
| 136293. No. 1159. | 136298. No. 1165. |
| 136294. No. 1266. | |

136299 to 136301. *AGROPYRON ELONGATUM* (Host) Beauv. Grass.

- 136299.** No. 820.
136300. No. 1300.
136301. No. 1302.

136302 and 136303. *AGROPYRON INTERMEDIUM* (Host) Beauv.

- 136302.** No. 1077.
136303. No. 1087.

For previous introduction see 119607.

136304 to 136306. *AGROPYRON TRACHYCAULUM* (Link) Malte. Wheatgrass.

- 136304.** No. 1267.
136305. No. 1268.
136306. No. 818.

136307 to 136309. *AGROPYRON SUBSECUNDUM* (Link) Hitchc. Grass.

- 136307.** No. 1083.
136308. No. 932.
136309. No. 1080.

For previous introduction see 115298.

136310. *AGROPYRON* sp.

No. 1443.

136311. *AGROPYRON* sp.

No. 1078.

136312. *ALOPECURUS PRATENSIS* L. Poaceae. Meadow foxtail.

No. 132.

For previous introduction see 119616.

136313. *AVENA PRATENSIS* L. Poaceae. Grass.

No. 1426. A perennial grass native to Europe.

136290 to 136369—Continued**136314.** AVENA PUBESCENS Huds.

No. 1430.

For previous introduction see 133259.

136315. BROMUS INERMIS Leyss. Poaceae.

Smooth brome-grass.

No. 1334.

136316 and 136317. BROMUS MARGINATUS Nees.**136316.** No. 927.**136317.** No. 1265.

For previous introduction see 125045.

136318. CORONILLA VARIA L. Fabaceae.

Crownvetch.

No. 654.

For previous introduction see 121114.

136319. DESCHAMPSIA CAESPITOSA (L.) Beauv. Poaceae. Tufted hairgrass.

No. 955.

For previous introduction see 119640.

136320 to 136327. ELYMUS spp. Poaceae.

Grass.

136320. ELYMUS CANADENSIS L.

No. 937.

For previous introduction see 16374.

136321. ELYMUS DAHURICUS Turcz.

No. 928.

For previous introduction see 135578.

136322 to 136326. ELYMUS SIBIRICUS L.**136322.** No. 89.**136325.** No. 1167.**136323.** No. 1111.**136326.** No. 1168.**136324.** No. 1166.

For previous introduction see 135583.

136327. ELYMUS VIRGINICUS var. SUBMUTICUS Hook.

No. 1086. A coarse perennial, native to the Rocky Mountains. It affords good pasturage and makes a coarse hay.

For previous introduction see 53052.

136328 to 136344. FESTUCA spp. Poaceae.

Grass.

136328. FESTUCA CAPILLATA Lam.

Hair fescue.

No. 1210.

For previous introduction see 110794.

136329 to 136339. FESTUCA ELATIOR L.

Meadow fescue.

136329. No. 125.**136335.** No. 1231.**136330.** No. 15.**136336.** No. 1471.**136331.** No. 19.**136337.** No. 1372.**136332.** No. 684.**136338.** No. 1473.**136333.** No. 755.**136339.** No. 38.**136334.** No. 1208.**136340.** FESTUCA ELATIOR var. ARUNDINACEA (Schreb.) Wimm.

No. 39.

136290 to 136369—Continued

- 136341 to 136344. *FESTUCA RUBRA* L. Red fescue.
 136341. No. 30. 136343. No. 1125.
 136342. No. 960. 136344. No. 1468.
- 136345 and 136346. *KOELERIA CRISTATA* (L.) Pers. Poaceae. Grass.
 136345. No. 1105.
 136346. No. 1107.
 For previous introduction see 108355.
136347. *KOELERIA GRACILIS* Pers. Grass.
 No. 402.
 For previous introduction see 135598.
136348. *PHALARIS ARUNDINACEA* L. Poaceae. Reed canary grass.
 No. 1057.
136349. *PHLEUM PHLEOIDES* (L.) Karst. Poaceae. Timothy.
 No. 1130.
- 136350 to 136369. *POA* spp. Poaceae. Grass.
 136350. *POA ALPINA* L. Bluegrass.
 No. 1067.
 For previous introduction see 129887.
- 136351 and 136352. *POA BULBOSA* L.
 136351. No. 1065.
 136352. No. 1318.
 For previous introduction see 135780.
136353. *POA CANBYI* (Scribn.) Piper. Piper.
 No. 1211.
136354. *POA COMPRESSA* L. Canada bluegrass.
 No. 956.
 For previous introduction see 133162.
136355. *POA EPILIS* Scribn.
 No. 1312.
136356. *POA GLAUCA* Vahl.
 No. 1098. A densely cespitose perennial grass, native to Europe, with flowering stems 1 or 2 feet high and leaves resembling those of Kentucky bluegrass (*Poa pratensis*). It grows very freely, seeding itself.
 For previous introduction see 58708.
- 136357 to 136359. *POA INTERIOR* Rydb.
 136357. No. 1194.
 136358. No. 1195.
 136359. No. 1204.
136360. *POA NEMORALIS* L. Wood bluegrass.
 No. 9.
 For previous introduction see 89954.
136361. *POA NEVADENSIS* Vasey. Nevada bluegrass.
 No. 1320.
 For previous introduction see 125061.

136290 to 136369—Continued**136362 and 136363.** POA PALUSTRIS L.

Fowl meadow grass.

136362 No. 1149.

136363. No. 10.

For previous introduction see 135610.

136364. POA SECUNDA Presl.

No. 1309.

136365. POA STERILIS Bieb.

No. 1073. A tufted perennial grass, native to the Caucasus region.

For previous introduction see 114273.

136366 to 136369. POA spp.

136366. POA sp.

No. 1321.

136367. POA sp.

No. 1075.

136368. POA sp.

No. 1074.

136369. POA sp.

No. 1074.

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