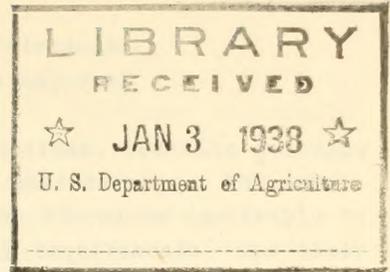


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PLANT INTRODUCTIONS

TWENTY-SIXTH

ANNUAL DESCRIPTIVE LIST

Season 1937-8

Containing Descriptions of the More Important

Introduced Plants Now Ready

for Listed Experimenters

Division of Plant Exploration and Introduction

Bureau of Plant Industry

United States Department of Agriculture

Washington, D. C.

PLANT INTRODUCTIONS.

Experimenters will please read carefully this introductory note before sending in their requests for plant material.

This, the Twenty-sixth Annual List of Plant Introductions, contains descriptions of many new and rare plants, not yet widely tested in this country. The available information concerning some of them is meager, and it is therefore impossible to speak with assurance regarding their value, their cultural requirements, and their adaptability to the various climates and soils of the United States.

These plants have been imported because it is believed some direct or indirect use can be made of them. They are first placed at the disposal of the experts engaged in plant breeding, crop acclimatization, and horticultural investigations generally in the United States Department of Agriculture and the State Experiment Stations. Some of them have been grown in sufficient quantity, however, so that they can be distributed to some private experimenters who have the facilities to test them carefully. The List is therefore sent to those who have qualified as experimenters with the Division of Plant Exploration and Introduction, and who have indicated a willingness to care for material sent them.

Accompanying this Annual List are complete Check Lists showing all plants available for distribution at the several Plant Introduction Gardens during the season 1937-8 and the Garden from which available. Applicants for material should fill out all blanks at the top of the Check List of each garden from which they request plants, place a mark to the left of the P. I. (Plant Introduction) number of each plant desired, and return the lists promptly to this Division. Items marked with an asterisk (*) are available in somewhat larger numbers, for propagating purposes, to interested nurserymen having exceptional facilities.

It should be distinctly understood that the Division does not agree to supply all the plants requested. It reserves the right to limit the number or to withhold the entire request of any experimenter in order that it may place the material according to its best judgment.

The shipping season extends, as a rule, from December 1 to April 1, or not later than April 15. While it may not always be practicable to ship plants at the time preferred by experimenters, it is much desired that when such preference exists it be indicated in the space provided for it at the head of the Check List.

These plants are placed in the hands of experimenters with the understanding that reports on their behavior will be sent to this Division from time to time, particularly noting their flowering, fruiting, hardiness, utilization, and any other interesting features. Reports should be prepared (preferably, but not necessarily, on regular forms) and sent, without special request, whenever in the judgment of the experimenter the plant has reached a stage that makes a report worth while; usually, however, unless the plant has flowered or died, reports need not be made within the first year or two. Regular report forms will be furnished by this Division, upon request. When all the plants of any P. I. number have died, this should be reported promptly by letter, with the cause of death indicated when known. It is expected that experimenters will keep their plants labeled at all times, and keep accurate charts showing the location and P. I. number of each one. Failure to comply with these directions will be considered sufficient reason for a discontinuance of the cooperative relation.

Descriptive List

Numbers preceding plant names are P. I. numbers and, in correspondence concerning any plant, both number and name always must be given.

Nurserymen please see statement at end of paragraph 3 of introductory note, concerning items marked with an asterisk (*).

97942. ABIES HOLOPHYLLA. Needle fir. From Japan. Presented by M. Tozawa, Director, Forest Experiment Station, Keijo, Chosen. A tall handsome fir, eventually 100 feet or more high, with stout spreading or ascending branches and dark-green needles, radially arranged on the branchlets. The bark of the young trees is light gray. (Supply very limited.) For trial in the milder parts of the Northern States. (Glenn Dale, Md.)

90650. ABIES NEPHROLEPIS. Fir. From Manchuria. Collected by P. H. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. A Siberian conifer up to 100 feet high, of narrow pyramidal habit, resembling the Siberian fir, Abies sibirica, but with rough bark, pubescent branchlets, dark-green leaves about 1 inch long, and smaller cones. (Supply limited.) For trial in the colder parts of the United States. (Glenn Dale, Md.)

90837. ACACIA CRASSIUSCULA. (Mimosaceae.) Thicket acacia. From New South Wales, Australia. Presented by the Director, Botanic Gardens, Sydney. An attractive spreading shrub, up to 10 feet high, with ridged branchlets, very numerous linear falcate 1-nerved phyllodes 3 to 6 inches long, and short racemes of small, dense, globular, yellow flower heads. Mature seeds planted immediately germinate in 3 weeks. Native to Tasmania. For trial in southern California and the warmer parts of the Gulf region. (Chico, Calif.)

122000. ACACIA CYANOPHYLLA. Araleun Wattle. From South Australia. Presented by J. Howard Johnson, St. Peters. A handsome, rapidly growing western Australian shrub or small tree up to 18 feet in height, with drooping branches and glabrous, shiny-green, lanceolate phyllodia. The numerous flower heads are in groups of 3 to 5, in short racemes, making a fine display. It seems satisfactory for pot culture in the lathhouse at Chico, California. For trial as a conservatory plant or in the warmer parts of the Southwest and in the Gulf region. (Chico, Calif.)

111228. ACACIA DENTINENS. From South Africa. Presented by the McGregor Museum, Kimberley. Zwart haak. An attractive shrub or small tree, armed with very short recurved prickles along the branches. The compound leaves have 3 pairs of pinnae, each composed of one pair of obliquely ovate leaflets. The small yellow flowers are in loose, sub-globose heads. For trial in the Gulf region and southern California. (Chico, Calif.)

116455. ACACIA MODESTA. From India. Collected at Saharanpur Gardens, United Provinces, by Walter Koelz, Bureau of Plant Industry. A medium-sized tree with glabrous gray branches and dark-brown polished prickles, native to the foothills of

the western and central Himalayas in India. The bipinnate leaves are made up of 4 to 6 pinnae, each bearing 6 to 7 leathery leaflets about $\frac{1}{2}$ -inch long. The small green flowers, in spikes 2 to 3 inches long, are followed by straight strap-shaped, glossy, drab pods 2 to 3 inches long. For trial in southern Florida and southern California. (Chico, Calif.)

114846. ACACIA SP. From southern India. Collected at Coimbatore by Walter Koelz, Bureau of Plant Industry. It is said that in its native home, this is a tree 60 feet high with a trunk 18 inches in diameter. (Supply very limited.) For trial in southern California and southern Florida. (Chico, Calif.)

124723. ACACIA SP. From Turkey. Collected at Ankara by H. L. Westover and F. L. Wellman, Bureau of Plant Industry. A spiny acacia with bipinnate, blue-green leaves. For trial in the Gulf region and the milder parts of California. (Glenn Dale, Md.)

102738. ACER ARGUTUM. Maple. From Manchuria. Obtained from Manshu Nosan Shokai, Inc., Dairen. A graceful, shrubby, deciduous tree with erect branches and doubly serrate leaves 2 to 4 inches long. The flowers, produced in April before the leaves, are greenish yellow, and the keys are borne in hanging racemes. This tree is native to the mountain woods of Japan and makes an elegant appearance with its pale-green leaves during the summer and its purple-brown branches in the winter. For trial in all but the coldest parts of the Northern States. (Glenn Dale, Md.)

95540. ACER CARPINIFOLIUM. Hornbeam maple. From Japan. Obtained from the Chugai Shokubutsu Yen, Yamamoto, near Kobe. A tree up to 30 feet high with oblong sharp-pointed doubly serrate leaves 3 to 5 inches long, short racemes of greenish flowers, and glabrous keys about an inch long. The bright-green hornbeamlike leaves turn bright brownish yellow in autumn. (Supply very limited.) For trial in all but the warmest and coldest parts of the United States. (Glenn Dale, Md.)

101172. ACER SIEBOLDIANUM MICROPHYLLUM.* Maple. Seedlings from trees growing on the campus of the Massachusetts Agricultural College, the seeds having been presented by Prof. L. L. Blundell. A shrub or small tree, native to Japan, with 7- to 9-lobed leaves only 2 inches broad. It is related to Acer palmatum but is somewhat coarser. The small yellowish flowers are borne on nodding peduncles and the keys, less than an inch long, spread at an obtuse angle. For trial from southern New England and central New York southward and west of the Rocky Mountains. (Glenn Dale, Md.)

90654. ACER TEGMENTOSUM. Maple. From Manchuria. Collected by P. H. Dorsett and W. J. Morse, Bureau of Plant Industry. An interesting green-barked maple, a small tree or large shrub, found on the mountainside. The rather large leaves, similar to Acer rufinerve, are three to five-lobed, and somewhat rugose, and the keys are in long racemes. (Supply very limited.) For trial in all but the coldest parts of the United States. (Glenn Dale, Md.)

90655. ACER TRIFLORUM. MAPLE. From Manchuria. Obtained by P. H. Dorsett and W. J. Morse, Bureau of Plant Industry, from the Forestry Department of the Agricultural Experiment Station of the South Manchurian Railway. A tree up to 25 feet high, with glabrous branchlets. The leaves are made up of 3 oblong-lanceolate leaflets with entire or coarsely toothed margins, and the flowers, in groups of 3, are followed by

densely pubescent keys having wide-spreading, nearly straight wings about 2 inches long. It is native to Chosen and Manchuria. (Few plants available.) For trial throughout the northern states. (Glenn Dale, Md.)

102916. ADINA RUBELLA. (Rubiaceae.) Collected in Lu Sha, Kiangsi Province and presented by A. N. Steward, University of Nanking. A vigorous, much-branched shrub. The small opposite leaves are dark glossy green with a reddish tint and with a pronounced reddish color when young. The dense heads of small flowers resemble those of the American button-bush, Cephalanthus occidentalis, to which this plant is related. For trial in all but the hottest and coldest parts of the United States. (Glenn Dale, Md.)

79992. AGAPANTHUS AFRICANUS. African lily. From India. Obtained from R. B. and D. S. Pradhan, the Chandra Nursery, Bengal. Variety Mooreanus minor. A dwarf form of the type, 1½ feet high, with slender linear leaves and pleasing blue flowers in small umbels in early summer. For trial from Philadelphia southward and on the Pacific coast. (Glenn Dale, Md.)

116456. ALBIZZIA PROCERA.* (Mimosaceae.) From India. Collected at Saharanpur Gardens, United Provinces, by Walter Koelz, Bureau of Plant Industry. A tall, handsome, tropical, leguminous tree, often 60 to 80 feet high, with greenish white bark, large pinnately compound deciduous leaves, and terminal panicles of yellowish flowers. In southern and eastern India, where the tree is native, the brown heartwood is used for making tools. For trial in California and the Gulf states. (Chico, Calif.)

93829. ALYOGYNE HAKEAEFOLIA.* (Malvaceae.) From Western Australia. Presented by Miss Ida W. Richardson, Perth. An evergreen shrub 6 to 10 feet high, with narrow-lobed or deeply serrate leaves, and large purple-lilac flowers in May and June. It may be grown in full sunlight or partial shade. Seeds germinate readily after a resting period under dry conditions. Plants should be kept well cut back during the first summer, and thereafter should be cut back each year, after flowering, to the heavy framework previously established. The plant usually requires support. For trial in the warmer parts of California and the Gulf region. (Chico, Calif.)

124003. ANGOPHORA LANCEOLATA.* (Myrtaceae.) From Egypt. Received through the Atkins Institution of the Arnold Arboretum, Cienfuegos, Cuba. A large evergreen tree, native to New South Wales, closely related to the eucalyptus and resembling Eucalyptus maculata. The opposite leaves, reddish in color, are sessile or scarcely petiolate, oblong, and 3 to 5 inches long. Its wood is hard and heavy, but not as durable as that of eucalyptus. For trial only in the warmest parts of southern Florida, and of the Southwest. (Glenn Dale, Md)

114860. ARISTEA ECKLONI. From Ceylon. Obtained at Nuwara, Eliya, by Walter Koelz, Bureau of Plant Industry. An iris-like plant from South Africa which has become naturalized in the high altitudes of Ceylon. It is about 1½ feet high, with narrow leaves about 10 inches long, and is very attractive with its numerous clusters of brilliant blue flowers. For trial in the Gulf States and California. (Glenn Dale, Md.)

117042. ARISTEA SP.* From Africa. Collected near St. Lucia Bay, Zululand, and presented by the American Amaryllis Society through Dr. H. P. Traub, Orlando, Florida. A tender perennial with basal rosettes of iris-like leaves about 1 inch wide and up to 24 inches high. The small fleeting sisyrinchium-like flowers, of a beautiful blue color, are borne freely in a wide spray, in the spring and summer, making a fine display in the garden. For trial in the lower South. (Glenn Dale, Md.)

118367. ARISTOLOCHIA ARCUATA. From Brazil. Collected at Sao Paulo, by W. A. Archer, Bureau of Plant Industry. A perennial twiner with membranous leaves 3 to 4 inches long and large, solitary, axillary, brownish flowers of grotesque shape. For trial in the warmest parts of the Gulf region. (Glenn Dale, Md.)

77173. ARTHROPODIUM CIRRHATUM. (Liliaceae.) From New Zealand. Presented by the Town Clerk, Wanganui. An herbaceous perennial forming large clumps of hemerocallis-like foliage above which rise the 3-foot branching flower stalks, each bearing many white starry flowers, one inch or less across, much like an anthericum or paradisea. It is similar to the anthericum in cultural requirements. For trial in the South-eastern States and on the Pacific coast. (Glenn Dale, Md.)

77543. ARTHROPODIUM CIRRHATUM. From Nelson, New Zealand. Presented by A. Wilkinson, Hon. Secretary and Treasurer of the New Zealand Alpine and Rock Garden Society. Same description as for preceding (P. I. No. 77173). (Chico, Calif.)

23014. ASPARAGUS SP.* From China. Collected at Hangchow, Chekiang, by Frank N. Meyer, Bureau of Plant Industry. A very small evergreen asparagus, attaining a height of only 3 to 5 inches. It is used as a border along paths in small gardens and requires a shade situation. The plant endures light frosts without injury. For trial in the middle and lower South and in southern California. (Savannah, Ga.)

93144. ASTER LINDLEYANUS. Lindley aster. Collected at Le Pas, Manitoba, by Knowles A. Ryerson, Bureau of Plant Industry. A perennial aster up to 6 feet high, with rather thick, sharply serrate, ovate leaves 2 to 4 inches long, and loose panicles of pale-blue or violet flower heads 1 inch across. It is native to the northern part of North America. This is reported as an early summer-blooming strain with purple flowers. In Maryland, in 1937, it began to flower in early July when 12 to 15 inches high. For trial throughout the Northern States. (Glenn Dale, Md.)

116581. ASTILBE RIVULARIS. (Saxifragaceae.) From India. Presented by the Lloyd Botanic Garden, Darjeeling, through Dr. R. A. Fenton, Portland, Oregon. A late-flowering astilbe with large plummy panicles of creamy-white flowers on stems from 3 to 5 feet high. A striking plant for the perennial border. For trial in all but the coldest parts of the United States, needing protection in the regions of severe winters. (Glenn Dale, Md.)

122068. *ASTILBE RIVULARIS*.* From India. Collected at Darjeeling by Walter Koelz, Bureau of Plant Industry. Said to have come from 9,000 feet altitude, in Sikkim. Description same as for preceding (P. I. No. 116581). (Glenn Dale, Md.)

67067. *BAECKEA PLATYCEPHALA*. (Myrtaceae.) From South Australia. Presented by Edwin Ashby, Blackwood. A small densely branched shrub, 1 or 2 feet high, with thick leaves crowded at the ends of the branches, and small white flowers in the upper axils. Native to Western Australia. For trial in southern California and southern Florida. (Chico, Calif.)

BAMBOOS. See description of species at end of this Descriptive List.

118650. *BERGENIA SP.** (Saxifragaceae.) From India. Collected on a dry slope at an altitude of 11,000 feet, by Walter Koelz, Bureau of Plant Industry. An attractive perennial for the border, with its few, bright glossy green, basal leaves that turn red in autumn. The leaves are obovate, obtuse, with ciliate margins, and are from 5 to 8 inches long. The sprays of flowers are white to pink. For trial throughout the South and on the Pacific coast. (Glenn Dale, Md.)

9662. *BIGNONIA UNGUIS-CATI*. From Funchal, Madeira. Collected by Barbour Lathrop and David Fairchild. An unusually large-flowered form of the species. The trumpet-shaped flowers, lemon yellow in color, are borne in huge masses, recurrently throughout the season. The evergreen plant grows well on walls, but will stand very little frost. For trial in the warmest parts of the Southwest and of the Gulf region. (Chico, Calif.)

111436. *BOMAREA SP.* (Amaryllidaceae.) From Colombia. Collected by W. A. Archer, Bureau of Plant Industry. A tender herbaceous perennial of twining habit. The elliptical leaves are alternate, light green, and twisted on the petiole so that the morphologically lower surface becomes the upper surface. The bomareas are closely related to the genus *Alstroemeria*, from which they differ chiefly in their climbing habit. The large showy flowers are variously colored and spotted, and are produced in early spring or summer in pendulous umbels. For trial as conservatory plants and in shady positions in the warmest parts of Florida and California. (Glenn Dale, Md.)

114723. *BOTRYOPLEURON AXILLARE*. (Scrophulariaceae.) From Szechwan Province, China. Presented by the Botanic Garden, Nanking. An herbaceous perennial related to *Digitalis*, with lanceolate acuminate to linear leaves, sometimes as much as 6 inches long. The leaves are very dark green in color, conspicuously veined, glossy, and with a peculiar sheen over the surface. The stems are slender and may need support. The small pink flowers are borne in dense spikes scarcely an inch long. For trial in the South and on the Pacific coast. (Glenn Dale, Md.)

101360. *BRYOPHYLLUM SCANDENS*. (Crassulaceae.) From France. Presented by Dr. Henri Humbert, Museum of Natural History, Paris. A climbing succulent plant with a slender stem and thick, sessile, linear, dark purplish-green leaves 2 to 3 inches long, bearing 5 or 6 bulbiferous teeth at their apex. The dark-violet flowers, one-third inch long, are in a lax, many-flowered inflorescence. Native to Madagascar. For trial indoors only except in the warmest parts of the Southwest and the Gulf region. (Glenn Dale, Md.)

78436. BRYOPHYLLUM UNIFLORUM. From Madagascar. Collected at Mont Amber, Diego Suarez, by Charles F. Swingle, Bureau of Plant Industry, and Dr. Henri Humbert, University of Algiers, Algeria. A trailing plant with opposite, small, roundish, fleshy leaves, dark green with a line of red on the edges. In flower, it is very showy, producing its large, pendulous, deep wine-red flowers in mid-winter. Unlike many succulents, it seems to prefer a moderately humid, shady location. For trial indoors except in the warmest parts of the Pacific coast and the Gulf region. (Glenn Dale, Md.)

78427. BRYOPHYLLUM SP.* From Madascar. Collected by Charles F. Swingle, Bureau of Plant Industry, and Dr. Henri Humbert, University of Algiers. Received as Kalanchoe fedtschenkoi but the pendulous habit of the flowers and the habit of sprouting from the crenations of the leaves indicate that the plant properly belongs in the genus Bryophyllum. A rather small succulent, about 10 inches high, with crenate rounded-oval leaves an inch and a half long, bluish green, overcast with purple, and small purplish flowers in a loose cluster terminating the slender stem. For trial indoors only except in frostless localities. (Glenn Dale, Md.)

97616. BRYOPHYLLUM CREMATUM.* From Scotland. Presented by the Royal Botanic Garden, Edinburgh. Received as Kalanchoe rotundifolia but the pendulous habit of the flowers, with the stamens inserted at the base of the tube, and the habit of sprouting from the crenations of the leaves indicate that it properly belongs in the genus Bryophyllum. The plant is a succulent perennial 1 to 3 feet high, with a trichotomously branched slender leafy stem. The fleshy leaves, 1 to 2 inches long, vary from broadly obovate to spatulate and are entire or crenate. The small orange or yellow flowers are borne in axillary clusters. Native to South Africa. For trial indoors only except in the warmest localities in the Gulf region and southern California. (Glenn Dale, Md.)

122072. CALCEOLARIA GRACILIS. (Scrophulariaceae.) From India. Collected at Darjeeling by Walter Koez, Bureau of Plant Industry. An annual calceolaria with small, lemon-yellow flowers sparsely dotted with purple, and hairy pinnatifid leaves, growing to about 18 inches in height. Although the flowers are much smaller than those of the florists' calceolaria, they are freely produced in late summer and early fall. For trial in all but the coldest and hottest parts of the United States. (Glenn Dale, Md.)

116860. CALLICARPA DICHOTOMA.* (Verbenaceae.) From Hunan Province, China. Collected in a forest at an altitude of 1,860 feet, by A. N. Steward, University of Nanking. A showy deciduous shrub to 5 feet in height, with purplish stems and opposite, elliptic to obovate leaves $1\frac{1}{2}$ to 3 inches long. The small pink flowers are borne in August in numerous small axillary clusters and are followed in autumn by showy red, berry-like fruits. If the tops are winter-killed the new growth will fruit the first season. For trial in all but the coldest and hottest sections of the United States. (Glenn Dale, Md.)

114722. CALLICARPA RUBELLA HEMSLEYANA. From China. Received from Szechwan Province, through the Botanic Garden at Nanking. A somewhat coarse, large deciduous shrub or small tree from 10 to 20 feet high. The cordate-oblong, gray-green leaves, 6 to 8 inches long, are very large for the genus. The small flowers, borne in axillary clusters, in the summer, are lilac to purple, and are followed in the fall by the many small showy purple berries which remain through early winter. For trial in all but the warmest parts of the southern United States. (Glenn Dale, Md.)

118764. *CALLISTEMON*. (Myrtaceae.) Bottlebrush. From Australia. Presented by the Director, Botanic Gardens, Sydney, New South Wales. A handsome shrub of drooping habit, that has reached a height of 5½ feet, with a spread of 7 feet, at Chico, Calif. The foliage is dense and the individual leaves resemble those of *Callistemon acuminatus*. The flowers, with very dark-red stamens an inch long, are in dense spikes 3 to 5 inches long and appear during April and early May. This is a selection from second-generation seedlings of a cross between *C. citrinus* and *C. acuminatus*, and the plants here offered were propagated by cuttings. (Chico, Calif.)

101200. *CALOTHAMNUS ASPER*. (Myrtaceae.) Net-bush. From Australia. Presented by Edwin Ashby, Wittunga, South Australia. A hairy evergreen shrub, with crowded linear flat leaves and short dense clusters of flowers with crimson stamens. It does well in full sunlight and is the most ornamental calothamnus thus far tested at Chico, California. The plant may be propagated by ripe-wood cuttings in fall. (Supply very limited.) For trial in the milder parts of California and the Gulf region. (Chico, Calif.)

101201. *CALOTHAMNUS HOMALOPHYLLUS*. From Australia. Presented by Edwin Ashby, Blackwood, South Australia. A tender, erect, evergreen shrub from 4 to 6 feet high, with thick, flat, nearly linear leaves 1 to 2 inches long, resembling the callistemons, to which it is related. Like the callistemons, the flowers are showy because of their long numerous rich-crimson stamens, and are borne in one-sided spikes. A graceful plant in habit. For trial in the warmest parts of California and the Southwest. (Chico, Calif.)

101202. *CALOTHAMNUS LONGISSIMUS*. From Australia. Presented by Edwin Ashby, Blackwood, South Australia. A low spreading evergreen shrub with softly pubescent, corky branches. The leaves are terete, from 6 to 12 inches long, glabrous and dark green. The small flowers embedded in the swollen corky stems have long brilliant stamens. It has proved tolerant of high temperatures at Chico, California, but the plants froze to the ground at a temperature of 12° F. For trial in the warmer parts of California and the Southwest. (Chico, Calif.)

101204. *CALOTHAMNUS SANGUINEUS*. From Australia. Presented by Edwin Ashby, Blackwood, South Australia. A tall, upright, rapidly growing evergreen shrub 6 to 12 feet high with terete leaves about an inch long, dull green and pubescent. The flowers, with numerous blood-red stamens, about an inch long, are produced in terminal one-sided spikes. It is said to be tolerant of extreme heat at Chico, California, but the plants froze to the ground at a temperature of 12° F. For trial in the warmer parts of California and the Southwest. (Chico, Calif.)

118573. *CALTHA PALUSTRIS*. (Ranunculaceae.) Marsh-marigold. From India. Collected above Tarakbal, Kashmir, at an altitude of 10,000 feet in a practically dry, rocky, stream bed. A white-flowered form of this usually yellow-flowered cosmopolitan species. It should prove useful in moist or wet situations similar to those in which the common form grows. For trial from South Carolina and Tennessee northward. (Glenn Dale, Md.)

114724. *CAMPANUMOEIA JAVANICA*. (Campanulaceae.) From China. Received from Szechwan Province, through the Botanic Garden, Sun Yat Sen Memorial Park, Nanking. A perennial twining vine with opposite leaves and yellowish, brown-veined, broadly bell-shaped flowers 1¼ inches across. For trial in the Gulf region and in California. (Glenn Dale, Md.)

78190. CARALLUMA LUTEA. (Asclepiadaceae.) From South Africa. Obtained from W. and C. Gowie, Grahamstown, through Hugh Evans, Santa Monica, California. A dwarf, leafless succulent, resembling the stapelias, to which it is related. The crowded, purple-mottled green stems are $\frac{3}{4}$ -inch across, erect, four angled, armed with stout horizontal teeth along the angles. The yellow flowers, 2-3 inches across, are borne in terminal clusters of 20-25 flowers, most of them opening at one time. For trial indoors only except in southern California and southern Florida. (Glenn Dale, Md.)
90849. CARMICHAELIA EXSUL. (Fabaceae.) From Australia. Presented by the Director, Botanic Gardens, Sydney, N. S. W. A leguminous shrub of rather upright habit, 2 to 4 feet high, with flattened branchlets, compound leaves made up of 3 to 5 obovate, emarginate leaflets nearly 1 inch long, and axillary peduncles bearing 1 or 2 yellowish white flowers. The shrub is rather more attractive than most related species and is suited to dry sunny situations. It is readily propagated in the greenhouse from cuttings of 1- to 2-year old wood. Native to Lord Howe Island. (Supply very limited.) For trial in the warmer parts of California and the Gulf region. (Chico, Calif.)
111349. CATALPA DUCLOUXII. (Bignoniaceae.) From China. Received from H. H. Chung, National Wu-Han University, Wuchang, Hupeh. A tree to 80 feet high, native to central and western China, with ovate-cordate leaves 4 to 8 inches long. The flowers, smaller than those of our American catalpas, are rose pink, with orange markings in the throat, and are borne in 5- to 15-flowered racemes. The slender pods are up to 2 feet long. For trial in the Southern States and on the Pacific coast. (Glenn Dale, Md.)
62704. CEANOTHUS PALLIDUS ROSEUS. (Rhamnaceae.) From Elstree, Herts, England. Presented by Aldenham House Gardens. Var. Marie Simon. A ceanothus with lovely lilac-pink flowers, similar in other respects to Ceanothus "Arnouldi." For trial throughout the Southern States and the Pacific-coast region, except in the hottest parts. (Glenn Dale, Md.)
77663. CEANOTHUS. From Orleans, France. Obtained from Leon Chenault & Son. Arnouldi. A handsome hybrid ceanothus growing to a height of 6 or 8 feet and with an equal spread. The pale-blue flowers, in dense compound panicles, are produced profusely in late summer and fall, but a few occur throughout the summer. A fine shrub in foliage and in flower. For trial throughout the Southern States and the Pacific coast region, except in the hottest parts. (Glenn Dale, Md.)
78053. CEANOTHUS. From France. Obtained from E. Turbat & Co., Orleans. Bijou. A hybrid variety similar to Arnouldi except that the flower color is a clear lilac pink. For trial throughout the South and on the Pacific Coast, except in the hottest parts. (Glenn Dale, Md.)
48663. CELTIS TALA.* Ulmaceae. From Montevideo, Uruguay. Plants grown from seed produced at Savannah, Georgia. A tree with a short branched trunk, thickly branched; when closely planted, these trees soon form an impenetrable hedge. The wood is yellowish white and smooth. It is used in Uruguay for fence posts and firewood. For trial in the Gulf states and on the Pacific coast. (Chico, Calif.)

112247. *CEREUS HEXAGONUS*. From Cuba. Received from Soledad, Cienfuegos, through F. G. Walsingham of the Atkins Institution of the Arnold Arboretum. A tall columnar cactus up to 45 feet high, branching at the base, the joints usually 6-angled. The flowers are 8 to 10 inches long with the outer segments purple and the inner ones white. The ovoid edible fruits are 3 to 6 inches long and have white or pinkish pulp. It is native to the West Indies and the northern part of South America. For indoor culture only except in southern California and southern Florida. (Glenn Dale, Md.)

72790. *CISTUS CORBARIENSIS*. (Cistaceae.) Rockrose. From Kew, England. Presented by the Director, Royal Botanic Gardens. A white-flowered shrub 2 feet high, native to Spain. For trial in the Gulf region and in California. (Chico, Calif.)

116969. *CISTUS SP.* Rockrose. From Turkey. Collected near Mersin by H. L. Westover and F. L. Wellman, Bureau of Plant Industry. The color of the flowers of this plant is unknown but the usual colors of this genus are white through rose to purple; these are large and freely produced in terminal or axillary cymes, appearing in early summer. The small, shrubby plants are seldom more than 30 inches high, but very freely branched, and the leaves are gray-green. For trial in the lower South, in the Southwest, and on the Pacific coast. (Chico, Calif., and Glenn Dale, Md.)

122457. *CISTUS SP.* Rockrose. From Turkey. Collected at Yalova Baths, Kaplichalari, by H. L. Westover and F. L. Wellman, Bureau of Plant Industry. Same description as for preceding (P. I. No. 116969). (Glenn Dale, Md.)

122458. *CISTUS SP.* Rockrose. From Turkey. Collected at Yalova, Kaplichalari, by H. L. Westover and F. L. Wellman, Bureau of Plant Industry. A species with rose-pink flowers, occurring in many mountainous parts of Turkey. Otherwise, the same description as for P. I. No. 116969. (Glenn Dale, Md.)

123034. *CISTUS SP.* (Cistaceae.) From Turkey. Collected west of Balekisehir by H. L. Westover and F. L. Wellman, Bureau of Plant Industry. A small shrub to 30 inches high, with many upright branches, and gray-green pubescent leaves. The large rose-pink flowers are borne in early summer in showy terminal clusters. For trial throughout the South and on the Pacific Coast. (Glenn Dale, Md.)

123035. *CISTUS SP.* Rockrose. From Turkey. Collected south of Bursa, by H. L. Westover and F. L. Wellman, Bureau of Plant Industry. Same description as for P. I. No. 116969. (Glenn Dale, Md.)

109621. *CITROPSIS SCHWEINFURTHII*. (Rutaceae.) African cherry orange. From tropical Africa. A dwarfish spiny citrus relative with bright-green leaves composed of 3 or 5 large leaflets and with winged petioles and rachis. The flowers, in axillary clusters, are large, white, and very fragrant and are produced abundantly even on young trees. The bright-orange-colored fruits are about 1½ inches in diameter, pleasantly fragrant, sweet, and with an agreeable flavor. The plant is reported to have value as a conservatory tree. (Supply very limited.) For trial only in the warmest parts of the citrus region and under glass. (Glenn Dale, Md.)

119707. *CLERODENDRUM MYRICOIDES*. (Verbenaceae.) From Africa. Obtained from Mt. Elgon Nurseries, Kitale, Kenya Colony. A tender erect evergreen shrub 3 to 5 feet high, with 4-lobed, oblong, dull-green leaves 2 to 6 inches long, and small bicolored,

pale-blue and white flowers in short terminal panicles. Native to tropical Africa. For trial under glass or in the warmest parts of Florida and California. (Glenn Dale, Md.)

118580. COLUTEA SP. (Fabaceae.) Bladder-senna. From India. Collected at Soopur, Baltistan, at an altitude of about 7,000 feet, by Walter Koelz, Bureau of Plant Industry. A deciduous shrub to 5 feet high, with glaucous thick pinnate leaves. The yellow flowers are followed by large inflated pods, of ornamental value until mid-winter. For trial in all but the coldest parts of the northern United States. (Glenn Dale, Md.)

88740. COTYLEDON ORBICULATA. (Crassulaceae.) From Ventimiglia, Italy. Presented by S. W. McLeod Braggins, Superintendent of La Mortola Gardens, through the Allison V. Armour expedition. An erect succulent plant up to 4 feet high, with opposite mealy leaves nearly circular in outline, about $1\frac{1}{2}$ inches in diameter, and reddish margined. The large reddish flowers are in terminal panicles. It is native to South Africa. For trial indoors only except in the warmest parts of the Southwest and of the Gulf region. (Glenn Dale, Md.)

78200 and 78201. CRASSULA CORYMBULOSA. From South Africa. Obtained from W. & C. Gowie, Grahamstown, through Hugh Evans, Santa Monica, Calif. A low, spreading South African succulent with crowded fleshy, linear-lanceolate, bright-green leaves about 4 inches long. The small white flowers, produced in large terminal racemes in the fall, are not particularly showy; however, the compact, well-branched plants, are pleasing at all times among succulent plantings. For trial indoors only except in the warmest parts of the Pacific Coast and of the Gulf region. (Glenn Dale, Md.)

114036. CUPRESSUS BENTHAMII. Cypress. From Costa Rica. Collected at San Pedro by W. A. Archer, Bureau of Plant Industry. A tree up to 70 feet high, with slender horizontal branches and bright-green leaves, forming a pyramidal head. Native to Mexico. For trial in southern California and the warmer parts of the Gulf region. (Chico, Calif.)

112084. CUPRESSUS GLABRA. From Africa. Presented by the Forest Department, Kenya Colony, through the Atkins Institution of the Arnold Arboretum, Cienfuegos, Cuba. A tree 25 to 30 feet in height, with a compact, narrowly oval, somewhat pyramidal crown. The branches, particularly of the younger tree, are strongly upright, the bark is thin, smooth, dark purple-red; the trunk tapering, sometimes divided into several branches. Foliage bright blue-green. For trial in the warmer parts of southern California and the Gulf region. (Glenn Dale, Md.)

112085. CUPRESSUS TORULOSA. From Africa. Received from the Forest Department, Kenya Colony, through the Atkins Institution of the Arnold Arboretum, Cienfuegos, Cuba. A tall pyramidal tree to 150 feet high, with short horizontal branches, ascending at the extremities; branchlets slender, drooping. It is native to the Himalayas at altitudes from 5,500 to 8,000 feet and will probably be hardy only in the far southern United States. For trial in the Gulf region and along the California coast. (Glenn Dale, Md.)

118375. CUPRESSUS SP. Cypress. From Brazil. Collected at Sao Paulo by W. A. Archer, Bureau of Plant Industry. Cedrinho. A coniferous tree which in the seedling stage resembles the Arizona cypress. The foliage is gray or blue-green. (Supply limited.) For trial in the warmest parts of the South and Southwest. (Glenn Dale, Md.)

122084. CYNOGLOSSUM DENTICULATUM. Boraginaceae. From India. Collected at Darjeeling by Walter Koelz, Bureau of Plant Industry, but said to have come from 9,000 feet altitude in Sikkim. A hardy biennial with small blue flowers in long, open one-sided spikes on stems $1\frac{1}{2}$ to 2 feet high. The habit of the plant is not attractive, but the flowers, resembling those of forget-me-not, keep well when cut. For trial in all but the coldest and hottest parts of the United States. (Glenn Dale, Md.)

122087. DEUTZIA CORYMBOSA.* (Hydrangeaceae.) From India. Collected at Darjeeling by Walter Koelz, Bureau of Plant Industry. The plant is said to have come from high altitudes in mountains near Darjeeling. This deutzia is distinguished by its late continuous flowering period, sometimes extended into July or August. The fragrant flowers are pure white and are borne in many-flowered corymbs. The large gray-green leaves are ovate to ovate-lanceolate, with a whitish pubescence beneath. For trial in all but the coldest and hottest parts of the United States. (Glenn Dale, Md.)

78128. DEUTZIA. From France. Obtained from V. Lemoine & Son, Nancy. Crenata latiflora. The very large, single white flowers, up to $1\frac{1}{2}$ inches in diameter, are borne on upright panicles which carry as many as 20 flowers. For trial from Philadelphia and southern Ohio southward to the Gulf and on the Pacific coast. (Glenn Dale, Md.)

78141. DEUTZIA.* From Nancy, France. Obtained from V. Lemoine & Son. Longifolia purpurea. A very attractive tall shrubby deutzia with large gray-green leaves. The flowers are deep-pink, purplish in the bud. For trial in the South and on the Pacific coast. (Glenn Dale, Md.)

73433. DEUTZIA.* From England. Presented by Aldenham House Gardens, Elstree, Herts. Scabra elegantissima. A tall ornamental shrub, a hybrid between Deutzia scabra and D. discolor purpurascens, with carmine buds and double pink flowers. It is probably one of the hardiest deutzias. For trial in all but the coldest and warmest parts of the United States. (Glenn Dale, Md.)

115941. DURANTA REPENS. (Verbenaceae.) From India. Collected at Poona by Walter Koelz, Bureau of Plant Industry. A very attractive spiny shrub to 15 feet high, used for hedges. The opposite, elliptical leaves are light green and from 2 to 4 inches long. The lilac-purple flowers are in paniced racemes, and are followed by orange, berry-like fruits $\frac{1}{2}$ -inch in diameter, suggesting those of Celastrus. For trial in the warmest parts of Florida and California. (Glenn Dale, Md.)

116928. ELAEAGNUS SP. From India. Collected at Kabul, Afghanistan, by Walter Koelz, Bureau of Plant Industry. This eleagnus produces edible fruit which is dried and sold in the markets of Afghanistan. The fruit is small, mealy, and rather acrid to the taste; it is usually covered with small silvery gray scales. For trial especially in the semi-arid Southwest. (Chico, Calif.)

103006. ENTELEA ARBORESCENS. (Tiliaceae.) From New Zealand. Presented by W. Wilkinson, Tauranga. A beautiful tree with extremely light wood, half as heavy as cork. Its large, maplelike leaves are evergreen. It is the only representative of its genus. Its distribution is confined to two small areas in the North Island of New Zealand and one in the South Island. It will grow only in warm climates. For trial in the milder parts of California and in the Gulf region. (Chico, Calif.)

113764. ENTELEA ARBORESCENS. From Australia. Received through the Melbourne Botanic Gardens, South Yarra. For description see preceding number (P. I. 103006). (Chico, Calif.)

103488. ERANTHEMUM NERVOSUM. (Acanthaceae.) From India. Collected in Bhadwar, Kangra, and presented by Walter Koelz, University of Michigan, Ann Arbor. A shrub 5 feet high with opposite large dark-green rugose leaves, found growing in moist shady situations at an altitude of 2,000 feet. The numerous royal-blue flowers are borne in winter on axillary and terminal spikes, in the axils of large, prominently nerved bracts. A fine plant for winter flowers. For trial under glass, or outdoors in the warmest parts of Florida and California. (Glenn Dale, Md.)

113749. ERLANGEA MARGINATA. (Asteraceae.) From the Belgian Congo, Africa. Presented by the Director, Government Experiment Station, Kosozi, Ruanda-Urundi Terr. An evergreen shrub 1½ to 2 feet high. The rose-lavender flowers, resembling those of Eupatorium, are in dense paniculate corymbs, several inches across, and are produced over a long period under glass in the winter. For trial under glass or in the warmest parts of southern California and southern Florida. (Chico, Calif.)

123862. ERYTHRINA FLABELLIFORMIS. (Fabaceae.) From New Mexico. Collected by L. N. Goodding, Soil Conservation Service. A low, deciduous shrub, 2 to 4 feet high, inhabiting the upper foothills of the isolated mountain ranges of the Southwest. The bright-scarlet flowers are in terminal racemes, and the seeds range in color from cream through yellowish or coffee-color to bright scarlet. In the fall, it is conspicuous with bright-yellow leaves. It will probably prove more hardy than the exotic species. (Supply very limited.) For trial in the warmest parts of Florida and the Southwest. (Glenn Dale, Md.)

118379. ERYTHRINA RETICULATA. From Brazil. Collected at Sao Paulo by W. A. Archer, Bureau of Plant Industry. A tender spiny shrub up to 6 feet high, with leathery leaves of three large oblate leaflets. The showy scarlet flowers are in terminal erect racemes about 5 inches long. In Brazil, stems of this plant are used for living fence posts. (Supply very limited.) For trial only in the warmest parts of Florida and California or as a conservatory plant. (Glenn Dale, Md.)

62666. EUCALYPTUS ALGERIENSIS. (Myrtaceae.) From Algeria. Collected by David Fairchild, Bureau of Plant Industry. A spring-flowering hybrid between Eucalyptus rostrata and E. rudis which has become naturalized in North Africa and now covers considerable areas of the hills around Algiers. It is remarkable for its rapid growth. E. algeriensis differs from E. rudis by its smooth trunk and from E. rostrata in its white buds. At Chico, Calif., trees of this species 40 feet high have withstood a minimum temperature of 12° F., with only light injury to leaves and tips of branches. For trial in the Southwest and the Gulf region. (Chico, Calif.)

90689. EUCALYPTUS BEYERI. From New South Wales, Australia. Presented by the Director, Botanic Gardens, Sydney. A tall tree with thin narrowly linear leaves, flowers in clusters of 3 to 6, and pear-shaped fruits a quarter of an inch long. It is native to Australia. At Chico, California, trees of this species, 22 feet high, were severely injured at a minimum temperature of 12° F. For trial in the warmer parts of California and the Gulf region. (Chico, Calif.)

90693. *EUCALYPTUS DEALBATA*. From New South Wales, Australia. Presented by the Director, Botanic Gardens, Sydney. A small stunted tree with rugose bark separating in scales, leaving the inner bark white and smooth. The glaucous ovate leaves are 4 inches long, and the clusters of 3 to 6 flowers are followed by hemispherical fruits about a quarter of an inch in diameter. At Chico, California, trees of this species 36 feet high were severely injured at a minimum temperature of 12° F. For trial in the warmer parts of California and the Gulf region. (Chico, Calif.)

123771. *EUCALYPTUS DIVERSICOLOR*. From Australia. Presented by F. H. Baker, Richmond, Victoria. A tall tree, up to 350 feet in height, native to western Australia. It is straight in habit and a fairly rapid grower. The very dense and elastic wood is considered superior timber, being used by wheelwrights and for shipbuilding. In Florida the tree is said to do best near the coast, in noncalcareous soils. It is somewhat frost resistant, but it does not endure dry heat. At Chico, California, trees of this species, 13 feet high, were killed at a minimum temperature of 12° F. For trial near the coast in southern California and in the milder parts of central and southern Florida. (Chico, Calif.)

90694. *EUCALYPTUS EXSERTA*. From Australia. Presented by G. P. Darnell-Smith, Director, Botanic Gardens, Sydney, New South Wales. A medium-sized tree with rough fissured ash-brown bark, sword-shaped leaves 3 to 6 inches long, axillary clusters of 3 to 8 flowers on long pedicels, and nearly globular fruits one-third of an inch in diameter. At Chico, California, trees of this species, 26 feet high, were severely injured at a minimum temperature of 12° F. For trial in the warmest parts of the Southwest and of the Gulf coast. (Chico, Calif.)

77610. *EUCALYPTUS LONGIROSTRIS*.* Creek gum. From Richmond, Australia. Presented by F. H. Baker. A tall Australian tree up to 200 feet high, with smooth dark-gray bark, narrowly lanceolate leaves 6 inches or more long, stalked umbels of small flowers attractive to bees, and globular fruits with conical tops. The heavy red wood is durable both above and below ground and is used for railroad ties, piles, and fence posts. At Chico, California, trees of this species 22 to 28 feet high, suffered only slight injury in a minimum temperature of 12° F. For trial in the Gulf States and California. (Chico, Calif.)

90701. *EUCALYPTUS NUMEROSA*. From New South Wales, Australia. Presented by the Director, Botanic Gardens, Sydney. A large tree up to 150 feet high and 3 feet in diameter, with fibrous bark, thin lanceolate leaves 4 to 7 inches long, flowers in dense umbels of 20 to 40, and pear-shaped fruits less than a quarter of an inch long. It is native to Australia. At Chico, California, trees of this species, 19 feet high, were only slightly injured at a minimum temperature of 12° F. For trial in the warmer parts of California and the Gulf region. (Chico, Calif.)

62418. *EUONYMUS BUNGEANUS*. (Celastraceae.) From China. Collected at Peiping by P. H. Dorsett, Bureau of Plant Industry. A handsome slender-branched Chinese shrub up to 15 feet high, with narrow, long-pointed yellowish-green leaves, and white or pinkish seeds with orange arils persisting well into the winter. Probably hardy in all but the coldest sections of the United States. (Chico, Calif.)

103776. *EUONYMUS JAPONICUS*. From Japan. Collected by P. M. Dorsett and W. J. Morse, Bureau of Plant Industry, in Heibya Park, Tokyo. This form is a tree 20 feet high, the fruits of which are said to be 1- to 2-seeded, reddish in color, and borne on rather stiff stems that stand up among the leaves. For trial from Washington, D. C., and Tennessee southward and on the Pacific coast. (Glenn Dale, Md.)

123208. *EUPATORIUM SP.* Asteraceae. From Bengal, India. Collected at Dacca by Walter Koelz, Bureau of Plant Industry. An erect to semi-scandent shrubby perennial. The lavender, ageratium-like flowers are very freely produced. It should be useful in the mixed perennial border, or in background plantings. For trial in the lower South. (Glenn Dale, Md.)

116869. *EURYA JAPONICA*. (Theaceae.) From Hunan Province, China. Presented by A. N. Steward, University of Nanking. A shrub 5 feet high, grown for its foliage. It is related to the camellias and requires much the same culture. The alternate glossy evergreen leaves are lanceolate, about 4 to 5 inches long, dark green at maturity, but reddish when young. The flowers are greenish white and are borne in small axillary clusters. For trial indoors or in the open in the warmest parts of Florida and California. (Glenn Dale, Md.)

114748. *FORDIOPHYTON FABERI*. (Melastomaceae.) From Szechwan Province, China. Presented by the Botanic Garden, Nanking. A tropical much-branched shrub to 2 feet, similar to the osbeckias in appearance. The opposite leaves are from 2 to 4 inches long, narrowly ovate, dark glossy green above and reddish beneath. The flowers are nearly an inch across and dark rose in color with large conspicuous yellow stamens. For trial under glass and in the warmest parts of Florida and California. (Glenn Dale, Md.)

98145. *FORSYTHIA INTERMEDIA DENSIFLORA*. Oleaceae. From England. Obtained from Aldenham House Gardens, Elstree, Herts. A shrub with spreading and pendulous branches, and much crowded, flat, rather pale flowers with slightly recurved lobes. For trial in all but the coldest parts of the Northern States. (Glenn Dale, Md.)

111356. *FRAXINUS GRIFFITHII*. Oleaceae. From China. Received from H. H. Chung, Wuchang, Hupeh Province. A handsome tree, about 45 feet high, native to the mountainous areas of western China and northeastern India, with leathery, elliptic, entire leaflets about 4 inches long. The small white flowers are in large, loose, bracted panicles. For trial in the Gulf region and on the Pacific coast. (Glenn Dale, Md.)

122091. *GENTIANA TIBETICA*.* Himalayan gentian. From India. Collected by Walter Koelz, Bureau of Plant Industry. An erect herbaceous perennial 1½ feet high, native to Tibet, with oblong-ovate leaves, 5 to 7 inches long, and small dull yellowish-white axillary flowers an inch long. For trial in the Northern States. (Glenn Dale, Md.)

18579. *GLEDITSIA SINENSIS*. (Caesalpinaceae.) Chinese honeylocust. From China. Collected near Peiping by Frank N. Meyer, Bureau of Plant Industry. A hardy, spiny, leguminous tree, up to 40 feet high, native to China. The pinnate leaves are 5 to 7 inches long. The pods, commonly 4 to 7 inches long by 1 to 1½ inches wide, are used in China instead of soap, and the tree is often called the "soap-pod tree." The trees

are long-lived, eventually making large and often beautiful, well-rounded, dense-headed trees. They are highly drought-resistant, somewhat tolerant of alkali, and are recommended for trial especially as park and shade trees in the mild-wintered, semiarid sections of the United States. (Chico, Calif.)

38800. GLEDITSIA SINENSIS. From China. Collected at Sianfu, Shensi, by Frank N. Meyer, Bureau of Plant Industry. Seedlings of a large-podded variety of the Chinese soap-pod tree. (Supply very limited.) (Chico, Calif.)

117448. GREWIA SP. (Tiliaceae.) From India. Collected at Mandi, Mandi State, by Walter Koelz, Bureau of Plant Industry. A shrub with alternate, cleft leaves producing deep rose-purple, berry-like fruits $\frac{3}{4}$ -inch long, with a pleasantly acid flavor. Its fruits are sold in large quantities in the markets in India. The grewias usually have small yellowish flowers in numerous small axillary or terminal clusters, followed in late summer and fall by attractively colored fruits. For trial in southern California and the warmer parts of the Gulf region. (Glenn Dale, Md.)

78211. HAWORTHIA CYMBIFORMIS. From Grahamstown, South Africa. Obtained from W. & C. Gowie, through Hugh Evans, Santa Monica, Calif. A South African succulent with rosettes, 3 to 4 inches broad, of 20 to 25 obovate leaves, 2 inches long, pale green marked on the upper half with vertical lines of darker green. For trial indoors only except in the Gulf region and the warmest parts of the Southwest. (Glen Dale, Md.)

41391. HOMOIOCELTIS ASPERA. (Ulmaceae.) Presented originally by the P. J. Berckmans Co., Augusta, Ga. The present plants are from seed of a tree grown by Victor E. Lent, Sorrento, Fla. A Japanese ornamental tree, up to 60 feet high, having the appearance of a hackberry (Celtis spp.), with the slender branches forming a dense head, rather inconspicuous greenish flowers, and small black drupes. Cultivated for its foliage and sometimes planted as a shade tree. For trial from Georgia southward and on the Pacific coast. Supply very limited. (Chico, Calif.)

118041. HYPERICUM SP. From India. Collected at an altitude of 6,500 feet at Khajias, Chamba State, by Walter Koelz, Bureau of Plant Industry. A very attractive densely branched shrub to $3\frac{1}{2}$ feet high, growing in part shade or sun. The leaves are small, oblong, grey-green in color. The beautiful golden-yellow flowers are borne in great abundance. For trial in all but the warmer and colder parts of the United States. (Glenn Dale, Md.)

122498 and 122500. HYPERICUM SP. St. Johnswort. From Turkey. Collected at Ulu Dag, south of Bursa, by H. L. Westover and F. L. Wellman, Bureau of Plant Industry. A shrub with large yellow flowers. The young plants resemble Hypericum hookerianum. For trial in the lower South and on the Pacific coast. (Glenn Dale, Md.)

111360. ILEX MICROCOCCA. Holly. From China. Obtained from H. H. Chung, Wuchang, Hupeh Province. A holly with oblong papery leaves 3 to 4 inches long and very small red berries $\frac{1}{6}$ inch in length. Native to Japan and China. For trial in the South and on the Pacific coast. (Glenn Dale, Md.)

102300. ILEX PEDUNCULOSA. Holly. From Manchuria. Obtained from Manshu Nosan Shokai, Inc., Dairen. A large evergreen tree, sometimes 40 feet or more high, with glossy green entire, elliptic or oblong leaves 2 to 4 inches long, and small globose scarlet berries. Native to Japan and Chosen. For trial in the Southern States and on the Pacific coast. (Glenn Dale, Md.)

112222. ILEX SP. Holly. From China. Collected in Kwangsi Province by A. N. Steward, University of Nanking. An unidentified species of holly, the young plants of which have cuneate, elliptic-lanceolate to oblanceolate, shortly acuminate, serrulate leaves. (Supply very limited.) For trial in the Gulf region and on the Pacific coast. (Glenn Dale, Md.)

102224. INDIGOFERA SPLENDENS. (Fabaceae.) Indigo. From France. Presented by L. Parde, Directeur des Ecoles Forestieres des Barres, Nogent-sur-Vernisson, Loiret. A small tropical African tree with pinnate leaves up to 3 inches long, consisting of 6 to 11 pairs of small oval leaflets. The large, showy, dark rose-pink flowers are in few-flowered axillary, spiciform racemes. For trial in the South and the milder parts of the Northern States. (Glenn Dale, Md.)

113990. JUBAEA CHILENSIS. Sirup palm. From Chile. Collected by Mrs. Ynes Mexia of the University of California Botanical Expedition to the Andes. An ornamental palm, 40 feet high, which thrives on very dry soil. The pinnate leaves are 6 to 12 feet long and the smooth trunk becomes as much as 5 feet in diameter. The coconut-like fruits are 2 inches in diameter. Although of slow growth if neglected, it responds well to good care and nutrition. These seedlings are quite small and it is suggested that they be carried in large pots or tubs for several years. After they become large enough to compete with other vegetation they should be set where they will receive full sunlight, and where the soil is always well drained. For trial in the South Atlantic and Gulf regions and in the warmest parts of the Southwest. (Glenn Dale, Md.)

124965. JUNIPERUS ASHEI. Ozark white cedar. Collected along the White River, in northern Arkansas, in 1934, by Charles F. Swingle, Bureau of Plant Industry. A bushy tree to 20 feet high, with spreading or ascending branches, native to the Ozark region, and closely related to Juniperus mexicana and J. monosperma. In foliage it has much the appearance and variation in color of J. virginiana. The heartwood is yellowish. The tree is reported to be immune from the common cedar-apple rust. Its native habitat is on high and dry limestone and sandstone bluffs where there is little soil and where temperatures down to -20° F. occur. For trial in the upper South and in all except the coldest parts of the Northern States. (Glenn Dale, Md.)

86826. KALANCHOE SCHUMACHERI. (Crassulaceae.) From Sweden. Presented by the Director, Botanic Gardens, Stockholm. An erect or ascending succulent 1 to 2 feet high with oblanceolate doubly serrate leaves 5 to 8 inches long and axillary and terminal cymes of yellow flowers. It is native to Java. (Glenn Dale, Md.)

103502. KALANCHOE SPATHULATA. From India. Collected by Walter Koelz, University of Michigan, on dry open slopes in Mandi State at 5,000 feet altitude. A succulent perennial up to 4 feet high with the lower leaves spathulate crenate, 3 to 10 inches long, and the upper leaves, 3 to 4 inches long, very narrow and sometimes trifoliolate. The clear yellow flowers are in flattish corymbs. It is native to tropical Asia. For trial outside in practically frostless localities and indoors elsewhere. (Glenn Dale, Md.)

86234. KALANCHOE SP. From Tashkent, Turkistan. Received from the Turkistan Plant Breeding Station, through the Texas Agricultural Experiment Station, College Station, Texas. A handsome succulent, native to Mozambique, Africa, with terete stems 2 to 4 feet high, simple or branched, leafy from about half way up. The opposite, green, elliptical obtuse leaves are glabrous, unspotted, and the pale lemon-yellow flowers are in corymbose cymes 3 to 6 inches across. For trial indoors or in the warmest parts of the Gulf region and southern California. (Glenn Dale, Md.)

78483 and 78485. KALANCHOE SP. From Madagascar. Collected by C. F. Swingle, Bureau of Plant Industry, and Dr. Henri Humbert, University of Algiers. A large kalanchoe with thick, entire ovate leaves, rusty and rough above while young but with age becoming gray, or sometimes glossy. The leaves sometimes become as much as 6 to 8 inches long. For trial under glass or outdoors in frostless areas. (Glenn Dale, Md.)

91525. KALANCHOE SP. From Fort Dauphin, Madagascar. Presented by Rev. A. S. Burgess, through C. F. Swingle, Bureau of Plant Industry. Mongy vola. A shrubby succulent about 12 feet high, with thick fleshy lobed, arrow-shaped leaves up to 15 inches long. These are rusty tomentose above and silvery below, both surfaces becoming dingy with age. The pale yellow flowers are borne in ample terminal panicles. Native to Madagascar. For trial indoors or in the warmest parts of Florida, Arizona and California. (Glenn Dale, Md.)

98164. KENNEDIA COMPTONIANA (Hardenbergia comptoniana)*. (Fabaceae.) From Australia. Presented by F. H. Baker, Richmond. A leguminous twining vine, with leaves composed of three or five leaflets. The present plants are of a woody free-growing form in which the leaves mostly have 5 linear-lanceolate coriaceous leaflets. The flowers, produced in early spring, are light purple to violet and are often obscured by the profuse foliage. Native to Australia. Propagated from seeds and from cuttings of firm green wood. For trial in southern California and southern Florida. (Chico, Calif.)

113770. KUNZEA PEDUNCULARIS.* (Myrtaceae.) From Australia. Presented by the Melbourne Botanic Gardens, South Yarra. A heath-like evergreen shrub, 8 to 15 feet high, allied to the callistemons and with similar cultural requirements. The small white flowers with conspicuous stamens are borne in the upper axils as short corymbs or long leafy racemes. Native to southeastern Australia. For trial in the milder parts of the Southwest and in the Gulf region. (Chico, Calif.)

114761. LANGUAS JAPONICA. (Zinziberaceae.) From Szechwan Province, China. Received through the Botanic Garden at Nanking. A subtropical ginger-like perennial with leafy stems about 1½ feet high, the leaves rather large and lanceolate, about 10 inches long and 3 inches wide. The small reddish flowers are in terminal panicles. Native to the warmer areas of Japan. (Glenn Dale, Md.)

112302. LAPLACEA INTERMEDIA. (Theaceae.) From Ecuador. Collected in Carchi Province by Mrs. Ynes Mexia, Bureau of Plant Industry. An evergreen shrub, allied to Gordonia, with beautiful glossy light-green foliage on reddish stems. The opposite lanceolate leaves are about 4 inches long, and the white flowers are about 1 inch across. For trial in the warmer parts of the Gulf region and on the Pacific Coast. (Glenn Dale, Md.)

118605. LAVATERA SP.* (Malvaceae.) From India. Collected at 5,300 feet altitude at Bandipur, Kashmir, by Walter Koelz, Bureau of Plant Industry. A perennial hollyhock-like plant, growing to 6 feet high and bearing large, single, rose colored flowers. For trial in all but the warmest and coldest parts of the United States. (Glenn Dale, Md.)

107726 and 108764. LIGUSTRUM VULGARE. (Oleaceae.) European privet. From Rumania. Collected at Babadag, Dobrogea, by Dr. Edgar Anderson, Balkan Expedition of the Arnold Arboretum, in unusually cold and dry localities. (Supply very limited.) For trial only in the colder parts of the United States. (Glenn Dale, Md.)

102228. LIGUSTRUM SP. Privet. Presented by L. Parde, Directeur des Ecoles Forestieres des Barres, Nogent-sur-Vernisson, Loiret. A shrub up to 22 feet high, resembling Ligustrum chenaultii. For trial in the more temperate parts of the United States. (Glenn Dale, Md.)

73607. LIMONIUM OTOLEPIS. (Plumbaginaceae.) Sea-lavender. From Tashkent, Turkistan. Presented by Hilaria Rajkova, Botanic Garden. A hardy herbaceous perennial, native to Turkistan, with small, narrowly-oval leaves and rather small bluish-lavender flowers in short spikes. At Chico, Calif., this plant has flowered freely in full sun throughout summer and has withstood the high summer temperatures without injury. Probably hardy throughout the United States. (Chico, Calif.)

82105. LIRIOPE GRAMINIFOLIA.* Snakebeard. From Chosen. Collected in the Imperial Botanical Gardens, Keijo, by P. H. Dorsett and W. J. Morse, Bureau of Plant Industry. It grows about a foot high, with grasslike leaves and purple to whitish flowers half an inch across, in racemes arising from scapes which appear through the leaves. It is used in place of grass in situations where dense shade and shallow rooting of trees prevent the satisfactory growth of grass. For trial in the upper South and all except the coldest parts of the Northern States. (Glenn Dale, Md.)

116596. LOBELIA ROSEA. (Campanulaceae.) From India. Received from the Lloyd Botanic Garden, Darjeeling, through Dr. R. A. Fenton, Portland, Oregon. A stout herb up to 12 feet high with horizontal branches drooping at the tips, native to the subtropical slopes of the Himalayas in India. The narrowly lanceolate leaves, 6 inches long, are velvety above, and the rosy white flowers, nearly an inch long are crowded in racemes. For trial in the Gulf region and on the Pacific coast. (Glenn Dale, Md.)

122105. LOBELIA SP.* (Campanulaceae.) From India. Collected at Darjeeling, by Walter Koelz, Bureau of Plant Industry. From an altitude of 12,000 feet, in Sikkim. The plant is perennial with a rosette of light green leaves up to 8 inches long. The flowering stems are from 1 to 3 feet high, producing purple flowers in a somewhat rigid raceme. For trial in the Southern States and in all but the warmest parts of the Pacific coast region. (Glenn Dale, Md.)

118608. LONICERA SP.* From India. Collected at 12,000 feet altitude along a stream and on a dry slope, by Walter Koelz, Bureau of Plant Industry. An attractive well-formed shrub to 8 feet high, with small, pale-green leaves. The fruits are a lovely orange to orange-red. (Glenn Dale, Md.)

76903. *LUCULIA GRATISSIMA*. (Rubiaceae.) From Gangtok, Sikkim, India. Presented by the forest manager of Sikkim. A Himalayan shrub up to 15 feet high, growing at altitudes of 4,000 to 5,000 feet, with opposite ovate leaves 6 inches long and many successive gorgeous rounded panicles of pink or rose-colored flowers in winter. A valuable plant for indoor culture and house decoration. (Supply very limited.) For trial indoors or in southern California and southern Florida. (Chico, Calif.)

116875. *MELASTOMA REPENS*. (Melastomaceae.) From Hunan Province, China. Presented by A. N. Steward, University of Nanking. A small tropical prostrate shrub growing on an open grassy slope at an altitude of 620 feet. The leaves are ovate, conspicuously 3-veined, about 1½ to 2 inches long, dark glossy green above, gray-green below, with reddish stems. The pinkish flowers are borne in small terminal corymbs. For trial in the warmest parts of the Gulf region and in southern California and as a possible summer bedding plant farther north. (Glenn Dale, Md.)

81262. *MESEMBRYANTHEMUM PRODUCTUM*. Figmarigold. (Aizoaceae.) From the Union of South Africa. Presented by the Director of the National Botanic Gardens, Kirstenbosch, Newlands, near Cape Town. A dwarf succulent with erect stems 1 to 2 inches high, with crowded incurved semicylindrical leaves 1 to 2 inches long, and pale rose-colored flowers in twos and threes on peduncles about an inch long. Native to South Africa. For trial indoors only except in the warmer parts of the Gulf region and the Southwest. (Glenn Dale, Md.)

78235. *MESEMBRYANTHEMUM SP.* From Union of South Africa. Obtained from W. & C. Gowie, Grahamstown, through Hugh Evans, Santa Monica, Calif. An erect succulent perennial, branching from the main stem, with thick fleshy glaucous-green leaves about 2 inches long, triangular in cross section. The leaves resemble those of *Mesembryanthemum aureum*. For trial indoors only except in the warmer parts of the Gulf region and the Southwest. (Glenn Dale, Md.)

77606. *METROSIDEROS TOMENTOSA*. (Myrtaceae.) Iron tree. From New Plymouth, New Zealand. Obtained from Duncan and Davies. A freely branching tree, native to New Zealand, up to 60 feet high and 4 feet in diameter, with coriaceous broadly ovate to gray-green leaves, 2 inches long, tomentose beneath, and terminal cymes of flowers conspicuous for their long scarlet stamens as in the other bottlebrushes. For trial in southern California and southern Florida. (Chico, Calif.)

114974. *MORAEA IRIDIROIDES*. (Iridaceae.) From Ceylon. Collected at Hakgala Gardens, Ceylon, by Walter Koelz, Bureau of Plant Industry. A very attractive relative of the iris with large clumps of iris-like leaves with flower stalks to three feet. The flowers have blue-purple standards and white falls, marked with yellow, resembling Japanese iris in form. For trial in the lower South. (Chico, Calif.)

114772. *MUSSAENDA DIVARICATA*. (Rubiaceae.) From Szechwan Province, China. Received through the Botanic Garden at Nanking. An erect or climbing evergreen shrub 3 feet or more in height, with elliptic-ovate, abruptly acuminate, papery leaves 3 to 5 inches long, and lax cymes of yellow flowers. Native to western China. For trial in the South and on the Pacific coast. (Glenn Dale, Md.)

118626. *MYOSOTIS SP.* (Boraginaceae.) Forget-me-not. From India. Collected above Tarakbal, Kashmir, by Walter Koelz, Bureau of Plant Industry, at an altitude of

10,000 feet. A perennial forget-me-not whose flowers are sky-blue, with a yellow eye. Beds of these plants, several square yards in area, are said to make a beautiful appearance. For trial in all except the warmest and coldest parts of the United States. (Glenn Dale, Md.)

113847. NEOMAMMILLARIA ELONGATA.* (Cactaceae.) From Mexico. Collected at the Botanical Garden, Mexico City, by Paul Russell and Max Souviron, Bureau of Plant Industry. A very attractive erect cactus 6 to 7 inches in diameter, with short tubercles having 16 to 18 yellow radial spines and small white or yellowish flowers. With age, this cactus forms a small clump of stems. Native to central Mexico. For trial outside in the milder parts of the southern United States and indoors elsewhere. (Glenn Dale, Md.)

110948. OENOTHERA TETRAPTERA. Evening-primrose. From Colombia. Collected by W. A. Archer, Bureau of Plant Industry. An ornamental plant a foot high, with deeply cut leaves and flowers an inch across that open white in the morning and later turn pink. The fruits are top-shaped and 4-winged. Of possible use in rock gardens. For trial in the South and on the Pacific coast. (Glenn Dale, Md.)

97775. OPUNTIA SP. From the West Indies. Collected on St. Kitts, Leeward Islands, by Allison V. Armour Expedition, Bureau of Plant Industry. A small attractive form with few spines, almost smooth, and peach-red fruits with red flesh which is sour but refreshing. For trial indoors only except in the warmest parts of the Gulf region and the Southwest. (Glenn Dale, Md.)

112219. OPUNTIA SP. From Ecuador. Collected by Mrs. Ynes Mexia, Bureau of Plant Industry. "Tuna". A rather attractive, erect, flat-jointed opuntia with dark blue-green joints; the joints are narrow-oblong, up to 10 inches long, with short white spines. The new growths are usually terminal. The color of the flowers is unknown but the plant resembles *O. pittieri*. For trial indoors only except in the Southwest and in the Gulf region. (Glenn Dale, Md.)

67087. ORTHROSANTHUS MULTIFLORUS.* (Iridaceae.) From Blackwood, South Australia. Presented by Edwin Ashby, "Wittunga." A charming Australian irislike plant with a short perennial rhizome, and flat, grasslike radical leaves up to 2 feet in length. sky-blue flowers are in a several-flowered oblong spike, borne on a stem 1 to 2 feet high and are open only in the morning. For trial in southern California and the Gulf region. (Chico, Calif.)

113775, ORTHROSANTHUS MULTIFLORUS. From Australia. Received through the Melbourne Botanic Gardens, South Yarra. See preceding number (PI 67087) for description. (Chico, Calif.)

122113. OSBECKIA NEPALENSIS.* (Melastomaceae.) From India. Collected by Walter Koelz, Bureau of Plant Industry. A handsome tropical plant, native to the Himalayas, with a rough erect stem $1\frac{1}{2}$ feet high and small, opposite, lanceolate, rigid leaves, dark green above, light green beneath. The large purplish-rose flowers are borne in terminal and axillary panicles or corymbs. Cuttings struck in the spring may make good summer bedding plants. For trial under glass and in the warmest parts of Florida and California. (Glenn Dale, Md.)

102909. OSBECKIA STELLATA. From India. Presented by the Curator, Lloyd Botanic Garden, Darjeeling, through Dr. Ralph A. Fenton, Portland, Oregon. A tropical shrub from 2 to 7 feet high, with reddish, 4-angled branchlets, and opposite, elliptic, reddish-petioled leaves, bright green on the upper surface, reddish beneath, 2 to 6 inches long. The delicately beautiful lilac-rose flowers have 4 ovate ciliate petals $1\frac{1}{2}$ inches long. Cuttings struck in the spring may be useful as summer bedding plants in the North. For trial under glass or in the warmest parts of Florida and California. (Glenn Dale, Md.)

122114. OSBECKIA STELLATA.* Collected in India by Walter Koelz, Bureau of Plant Industry. Same description as for preceding (P. I. No. 102909). (Glenn Dale, Md.)

122115. OSBECKIA SP.* Collected at Siliguri, Bengal, India, by Walter Koelz, Bureau of Plant Industry. An attractive shrub similar to *O. stellata* except that the leaves are slightly smaller. For trial under glass and in the warmest parts of Florida and California. (Glenn Dale, Md.)

78151. PHILADELPHUS. (Hydrangeaceae.) From France. Obtained from V. Lemoine & Son, Nancy. Atlas. A handsome tall-growing hybrid sort with enormous fragrant flowers over $2\frac{1}{2}$ inches wide which have broad milk-white petals. For trial in all except the warmest and coldest parts of the United States. (Glenn Dale, Md.)

78153. PHILADELPHUS.* From Nancy, France. Plants obtained from V. Lemoine & Son. Enchantment. A hybrid variety bearing dense panicles of double white flowers of the most striking appearance, on long erect branches. For trial in all but the hottest parts of the United States. (Glenn Dale, Md.)

78154. PHILADELPHUS.* From Nancy, France. Obtained from V. Lemoine & Son. Innocence. A hybrid variety with such an abundance of large single pure-white flowers, borne on long arched branches, that the bush has the appearance of snowy sheaves of blooms. For trial in all but the hottest parts of the United States. (Glenn Dale, Md.)

97948. PICEA KOYAMAI.* Spruce. From Japan. Presented by M. Tozawa, Director, Forest Experiment Station, Keijo, Chosen. A narrowly pyramidal tree 60 feet high, native to Japan and Chosen, with reddish-brown bloomy branches and radially spreading leaves half an inch long, with two white bands above. The pale-brown cylindrical cones are 2 to 3 inches long. For trial in the Northern States and in the Appalachian region of the South. (Glenn Dale, Md.)

118636. POLEMONIUM SP. From India. Collected at Gurez, Kashmir, by Walter Koelz, Bureau of Plant Industry. A very attractive herbaceous perennial growing to a height of $3\frac{1}{2}$ feet. It does well in moist situations, either in the open or in shade. The beautiful large purplish-blue flowers are in terminal clusters. For trial in all but the warmest parts of the Southern States and on the Pacific coast. (Glenn Dale, Md.)

116608. POLYGONUM MOLLE. From India. Presented by the Lloyd Botanic Garden, Darjeeling. A sub-shrubby or herbaceous perennial, 4 to 5 feet high, covered in late summer and fall with large thyrse-like terminal panicles of creamy-white flowers. It is related to *Polygonum polystachyum*. The large leaves are elliptic lanceolate. A handsome plant for the border or for screen plantings. For trial throughout the South and on the Pacific coast. (Glenn Dale, Md.)

118639. PRIMULA SP.* From India. Collected at an altitude of 9,000 feet, near a spring at Burzil, Kashmir, by Walter Koelz, Bureau of Plant Industry. The plant reaches a height of 3 feet. The very attractive flowers are blue-purple or purple with a yellow eye, and are produced in heads 2 inches across. For trial in the Northern States. (Glenn Dale, Md.)

118640. PRIMULA SP.* From India. Collected at an altitude of 10,000 feet, near a spring at Burzil, Kashmir, by Walter Koelz, Bureau of Plant Industry. This primula grows to a height of 3 feet. The flowers are said to be white, tinged pink. For trial in the upper South and in the Northern States. (Glenn Dale, Md.)

61938. PTEROCARYA STENOPTERA.* (Juglandaceae.) Chinese wingnut. From China. Collected from the Bubbling Well Cemetery, a short distance from the grave of Frank N. Meyer, by P. H. Dorsett, Bureau of Plant Industry. A handsome ornamental tree up to 60 feet high, with pinnate leaves 6 to 12 inches long, having oblong, acute leaflets 2 to 4 inches long. The long pendulous catkins when the tree is in flower or fruit add to its attractiveness. For trial on the Pacific coast and in the Southern States. (Chico, Calif.)

111373. PYRACANTHA CRENATO-SERRATA. Firethorn. (Malaceae.) From China. Received from H. H. Chung, Wuchang, Hupeh Province. A spiny evergreen shrub up to 9 feet high, with young branchlets rusty-pubescent, and elliptic to obovate-oblong leaves 1 to 2 inches long, lustrous dark green above and lighter beneath. The coral-red fruits, a quarter of an inch across, are in dense corymbs. For trial in the southern half of the United States. (Glenn Dale, Md.)

109352. PYRACANTHA SP. From Turkey. Collected near Samsun by H. L. Westover and C. R. Enlow, Bureau of Plant Industry. An unidentified pyracantha resembling P. coccinea. It is a much branched shrub with dull gray-green, pubescent leaves, oblong elliptic in shape, from 1 to 2 inches long. For trial in the Southern States. (Glenn Dale, Md.)

114783. RANDIA HENRYI.* (Rubiaceae.) From Szechwan Province, China. Presented by the Botanic Garden at Nanking. A tender evergreen shrub or small tree, very attractive for its foliage. The opposite leathery lanceolate leaves are dark-green above, but while young are coppery red. The few white flowers, about an inch across, are borne in nearly sessile cymes. For trial outdoors in the warmer parts of Florida and California, or elsewhere under glass. (Glenn Dale, Md.)

112285. RHAMNUS DAVURICA. Dahuria buckthorn. From Manchuria. Collected at Khandagai by the Roerich Expedition. A large hardy spreading shrub or small tree, up to 30 feet high, with oblong leaves 2 to 4 inches long, greenish flowers, and black berries about three-eighths of an inch in diameter. Native to northeastern Asia. For trial in the northern United States. (Glenn Dale, Md.)

111375. RHAMNUS SP. From China. Received from H. H. Chung, Wuchang, without description. A deciduous shrub with alternate leaves 2 to 3 inches long, in habit somewhat resembling Rhamnus heterophylla. For trial in the Southern States and on the Pacific coast. (Glenn Dale, Md.)

119262. RHAMNUS SP.* From India. Collected at Bandrole, Kulu, Punjab, by Walter Koelz, Bureau of Plant Industry. Collected at an elevation of 5,000 feet. A well-formed evergreen tree with a trunk to 1 foot in diameter, with large trusses of creamy flowers, and opposite lanceolate bright-green leaves. For trial throughout the South. (Glenn Dale, Md.)

115811. RHUS LANCEA.* (Anacardiaceae.) From South Africa. Received from McGregor Museum, Kimberley. A small evergreen tree with gray bark and numerous slender branches. The leaves are long-stalked and the lanceolate linear leaflets are 4 to 5 inches long. Native to the Cape of Good Hope. At Chico, California, small plants of this species have withstood high summer temperatures without injury, but were mildly injured in a winter temperature of 12° F. For trial in the warmer parts of the Southwest and Gulf region. (Chico, Calif.)

119293. RHUS VIMINALIS.* From South Africa. Received from the McGregor Museum, Kimberley. Native name karree boom. A hardy evergreen tree up to 30 feet high and of equal spread, reported to withstand drought and some frost. It grows readily from seeds, cuttings, or poles or stumps set in moist ground and kept moist until growth starts. The tree is said to prefer a thin, limestone soil but to thrive on other soils. It is considered an excellent timber for gate and fence posts. In South Africa, sheep and goats are reported to browse on the foliage, and the sweetish fruits to be eaten by children and poultry. The karree boom should be tested as a street or shade tree as it is stated to be hardier and more ornamental than Schinus molle, which it resembles in habit. For trial more especially in the southwest but also in less humid localities of the Gulf region. (Chico, Calif.)

44401. RUBUS IRENAEUS. Presented by Aldenham House Gardens, Elstree, Herts, England. A prostrate, prickly, evergreen shrub, native to central and western China, with white flowers, large red or yellow inedible fruits, and simple leaves suggesting those of coltsfoot. It is not known to have fruited as yet in this country. For trial in the southern half of the United States. (Savannah, Ga.)

22987. SAGERETIA THEEZANS.* (Rhamnaceae.) From China. Collected at Soochow, Kiangsu, by Frank N. Meyer, Bureau of Plant Industry. A gracefully spreading shrub of rapid growth, becoming at times 10 feet across. The foliage is dense and is almost evergreen in mild climates; the leaves appear very early in the spring and persist until late fall. The color is a fine, light, bright green. Although the many small flowers are rather inconspicuous, they have a fine fragrance and are produced in the fall. A valuable ornamental shrub. For trial throughout the southern United States. (Chico, Calif.)

17737. SALIX MATSUDANA UMBRACULIFERA*. Willow. From China. Collected by the late F. N. Meyer, Bureau of Plant Industry. A handsome hardy Chinese willow with a dense, flattened-globular crown. The branches are long, slender, and tinged with red toward the tips. Probably hardy throughout the northern United States. (Glenn Dale, Md.)

118649. SAMBUCUS SP.* (Caprifoliaceae.) Elderberry. From India. Collected at Bandipur, Kashmir, by Walter Koelz, Bureau of Plant Industry. An herbaceous perennial, producing masses of stems to a height of 4 to 5 feet, carrying large compound

leaves. The large corymbs of creamy, heavy-scented flowers in midsummer are followed by edible orange fruits. A pleasing ornamental for the border, that is not particular in its cultural requirements. For trial throughout the South and on the Pacific coast. (Glenn Dale, Md.)

117458. *SAPINDUS EMARGINATA*. (Sapindaceae.) From India. Collected by Walter Koelz, Bureau of Plant Industry. A handsome tree from southern India, with large pinnately compound alternate leaves, light green in color, and small inedible fleshy fruits. (Supply limited.) For trial in southern Florida and southern California. (Glenn Dale, Md.)

92760. *SARCOCOCCA SALIGNA*. (Buxaceae.) From England. Obtained from Aldenham House Gardens, Elstree, Herts. An evergreen shrub 2 to 3 feet high with smooth erect stems. The smooth, glossy, narrow-lanceolate leaves, 3 to 5 inches long and about an inch wide have a long drawn-out point and a marginal vein extending all around the leaves. The small ovoid purple fruits are less than an inch long. The species is native to the Himalayan Mountains and is closely allied to *Sarcococca hookeriana*, though probably less hardy. For trial in the Southern and Pacific Coast States. (Glenn Dale, Md.)

119263. *SARCOCOCCA SALIGNA*.* From India. Collected at Bandrole, Kulu, Punjab, at an elevation of 6,000 feet, by Walter Koelz, Bureau of Plant Industry. Same description as for the preceding (P. I. No. 92760). (Glenn Dale, Md.)

77933. *SENECIO ANTANDROI*. (Asteraceae.) From Madagascar. Collected at Upper Valley, Fiherenana, by Charles F. Swingle, Bureau of Plant Industry, and Dr. Henri Humbert, University of Algiers, Algeria. A shrubby composite, succulent in nature and somewhat resembling *Bryophyllum scandens*. It has long-linear almost cylindrical leaves, reddish-purple in color. Although shrubby, the stems require support, in the greenhouse at least. The small, probably yellow flower heads are arranged in loose corymbs. For trial indoors only, except in the warmest parts of Florida and the Southwest. (Glenn Dale, Md.)

21967. *SOPHORA DAVIDII*. From Chainfu, Shantung, China. Obtained by the late F. N. Meyer, agricultural explorer. A spiny leguminous shrub growing 6 to 10 feet tall, bearing small pinnate leaves, loaded with small violet-tinted whitish flowers in spring. Chinese name, *Kuei tsi ching*. It may be used as a hedge plant and is somewhat drought resistant. It requires pruning when grown as an ornamental in the south. (Supply limited.) For trial in all except the coldest parts of the country. (Chico, Calif.)

114803. *SPIRAEA JAPONICA ACUMINATA*.* (Rosaceae.) From China. Presented by the Botanic Garden, Nanking. A handsome, hardy, deciduous shrub, 3 to 6 feet in height, native to western Szechwan and Hupeh, at altitudes of 3,300 to 5,500 feet. In July and August appear the brilliant rose-colored or red flowers which with the dark green foliage make a very fine contrast. For trial in the southern and Pacific-coast states. (Glenn Dale, Md.)

122141. *SPIRAEA SP.** From India. Collected at Darjeeling by Walter Koelz, Bureau of Plant Industry. The plant was reported to grow at an altitude of 12,000 feet. It is an ornamental shrub and should be tried in all but the warmest parts of the United States. (Glenn Dale, Md.)

81203. STAPELIA HANBURYANA. (Asclepiadaceae.) From Ventimiglia, Italy. Presented by S. W. McLeod Braggins, Superintendent, La Mortola. A freely branching succulent with obtusely 4-angled dull-green stems 2 to 6 inches long. The flowers are 2 to 3 inches broad, rugose inside, greenish yellow, evenly marked with small transverse purplish brown spots and lines and edged with the same color. It is considered to be a hybrid of some form of Stapelia variegata. For trial in the warmest parts of the Southwest and of the Gulf region and under glass. (Glenn Dale, Md.)

23032. SYRINGA MEYERI. Meyer lilac. From China. Collected near Peiping by Frank N. Meyer, Bureau of Plant Industry. A compact shrub up to 10 feet high, native to northern China, with small oval-elliptic leaves and dense panicles of violet flowers, which appear very early in the season. These plants are grafted on Ligustrum walkeri, a tender species. Because of tenderness of the root stock, the plants are offered for trial only in the milder parts of the Northern States. (Glenn Dale, Md.)

102237. SYRINGA REFLEXA. Nodding lilac. From France. Presented by Ecoles Forestieres des Barres, Nogent-sur-Vernisson, Loiret. A shrub 12 to 16 feet high, with rough ovate leaves 3 to 6 inches long, and nearly cylindrical drooping panicles crowded with small flowers which are deep carmine in bud, fading as the flowers open to pink outside and white within; the flowers appear in June. Native to central China. These plants are grafted on Ligustrum walkeri, a tender species. Because of tenderness of the root stock, the plants are offered for trial only in the milder parts of the Northern States. (Glenn Dale, Md.)

113778. TEMPLETONIA RETUSA. (Fabaceae.) Melbourne coralbush. From Australia. Received from the Melbourne Botanic Gardens, South Yarra. A tall shrub with angular glaucous branchlets, native to Australia. The simple leathery broadly ovate leaves are 1 inch long, and the axillary red or white flowers, 1 inch long, are solitary or in clusters of 2 or 3. In southern California this plant flowers in the winter (Supply very limited.) For trial in southern Florida and southern California. (Chico, Calif.)

114193. TRICYRTIS FORMOSANA. (Melanthiaceae.) Toad-lily. From Japan. Obtained from K. Wada, Numazu-shi. An herbaceous perennial plant with short creeping rhizomes, and erect, simple, leafy flexuous stems to 10 inches high. The leaves are alternate, lanceolate, and hirsute. The flowers are borne terminally and in the axils of the upper leaves, in few flowered loose corymbs in late summer. They are more than an inch long, of an unusual and pleasing blend of red-and-blue-purple, with dots of darker purple on the inner surface of the perianth. A very attractive garden plant. for trial throughout the South and the milder parts of the Northern States. (Glenn Dale, Md.)

95678. TRICYRTIS HIRTA.* Hairy toad-lily. From the Netherlands. Obtained from C. G. Van Tubergen (Ltd.), Haarlem. An attractive perennial to 3 feet high, in habit suggesting our solomon-seal but covered with downy hairs. The cordate-lanceolate leaves are conspicuously veined and clasp the stem, and the creamy-white lilylike terminal and axillary flowers are much speckled with warm lavender purple and appear late in the season. The plant thrives in the shade, in soil with a liberal quantity of leaf compost and some coarse sand. Where seed does not ripen before frost, cuttings taken in early fall may be rooted. It is native to Japan. For trial in all but the warmest parts of the United States. (Glenn Dale, Md.)

114202. TRICYRTIS. From Japan. Obtained from K. Wada, Numazu-shi. Toun. A hybrid of Tricyrtis formosana x hirta. Similar in habit to T. hirta, but flowering about a week earlier. The flowers are variable in color, some of them thickly speckled and blotched with rich red-purple on a ground color of pale pink; others are similarly marked with a charming blue-purple on a light blue base. They are borne on a terminal open panicle. For trial in all but the warmest parts of the South. (Glenn Dale, Md.)

118656. TROLLIUS SP. (Ranunculaceae.) From India. Collected above Tarakbal, Kashmir, by Walter Koelz, Bureau of Plant Industry, at an elevation of 10,000 feet, in an alpine meadow. The plant grows to a height of 2 feet. The genus Trollius represents a group of hardy herbaceous perennials with fibrous thickened roots, grown for their showy yellow or orange flowers, which are solitary and terminal on leafy shoots. As a rule, they do best in moist situations and are useful as border plants. For trial in the Northern States. (Glenn Dale, Md.)

116763. VERBESINA LINDENII. Asteraceae. From India. Collected at Saharanpur, by Walter Koelz, Bureau of Plant Industry. A tropical herbaceous perennial 8 to 10 feet high with rough hastate leaves 4 inches long and deep-yellow flower heads, in autumn. Native to tropical America. At Chico, California, these plants have not been injured by high temperatures in full sun. For trial in the Southern States and on the Pacific coast. (Chico, Calif.)

111381. VIBURNUM SP. (Caprifoliaceae.) From China. Presented by H. H. Chung, Wuchang. A viburnum with ovate, soft-green pubescent leaves. For trial in the Gulf region and on the Pacific coast. (Glenn Dale, Md.)

116766. VIGUIERA DENTATA HELIANTHOIDES. (Asteraceae.) From India. Collected at Saharanpur Gardens, Saharanpur, United Provinces, by Walter Koelz, Bureau of Plant Industry. An erect herbaceous perennial up to 6 feet high, with large ovate-lanceolate pubescent leaves, and yellow flower heads about 1½ inches across. Native to Cuba. At Chico, Calif., it is somewhat intolerant of the summer sun. (Supply very limited.) For trial only in the milder parts of the Pacific-coast and Gulf regions. (Chico, Calif.)

113789. VITIS TRIFOLIA. From India. Obtained from the Forest Botanist, Forest Research Station, Dehra Dun, through F. J. Crider, Tucson, Ariz. An odd vitis with fleshy roots, trifoliolate leaves, and of herbaceous habit. The leaves are dark green, conspicuously veined. Probably it is useful only as an ornamental perennial climber. For trial in the Gulf region and on the Pacific coast. (Glenn Dale, Md.)

124725. WISTARIA FLORIBUNDA. (Fabaceae.) From Japan. Presented by N. Suyetake, Tokyo, through P. H. Dorsett, Bureau of Plant Industry. Var. Koshigaya. The parent plant from which this introduction was made is a Japanese shrine. The flower racemes are noted for their length but are not quite as long as those of the variety Ushijima (P. I. No. 124726). For trial in all but the coldest parts of the United States. (Glenn Dale, Md.)

124726. WISTARIA FLORIBUNDA. From Japan. Presented by N. Suyetake, Tokyo, through P. H. Dorsett, Bureau of Plant Industry. Var. Ushijima. The parent plant from which this introduction was made forms an arbor nearly an acre in extent, in Japan, and this arbor has been made a national monument. The flower racemes are remarkable for

their length, some of them measuring 4 feet. It is said by the Japanese that they sometimes are as much as 7 feet long. For trial in all but the coldest parts of the United States. (Glenn Dale, Md.)

113564. XYLOSMA FLEXUOSA. (Flacourtiaceae.) Presented by Peter Heinz, Brownsville. A small spiny tree up to 20 feet high. The leaves are glabrous and evergreen, about 2 to 3 inches long. The fragrant flowers are in many clusters, followed in the autumn by dark red fruits $\frac{1}{4}$ -inch in diameter, in such numbers that they color the plant. It is a striking ornamental, said to be more attractive in fruit than the holly. The Indian name for the tree is Huichiciltemel. For trial in the warmer parts of the Southwest and in the Gulf region. (Chico, Calif.)

B A M B O O S.

For the convenience of Experimenters, the bamboos of which plants are available are listed all together here.

12180. PHYLLOSTACHYS BAMBUSOIDES. Giant timber bamboo. From Japan. Obtained from the Yokohama Nursery Co., Yokohama. Japanese name Madake. A hardy bamboo of running habit, with culms to 70 feet high and 5 inches in diameter and with undulate lanceolate leaves 3 to 7 inches long. It is evergreen at temperatures down to about 5° F., but at a few degrees lower the plants are killed to the ground or severely injured. The plant spreads by vigorous underground rhizomes from which the new culms arise. Grows to full size only in grove form, in an area at least 75 feet across, and after 15 or more years. Grove is kept within bounds by artificial means. Small culms 3 years old useful for plant stakes, fishing poles, etc; larger culms for light construction and other purposes. The edible shoots, with smooth, spotted and blotched sheaths, appear in spring. Not less than 25 plants (shipping wt. 25 - 35 lbs.) sent to an experimenter for planting only in grove form. The first season, however, the plants should be grown $1\frac{1}{2}$ to 2 feet apart in a nursery row, in well fertilized soil, and be freely watered in dry weather. In the late winter or early spring following, transplant with ball of earth to permanent situation, on good well-drained land, spaced 12 feet apart each way. Well-rotted manure or a good commercial fertilizer should be placed in the hole. New plants from rhizomes left in digging should appear in nursery in spring and can be transplanted later. (Supply of plants limited.) For trial only in the Pacific coast region. (Chico, Calif.)

24760. PHYLLOSTACHYS BAMBUSOIDES. Giant timber bamboo. Obtained by William D. Hills, Bureau of Plant Industry. Same description as for the preceding (P. I. No. 12180). Supply very limited. (Chico, Calif.)

42659. PHYLLOSTACHYS BAMBUSOIDES. Bamboo. From Japan. Obtained from the Yokohama Nursery Co., Yokohama. Castillon. A medium-sized ornamental variety of the giant timber bamboo, growing to about 30 feet high, with golden yellow culms and branches with a conspicuous green stripe on the flattened side of each internode. The leaves occasionally bear narrow creamy white stripes. In cold endurance, habit of growth, and culture the variety is like the type except that the planting distance for grove formation is 8 to 10 feet. Plants supplied in lots of 5 or more. For trial from North Carolina to the northern Gulf region and on the Pacific coast. (Savannah Ga.)

116965. PHYLLOSTACHYS FLEXUOSA. Bamboo. Presented by the Centro Agricola, Bahia, Brazil, through Dr. V. A. Argollo Ferrao. A rather small, hardy bamboo of the running type, native to China, which grows to a height of 10 feet or more. The linear-lanceolate leaves, usually 2 or 3 on a branchlet, are 2 to 4 inches long. The culms, when 3 years old, are useful for plant stakes, small fishing poles, etc. The cold resistance and cultural treatment required are the same as for Phyllostachys bambusoides but the spacing of the plants in the permanent planting should be 6 to 8 feet. Plants will be furnished in lots of 10 or more. For trial on the Pacific coast and in the milder parts of the South. (Chico, Calif., and Savannah, Ga.)

73452. PHYLLOSTACHYS HENRYI. Henry bamboo. Originally collected in China by F. N. Meyer, Bureau of Plant Industry. The present plants are grown from material received from E. A. McIlhenny, Avery Island, La. This is a running bamboo of medium size, growing only to about 26 feet high but with diameters up to 2½ inches. It is said to be one of the most highly esteemed edible bamboos of China, the fresh shoots being entirely free from bitterness. The plants develop rapidly under favorable conditions and sometimes produce culms of maximum size within four years from planting. Culture same as for Phyllostachys bambusoides except that planting distance in grove is 8 to 10 feet. Not less than 15 plants (shipping wt. 15-20 lbs.) sent to an experimenter. For trial, in grove form only, in all but the warmest parts of the South Atlantic and Gulf regions and on the Pacific coast. (Savannah, Ga.)

24761. PHYLLOSTACHYS NIGRA HENONIS. From Japan. Originally obtained by Wm. D. Hills, Bureau of Plant Industry. The present plants are grown from material received from E. A. McIlhenny, Avery Island, La. Japanese name Hachiku. A hardy giant bamboo of running habit, ultimately producing culms 50 feet high and 3½ inches in diameter. The edible new shoots appear during April and May. The shoots are easily distinguished from those of other giant bamboos in that the sheaths which at first enfold them are unspotted mauve, with a small crinkly green pseudophyll, or blade, at the apex of each sheath. This is considered the hardiest of the giant bamboos but it is more or less injured at temperatures lower than 0° F. Culture same as for Phyllostachys bambusoides. Plants furnished in lots of 15 or more, for growing in grove form only. For trial in the milder parts of the Southern States, except southern Florida, and on the Pacific coast. (Savannah, Ga.)

75160. PHYLLOSTACHYS VIRIDI-GLAUDESCENS. Bamboo. Presented by the Director, Royal Botanic Gardens, Kew, England. A hardy Chinese bamboo of rapid-spreading habit, to 18 feet high. The plant strongly resembles Phyllostachys bambusoides, but besides being of much lower maximum height, differs in having flat instead of undulate leaves, less spotting of the culm sheaths, and a characteristic slight roughness of the outer surface of the sheaths. Uses of culms same as in related species. The cold endurance and culture are much the same as for P. bambusoides but with the planting distance in grove about 8 feet. Plants furnished in lots of 5 or 10. For trial on the Pacific coast and in the South from North Carolina and northern Alabama to the Gulf. (Chico, Calif.)

55713. PHYLLOSTACHYS SP. Bamboo. From China. Collected by F. N. Meyer, Bureau of Plant Industry. A hardy evergreen bamboo of running type, to 25 feet high. This species is easily distinguished from others of similar appearance by the yellowish color of the flattened sides of the internodes of culms and branches during the first

year or two, while the rounded parts are green. Grows to full size only in grove form, in an area at least 30 feet across, and after several years. Culms useful for plant stakes, fishing poles, etc. This bamboo has been previously sent out under the name Phyllostachys nevinii but is now found to be of another, apparently undescribed, species. Its climatic and cultural requirements are the same as for P. bambusoides except that planting distance in grove is 8 to 10 feet apart. Plants furnished only in lots of 15 or more. For trial in the milder parts of the South, except southern Florida, and on the Pacific coast. (Chico, Calif., and Savannah, Ga.)

116768. PHYLLOSTACHYS SP. Bamboo. From China. Collected by F. N. Meyer, Bureau of Plant Industry. (Formerly sent out under P. I. No. 23234.) A hardy running bamboo, to 20 feet high, with dense foliage. It resembles Phyllostachys aurea but there is never any crowding of the lower internodes of the culm as in that species. The conditions under which plants will be furnished to experimenters, and the cultural requirements and uses of culms, are about the same as for P. I. No. 55713. (Chico, Calif., and Savannah, Ga.)

89709. PLEIOBLASTUS CHINO. Bamboo. Obtained from V. N. Gauntlett & Co., Chiddingfold, England. Laydeker. A dwarf hardy bamboo of running habit, 2½ to 3 feet high. The slender culms, usually without branches the first year, bear 10 to 12 lanceolate or linear-lanceolate dark-green leaves and in the second year the branches bear 5 or 6 leaves, mostly toward the tips. The leaves are 2 to 5 inches long, the longer and more slender ones being near the tips, and they are sometimes irregularly mottled with pale green or dull yellow. This bamboo is not very attractive but because of its vigor may be useful as a ground cover where more desirable plants do not thrive. It should be watched for possible development of a weedy habit. Plants will be furnished in lots of 5 or more. For trial in the middle and upper South and on the Pacific coast. (Savannah, Ga.)

52673. PLEIOBLASTUS PUMILUS (Sasa pumila). Bamboo. Presented by Vilmorin, Andrieux & Co., Paris, France. A dwarf hardy running bamboo, native to Japan, often growing only 6 to 10 inches high in warm localities but up to 2 feet in partial shade or in cooler regions. The narrow lanceolate leaves 1½ to 3½ inches long are borne 8 to 10 in number, near the tips of the culms and branches. The plant thrives in fairly moist soil and in suitable situations is useful as a ground cover. In drier locations the leaves tend to curl in hot dry weather. Because of its small size, grasslike leaves, and rampant underground rhizomes, the plant becomes a weed and is difficult to eradicate when it escapes. In proximity to a garden it is especially important to curb it. Plants furnished in lots of 5 or 10. Young plants require frequent watering. For trial in the middle and upper South and the milder parts of the Northern States. (Savannah, Ga.)

75166. PLEIOBLASTUS PUMILUS. (Sasa pumila). Bamboo. Presented by the Director, Royal Botanic Gardens, Kew, England. This form of the species differs from the preceding (P. I. No. 52673) in having nearly twice the number of leaves which often are a little wider and more crowded on the culms and branches. (Chico, Calif.)

75165. PSEUDOSASA JAPONICA (Sasa japonica). Arrow bamboo. Presented by the Director, Royal Botanic Gardens, Kew, England. A hardy ornamental Japanese bamboo of running habit, 6 to 16 feet high, with branches arising singly from the internodes of the culms. The dark-green lanceolate leaves are 5 to 12 inches long and remain

green at temperatures down to about 5° F. This handsome bamboo is useful for mass planting either in full sun or partial shade. Plants should be grown in nursery row the first year and kept well watered. Transplant to permanent situation, 6 - 8 feet apart, the following spring. For trial in the Pacific coast region and in all except the warmest parts of the South. (Chico, Calif.)

52670. SASA AURICOMA. Bamboo. Presented by Vilmorin, Andrieux & Co., Paris, France. A dwarf hardy bamboo of the running type, to 2 feet high, native to China and Japan. It is a strikingly handsome little species, having green-and-yellow striped leaves about 6 inches long by $\frac{3}{4}$ of an inch wide. It makes an exceedingly attractive ground cover in protected situations in regions where the minimum winter temperature is not much lower than 0° F. The leaves are often killed at temperatures several degrees higher but recovery of the plants in the spring is fairly rapid. Young plants require frequent watering. Because of the vigor of the underground parts of the plant it becomes weedy if the rhizomes are not prevented from spreading by a deep barrier of some sort. Plants will be furnished in lots of 3 to 10. For trial in the middle and upper South and on the Pacific coast. (Savannah, Ga.)

75162. SASA CHRYSANTHA. Bamboo. Presented by the Director, Royal Botanic Gardens, Kew, England. A hardy Japanese bamboo of running habit, producing culms up to 5 feet high, with branches from the upper nodes and with lanceolate leaves 2 to 7 inches long. The plant is useful for mass planting and as a ground cover, either in full sun or in partial shade, and is evergreen at temperatures down to about 10° F. Even when killed back it recovers well in the late spring. Plants furnished in lots of 5. (Supply limited.) For trial in the middle and upper South and the mildest parts of the Northern States. (Chico, Calif.)

52674. SASA PYGMAEA. Bamboo. Presented by Vilmorin, Andrieux & Co., Paris, France. One of the smallest of known bamboos, often growing only 6 to 10 inches high. It is of the hardy running type and is a native of Japan. The leaves, 1 to 2 inches long, are green above and whitish pubescent beneath. The cold resistance of the plant is about the same as that of *Sasa auricoma* and the habits and cultural requirements are also much the same. Plants furnished in lots of 3 to 10. For trial in the middle and upper South and on the Pacific-coast. (Savannah, Ga.)

52671. SEMIARUNDINARIA FASTUOSA. (*Arundinaria fastuosa*.) Narihira bamboo. Presented by Vilmorin, Andrieux & Co., Paris, France. An exceptionally handsome, hardy bamboo up to 22 feet high, native to Japan. It is of running habit but the rhizomes are less rampant than those of most hardy bamboos. The smaller culms are densely clothed for almost their entire length by the dark-green lanceolate leaves, which are up to 7 inches long and borne on numerous upright branches. Taller culms, as in other bamboos, are without branches on the lower part. An area at least 12 to 15 feet across is required for the ultimate production of full-sized culms. The plant withstands a minimum temperature of 0° F. with little injury to the foliage but is killed back to the ground at a few degrees lower. Young plants must be watered very frequently in dry weather during the entire first season. Plants will be furnished singly, or in lots up to 15 where desired for propagation. For trial from Philadelphia southward and on the Pacific coast. (Savannah, Ga.)

