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INVENTORY No.



Washington, D. C.

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Issued November, 1927

PLANT MATERIAL INTRODUCED BY THE OFFICE OF FOREIGN PLANT INTRODUCTION, BUREAU OF PLANT INDUSTRY, DURING THE PERIOD FROM JULY 1 TO SEPTEMBER 30, 1925 (NOS. 64429 TO 65047)

CONTENTS

| | Page |
|---|------|
| Introductory statementInventoryIndex of common and scientific namesIndex of common and scientific names | _ 3 |

INTRODUCTORY STATEMENT

The Province of Manchuria, northeastern China, with an area of about 400,000 square miles, is largely an agricultural region. The winters are generally long and cold, with a minimum temperature sometimes as low as -40° F., while the summers are short and hot. Certain parts of the northwestern United States are subject to similar climatic conditions, and it is therefore of special interest that an agricultural explorer of this bureau, P. H. Dorsett, spent the greater part of the period covered by this inventory in Manchuria, with the result that large quantities of propagating material were collected. This material included such fruits as cherries, apricots, raspberries, and currents; also a number of native grasses and many miscellaneous vegetables and woody plants.

At the same time that Mr. Dorsett was in Manchuria, Doctor Fairchild was working along the northern coast of Africa and other parts of the Mediterranean countries, one of the oldest agricultural regions of the world. Among the most interesting plants sent in by Doctor Fairchild were those included in such leguminous genera as Cytisus, Genista, Hedysarum, Lotus, Medicago, Scorpiurus, and Vicia. Past experience has shown that plants from the Mediterranean region generally will thrive in the warmer sections of the Pacific States and parts of the Southwest, and many of the plants collected by Doctor Fairchild are promising, not only as forage but also as ornamentals. Among the latter were several species of iris, of value chiefly for breeding purposes, a native Moroccan grape hyacinth (Muscari sp., No. 64957), and two rockroses from Spain (Cistus spp., Nos. 65003 and 65004).

A specially selected collection of citrus-plant material (Citrus spp., Nos. 64603 to 64615) from the Botanic Garden at Buitenzorg, Java, was introduced through H. J. Webber, of the College of Agriculture at Berkeley, Calif. This included locally developed varieties and strains of oranges, shaddocks, and citrons, likely to prove of value to the citrus breeders of this country.

From the little-known region of South Australia has been received a unique collection of native shrubs of ornamental value (Nos. 64476 to 64497, 64798 to 64805). Most of these are previously unknown in American horticulture and have not been introduced previously by this office. Among the more interesting items may be mentioned *Balaustion pulcherrimum* (No. 64476), a prostrate myrtaceous shrub with rich red flowers an inch across, said to be

very rare in its native country; Chorilaena quercifolia (No. 64480), a tall rutaceous shrub, densely clothed with soft velvety hairs which assume a golden-yellow color; and Melaleuca cordata (No. 64802), a rigidly upright shrub with small round leaves and dense globular heads of small red flowers. A number of Melaleucas are already grown in the Pacific States, where their ability to grow rapidly and to resist drought, added to their ornamental quality, have made them popular.

The karoo bush (*Pentzia incana*, No. 64649) is held in high esteem in South Africa because it affords extensive pasturage for sheep. It is said to be able to withstand temperatures near zero Fahrenheit and is known to be very drought resistant. This introduction, therefore, should have special value for

the Southwest on account of its possible value as a browse plant.

The botanical determinations of introductions have been made and the nomenclature determined by H. C. Skeels, and the descriptive matter has been prepared under the direction of Paul Russell, who has had general supervision of this inventory.

ROLAND MCKEE,

Acting Senior Agricultural Explorer in Charge.

Office of Foreign Plant Introduction, Washington, D. C., May 7, 1927.

INVENTORY 1

64429. CITRUS GRANDIS (L.) Osbeck. Rutaceae. Grapefruit.

From Los Banos, Philippine Islands. Budwood presented by J. E. Higgins, College of Agriculture. Received September 9, 1925.

In a letter of September 22, 1925, to this office, T. Ralph Robinson, of the Bureau of Plant Industry, states that this pummelo was noted by W. T. Swingle some years ago at Los Banos, where trees were being grown under C. A. No. 1427. The only name given it is "Better pummelo."

64430 and 64431. CHAENOMELES SU-PERBA (Frahm) Rehder. Malaceae.

Shrubs growing in the permanent planting area at the Bell Plant Introduction Garden, Glenn Dale, Md. Numbered July, 1925, for convenience in distribution. Notes taken from the Journal of the Arnold Arboretum, volume 2, page 58.

64430. A handsome ornamental shrub which apparently is a hybrid between Chaenomeles japonica and C. lagenaria. It differs from C. japonica chiefly in the larger, but narrower, more sharply serrate, darker green leaves and in the larger deep-red flowers. From C. lagenaria it differs in the smaller leaves, the pubescent young branchlets, and in the more upright and compact habit.

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

names into harmony with recognized horticultural nomenclature.

It is a well-known fact that botanical descriptions, both technical and economic, seldom mention the seeds at all and rarely describe them in such a way as to make possible identification from the seeds alone. Many of the unusual plants listed in these inventories are appearing in this country for the first time, and there are no seed samples or herbarium specimens with ripe seeds with which the new arrivals may be compared. The only identification possible is to see that the sample received resembles seeds of other species of the same genus or of related genera. The responsibility for the identifications therefore must necessarily often rest with the person sending the material. If there is any question regarding the correctness of the identification of any plant received from this office, berbarium specimens of leaves and flowers should be sent in, so that definite identification can be made.

64430 and 64431—Continued.

64431. Forma *alba*. A form of the above with white flowers.

64432 to 64442.

From Rabat, Morocco. Bulbs collected by David Fairchild, agricultural explorer, Bureau of Plant Industry. Received July 6, 1925. Notes by Doctor Fairchild.

64432. ARISARUM VULGARE Targ. Toz

A wild aroid which occurs in large quantities in the black gumbo soils around Kenitra. The medium-sized tubers, produced in this soil, are eaten by hogs.

64433. BIARUM BOVEI Blume. Araceae.

An aroidlike Arisarum, but producing larger tubers, found in black, sticky gumbo soil, about 60 miles north of Kenitra. R. Maire, of the University of Algiers, recommended it because it grows so abundantly and because the hogs are very fond of it.

64434. GLADIOLUS BYZANTINUS Mill. Iridaceae.

From the cork forest of Mamora, near Rabat. A slender delicate species with purple-red flowers and much more grasslike in habit than the cultivated forms generally. It might give delicacy of form to hybrids.

For introduction of seeds, see S. P. L. No. 64057.

64435 to 64439. IRIS spp. Iridaceae.

64435. IRIS ALATA Poir.

A low-growing species which grows wild in the wet gumbo soils about 66 miles north of Kenitra, Morocco. It is a purple-flowered species, and R. Maire tells me it is well worth growing in our borders for its large flowers which appear, in Algeria, during October and November. It produces numerous tubers on its roots.

For previous introduction, see S. P. I. No. 64190.

64436. IRIS FONTANESII Godr.

This species is very similar to Iris tingitana, but is much lighter in color. We found wild specimens nearly 5 feet high near Boulhaut, northern Morocco. Both of these species being bulbous, with their resting periods in the dry summer, they would be better adapted to southern California than to other iris-growing sections of the United States. These bulbs were collected by R. Maire.

64437. IRIS TINGITANA Boiss. and Reut.

Collected near Kenitra. A very tall, dark-purple species occurring wild in Tangier and along the roadsides throughout northern Morocco. At Kenitra the Arabs brought in armfuls of this iris, and under the electric light they appeared almost black.

64432 to 64442—Continued.

64438 and 64439. IRIS SDD.

Two bulbous species, bearing blue flowers, found along the roadside between Meknes and Rabat.

64438. IRIS Sp.

The plants of this species are 16 inches tall.

64439. IRIS sp.

A dwarf iris about 8 inches high.

64440. LEUCOJUM AUTUMNALE L. Amaryllidaceae.

A graceful white-flowered bulbous plant about a foot high which occurs in sandy soil in the forest of Mamora. It should be useful as a border plant in southern California.

64441. Narcissus viridiflorus Schousb. Amaryllidaceae.

These bulbs were collected from the edge of a diya, or rainy season pond. R. Maire informs me that the flowers are clear green and that the plant is well worthy of cultivation by amateurs.

64442. SCILLA PERUVIANA L. Liliaceae.

Collected in the forest of Mamora. A very attractive plant worthy of naturalizing in the dry sandy soils in the oak forests of southern California, where conditions are similar to those of the cork-oak forest of Mamora. Its large hemispherical violet-blue inflorescence exhaics a delicate odor of ether.

For previous introduction, see S. P. I. No. 63483.

64443. CARPOTROCHE BRASILIENSIS (Raddi) Endl. Flacourtiaceae.

From Bello Horizonte, Minas Geraes, Brazil. Seeds presented by Alvaro da Silveira, Chefe da Commissão Geographica e Geologica de Minas Geraes. Received September 18, 1925.

This tree is known here in Minas Geraes as "canudo de pita" or "sapucainha." From the seeds is prepared an ointment used for skin affections and a sirup said to cure leprosy. (Silveira.)

64444 to 64447.

From Harbin, Manchuria. Seeds collected by P. H. Dorsett, agricultural explorer, Bureau of Plant Industry. Received September 22, 1925. Notes by Mr. Dorsett.

64444. BETULA JAPONICA Siebold. Betulaceae. Birch.

No. 4001. August 12, 1925. Collected by B. W. Skvortzow from trees growing in the parks. This is one of the common trees in this region; so far we have not seen any very large trees.

For previous introduction, see S. P. I. No. 39489.

64445. PRUNUS JAPONICA Thunb. Amygdalaceae. Cherry.

No. 3909. August 8, 1925. Obtained from a plant in B. W. Skyortzow's garden. The small bright-red fruits, appearing at this time of the year, make this an attractive ornamental shrub. The fruit is not very good to eat when fresh, but is used for making jams and preserves.

For previous introduction, see S. P. I. No. 60983.

64444 to 64447—Continued.

64446. PRUNUS Sp. Amygdalaceae. Plum.

No. 3918. August 8, 1925. From B. W. Skvortzow's garden. This is the common yellow plum which grows here; Mr. Skvortzow thinks it is not a native species.

64447. Rosa sp. Rosaceae. Rose

No. 3862, August 4, 1925. Rose hips obtained from plants growing in the new Russian cemetery.

64448. Prunus sp. Amygdalaceae.

From Choni, Kansu, China. Seeds collected by J. F. Rock, Arnold Arboretum, Jamaica Plain, Mass. Received September 28, 1925.

Nos. 12432 and 12527. July, 1925. A bush cherry which grows wild on the mountains around here; it is 6 to 10 feet high, occasionally higher. It has dark-green glabrous leaves and long pink tubular flowers. (Rook.)

64449. Allium cepa L. Liliaceae.

Onion.

From Palma, Majorca, Balearic Islands, Sceds purchased by David Fairchild, agricultural explorer. Bureau of Plant Industry, with the Allison V. Armour expedition. Received September 30, 1925.

No. 202. August 23, 1925. The giant flat onion. A white variety which is an amazing onion as seen in Iviza, for it measures 6 inches in diameter and is only 2½ inches thick. The special manner of using it, which we found very good, is to boil the onion intact and serve singly on a plate with a dressing of oil and vinegar, such as is made for lettuce. (Fairchild.)

64450. Gossypium hirsutum L. Malvaceae. Cotton.

From Tucuman, Argentina, Seeds presented by W. E. Cross, director, Tucuman Experiment Station. Received July 28, 1925.

Selected seed which is the result of a few years' selection from the conglomerate generally cultivated in this country. This cotton is known as the Chaco variety. (G. L. Faucett. Acting Director, Tucuman Experiment Station.)

64451 to 64475.

From Manchuria. Seeds collected by P. H. Dorsett, agricultural explorer, Bureau of Plant Industry. Received July 22, 1925.

64451. AMARANTHUS PANICULATUS L Amaranthaceae.

No. 3138. June 1, 1925. Hsi fau ku or yu tze ku (fish-egg millet). This seed was procured from a farmer about 1½ miles from Ertiengtientze. The Chinese women of this vicinity pop the seed in a small iron ladle which is heated over a charcoal fire. (Dorsett.)

64452. Anemone Chinensis Bunge. Ranunculaceae.

No. 3100. Ertiengtientze. June 1, 1925. A rather attractive herbaceous plant, which grows on the hillsides on more or less level land. The flower stems are 18 to 20 inches high, and the flower or seed heads are similar to those of the dandelion.

64451 to 64475—Continued.

64453. CAREX sp. Cyperaceae. Sedge.

No. 3301. Harbin. June 14, 1925. Found in exposed dry places in the new Russian cemetery.

64454. FALCATA JAPONICA Oliver. Fabaceae.

No. 3131. June 1, 1925. A small leguminous vine growing in thick shrubby places on the hills about Ertiengtientze.

64455 and 64456. HIEROCHLOE GLABRA Trin. Poaceae. Grass.

64455. No. 3016. Harbin. May 23, 1925. Collected from plants growing in one of the small parks just at the top of the hill, en route from Fuchiatien to New Town.

64456. No. 3020. Harbin. May 24, 1925. Collected in the new Russian cemetery. This grass is peculiar in that the fruiting stalk contains practically no leaves. It is not a bunch grass and apparently spreads not only by seeds but through siender underground shoots.

64457 and 64458. LONICERA PRAEFLORENS Batal. Caprifoliaceae. Honeysuckle.

64457. No. 3083. Ertiengtientze. June 1, 1925. An edible-fruited honeysuckle which grows in the shade of good-sized trees. The fruits, about the size of peas, are bright red.

64458. No. 3266. Hungtaohotze. June 10, 1925. Obtained from plants growing in rather open timberland on the mountain ridges in one of the V. F. Kavolsky forest concessions. We ate quite a few of these fruits and can say that while they are not excellent we have eaten worse.

64459 and 64460. PANICUM MILIACEUM L. Poaceae. Proso.

64459. No. 3137. June 1, 1925. A glutinous red-sceded variety procured from a Chinese farmer about 13/2 miles to the northeast of Ertienstientze.

64460. No. 3140. June 1, 1925. A very dark, almost black shiny-seeded variety obtained from a Chinese farmer about 1½ miles northeast of Ertiengtienize.

64461. Pon sp. Ponceae. Gras

No. 3299. Harbin. June 14, 1925. Collected in a dry exposed place in the new Russian cemetery.

64462. Prunus sp. Amygdalaceae. Cherry.

No. 3174. Harbin. June 4, 1925. Yen tai ying tao (Chefoo cherry) obtained in the market and said to have been shipped in from Chefoo. The seeds are rather large and appear to be somewhat different from the ordinary cherry.

64463 to 64472. ULMUS spp. Ulmaceae.

64463. ULMUS MACROCARPA Hance.

No. 3156. Ertiengtientze. June 1, 1925.

64464 and 64465. ULMUS PUMILA L.

64464. No. 2986. May 20, 1925. Collected from trees, exposed to drought and severe cold, growing

64451 to 64475—Continued.

on a sandy knoll a mile or so to the north of Harbin, in bottomland across the Sungari River.

64465. No. 2995. May 22, 1925. Obtained from trees growing in the old Russian cemetery, located about two blocks east of the American legation. These trees are better shaped than the others.

64466 and 64467. ULMUS JAPONICA Sarg.

64466. No. 3072. May 31, 1925. Obtained from a tree located on the southwestern slope of the hill near Ertiengtientze. The leaves of this tree are more or less rough, and the fruits are small.

64467. No. 3127. Ertiengtientze. June 1, 1925.

64468 to 64471. ULMUS PUMILA L.

64463. No. 3128. Ertiengtientze. June 1, 1925. An attractive tree with pendulous branches.

64469. No. 3129. June 1, 1925. Collected on the hillside northeast of Ertjengtientze.

64470. No. 3132. Ertiengtientze. June 1, 1925. More or less cork was found on the branches of this tree.

64471. No. 3267. June 10, 1925. Hsiao yueh hung yü shu (small-leaved red clm). This variety was obtained in the river bottom in the V. F. Kavolsky forest concession about 20 miles from Hengtao-hotze.

64472. ULMUS LACINIATA (Trautv.)
Mayr.

No. 3065. May 31, 1925. From a small tree growing on a northern mountain slope to the northerst of Erriengtientze. This species has rather long fruits and large leaves. The tree is said to be rather large, but so far we have seen only one small one.

64473 to 64475. VIOLA spp. Violaceae. Violet.

64473. VIOLA VARIEGATA Fisch.

No. 3105. Ertiengtientze. June 1, 1925. A species with cyclamenlike leaves, white along the veins, and light purple flowers.

64474. VIOLA COLLINA Bess.

No. 3106. Ertiengtientze. June 1, 1925. The large light-green leaves are produced on long stems; the stems and leaves are hairy.

64475. VIOLA Sp.

No. 3130. June 1, 1925. A wild Chinese violet found on the hillsides to the northeast of Ertiengtientze.

64476 to 64497.

From Blackwood, South Australia. Seeds presented by W. L. Wheeler, Eden Hills, through Edwin Ashby, "Wittunga." Received July 31, 1925. Notes by Mr. Wheeler.

64476. Balaustion pulcherrimum Hook. Myrtaceae.

A low prostrate chrub, native to Western Australia, with a short thick trunk, narrow rigid leaves, and large

64476 to 64497-Continued.

solitary rich-red flowers about an inch across. It is said to be very rare in its native country.

64477. Bossiaea sp. Fabaceae.

A shrub 6 to 15 feet high; very ornamental.

64478. CALOTHAMNUS CHRYSANTHERUS F. Muell. Myrtaceae.

A rather small shrub, native to Western Australia, described by Bentham (Flora Australiensis, vol. 3) as erect, with thick corky branches and thick, terete, sharp-pointed leaves 2 to 4 inches long. The chief beauty of the shrub lies in the bundles of deep-red stamens which protrude an inch or more from the yellowish flowers.

64479. Cassia Pleurocarpa F. Muell. Caesalpiniaceae.

An Australian cassia, which, according to Bentham (Flora Australiensis, vol. 2) is a tall, erect shrub with rather thick linear leaflets and loose clusters of yellow flowers, the individual flowers being about three-fourths of an inch wide.

64480. CHORILAENA QUERCIFOLIA Endl. Rutaceae.

The branches of this tall Australian shrub are densely clothed with soft velvety hairs which often assume a golden-yellow color, according to Bentham (Flora Australiensis, vol. 1). The leathery oval leaves are about 3 inches long, densely covered below with velvety hairs.

64481. Crowea Angustifolia Turcz. Rutaceae.

According to Bentham (Flora Australiensis, vol. 1) this low shrub from Western Australia has small, very narrow leaves and rather large red or white flowers about half an inch long, either solitary or in pairs.

64482. Cyanostegia angustifolia Turcz. Verbenaceae.

An erect shrub, native to Western Australia, which according to Bentham (Flora Australiensis, vol. 5) has small linear leaves and loose pyramidal panicles of small purple flowers.

64483. HAKEA LAURINA R. Br. Proteaceae.

A tall Australian shrub, 30 feet or less high, remarkable for its showy crimson flowers. These are in globular heads about 2 inches in diameter, from which the numerous golden-yellow styles protrude an inch or so in all directions.

64484 and 64485. HAKEA MULTILINEATA Meism. Proteaceae.

64484. This tall Australian shrub is closely related to the preceding (*Hakea lawina*), differing only in the venation of the leaves, the oblong shape of the flower cluster, and other minor characters.

64485. Variety rhynchocarpa, which bas beaked fruits.

64486. HELIPTERUM RUBELLUM (A. Gray) Benth. Asteraceae.

An annual composite from Western Australia, with solitary heads of red flowers. Several species of this genus

64476 to 64497—Continued.

have become popular as "everlastings." This plant is about 8 inches high, with slender hairy stems and narrow alternate leaves.

64487. HOVEA ELLIPTICA (J. E. Smith) DC. Fabaceae.

A leguminous shrub, described by Bentham (Flora Australiensis, vol. 2) as up to 10 feet in height, with slender branches, small, narrowly oval leaves, and short axillary clusters of small blue flowers. Native to Western Australia.

64488. Kunzea sericea (Labill.) Turcz. Myrtaceae.

A tall Australian shrub described by Bentham (Flora Australiensis, vol. 3) as having rigid, tortuous branches and silvery white, very stiff leaves less than an inch in length. The yellowish flowers are either solitary or in terminal clusters.

64489. LEUCOPOGON VERTICILLATUS R. Br. Epacridaceae.

The leaves of this Australian shrub are crowded at the ends of the branches in such a manner as to appear verticillate, according to Bentham (Flora Australiensis, vol. 4). The shrub is tall and erect, and the small reddish flowers are in slender spikes.

64490. Marianthus erubescens Putterl. Pittosporaceae.

A perennial twining vine with red flowers, collected in Merreden, Western Australia.

64491. MELALEUCA VIOLACEA Schauer. Myrtaceae.

A handsome shrub, native to Western Australia, which according to Bentham (Flora Australiensis, vol. 3) is low and spreading in habit, with rigid small oval leaves and terminal heads or small clusters of purple-red flowers.

64492. MELALEUCA sp. Myrtaceae.

A shrub 4 feet high.

64493. Phebalium Tuberculosum (F. Muell.) Benth. Rutaceae.

A yellow-flowered, narrow-leaved evergreen shrub from Western Australia which might be suitable for coolhouse culture in the northern United States, or perhaps for growing out of doors in the south. The plant becomes about 4 feet high and blooms early in the spring.

64494. PITYRODIA TECKIANA (F. Muell.) E. Pritz. Verbenaceae.

A low shrub, about 2½ feet high, clothed with cottony wool and thickly covered with sessile linear leaves. The green and yellow flowers are solitary or in clusters. Native to Victoria, Australia.

64495. SIDA CALYXHYMENIA J. Gay. Malvaceae.

According to Bentham (Flora Australiensis, vol. 1), this is an erect shrub, entirely covered with a whitish pubescence, with yellow flowers, solitary or in twos. Native to southern and Western Australia.

64496. THOMASIA BRACHYSTACHYS Turcz. Sterculiaceae.

A tall hairy shrub from Western Australia, which is described by Ben-

64476 to 64497—Continued.

tham (Flora Australiensis, vol. 1) having heart-shaped leaves and declusters of small white flowers. dense

64497. TRYMALIUM BILLARDIERI

A tall shrub, about 12 feet high, with broadly oval leaves and loose clusters of greenish-yellow flowers. Native to Western Australia.

64498. Gossypium Barbadense L. Mal-Cotton.

From Nassau, Bahamas. Seeds presented by F. C. M. Albury, secretary, Board of Agriculture. Received August 5, 1925.

A sample of this cotton was recently sent to England and the following report was received: Color good, staple 1% inches long, strong, rather irregular in length, and rougher than American. (Albury.)

64499 to 64501. Coix Lacryma-Jobi Ma-YUEN (Rom.) Stapf. Poaceae. Adlay.

From Manila, P. I. Seeds presented by S. Youngberg, acting director, Bureau of Agriculture. Received August 7, 1925.

The mayuen, or adlay, has attracted considerable attention as a cereal for tropical regions. According to P. J. Wester, it is better than upland rice for tropical agriculture in being more drought resistant, a heavier yielder, and much less expensive to cultivate. The seeds can be used largely in the same manner as corn.

64499. Dark-brown ma-vuen.

64500. Light-brown ma-yuen.

64501. White ma-yuen.

64502. Gossypium sp. Malvaceae. Kidney cotton.

From San Juan, P. R. Seeds presented by C. A. Figuerva, assistant agricultural adviser, Department of Agriculture and Labor. Received August 12, 1925.

Locally grown seeds.

64503 and 64504.

From Manchuria. Seeds collected by P. H. Dorsett, agricultural explorer, Bureau of Plant Industry. Received July 17, 1925. Notes by Mr. Dorsett.

64503. ARACHIS HYPOGAEA L. Fabaceae. Peanut.

No. 3722. Harbin. July 18, 1925. This variety, the smallest we have seen since arriving here, is said to have been shipped in from Kalgan, Chihli Province.

64504. ULMUS PUMILA L. Ulmaceae.

No. 3395. Tsitsihar. June 22, 1925. This may prove to be more cold resistant in the northern United States than the type now growing there.

64505 and 64506. Fragaria spp. Rosa-Strawberry.

From Dundas, New South Wales. presented by Herbert J. Rumse ceived July 31, 1925. Notes Plants Rumsey. Mr. bу Rumsey.

Varieties not offered by American nurserymen.

64505 and 64506—Continued.

64505. FRAGARIA Sp.

Fendalcino (Etters). This is a solid-fruited variety with very robust foliage. The berries, deep red and of fine size, are produced in regular crops well into the summer. The plants stand drought well, and this promises to be a magnificent commercial variety as well as one for the home garden. for the home garden.

64506. Fragaria sp.

Illawarra. This variety, as the name implies, is a local seedling. It is said to be a cross between an American variety called Gandy, which it somewhat resembles, and Cresswell's Seedling. The fruit of Illawarra is particularly handsome, its prominent seeds studding the enormous fruits like jewels. The large bright-green cap makes it very handsome, and it is no uncommon event to find from one to six large fruits in a bunch, each weighing from 1 to 2 ounces.

64507. SACCHARUM OFFICINARUM Poaceae. Sugar cane.

From Santiago de las Vegas, Cuba. Cut-tings presented by Gonzalo M. Fortún, director. Estación Experimental Agronó-mica. Received September 22, 1925.

A locally grown strain.

64508 and 64509.

From Jalisco, Chiapas, Mexico. Seeds presented by C. A. Purpus, Zacuapam, Huatusco, Vera Cruz, Mexico. Received Auusco, Vera C gust 7, 1925.

64508. Annona muricata L. Annonaceae. Soursop. A local variety.

64509. Gossypium sp. Malvaceae. Cotton. A variety grown in Oaxaca, Mexico.

64510. Mimusops Zeyheri Sond. potaceae.

From Pretoria, Transvaal, Union of South Africa. Seeds presented by I. B. Pole Evans, chief, division of botany. Re-ceived August 12, 1925.

Moepel.—This magnificent shade tree is Moepel.—This magnificent shade tree is evergreen and bears an edible fruit with which H. L. Shantz was very much taken when he was last here. It grows along the western slopes of the Magaliesburg Range and extends from Pretoria westward to Zeerust. (Pole Evans.)

According to Harvey and Zonder (Flora Capensis, vol. 4, sec. 1, p. 441), this tree has long-stemmed narrow leaves about 4 inches long, and edible drupes, about an inch long, with sweet-flavored flesh.

For previous introduction, see S. P. I. No. 50165.

64511. Canavali plagiosperma Piper. Fabaceae.

From Port of Spain, Trinidad, British West Indies. Seeds presented by W. G. Free-man, director, Department of Agricul-ture. Received August 14, 1925.

This plant, known here under the name of Canavalia gladiata, is a weak climber

and is usually grown as a bush bean. appears to be intermediate between C. gladiata and C. ensiformis. (Freeman.)

previous introduction, see S. P. I. No. 52861.

64512. Crotalaria sp. Fabaceae.

From Southern Provinces, Nigeria, Africa. Seeds presented by D. H. Urquhart, su-perintendent of agriculture, Umuahia Agricultural Station. Received August 10, 1925

Introduced for trial as a cover crop in the United States.

64513. HELIANTHUS TUBEROSUS L. AS-Jerusalem artichoke.

com Auckland, New Zealand. Tubers purchased from Arthur Yates & Co. Re-ceived August 19, 1926.

Locally grown tubers.

64514 to 64517. SACCHARUM OFFICI-NARUM L. Poaceae. Sugar cane.

From Rio de Janeiro, Brazil. Cuttings presented by Antonio Carlos Pentana, director, General Experiment Station, Campos. Received August 25, 1925.

Locally grown strains.

64514. 2443-C.

64516. 4473-C.

64515. 3100-C.

64517. hh75-C.

64518. Dahlia sp. Asteraceae.

From Cayoacan, D. F., Mexico. Cut presented by Mrs. Zelia Nuttall. ceived February 14, 1925. Num Cuttings Numbered July, 1925.

A giant or tree dahlia, up to 20 feet in height, with great panicles of single rosy mauve blossoms. (Nuttall.)

The tree dahlias are native to tropical America and are tropical in cultural requirements.

64519. Garcinia mangostana L. Clusi-Mangosteen. aceae.

rom Paris, France. Seeds purchased from Vilmorin-Andrieux & Co. Received August 27, 1925. From

Mangosteen seeds introduced for testing in the tropical dependencies of the United States

For previous introduction, see S. P. I. No. 61301.

64520 and 64521.

From San Remo, Italy. Seeds presented by Mario Calvino, Stazione Sperimentale di Floricultura. Received August 19, 1925. Notes by Doctor Calvino.

64520. Lotus sp.

A very rare leguminous plant, about 1 meter in height, suitable for growing in wet soil.

64521. PSORALEA BITUMINOSA L. Faha-

leguminous perennial which thrives in dry calcareous soil. It has blue flowers and is native to the Mediterranean countries.

64522 to 64526.

From Kotgarh, Simla Hills, Punjab, India. Seeds collected by S. E. Stokes and Richard B. Gregg. Received August 20, 1925. Notes by Mr. Gregg.

64522. ELEUSINE CORACANA (L.) Gaertn. Poaceae. Ragi.

July 4. 1925. Local native name, Koda.

64523. HORDEUM VULGARE PALLIDUM Seringe. Poaceae. Six-rowed barley.

July 3, 1925. A bearded barley.

64524. HORDEUM sp. Poaceae. Naked barley.

July 3, 1925. Beardless barley.

64525. TRITICUM AESTIVUM L. (T. vulgare Vill.). Poaceae. Common wheat.

July 15, 1925. Red winter wheat which ripened about June 1, 1925. These seeds are the best kernels from 17 selected ears.

64526. Zea mays L. Poaceae. Corn. June 20, 1925. Maire, a relatively quick-ripening variety.

64527 to 64530.

From Westport, West Coast, New Zealand. Seeds presented by D. McLellan, Sergeants Hill. Received August 20, 1925.

64527. DANTHONIA PILOSA R. Br. Posсеяе.

In Australia this is considered an excellent pasture grass; it seeds freely and gives good fodder in early spring.

For previous introduction, see S. P. I. No. 49017.

64528. HOLCUS SORGHUM SUDANENSIS (Piper) Hitchc. Poaceae. Sudan grass.

A local strain. For previous introduction, see S. P. I. No. 50781.

64529. Poa sp. Poaceae.

64530. TRIFOLIUM SUBTERRANEUM L. Subterranean clover. baceae.

Experiments carried on by the Office of Forage-Crop Investigations and by State experiment stations in cooperation with this department during 1921 and 1922 have established the fact that this clover will survive the winter as far north as Knoxville, Tenn. At this station, as well as several others, the plants from fall seeding made some growth in the fall, held their own during the winter, and made a rapid and heavy growth early in the spring of 1922. This clover made a strong growth on sandy land at McNeill, Miss.; in this case finely ground bone meal had been used as fertilizer. Preliminary trials have been encouraging, and the department is making further tests. (A. J. Picters, Bureau of Plant Industry.)

For previous introduction, see S. P. I.

For previous introduction, see S. P. I. No. 55707.

64531 to 64535. CROTALARIA Spp. - Fabaceae.

From Nairobi, Kenya Colony, British East Africa. Seeds presented by J. McDon-ald, Scott Agricultural Laboratories.

64531 to 64535—Continued.

Received August 22, 1925. Notes by Mr. McDonald.

A collection of crotalarias introduced for testing as cover-crop plants in the southern United States.

64531. CROTALARIA JUNCEA L. Sunn hemp.

No. 1. An erect yellow-flowered annual, 4 to 5 feet high, native to tropical nual, 4 to 5 feet high, native to tropical Asia generally. It is cultivated in many places in India and also in northern Ceylon for the sake of the strong and useful fiber obtained from the stems. This fiber is used in India for making coarse canvas, cordage, and fishing nets, and an average yield is about 640 pounds an acre. A light rich soil is considered best for growing this plant, although with cultivation it may be grown on almost any soil. almost any soil.

For previous introduction, see S. P. I. No. 44124.

64532. CROTALARIA INTERMEDIA Kotschy.

No. 2. From the Scott Agricultural Laboratories.

64533. CROTALARIA Sp.

No. 3. Collected on a roadside in the forest, Mile 8, Londiani, Eldoret Road.

No. 4. Collected in a rather dry situation along a roadside.

64535. CROTALARIA DILLONIANA Baker.

No. 5. From Muhoroni. A low erect herbaceous plant with pale-green trifoliate leaves and purple-striped yellow flowers in dense terminal racemes up to 6 inches in length.

64536. Combretum coccineum (Sonner.) Lam. Combretaceae.

From Addis Ababa, Abyssinia. Seeds presented by Charlotte Lambie, through H. V. Harlan, Bureau of Plant Industry. Received August 31, 1925.

A handsome woody climber from Madagascar with narrow evergreen leaves and small but brilliant-red flowers; these are in loose spikes or panicles and are characterized by long exserted stamens. It should be tried in the southern end of Florida.

64537. Cuphea balsamona Cham. and Schlecht. Lythraceae.

From Bahia, Brazil. Seeds presented by Rev. P. Camillo Torrend, Collegio Antonio Vieria. Received August 25, 1925.

According to an article published in Chacaras E Quintaes (vol. 31, p. 426, May 15, 1925) by Father Torrend, this plant has acquired an excellent reputation in southern Brazil as forage. Even when other fodder plants are abundant, cattle are said to consume with avidity the "barba de San Pedro," as it is called.

64538. Vitis sp. Vitaceae.

From Ambato, Ecuador. Cuttings presented by Augusto H. Martinez, Escuela de Agri-cultura. Received September 9, 1925.

When at Ambato in February of this year [1925] I saw this grape growing in the quinta La Liria, belonging to the Martinez family. Augusto Martinez informed me that this plant was brought to Ambato

49175 - 27 - 2

from the region of Santo Domingo de los Colorados, where it grows wild. Due probably to the cool climate of Ambato, as compared with that of Santo Domingo (which lies at a low elevation on the western slope of the Andes), the plant fails to produce fruit at La Liria, but it vegetates luxuriantly and flowers profusely.

In general appearance the plant resembles Vitis caribaea, yet I believe it to be distinct from that species. Don Augusto says that it bears an edible fruit of good quality and that it may prove to be of value in connection with the development of new grapes for tropical regions. It should be planted in Florida and the West Indies for use in breeding work. (Wilson Popenoe, Bureau of Plant Industry.)

64539. Fragaria sp. Rosaceae.

Strawberry.

From Hingan, Manchuria. Seeds collected by P. H. Dorsett, agricultural explorer, Bureau of Plant Industry. Received Au-gust 25, 1925.

No. 3583. July 3, 1925. A fra very pleasant odor. (Dorsett.) A fruit having

64540. Triticum aestivum L. (T. vulgare Vill.). Poaceae. Common wheat.

From Angers, France. Seeds presented by F. R. Godineau. Received September 14, 1925.

This variety is the Early of Milly, which is a selection of Gentile Rosse. It has a rougher straw and a longer spike than the latter and is more accustomed to the cold weather, having been grown in the north of France for several years. (Godineau.)

64541. Funtumia elastica (Preuss) Stapf. Apocynaceae.

Lagos rubber tree.

From Paris, France. Seeds purchased from Vilmorin-Andrieux & Co. Received Sep-tember 19, 1925.

A large forest tree which is very widely distributed throughout central Africa and is the source of the Lagos rubber of commerce.

For previous introduction, see S. P. I. No. 61491.

64542. Hevea brasiliensis (H. B. K.) Muell. Arg. Euphorbiaceae.

From Bayeux, Haiti. Seeds presented by L. G. Polhamus, Bureau of Plant In-dustry. Received September 23, 1925.

The Para rubber tree, native to Brazil and now extensively cultivated in the East Indies, has always ranked as the principal and most important rubber-producing

tree in the world.

In 1922 the world's production of rubber amounted to 379,200 tons, of which 354,980 tons, or 93 per cent, came from this source. (Alfred Keys, Bureau of Plant Industry.)

For previous introduction, see S. P. I. No. 57943.

64543 to 64546. Gossypium spp. Mal-Cotton. vaceae.

om Papeete, Tahiti, Society Islands. Seeds presented by Père Emmanuel Rougier. Received September 10, 1925. Notes by Père Rougier.

Locally developed varieties.

64543 to 64546—Continued.

64543 and 64544. Gossypium barbadense L.

64543. Matafifi. Introduced here recently as Algerian cotton.

64544. Tahiti cotton, which is probably a hybrid of several species introduced into this colony. Our agricultural expert, Mr. Brugiroux, thinks it is the variety best suited for our needs.

64545. Gossypium sp.

Caledonian. From New Caledonia and New Hebrides; recently introduced.

64546. Gossypium sp. Kidney cotton.

Taone, which is probably a hybrid of several species introduced into this colony.

64547. Capsicum annuum L. Solanaceae. Red pepper.

From Mahon, Minorca, Balearic Islands. Seeds collected by David Fairchild, agricultural explorer, Bureau of Plant Industry, with the Allison V. Armour expedition. Received September 30, 1925.

No. 218. August 24, 1925. A superbvariety discovered by Mr. Armour in the little market at Mahon. It is 4 inches long, 2 inches in diameter, and of a conical shape almost identical with that of the Hachiya variety of Japanese persimmon. The color is exceptionally clear and attractive, and the flavor is excellent. (Fairchital.)

64548. Illecebrum verticillatum L. Silenaceae.

From Rabat, Morocco. Roots collected by David Fairchild, agricultural explorer, Bureau of Plant Industry. Received June 29, 1925. Numbered July, 1925.

A tall graceful plant which is a perennial occurring in the cork forests around Boulhaut, northern Morocco. The pendent white flowers are produced in April, and the bulbs are subjected to six months of drought in the sandy-argillaceous soils of this region. These roots were found by R. Maire near an outcropping of rocks called Socrat en Nemra. (Fairchild.)

64549. Asparagus altissimus Munby. Convallariaceae.

From Marrakesh, Morocco. Seeds presented by Auguste Tornezy, inspector of agriculture, Marrakesh, through David Fairchild, agricultural explorer, Bureau of Plant Industry, with the Allison V. Armour expedition. Received September 30, 1925.

No. 187. June 1, 1925. A tall-growing, slender species, probably from the Great Atlas Mountains, which may prove of value as a greenhouse plant for its attractive sprays. (Fairchild.)

64550 to 64552.

From Kotgarb, Simla Hills, Punjab, India. Seeds collected by S. E. Stokes and Richard B. Gregg. Received July 18, 1925. Notes by Mr. Gregg.

64550. Brassica sp. Brassicaceae.

June 4, 1925. Baraf Gobi (snow cabbage) is planted the end of June, during the early rains, and matures in the late

64550 to 64552—Continued.

autumn. It is not cut and gathered like our cabbage, but is left in the field, and the leaves are broken off and used as needed, as are those of spinach and chard. This cabbage remains green all during the snows, and only attains its best flavor after the first frosts and snows. It therefore furnishes fresh greens during the winter, even as late as April.

64551. TRITICUM AESTIVUM L. (T. vul-yare Vill.). Poaceae. Common wheat.

June 2, 1925. Kotyarh, red-bearded winter wheat, is planted in this region during September and October and ripens during the latter part of May. It has a strong stem, does not lodge easily, and endures heavy snows. It is especially liked because it does not tend to sprout during the heavy rains which are apt to occur during the harvest season.

64552. ZEA MAYS L. Poaceae. Corn.

June 8, 1925. This variety of maize ripens very quickly compared with most other varieties, as it is planted after the other corn has gotten a good start, and ripens about the same time. It is planted about the first week in June and ripens in about 90 days. Compared with the American corn, the kernels are small.

64553 and 64554. Hedysarum spp. Fabaceae.

From Oran, Algeria. Seeds presented by Herbier A. Faure. Received July 20, 1925.

64553. HEDYSARUM CAPITATUM Desf.

An annual ascending leguminous plant with purple flowers. Native to the Mediterranean countries.

64554. Hedysarum Pallidum Desf.

A perennial procumbent leguminous plant, native to northern Africa, where it thrives on steep hillsides.

64555. ARUNDINARIA ALPINA Schum. Poaceae. Bamboo.

From Nairobi, Kenya Colony, British East Africa. Seeds presented by the conservator of forests, Forest Department. Received July 17, 1925.

A bamboo with narrow leaves about 3 inches long and less than half an inch wide and large lax panicles composed of small spikelets a little more than an inch in length.

64556. Prosopis Nandubey Lorentz. Mimosaceae.

From Montevideo, Uruguay. Seeds presented by Luis Guillot, director técnico, Dirección General de Paseos Publicos. Received July 25, 1925.

A Uruguayan tree which, according to Arechavaleta (Flora Uruguaya, vol. 1, p. 419), is considered valuable timber because of the great durability of the wood which is used for various industrial purposes. The numerous small flowers appear in the spring, and the sickle-shaped pods inclose pulp of acid flavor.

For previous introduction, see S. P. I. No. 57936.

64557. OMPHALEA OLEIFERA Hemsl. Euphorbiaceae

From Moyuta, Guatemala. Seeds presented by Francisco Morcucci. Received July 27, 1925.

This Central American tree, known in Guatemala as palo de queso and hoja de queso, is called tambor in Salvador, according to Standley (Pharmaceutical Journal, vol. 110, p. 489). The main value of the tree lies in the fruit and seeds. From the latter is obtained an oil with the same properties as castor oil, but with an agreeable flavor. This oil is also used for making soap, for illumination, and in cooking. The immature fruits when boiled are said to have an excellent flavor, and the ripe seeds are eaten as a delicacy.

64558. VIROLA GUATEMALENSIS (Hemsl.) Warburg. Myristicaceae.

From San Antonio Sachitepequez, Guate-mala. Seeds presented by Jorge G. Salas, director general de agricultura, City of Guatemala. Received July 27, 1925.

A Central American tree which, according to O. Warburg (Monographie der Myristicaceen, p. 220), bears fruits which yield a valuable oil. The natives of Guatemala collect the oil for making soap and capables. candles

64559. PSIDIUM GUAJAVA L. Myrta-Guava ceae.

om Victoria, Cameroon, West Africa. Seeds presented by F. J. Evans. Re-ceived July 27, 1925. From

exceptionally good white variety. (Evans.)

64560 to 64565.

rom Kenitra, Morocco. Seeds presented by Gaston Durand, inspecteur d'agricul-ture. Received July 27, 1925. From Kenitra, Morocco.

64560. Anchusa undulata L. Boraginaceae.

A hardy perennial, about 2 feet high, with panicled clusters of purple flowers. It is native to Spain and thrives best in sunny locations.

64561. LAVATERA Sp. Malvaceae.

A number of lavateras have very showy flowers, sometimes 2 to 4 inches across, and variously colored. They are either herbaceous or shrubby and mostly native to the Mediterranean countries.

64562, MALCOMIA LITTOREA Ait. caceae.

An annual branching plant, a foot or less in height, with large showy pink-purple flowers in loose racemes. It is native to the western Mediterranean countries.

64563. Malope sp. Malvaceae.

These are showy annuals belonging to the mallow family, all native to the Mediterranean region. In height they range from 1 to 3 feet, and the flowers are violet, pink, or white.

64564. Trifolium sp. Fabaceae. Clover.

64565. IRIS TINGITANA Boiss. and Reut. Iridaceae.

An iris originally discovered in the vicinity of Tangiers, Morocco, whence it was introduced into cultivation several

64560 to 64565—Continued.

years ago. The stout stems, about 2 feet high, are one or two-headed, and the flowers are borne in clusters of two or three. The standards are bright lilae, about 3 inches long, and the falls are flushed with yellow in the center. Introduced for iris breeders.

64566. Bauhinia esculenta Burchell. Caesalpiniaceae.

From Kirstenbosch, Cape Province, Union of South Africa. Sceds presented by R. H. Compton, director, National Botanic Garden. Received July 27, 1925.

The "Tamani berry" or "Gemsbok bean," native to South Africa, is described in the Journal of the Department of Agriculture of the Union of South Africa (vol. 8, p. 613) as a leguminous plant whose seeds form the staple diet of the Kalahari bushmen; animals are also very fond of the seeds, which are excellent for fattening. The seed kernels are rich in protein and oil, the latter resembling cottonseed oil.

64567. Saccharum officinarum T. Sugar cane. Poaceae.

From Santiago de las Vegas, Cuba. Cuttings presented by Gonzalo M. Fortún, director, Estación Experimental Agronómica, through E. W. Brandes, Bureau of Plant Industry. Received August 7, 1925.

A locally grown strain.

64568 to 64586.

From China. Seeds collected by F. A. Me-Clure, agricultural explorer, Bureau of Plant Industry. Received July 28, 1925. Notes by Mr. McClure.

64568. Myrica Rubra Sieb. and Zucc. Myricaceae.

Myricaceae.

No. 168. Shuisaits'uen, Lohkongtung.
May 23, 1925. Yeung mui. This is a
very handsome tree, averaging 5 or 6
meters in height, with dark-green glossy
foliage which sets off to fine advantage
the bright-red to pink fruits. The fruits
are globular in shape and quite acid in
flavor. Owing to their fragility and peculiar structure they do not ship well,
but small leafy branches distributed
among them as they are placed in the
baskets are said to protect them somewhat. The fresh fruits are too soft to
appeal to the Chinese palate, and they
are used for the most part in much the
same manner as the Tsing mui (Prunus
mume), that is, salted and dried.

64569 to 64582. Prunus mume Sieb, and

64569 to 64582. PRUNUS MUME Sieb, and Zuec. Amygdalaceae. Japanese apricot.

Zucc. Amygdalaceae. Japanese apricot.

Tsing mui. The fruits of this group are so sour that they are rarely eaten fresh. The most common method of treatment is to place them in large wooden vats having a capacity of nearly 400 cubic feet, with salt at the rate of 1.3 pounds of salt to 10 pounds of fruit. By means of mats and stones the fruits are weighted down and kept in this condition for 10 days or so. They are then spread out on bamboo trays and dried in the sun. When dry they are white with an incrustation of salt. They may be kept indefinitely in this condition so long as they are kept dry. They are used by confectioners to make a great variety of confections, most of which have as their chief flavoring principles licorice and saccharine.

64568 to 64586—Continued.

The following material was obtained during the middle of May, 1925, from trees growing in the Canton Christian College orchards:

64569. No. 152. Taai wat tsing mui.

64570. No. 153. Ngoh shue mui.

64571. No. 154. Waang wat mui.

64572. No. 155. Taai mui. This variety is distinguished from the other memis distinguished from the other members of the tsing mui group by the following characteristics: It has larger, almost circular leaves with long acuminate tips, the fruits are larger than the average size, and the branches are fewer and stouter.

64573. No. 156. This variety is said to be identical with *taai mui*, No. 155 [S. P. I. No. 64572].

No. 157. Wong mui. I find that on the markets the name wong mui (yellow mui) is applied only to those that have turned yellow in ripening.

64575. No. 158. *Taai wat tsing mui.* The same as No. 152 [S. P. I. No. 64569], but from trees with a different ancestry.

64576. No. 159. Ngoh shue mui. This material is the same as No. 153 [S. P. I. No. 64570], but from trees with a different ancestry.

64577. No. 160. *Waang wat mui.* The same as No. 154 [S. P. I. No. 64571], but from trees having a different ancestry.

64578. No. 161. Cha ip mui. This member of the tsing mui group is said to be distinguished from the other members by having slightly thinner skin, for which reason it bruises more easily in transit.

64579. No. 162. Waang wat mui. The same as Nos. 154 and 160 [S. P. I. Nos. 64571 and 64577], but it is from trees with a different ancestry.

64580. No. 163. *Paak uen t'au mui.* The same as No. 156 [S. P. I. No. 64573], but from trees with a different ancestry.

64581. No. 164. *Taai wat tsing mui.*The same as Nos. 152 and 158
[S. P. I. Nos. 64569 and 64575], but from trees having a different ancestry.

64582. No. 165. Hang mui chi.

64583. PRUNUS SALICINA Lindl. Amygdalaceae.

No. 167. May. 23, 1925. Hang mui. Purchased from Mr. Chung Ch'iu Chue, of Shuisaitsuen, Lohkongtung. This fruit belongs in a group with No. 169 [S. P. I. No. 64584] and is quite distinct from the tsing mui group, Nos. 152 to 165 [S. P. I. Nos. 64569 to 64582]. This tree has an upright habit not to be found in any of the other muis. The leaves are lanceolate, acuminate, and serrulate; the fruits are globular, pale yellow when ripe, and have a slightly pubescent skin. The flesh is golden yellow, mealy in texture, but rather fibrous near the seed, to which it adheres. The flesh is sweeter and more fragrant than that of any of the tsing muis, although it is slightly inferior in these respects to No. 169 [S. P. I. No. 64584].

64568 to 64586—Continued.

64584. PRUNUS SALICINA Lindl. Amygdalaceae.

64584. PRUNUS SALICINA Lindl. Amygdalaceae.

No. 169. Hung mui. Obtained during the middle of May, 1925, from trees growing in the Canton Christian College orchards. This fruit belongs in a group with hang mui, No. 167 [S. P. I. No. 64583], which is quite distinct from the tsing mui group, Nos. 152 to 165 [S. P. I. Nos. 64569] to 64582]. The tree has slender branches and a spreading habit; the leaves are lanceolate, acuminate, and serrulate, and can not be distinguished from those of hang mui. The fruits are globular in shape, and the purplish red skin is slightly pulescent. The golden-yellow flesh is slightly juicy, sweet, and fragrant, but near the seed, which is a cling, it is fibrous, sour, and bitter. By the addition of 1 part of sugar to 1 part of the flesh, including the skin, and rapidly cooking for a short time, an attractive and delicious jam may be prepared. These fruits also make excellent pies which have a spicy fragrance and flavor. The fruits are never salted by the Chinese, but are eaten fresh. They soften much more quickly after picking than do the fruits of the tsing muis or of hang mui, and are the first to disappear from the market. This is partly due to the fact that they ripen among the very first and partly to the fact that they are not good keepers.

64585. Rubus sp. Rosaceae.

No. 166. May 25, 1925. She p'aau lak. Found on a roadside in Lohkongtung, in rather loamy to sandy granite soil. A sturdy, very thorny bush, 4 to 6 decimeters high, with small layender flowers and red fruits whose large drupelets separate very readily. The flavor is fair.

64586. TRITICUM AESTIVUM L. (T. vulgare Vill.). Poaceae. Common wheat.

No. 172. June 3, 1925. Siu mak and min mak. A bearded variety obtained from the Canton Christian College farm, where it has been growing for several years. It is sown about the middle of November and harvested in March.

64587. Solanum tuberosum L. Solan-Potato.

From Paget East, Bermuda. Tubers presented by E. A. McCallan, director, Department of Agriculture. Received July 30, 1925.

Locally grown tubers.

64588. Helianthus tuberosus L. As-Jerusalem artichoke. teraceae.

From Sydney, New South Wales. Tubers purchased from Anderson & Co. Received August 11, 1925.

A locally grown white variety.

64589 to 64591. Soja Max (L.) Piper (Glycine hispida Maxim.). Faba-Soy bean. ceae.

From Buitenzorg, Java. Seeds presented by L. Koch. chief, Plant Breeding Station. Received August 5, 1925.

64589. Zwarte No. 16.

64590, Witte No. 26.

64591. Zwarte No. 27.

64592. TRIFOLIUM SUBTERRANEUM L. Fabaceae. Subterranean clover.

From Sydney, New South Wales. Seeds purchased from Foster & Sons. Received August 7, 1925.

For previous introduction and description, see S. P. I. No. 64530.

64593 and 64594.

From Teneriffe, Canary Islands. Collected by David Fairchild, agricultural explorer, Bureau of Plant Industry, with the Allison V. Armour expedition. Received August, 1925. Notes by Doctor Fairchild.

64593. SEMPERVIVUM CANARIENSE L. Crassulaceae.

July 10, 1925. Plants from the cliffs near San Juan de la Rambla, not far from Orotava. This forms an immense rosette of leaves, sometimes as much as 14 inches across, which lies perfectly flat against perpendicular walls of lava rock. When there are many they give the appearance of a lot of large green dinner plates stuck to the cliffs. From the center of these plates arise the flowering racemes, and since the dinner plates are all about to form these racemes, they swell out in the middle and become like mammae. The flower clusters are striking but not particularly beautiful, since the flowers themselves are greenish in color. These could be grown on the back-yard walls of the homes in southern California.

64594. Tamarix Gallica L. Tamarica-ceae. Tamarisk.

ceae. Tamarisk.

July 11, 1925. The use of the tamarisk as a windbreak is almost universal in Algeria, Morocco, and the Canary Islands. The form of tamarisk which one sees everywhere appears to be slightly different in Teneriffe from the form which I saw in Algiers. Cuttings of this were collected on the beach at Orotava. We discovered there that a curious slimy salty liquid was actually dripping off the leaves and branches in such quantities that one could not walk under them without ruining his clothes. Evidently the plant roots like the salty water and eliminate the salt through the leaves. I remember that Volkens discussed this feature of the tamarisk many years ago in his Egyptische Arabiche Wüste.

64595. HETEROSPATHE ELATA Scheff. Phoenicaceae. Palm.

From Manila, P. I. Seeds presented through P. J. Wester. Received August 7, 1925.

A tall, unarmed palm, with a straight, slender stem and long pinnate leaves, growing in protected situations and where the rainfall is evenly distributed. It is one of the most attractive and graceful palms that I have seen, and from my experience with it at Lamao it will make a good plant for the conservatory and possibly a good house palm. (Wester.)

For previous introduction, see S. P. I. No. 61323.

64596. RAPHANUS SATIVUS L. Brassicaceae. Radish.

From Kagoshima, Japan. Seeds presented by Shiganari Kawagoe, Kagoshima Im-

64596—Continued.

perial College of Agriculture and Forestry, through Masao Yoshikawa, Bureau of Plant Industry. Received August 11, 1925

A late variety of Sakurajima daikon (Sakurajima horse radish). All varieties of Sakurajima daikon, especially the late one, grow to giant size, often nearly 2 feet in diameter. The shape of this late variety is like a turnip, almost round, while that of the early varieties is rather long. The growth is mysteriously limited to Sakurajima Island, and in Kagoshima or the near-by villages, scarcely more than 2 miles from the island, we can not grow the real giant radish. The Sakurajima daikon is a very delicious vegetable, juicy and tender. The planting season on Sakurajima Island, for the late variety, is about the first of August. The seeds are sown in rows, 4 feet apart, and the distance between plants should be about 3 feet. (Yoshikawa.)

64597. BILLARDIERA LONGIFLORA Labill. Pittosporaceae.

From South Yarra, Victoria, Australia. Seeds presented by William Laidlaw, Government botanist, National Herbarium of Victoria. Received August 11, 1925.

A twining shrub, sometimes several feet in length, with leaves varying from oval to linear in shape and from half an inch to 2 inches in length. The blue flowers are pendulous on solitary stems an inch long. This plant grows wild along watercourses in Australia and Tasmania.

For previous introduction, see S. P. I. No. 61326.

64598. CERATONIA SILIQUA L. Caesalpiniaceae. Carob.

From La Palma, Majorca, Balcaric Islands. Scions collected by David Fairchild, agricultural explorer, Bureau of Plant Industry, with the Allison V. Armour expedition. Received September 1, 1925.

No. 188a. August 16, 1925. I found this water sprout coming up from the roots of a large tree of the Panesca variety which bore hermaphrodite flowers and an abundance of large thick pods of apparently good quality. This may prove to be slightly different from the typical Panesca. (Fairchild.)

64599 to 64601. Coix lacryma-jobi mayuen (Rom.) Stapf. Poaceae.

Adlay.

From Buitenzorg, Java. Seeds presented by P. J. S. Cramer, director, General Experiment Station. Received September 1, 1925

The ma-yuen, or adlay, has attracted considerable attention as a cereal for tropical regions. According to P. J. Wester, it is better than upland rice for tropical agriculture in being more drought resistant, a heavier yielder, and much less expensive to cultivate. The seeds can be used largely in the same manner as corn.

64599. Dioli bras.

64600. Djoli brasbruin.

64601. Djoli Hetan.

64602. Deguelia trifoliata (Lour.)
Taub. (Derris uliginosa Benth.).
Fabaceae.

From Peradeniya, Ceylon. Seeds presented by F. A. Stockdale, Director of Agriculture. Received September 1, 1925.

A stout climbing shrub, native to eastern Asia. The roots of some species of Deguella are used as fish poison in parts of India and Africa, and this Indian species is introduced for possible use as an insecticide.

For previous introduction, see S. P. I. No. 46019.

64603 to 64615. Citrus spp. Rutaceae.

From Buitenzorg, Java. Collected by H. J. Webber, College of Agriculture, Berkeley, Calif. Received August 20, 1925. Notes by Doctor Webber.

Budwood from the citrus collection at the Buitenzorg Botanical Garden.

64603. CITRUS AURANTIFOLIA (Christm.) Swingle. Lime.

No. 6. Mendado. Forma amblycarpa. Garden No. XV J. B. XI 5. A roughskinned variety.

64604. CITRUS GRANDIS (L.) Osbeck (C. decumana Murr.).

No. 4. Sumatra. Var. sphaerocarpa. Garden No. III G. 86.

64605. CITRUS MEDICA SARCODACTYLIS (Nooten) Swingle. Fingered citron.

No. 10. The Buddha-fingered citron from P. J. S. Cramer's private garden.

64606. CITRUS SD.

No. 9. A citron or lemon type, probably a hybrid, which is known to give very peculiar seedlings.

In Java I found that the citrus fruits in the market at this time of year include various types of a red or pink-fleshed shaddock and types of Mandarin oranges, some of which are fairly large and of good quality. The following numbers are of seeds taken from especially selected fruits

64607 to 64612. CITRUS GRANDIS (L.) Osbeck (C. decumana Murr.). Shaddock.

64607 to 64610. Pink-fleshed shaddock.

64607. No. 11. 64609. No. 13.

64608. No. 12. 64610. No. 14.

64611. No. 18. Deep red-fleshed variety.

64612. No. 19. Pink-fleshed variety.

64613 to 64615. CITRUS NOBILIS DELICIOSA (Ten.) Swingle. Mandarin orange.

64613. No. 15. **64614.** No. 16.

64615. No. 17. A spicy variety.

64616 to 64646.

From Leningrad, Russia. Seeds presented by B. L. Issatschenko, director, Botanic Garden. Received August 22 and 24, 1925.

64616. AESCHYNOMENE INDICA L. Fabaceae.

A bushy leguminous annual 1 to 3 feet high, with pale-green feathery leaves. Native to the Tropics. Procured for trial as fodder and as green manure.

For previous introduction, see S. P. I. No. 59294.

64616 to 64646-Continued.

64617 to 64624. ASTRAGALUS spp. Fabaceae.

64617. ASTRAGALUS ALPINUS L.

A perennial plant with ascending stems about 8 inches high. Native to the Alpine regions of central Europe.

64618. ASTRAGALUS ARMENIACUS Boiss.

A perennial cespitose plant, native to Armenia, with leaves about 4 inches long and small yellow flowers.

64619. ASTRAGALUS BOETICUS L.

An upright, often stout annual, with compound leaves usually composed of 9 to 15 pairs of very narrow leaflets and 6 to 15 pale-yellow flowers in a crowded raceme. Native to the Mediterranean countries.

For previous introduction, see S. P. I. No. 58693.

64620. ASTRAGALUS CICER L.

A European astragalus said to be valuable for forage. It is a perennial with prostrate or ascending stems.

64621. ASTRAGALUS ECHINUS DC.

A much-branched shrubby perennial, native to alpine regions in Asia Minor.

64622. ASTRAGALUS EXSCAPUS TRANSIL-VANICUS (Janka) Asch. and Graebn.

A perennial plant with very long roots and a rhizome which forms a thick mat. The stems are scarcely more than 4 inches high. Native to sunny places in the Mediterranean countries.

64623. ASTRAGALUS MACROCARPUS DC.

A perennial astragalus native to Palestine. The compound leaves consist of 12 to 15 pairs of leaflets, each about half an inch long.

64624. A S T R A G A L U S MEMBRANACEOUS (Fisch.) Bunge.

A perennial plant with hairy swollen pods, native to Spain.

64625 to 64628. ELYMUS spp. Poaceae. Grass.

64625. Elymus dahuricus Turcz.

A tall perennial ryegrass with stout erect stems, native to dry stony places in Russia and Siberia.

For previous introduction, see S. P. I. No. 36796.

64626. ELYMUS EXCELSUS Turcz.

A leafy-stemmed perennial grass with a fibrous root and narrow leaves. Native to southeastern Siberia.

64627. ELYMUS Sp.

64628. ELYMUS sp.

64629. LATHYRUS FILIFORMIS BAUHINI (Genty) Beck. (L. ensifolius Gay.). Fabaceae.

A perennial leguminous plant, a foot or two high, with a creeping rhizome. Native to the Mediterranean region.

64630. LATHYRUS INCONSPICUUS L. Fabaceae.

An annual upright or ascending leguminous plant with very slender stems up to a foot in length. Native to the Mediterranean region.

64616 to 64646—Continued.

64631. LOLIUM PERENNE L. Poaceae.

Perennial rye grass.

Received as Lolium linicolom, which is now referred to L. perenne.

64632. LOLIUM RIGIDUM Gaud. Poaceae.

An annual gray-green bushy grass with ascending stems 1 or 2 feet long. Native to southern and central Europe.

64633. Lotus hispidus Desf. Fabaceae.

A deeply rooted annual plant with usually prostrate stems, native to the Mediterranean countries.

64634. MEDICAGO FALCATA L. Fabaceae.
Alfalfa.

64635, MEDICAGO SATIVA L. Fabaceae.
Alfalfa.

64636. MISCANTHUS SACCHARIFLORUS (Maxim.) Hack. Poaceae. Grass.

A stout perennial grass with long flat leaves and terminal spreading panicles. Native to southeastern Siberia.

64637. Onobrychis Caput-Galli (L.) Lam. Fabaceae.

An annual or biennial prostrate or ascending plant with stems up to 3 feet in length. Native to dry situations in the Mediterranean region.

64638. Ornithopus pinnatus (Mill.) Druce (O. ebracteatus Brot.). Fabaceae.

An attractive annual leguminous plant about a foot and a half high, with spreading or prostrate stems. Native to the Mediterranean region.

64639. Phaseolus vulgaris L. Fabaceae. Common bean.

Locally grown beans.

64640. PISUM ELATIUS Bieb. Fabaceae.

A hardy annual, about 5 feet high, with leaves composed of one to three pairs of narrow leaflets and purple flowers. Native to woods and thickets in the alpine regions of Europe.

For previous introduction, see S. P. I. No. 58707.

64641. Soja Max (L.) Piper (Glycine hispida Maxim.). Fabaceae. Soy bean.

64642. TRICHOLAENA ROSEA Nees. Poaceae. Natal grass.

Received as Tricholaena grandiflora, which is now referred to T. rosea.

64643 to 64645. Trifolium spp. Fabaceae. 64643. Trifolium maritimum Huds.

An annual erect or decumbent branching clover from Asia Minor, where it grows in fields and along the sea coasts. The flowers are white or pale flesh color.

For previous introduction, see S. P. I. No. 59370.

64644. TRIFOLIUM PRATENSE L. Red clover.

Received as Trifolium nivale, which is now referred to T. pratense. Locally grown seeds.

64616 to 64646-Continued.

64645. TRIFOLIUM STELLATUM L.

An annual upright clover, up to a foot high, native to the Mediterranean region.

64646. TRIGONELLA CAERULEA (L.) Seringe. Fabaceae.

An annual upright plant, usually about a foot high and mostly unbranched, with bright-blue flowers having the same odor as the fenugreek (Triponella foenum-graecum). Native to the Mediterranean region.

64647. Gladiolus sp. Iridaceae.

From Old Umtali, Rhodesia, Africa. Seeds presented by E. H. Greeley. Received September 4, 1925.

A native species of possible value for plant breeders.

64648. Prunus armeniaca L. Amygdalaceae. Mikado apricot.

From Jamaica Plain, Mass. Bud sticks presented by E. H. Wilson, Arnold Arboretum. Received September 14, 1925.

A Japanese apricot under the name of "Mikado," a form of the common apricot (Prunus armeniaca), has been grown in the arboretum for several years, where it makes a small tree with erect branches and, flowering freely every spring, has proved here one of the handsomest and most satisfactory plants of its class. (Wilson.)

64649. Pentzia Incana (Thunb.) Kuntze (*P. virgata* Less.). Asteraceae.

From Middleburg, Cape Province, Union of South Africa. Seeds presented by the principal, Grootfontein School of Agriculture. Received September 10, 1925.

A low-growing, spreading bush which layers naturally when the tips of its branches arch over and touch the ground. In the eastern province of Cape Colony, where the rains occur in summer but where long, severe droughts are frequent, this is one of the most valuable of all the karoo plants for fodder purposes. It is especially good for sheep and goats, which eat it down almost to the ground. (David Fairchild.)

64650. VITIS VINIFERA L. Vitaceae. Grape.

From Bay Saint Louis, Miss. Cuttings presented by George E. Murrell, horticulturist. Southern Railway. Received July 6, 1925.

From the Ransecar farm, about 1½ miles from Bay Saint Louis; owned by Mr. Hoffman. This grape was planted by R. R. Ware, who formerly owned the farm, and, according to George C. Husmann, Bureau of Plant Industry, it closely resembles the Listan variety. (Murrell.)

64651 and 64652. Bougainvilled sp. Nyctaginaceae.

From Port of Spain, Trinidad, British West Indics. Presented by W. G. Freeman, director of agriculture. Received July 11, 1925.

A pink variety originally brought from Ecuador. (Freeman.)

64651 and 64652—Continued.

64651. Plants.

64652. Cuttings.

The bougainvilleas are showy climbing shrubs, native to South America, which are adapted for growing under glass in the North and out of doors in the Gulf States and California.

64653 and 64654. GLADIOLUS SDD. Iri-

From Kirstenbosch, Cape Province, Union of South Africa. Seeds presented by R. H. Compton, director, National Botanic Gardens, through H. L. Shantz, Burcau of Plant Industry. Received August 20, 1925. Notes by Professor Compton.

64653. GLADIOLUS CALLISTUS Bolus f

No. 498. A relatively new species which I have not had an opportunity to look up but which belongs to the Gladiolus blandus group. It is an extremely beautiful. dus group. It is an extreme, beat tall, upright-growing species of a fine

64654. GLADIOLUS RECURVUS L.

No. 499. One of the most promising of our gladioli from the hybridizer's point of view. The flowers are blue and quite fragrant. This variety is highly regarded as an ornamental, and, because of its color and perfume, should also prove valuable for hybridization.

64655. Cryptostegia MADAGASCARIENsis Bojer. Asclepiadaceae.

From Tananarive, Madagascar. Seeds presented by the Chief, Agricultural Service. Received July 1, 1925.

A climbing shrubby vine, native to Madagasar, which is grown as an ornamental in South Africa and elsewhere. The leaves are short and leathery, and the whitish or pink flowers are 2 to 3 inches wide. Of possible value as a source of rubber.

For previous introduction, see S. P. I. No. 60442.

64656 to 64660. Dioscorea spp. Dioscoreaceae.

From Rabaul, New Guinea. Tubers presented by G. Bryce, director of agriculture. Received July 6, 1925.

A collection of native yam varieties.

64656. Allah. 64659. Marut. 64657. Lama. 64660. Taniel.

64658. Maine.

64661 and 64662. Solanum spp. So-

From Lima, Peru. Tubers presented by Julio Gaudron, Escuela Agricultura, Re-ceived July 8, 1925. Notes by Wilson Popenoe, Bureau of Plant Industry.

64661. SOLANUM Sp.

Though this plant is grown at the Bo-Though this plant is grown at the Botanic Garden in Lima under the name of Solanum maglia, W. E. Safford believes it is not this species. Its tubers, which are more or less round in form and 1 or 2 inches in diameter, are of no value as food. The plant, however, is of interest to breeders for hybridizing with the true potato. potato.

For previous introduction, see S. P. I. No. 62697.

64661 and **64662**—Continued.

64662. Solanum tuberosum L. Potato.

The yellow-fleshed potato is one of the most interesting varieties found in the Andean region, home of many remarkable potatoes. The tubers are rather small and have deep eyes, so that they are not as easily prepared for the table as those of some other varieties; but in point of quality they yield to none that I have tasted. The flesh is the color of American butter and has a rich, nutty flavor suggesting that of the chestnut. It seems to me the variety might be improved, so as to do away with the objectionable eyes, and that it would then be worth extensive cuflivation.

For previous introduction, see S. P. I. No. 56803.

64663. Acacia scorpioides (L.) W. F. Wight (A. arabica Willd.). Mimo-

om Alexandria, Egypt. Plants pre-sented by W. A. Lancaster, at the re-quest of S. H. Shearer. Indianapolis, Ind. Received July 10, 1925. From

According to J. H. Holland (Useful Plants of Nigeria, pt. 2, p. 288), a large proportion of the gum arabic of commerce is furnished by this tree, which is native to northern Africa and southwestern Asia. True gum arabic, however, is said to come only from another species, Acacia senegal. The pods and bark of A. scorpioides are used for tanning, and the leaves and young pods are sometimes fed to cattle. The wood is hard and durable and is used in India for making tools.

For previous introduction, see S. P. I. No. 58379.

64664. Coix Lacryma - Jobi Ma - Yuen (Rom.) Stapf. Poaceae. Adlay.

From Peradeniya, Ceylon. Seeds presented by F. A. Stockdale, Director of Agricul-ture, Peradeniya, at the request of P. J. Wester. Received July 11, 1925.

Batangas. The ma-yuen, or adlay, has attracted considerable attention as a cereal for tropical regions. According to Mr. Wester it is better than upland rice for tropical agricultural regions in being more drought resistant, a heavier yielder, and much less expensive to cultivate. The seeds can be used largely in the same manner as corn.

64665. Prunus tomentosa Thunb. Bush cherry. Amygdalaceae.

From Rochester, N. Y. Bud sticks col-lected by C. C. Thomas. Bureau of Plant Industry. Received July 25, 1925.

Durant Park. The largest fruited and most prolific of any of the varieties in fruit in the park. (Thomas.)

64666. Eucalyptus delegatensis R. T. Baker. Myrtaceae.

From Hobart, Tasmania. Seeds presented by L. A. Evans, Secretary of Agriculture, Agricultural and Stock Department. Re-ceived September 9, 1925.

A variety, commonly called "Gum-topped stringy bark," obtained at an altitude of about 3,000 feet by J. B. Milsom, near the Great Lake. (Evans.)

This tree, originally described by Heoker under the name Eucalyptus gigantea, is reported to attain large dimensions. It is described as erect, the branches usually short and ascending, the bark thin and fibrous, and the foliage very similar to that of E. obliqua. For trial in the extreme southern United States and in California.

For previous introduction, see S. P. 1. No. 58628.

64667. NEYRAUDIA MADAGASCARIENSIS (Kunth) Hook, f. Poaceae. Grass.

From Tananarive, Madagascar. Seeds presented by the chief, Agricultural Service, Received July 15, 1925.

A tall, coarse, perennial grass, closely allied to the giant reed (Arando donaw). Although native to Madagascar, it is found in many parts of tropical Asia and Africa. The flat narrow leaves, 1 or 2 feet long, are on learly, solid stems, 6 to 10 feet high. The shining silky erect panicles are 1 to 3 feet in length. In Madagascar the leaves are said to be used for making hats.

For previous introduction, see S. P. I. No. 39690.

64668. SALVIA COCCINEA PSEUDOCOCCINEA (Jacq.) A. Gray. Menthaceae.

From Yucatan, Mexico. Seeds collected by Ernest L. Crandall, Bureau of Plant Industry. Received July 20, 1925.

A perennial sage with flowers the same shade of intense red as that of the cardinal flower (Lobelia cardinalis). The plants, which have two to five stems, vary in height from 15 to 30 inches and grow in little pockets of soil on limestone rocks in very dry sunny places. Each morning the fully opened flowers drop off before 11 o'clock. (Crandall.)

64669. Prunus incisa Thunb. Amygdalaceae.

From Jamaica Plain, Mass. Seeds presented by C. S. Sargent, director, Arnold Arboretum. Received July 20, 1925.

An ornamental Japanese cherry which is described (Arnold Arboretum, Bulletin of Popular Information, vol. 8, no. 3) as a large shrub, or sometimes a small tree, about 25 feet high. The flowers, which appear in drooping clusters before the deeply cut leaves, are white or rosy, with bright-red calyxes, and the anthers are bright yellow. The petals fall early, but the calyxes, which gradually grow brighter, remain on the young fruits for some time and are quite showy.

64670 to 64672. SACCHARUM OFFICINA-BUM L. Poaceae. Sugar cane.

From Santiago de las Vegas, Cuba. Cuttings presented by Gonzalo M. Fortún, director, Estación Experimental Agronómica. Received July 20, 1925.

Locally grown strains.

64670. Co. 205. **64672.** Co. 281. **64671.** D: 247.

64673. Musa uranoscopos Lour. (M. coccinea Andr.). Musaceae. Banana.

From Canton, China. Seeds collected by F. A. McClure, agricultural explorer, Bureau of Plant Industry. Received July 28, 1925.

No. 151. May 19, 1925. Wat chiu and shui tsiu. Obtained from a tree in an old

deserted yamen (Hok Toi Nga Moon) on Kauiufong. The plants, 4 to 5 meters high, have leaves which are longer and narrower than those of the usual cultivated bananas here. The bracts of the flowers curl, one at a time, back from the bud, exposing the brilliant-red inner surface, thus permitting the fertilization of the flowers. Unlike those of the cultivated edible banana, these bracts persist after the fruits reach maturity. The fruits are short and thick, being only 9 centimeters long, including the rather slender base by which they are attached to the stalk, and 11.5 centimeters in circumference. The skin turns a rich yellow when the fruits are ripe. The interior of the fruits is so packed with seeds that there is practically no flesh. (McClurc.)

64674 to 64719. Soja Max (L.) Piper (Glycine hispida Maxim.). Fabaceae. Soy bean.

From Kagoshinia, Japan. Seeds presented by K. Tamari, Kagoshima Imperial College of Agriculture and Forestry. Received July 23, 1925. Notes by Mr. Tamari.

64674 to 64683. Grown at the Prefecture Akita, in 1924, and obtained through C. Kanamoto, Yokozawamura, Akita.

64674. No. A-1. Hanshiro Mame. A half-white variety.

64675. No. A-2. Mejiro. White-eyed soy bean.

64676. No. A-3. Goyo Mame. A fiveleaved variety.

64677. No. A-4. Wase Akazaya. An early variety having a reddish pod.

64678. No. A-5. Ko Abakoku. A small abakoku soy bean.

64679. No. A-6. Kuro Mame. Black variety.

64680. No. A-7. Kuro Zaya. Black-podded soy bean.

64681. No. A-8. Akita.

64682. No. A-9. Ani.

64683. No. A-10. Tamazdukuri. This variety was grown at Tamazdukuri.

64684 to 64701. Grown in Chosen during 1924 and collected by the courtesy of the director of the agricultural experiment station of Chosen, Suigen.

64684. C-1. Suigen No. 5.

64685. C-2. Suigen No. 8.

64686. C.-3. Suigen No. 9.

64687. C-4. Suigen No. 10. 64688. C-5. Ciarukon.

64689, C-6, Chūhoku Shiro. A white soy bean grown at the Prefecture Chūhoku.

64690. C-7. Tansen Tanryoku. Light green variety grown in Tansen.

64691. C-8. Chōzdui,

64692, C-9. Niku Awo Cha Daizda. A green variety with a brown skin.

64693. C-10. Urusan.

64694. C-11. Himashi Daizdu. Castor soy bean.

64695, C-12, Köshiu Chüryü. From Koshiu,

49175-27---3

64674 to 64719—Continued.

64696. No. C-13. Awo Daizdu. Green soy bean.

64697. No. C-14. Kuro Daizdu. black variety.

64698. No. C-15. Kuro Satő Daizdu. A black, sugar soy bean.

64699. No. C-16. Ryuhan Daizdu. Dragon-colored variety.

64700. No. C--17. Chünenkon.

64701. No. C-18. Moyashi Daizdu. variety used for bleaching.

64702 to 64705. Grown in Hokkaido in 1924, and obtained through the director of the agriculture experiment station at Hokkaido, Sapporo.

64702. No. II-1. Quachi.

64703. No. H-2. Mizdukuguri. (Diversoy bean.)

64704. No. H-3. Turunoko. (Crane chick soy bean.)

64705. No. II-4. Yukikorogashi. (Snowball soy bean.)

64706 to 64717. Grown during 1924 at the Prefecture Kumamoto and obtained through M. Jyo, of the prefectural authorities, Kumamoto.

64706. No. K-1. Higo.

64707. No. K-2. *Aoji*. A green varietv.

64708. No. K-3. Aka Wase. An early, red variety.

64709. No. K-4. Ki Zaya. Yellowpodded variety.

64710. No. K-5. Wase Kin Daixdu. An early golden soy bean.

64711. No. K-6. Riku U No. 3. T variety was bred at the Riku Agricultural Experiment Station. This

64712. No. K-7. Shiro Zaya. A whitepodded soy bean.

64713. No. K-8. Kin Daizdu. A golden variety.

64714. No. K-9. Karyo Daizdu, improved soy bean.

64715. No. K-10. *Hachikoku*. (Eig koku soy bean; very productive.)

64716. No. K-11. Asahi. (The morning sun soy bean.)

64717. No. K-12. Takiya,

64718 and 64719. Grown during 1924 at the Prefecture Aichi and obtained through the director of the agricultural experiment station of the Prefecture Aichi, Anjyo, Mikawa.

64718. No. N-1. Kyōto-Kuro Daizdu. Kyōto black soy bean.

64719. No. N-2. Ko Mame. Smallseeded variety.

64720 to 64749. Soja max (L.) Piper (Glycine hispida Maxim.). Faba-Soy bean.

From Aizu Wakamatsu, Japan. Seeds presented by Rev. Christopher Noss, Japan mission of the Reformed Church. Received July 23, 1925.

Locally grown strains.

64720. No. 1. 64723. No. 4. 64721. No. 2. 64724. No. 5. 64722. No. 3. 64725. No. 6. **64720 to 64749**—Continued.

64726. No. 7. 64738. No. 19. 64727. No. 8. 64739, No. 20. 64728. No. 9. 64740, No. 21. 64729. No. 10. 64741. No. 22. 64730. No. 11. 64742. No. 23. 64731. No. 12. 64743. No. 24. 64732. No. 13. 64744. No. 25. 64745. No. 26. 64733. No. 14. 64734. No. 15. 64746. No. 27. 64735. No. 16. 64747. No. 28. 64736. No. 17. 64748, No. 29. 64749. Mixed.

64750 to 64761. Saccharum officina-RUM L. Poaceae. Sugar cane.

From Santiago de las Vegas, Cuba, Cuttings presented by J. R. Zell, Received July 30, 1925.

Locally grown strains.

64737. No. 18.

64750. No. 1. 64756. No. 7. 64751. No. 2. 64757. No. 8. 64752. No. 3. 64758. No. 9. 64753. No. 4. 64759. No. 10. 64754. No. 5. 64760, No. 11. 64755. No. 6. 64761. No. 12.

64762. Elaeagnus philippensis Petr. . (E. philippinensis Wester). agnaceae.

From the Philippine Islands. Seeds presented by P. J. Wester. Received August 26, 1925.

Lingaro. Seeds sent to me from the Philippines by Mrs. R. M. McCrory. This is an attractive climbing wild shrub with small pointed leaves, silvery beneath, and smooth pink oblong edible fruits about an inch long. These fruits have subacid or sour flesh of good flavor and make excellent jelly. (Wester.)

64763. Alangium longiflorum Merr.

From Los Banos, P. I. Seeds presented by Eduardo Quisumbing, assistant professor in plant physiology, College of Agricul-ture. Received September 9, 1925.

handsome deciduous tropical tree, described by Merrill (Philippine Journal of Science, vol. 7, C, no. 5) as about 30 feet high with thin oblong leaves and small axillary clusters of white flowers.

64764. LILIUM sp. Liliaceae. Lily.

From Ertsingtientze, Manchuria. Bulbs collected by P. H. Dorsett, agricultural explorer, Bureau of Plant Industry. Re-ceived September 9, 1925.

No. 3845. July 30, 1925. This is reported to be a drooping red lily, with recurved petals, which grows on the mountain sides. (Dorsett.)

64765 to 64797.

From Manchuria. Seeds and bulbs collected by P. H. Dorsett, agricultural explorer, Bureau of Plant Industry. Received August 24, 1925. Notes by Mr. Dorsett.

64765 to 64797—Continued.

64765. AGROPYRON CILIARE (Trin.) Franch. Poaceae. Grass.

No. 3697. Harbin. July 11, 1925. A tall-growing short-awned grass found in the new Russian cemetery.

64766. AQUILEGIA OXYSEPALA Trautv. and Mey. Ranunculaceae. Columbine.

No. 3526. June 29, 1925. An herbaceous plant, having more or less square flowers with four points; obtained in rocky situations at Jalatun and Barun. 64767. OXYTROPIS OXYPHYLLA (Pall.) DC.

64767. OXYTROPIS OXYPHYLLA (Pall.) DC. Fabaceae.

No. 3610. Hailar. July 5, 1925. Obtained from plants growing in the sand dunes.

64768. CARAGANA PYGMAEA (L.) DC. Fabaceae. Dwarf pea tree.

No. 3677. Chalaioerh. July 7, 1925. A small thorny shrub.

For previous introduction, see S. P. I. No. 55769.

64769. Caragana sp. Fabaceac.

No. 3702. Harbin. July 11, 1925. Obtained in the new Russian cemetery.

64770. ERODIUM sp. Geraniaceae.

No. 3383. Tsitsihar. June 22, 1925. From the nursery of the forester of the Chinese Eastern Railway.

64771. FESTUCA OVINA L. Poaceae.
Sheep fescue.

No. 3599. Hilar. July 3, 1925. A rather tall-growing grass found in the sand dunes located to the north of the city. The location is very much exposed, and at this season, at least, it is very dry

64772. HORDEUM VIOLACEUM Boiss. Poaceae. Grass.

No. 3589. Hilar. July 3, 1925. One of the commonest grasses we have found in the regions thus far visited.

64773. LILIUM TENUIFOLIUM Fisch. Liliaceae. Lily.

No. 3477. June 27, 1925. Bulbs of a low-growing lily with recurved drooping pink or red flowers, found on the granite mountain to the east of Jalatun.

64774. LILIUM CONCOLOR BUSCHIANUM (Lodd.) Baker. Liliaceae. Lily.

No. 3478. Jalatun. June 28, 1925. Bulbs of an upright red-flowered lily growing on the lower levels and occasionally on the sides of the hills. The petals of this lily do not recurve, and the flowers do not droop but stand erect.

64775. Melica gmelini Turcz. Poaceae. Grass.

No. 3469. Barun. June 29, 1925. Found on the mountain side in exposed rocky situations.

64776. PAPAVER NUDICAULE L. Papaveraceae. Poppy.

No. 3479. Jalatun. June 27, 1925. An attractive sulphur-yellow long-stemmed poppy which is abundant in this region.

64777. Phoenix dactylifera L. Phoenicaceae. Date palm.

No. 3307. June 15, 1925. "Eggplant" date, received from E. M. Lamb, director,

64765 to 64797—Continued.

First Sino-Turkestan Motion Picture Expedition, and called by him Tsao erh, meaning "Tibetan jujube." It is my understanding that these fruits are grown in Tibet.

64778 to 64786. Poa spp. Poaceae. Grass. 64778 and 64779. Poa CHAIXII Vill.

64778. No. 3313. June 17, 1925. A rather coarse, very open-headed grass obtained from the small park near New Town, Harbin.

64779. No. 3552. Batun. July 1, 1925. A very open-headed grass with brittle stems.

64780. POA NEMORALIS L.

No. 3363. June 22, 1925. Obtained from the dry prairie land north of Tsitsihar. This is one of the most common grasses we have seen on the prairie.

64781. POA PALUSTRIS L. Fowl meadow grass.

No. 3314. June 17, 1925. Found in the small parks on the hill just outside of New Town, Harbin.

64782 to 64784. I'OA PRATENSIS L. Bluegrass.

64782. No. 3517. June 29, 1925. Plants found growing in moist gravelly soil at Barun.

64783. No. 3542. Barun. June 30, 1925. This is a single-stemmed. rather open-headed grass, found in a river-bottom area.

64784. No. 3664. Hailar. July 6, 1925. Obtained in the prairie, Argon river bottom.

64785 and 64786. POA SPHONDYLODES Trin.

64785. No. 3371. Tsitsthar. June 21, 1925. From a hot dry field near the railroad station.

64786. No. 3625. Hailar. July 5, 1925.

64787. POPULUS SUAVEOLENS Fisch. Salicaceae. Poplar.

No. 3480. Jalatun. June 27, 1925. From trees growing in the parks.

64788 and 64789. PRUNUS ARMENIACA L. Amygdalaceae. Apricot.

64788. No. 3704. Harbin. July 12, 1925. A medium-sized, almost round, deep-yellow apricot with golden-yellow flesh which, though not juicy, is of very good quality. This looks as though it may be a plumcot; the seeds appear to be somewhat different from the ordinary apricot.

64789. No. 3710. Harbin. July 20, 1925. This variety, called "Large red apricot," was shipped in from Tientsin. It is about the handsomest apricot we have seen, being bright golden yellow with a very attractive pink blush and yellow flesh. The seed is large and quite flat. The fruit is a freestone, not julcy, and, according to our standard, the quality is low, but this may be due to the fruit having been picked quite green.

64765 to 64797—Continued.

64790. PRUNUS AVIUM L. Amygdalaceae. Sweet cherry.

No. 3338. Harbin. June 18, 1925. A creamy white cherry, the fruits of which vary considerably in size, purchased in the market.

64791. PRUNUS PADUS L. Amygdalaceae. European bird cherry.

No. 3607. Hailar. July 5, 1925. This cherry was procured in the sand dunes. It may prove to be of interest as a shade and ornamental tree for the Great Plains region.

64792 and 64793, Puccinellia distans Grass.

64792. No. 3315. Harbin. June 17, 1925. We found this grass being eaten by cattle, but that may have been because they had little else to eat.

64793. No. 3634. July 5, 1925. A grass of medium height collected at Hailar.

64794. RIBES DIACANTHA Pall. Grossulariaceae. Currant.

No. 3600. July 3, 1925. Found wild in the sand dunes to the north of Hailar.

64795. Sambucus sp. Caprifoliaceae.

No. 3703. Harbin. July 11, 1925. A dark-brown seeded elderberry growing in the new Russian cemetery.

64796. Spiraea sp. Rosaceae. Spirea

No. 3495. Jalatun. June 28, 1925. Found on the west side of the Granite Mountain across from the railway station. The plants showed evidence of having flowered very freely, and they did not show any winterkilling.

64797. LONICERA Sp. Caprifoliaceae.

No. 3685. Bukedoo. July 8, 1925. A variety having dark-purple or black berries which are very acid, mucilaginous, and of good flavor.

64798 to 64805.

From Blackwood, South Australia. Seeds presented by Edwin Ashby, "Wittunga." Received September 3, 1925. Notes taken from Bentham, Flora Australiensis.

64798. ACACIA SCAPELLIFORMIS Meisn. Mimosaceae.

A tall shrub from Western Australia, with the phyllodia (leaflike stems) triangular lanceolate and about an inch long. The pods are very long and narrow, twisting readily.

64799. ACACIA SIGNATA F. Muell. Minto-saceae.

A straggling shrub, 6 to 8 feet high, with narowly linear phyllodia about 4 inches long and short flat leathery pods. Native to Western Australia.

64800. ISOPOGON ASPER R. Br. Proteaceae.

Usually a low shrub, with erect branches 1 or 2 feet high, and crowded pinnate leaves with rigid leaflets, the entire leaf generally not more than an inch long. The red flowers are in small dense cones which are either terminal or axillary. Native to Western Australia.

64798 to 64805-Continued.

64801. LEPTOSPERMUM ROEI Benth. Myrtaceae.

A slender-branched shrub, indigenous to Western Australia, covered with silky pubescence, and with flat oblong leaves 3 to 6 inches long. The rather large white flowers are either solitary or in pairs.

64802 to 64804. MELALEUCA spp. Myrtaceae.

64802. MELALEUCA CORDATA Benth.

A rigid shrub with numerous small round or oval spreading leaves and dense globular heads of rather small red flowers. Native to Western Australia.

64803. MELALEUCA HOLOSERICE A Schauer.

A bushy shrub, from Western Australia, generally 2 to 3 feet high, with the leaves and branches covered with white pubescence. The leaves are linear and half an inch long. The pink flowers are in dense terminal heads.

64804. Melaleuca longicoma Benth.

The large rich-red flowers of this Australian shrub are in small cylindrical spikes at the bases of the young leafy branches. The oblong leaves are less than 2 inches long.

64805. TEMPLETONIA RETUSA (Vent.) R. Br. Fabaceae.

A tall Australian leguminous shrub with small leathery leaves and large bright-red flowers, more than an inch long, either solitary or in few-flowered clusters.

64806 and 64807.

From Richmond, Victoria, Australia. Seeds presented by F. H. Baker. Received September 8, 1925.

64906. ACACIA VERNICIFLUA A. Cunn. Mimosaceae.

According to Curtis's Botanical Magazine (pl. 3266), this is a slender muchbranched shrub with leathery, very narrow phyllodia [leaflike stems] about 2 inches in length and deep-yellow flowers in small heads which are generally in pairs. It is native to the barren hills around Bathurst, New South Wales.

For previous introduction, see S. P. I. No. 56869.

64807. CANDOLLEA GRAMINIFOLIA (Swartz) F. Muell. (Stylidium graminifolium Swartz). Candolleaceae.

An ornamental Australian plant which, according to Bentham (Flora Australiansis, vol. 4, p. 10), has stiff grasslike leaves, sometimes 9 inches long and always growing in a tuft from the end of a very short stem, and scapes 6 to 18 inches long bearing a simple raceme of pink flowers.

For previous introduction, see S. P. I. No. 56563.

64808 to 64810.

From Dehra Dun, United Provinces, India. Seeds presented by R. N. Parker, forest botanist, Forest Research Institute and College. Received September 14, 1925. Notes taken from Munro's Monograph of the Bambusaceae.

64808 to 64810—Continued.

64808. CEPHALOSTACHYUM PERGRACILE Munro. Poaceae. Bamboo.

A beautiful arborescent bamboo, cespitose in habit, with erect stems 40 fect in height and sometimes 10 inches in circumference. The narrowly lanceolate leaves are usually about 10 inches long and an inch wide. The flowering panicles are sometimes 18 inches long. One of the chief bamboos of Burma.

For previous introduction, see S. P. I. No. 40887.

64809. DENDROCALAMUS HAMILTONII Nees and Arn. Poaceae. Bamboo.

The common bamboo of the eastern Himalayas, where it grows to a height of from 40 to 60 feet, with horizontal branches and stems 4 to 7 inches in diameter. The foliage is very variable, the broadly lanceolate leaves being 4 to 16 inches long and up to 5 inches wide. The plant is said to flower every year, and the young shoots are eaten when boiled.

For previous introduction, see S. P. I. No. 53909.

64810. DENDROCALAMUS MEMBRANACEUS Munro. l'oaceae. Bamboo.

A bamboo native to eastern India, probably arborescent, with comparatively small leaves about 4 inches long and one-tenth as wide.

64811. OMPHALEA OLEIFERA Hemsl. Euphorbiaceae.

From Moran, Amatitlan, Guatemala. Seeds presented by J. G. Salas, director general de agricultura, City of Guatemala, through P. C. Standley, United States National Museum. Received September 14, 1925.

For previous introduction and description, see S. P. I. No. 64557.

64812 to 64842.

From Avondale, Auckland. New Zealand. Plants presented by H. R. Wright. Received September 19, 1925. Notes by Mr. Wright.

64812 to 64814. AMYGDALUS PERSICA L. (Prunus persica Stokes). Amygdalaceae. Peach.

64812. Allen's Late.

64813. Golden Queen. A yellowfleshed clingstone, claimed to be one of the best canning sorts. The tree is compact in habit and a heavy cropper; fruits of medium size.

64814. Lee's Salway. The best of the Salway type; a very fine peach.

64815 and 64816. AMYGDALUS PERSICA NECTARINA Ait. Amygdalacene. Nectarine.

64815. Early Rivers. Fruits very large; skin light yellow with crimson cheek; flesh tender, juicy, sweet, with rich flavor; season very early.

64816. Zealandia. One of the largest of all nectarines.

64817 and 64818. CYDONIA OBLONGA Mill. Malaceae. Quince.

64817. Manning Seedling. A superquince. 64812 to 64842—Continued.

64818. Smyrna. Tree strong growing and prolific, bearing often in second year from budding. Fruits very large; flesh tender when cooked, with a delicious flavor.

64819 to 64821. Diospyros Kaki L. f. Diospyraceae. Kaki.

64819. Charming. Not yet tested for fruit; autumn foliage very fine.

64820. Hazelwood.

64821. Wright's Polrialot.

64822 to 64825. ERIOBOTRYA JAPONICA (Thunb.) Lindl. Malaceae. Loquat.

64822. Hunter. An Australian variety.

64823. Myer's Best. A New Zealand variety.

64824. Smith. An Australian variety.

64825. Success. A New Zealand variety.

64826. Figus Carica L. Moraceae. Fig.

Mrs. Williams. Of unknown origin; given to Mrs. Williams, of Auckland, by an old sea captain. The fruits are large, brown, often weighing 12 ounces, of excellent flavor. The tree is strong and prolific.

64827. Malus Pumila Mill. Malaceae. Paradise apple.

To be tested as a dwarf stock.

For previous introduction, see S. P. I. No. 54386.

64828 to 64832. Malus sylvestris Mill. Malaceae. Apple.

64828. Aromatic.

64829. Cox's Early.

64830. Crisp's Russet. Fruit large, conical, and regular; flesh crisp, firm, and juicy; of first-class quality. Season late.

64831. Granny Smith.

64832. Sturner Pippin. Fruit medium sized, roundish oblate; skin yellow, almost covered with brownish red; flesh firm, crisp, very rich; grown largely in Tasmania for export.

64833. Malus sp. Malaceae. Crab apple.

Gorgeous. The best red crab I have ever seen; up to an inch in diameter, and a real marvel for cropping. A Japanese seedling.

64834. MALUS sp. Malaceae. Crab apple.

Golden beauty. A yellow crab worked on Prunus prunifolia, the only stock for it. A Japanese seedling.

64835 to 64838. Prunus Armeniaca L. Amygdalaceae. Apricot.

64835. Bolton.

64836. Cattles Early.

64837. Cattles Red.

64838. Trevatt.

64839, Prunus sp. Amygdalaceae. Plum.
Raglan.

64840, Prunus sp. Amygdalaceae, Plum.
Blileana.

64812 to 64842—Continued.

64841. PRUNUS sp. Amygdalaceae. Plum.

Early Gem. A very early-maturing cherry plum raised in Australia.

64842. PRUNUS Sp. Amygdalaceae. Plum. Jenkin's Seedling.

64843 and 64844. PINUS spp. Pinaceae. Pine.

From Zernez, Switzerland. Seeds presented by Mr. Bessole, of Veuve Roner & Co., at the request of Augustine Henry, College of Science for Ireland, Dublin. Re-ceived September 11, 1925.

64843. Pinus montana pumilio (Haenke) Willk.

A handsome hardy low shrubby pine with ascending branches densely clothed with bright-green foliage. Before maturity the cone is usually violet-purple, becoming yellowish or dark brown when fully ripe. This form is native to the mountains of central Europe.

For previous introduction, see S. P. I. No. 59697.

64844. PINUS MONTANA UNCINATA Willk.

A variety of *Pinus montana* which becomes 60 to 80 feet high, with bluntly pyramidal cones. It is found in France and Spain.

64845 to **64854**. Citrus spp. Rutaceae.

From Avondale, Auckland, New Zealand. Plants presented by H. R. Wright. Received September 19, 1925. Notes by Mr. Wright.

64845 to 64851. CITRUS NOBILIS DELICIOSA (Ten.) Swingle. Mandarin orange. (Ten.) Swingle.

64845. Beauty of Glen Retreat. I have seen these more than 8 inches in diameter.

64846. Early Imperial. The earliest mandarin to ripen here.

64847. Early Shipping. An orange-mandarin hybrid; very early.

64848. Ellendale Beauty.

64849. Jacob Special.

64850. Navel orange.

64851. Thorny.

64852 to 64854. CITRUS SINENSIS (L.) Osbeck. Sweet orange.

64852 and 64853. Best's Seedless, a selected strain; quality excellent. 64852. On rough-lemon stock.

64853. On sour-orange stock.

64854. Groverly Navel. A prolific variety.

64855 to 64868.

From Manchuria. Seeds collected by P. H. Dorsett. agricultural explorer, Bureau of Plant Industry. Received September 8, 1925. Notes by Mr. Dorsett.

64855. FESTUCA RUBRA L. Poaceae. Red fescue grass.

No. 3742. Hingan. July 22, 1925. A tall grass with slender stems and panicles and fine leaves. From plants growing about halfway up the mountain.

64855 to **64868**—Continued.

64856. Fragaria sp. Rosaceae. Strawberry.

No. 3753. Hingan. July 22, 1925. Fruits purchased from a Chinese who gathered them on the hills about here.

64857, MALUS SD. Malaceae. Apple.

No. 3830. Harbin. July 25, 1925. Green and very delicate pink-skinned fruits, of irregular size, with mealy white flesh of a sweet flavor. We think this the best-flavored Chinese apple we have tasted.

64858, POA NEMORALIS L. Poaceae.

No. 3753a. Hingan. July 22, 1925.

64859. Ribes sp. Grossulariaceae. Currant.

No. 3729. July 22, 1925. Seeds of a black currant obtained from a Chinese who collected them near Bukedoo. a Chinese ·

64860. Ribes sp. Grossulariaceae.
Currant.

No. 3800. Hingan. July 23, 1925. Seeds of a black current purchased from a Chinese at the railway station.

64861. Ribes sp. Grossulariaceae.

Currant.

No. 3801. July 23, 1925. Seeds obtained from a Chinese, who collected the fruits at Hingan.

64862. Rubus sp. Rosaceae. Raspberry.

No. 3803, Hingan. July 23, 1925. Found on the old railway grade on the mountain.

64863. Rubus sp. Rosaceae. Raspberry.

No. 3831. Harbin. July 25, 1925. A large-fruited red-capped raspberry purchased in the market, where it had been shipped in from Yimienpo in the mountains southeast of Harb.n.

64864. Rubus sp. Rosaceae. Raspberry.

No. 3832. July 25, 1925. A light creamy yellow raspberry purchased in the market, where it had been shipped in from Yimicapo in the mountains southeast of Harbin. This is the best raspberry we have seen. It is of good size and quality and of very good appearance.

64865. Sambucus racemosa L. Caprifoliaceae. Red elder.

No. 3792. Hingan. July 23, 1925. An attractive ornamental, about 12 feet in height, found on the mountain side. It produces clusters of bright-red berries.

64866. Spiraea media Schmidt. Rosaceae. Spirea.

No. 3741. Hingan. July 22, 1925. Plants 12 to 18 inches high, growing on the top of the mountain to the south of the railroad station. The flowers are

64867. VACCINIUM VITIS-IDAEA L. Vacciniaceae

No. 3745. Hingan. July 23, 1925.

64868. VACCINIUM sp. Vacciniaceae.

No. 3802. Hingan. July 23, 1925. Fruits mostly round and deep purple with considerable bloom.

64869 to 64887.

- From Harbin, Manchuria. Seeds collected by P. H. Dorsett, agricultural explorer, Bureau of Plant Industry. Received September 16, 1925. Notes by Mr. Dorsett.
 - 64869 and 64870. CITRULLUS YULGARIS Schrad. Cucurbitaceae. Watermelon.
 - 64869. No. 3835. July 27, 1925. "Three good friends.". A light-green thin-skinned watermelon, of fair quality, with red flesh and black seeds, shipped in from Tashihyingkou.
 - 64870. No. 3917. August 8, 1925. A small green or maybe striped watermelon from Hailar, where it is said the best melons are grown.
 - 64871 to 64875. CUCUMIS MELO L. Cucurbitaceae. Melon.
 - 64871. No. 3834. July 27, 1925. "Chinese striped melon." A green and yellow melon with a pleasant aroma. The white flesh is of fair quality.
 - 64872. No. 3857. August 4, 1925.
 "White melon." A small white melon with faint reddish brown stripes and white flesh which is crisp and watery.
 - 64873. No. 3858. August 4, 1925. A small green and yellow striped melon with green, rather firm, thin sweet watery flesh of only fair quality. This and the other small melon, No. 3857 [S. P. I. No. 64872], may be short-season varieties.
 - 64874. No. 3874. August 4, 1925. A small light-green melon purchased in the market at Pristan. The thin crisp green flesh is watery and sweet and of poor quality. A short-season variety.
 - 64875. No. 3861. August 4, 1925. The Russian melon with yellowish green skin and rather melting sweetish yellow flesh.
 - 64876. HORDEUM VULGARE NIGRUM (Willd.) Beaven. Poaceae.
 Six-rowed barley.

No. 3878. August 5, 1925. "Black barley" obtained from the test garden of the Manchurian Agricultural Society, Harbin.

64877 and 64878. HORDEUM VULGARE PAL-LIDUM Seringe. Poaceae. Six-rowed barley.

August 5, 1925. Obtained from the test garden of the Manchurian Agricultural Society, Harbin.

64877. No. 3879. A local variety of barley, No. 4 in the garden series.

64878. No. 3880. A local variety of barley, No. 6 in the garden series.

64879. Prinsepia sinensis Oliver. Amygdalaceae.

No. 3847. Ertsingtientzi. July 30, 1925. A "thorn cherry." The fruits, which grow abundantly here, are edible but not especially good. They are rather large and vary considerably in size.

- 64880 to 64886, PRUNUS ARMENIACA L. Amygdalaceae. Apricot.
 - 64880, No. 3842. Ertsingtientzi. July 30, 1925. A wild apricot found on the mountain side. The seeds vary considerably in size and general appearance.

64869 to 64887—Continued.

- 64881 to 64883. Obtained through the superintendent of the botanical garden of the Manchurian Agricultural Society.
 - **64881.** No. 3910. August 8, 1925. A large-fruited variety.
 - 64882. No. 3911. August 8, 1925. A very dark reddish variety with relatively small seeds, from tree No. 17.
 - 64883. No. 3912. August 8, 1925. A yellow variety from tree No. 20.
 - 64884. No. 3914. August 5, 1925. Presented by B. W. Skvortzow; selected from the best types growing here.
 - 64885. No. 3915. August 8, 1925. Presented by B. W. Skvortzow; selected from a private garden.
 - 64886. No. 3916. August 8, 1925. Presented by B. W. Skvortzow; a large-fruited variety.
- 64887. RUBUS CRATAEGIFOLIUS Bunge. Rosaceae. Siberian raspberry.

No. 3841. Ertsingtientzi. July 30, 1925. Obtained from wild plants growing on the mountains. The fruits are red and for a wild variety large, but of poor quality.

64888. Allium nigrum L. Liliaceae.

From Morocco. Bulbs collected by David Fairchild, agricultural explorer, Bureau of Plant Industry. Received June 29, 1925. Numbered September, 1925.

Collected near Ouezzan; of possible value for borders. (Fairchild.)

A tall species, about 3 feet in height, native to southern Europe. The attractive pale-violet or whitish flowers are produced in summer.

For previous introduction, see S. P. I. No. 58878.

64889 to 64892. Gossypium spp. Malvaceae. Cotton.

From Bangalore, India. Seeds presented by V. N. Ranganatha Rao, assistant botanist, Department of Agriculture. Received September 11, 1925.

Locally grown strains.

64889. Gossypium arboreum L.

This cotton is commonly grown in Mysore. (Rao.)

For previous introduction, see S. P. I. No. 52384.

64890 and 64891. GOSSYPIUM HERBACEUM L.

Variety mclanospermum. A black-seeded variety.

64890. No. 1. 64891. No. 2.

64892. Gossypium obtusifolium Roxb.

One of our indigenous cottons. (Rao.)

For previous introduction, see S. P. I. No. 45326.

64893 to 64896. CITRUS spp. Rutaceae.

From Avondale, Auckland, New Zealand. Plants presented by H. R. Wright. Received September 30, 1925. Notes by Mr. Wright.

64893 to 64896—Continued.

64893. CITRUS SINENSIS (L.) Osbeck. Sweet orange.

Best's Seedless orange; on roughlemon stock. A selected strain.

64894. CITRUS Sp.

Byfieldon; on rough-lemon stock.

64895. CITRUS SD.

Muscio Seedling; on mandarin stock.

64896. Citrus sp.

Pride of Ellendale; on mandarin stock.

64897 to 64904. Gladiolus spp. Irida-

From Pretoria, Transvaal, Union of South Africa. Bulbs presented by I. B. Pole Evans, Chief, Division of Botany. Received August 12, 1925.

These gladioli, lifted from my own garden, have been collected on various occasions in different parts of the country. (Pole Evans.)

64897. GLADIOLUS Sp.

No. 2.

64898. GLADIOLUS Sp.

No. 12.

64899. GLADIOLUS Sp.

No. 14.

64900. GLADIOLUS Sp.

No. 23.

64901. GLADIOLUS Sp.

No. 24.

64902. GLADIOLUS Sp.

No. 26.

64903. GLADIOLUS Sp.

No. 50.

64904. GLADIOLUS Sp.

No. 255.

64905 and 64906. AVERRHOA spp. Oxalidaceae.

From Manila, P. I. Plants presented by S. Youngberg, acting director, Bureau of Agriculture. Received August 24, 1925.

According to P. J. Wester, formerly of the Bureau of Science, Manila, the following are superior varieties of the bilimbi and carambola. They are introduced for testing in the warmest parts of the United States.

64905. AVERRHOA BILIMBI L. Bilimbi.

Camia c 5135. The bilimbi, a tree 20 to 60 feet high, is extensively cultivated in parts of South America and the West Indies for the sake of its greenish yellow, cucumber-shaped, acid fruits, which are pickled or used as a relish with meat. It is tropical in its requirements.

64906. AVERRHOA CARAMBOLA L. Carambola.

Carambola c 5134. The carambola is similar to the bilimbi, but the yellow or golden-brown fruits are somewhat larger and less acid. The tree is smaller, varying in height from 15 to 30 feet, and is grown occasionally in the warmest parts of Florida.

64907 to 65000.

From the Mediterranean region. Collected by David Fairchild, agricultural explorer, Bureau of Plant Industry. Received September, 1925. Notes by Doctor Fairchild.

64907. Argania spinosa (L.) Skeels (A. sideroxylon Roem. and Schult.). Sapotaceae

Sapotaceae.

Collected in the Sous Valley, near Agadir, Morocco, June, 1925. The argan tree, one of the most drought-resistant trees known, covers thousands of acresof the rockiest, driest soil in all Morocco and furnishes the only green foliage for goats during the terrifically dry summers. This tree is related to the sapodilla, being of the Sapotaceae, but with fruits which, when raw, are extremely acrid; they are eaten by cattle, sheep, and goats. The seeds contain a strongly flavored oil which, after being heated to drive off the odor, is excellent to use for frying and is preferred by some to olive oil.

64908 and 64909. ASPHODELUS FISTULOSUS L. Liliaceae.

A small stemless annual up to 20 inches in height with a dense rosette of very narrow leaves about a foot long and racemes of small, pinkish, lilylike flowers. Native to the Mediterranean countries.

64908. No. 16. Found near Agadir, on the road to Mogador, June 8, 1925.

64909. No. 48. Found near Marrakesh, on the road to Mogador, May 17, 1925.

64910. ASPRIS Sp. Poaceae. Grass.

No. 88. Near Rabat, Morocco. June 17, 1925. A small beautiful grass with delicate panicles of very ornamental flowers.

64911 and 64912. BISERRULA PELECINUS L. Fabaceae.

An annual leguminous shrub, prostrate or ascending in habit, with numerous slender stems up to a foot long, unequally pinnate leaves, and globular clusters of light-yellow flowers. Native to waste places in the Mediterranean countries.

64911. No. 90. Near Rabat, on the road to Casa Blanca, May 8, 1925.

64912. No. 110. From the pasture land near Algerias, Spain, June 27, 1925.

64913. BOCCONIA FRUTESCENS L. Papa veraceae.

No. 116. From the Santa Brigida Hotel gardens, Las Palmas, Grand Canary, Canary Islands, July 23, 1925. A large showy shrub 10 feet in height, with very large attractive leaves which are deeply lobed and pale beneath. The yellow flowers are borne in large pendent panicles followed by very interesting fruits with brilliant-red arils.

For previous introduction, see S. P. I. No. 33102.

64914. Bromus sp. Poaceae. Grass.

No. 46. Near Marrakesh, Morocco, May 17, 1925. A dry-land grass growing on baked clay soil in a wheat field.

64915. CAESALPINIA PECTINATA Cav. (C. tinetoria Domb.). Caesalpiniaceae.

No. 119. From the garden of Raphael Cabrera, Yaiza, Lanzarote, Canary Islands.

A tall upright spiny shrub or small tree, often planted for hedges in Peru.

The largest trees attain a height of 25 to 30 feet, with trunks 6 to 8 inches in diameter. The foliage is deep green, with the leaflets smooth and polished on the upper surface. The greenish yellow flowers, in cylindrical open spikes, are not very conspicuous, but the pods are produced in large clusters, and the exposed surfaces show bright scarlet for a long time before maturing. This tree might have value as a hedge plant or windbreak in the drier, warmer parts of the Southwestern States. (O. F. Cook, Bureau of Plant Industry.)

For previous introduction, see S. P. I. No. 41323.

64916. CANARINA CANARIENSIS (L.) Kuntze (C. campanulata L.). Campanulaceae.

No. 111. Presented by Juan Bolinaga, Directeur du Jardin de Acclimatacion, Orotava, Teneriffe, Canary Islands, July 8, 1925

According to Doctor Fairchild's note, under S. P. I. No. 9664, this is a pretty creeper, native to the Canary Islands, with luxuriant light-green foliage and bell-shaped orange-red flowers which are very showy. It requires much moisture and grows naturally in shaded valleys of the Canary Islands.

64917. COTYLEDON UMBILICUS L. Crassulaceae.

No. 175. Tubers from an Arab cemetery near Amismiz, south of Marrakesh, in the Great Atlas Mountains of Morocco, May 29, 1925. A drought-resistant plant grown on the tile roofs of houses in Morocco, giving them a look of age.

A perennial fleshy plant up to a foot high with succulent orbicular leaves and pendulous racemes of yellowish green flowers. Native to western Europe.

64918. DATURA sp. Solanaceae.

No. 120. From the garden of Señor Machado, Icod, Teneriffe, Canary Islands, July 8, 1925. A variety having purewhite trumpet-shaped flowers.

64919. EBENUS PINNATA Ait. Fabaceae.

No. 15. Near Agadir, on the road to Mogador. Morocco, June 8, 1925. A beautiful legume with lovely heads of pink flowers on long peduncles, and graygreen foliage, which forms clumps on dry roadsides.

64920. ECHIUM FASTUOSUM Salisb. Bo raginaceae.

No. 114. From the La Paz estate, Orotava, Teneriffe, Canary Islands, July 10, 1925. A much-branched shrub 8 feet high with gray-oreen foliage and spikes of sky-blue flowers streaked with white.

For previous introduction, see S. P. I. No. 35672.

64921. Echium Simplex DC. Boraginaceae.

No. 103. From the La Paz estate, Orotava, Teneriffe, Canary Islands, July 10, 1925. "Pride of Teneriffe." An amazing plant which produces an enormous spike of white flowers, 10 feet high, from a basal rosette of leaves.

64922. Fuchsia speciosa Hort. Onograceae. Fuchsia.

No. 127. These seeds were obtained from Juan Bolinaga, Directeur du Jardin

64907 to 65000—Continued.

de Acclimatacion, Orotava, Teneriffe, Canary Islands, and came from the Hijuela or branch botanical garden at Orotava, July 8, 1925. The seeds of this form, which are produced in great abundance, are exported from Teneriffe to Europe, where strains of peculiarly vigorous plants are produced from them.

64923. GENISTA MONOSPERMA (L.) Lam. Fabaceae.

No. 150. From the old Perez garden, now the Hotel Victoria, Orotava, Teneriffe, Canary Islands.

An ornamental leguminous shrub, native to Spain, about 10 feet high with slender grayish branches and small, very narrow leaves. The fragrant white flowers are in short lateral racemes.

For previous introduction, see S. P. I. No. 51145.

64924 to 64926. GENISTA MONOSPERMA (L.) Lam. Fabaceae.

A remarkable leguminous shrub with white fragrant flowers. This variety is used as a sand binder on the dunes near Mogador, Morocco.

64924. No. 37. From bushes near Mogador, June 2, 1925.

64925. No. 37a. Presented by Louis Beauchamp, chef des eauxet forêts, Mogador, June 4, 1925.

64926. Growing beside the road to Boulhout near its junction with the Rabat-Casa Blanca highway, Morocco, May 8, 1925.

64927. GENISTA SPHAEROCARPA Lam. Fabaceae.

No. 4. Demnat, Morocco, May 31, 1925. A charming drooping desert shrub covered with delicate brilliant yellow flowers somewhat resembling small orchids.

For previous introduction, see S. P. I. No. 63977.

64928. Gymnosporia cassinoides (L'Her.) Masf. Celastraceae.

No. 132. Presented by Juan Bolinaga, Directeur du Jardin de Acclimatacion, Orotava, Teneriffe, Canary Islands, July, 1925.

A spiny shrub of rigid habit with small leathery leaves and inconspicuous whitish flowers; of possible value for hedges in the Southern States. Native to Madeira.

64929. Habenaria sp. Orchidaceae.

No. 123. A terrestrial orchid growing on rocky dry places, near San Andres, Palma, Canary Islands, July 18, 1925.

64930. Hedysarum coronarium L. Fabaceae.

No. 97. Amismiz, Morocco, June, 1925.

A perennial or biennial European plant, 2 to 4 feet high, with odd-pinnate foliage and axillary racemes of deepred fragrant flowers.

64931. Hedysarum spinosissimum L. Fabaceae.

No. 17. Found in the dry soil along a small "oued" or stream near Marrakesh on the road to Asni, May 28, 1925.

A low-growing annual plant with numerous stems sometimes over a foot

long. The lower leaves are in a basal rosette. The pink or purplish flowers are in short racemes. Native to dry places in the Mediterranean countries.

64932. HIPPOCREPIS SCABRA DC. Fabaceae.

No. 8. Near Amismiz, Morocco, May 19, 1925.

A herbaceous perennial leguminous plant, with axillary nodding yellow flowers, native to the western Mediterranean region. The leaves are unequally pinnate.

64933. IRIS sp. Iridaceae.

No. 10. Found on the roadside between Casa Blanca and Fedhala, Morocco, May 10, 1925.

64934. Jasminum odoratissimum L. Oleaceae.

No. 142. From the park at Icod, Teneriffe, Canary Islands, July, 1925. A beautiful yellow flowering variety, native to Teneriffe, which forms a large and attractive shrub.

For previous introduction, see S. P. I. No. 43804.

64935. LAVATERA CRETICA L. Malvaceae.

No. 135. A small plant with narrow deep-pink striped petals growing as a weed near Ronda, on the road to Grazalema, Spain, July 1, 1925.

64936. LENTILLA LENS (L.) W. F. Wight (Lens esculenta Moench.). Fabaceae. Lentil.

No. 147. This native variety of lentil was presented by Julio Cutillas, of Santa Cruz, Palma, Canary Islands, July 18, 1925.

64937. LEUCOJUM TRICHOPHYLLUM Schousb. Amaryllidaceae.

No. 35. Collected on the road between Casa Blanca and Fedhala, Morocco, May 10, 1925.

This graceful bulbous plant, 2 feet high, with its white hanging flowers, three or four on each stem, gives a delicate touch to the border. (Note under S. P. I. No. 64087 by Doctor Fairchild.)

64938. LIMONIUM sp. Plumbaginaceae.

No. 14. A large-growing species found near Agadir en route to Mogador, June 8, 1925.

64939. Limonium sp. Plumbaginaceae.

No. 87. Collected in the Forest of Mamora, near Rabat, Morocco, June 14, 1925. A tall delicate species with a single stem from the rosette of leaves. The flowers are pale bluish white.

64940. LOTUS BERTHOLETH Masf. Faba-

No. 149. Obtained from Juan Bolinaga, Directeur du Jardin de Acclimatacion, Orotava, Teneriffe, Canary Islands, July 9, 1925. "Pigeon's Beak." This ornamental is used in hanging baskets, and the gray-green foliage sets off the attractive searlet flowers.

64941. LOTUS CYTISOIDES L. Fabaceae.

No. 148. Collected in the cork-oak forest near Ronda, Spain, July 1, 1925.

64907 to 65000—Continued.

A perennial prostrate or ascending herbaceous plant, native to the Mediterranean countries. The stems are up to a foot and a half long, and the flowers are orange-yellow.

For previous introduction, see S. P. I. No. 51860.

64942. LUPINUS TERMIS Forsk. Fabaceae. Lupine.

No. 144. Barranco de la Galga, Palma, Canary Islands, July 20, 1925. The "chocho" of the Canary Islands is an unusually vigorous tall-growing species which is grown to enrich the soil on the terraces of the barrancos of Palma and the other islands. It is fed to stock after being soaked in cold water for 24 hours.

For previous introduction, see S. P. I. No. 52172.

64943. Mandevilla suaveolens Lindl. Apocynaceae.

No. 121. Presented by Juan Bolinaga, Directeur du Jardin de Acclimatacion, Orotava, Teneriffe, Canary Islands, July 8, 1925. A superb fragrant white-flowered climber which can be grown in the tops of high trees and on pergolas, The flowers are 2 inches long and resemble those of the jasmine.

For previous introduction, see S. P. I. No. 33984.

64944. MATTHIOLA PARVIFLORA (Schousb.)
R. Br. Brassicaceae.

No. 101. From the road between Marrakesh and Mogador, June, 1925. A desert relative of the common stock (Matthiola bicornis) which may have value for breeding purposes.

A purple-flowered annual plant about 6 inches high, which blooms in July.

64945 to 64952. MEDICAGO spp. Fabaceae.

64945 to 64947. MEDICAGO LACINIATA (L.) Mill.

An annual medick with upright or ascending habit, about 6 inches high, native to the Mediterranean countries.

64945. No. 43. From the road between Casa Blanca and Marrakesh, May 13, 1925.

64946. No. 82. From the cultivated fields in the Barranco de las Augustias, near the caldera or old crater above the town of Los Llanos, Palma, Canary Islands, July 16, 1925.

64947. From the Barranco de las Augustias, July 16, 1925.

64948 to 64951. MEDICAGO LITTORALIS Rhode.

An annual leguminous plant, usually prostrate in habit, with stems up to a foot and a half long, branched from the base. Native to sandy places in the Mediterranean region.

64948. No. 1. Near the Pont des Espagnole, on the road between Casa Blanca and Fedhala, May 10, 1925.

64949. No. 36. Near Marabout, above Sale, Morocco, May 5, 1925. Growing on shell sand near cliffs swept by salt spray.

64950. No. 62. A nearly spineless form from the road between Fedhala and Casa Blanca, May 10, 1925.

64951. No. 79. Growing on dry rocky soil near Icod, Teneriffe, Canary Islands, July 10, 1925.

64952. MEDICAGO SOLEIROLII Duby. Fabaceae.

No. 2. Collected on the road between Rabat and Casa Blanca, May 9, 1925. A spineless annual bur clover with rather large spineless pods; a vigorous grower and adapted to very dry roadside conditions and a region of winter rainfall.

For previous introduction, see S. P. I. No. 31007.

64953 and 64954. MELICA CUPANI Guss. Poaceae.

64953. No. 26. Collected between Mogador and Marrakesh, Morocco, May 17, 1925. A grass with tall dense heads, growing under the protection of Ziziphus lotus growth which keeps the goats from destroying it. This variety seems to thrive in hard baked clay soit.

64954. No. 86. A tall-growing species found on the sun-baked soil by the roadside, between Marrakesh and Mogador, Morocco, May 22, 1925.

64955. Melilotus speciosa Durieu. Fabaceae.

No. 107. From a few plants along the railroad between Rabat and Sale, Morocco, near the bridge across the Bou Regreg River, June 14, 1925. A vigorous plant which should have distinct value as a forage when grown in a region of light rainfall (19 inches annual), moderately high temperatures (maximum 115° and minimum 27° F.), and a soil of stiff clay. The plant grows to a height of about 4 feet and carries a good quantal control of the stiff clay. of stiff clay. The plant grows to a height of about 4 feet and carries a good quantity of leaves.

64956. Morus Nigra L. Moraceae. Black mulberry.

No. 134. From Barranco Ruis, Orotava, Teneriffe, Canary Islands, July 11, 1925. A black mulberry which has grown wild on Teneriffe in the barrancos and bears immense quantities of deliciously bears imme

For previous introduction, see S. P. I. No. 41459.

64957. Muscari sp. Liliaceae. Grape hyacinth.

No. 102. From Ito Plateau, near Azrou, Morocco, June 17, 1925. A species peculiar to the Middle Atlas Mountains, found at an altitude of 1,300 meters.

A spring-blooming bulbous plant with blue or white flowers in racemes or spikes.

64958. MYOPORUM INSULARE R. Br. Myoporaceae.

No. 92. Presented by M. Pochon, Jardin d'Acclimatation, Rabat, Morocco, May, 1925. An Australian tree which has come to be widely used in Morocco as a windbreak and a hedge plant near the sea, as it withstands the salt air well. The evergreen foliage presents a pleasing appearance. appearance.

64907 to **65000**—Continued.

64959. NERIUM OLEANDER L. Apocynaceae. Oleander.

No. 96. Seeds from a wild form growing in the Sous Valley, near Agadir, Morocco, June 7, 1925. It may be worth testing for drought resistance and for resistance to scale infestation.

64960. OCOTEA FOETENS (Ait.) Benth. and Lauraceae.

From trees near Moya, Canary Islands, July 27, 1925. The "til" tree of the Canary Islands is a species which is rap-idly disappearing. It has beautiful glo-sy evergreen leaves and attractive glo-sy evergreen leaves and attractive fruits. The handsome dark wood is used for cabinetwork.

For previous introduction, see S. P. I. No. 31903.

64961. OCHNA MULTIFLORA DC. Ochna-

No. 128. From the old garden of the famous botanist Wildpret at Orotava, Teneriffe, Canary Islands, July 11, 1925. An extremely ornamental low-growing shrub with purple berries which are borne on a red receptacle.

64962. ADENOCARPUS FOLIOLOSUS (Drvander) DC. Fabaceae.

No. 124. A yellow-flowered ornamental shrub growing along the road to Monte de las Lomitas, near San Andres, Palma, Canary Islands, July 19, 1925.

64963, ORCHIS PAPILIONACEA L. Orchi-

No. 38. Found in a Berber cemetery, near Amismiz, in the Great Atlas Mountains, south of Marrakesh, Morocco, May 30, 1925. A terrestrial orchid, about 18 inches high, which grows in soil that bakes as hard as a brick before the last of May. This variety produces tubers the size of a pigeon's egg, also attractive red flowers.

64964. Ornithopus compressus L. Fabaceae.

No. 89. Collected between Casa Blanca and Fedhala, Morocco, May 10, 1925. A forage legume which seems to be a rather constant factor in the pastures of Morocco, Spain, and the Canary Islands.

A slender spreading annual plant with pinnate leaves and very small yellow flowers.

64965. PANDOREA AUSTRALIS (R. Br.) Spach (*Tecoma australis* R. Br.). Bignoniaceae.

No. 141. From the Santa Brigida Hotel gardens, Monte, Grand Canary, Canary Islands, July 23, 1925.

An evergreen climbing shrub glossy dark-green odd-pinnate leaves and yellowish flowers with violet spots in the throat. Native to Australia.

For previous introduction, see S. P. I. No. 46384.

64966. PAPAVER sp. Papaveraceae.

No. 138. A dwarf form of very delicate habit with peculiarly brilliant scarlet flowers, inhabiting the dry talus of lava rocks in the caldera (dry crater) of the extinct volcano near Los Llanos, Palma, Canary Islands, July 16, 1925.

64967, Persea indica (L.) Spreng. Lauraceae.

No. 165. Collected in private gardens at Las Palmas, Grand Canary, Canary Islands, July 22, 1925. A handsome medium-sized tree native to the Canary Islands and the Azores, where it is used as a shade tree in private gardens.

For previous introduction, see S. P. I. No. 39954.

64968. Phoenix dactylifera L. Phoenicaceae. Date.

No. 31. Brought from Timimoun, 15 days' caravan ride from Figuif, by C. L. Fournier, of Turga, Marrakesh, Morocco, and presented by M. Savarin, May 17, 1925. This date is said to be one of the best of the Moroccan Sahara.

64969. Podachaenium eminens (Lag.) Schultz-Bip (*P. paniculatum* Benth.). Asteraceae.

No. 117. A rapidly growing ornamental shrubby composite from Mexico with showy yellow flowers, found in the Jardin de Acclimatacion, Orotava, Teneriffe, Canary Islands, July 12, 1925.

For previous introduction, see S. P. I. No. 43235.

64970. PSORALEA BITUMINOSA L. Fabaceae.

No. 143. Barranco Ruiz, Orotava, Teneriffe, Canary Islands.

The tedera is a perennial plant which one finds everywhere along the roads and trails through the barrancos of the islands. On some of the terraces, where the soil is too shallow and dry for alfalfa, it is cultivated for its hay. It is said to be a splendid milk producer.

64971. RHAMNUS CRENULATA Ait. Rhamnaceae.

No. 125. From the Barranco de la Galga, Palma, Canary Islands, July 30, 1925. A bush 4 feet high, with large numbers of stiff short branches of a spiny character and red berries. May prove to be a valuable plant for hedges.

64972. RHUS PENTAPHYLLA (Jacq.) Desf. Anacardiaceae.

No. 19. Collected on the road between Rabat and Casa Blanca, May 8, 1925. A drought-resistant shrub which, when in fruit, is covered with very beautiful red berries. The trunk and roots yield a valuable tannin which is an article of export.

64973. ROSA SEMPERVIRENS L. Rosaceae. Rose.

No. 95. A wild white single rose found in the Oued Korifla, near Boulhout, May, 1925

For previous introduction, see S. P. I. No. 56820.

64974. Salvia sp. Menthaceae. Sage.

No. 100. A handsome light blue-flowered sage found near Rabat, Morocco, May, 1925.

64975. Scirpus holoschoenus L. Cyperaceae.

No. 140. From the Barranco Ruiz, Orotava, Teneriffe, July 10, 1925. A giant rush growing to 7 feet in height

64907 to 65000-Continued.

and used in years past by the Teneriffe peasants for basket work. It is the handsomest rush I have ever seen, and it would be worth growing as an ornamental plant.

64976 to 64978. Scorpiurus sulcata L. Fabaceae.

An annual leguminous plant, native to the Mediterranean region, with one to three prostrate or ascending stems up to a foot and a half in length and simple narrow leaves. The flowers are yellow.

64976. No. 9. From an abandoned wheat field near Amismiz, Morocco, May 19, 1925.

64977. No. 93. On the road between Casa Blanca and Fedhala, Morocco, May 10, 1925.

64978. No. 108. From the side of an irrigation ditch, near Marrakesh, Morocco, May 17, 1925.

64979. Scorpiurus vermiculata L. Fabaceae.

No. 33. Collected on the road between Casa Blanca and Fedhala, Morocco, May 10, 1925.

A trailing annual with leaves tapering into the stems and with yellow flowers. Native to the Mediterranean countries.

64980. Secale cereale L. Poaceae. Rye.

No. 27. A high-altitude rye of Berber origin from the Atlas Mountains which Auguste Tornezy, the inspector of agriculture at Marrakesh, has found to be an unusually good forage variety. Presented by Mr. Tornezy, May 17, 1925.

64981. SEMPERVIVUM PALMENSE (Webb) Christ. Crassulaceae.

A remarkable species whose young resettes of leaves look like rosebuds. Found on the dry perpendicular rocks of the caldera or old crater of the volcano near Los Llanos, Palma, Canary Islands, July 16, 1925.

64982. Sempervivum sp. Crassulaceae.

No. 113. From San Andres, Palma, Canary Islands, July 20, 1925. A charming species growing on the sun-baked cliffs in Palma Island. When young the plants resemble rosebuds in shape and are very attractive.

64983. Sempervivum sp. Crassulaceae.

No. 115. From the Barranco Ruiz, near Orotava, Teneriffe, Canary Islands, July 11, 1925. A beautiful velvety leaved species which turns reddish when old and is altogether a charming form.

64984. SOLANUM AVICULARE FORST. f. Solanaceae.

No. 118. From the old garden of the great botanist Wildpret, Orotava, Teneriffe, Canary Islands, July 11, 1925. A beautiful blue-flowered yellow-fruited shrub with laciniate leaves.

64985. Spergularia diandra Boiss. Silenaccae.

No. 145. A very pretty annual with pink flowers, which stands a great deal of dry weather. This variety spreads over the ground in a mat. Found on a roadside near Ronda, Spain, July 1, 1925.

64986 to 64988. STIPA TORTILIS Desf. Poaceae.

An annual bushy grass with prostrate or ascending stems up to a foot and a half long and gray-green leaves. Native to sandy and stony places in the Mediterranean countries.

64986. No. 12. From the road between Mogador and Marrakesh, Morocco, May 17, 1925.

64987. No. 44. Collected in a wheat field, near Marrakesh, Morocco, on the road to Mogador, May 17, 1925.

64988. From the road between Mogador and Marrakesh, Morocco, May 16, 1925.

64989. TAMARIX GALLICA L. Tamarica-ceae. Tamarisk,

No. 139. July, 1925. Var. canariensis. A very attractive form of the common variety which is used in the island of Teneriffe as a windbreak to protect the banana plantations.

64990 to 64997. Trifolium spp. Fabaceae.

64990. TRIFOLIUM ANGUSTIFOLIUM L.

No. 91. From the Barranco de la Galga, Palma, Canary Islands, July 20, 1925.

An annual clover, native to the Mediterranean region, with one to three prostrate or ascending stems up to a foot or more in length.

For previous introduction, see S. P. I. No. 46811.

64991. Trifolium isthmocarpum Brot.

No. 39. From the road between Casa Blanca and Fedhala, Morocco, May 10, 1925.

A many-stemmed annual clover, about a foot high, with dense heads of pink flowers. Native to Spain and North Africa.

64992. TRIFOLIUM STRIATUM SPINESCENS Lange.

No. 164. From the road between Ronda and Grazalema, Spain, July 1, 1925. A tiny dwarf clover not over 4 inches high, which forms patches of considerable size in the region near Ronda

64993 to 64995. Trifolium tomentosum L.

A dense low-growing annual or biennial clover with stems usually less than 8 inches long. Native to dry barren places in the Mediterranean region.

64993. No. 24. From an irrigation ditch just outside of Marrakesh, Morocco, May 17, 1925.

64994. No. 42. From the edge of an irrigation ditch near the experimental farm. Marrakesh, Morocco, May 17, 1925.

64995. No. 98. From the road between Casa Blanca and Fedhala, May 10, 1925.

64996. Trifolium sp.

No. 30. A dwarf clover, not over 3 inches high, which forms dense mats

64907 to 65000—Continued.

in the dry soil on the road between Rabat and Casa Blanca, Morocco, May 8, 1925.

64997. Trifolium sp.

No. 41. A dwarf clover, not over 5 inches high, forming patches of considerable size in the dry clay soil near Marabout, beyond Amismiz, Morocco, May 30, 1925.

64998. TRITICUM DURUM Desf. Poaceae.

No. 34. From the experimental farm, Marrakesh, presented by Auguste Tornezy, inspector of agriculture at Marrakesh, May 17, 1925. Var. dredria. A native Moroccan variety which, according to Mr. Tornezy, has the advantage of keeping the birds from stealing the grain because the heads bend as they ripen, throwing the awns into an upright position which the birds do not like.

64999 and 65000, VICIA SATIVA L. Fabaceae. Common vetch.

64999. No. 11. From a hedgerow along the road between Tanaourt and Marrakesh, Morocco, May 17, 1925.

65000. No. 45. From wheat fields between Mogador and Marrakesh, Morocco, May 17, 1925.

65001 to 65047.

From the Mediterranean region. Collected by David Fairchild, agricultural explorer, Bureau of Plant Industry, with the Allison V. Armour expedition. Received September, 1925. Notes by Doctor Fairchild.

65001 and 65002. Capsicum annuum L. Solanaceae. Red pepper.

65001. No. 197. Obtained in the market at Inca, Majorca, Balearic Islands, August 19, 1925. A remarkable, extremely large, landsome scarlet variety of fine flavor. The pods measure 8 inches in length and 9 inches in the largest circumference. Nearly all of the seeds are located on the central placenta.

65002. No. 217. Obtained in the market at Port Mahon, Minorca, Balearic Islands. A variety of "bullnose" pepper of unusual size, being 4 inches long and 4 inches across. It is rather too deeply lobed to be ideal in shape, nevertheless it is large enough to be quite attractive.

65003. CISTUS CRISPUS L. Cistaceae.

No. 158b. From the Montelirio estate near Ronda. Spain, July 1, 1925. A pink-flowered species growing with No. 158a [S. P. I. No. 65004] in cork-oak forests near Ronda.

A compact hairy shrub about 2 feet high, with sessile, very narrow leaves and three to four flowers about 2 inches across. Native to southern Europe.

65004. CISTUS sp. Cistaceae.

No. 158a. A beautiful white-flowered rockrose of southern Spain which covers great stretches of country in the cork-oak forests around Ronda. From the Montelirio estate near Ronda, July 1, 1925.

65005. CITRULLUS VULGARIS Schrad. Cucurbitaceae. Watermelon.

No. 220. From the market at Las Palmas, Grand Canary, Canary Islands, Au-

65001 to 65047—Continued.

gust, 1925. A delicious dark-fleshed variety, perfectly round, with a thin dark-green rind.

65006. Cotyledon umbilicus L. Crassulaceae.

No. 157. From Barranco de la Galga, Palma, Canary Islands, July 20, 1925. A plant with tubers which enable it to live on the tile roofs of houses in the dry burning summer climate of Morocco and the Canary Islands.

65007. CUCUMIS MELO L. Cucurbitaceae.

No. 203. Seeds of the "Francesca" and "Valencianos" varieties of melon purchased from the seed dealer Bartolome Amengual Delmau, Palma, Majorca, Balearic Islands, August 22, 1925.

65008 to 65011. Cytisus spp. Fabaceae.

65008. CYTISUS FILIPES Webb and Berth.

No. 167. From the Barranco de la Galga, Palma, Canary Islands, July 20, 1925. A shrub which is grown for its fragrant white flowers, on the terraces of the barrancos of the island. It resembles superficially a Genista.

65009. CYTISUS PALMENSIS (Christ)
Hutchinson. Tagasaste.

No. 180b. From the hillside above Santa Cruz, Palma, Canary Islands, July 16, 1925. One of the varieties of tagasaste which is deserving of trial as a forage shrub for the cool, but not cold, regions of California and Arizona. Unless the bushes are cut they become so woody and hard that the stock refuse to eat them. The shrub, 12 feet or less in height, has long slender hairy branches, narrow leaves, silky beneath, and axillary clusters of white flowers. Native to the Canary Islands.

65010. CYTISUS PEREZII Hutchinson. Escabon.

No. 180a. From Osario, Terror, Grand Canary, Canary Islands, July 26, 1925. The escabon of the Canary Islanders, who grow it for firewood largely, but do not cut it for forage as they do tagasaste [S. P. I. No. 65009]. The flowers are white and are said to be fragrant. This is an ornamental of some promise.

65011. CYTISUS STENOPETALUS (Webb) Christ.

Nos. 151 and 152. From the old Perez garden, now part of the grounds of the Hotel Victoria, Orotava, Teneriffe, Canary Islands, July 9, 1925. The "gacia" or "gacio" is a forage crop of the Canary Islands used particularly for feeding goats; it is said to induce milk production. It is a shrub or small tree, 20 feet or less in height, with crowded silky pubescent foliage and elongated racemes of bright-yellow flowers. Native to the Canary Islands.

For previous introduction, see S. P. I. No. 44832.

65012. DOLICHOS JACQUINII DC. (D. lignosus Jacq., not L.). Fabaceae.

No. 179. From an old garden wall at Chella, the old Moorish ruin of Kasba, near Rabat, Morocco, June 21, 1925.

65001 to 65047—Continued.

The profuse blooming habit and the extreme elegance of foliage make this Australian vine valuable for covering porches. It is an evergreen perennial with leaves much smaller than those of Dolichos lablab. The flowers are white or purplish.

For previous introduction, see S. P. I. No. 48668.

65013. EPHEDRA ALTISSIMA Desf. Gnetaceae.

No. 227. Collected in an Arab cemetery near Amismiz, south of Marrakesh, Morocco, May 30, 1925.

A climbing much-branched shrub, up to 20 feet in height, with green branches resembling the stems of the horsetail (Equisetum), very small leaves, and berrylike scarlet fruits. Native to North Africa.

For previous introduction, see S. P. I. No. 57930.

65014. Fuchsia corymbiftora Ruiz and Pav. Onagraceae.

No. 155. From the old Perez garden, now part of the grounds of the Hotel Victoria, Orotava, Teneriffe, Canary Islands, July 12, 1925.

A handsome Peruvian fuchsia with large serrate taper-pointed leaves and deep-red flowers. The plant becomes tall, but requires support to attain full height, and is therefore adapted for pillars or pergolas in the warmest parts of the United States.

65015 to 65018. GENISTA spp. Fabaceae. 65015. GENISTA MONOSPERMA (L.) Lam.

No. 172. From the park at Icod, Teneriffe, Canary Islands, July 9, 1925.

For previous introduction and description, see S. P. I. Nos. 64924 to 64926.

65016. GENISTA RHODORHIZOIDES Webb and Berth.

No. 173. From a private garden at Yaiza, Lanzarote, Canary Islands, July 30, 1925. A white-flowered fragrant shrub growing 10 to 12 feet in height when cultivated. Useful probably as a sand binder and also for forcing purposes in greenhouses because of its fragrant flowers.

65017. GENISTA SPHAEROCARPA Lam.

No. 159. From the hillsides near Ronda, Spain, July 1, 1925.

For previous introduction and description, see S. P. I. No. 64927.

65018. GENISTA Sp.

No. 186. From Mercedes, Teneriffe, Canary Islands, at an altitude of 2,300 feet, July 12, 1925. A leguminous shrub which may have value as a soil improver.

65019. Gossypium sp. Malvaceae.

Cotton

No. 206. San Antonio, Iviza, Balearic Islands, August 14, 1925. From a single plant which most likely had escaped from some garden.

65020. JUNIPERUS PHOENICEA L. Pinaceae. Juniper.

No. 207. Collected near San Giuseppe, Iviza, Balearic Islands, August 16, 1925.

65001 to 65047—Continued.

As seen in the Balearic Islands, this is a small pyramidal tree; and in the mountains of Algeria and Morocco, where the land is stony and dry, the temperature reaching over 95° F., and no rain falling during the summer, it is a spreading bushy tree. It produces an abundance of reddish brown fruits and is said to yield an aromatic resin, although I did not hear of this being collected in the regions where it grows.

For previous introduction, see S. P. I. No. 54919.

65021. LONICERA IMPLEXA Ait. Caprifoliaceae. Honeysuckle.

No. 193. Growing wild on the rocky hillsides at the Coll de Soller, Majorca, Balearic Islands, August 19, 1925. A rather small shrubby honeysuckle with perfoliate leaves and pink berries in the axils of the leaves.

65022. Lotus sp. Fabaceae.

No. 183. Near Icod, Teneriffe, Canary Islands, July 10, 1925. A very deeprooted species found on dry rocky hillsides.

65023. LYCOPERSICON ESCULENTUM Mill. Solanaceae. Tomato.

No. 201. From Vanalbufar, Majorca, Balearie Islands, August 22, 1925. A small round tomato, 1½ inches in diameter, of a brilliant red color and extraordinary drying qualities. The fruits, about 90 to a bunch, are strung up on threads and dried in special rooms. The semidried fruits are shipped to Spain in immense quantities. This variety has very few seeds and a strong but agreeable tomato flavor.

65024. MEDICAGO ARBOREA L. Fabaceae.

No. 221. From Barranco Simon, Minorca, Balearic Islands, August 24, 1925. This shrubby species is grown extensively, I am informed, as a hedge plant in the island of Minorca, and the branches are cut and fed to stock.

For previous introduction, see S. P. I. No. 28277.

65025 and 65026. MELILOTUS SULCATA Desf. Fabaceae.

An annual pale-green leguminous plant, upright in habit, branched from the base, and up to a foot and a half high. The flowers are small and yellow. Native to the Mediterranean countries.

For previous introduction, see S. P. I. No. 43597.

65025. No. 181. Found by the roadside between Azrou and Meknez, Morocco, June 16, 1925.

65026. No. 212. From the roadside near Soller, Majorca, Balearic Islands, August 20, 1925.

65027 and 65028. ORNITHOPUS COMPRESSUS L. Fabaceae.

A slender spreading annual plant with pinnate leaves and very small yellow flowers.

For previous introduction, see S. P. I. No. 64964.

65027. No. 154. From the fields near Algecias, Spain, June 27, 1925.

65001 to 65047—Continued.

65028. No. 155. From the Barranco de la Galga and Punta Llama, Palma, Canary Islands, July 20, 1925.

65029. ORNITHOPUS PINNATUS (Mill.)
Druce (O. ebracteatus Brot.). Fabaceae.

No. 161. From Monte de las Lomitas, Palma, Canary Islands, July 19, 1925. A slender-stemmed annual plant, sometimes 20 inches high, prostrate or ascending in habit, with small yellow flowers. Native to the Mediterranean region.

65030. PANCRATIUM MARITIMUM L. Amaryllidaceae.

No. 209. From the beach at Cala Parte, near Port Mahon, Minorca, Balearic Islands, August 25, 1925. I never saw a more beautiful sight than that produced by thousands of this maritime lily growing in pure sand on the tiny beach at Cala Parte. The fragrance from these beautiful white flowers, over 2 inches long, was delightful.

65031. Persea indica (L.) Spreng. Lauraceae.

No. 169. From the old Perez garden, now a part of the grounds of the Hotel Victoria, Orotava, Teneriffe, Canary Islands.

For previous introduction and description, see S. P. I. No. 64967.

65032. PLOCAMA PENDULA Ait. Rubiaceae.

No. 185. Collected on the road to Ingenio, Grand Canary, Canary Islands, July 26, 1925. A dwarf drooping willowlike shrub, light green, which grows to an old age in the driest soils of the dry regions of the island of Teneriffe. It bears great clusters of small white berries resembling those of the mistletoe.

For previous introduction, see S. P. I. No. 55920.

65033, PSORALEA BITUMINOSA L. Fabaceae.

No. 177. Presented by Cesar Martinez Barreda, Santa Cruz, Palma, Canary Islands, July 17, 1925.

For previous introduction and description, see S. P. I. No. 64970.

65034. RUBUS DISCOLOR Weihe and Nees. Rosaceae.

No. 192. From Soller, near Palma, Majorca, Balearic Islands, August 19, 1925. A very spiny species loaded with black fruits which were rather dry but sweet. The individual fruits were round. It is inferior to our cultivated varieties, but of possible value for breeding purposes.

For previous introduction, see S. P. I. No. 42750.

65035 to 65037. Scorpiurus spp. Faba-

65035. SCORPIURUS SUBVILLOSA L.

No. 196. Collected on the road between Palma and Soller, Majorca, Balearic Islands, August 19, 1925. A decumbent or ascending annual with one to three stems up to 20 inches in length, long-stemmed simple grassgreen narrow leaves, and small yellow flowers. Native to the Mediterranean countries.

65001 to 65047—Continued.

For previous introduction, see S. P. I. No. 58710.

65036. SCORPIURUS SULCATA L.

No. 160. From Monte de las Lomitas, Palma, Canary Islands, July 19, 1925.

For previous introduction and description, see S. P. I. No. 64976.

65037. SCORPIURUS VERMICULATA L.

No. 176. Collected near Algeciras, Spain, June 27, 1925.

For previous introduction and description, see S. P. I. No. 64979.

65038. Sempervivum sp. Crassulaceae.

No. 153. From Barranco de la Gomera, Palma, Canary Islands, July 17, 1925. A handsome species, turning a beautiful red in summer, which is worth cultivating because of its ability to grow on stone walls in southern latitudes and withstand long periods of drought. The leaves, fringed with short hairs, form a great reasted on a short stem. No. 153. From Barranco de la Gomera, great rosette on a short stem.

65039. Sempervivum sp. Crassulaceae.

No. 166. A strikingly handsome species which produces rosettes of thick, fleshy, but glaucous leaves resembling halfout graucous leaves resembling half-opened rosebuds. It grows from crevices in the precipitous cliffs of the so-called Barranco de las Aguas, near Monte de las Lomitas, Palma, Canary Islands, July 19, 1925.

65040. Sonchus sp. Cichoriaceae.

Nos. 170 and 171. From the old Perez garden, now part of the grounds of the Hotel Victoria, Orotava, Teneriffe, Canary Islands, July 18, 1925. A large yellow-flowered species with rather succulent leaves. It is much sought after by goats.

65041 to 65044. Trifolium spp. Fabaceae. Clover.

65041. TRIFOLIUM sp.

No. 162. A species forming mats of considerable size on the cultivated terraces where barley and wheat are grown in the Barranco de la Galga, Palma, Canary Islands, July 20, 1925.

65042. TRIFOLIUM Sp.

No. 163. A small dwarf sp growing in pasture land in the species hills near Algeciras, Spain, June 27, 1925.

65001 to 65047—Continued.

65043. TRIFOLIUM Sp.

No. 210. A small dwarf clover forming a fine mat of herbage in a rather moist meadow near the torrente or dry watercourse of Molinar, near Palma, Majorca, Balearic Islands, August 21, 1925.

65044. Trifolium sp.

No. 214. I found the dry pasture land in the Barranco de Cala Parte, near Port Mahon, Minorca, Balearic Islands, August 25, 1925, covered with dry clover heads of this small species.

65045. Warionia saharae Benth. and Asteraceae.

No. 129. Collected near Agadir, Morocco, on the road to Mogador, June 8, 1925. A very striking tree composite, native to the Sahara Desert of western Algeria and Morocco, which forms a tree 10 feet or more high and bears great yellow flowers which are almost as large as those of the artichoke.

65046 and 65047. ZEA MAYS L. Poaceae.

Corn. 5046. No. 182. Collected near Uga, Lanzarote, Canary Islands, July 31, 1925. The dwarf maize of Lanzarote, which I take to be a distinct race and which is practically the only variety grown on that volcanic cinder-covered island, appears to be a brachytic dwarf with stems as large in diameter as ordinary corn but only about 24 inches high. Ordinarily only a single ear of corn is borne, and its lower end is so close to the ground that it gives the impression of rising right out of the gray cinders. I was told that six months are required to produce these small ears. This corn does not appear to be of especially good quality. Lanzarote has a cool climate, there being heavy dews every hight, although for two years there has been no rain. 65046. No has been no rain.

65047. No. 219. From Las Palmas, Grand 1047. No. 219. From Las Palmas, Grand Canary, Canary Islands, July 25, 1925. A very brilliantly colored variety grown extensively all over this island of Grand Canary. It has a translucent appearance quite foreign to the corns in America. In the dry portion of the island this corn makes a structed, slow growth, but it is not a true dwarf such as No. 182 [S. P. I. No. 65046].

INDEX OF COMMON AND SCIENTIFIC NAMES

Acacia arabica. See A. scorpioides. scapelliformis, 64798. scorpioides, 64663. signata, 64799. vernicifua, 64806.
Adenocarpus foliolosus, 64962. Adlay. See Coix lacryma-jobi ma-yuen. Aeschynomene indica, 64616. Agropyron ciliare, 64765.
Alangium longiflorum, 64763. Allalia, Medicago falcata, 64634. M. sativa, 64635. Allium crpa, 64449. nigrum, 64888. Amaranthus peniculatus, 64451. Amygdalus persica, 64812-64814. persica nectarina, 64815, 64816. Anchusa undulata, 64506. Anchusa undulata, 64506. Anple. See Malus spp. paradise, Malus pumila, 64827. Apricot. See Prunus armeniaca. Japanese. See P. mume. Aquilegia oxysepala, 64766. Arachis hypogaca, 64503. Argania sideroxylom. See A. spinosa. spinosa, 64907. Arisarum vulgare, 64432. Aryandinaria alpina, 64555. Asparagus altissimus, 645649. Carpotroche brasiliensis, 64443. Cassia pleurocarpa, 64479. Cephalostachyum pergracile, 64808. Ceratonia siliqua, 64598. Chaenomeles superba, 64430; 64431. Cherry. See the following Prunus spp. Cherry. See the following Prunus spp.
P. glandulosa.
P. padus.
bush. See P. tomentosa.
European bird. See P. padus,
sweet. See P. avium.
Chorileana quercifolia, 64480.
Cistus sp., 65004.
crispus, 65003.
Citron, fingered. See Citrus medica sarcodactulis. codactylis, Citrullus vulgaris, 64869; 64870, 65005. Citrus spp., 64606, 64894-64896. aurantifolia, 64603. decumana. See C. grandis. grandis, 64429, 64604, 64607-64612. medica sarcodactylis, 64605. nobilis deliciosa, 64613-64615, 64845nobilis deliciosa, 64613-64615, 64845-64851.
sinensis, 64852-64854, 64893.
Clover. See Trifolium spp.
subterranean. See T. subterraneum.
Coix lacryma-jobi ma-yuen, 64499-64501, 64599-64601, 64664.
Columbine. See Aquilegia sp.
Combretum coccineum, 64536.
Corn. See Zca mays.
Cotton. See Gossypium spp.
Cotyledon umbilicus, 64917, 65006.
Crab apple. See Malus spp.
Crotalaria spp., 64512, 64533, 64534.
dilloniand, 64535.
intermedia, 64535. Arisarum viugare, 64452. Arundinaria alpina, 64555. Asparagus altissimus, 64549. Aspris sp., 64910. Astragalus alpinus, 64617. armeniacus, 64618. boeticus, 64619. cicer, 64620. cicer, 64620. cchinus, 64621. cxscapus transilvanicus, 64622. macrocarpus, 64623. mcmbranaceous, 64624. Arerrhoa bilimbi, 64905. carambola, 64906. actioniana, 64353.
intermedia, 64532.
juncea, 64531.
Crowea anyustifolia, 64481.
Cryptostegia madajascariensis, 64655.
Cucumis melo, 64871-64875, 65007.
Cuphea balsamona, 64537.
Currant. See Ribes spp. Balaustion pulcherrimum, 64476. Bamboo. See the following:
Arundinaria alpina. Currant. See Ribes spp. Cyanostegia angustifolia, 64482. Cydonia oblonga, 64817, 64818. Cytisus filipes, 65008. palmensis, 65000. perezii, 65010. stenopetalus, 65011. Cephalostachyum pergracile. Dendrocalamus hamiltonii. D. membranaceus. D. membranaccus.
Banena. See Musa uranoscopos.
Barley. See Hordeum spp.
Bauhinia esculenta, 64566.
Bean. common. See Phaseolus vulgaris.
Betula japonica, 64444.
Biarum bovei, 64433.
Bilimbi. See Averrhoa bilimbi.
Billardiera longiftora, 64597.
Birch. See Betula japonica.
Biserrula pelecinus, 64911, 64912.
Bocconia frutescens, 64913.
Bossiaes sp., 64477.
Bougainvillea spp. 64651, 64652.
Brassica sp., 64950.
Bromus sp., 64914.
Caesalninia pectinata 64915 Dahlia sp., 64518.

Danthonia pilosa, 64527.

Datura sp., 64918.

Deguelia trifoliata, 64602. Degucita triforata, 64802.
Dendrocalamus hamiltonii, 64809.
membranaccus, 64810.
Derris uliginosa. See Deguelia trifoliata.
Dioscorea spp. 64656-64660.
Diospyros kaki, 64819-64821.
Dolichos jacquinii, 65012.
lignosus. See D. jacquinii.
Dwarf pea tree. See Caragana pygmaea. Ebenus pinnata, 64919.
Echium fastuosum, 64920.
simplex, 64921.
Elacagnus philippensis, 64762.
philippinensis. See E. philippensis.
Elder. See Sambucus spp.
Eleusine coracana, 64522.
Elm. See Ulmus spp.
Elymus spp., 64627, 64628.
dahuricus, 64625.
excelsus, 64626.
excelsus, 64626.
Ephedra altissima, 65013.
Eriobotrya japonica, 64822-64825.
Erodium sp., 64770. Caesalpinia pectinata, 64915, tinctoria. See C. pectinata. Calothamnus chrysantherus, 64478. Canarina campanulata. See C. canaricasis. Calothamnus chrysantherus, 64478.
Canarina campanulata. See C. canarica.
canariensis, 64916.
Canavali plagiosperma, 64511.
Candollea graminifolia, 64807.
Capsicum annuum, 64547, 65001, 65002.
Caragana sp., 64769.
pygmaea, 64768.
Carambola. See Averrhoa carambola.
Cares sp., 64453.
Carob. See Ceratonia siliqua.

Escabon. See Cytisus perezii. Eucalyptus delegatensis, 64666. Jasminum odoratissimum, 64934. Jerusalem artichoke. See I Helianthus Falcata japonica, 64454.
Festuca ovina, 64771.
rubra, 64855.
Ficus carica, 64826.
Fig. See Ficus carica.
Fragaria spp., 64505, 64506, 64539, 64856.
Fuchsia corymbiflora, 65014.
speciosa, 64922.
Funtumia elastica, 64541. tuberosus. Juniper. See Juniperus phoenicea. Juniperus phoenicea, 65020. Kaki. See Diospyros kaki. Kunzea sericea, 64488. Lathyrusensifolius. See L. filiformis Lathyrus ensifolius. See bauhini. filiformis bauhini, 64629. inconspicius, 64630. Lavatera sp., 64561. cretica, 64935. Garcinia mangostana, 64519. Garcinia mangostana, 64019.
Genista sp., 65018.
monosperma, 64923-64926, 65015.
rhodorhizoides, 65016.
sphaerocarpa, 64927, 65017.
Gladiolus spp., 64647, 64897-64904.
byzantinus, 64434.
callistus, 64653.
yccurvus, 64654.
Glucine hisnida. See Soja max. cretica, 64935.
Lens esculenta. See Lentilla lens.
Lentil. See Lentilla lens.
Leutilla lens, 64936.
Leptospermum roci, 64801.
Leucojum autumnale, 64440.
trichophyllum, 64937.
Leucopogon verticillatus, 64489.
Lilium sp., 64764.
concolor buschianum, 64774.
tenuifolium, 64773.
Lily See Lilium spn. Glycine hispida. See Soja max.
Gossypium spp., 64502, 64509, 64545, 64504, 65019.
arboreum, 64889.
barbadense, 64498, 64543, 64544.
herbaceum, 64890, 64891.
hirsutum, 64450.
obtusifolium, 64892.
Grape. See Vitis spp.
Grapefruit. See Citrus grandis.
Grape hyacinth. See Muscari sp.
Grass. blue. See Poa pratensis.
fow meadow. See Poa palustris.
Natal. See Tricholaena rosea.
perennial rye. See Lolium perenne.
red fescue. See Festuca ovina.
sheep fescue. See Festuca ovina.
Sudan. See Holcus sorghum sudancusis. Glycine hispida. See Soja max. Gossypium spp., 64502, 64509, Linuifolium, 64773.

Lily. See Lillium spp.
Lime. See Citrus aurantifolia.
Limonium spp., 64938, 64939.

Lolium perenne, 64631.

rigidum, 64632.
Lonicera sp., 64797.

implexa, 65021. implexa, 65021.
praeflorens, 64457, 64458.
Loquat. See Eribotrya japonica.
Lotus spp., 64520, 65022.
bertholetii, 64940.
cytisoides, 64941.
hispidus, 64633.
Lupine. See Lupinus termis.
Lupinus termis, 64942.
Lycopersicon esculentum, 65023. cnsis. Malcomia littorea, 64562.
Malope sp., 64563.
Malope sp., 64563.
Malus spp., 64383, 64834, 64857.
pumila, 64827.
sylvestris, 64828-64832.
Manus special suaveolens, 64943.
Mangosteen. See Garcinia mangostana.
Marianthus erubescens, 64490.
Matthiola parviflora, 64944.
Medicago arborea, 65024.
falcata, 64634.
laciniata, 64945-64947.
littoralis, 64948-64951.
sativa, 64635.
solcirolii, 64952.
Melaleuca sp., 64492.
cordata, 64802.
holoscricea, 64803.
longicoma, 64804.
violacea, 64491.
Melica cupani, 64953, 64954.
gmelini, 64775.
Melilotus speciosa, 64955.
sulcata, 65025, 65026.
Melon. See Cucumis melo.
Mimusops zeyheri, 64510.
Miscanthus saechariflorus, 64636. See also: ee also:
Agropyron ciliare.
Aspris sp.
Bromus sp.
Danthonia pilosa.
Elymus spp.
Festuca ovina.
F. rubra.
Hierochloe glabra.
Hordeum violaceum.
Lolium rigidum.
Melica cupani.
M. gmelini. M. gmelini. Miscanthus sacchariflorus. Neyraudia madagascariensis. Poa spp. Puccinellia distans. Stipa tortilis.
Guava. See Psidium guajava.
Gymnosporia cassinoides, 64928. Gymnosporia cassinoides, 64928.

Habenaria sp., 64929.
Hakea laurina, 64483.
multilineata, 64484. 64485.
Hedysarum capitatum, 64553.
coronarium, 64930.
pallidum, 64554.
spinosissimum, 64931.
Hetinthus tuberosus, 64513, 64588.
Hetipterum rubellum, 64486.
Heterospathe elata, 64595.
Hevea brasiliensis, 64542.
Hierochloe glabra, 64455, 64456.
Hippocrepis scabra, 64932.
Holcus sorghum sudanensis, 64528.
Honeysuckle. See Lonicera spp.
Hordeum sp., 64524.
violaceum, 64772.
vulgare nigrum, 64876.
vulgare pallidum, 64523, 64877, 64878.
Hovea elliptica, 64487.
Illecebrum verticillatum, 64548. Mimusops zeyheri, 64510. Minusops zeyneri, 64510.
Miscanthus sacchariforus, 64636.
Morus nigra, 64956.
Mulberry, black. See Morus nigra.
Musa coccinea. See M. uranoscopos.
uranoscopos. 64673. Muscari sp., 64957. Myoporum insulare, 64958. Myrica rubra, 64568. Narcissus viridiflorus, 64441. Nectarine. See Amygdalus persica neo-See tarina. Nerium oleander, 64959. Neyraudia madagascariensis, 64667. Illecebrum verticillatum, 64548. Iris spp., 64438, 64439, 64933. alata, 64435. Ochna multiflora, 64961. Ocotea foetens, 64960. Oleander. See Nerium oleander. Omphalea oleifera, 64557, 64811. Onion. See Allium cepa. Onobrychis caput-yalli, 64637. fontanesii, 64436. tingitana, 64437, 64565. Isopogon asper, 64800.

```
Sage. See Salvia sp.
Salvia sp., 64974.
coccinea pseudococcinea, 64668.
Sambucus sp., 64795.
racemosa, 64865.
   Orange, mandarin. See Citrus nobilis de-
                                  liciosa.
  sweet. See C. sinensis.
Orchis papilionacea, 64963.
Ornithopus compressus,
65028.
                                                                                                                                       64964.
                                                                                                                                                                                      65027,
                                                                                                                                                                                                                               racemosa, 64860.
Scilla peruviana, 64442.
Scirpus holoschoenus, 64975.
Scorpiurus subvillosa, 65035.
sulcata, 64976-64978, 65036.
vermiculata, 64979, 65037.
Secale cereale, 64980.
Sedge. See Carex sp.
Sempervivum spp., 64982, 64983, 65038,
65039.
   chracteatus. See O. pinnatus.
pinnatus, 64638, 65029.
Oxytropis oxyphylla, 64767.
  Palm. See Heterospathe elata.
date. See Phoenix dactylifera.
Pancratium maritimum, 65030.
Pandorea australis, 64965.
Panicum miliaccum, 64459, 64460.
Papaver sp., 64966.
                                                                                                                                                                                                                                                                65039.
                                                                                                                                                                                                                               03039.
canariense, 64593.
palmense, 64981.
Shaddock. See Citrus grandis.
Sida calyxhymenia, 64495.
Soja max, 64589-64591, 64641, 64674-64749.
Panicolm miliaccum, 64459, 64460.
Papaver sp., 64966.
nudicaule, 64776.
Peach. See Amygdalus persica.
Peanut. See Arachis hypogaca.
Pentzia incana, 64649.
virgata. See P. incana.
Pepper, red. See Capsicum annuum.
Persea indica, 64967, 65031.
Phaseolus vulgaris, 64639.
Phebalium tuberculosum, 64493.
Phoceniw dactylifera, 64777, 64968.
Pine. See Pinus spp.
Pinus montana pumilio, 64844.
Pisum elatius, 64640.
Pityrodia teckiana, 64494.
Pilocama pendula, 65032.
Plum. See Prunus spp.
Poa spp., 64461, 64529.
chaixii, 64778, 64779.
nemoralis, 64781, 64781.
pratensis, 64781.
pratensis, 64782-64784.
sphondylodes, 64785, 6486.
Podachaenium eminens, 64969.
paniculatum. See P. eminens.
Poppy. See Papaver spp.
Poplus suavcolens, 647877.
Potato. See Solanum tuberosum.
Prinsepia sinensis, 64879.
Proso. See Panicum miliaccum.
                                                                                                                                                                                                                              64749.
Solanum sp., 64661.
ariculare, 64984.
tuberosum. 64587, 64662.
Sonchus sp., 65040.
Soursop. See Annona muricata.
Soy bean. See Soja max.
Spergularia diandra, 64985.
Spiraea sp., 64976.
media. 64866.
Spirea. See Spiraea spp.
Stipa tortilis, 64986-64988.
Strawberry. See Fragaria spp.
Stylidium graminifolium. See Candollea graminifolia.
Sugar cane. See Saccharum officinarum.
Sunn hemp. See Cutisus nalmensis.
                                                                                                                                                                                                                               Tagasaste. See Cytisus palmensis.
Tamarisk. See Tamarix gallica.
Tamarisk gallica. 64594, 64989.
Teccoma australis. See Pandorea australis.
Templetonia retusa, 64805.
Thomasia brachystachys, 64496.
Tomato. See Lycopersicon esculentum.
Tricholaena rosea, 64642.
Trifolium spp., 64564, 64996, 64997, 65041—65044.
  Potato. See Solanum tuberosum.
Prinsepia sinensis, 64879.
Proso. See Panicum miliaceum.
Prosopis nandubey, 64556.
Prunus spp., 64446, 64448, 64462, 64839-64842.
                                                                                                                                                                                                                                65044.
angustifolium, 64990.
isthmocarpum, 64991.
maritimum, 64643.
pratense, 64644.
stellatum, 64645.
striatum spinescens, 64992.
subterraneum, 64530, 64592.
tomentosum, 64993-64995.
Trigonella caerulea, 64646.
Triticum aestivum, 64525, 64540, 64551,
64586.
durum, 64998.
 64842.

armeniaca, 64648, 64788, 64789, 64835-64838, 64880-64886.

avium, 64790.
incisa, 64669.
japonica, 64445.

mume, 64569-64582.
padus, 64791.
persica. See Amygdalus persica.
salicina, 64583, 64584.
tomentosa, 64665.

Psidium guajava, 64559.
Psoralea bituminosa, 64521, 64970, 65033.
Puccinellia distans, 64792, 64793.
                                                                                                                                                                                                                                 durum, 64998.
vulgare. See T. aestivum.
Trymalium billardieri, 64497.
                                                                                                                                                                                                                                Ulmus japonica, 64466, 64467.
laciniata, 64472.
macrocarpa, 64463.
pumila, 64464, 64465, 64468–64471,
   Quince. See Cydonia oblonga.
Quince. See Cydonia oblonga.
Radish. See Raphanus sativus.
Ragi. See Eleusine coracana.
Raphanus sativus, 64596.
Raspberry. See Rubus spp.
Siberian. See R. crataegifolius.
Red elder. See Sambucus spp.
Rhamnus crenulata, 64971.
Rhus pentaphylla, 64972.
Ribes spp., 64859-64861.
diacantha. 64794.
Rosa sp., 64447.
sempervirens, 64973.
Rose. See Rosa spp.
Rubber tree, Lagos. See Funtumia elastica.
Rubus spp., 64585, 64862-64864.
crataegifolius, 64887.
discolor, 65034.
Rye. See Secale cercale.
Saccharum officinarum. 64507. 64514.
                                                                                                                                                                                                                                                                 64504.
                                                                                                                                                                                                                                Vaccinium sp., 64868.

vitis-idaea, 64867.

Vetch, common. See Vicia sativa.

Vicia sativa. 64999, 65000.

Viola sp.. 64475.

collina, 64474.

variepata. 64473.

Violet. See Viola spp.

Virola guatemalensis, 64558.

Vitis sp.. 64538.
                                                                                                                                                                                                                                  Vitis sp., 64538.

vinifera, 64650.
                                                                                                                                                                                                                                Warionia saharae, 65045.
Watermelon. See Citrullus vulgaris.
Wheat, common. See Triticum aestivum.
durum. See Triturum.
                                                                                                                                                                                                                                Yam. See Dioscorea spp.
             ccharum officinarum, 64507, 64514, Xam. See Dioscorea spp. 64517, 64567, 64670-64672, 64750-64761. Zea mays, 64526, 64552, 65046, 65047.
   Saccharum
```

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