# PLANT MATERIAL INTRODUCED BY THE DIVISION OF FOREIGN PLANT INTRODUCTION, BUREAU OF PLANT INDUSTRY, JANUARY 1 TO MARCH 31, 1932 (Nos. 95552-98256) 

| CONTENTS | Page |  |
| :--- | ---: | ---: |
| Introductory statement | 1 |  |
| Inventory |  |  |
| Index of common and scientific names | 0 | 9 |

## INTRODUCTORY STATEMENT

Inventory 110, recording plant material received by the Division of Foreign Plant Introduction between January 1 and March 31, 1932 (nos. 95552-98256), is conspicuous for two major groups-the one of soybeans containing 1,503 introductions, and the other the collections of the Allison V. Armour expedition to the West Indies and South America on which both David Fairchild and P. H. Dorsett collected for the Division a total of 371 numbers.

No two collections could be cited that would more perfectly illustrate the extremes of purposes that have to be pursued. The soybean collection is part of an intensive study of soybean types and varieties inaugurated by P. H. Dorsett and W. J. Morse during their explorations in 1929-30 when this crop was studied in the field. If the present introductions add as much to the advancement of this new crop as the former introductions have done, this collection, so dryly recorded here, will be of national importance. The other mass of material represents a study of the flora native and introduced of the islands and countries traversed, with the specific intent of establishing as many new plants as possible in the comparable areas about the Gulf of Mexico and in southern Florida. It embraces some duplicates, some one of which may be more suited than the rest for our conditions.

Conspicuous among the many subtropical plants, both economic and ornamental in character, are included seeds of many kinds of palms (over 40 numbers) some of them from plants native to the country of collection, others from exotic species established there. Plants raised from these seeds will be planted for testing in the South to determine their suitability for our soils and climates, and added to the present collection at Coconut Grove will make one of the most important collections in the country.

Through the courtesy of Maj. Lionel de Rothschild, London, England, the Division has shared in some of the seeds from the last Forrest expedition in China, which sent in, among other things, many rhododendrons; others who have contributed to the rhododendron studies of the Division are the Hon. Henry MacLaren and J. R. Stevenson, who have sent seeds of species and varieties for test as to hardiness.

Conspicuous additions of chestnut material from China are comprised in four sets of material ( $95631-95648,95663,95664,97853-97857,98001-98009$ ) from Peter Liu and one from Japan (96390-96420) through R. Kent Beattie from
the experiment station at Ayabe, the experiment station at Okitsu, and several other points which represent named cultivated varieties and several other trees of supposed merit, the whole to be used in studies now being made by Department specialists.

Many introductions, about 60 in number, were made to add to the maple collection at the United States Plant Field Station, Glenn Dale, Md., where the genus is the subject of several studies.

A few miscellaneous introductions appear in this inventory from the special expedition to South America made by C. O. Erlanson and H. G. Macmillan for wild potatoes, the excellent results of which will be recorded in Inventory No. 111 and in subsequent bulletins and papers that will record the successful use of their collected plants in breeding disease-resistant potato varieties. Also related to the general project are the potatoes presented by Dr. V. P. Alekseev (97354-97374), which were developed by him at the Sukhum Subtropical Branch of the All-Union Institute of Plant Industry, Sukhum, Caucasus.
The botanical determinations have been made and the nomenclature determined by H. C. Skeels, who has had general supervision of this inventory.

Knowles A. Ryerson,
Principal Horticulturist, in Charge.
Division of Foreign Plant Introdoction, Washington, D. C., June 5, 1939.

## INVENTORY ${ }^{1}$

95552. Kalanchoe globulifera coccinea Perrier. Crassulaceae.
From Germany. Seeds presented by Robert Blossfeld, Potsdam. Received January 5, 1932.
A stout branched succulent perennial up to a foot high, with elongated thick irregularly toothed obovate-spatulate leaves over 2 inches long and numerous bright scarlet flowers in large terminal corymblike cymes. Native to Madagascar.

For previous introduction see 79170.
95553. Cucumis melo L. Cucurbitaceae.

Melon.
From Martos, Spain. Seeds presented by Frank H. Goll, Bureau of Plant Industry, United States Department of Agriculture. Received January 5, 1932.
A very sweet melon with a smooth deepgreen skin.

## 95554 and 95555.

From Scotland. Seeds presented by Dr. J. W. Gregor, Scottish Society for Research in Plant Breeding, Corstorphine, Midlothian. Received January 5, 1932. 95554. Phleum ardnarium L. Poaceae. Timothy.
An annual tufted erect or ascending grass, up to a foot in height, with smooth leaves about an inch long and cylindrical spikes. It is native to Europe and the northern coast of Africa.
For previous introduction see 74170.
95555. Phlidu Phleoides (L.) Karst. Poaceae.

Timothy.
A perennial gray-green loosely cespitose grass with short creeping rhizomes and stems 1 to 2 feet high. It is native to the dry stony places throughout central Europe.
For previous introduction see 78799.

## 95556 to 95560.

From China. Seeds collected by the Forrest expedition, 1930-32, to southwestern China and presented by Maj. Lionel de Rothschild, London, England. Received January 5, 1932.
95556. Castanopsis sp. Fagaceae.

No. 30347.
95557. Lilium nepalense burmanicum W. W. Smith. Liliaceae. Lily.

A form having a perianth intermediate between the Martagon and Eulirion sections, and heavily blotched inside with purple.
95558. Nomocharis pardanteina Franch. Liliaceae.
A beautiful liliaceous plant about 3: feet high, which grows on grassy slopes on the outskirts of forests between 9,000 and 11,000 feet altitude. The leaves: are ternate, and the large flowers, 3 inches across, are white, pink, purple, or red with deep irregular purple blotches and have salver-shaped corollas.

## Forma farreri.

For previous introduction see 84020 .
95559. Styrax sp. Styracaceae.

No. 29552.
95560. Thia forrestil Diels. Theaceae.

A shrub 3 to 8 feet high with slender branches, ovate or lanceolate papery leaves about an inch long, and smail creamy white flowers. Native to wooded gullies in Yunnan, China.

For' previous introduction see 93395.

## 95561. Castanea mollissima Blume: Fagaceae. <br> Hairy chestnut.

From China. Scions collected by Peter Liu and sent through Owen L. Dawson, agricultural commissioner, Shanghai. Received January 7, 1932.

[^0]
## 95561-Continued

Cassia flower chestnut. Collected in the foothills near Wusi.

## 95562 to 95575.

From the Union of Soviet Socialist Republics, Seeds presented by the director, Tiflis Botanic Garden, Tiflis, Georgia, Caucasus. Received January 7, 1932.

95562 to 95566 . Acer spp. Aceraceae.
Maple.
95562. Acer hyrcandm Fisch. and Mey. A southern European maple of compact habit, about 25 feet high, with bright-green 5 -lobed leaves and greenish yellow flowers which are followed by winged fruits about an inch long.

For previous introduction see 90590 .
95563. ACER mONSPESSULANUM IBERICUM (Bieb.) Pax. (A. ibericum Bieb.).
A form of the Montpelier maple with larger leaves, having the inner lobes slightly 3 -lobed and obtuse. It is native to the Caucasus region.

For previous introduction see 90952 . 95564. Acer insigna Boiss. and Buhse.

A large tree with deeply cordate leaves 5 to 10 inches across, having coarsely crenate-serrate lobes. The flowers are borne in large erect panicles. It is native to the Caucasus region and northern Persia.

For previous introduction see 90591. 95565. AcEr Cappadocicum Gleditsch (A. laetum Meyer). Coliseum maple.

A tree up to 50 feet high, native to the Caucasus region and eastward to western China. The 5 - to 7 -lobed, cordate leaves are 3 to 6 inches across, and the yellow-green flowers, in upright corymbs, are followed by spreading winged fruits.

For previous introduction see 93076.
95566. Acer divergens Koch and Pax (A. quinquelobum Koch).

A tree, native to the Caucasus, with ash-brown bark and leathery 5-lobed leaves which are dark green above and pale beneath.
For previous introduction see 90589.
95567 to 95570 . ALlium spp. Liliaceae.
Onion.

## 95567. Allium albidum Fisch.

A species with clustered oblong bulbs very narrow semiterete leaves, and white or yellow-white flowers. Native to the southern part of the Union of Soviet Socialist Republics.

For previous introduction see 90594. 95568. Allium lepidum Kunth.

A rather small onion with semiterete leaves 3 to 4 inches high and a shorter scape bearing an umbel of purplish flowers. It is native to the Caucasus.
For previous introduction see 90601. 95569. Allium pseudostrictum Albow.

An alpine onion about 8 inches high with flat linear leaves and pale-rose flowers in a small dense globular head

## 95562 to 95575-Continued

on a scape 10 inches high. Native to the southern part of the Union of Soviet Socialist Republics.

For previous introduction see 90602.
95570. Allium victorialis L.

One of the most distinctive species of European onion with stems about 2 feet high, leaves resembling those of the lily-of-the-valley, and white or greenish-white flowers.
95571. Ecballium elaterium (L.) A. Rich. Cucurbitaceae.

Squirting-cucumber.
A perennial trailing vine native to the Mediterranean countries, which is cultivated as an annual in gardens of the Temperate Zone. It is a curiosity because of its peculiar habit of violently ejecting its seeds and juice. A drug, elaterium, is obtained from the juice. In flower and foliage characters the plant closely resembles the cucumber, and the fruit is like a small green elliptical gourd covered with soft greenish prickles.

For previous introduction see 64188.
95572. Solanum nigrum L. Solanaceae.

Black nightshade.
95573. Solanum dulcamara L. Solanacete.

Bitter nightshade.
Received as Solanum persicum, which is a form with ovate-cordate, entire leaves.
95574. Tamarix HoHenackeri Bunge. Tamaricaceae. Tamarisk.
An evergreen tree, native to the Caucasus, with very small linear acute leaves and small flowers in racemes 1 or 2 inches long, appearing in the spring.

## 95575. Tamarix pentandra Pall. (T. pallasil Desv.). Tamaricaceae. Tamarisk.

A shrub or small tree with usually purple branches; the lanceolate to ovate leaves are glaucous or pale green; the large panicles of pink flowers are in dense racemes 1 to 2 inches long and appear in July and August. This tamarisk is found wild from the Balkan Peninsula through southern Europe to Turkistan and from Asia Minor to Persia.

For previous introduction see 42443.
95576 to 95579. Castanea Crenata Sieb. and Zucc. Fagaceae.

Japanese chestnut.
From Japan. Seeds purchased from the Yokohama Nursery Co., Yokohama. Received January 7, 1932.
A collection of chestnuts introduced for the use of Department specialists.
95576. No. 1.
95577. No. 2.

95578, No. 3.
5580. Citrullus Cucurbitaceae.
95579. No. 4.

From India. Seeds presented by Jai Chand Luthra, professor of botany, Lyallpur, Punjab. Received January 11, 1932.
A mixed sample, purchased in the market.
95581. Poa sp. Poaceae.

Grass.
From Canada. Seeds presented by Dr. G. P. McRostie, Department of Agronomy, Manitoba Agricultural College, Winnipeg. Received January 12, 1932.
One of the selections of Poa fabellata, selected out by Professor Roberts, who secured the seed from the Falkland Islands 5 years ago.
95582. Ficus callosa Willd. Moraceae.

Fig.
From Ceylon. Seeds presented by T. H. Parsons, curator, Royal Botanic Gardens, Peradeniya. Received January 13, 1932.

A large tree, native to southeastern Asia, with hoary warted branchlets and rigid leathery elliptical leaves 5 to 8 inches long. The yellow pubescent fruits, 1 inch in diameter, are slightly pear shaped and are borne singly in the axils of the leaves.

95583 to 95592. Lycopersicon escuLentum Mill. Solanaceae. Tomato.
From Manchuria. Seeds presented by M. Chara, Manshu Nosan Shokai, Inc., Dai. ren, southern Manchuria. Received January 13, 1932.
A collection of seeds from Manchuria and northern China.
95583. No. 1.
95584. No. 2.
95585. No. 3.
95586. No. 4.
95587. No. 5.
95593. Manihot esculenta Crantz (M. utilissima Pohl). Suphorbiaceae.

Cassava.
From the West Indies. Scions collected by David Fairchild and P. H. Dorsett, agricultural explorers, Bureau of Plant Industry, with the 1931-32 Allison $V$. Armour expedition. Received January 14, 1932.
No. 2564. John de Mott. Presented by J. T. Brown, agricultural teacher, of Arthur Town, Cat Island, Bahamas. A very sweet cassava which is cultivated in the potholes of the limestone rock of Cat Island.
95594. Feronia limonia (L.) Swingle (F. elephantum Correa). Rutaceae. Wood-apple.
From French Indo-China. Seeds presented by M. Poilane, Institut des Recherches, Agronomique de l'Indochine Division de Botanique. Received December 22, 1931. Numbered in January, 1932.
A very graceful small thorny tree, native to India, where it thrives in exhausted soil in which no other tree can grow. The round fruits, about 2 inches in diameter, contain rather dry sweetish aromatic pulp, suitable for making jelly.

## 95595 and 95596.

From Cuba. Seeds presented by Juan T. Roig, Pinar del Rio. Received January 15, 1932.
Two varieties of rice introduced for the use of Department specialists.

## 95595 and 95596-Continued

95595. Oryza cubensis Eckmann. Poaceae.
Received from Jobabo, Oriente, Cuba, where it grows wild in the lagoons. Apparently a wild rice which rather closely resembles the cultivated rice.
95596. Oryza latifolia Desv. Poaceae. Rice.
A perennial wild rice distributed throughout parts of tropical Asia, Africa, and America. The tufted stems become 6 to 8 feet high, and the plant is said to flower and produce seeds throughout the year. The smooth leaves are 1 to 2 feet long, and about an inch wide, and the erect spike is up to 4 inches long.

For previous introduction see 95517 .
95597. Olearia myrsinoides ervbesCENS (DC.) F. Muell. Asteraceae.
From Tasmania. Seeds presented by L. A. Evans, Sandy Bay, Hobart. Received January 14, 1932.
A low straggling shrub, native to Tasmania and Australia, with the branches, flower stems, and the under side of the leaves closely covered with silvery tomentum. The obovate leaves, 1 to 2 inches long, are shining and reticulate above, and the asterlike blue or white flower heads are clustered on axillary peduncles forming a leafy panicle.
95598. Ficus carica L. Moraceae.

Common fig.
From England. Cuttings presented by Col. F. E. Durham, through the Royal Horticultural Society, London. Received January 15, 1932.
Brown turkey.
95599 to 95610. Thalictrum spp. Ranunculaceae.

Meadowrue.
From Switzerland. Seeds purchased from H. Correvon, Floraire Nurseries, CheneBourg, Geneva. Received January 16, 1932.

Introduced for the use of Department specialists.

95599 and 95600. THALICTRUM AQUILEGIFOLIUM L. Columbine meadowrue.
95601. Thalictrum chelidonii DC.
95602. Thalictrum delavayi Franch.
95603. THALICTRUM DIPTEROCARPUM Franch. Yunnan meadowrue.
95604. Thalictrum fendleri Engelm.
95605. Thalictrum flexuosum Bernh.
95606. Thalictrum glaucum Desf.

Dusty meadowrue.
95607. Thalictrum majus Jacq.
95608. Thalictrum minus L.

Low meadowrue.
95609. Thalictrum odoratum Gren. and Godr.
95610. Thalictrum saxatile Vill.

95611 to 95614. Bougainvillea spp. Nyctaginaceae.
From Cuba. Cuttings presented by Robert M. Grey, superintendent, Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos. Received January 18, 1932 .

## 95611 to 95614 -Continued

A collection of floriferous seedlings grown at the Soledad Garden.
95611. Bougainvillea glabra $\times$ butat (Crimson Lake).
No. 1 .
95612 to 95614. Bougainvillea spectabilis lateritia $\times$ butali.
95612. No. 2.
95613. No. 14.
95614. No. 19.
95615. Castanea mollissima Blume. Fagaceae. Hairy chestnut.
From China. Seeds collected by Peter Liu and sent through Owen L. Dawson, agricultural commissioner, Shanghai. Received January 18, 1932.
For the introduction of scions see 95561.

## 95616 to 95628.

From China. Seeds collected by the Forrest expedition, $1930-32$, to southwestern China and presented by Maj. Lionel de Rothschild, London, England. Received January 18, 1932.
95616. Abies sp. Pinaceae.

Fir.
No. 29796.
95617. Cremanthodium farrmai $W$. $W$. Smith. Asteraceae.
No. 29889. A stately plant with pendulous globular-looking flowers of pure white, that deepen to dark dull claret as they die. The stems are up to 20 inches high, and the basal leaves, ovate and papery, are 4 to 5 inches long. Native to Upper Burma.
95618. Cremanthodium sp. Asteraceae.

No. 29863.
95619. Daphniphyllum beddomit Craib. Euphorbiaceae.
A tropical tree becoming about 50 feet high, with rather thin oblong-lanceolate leaves 3 to 5 inches long and small white flowers in short axillary clusters. Native to Burma.
95620. Euonymus sp. Celastraceae.

No. 30379.
95621. Lilium nepalense burmanicum W. W. Smith. Liliaceae. Lily.

No. 29943.
For previous introduction and description see 95557.
95622. Lilium ochraceum Franch. Liliaceae.

Lily.
No. 29944. A rare and beautiful lily from Burma, not hardy except in the most favorable districts; it is an admirable cool greenhouse plant. This is a very variable species, producing flowers which range in eolor from deep golden yellow to pale yellow stained in varying degrees with deep wine purple.

For previous introduction see 91632.
95623. Magnolia rostrata W. W. Smith. Magnoliaceae.
No. 29821. A deciduous tree native to western China, becoming 75 feet high. The leaves; congested toward the ends

## 95616 to 95628-Continued

of the branchlets, are broadly ovate and a foot or more long. The rosy flowers, appearing very early, are up to 6 inches across.
95624. Magnolia insignis Wall. Magnoliaceae.
No. 29747. A large tree, native to India, with lanceolate coriaceous leaves 6 inches long and fragrant pink flowers followed by bright-purple fruits 3 to 4 inches long.
95625. Nomocharis pardanthina farreri W. E. Evans. Liliaceae.
No. 29815 . A plant about 2 feet high with whorls of dark-green lanceolate leaves and from 1 to 10 rose-pink to white flowers of variable shade, color, and spotting. Native to alpine slopes, among dwarf bamboos in Upper Burma. It differs from the type in having fimbriate inner perianth segments.
95626. Nomocharis sp. Liliaceae.

No. 29942. Said to have red or purplered flowers.
95627. Thea sp. Theaceae.

$$
\text { No. } 29960 .
$$

95628. Thea sp. Theaceae.
95629. RHODODENDRON BRACHYCARPUM D. Don. Ericaceae.

Fujiyama rhododendron.
From Japan. Seeds purchased from T. Sakata \& Co., Yokohama, through Herbst Bros., New York, N.Y. Received January 20, 1932.
A shrub 10 to 15 feet high with elliptic to oblanceolate leaves 3 to 9 inches long, cuneate to auriculate at the base, dark green above and gray tomentose beneath. The broadly funnelform flowers, about 2 inches across, are white or yellow, striped and flushed pink, and spotted greenish brown. It is native to Japan and Chosen.

For previous introduction see 86750 .

## 95630 to 95655.

From China. Material collected by Peter Liu and sent through Owen L. Dawson, agricultural commissioner, Shanghai. Received January 19, 1932.
95650. Diospyros sinensis Hemsl. Dios-

Seeds collected between Chuki and Tengchiao, Chekiang Province.
95631 to 95648. Castanea spp. Fagaceae. Chestnut.
95631 to 95633. Castanea henryi (Skan) Rehd. and Wils.
No. 3. Chu Lee or Chun Lee, pearl chestnut. Seeds and scions of an edible chestnut collected in Chekiang Province. The tree becomes 25 to 30 feet higb, with oblong-lanceolate, longacuminate leaves, green on both sides. The burs are either solitary or two in a bunch and contain usually but one nut.
95631. From Hsiaofeng.
95632. Scions from Fengchiao.
95633. From Fengchiao.

95634 to 95648 . CASTANEA MOLLISSIMA Blume.

Hairy chestnut.

## 95630 to 95655 -Continued

95634 to 95640. Scions collected in Chekiang Province.
95634. No. 1. Ya Lee Tzu, wild chestnut. From Fengchiao.
95635. No. 2.. Kuei Lee, large chestnut. From Fengchiao.
95636. No. 4. Kuei Lee, large chestnut. From Linanhsien.
95637. No. 6. Pui Mao Lee, white hairy chestnut. From Yühang.
97838. No. 5. Kuei Lee, large chestnut. From Yühang.
97639. No. 7. Kuei Lee, large chestnut. From Hangchow.
97640. No. 8. Kиei Hua Lee, cassia chestnut. From Hangchow.

## 95641 to 95648 . Seeds.

95641. Hing Kuo Nei Pi Lee, black-skinned chestnut. From Ningkwohsien, Anhwei Province.
95642. Han Lu, cold dew chestnut. From North Mountain, Peiping, Chihli Province.
95643. Tung Shan, or East Mountain chestnut. Collected on East Mountain, about 60 miles northeast of Peiping, Chihli Province.
95644. Kuei Lee, large chestnut. From Linanhsien, Chekiang Province.
95645. Kuei Lee, large chestnut. From Hsiaofeng, Chekiang Province.
95646. Kuei Lee, large chestnut. From Fengchiao, Chekiang Province.
95647. Hu Chaw Li Tzu, tiger paw chestnut. From Peiping, Chihli Province.
95648. Bai Mao Tzu, white hairy chestnut. A rare variety obtained from a countrywoman at Tulilingkang, near Yühang.
95649. Diospyros kaki L. f. Diospyraceae.

Kaki persimmon.
Ya shih, wild persimmon. Seeds collected by Mr. Chang at Kutang, near Hangchow.
95650. Diospyros sinensis Hemsl. Diospyraceae. Persimmon.
Bai Pi Shih, white bark persimmon. Seeds collected by Mr. Chang at Kutang, near Hangchow. A small semievergreen Chinese tree with a short thick trunk, wide-spreading branches and spiny branchlets, thick oblong-lanceolate leaves 2 to 3 inches long, and globose or ovoid golden edible fruits nearly an inch in diameter.

For previous introduction see 78527.
95651 to 95653. Pinus bungeana Zucc. Pinaceae.

Lacebark pine.
Bai Kuo Sung. Seeds collected in the vicinity of Peiping.
95651. Collected near the Winter Palace.
95652. Collected at the Chieh Tai Ssu Temple, Western Hills.

## 95630 to 95655-Continued

95653. Collected at the Tan Chow Suu Temple, Western Hills.
95654. Rubus sp. Rosaceae. Raspberry.

Seeds of a wild raspberry collected. on the roadside between Chuki and Fengchiao, Chekiang Province.
95655. Sapium sebifirum (L.) Roxb. Euphorbiaceae. Chinese tallowtree.
Ohin Tzu. Seeds collected between Chuki and Fengchiao, Chekiang Province. The oil from the kernels of these seeds is used for making machine oil and the tallow from the outer skin for making candles.

## 95656. Gossypium davidsonit Kellogg.

 Malvaceae.Cotton.
From San Marco Island, Baja California, Mexico. Seeds presented through E. H. Page, Oakland, Calif. Received January 21, 1932.
A shrub up to 5 feet high with broadlycordate entire leaves densely velvety on both sides. The bright lemon-yellow flowers are 1 to 2 inches across and have a purple spot at the base of each petal. Na. tive to Baja California.

For previous introduction see 93543 .

## 95657 and 95658.

From Canada. Seeds presented by Prof. L. E. Kirk, Field Husbandry Department, University of Saskatchewan, Saskatoon. Received January 19, 1932.
A collection of grasses introduced for the use of Department specialists working with forage crops.

## 95657. Agropyron tendidu Vasey. Poaceae. Slender wheatgrass.

For previous introduction see 91377.
95658. Bromus inermis Leyss. Foaceae.

Common bromegrass.
A perennial European grass, with creeping rhizomes and stems up to 30 inches high.
95659 and 95660. Prunus mume Sieb. and Zucc. Amygdalaceae.

Japanese apricot.
From Maryland. Cuttings presented by a. E. Merritt, Chevy Chase. Received January $19,1932$.
95659. A form with semidouble pink flowers.
95660. A form with single pink flowers.

95661 and 95662.
From the Union of Soviet Socialist Republics. Seeds presented by V. P. Alekseev, plant introducer, Sukhum Subtropical Branch of the All-Union Institute of Plant Industry, Sukhum, Caucasus. Received January 19, 1932.
95661. Butia capitata $\times$ eriospatha. Phoenicaceae. Palm.
A natural hybrid combining characters of both parents. The fruit very closely resembles the best Japanese loquats, and the tree will probably thrive in every location where the Satsuma orange is a commercial crop.
95662. Laurocerasus officinalis Roemer (Prunus laurocerasus L.). Amygdalaceae. English cherry-laure.

## 95661 and 95662-Continued

No. 41337. A very free-flowering, lowspreading evergreen shrub with narrow flat foliage. It is perhaps more hardy than the common type.

For previous introduction see 73857.
95663 and 95664 . Castanea mollissima Blume. Fagaceae. Hairy chestnut.
From China. Scions collected by Peter Liu and sent through Owen L. Dawson, agricultural commissioner, Shanghai. Received January 19, 1932.
Collected December 18, 1930 at the village of Huangchuan, near Shantung.
95663. Ming Lee Tzu, bright chestnut. A chestnut as large as the Tiger paw, which ripens about the middle of September.
95664. Mao Lee Tzu, hairy chestnut. A seedling chestnut which is not so large as the Bright chestnut, although the flavor is about the same. It ripens early in September.

## 95665 and 95666.

From the West Indies. Material collected by David Fairchild and P. H. Dorsett, agricultural explorers, Bureau of Plant Industry, with the 1931-32 Allison $V$. Armour expedition. Received January 20, 1932.
Collected at Gun Point, Eleuthera Island, Bahamas, January 11, 1932.
95665. DIoscorea alata L. Dioscoreaсеае.

Winged yam.
No. 2581. Tubers of the white yam of the Bahamas, found growing in red rocky soil. It is of medium size, with a thin skin and flesh of good quality. This yam is grown on the ground, not on a trellis, and is considered at its best in the winter season, as it is then more mealy, being densely packed with starch at that time.
95666. Manihot esculenta Crantz ( $M$. utilissima Pohl). Euphorbiaceae.

Cassava.
No. 2580. Cuttings of the variety Abraham, which is a rapid grower and the roots are of good quality. The farmers of Spanish Wells Island, Bahamas, consider this their best cassava, and a kind of bread is made of it there by grating the root and putting with it a small amount of grated sweetpotato. It tastes a little like a very dry pumpkin pie and is very nutritious.

## 95667 to 95681.

From the Netherlands. Plants purchased from C. G. Van Tubergen, Ltd., Zwanenburg Nurseries, Haarlem. Received January 21, 1932.
95667. Bulbinella hookeri (Colenso) Cheeseman (Anthericum hookeri Colenso). Liliaceae.
A perennial herb, related to the asphodels, varying in size from 2 to 3 feet. The numerous glaucous-green leaves are linear, and the loose racemes of brightyellow flowers are on slender scapes up to 10 inches long. It is native to New Zealand.

For previous introduction see 95477 .
95668. Stachys Grandiflora (Steph.) Benth. Menthaceae.

## 95667 to 95681 -Continued

A perennial herb 1 foot high, native to Asia Minor. The broadly cordate, obtusely crenate leaves are petioled at the base of the stem and reduce to sessile bracts at the top. The large showy flowers with curving tubes 1 inch long are borne in interrupted spikes.

Variety superba. Said to have flowers of intense mauve or a rich shade of purple-violet.
95669. BUPHTHALMUM SALICIFOLIUM L. Asteraceae.

Willowleaf oxeye.
A perennial herb, native to northern Europe, with slightly serrate willowlike leaves and solitary flower heads with long yellow rays.
95670. Dracocmphalum ruyschiana L. Menthaceae. Siberian dragonhead.
A slightly pubescent herbaceous perennial about 2 feet high with linearlanceolate entire leaves and interrupted spikes of 2-lipped purple flowers an inch long. It is native to Siberia.
95671. VANCOUVERIA HEXANDRA (Hook.)

Morr. and Dec. (Epimedium hexandrum Hook.). Berberidaceae.
A perennial herb 1 foot high, native to northwestern America, with triternate leaves made up of angularly 3 -lobed cordate leaflets and panicles of small white flowers.
95672. Eryngium bourgati Gouan. Apiaceae.

Eryngo.
A low herbaceous perennial, native to the Mediterranean region, with solitary sparingly branched stems 1 to 2 feet high. The rigid leathery reniform leaves are palmately 3 - to 5 -lobed and have spiny teeth, and the flower heads are blue or rarely green.
95673. Eryngium violetta Hort. Apiaceae.

Eryngo.
A name for which a place of publication and a description have not been found.

95674 and 95675. Galega officinalis L. Fabaceae. Common goatsrue.

## 95674. Her Majesty.

95675. Niobe.
95676. Nepeta macrantha Fisch. Menthaceae.
Souvenir de André Chaudron. An erect branching herbaceous perennial with ovate-lanceolate leaves green on both sides and showy blue flowers 1 inch long in few-flowered cymes. It is native to the Altai region.
95677. Pelargonium endlicherianum Fenzl. Geraniaceae.

Geranium.
A perennial herb 1 to 2 feet high, native to western Asia. The slightly branched, somewhat fleshy stems bear cordate-orbicular obscurely 5-lobed crenate leaves and umbels of rose-colored flowers having the two upper petals much longer than the lower ones.
95678 to 95680 . Tricyrtis spp. Melanthiaceae.

Toadlily.
95678. Tricyrtis hirta Hook.

Hairy toadlily.
A perennial herb, 1 to 3 feet high, covered with soft whitish spreading hairs. The cordate-lanceolate leaves clasp the stem, and the white lilylike flowers are covered with purple spots. It is native to Japan.

## 95667 to 95681 -Continued

95679. Tricyrtis macropoda Miquel. Speckled toadlily.
A perennial herb, 2 to 3 feet high, with oblong leaves and loose corymbs of light-purple flowers having minute dark-purple spots. It is native to China and Japan.

## 95680. Tricyrtis pilosa Wall.

A perennial herb, 2 to 4 feet high, native to the Himalayas between 5,000 and 6,000 feet altitude. The stems are slightly pilose, the leaves are oblong, and the numerous loosely corymbose flowers are whitish with large purple spots.
95681. Zephyranthes ajax Sprenger. Amaryllidaceae.

Zephyrilly.
A hybrid between Zephyranthes candida and Z. citrina. The 3 to 4 brightgreen leaves, 10 to 12 inches long, appear in the spring and are evergreen in the South. The flowers, much larger than either of the parents, are pale canary yellow, brownish without and flushed with red and with a light-green throat. The perianth tube is entirely lacking, and the divisions are widely reflexed.

## 95682 to 95685 . Bromus inermis Leyss. Poaceae. <br> Common bromegrass.

From Canada. Seeds presented by Prof. L. E. Kirk, Field Husbandry Department, University of Saskatchewan, Saskatoon. Received January 19, 1932.
Seeds of the 1931 crop, introduced for the use of Department specialists.
For previous introduction and description see 95658.
95682. (S-23-37-3-1-1).
95683. (S-13-1-2-1).
95684. (S-37-3-2-1)
95685. (S-35-1-5-2).
95686. Euchlaena mexicana Schrad. Poaceae.

Teosinte.
From Guatemala. Seeds presented by Wilson Popenoe, research department, United Fruit Co., Guatemala City. Received January 25, 1932.
A coarse annual grass, native to Mexico, where it was cultivated in prehistoric times. It resembles corn rather closely and some botanists consider that corn is a hybrid of which teosinte is one of the parents.

For previous introduction see 93264.
95687. Carica papaya L. Papayaceae. Papaya.
From the island of Guam. Seeds presented by C. W. Edwards, director, Agricultural Experiment Station. Received January 25, 1932.
Selected seed.

## 95688 to 95705.

From the West Indies. Seeds collected by David Fairchild and P. H. Dorsett, agricultural explorers, Bureau of Plant Industry, with the 1931-32 Allison $V$. Armour expedition. Received January 25, 1932.

## 95688 to 95705—Continued

95688. Achras zapota L. Sapotaceae. Sapodilla.
No. 2565. Lady finger. Collected on Cat Island, Bahamas. A small symmetrical tree 25 feet high, with shiny darkgreen leathery leaves and round or oblong fleshy fruits resembling in outward appearance a smooth-skinned brown potato. It is native to tropical America, although it is now cultivated in the Asiatic Tropics as well. When thoroughly ripe the fruit is flne eating, a very thin skin enclosing a pale-brown juicy pulp of delicious flavor. The bark contains a milky latex known commercially as chicle. The tree is best propagated from cuttings, although it may also be raised from seeds.

For previous introduction see 93298.
95689. Cissus intermedia A. Rich. Vitaceae.
No. 2558. Bull vine. Collected January 3, 1932, at Grant Town and Nassau, New Providence Island. A slender slightly fleshy vine 6 to 10 feet long, native to the West Indies. The trifoliolate leaves have oblong-lanceolate serrate leaflets 1 to 2 inches long, and the compound cymes of red flowers are followed by subglobose black berries on red pedicels.
95690. Conocarpus erecta L. Combretaceae.
No. 2568. Collected January 4, 1932, at Arthur Town, Cat Island, Bahamas, Buttonwood. Variety sericea. A silky pubescent shrub or tree from 3 to 60 feet high with angled or winged branchlets. The elliptic or ovate, densely tomentose leaves are 1 to 2 inches long, and the inconspicuous flowers, borne in small heads, are followed by reddish-brown fruits one half inch long. It is native to the seacoasts of Florida, the West Indies, tropical America, and western tropical Africa.
95691. Ficus jacquiniaefolia A. Rich. Moraceae.
No. 2553. Collected January 1, 1932 at Nassau, New Providence Island, Bahamas. A small-leaved wild fig which produces small, purple, sweetish fruits about an inch long.
95692. Galactia striata (Jacq.) Urban. Fabaceae.
No. 5. Collected January 5, 1932, on Conception Island, Bahamas. A rather strong-growing viny plant with pink pealike flowers.
95693. Ipomoea tuba (Schlecht.) Don. Convolvulaceae.
No. 6. Collected January 5, 1932, on Conception Island. A fleshy climbing vine up to 30 feet long with ovate-orbicular leaves 3 to 5 inches long and white flowers having five narrow greenish bands. It is native to the West Indies and tropical America.
9569. JacQuemontia jamaicensis (Jacq.) Hallier f. Convolvulaceae.
No. 2554. Collected January 1, 1932, at Nassau, New Providence, Bahamas. A vine with small narrow, leaves and small white flowers with pointed petals.
95695. Bourreria ovata Miers. Boraginaceae.
No. 2571. Strong back. Collected on Rum Key, Bahamas, January 6, 1932. A

## 95688 to 95705 -Continued

shrub with glossy green leaves, fragrant white flowers, and small yellow edible fruits. Under cultivation this may prove a good hedge plant for rocky pineland.
95696 to 95698. PASSIFLORA spp. Passifloraceae.
95696. Passiflora cupraina L.

No. 2562. Collected near Arthur Town, Cat Island, Bahamas, January 4, 1932. A rather attractive vine with dark-brown leathery leaves and flowers of a coppery hue. The small frutts, the size of marbles, turn dark purple or almost black when ripe.
95697 and 95698. PASSIFLORA PECTINATA Griseb.
A red-fruited species with attractive foliage of thickish dark-green leaves.
95697. No. 2569. Collected January 5,1932 on Conception Island.
95698. No. 2569-A, Collected January 6, 1932 on Rum Key.
95699. Phaselolus vulgaris L. Fabaсеае.

Common bean.
No. 2566. Collected January 4, 1932 on Cat Island. A white or yellowish-white flowered bean with pure white beans which is a vigorous grower and may be a perennial. It is cultivated in the cornfields here by the colored folks who eat it wher they cannot get the pigeonpea.
95700. Phoenix rombelenil O'Brien.

Phoenicaceae. Roebelen date palm.
No. 2560. Collected at Old Fort, Nassau, New Providence Island, January 31, 1932.

For previous introduction see 75225.
95701. Pinus pinha L. Pinaceae.

Italian stone pine.
No. 7. A large tree up to 80 feet high, with long horizontal branches eventually forming a flat crown. The rigid acute bright-green leaves are 5 to 8 inches long, and the broadly ovate chestnut-brown cones, 4 to 6 inches long, bear reddishbrown seeds nearly 1 inch long. It is native to southern Europe.
95702 and 95703. SESAMUM ORIENTALE L. Pedaliaceae.

Sesame.
95702. No. 8. Collected on Cat Island.
95703. No. 2556. Benni seed. Collected January 2, 1932 at Nassau, New Providence Island. A whiteseeded strain. A good cooking oil is made from the seed and is used in making cakes and candies.
95704. GOUANIA LUPULOIDES (L.) Urban. Rhamnaceae.
No. 2559. Collected January 3, 1932 near Grant Town, Nassau, New Providence Island. A woody vine, native to the West Indies up to 25 feet high, climbing by coiled tendrils. The thin cordate serrate leaves are 1 to 4 inches long; the small yellow flowers are borne in pubescent racemes and are followed by broadly winged fruits half an inch long.
95705. Talinum Paniculatum (Jacq.)
Gaertn. Portulacaceae. Gaertn. Portulacaceae.
No. 2567. Collected January 2, 1932 near Grant Town, Nassau, New Providence Island. An ornamental shrub with

## 95688 to 96705 -Continued

smooth dark-green slightly fleshy olvovate leaves, and loose panicles of deep pink flowers followed by tiny papery pods, filled with dark-brown seeds.

For previous introduction see 68863.
95706 to 96383 . Soja max (L.) Piper (Glycine hispida Maxim.). Fabaceae.

Soybean.
From Chosen. Seeds arranged for by the Dorsett and Morse expedition and sent through the American consulate at Tokyo, Japan. Received January 26, 1932.

A collection of soybeans presented by the Seisen Shijo (western branch) of the Agricultural Experiment Station of the Chosen Government, Shariin, October 24, 1931.

95706 to 95718. From the Zenra-Nando Prefecture.
95706. No. 7971. Station no. 1. Medium size, straw-yellow with darkbrown hilum ; heavily mottled with brown.
95707. No. 7972. Station no. 2. Medium large, olive-yellow with dark brown hilum; slightly mottled with brown.
95708. No. 7973. Station no. 3. Medium small green with brown hilum; green germ; slightly mottled with brown.
95709. No. 7974. Station no. 4. Medium size, straw to olive-yellow with a pale hilum; slightly mottled with brown.
95710. No. 7975. Station no. 5. Medium size, straw-yellow with pale hilum; slightly mottled with brown.
95711. No. 7976. Station no. 6. Medium size, straw to olive-yellow with pale hilum; slightly mottled with brown.
95712. No. 7977. Station no. 7. Medium size, black with yellow germ.
95713. No. 7978. Station no. 8. Medium size, straw-yellow with brown hilum ; slightly mottled with brown.
95714. No. 7979. Station no. 9. Medium size, straw-yellow, with brown hilum; slightly flattened; slightly mottled with brown.
95715. No. 7980. Station no. 10. Medium small, green with light-brown hilum; germ green.
95716. No. 7981. Station no. 11. Medium size, straw-yellow with pale hilum; heavily mottled with brown.
95717. No. 7982. Station no. 12. Medium size, straw to olive-yellow with pale hilum ; slightly mottled with brown.
95718. No. 7983. Station no. 13. Medium size, straw-yellow with pale hilum; heavily mottled with brown.
95719 to 95740 . From the Zenra-Hokudo Prefecture.
95719. No. 7984. Station no. 14. Medium size, straw-yellow with pale hilum; slightly mottled with brown.
95720. No. 7985. Station no. 15. Medium size, straw-yellow with. pale hilum ; slightly mottled with brown.

## 95706 to 96383-Continued

95721. No. 7986. Station no. 16. Medium size, straw-yellow with pale hilum; slightly mottled with brown.
95722. No. 7987. Station no. 17. Medium size, straw-yellow with pale hilum; heavily mottled with brown.
95723. No. 7988. Station no. 18. •Medium size, straw-yellow with pale hilum; heavily mottled with brown.
95724. No. 7989. Station no. 19. Medium size, straw-yellow with pale hilum; slight!y mottled with brown.
95725. No. 7990. Station no. 20. Medium size, straw to olive-yellow with pale hilum; heavily mottled with brown.
95726. No. 7991. Station no. 21. Medium large, straw-yellow with pale hilum; mottled with brown. Seed coat slightly wrinkled and split.
95727. No. 7992. Station no. 22. Large size, straw- to olive-yellow with pale hilum; slightly mottled with brown.
95728. No. 7993. Station no. 23. Medium large, straw-yellow with pale hilum; mottled with brown.
95729. No. 7994. Station no. 24. Medium size, straw-yellow with pale helium ; slightly mottled with brown.
95730. No. 7995. Station no. 25. Medium size, straw-yellow with pale hilum; slightly mottled with brown.
95731. No. 7996. Station no. 26. Medium size, straw-yellow with pale hilum; mottled with brown.
95732. No. 7997. Station no. 27. Medium size, straw- to olive-yellow with pale hilum; slightly mottled with brown.
95733. No. 7998. Station no. 28. Medium large, straw- to olive-yellow with pale hilum; heavily mottled with brown.
95734. No. 7999. Station no. 29. Medium size, straw-yellow with pale hilum; slightly mottled with brown.
95735. No. 8000. Station no. 30. Medium size, straw-yellow with pale hilum; slightly mottled with brown.
95736. No. 8001. Station no. 31. Medium size, straw-yellow with pale hilum.
95737. No. 8002. Station no. 32. Large size, straw-yellow with pale hilum.
95738. No. 8003. Station no. 33. Medium size, straw-yellow with pale hilum.
95739. No. 8004. Station no. 34. Medium large, straw-yellow with brown hilum; slightly mottled with brown.
95740. No. 8005. Station no. 35. Medium size, straw-yellow with pale hilum; slightly mottled with brown.
95741 to 95776. From the Keisho-Nando Prefecture.
95741. No. 8006. Station no. 36. Medium small, straw-yellow with darkbrown hilum.
95742. No. 8007. Station no. 37. Medium size, straw-yellow with brown hilum; slightly mottled with brown.

## 95706 to 96383-Continued

95743. No. 8008. Station no. 38. Medium size, straw-yellow with brown hilum ; slightly mottled with brown.
95744. No. 8009. Station no. 39. Medium size, straw-yellow, slightly flattened; dark-brown hilum; slightly mottled with brown.
95745. No. 8010. Station no. 40. Medium size, straw-yellow with pale hilum.
95746. No. 8011. Station no. 41. Medium size, straw-yellow with brown hilum ; heavily mottled with brown.
95747. No. 8012. Station no. 42. Medium large, straw-yellow with pale hilum.
95748. No. 8013. Station no. 43. Medium small, straw-yellow with pale hilum ; slightly flattened and slightly mottled with brown.
95749. No. 8014. Station no. 44. Medium small, straw-yellow with darkbrown hilum; heavily mottled with brown.
95750. No. 8015. Station no. 45. Medium large, straw-yellow with pale hilum; slightly mottled with brown.
95751. No. 8016. Station no. 46. Medium small, straw-yellow with brown hilum.
95752. No. 8017. Station no. 47. Medium large, straw-yellow to olive yellow with pale hilum; slightly mottled with brown.
95753. No. 8018. Station no. 48. Medium small, straw-yellow with pale hilum; heavily mottled with black and brown.
95754. No. 8019. Station no. 49. Medium size, straw-yellow with pale hilum ; heavily mottled with brown.
95755. No. 8020. Station no. 50. Medium size, straw-yellow with brown hilum; slightly mottled with brown.
95756. No. 8021. Station no. 51. Medium large, straw-yellow with pale hilum; heavily mottled with brown.
95757. No. 8022. Station no. 52. Medium large, straw-yellow with pale hilum; heavily mottled with brown.
95758. No. 8023. Station no. 53. Medium large, straw-yellow with pale hilum; slightly mottled with brown.
95759. No. 8024. Station no. 54. Medium small, straw-yellow with darkbrown hilum ; slightly mottled.
95760. No. 8025. Station no. 55. Medium size, straw-yellow with pale hilum; slightly mottled with brown.
95761. No. 8026. Station no. 56. Medium large, straw-yellow with pale hilum; mottled with brown.
95762. No. 8027. Station no. 57. Medium size, pale-straw yellow with light-brown hilum.
95763. No. 8028. Station no. 58. Medium size, straw-yellow with darkbrown hilum; heavily mottled with brown.
95764. No. 8029. Station no. 59. Medium size, straw-yellow with darkbrown hilum; slightly mottled with brown.

## 95706 to 96383 -Continued

95765. No. 8030. Station no. 60. Medium size, straw-yellow with pale hilum; heavily mottled with brown.
95766. No. 8031. Station no. 61. Medium size, straw-yellow with brown hilum; slightly mottled with brown.
95767. No. 8032. Station no. 62. Medium size, straw-yellow with pale hilum; heavily mottled with brown.
95768. No. 8033. Station no. 63. Medium large, straw-yellow with pale hilum.
95769. No. 8034. Station no. 64. Medium small, straw- to olive-yellow with brown hilum ; heavily mottled with brown.
95770. No. 8035. Station no. 65. Medium size, light straw-yellow with dark hilum; slightly mottled with brown.
95771. No. 8036. Station no. 66. Medium size, light straw-yellow with dark-brown hilum; mottled with brown.
95772. No. 8037. Station no. 67. Medium size, light straw-yellow with dark-brown hilum; mottled with brown.
95773. No. 8038. Station no. 68. Medium size, green with brown hilum; slightly mottled with brown.
95774. No. 8039. Station no. 69. Medium large, straw-yellow with pale hilum ; heavily mottled with brown. Wrinkled and split.
95775. No 8040. Station no. 70. Medium size, straw-yellow with darkbrown hilum ; slightly mottled with brown.
95776. No. 8041. Station no. 71. Medium size, straw-yellow with brown hilum ; slightly mottled with brown.
95777 to 95828 . From the Keisho-Hdkudo Prefecture.
95777. No. 8042. Station no. 72. Medium size, straw-yellow with pale hilum.
95778. No. 8043. Station no. 73. Medium size, straw-yellow with pale hilum.
95779. No. 8044. Station no. 74. Medium large, straw-yellow with pale hilum ; mottled with brown.
95780. No. 8045. Station no. 75. Medium size, olive-yellow with pale hilum; heavily mottled with brown.
95781. No. 8046. Station no. 76. Medium size, straw-yellow with brown hilum.
95782. No. 8047. Station no. 77. Medium size, straw to greenish yellow with pale hilum.
95783. No. 8048. Station no. 78. Medium size, straw-yellow with pale hilum; slightly mottled.
95784. No. 8049. Station no. 79. Medium large, straw to greenish yellow with pale hilum; mottled with brown.
95785. No. 8050. Station no. 80. Medium large, straw-yellow with pale hilum. Seed coat more or less cracked.

## 95706 to 96383 -Continued

95786. No. 8051. Station no. 81. Medium large, straw-yellow with pale hilum; heavily mottled with brown.
95787. No. 8052. Station no. 82. Medium large, olive-yellow with pale hilum; very heavily mottled with - dark brown.
95788. No. 8053. Station no. 83. Medium large, straw-yellow with pale hilum ; mottled with brown.
95789. No. 8054. Station no. 84. Medium size, straw-yellow with pale hilum ; slightly mottled with brown; seed coat more or less wrinkled and cracked.
95790. No. 8055. Station no. 85. Medium size, straw to olive-yellow with pale hilum; heavily mottled with dark brown.
95791. No. 8056. Station no. 86. Large size, straw to greenish yellow with pale hilum: mottled with brown.
95792. No. 8057. Station no. 87. Medium large, straw-yellow with brown hilum; mottled with brown.
95793. No. 8058. Station no. 88. Medium large, straw- to olive-yellow with pale hilum; seed coat more or less wrinkled and cracked; slightly' mottled.
95794. No. 8059. Station no. 89. Medium size, pale straw-yellow with pale hilum.
95795. No. 8060. Station no. 90. Medium size, straw-yellow with brown hilum.
95796. No. 8061. Station no. 91. Medium size, straw-yellow with brown hilum.
95797. No. 8062. Station no. 92. Medium size, straw-yellow with pale hilum; mottled with brown.
95798. No. 8063. Station no. 93. Medium large, straw-yellow with pale hilum ; mottled with brown.
95799. No. 8064. Station no. 94. Medium size, straw- to olive-yellow with pale hilum ; mottled with brown.
95800. No. 8065. Station no. 95. Medium size, straw-yellow with pale hilum ; mottled slightly.
95801. No. 8066. Station no. 96. Medium size, straw-yellow with darkbrown hilum; seed coat wrinkled and cracked.
95802. No. 8067. Station no. 97. Medium large, straw-yellow with pale hilum ; slightly mottled.
95803. No. 8068. Station no. 98. Medium large, straw-yellow with pale hilum; slightly mottled with brown.
95804. No. 8069. Station no. 99. Medium large, olive-yellow with pale h .lum ; slightly mottled with brown. Seed coat soméwhat wrinkled and split.
95805. No. 8070. Station no. 100. Medium small, black. Yellow germ. Slightly flattened.
95806. No. 8071. Station no. 101. Medium size, straw-yellow with pale hilum; slightly mottled with brown.

## 95706 to 96383 —Continued

95807. No. 8072. Station no. 102. Medium large, straw-yellow with pale hilum ; heavily mottled with brown.
95808. No. 8073. Station no. 103. Medium size, straw- to olive-yellow with pale hilum; heavily mottled with dark brown.
95809. No. 8074. Station no. 104. Medium size, straw-yellow with brown hilum ; mottled with brown.
95810. No. 8075. Station no. 105. Medium size, straw-yellow with pale hilum; mottled with brown.
95811. No. 8076. Station no. 106. Medium large, straw-yellow with pale hilum; mottled with brown.
95812. No. 8077. Station no. 107. Medium size, straw- to greenish-yellow, pale hilum; slightly mottled with brown.
95813. No. 8078. Station no. 108. Medium size, straw- to olive-yellow with pale hilum.
95814. No. 8079. Station no. 109. Medium large, straw- to olive-yellow with pale hilum; seed coat more or less wrinkled and cracked.
95815. No. 8080. Station no. 110. Medium large, straw-yellow with pale hilum ; mottled with brown.
95816. No. 8081. Station no. 111. Medum size, straw-yellow with pale hilum; slightly mottled with brown.
95817. No. 8082. Station no. 112. Medium size, straw to greenish yellow, pale hilum; slightly mottled with brown.
95818. No. 8083. Station no. 113. Medium large, straw-yellow with pale hilum; evidence of purple spot on seed.
95819. No. 8084. Station no. 114. Medium size, straw-yellow with pale hilum.
95820. No. 8085. Station no. 115. Medium size, straw-yellow with pale hilum.
95821. No. 8086. Station no. 116. Medium size, straw-yellow with pale hilum; slightly mottled with brown.
95822. No. 8087. Station no. 117. Medium size, straw-yellow with pale hilum; mottled with dark brown.
95823. No. 8088. Station no. 118. Medium size, straw-yellow with pale hilum.
95824. No. 8089. Station no. 119. Medium size, straw-yellow with pale hilum; slightly mottled.
95825. No 8090. Station no. 120. Medium large, straw- to olive-yellow with pale hilum; slightly mottled.
95826. No. 8091. Station no. 121. Medium size, straw-yellow with pale hilum ; slightly mottled.
95827. No. 8092. Station no. 122. Medium size, straw- to olive-yellow with pale hilum ; slightly mottled.
95828. No. 8093. Station no. 123. Medium size, straw-yellow with pale hilum; heavily mottled with brown.
95829 to 95866 . From the Chusei-Nando Prefecture.

## 95706 to 96383-Continued

95829. No. 8094. Station no. 124. Medium size, straw-yellow with pale hilum; mottled with brown.
95830. No. 8095. Station no. 125. Medium large, straw-yellow with darkbrown hilum ; mottled slightly.
95831. No. 8096. Station no. 126. Medium large, straw-yellow with darkbrown hilum; slightly mottled.
95832. No. 8097. Station no. 127. Medium large, straw-yellow with brown hilum ; slightly mottled.
95833. No. 8098. Station no. 128. Medium size, straw-yellow with pale hilum ; mottled with brown.
95834. No. 8099. Station no. 129. Medium size, straw-yellow with pale hilum ; mottled with brown.
95835. No. 8100. Station no. 130. Medium large, olive-brown with yellow germ.
95836. No. 8101. Station no. 131. Medium size, straw-yellow with brown hilum ; slightly mottled with brown.
95837. No. 8102. Station no. 132. Medium size, straw to olive-yellow with pale hilum; slightly mottled with brown.
95838. No. 8103. Station no. 133. Medum size, straw-yellow with pale hilum ; mottled with brown.
95839. No. 8104. Station no. 134. Medium large, straw to olive-yellow with pale hilum; mottled with brown; seed coat slightly wrinkled and cracked.
95840. No. 8105. Station no. 135. Medium large, olive-green mottled with black; black hilum.
95841. No. 8106. Station no. 136. Medium large, straw to olive-yellow with pale hilum; slightly mottled with brown.
95842. No. 8107. Station no. 137. Medium small, straw-yellow with pale hilum; heavily mottled with brown.
95843. No. 8108. Station no. 138. Medium size, straw-yellow with slateblack hilum; slightly mottled.
95844. No. 8109. Station no. 139. Medium size, straw-yellow with pale hilum ; mottled with brown.
95845. No. 8110. Station no. 140. Medium small, straw-yellow with pale hilum ; heavily mottled with brown.
95846. No. 8111. Station no. 141. Medium small, olive-yellow with lightbrown hilum; heavily mottled with brown.
95847. No. 8112. Station no. 142. Medium size, straw to olive-yellow with brown hilum; heavily mottled with brown.
95848. No. 8113. Station-no. 143. Medium large, straw-yellow, mottled with brown.
95849. No. 8114. Station no. 144. Large size, straw to olive-yellow with pale hilum; slightly mottled with brown; seed coat somewhat wrinkled and split.
95850. No. 8115. Station mo. 145. Medium large, olive-yellow with black hilum; heavily mottled with. black.

## 95706 to 96383-Continued

95851. No. 8116. Station no. 146. Medium size, straw-yellow with pale hilum; slightly mottled with brown.
95852. No. 8117. Station no. 147. Medium size, green with black hilum; germ green; seed coat somewhat wrinkled and split.
95853. No. 8118. Station no. 148. Medium size, straw-yellow with pale hilum ; mottled with brown.
95854. No. 8119. Station no. 149. Medium size, straw-yellow with pale hilum.
95855. No. 8120. Station no. 150. Medium size, straw- to olive-yellow with pale hilum.
95856. No. 8121. Station no. 151. Medium large, straw- to olive-yellow with pale hilum; slightly mottled with brown.
95857. No. 8122. Station no. 152. Medium size, straw-yellow with pale hilum; mottled with brown.
95858. No. 8123. Station no. 153. Medium large, straw-yellow with black hilum; mottled with black.
95859. No. 8124. Station no. 154. Medium size, straw-yellow with pale hilum; heavily mottled with brown.
95860. No. 8125. Station no. 155. Medium size, light straw-yellow with brown hilum ; heavily mottled with brown.
95861. No. 8126. Station no. 156. Medium large, light straw-yellow with brown hilum.
95862. No. 8127. Station no. 157. Medium size, straw-yellow with brown hilum.
95863. No. 8128. Station no. 158. Medium size, straw-yellow with lightbrown hilum ; slightly mottled.
95864. No. 8129. Station no. 159. Medium size, straw-yellow with pale hilum ; mottled with brown.
95865. No. 8130. Station no. 160. Medium size, yellowish green with green germ and slate-black hilum.
95866. No. 8131. Station no. 161. Medium large, brown with network of white on each side.

95867 to 95899 . From the Chusei-Hokudo Prefecture.
95867. No. 8132. Station no. 162. Medium size, straw-yellow with brown hilum ; slightly mottled.
95868. No. 8133. Station no. 163. Medium large, straw-yellow with pale hilum ; slightly mottled with brown; seed coat more or less wrinkled and cracked.
95869. No. 8134. Station no. 164. Medium large, straw- to olive-yellow with pale hilum; mottled with brown.
95870. No. 8135. Station no. 165. Medium size, straw- to olive-yellow with pale hilum.
95871. No. 8136. Station no. 166. Medium large, straw- to olive-yellow with pale hilum; mottled with brown.

## 95706 to 96383-Continued

95872. No. 8137. Station no. 167. Medium size, straw-yellow with pale hilum ; slightly mottled with brown.
95873. No. 8138. Station no. 168. Medium size, straw-yellow with pale hilum.
95874. No. 8139. Station no. 169. Medium size, straw-yellow with pale hilum ; slightly mottled with brown.
95875. No. 8140. Station no. 170. $\mathrm{Me}-$ dium size, straw-yellow with pale hilum.
95876. No. 8141. Station no. 171. Medium size, straw-yellow with pale hilum; mottled with brown.
95877. No. 8142. Station no. 172. Medium size, straw-yellow with pale hilum.
95878. No. 8143. Station no. 173. Medium size, straw-yellow with pale hilum; slightly mottled with brown.
95879, No. 8144. Station no. 174. Medium size, straw-yellow with pale hilum; slightly mottled with brown.
95879. No. 8145. Station no. 175. Medium size, straw-yellow with pale hilium; slightly mottled with brown.
95880. No. 8146 . Station no. 176. Medium size, light straw-yellow with light-brown hilum.
95881. No. 8147. Station no. 177. Medium large, straw- to olive-yellow, pale hilurn; slightly mottled with brown.
95882. No. 8148. Station no. 178. Medium size, straw-yellow with pale hilum.
95883. No. 8149. Station no. 179. Medium size, straw-yellow with pale hilum; mottled with brown.
95885 and 95886 . Medium size, strawyellow with pale hilum.
95884. No. 8150. Station no. 180.
95885. No. 8151. Station no. 181.
95886. No. 8152. Station no. 182. Medium size, straw-yellow with pale hilum ; mottled with brown.
95888 to 95892. Medium size, strawyellow with pale hilum.
95887. No. 8153. Station no. 183.
95888. No. 8154. Station no. 184.
95889. No. 8155. Station no. 185.
95890. No. 8156. Station no. 186.
95891. No. 8157. Station no. 187.

95893 to 95895. Medium size, strawyellow with pale hilum; slightly mottled with brown.
95893. No. 8158. Station no. 188.
95894. No. 8159. Station no. 189.
95895. No. 8160. Station no. 190.
95896. No. 8161. Station no. 191. Medium size, straw-yellow with pale hilum; affected some by purple spot.
95897 to 95899. Medium size, strawyellow with pale hilum; slightly mottled with brown.
95897. No. 8162. Station no. 192.
95898. No. 8163. Station no. 193.

## 95706 to 96383-Continued

95899. No. 8164. Station no. 194.

95900 to 95944 . From the Keikido Prefecture.
95900. No. 8165. Station no. 195. Medium size, straw-yellow with pale hilum; slightly mottled with brown.
95901. No. 8166. Station no. 196. Medium size, straw-yellow with pale hilum.
95902. No. 8167. Station no. 197. Medium size, straw-yellow with pale hilum ; slightly mottled with brown.
95903. No. 8168. Station no. 198. Medium size, straw-yellow with pale hilum.
95904 to 95916 . Medium size, strawyellow with pale hilum; slightly mottled with brown.
95904. No. 8169. Station no. 199.
95905. No. 8170. Station no. 200.
95906. No. 8171. Station no. 201.
95907. No. 8172. Station no. 202.
95908. No. 8173. Station no. 203.
95909. No. 8174. Station no. 204.
95910. No. 8175. Station no. 205.
95911. No. 8176. Station no. 206.
95912. No. 8177. Station no. 207.
95913. No. 8178. Station no. 208.
95914. No. 8180. Station 0. 209.
95915. No. 8180. Station no. 210.
95916. No. 8181. Station no. 211.

95917 and 95918. Medium size, strawyellow with pale hilum; mottled with brown.
95917. No. 8182. Station no. 212.
95918. No. 8183. Station no. 213.
95919. No. 8184. Station no. 214. Medium size; straw-yellow with pale hilum.
95920. No. 8185. Station no. 215. Medium size straw-yellow with pale hilum; slightly mottled with brown.
95921 to 95923 . Medium size, strawyellow with pale hilum; mottled with brown.
95921. No. 8186. Station no. 216.
95922. No. 8187. Station no. 217.
95923. No. 8188. Station no. 218.

95924 and 95925 . Medium size, strawyellow with pale hilum; slightly mottled with brown.
95924. No. 8189. Station no. 219.
95925. No. 8190. Station no. 220.
95926. No. 8191. Station no. 221. Medium size, straw-yellow with brown hilum ; mottled with brown ; slightly affected with purple spot.
95927. No. 8192. Station no. 222. Medium large, straw-yellow with pale hilum; slightly mottled with brown.
95928. No. 8193. Station no. 223. Medium large, straw- to yellow-green with pale hilum; slightly mottled with brown.
95929 and 95930. Medium size, strawyellow with pale hilum.

## 95706 to 96383-Continued

95929. No. 8194. Station no. 224.
95930. No. 8195. Station no. 225.

95931 and 95932. Medium size, strawyellow with pale hilum; slightly mottled with brown.
95931. No. 8196. Station no. 226.
95932. No. 8197. Station no. 227.

95933 and 95934 . Medium size, strawyellow with pale hilum; slightly mottled.
95933. No. 8198. Station no. 228.
95934. No. 8199. Station no. 229.
95935. No. 8200. Station no. 230. Medium size, straw-yellow with pale hilum.
95936 and 95937. Medium size, strawyellow with pale hilum; mottled with brown.
95936. No. 8201. Station no. 231. Slightly mottled.
95937. No. 8202. Station no. 232.

95938 to 95940. Medium size, strawyellow with pale hilum; slightly mottled with brown.
95938. No. 8203. Station no. 233.
95939. No. 8204. Station no. 234.
95940. No. 8205. Station no. 235.
95941. No. 8206. Station no. 236. Medium size, straw-yellow with pale hilum; mottled with brown.
95942 and 95943: Medium size, strawyellow with pale hilum; slightly mottled with brown.
95942. No. 8207. Station no. 237.
85943. No. 8208. Station no. 238.
95944. No. 8209. Station no. 239. Medium size, straw-yellow with pale hilum ; mottled with brown.
95945 to 96000 . From the Kogendo Prefecture.
95945. No. 8210. Station no. 240. Large size, straw-yellow with pale hilum.
95946. No. 8211. Station no. 241. Large size, light straw-yellow with pale hilum; mottled with brown.
95947. No. 8212. Station no. 242. Medium size, straw-yellow with pale hilum ; mottled with brown.
95948. No. 8213. Station no. 243. Medium large, straw-yellow with pale hilum; heavily mottled with brown.
95949. No. 8214. Station no. 244. Medium size, straw-yellow with pale hilum ; seed coat more or less wrinkled and split.
95950. No. 8215. Station no. 245. Medium size, straw-yellow with pale hilum; heavily mottled with brown.
95951 and 95952 . Medium large, strawto olive-yellow with pale hilum; mottled with brown.
95951. No. 8216. Station no. 246.
95952. No. 8217. Station no. 247.
95953. No. 8218. Station no. 248. Medium large, straw- to olive-yellow with pale hilum; slightly mottled with brown.

## 95706 to 96383 -Continued

95954. No. 8219. Station no. 249. Medium large, straw-yellow with pale hilum; heavily mottled with brown.
95955, No. 8220. Station no. 250. Medium large, straw-yellow with brown hilum ; mottled with brown.
95955. No. 8221. Station no. 251. Medium large, straw-yellow with brown hilum.
95956. No. 8222. Station no. 252. Medium large, straw-yellow with pale hilum.
95957. No. 8223. Station no. 253. Medium large, straw- to olive-yellow with pale hilum; slightly mottled with brown.
95958. No. 8224. Station no. 254. Medium large, straw-yellow with brown hilum; slightly mottled with brown.
95959. No. 8225. Station no. 255. Medium large, straw-yellow with brown hilum; slightly mottled with brown; seed coat more or less wrinkled and cracked.
95960. No. 8226. Station no. 256. Medium large, straw-yellow with brown hilum; heavily mottled with brown.
95961. No. 8227. Station no. 257. Medium large, straw- to olive-yellow with pale hilum; seed coat more or less wrinkled and split.
95962. No. 8228. Station no. 258. Medium large, straw-yellow with pale hilum ; slightly mottled with brown; seed coat more or less wrinkled and cracked.
95963. No. 8229. Station no. 259. Medium large, straw- to olive-yellow with pale hilum ; seed coat more or less wrinkled and split.
95964. No. 8230. Station no. 260. Medium large, straw- to olive-yellow with pale hilum; seed coat wrinkled.
95966 and 95967. Medium size, strawyellow with pale hilum; slightly mottled with brown. .
95965. No. 8231. Station no. 261.
95966. No. 8232. Station no. 262.
95967. No. 8233. Station no. 263. Medium size, straw- to olive-yellow with pale hilum; slightly mottled with brown.

95969 to 95972 . Medium size, strawyellow with pale hilum; slightly mottled with brown.
95969. No. 8234. Station no. 264.
95970. No. 8235. Station no. 265.
95971. No. 8236. Station no. 266.
95972. No. 8237. Station no. 267.
95973. No. 8238. Station no. 268. Medium large, straw-yellow with pale hilum; heavily mottled with brown.
95974. No. 8239. Station no. 269. Medium large, straw- to olive-yellow with pale hilum; slightly mottled with brown; seed coat more or less wrinkled and split.
95975. No. 8240. Station no. 270. Medium large. straw-yellow with pale hilum; mottled with brown.

## 95706 to 96383-Continued

95976. No. 8241. Station no. 271. Large size. straw-yellow with pale hilum; heavily mottled with dark. brown.
9597\%. No. 82842. Station no. 272. Large size, straw-yellow with pale hilum; heavily mottled with brown and affected with purple spot.
95977. No. 8243. Station no. 273. Large size, straw-yellow with pale hilum; seed coat wrinkled.
95978. No. 8244. Station no. 274. Medium large, straw-yellow with pale hilum; mottled with brown; seed coat more or less wrinkled and split.
95979. No. 8245. Station no. 275. Large size, straw-yellow with pale hilum; heavily mottled with brown; seed coat wrinkled and split.
95980. No. 8246. Station . no. 276. Large size, straw-yellow with pale hilum ; slightly mottled with brown; seed coat wrinkled and split.
95981. No. 8247. Station no. 277. Large size, straw-yellow with pale hilum; mottled with brown; seed coat more or less wrinkled.
95982. No. 8248. Station No. 278. Large size, straw-yellow with pale hilum; heavily mottled with brown; seed coat more or less wrinkled.
95983. No. 8249. Station no. 279. Large size, straw-yellow with brown hilum; seed coat somewhat wrinkled and split.
95984. No. 8250. Station no. 280. Large size, straw-yellow with brown hilum ; slightly mottled with brown.
95985. No. 8251. Station no. 281. Large size, straw-yellow with lightbrown hilum; mottled with brown; seed coat heavily wrinkled and split.
95986. No. 8252. Station no. 282. Large size, straw-yellow with brown hilum ; seed coat wrınkled and split.
95987. No. 8253. Station no. 283. Large size, straw-yellow wth brown hilum; mottled with brown ; seed coat wrinkled and split.
95988. No. 8254. Station no. 284. Medium large, straw-yellow with lightbrown hilum.
95989. No. 8255. Station no. 285. Large size, straw-yellow with brown hilum; seed coat slightly split.
95990. No. 8256. Station no. 286. Large size, straw-yellow with brown hilum; mottled and somewhat affected with purple spot.
95991. No. 8257. Station no. 287. Large size, straw-yellow with lightbrown hilum; slightly mottled with brown.
95992. No. 8258. Station no. 288. Large size, straw-yellow with brown hilum ; slightly wrinkled.
95993. No. 8259. Station no. 289. Large size, straw-yellow with brown hilum; mottled with brown.
95994. No. 8260. Station no. 290. Large size, straw-yellow with lightbrown hilum ; slightly mottled with brown; seed coat slightly wrinkled.

## 95706 to 96383-Continued

95996. No. 8261. Station no. 291. Medium large, straw-yellow with lightbrown hilum; seed coat more or less wrinkled and split.
95997. No. 8262. Station no. 292. Large size, straw-yellow with brown hilum; seed coat more or less wrinkled and split.
95998 and 95999. Medium large, strawyellow with pale hilum; seed coat more or less wrinkled ; slightly mottled with brown.
95998. No. 8263. Station no. 293.
95999. No. 8264. Station no. 294.
96000. No. 8265. Station no. 295. Large size, straw-yellow with lightbrown hilum; seed coat wrinkled and slightly mottled with brown.
96001 to 96004. From the Kokaido Prefecture.
96001. No. 8266. Station no. 296. Medium size, straw-yellow with pale hilum; slightly mottled with brown.

96002 to 96004 . Medium large, strawyellow with pale hilum; slightly mottled with brown.
96002. No. 8267. Station no. 297.
96003. No. 8268. Station no. 298.
96004. No. 8269. Station no. 299.
96005. No. 8270. Station no. 300. Medium size, straw-yellow with pale hilum; mottled with brown.
96006. No. 8271. Station no. 301. Medium size, straw-yellow with pale hilum; slightly mottled with brown and affected with purple spot.
96007. No. 8272. Station no. 302. Medium size, straw- to olive-yellow with pale hilum.
96008. No. 8273. Station no. 303. Medium size, straw-yellow with pale hilum.
96009. No. 8274. Station no. 304. Large size, straw-yellow with lightbrown hilum; slightly wrinkled.
96010. No. 8275. Station no. 305. Medium large, straw-yellow with lightbrown hilum; slightly mottled with brown.
96011. No. 8276. Station no. 306. Medium large, straw-yellow with lightbrown hilum; slightly mottled with brown; seed coat slightly wrinkled.
96012. No. 8277. Station no. 307. Medium size, straw-yellow with darkbrown hilum; heavily mottled with dark brown.
96013. No. 8278. Station no. 308. Medium large, straw-yellow with lightbrown hilum; heavily mottled with brown.
96014. No. 8279. Station no. 309. Medium size, straw-yellow with darkbrown hilum; heavily mottled with dark brown.
96015 and 96016. Medium large, strawyellow with dark-brown hilum; heavily mottled with dark brown.
96015. No. 8280. Station no. 310.
96016. No. 8281. Station no. 311.

## 95706 to 96383 -Continued

96017. No. 8282. Station no. 312. Medium large, straw-yellow with lightbrown hilum; slightly mottled with brown.
96018. No. 8283. Station no. 313. Medium large, straw-yellow with lightbrown hilum; seed coat slightly wrinkled and split.
96019. No. 8284. Station no. 314. Medium large, straw-yellow with brown hilum; seed coat slightly wrinkled.
96020. No. 8285. Station no. 315. Large size, straw-yellow with lightbrown hilum; seed coat somewhat wrinkled and split.
96021. No. 8286. Station no. 316. Large size, straw-yellow with brown hilum ; mottled with dark brown ; seed coat wrinkled and split.
96022. No. 8287. Station no. 317. Large size, straw-yellow with brown hilum ; slightly mottled with brown; seed coat badly wrinkled and split.
96023. No. 8288. Station no. 318. Large size, straw-yellow with lightbrown hilum; seed coat wrinkled and split.
96024. No. 8289. Station no. 319. Large size, straw-yellow with brown hilum ; heavily mottled with brown; seed coat badly wrinkled and split.
96025. No. 8290. Station no. 320. Large size, straw-yellow with lightbrown hilum; slightly mottled with brown ; seed coat wrinkled and split.
96026. No. 8291. Station no. 321. Medium size, straw-yellow with brown hilum ; slightly mottled with brown; seed coat slightly wrinkled and split.
96027. No. 8292. Station no. 322. Medium size, straw-yellow with darkbrown hilum; mottled with dark brown.
96028. No. 8293. Station no. 323. Medium large, straw-yellow with brown hilum; slightly mottled with brown.
96029. No. 8294. Station no. 324. Medium size, straw-yellow with brown hilum ; slightly mottled with brown; seed coat slightly wrinkled and split.
96030. No. 8295. Station no. 325. Medium size, straw-yellow with brown hilum; slightly mottled with brown.
96031 to 96034 . Medium size, strawyellow with brown hilum; mottled with brown.
96031. No. 8296. Station no. 326. Slightly mottled.
96032. No. 8297. Station no. 327.
96033. No. 8298. Station no. 328.
96034. No. 8299. Station no. 329.
96035. No. 8300. Station no. 330. Medium size, straw-yellow with darkbrown hilum.
96036. No. 8301. Station no. 331. Medium size, straw-yellow with brown hilum; mottled with brown.
96037. No. 8302. Station no. 332. Medium size, straw-yellow with brown hilum: mottled with brown ; seed coat slightly wrinkled and split.

## 95706 to 96383-Continued

96038. No. 8303. Station no. 333. Medium large, straw-yellow with lightbrown hilum; seed coat wrinkled and split.
96039. No. 8304. Station no. 334. Medium size. straw-yellow with pale hilum ; slightly mottled with brown.
96040. No. 8305. Station no. 335. Large size, straw-yellow with lightbrown hilum; slightly mottled with brown; slightly wrinkled.
96041. No. 8306. Station no. 336. Medium size, straw-yellow with pale hilum; slightly mottled with brown.
96042. No. 8307. Station no. 337. Medium size, straw-yellow with pale hilum.
96043. No. 8308. Station no. 338. Medium large, straw-yellow with pale hilum; slightly mottled with brown.
96044. No. 8309. Station no. 339. Large size, straw-yellow with lightbrown; seed coat wrinkled.
96045 to 96094. From the Heian-Nando Prefecture.
96045. No. 8310. Station no. 340. Medium size, straw-yellow with pale hilum ; slightly mottled with brown.
96046. No. 8311. Station no. 341. Medium size, straw-yellow with brown hilum; slightly mottled with brown.
96047. No. 8312. Station no. 342. Medium size, straw-yellow with pale hilum; mottled with brown.
96048. No. 8313. Station no. 343. Medium size, straw-yellow with brown hilum ; slightly mottled with brown.
96049. No. 8314. Station no. 344. Medium size, straw-yellow with pale hilum; slightly mottled with brown.
96050. No. 8315. Station no. 345. Medium size. straw-yellow with pale hilum.
96051. No. 8316. Station no. 346. Medium large, straw- to olive-yellow with pale hilum; slightly mottled with brown; seed coat slightly wrinkled and split.
96052. No. 8317. Station no. 347. Medium size, straw-yellow with pale hilum; slightly mottled with brown.
96053. No. 8318. Station no. 348. Medium size, straw-yellow with pale hilum.
96054. No. 8319. Station no. 349. Large size, straw-yellow with pale hilum; mottled with brown; seed coat wrinkled and split.
96055. No. 8320. Station no. 350. Large size, straw-yellow with lightbrown hilum ; slightly affected with purple spot; seed coat badly wrinkled and split.
96056. No. 8321. Station no. 351. Medium size, straw-yellow with pale hilum.
96057 and 96058. Medium size, strawyellow with pale hilum; slightly mottled with brown.
96057. No. 8322. Station no. 352.
96058. No. 8323. Station no. 353.

## 95706 to 96383 -Continued

96059. No. 8324. Station no. 354. Medium large, straw-yellow with pale hilum; slightly mottled with brown; slightly wrinkled and split.
96060. No. 8325. Station no. 355. Medium size, straw-yellow with lightbrown hilum; badly wrinkled and split; slightly mottled with brown.
96061. No. 8326. Station no. 356. Large size, straw-yellow with lightbrown hilum ; slightly mottled with brown.
96062. No. 8327. Station no. 357. Large size, straw-yellow with lightbrown hilum.
96063. No. 8328. Station no. 358. Medium large, straw-yellow with lightbrown hilum; seed coat slightly wrinkled.
96064 and 96065. Medium size, strawyellow with pale hilum; slightly mottled with brown.
96064. No. 8329. Station no. 359.
96065. No. 8330. Station no. 360.
96066. No. 8331. Station no. 361. Medium large, straw-yellow with brown hilum ; slightly mottled with brown.
96067. No. 8332. Station no. 362. Large size, straw-yellow with brown hilum ; slightly mottled with brown; slight purple spot; seed coat wrinkled and split.
96068. No. 8333. Station no، 363. Medium large, straw-yellow with pale hilum ; mottled with brown; slightly wrinkled.
96069. No. 8334. Station no. 364. Large size, straw-yellow with lightbrown hilum ; slightly mottled with brown ; seed coat wrinkled and split.
96070. No. 8335. Station no. 365. Medium large, straw-yellow with darkbrown hilum ; heavily mottled with dark brown; seed coat badly split.
96071. No. 8336. Station no. 366. Medium size, straw-yellow with lightbrown hilum.
96072. No. 8337. Station no. 367. Medium size, straw-yellow with pale hilum.
96073 and 96074. Medium size, strawyellow with pale hilum; slightly mottled with brown.
96073. No. 8338. Station no. 368.
96074. No. 8339. Station no. 369.
96075. No. 8340. Station no. 370. Medium size, straw-yellow with lightbrown hilum; mottled with brown.
96076. No. 8341. Station no. 371. Medium size, straw-yellow with pale hilum ; slightly mottled with brown.
96077. No. 8342. Station no. 372. Medium size, straw-yellow with pale hilum ; mottled with brown.
96078. No. 8343. Station no. 373. Medium size, straw-yellow with pale hilum ; slightly mottled with brown; somewhat wrinkled.
96079. No. 8344. Station no. 374. Medium size, straw-yellow with pale hilum.

## 95706 to 96383-Continued

96080. No. 8345. Station no. 375. Medium size, straw-yellow with lightbrown hilum; slightly wrinkled.
96081 to 96084 . Medium sized, strawyellow with pale hilum; slightly mottled with brown.
96081. No. 8346. Station no. 376.
96082. No. 8347. Station no. 377.
96083. No. 8348. Station no. 378.
96084. No. 8349. Station no. 379.
96085. No. 8350. Station no. 380. Medium size, straw-yellow with lightbrown hilum; slightly mottled with brown.
96086. No. 8351. Station no. 381. Medium size, straw-yellow with pale hilum ; mottled with brown.
96087. No. 8352. Station no. 382. Medium size, straw-yellow with brown hilum; mottled with brown.
96088. No. 8353. Station no. 383. Medium size, straw-yellow with brown hilum ; seed coat badly wrinkled and split.
96089. No. 8354. Station no. 384. Medium size, straw-yellow with lightbrown hilum; slightly mottled with brown; seed coat slightly split.
96090. No. 8355. Station no. 385. Medium size, straw-yellow with pale hilum ; slightly affected with purple spot.
96091. No. 8356. Station no. 386. Large, straw- to olive-yellow with light-brown hilum ; slightly mottled with brown; seed coat slightly split.
96092. No. 8357. Station no. 387. Medium size, straw-yellow with pale hilum; slightly mottled with brown.
96093. No. 8358. Station no. 388. Medium size, straw-yellow with lightbrown hilum ; slightly mottled with brown.
96094. No. 8359. Station no. 389. Medium large, straw-yellow with brown hilum; badly mottled with brown; seed coat split.
96095 to 96126 . From the Heian-Hokudo Prefecture.
96095. No. 8360. Station no. 390. Medium size, straw-yellow with brown hilum; mottled with brown.
96096. No. 8361. Station no. 391. Medium size, straw-yellow with pale hilum; slightly mottled with brown.
96097. No. 8362. Station no. 392. Medium large, straw-yellow with lightbrown hilum; mottled with brown; wrinkled and split.
96098. No. 8363. Station no. 393. Medium large, straw-yellow with pale hilum; wrinkled and split.
96099. No. 8364. Station no. 394. Medium large, straw-yellow with brown hilum; mottled with brown; seed coat wrinkled and split.
96100. No. 8365. Station no. 395. Medium size, straw-yellow with pale hilum ; mottled with brown.
96101. No. 8366. Station no. 396. Medium size, straw-yellow with pale hilum; mottled with brown; seed coat wrinkled.

## 95706 to 96383 -Continued

96102. No. 8367. Station no. 397. Medium size, straw-yellow with lightbrown hilum; heavily mottled with dark brown.
96103. No. 8368. Station no. 398. Medium large, straw-yellow with lightbrown hilum; mottled with brown; seed coat wrinkled and split.
96104. No. 8369. Station no. 399. Medium size, straw-yellow with pale hilum.
96105. No. 8370. Station no. 400. Medium size, straw-yellow with pale hilum; badly mottled with brown; seed coat somewhat spiit.
96106. No. 8371. Station no. 401. Medium size, straw-yellow. with pale hilum.
96107. No. 8372. Station no. 402. Medium large, straw-yellow with darkbrown hilum; badly mottled with brown; seed coat split.
96108. No. 8373. Station no. 403. Medium size, straw-yellow with pale hilum ; slightly mottled with brown.
96109. No. 8374. Station no. 404. Medium large, straw-yellow with pale hilum ; slightly mottled with brown.
96110. No. 8375. Station no. 405 . Medium size, straw-yellow with pale hilum; mottled with brown.
96111. No. 8376. Station no. 406. Medium size, straw-yellow with brown hilum; mottled with brown; seed coat somewhat split.
96112. No. 8377. Station no. 407. Medium large, straw- to olive-yellow with light-brown hilum; mottled with brown; seed coat split.
96113. No. 8378. Station no. 408. Medium size, straw-yellow with brown hilum; mottled with brown and black.
96114. No. 8379. Station no. 409. Large size, straw-yellow with lightbrown hilum; heavily mottled with brown; seed coat split.
96115. No. 8380. Station no. 410. Medium large, straw- to olive-yellow with light brown hilum; seed coat somewhat split.
96116. No. 8381. Station no. 411. Medium size, straw-yellow with pale hilum; heavily mottled with dark brown.
96117. No. 8382. Station no. 412. Medium size, light straw-yellow with pale hilum; seed coat somewhat wrinkled.
96118. No. 8383. Station no. 413. Medium size, straw-yellow with pale hilum.
96119. No. 8384 Station no. 414. Medium large, light straw-yellow with pale hilum.
96120. No. 8385. Station no. 415. Medium size, straw-yellow with brown hilum ; heavily mottled with brown.
96121. No. 8386. Station no. 416. Medium large, straw-yellow with pale hilum ; slightly mottled with brown; seed coat split.
96122. No. 8387. Station no. 417. Medium size, straw-yellow with pale hilum; slightly mottled with brown.

## 95706 to 96383 -Continued

96123. No. 8388. Station no. 418. Large size, straw-yellow with pale hilum ; slightly mottled with brown; seed coat split; affected with purple spot.
96124, No. 8389. Station no. 419. Medium large, straw-yellow with pale hilum; seed coat split.
96124. No. 8390. Station no. 420. Medium large, straw-yellow with pale hilum; seed coat split in fine network on sides.
96125. No. 8391. Station no. 421. Medium large, straw-yellow with pale hilum; slightly mottled with brown.
96127 to 96156. From the Kankyo-Nando Prefecture.
96126. No. 8392. Station no. 422. Medium large, straw-yellow with pale hilum ; heavily mottled with brown; seed coat wrinkled and split.
96127. No. 8393. Station no. 423. Medium large, straw-yellow with pale hilum ; heavily mottled with brown; seed coat wrinkled and split.
96129 and 96130. Medium size, strawyellow with pale hilum.
96128. No. 8394. Station no. 424.
96129. No. 8395. Station no. 425.
96130. No. 8396. Station no. 426. Medium size, straw-yellow with pale hilum; heavily mottled with brown.
96132 to 96137. Straw-yellow with pale hilum; heavily mottled with brown. 96132. No. 8397. Station no. 427. Medium large, seed coat split.
96131. No. 8398. Station no. 428. Medium size, seed coat split.
96132. No. 8399. Station no. 429. Medium size.
96133. No. 8400. Station no. 430. Medium size, seed coat split.
96134. No. 8401. Station no. 431. Medium size.
96135. No. 8402. Station no. 432. Medium size.
96136. No. 8403. Station no. 433. Medium size, straw-yellow with pale hilum; slightly mottled with brown.
96137. No. 8404. Station no. 434. Medium size, straw- to olive-yellow with pale hilum; slightly mottled with brown.
96138. No. 8405. Station no. 435. Medium size, straw-yellow with brown hilum; slightly mottled with brown.
96141 and 96142. Medium size, strawyellow with pale hilum; heavily mottled with brown.
96139. No. 8406. Station no. 436.
96140. No. 8407. Station no. 437.
96141. No. 8408. Station no. 438. Medium large, straw-yellow with pale hilum; slightly mottled with brown.
96144 to 96146 . Medium size, strawyellow with pale hilum; heavily mottled with brown.
96142. No. 8409. Station no. 439. Dark-brown mottling.
96143. No. 8410. Station no. 440. Seed coat split.

## 95706 to 96383 -Continued

96146. No. 8411. Station no. 441.
96147. No. 8412. Station no. 442. Medium size, straw-yellow with brown hilum; heavily mottled with brown ; seed coat split.
96148. No. 8413. Station no. 443. Medium large, straw-yellow with pale hilum ; heavily mottled with brown; seed coat split.
96149. No. 8414. Station no. 444. Medium size, straw-yellow with brown hilum ; heavily mottled with brown.
96150. No. 8415. Station no. 445. Medium large, straw-yellow with pale hilum; mottled with brown; seed coat split.
96151. No. 8416. Station no. 446. Medium size, straw-yellow with pale hilum; slightly mottled with brown.
96152. No. 8417. Station no. 447. Medium size, straw-yellow with pale hilum; secd coat split.
96153. No. 8418. Station no. 448. Medium size, straw-yellow with pale hilum ; seed coat slightly split.
96154. No. 8419. Station no. 449. Medium size, straw-yellow with pale hilum ; heavily mottled with brown; seed coat badly split; some purple spot.
96155. No. 8420. Station no. 450. Olive-yellow with pale hilum; some mottling with brown; seed coat split.
96156. No. 8421. Station no. 451. Medium large, straw-yellow with brown hilum; slightly mottled with brown; seed coat split.
96157 to 96187 . From the Kankyo-Hokudo Prefecture.
96157. No. 8422. Station no. 452. Medium size, straw-yellow with pale hilum ; slightly mottled with brown; seed coat split.
96158. No. 8423. Station no. 453. Large size, straw-yellow with pale hilum ; seed coat somewhat split.
96159. No. 8424. Station no. 454. Medium size, straw-yellow with brown hilum ; heavily mottled with brown; some purple spot; seed coat split.
96160. No. 8425. Station no. 455 . Medium large, straw-yellow with pale hilum ; seed coat split into fine network on sides.
96161. No. 8426. Station no. 456. Medium size, straw-yellow with pale hilum ; slightly mottled with brown; seed coat split.
96162 and 96163. Straw-yellow with light-brown hilum; slightly mottled with brown; affected with purple spot.
96162. No. 8427. Station no. 457. Medium large.
96163, No. 8428. Station no. 458. Medium size.
96163. No. 8429. Station no. 459. Medium size, straw-yellow with brown hilum; slightly mottled with brown; seed coat split.
96165 and 96166. Medium size, strawyellow with pale hilum.
96164. No. 8430. Station no. 460.

## 95706 to 96383 -Continued

96166. No. 8431. Station no. 461. Seed coat split.
96167 and 96168 . Medium size, strawyellow, heavily mottled with brown, seed coat split.
96167. No, 8432. Station no. 462. Brown hilum.
96168. No. 8433. Station no. 463. Pale hilum, seed coat split, some purple spot.
96169 and 96170. Medium size, strawyellow with pale hilum.
96169. No. 8434. Station no. 464. Slightly mottled with brown.
96170. No. 8435. Station no. 465. Seed coat wrinkled and split.
96171. No. 8436. Station no. 466. Medium large, straw-yellow with pale hilum ; slightly mottled with brown; seed coat badly split.
96172 to 96174 . Large size, straw-yellow with pale hilum.
96172. No. 8437. Station no. 467. Seed coat badly split.
96173. No. 8438. Station no. 468. Seed coat split, some purple spot.
96174. No. 8439. Station no. 469. Slightly mottled with brown, seed coat badly split.

96175 to 96180 . Medium size, strawyellow with pale hilum.
96175. No. 8440. Station no. 470 Slightly mottled with brown, seed coat split.
96176. No. 8441. Station no. 471. Heavily mottled with brown, seed coat split.
96177. No. 8442. Station no. 472 Slightly mottled with brown, seed coat much split.
96178. No. 8443. Station no. 473. Slightly mottled with brown, seed coat slightly split.
96179. No. 8444. Station no. 474. Seed coat badly split.
96180. No. 8445. Station no. 475. Slightly mottled with dark brown.
96181. No. 8446. Station no. 476. Medium size, olive-yellow with pale hilum ; heavily mottled with brown; some purple spot; seed coat split.
96182 to 96185 . Medium size, olive-yellow with pale hilum.
96182. No. 8447. Station no. 477. Seed coat slightly split.
96183. No. 8448. Station no. 478. Mottled with brown.
96184. No. 8449. Station no. 479.
96185. No. 8450. Station no. 480. Heavily mottled with brown, seed coat split.
96186. No. 8451. Station no. 481. Medium large, straw-yellow with pale hilum ; seed coat slightly split.
96187. No. 8452. Station no. 482. Medium size, straw-yellow with pale hilum ; seed coat split.
96188 to 96202. From the Chinese Eastern Railway Agricultural Experiment Station, Echo, Manchuria.

## 95706 to 96383-Continued

96188 and 96189. Black with green germ.
96188. No. 8453. Station no. 483. Medium size.
96189. No. 8454. Station no. 484. Medium size.
96190. No. 8455. Station no. 485. Medium size, straw-yellow with darkbrown hilum.
96191 to 96193. Medium size, straw-yellow with pale hilum; slightly mottled with brown.
96191. No. 8456: Station no. 486.
96192. No. 8457. Station no. 487.
96193. No. 8458. Station no. 488. Seed coat split ; purple spot.
96194. No. 8459. Station no. 489. Medium size, straw-yellow with black hilum and black markings about the seed scar
96195 and 96196. Straw-yellow with slate black hilum.
96195. No. 8460. Station no. 490 Medium small.
96196. No. 8461. Station no. 491. Medium size.
96197. No. 8462. Station no. 492. Me dium size, straw-yellow with black hilum ; some purple spot.
96198. No. 8463. Station no. 493. Medium size, straw to olive-yellow with pale hilum; heavily mottled with dark brown.
96199. No. 8464. Station no. 494. Medium size, straw-yellow with brown hilum ; heavily mottled with brown ; some purple spot.
96200 and 96201 . Medium small, strawyellow with black hilum.
96200. No. 8465. Station no. 495. Some purple spot.
96201. No. 8466. Station no. 496.
96202. No. 8467. Station no. 497. Medium size, straw-yellow with pale hilum; heavily mottled with brown.
96203 to 96383 . From the Kankyo-Hokudo Prefecture.
96203 and 96204. Medium size, olive with black hilum; heavily mottled with black.
96203. No. 8468. Station no. 498.
96204. No. 8469. Station no. 499.

96205 and 96206. Medium large, olive with pale hilum; heavily mottled with black.
96205. No. 8470. Station no. 500. Seed coat somewhat wrinkled.
96206. No. 8471. Station no. 501.
96207. No. 8472. Station no. 502. Medium large, black with yellow germ; seed more or less flattened.
96208. No. 8473 . Station no. 503. Medium size, olive with pale hilum; heavily mottled with black.
96209. No. 8474. Station no. 504. Medium size, bicolor (straw-yellow with black saddle).
96210 and 96211 . Olive with pale hilum ; heavily mottled with black.

## 95706 to 96383 --Continued

96210. No. 8475. Station no. 505. Large size.
96211. No. 8476. Station no. 506. Medium size.
96212 to 96216 . Medium size, olive with black hilum; heavily mottled with black.
96212. No. 8477. Station no. 507.
96213. No. 8478. Station no. 508.
96214. No. 8479. Station no. 509.
96215. No. 8480. Station no. 510.
96216. No. 8481. Station no. 511.

96217 to 96219. Medium size, black with yellow germ.
96217. No. 8482. Station no. 512.
96218. No. 8483. Station no. 513.
96219. No. 8484. Station no. 514.

96220 and 96221 . Medium size, olive with black hilum; heavily mottled with black.
96220. No. 8485 . Station no. 515.
96221. No. 8486. Station no. 516.
96222. No. 8487. Station no. 517. Medium size, black with yellow germ.
96223 to 96226. Medium size, olive, heavily mottled with black.
98223. No. 8488. Station no. 518.
96224. No. 8489. Station no. 519.
96225. No. 8490. Station no. 520.
96226. No. 8491. Station no. 521.
96227. No. 8492. Station no. 522. Large size, black and olive with yellow germ and seed coat more or less split.
96228 and 96229. Medium size, olive with black hilum; heavily mottled with black.
96228. No. $8493 . \quad$ Station no. 523.
96229. No. 8494. Station no. 524.
96230. No. 8495. Station no. 525. Medium size, olive, heavily mottled with black and brown.
96231. No. 8496. Station no. 526. Medium large, olive, with black and brown mottling.
96232 to 96234 . Medium size, black and brown with black arranged in concentric rings. Slightly flattened.
96232. No. 8497. Station no. 527.
96233. No. 8498. Station no. 528.
96234. No. 8499. Station no. 529.
96235. No. 8500 . Station no. 530. Medium size, black and brown.
96236 to 96242 . Medium size, black and brown. Black concentric rings.
96236. No. 8501. Station no. 531.
96237. No. 8502. Station no. 532.
96238. No. 8503. Station no. 533.
96239. No. 8504. Station no. 534.
96240. No. 8505. Station no. 535.
96241. No. 8506. Station no. 536.
96242. No. 8507. Station no. 537.

## 95706 to 96383 -Continued

96243. No. 8508. Station no. 538. Medium size, brown with brown hilum.
96244 to 96248 . Brown and black. Black arranged in concentric rings.
96244. No. 8509. Station no. 539. Medium size.
96245. No. 8510. Station no. 540. Medium large.
96246. No. 8511. Station no. 541. Medium large.
96247. No. 8512. Station no. 542. Medium size.
96248. No. 8513. Station no. 543. Medium size.
96249. No. 8514. Station no. 544. Medium size, brown, slightly mottled with black.
96250. No. 8515. Station no. 545. Medium large, dark brown, slightly mottled with black.
96251 to 96256 . Black and brown. Black arranged in concentric rings.
96251. No. 8516. Station no. 546. Medium size.
96252. No. 8517. Station no. 547. Medium small.
96253. No. 8518. Station no. 548. Medium size.
96254. No. 8519. Station no. 549. Medium size.
96255. No. 8520. Station no. 550. Medium size.
96256. No. 8521. Station no. 551. Medium small.
96257. No. 8522. Station no. 552. Medium size, straw-yellow with brown hilum; mottled with dark brown.
96258 and 96259. Medium size, strawyellow; mottled with brown and black. Black in concentric rings.
96258. No. 8523. Station no. 553.
96259. No. 8524. Station no. 554.
96260. No. 8525. Station no. 555. Medium size, straw-yellow, mottled with brown and black.
96261. No. 8526. Station no. 556. Medium size, straw-yellow, heavily mottled with black and brown.
96262. No. 8527. Station no. 557. Medium large, straw-yellow with large patches of black about the hilum; seed coat split to a considerable extent.
96263. No. 8528. Station no. 558. Medium large, black with olive-yellow saddle; somewhat flattened.
96264. No. 8529. Station no. 559. Medium large, black with slight oliveyellow saddle; much flattened.
96265. No. 8530 . Station no. 560. Medium size, black with olive saddle; slightly flattened.
96266 and 96267 . Medium large, black with olive-yellow markings; slightly flattened.
96266. No. 8531. Station no. 561.
96267. No. 8532. Station no. 562.
96268. No. 8533 . Station no. 563. Medium large, brown, slightly flattened.

## 95706 to 96383 -Continued

96269, No. 8534. No. 564. Medium large, black with straw-yellow saddle; much flattened.
96270 to 96272 . Large size, olive-yellow with black hilum: mottled with brown and black.
96270. No. 8535. Station no. 565.
96271. No. 8536. Station no. 566.
96272. No. 8537. Station no. 567.

96273 and 96274. Medium size, oliveyellow with black hilum.
96273. No. 8538. Station no. 568. Mottled with black.
96274. No. 8539. Station no. 569. Slightly mottled with black.
96275. No. 8540. Station no. 570. Medium large, olive with black hilum; slightly mottled with dark brown.
96276. No. 8541. Station no. 571 . Medium small, olive-yellow with black hilum; heavily mottled with black.
96277. No. 8542. Station no. 572. Medium size, olive-yellow with brown hilum ; mottled with brown.
96278. No. 8543. Station no. 573. Large size, olive-yellow with brown hilum; seed coat somewhat split.
96279 to 96281 . Olive yellow with brown hilum ; slightly mottled with brown.
96279. No. 8544. Station no. 574. Large size; hilum large.
96280. No. 8545. Station no. 575. Medium small.
96281. No. 8546. Station no. 576. Medium size.
96282. No. 8547. Station no. 577. Small size, olive-yellow with brown hilum ; much flattened.
96283 to 96294 . Olive-yellow with brown hilum ; slightly mottled with brown.
96283. No. 8548. Station no. 578. Medium small.
96284. No. 8549. Station no. 579. Medium size.
96285. No. 8550. Station no. 580. Medium size, seed coat more or less split.
96286. No. 8551. Station no. 581. Medium small.
96287. No. 8552. Station no. 582. Medium small.
96288. No. 8553. Station no. 583. Medium size.
96289. No. 8554. Station no. 584. Medium size.
96290. No. 8555. Station no. 585. Medium size, seed coat more or less split.
96291. No. 8556. Station no. 586. Medium size.
96292. No. 8557. Station no. 587. Medium small.
96293. No. 8558. Station no. 588. Medium size.
96294. No. 8559. Station no. 589. Medium small.
96295. No. 8560. Station no. 590. Medium large, straw- to olive-yellow

## 95706 to 96383 -Continued

with brown hilum ; slightly mottled with brown.
96296. No. 8561. Station no. 591. Medium size, straw-yellow with brown hilum ; slightly mottled with brown; seed coat more or less split.
96297. No. 8562. Station no. 592. Medium size, straw- to olive-yellow with brown hilum.
96298 to 96300 . Medium size, olive yellow with brown hilum ; mottled with brown.
96298. No. 8563. Station no. 593.
96299. No. 8564. Station no. 594.
96300. No. 8565. Station no. 595.
96301. No. 8566. Station no. 596. Large size, olive-yellow with pale hilum; mottled with brown; seed coat slightly split.
96302. No. 8567. Station no. 597. Medium large, olive-yellow with pale hilum ; mottled with brown.
96303. No. 8568. Station no. 598. Medium large, olive-yellow with pale hilum; mottled with brown and black.
96304. No. 8569. Station no. 599. Medium size, olive-yellow with pale hilum.
96305 and 96306. Medium size, strawto olive-yellow with pale hilum; mottled with brown; seed coat more or less split.
96305. No. 8570. Station no. 600. Heavily mottled.
96306. No. 8571. Station no. 601. Slightly mottled.
96307 and 96308. Olive-yellow with pale hilum; mottled with brown.
96307. No. 8572. Station no. 602. Medium size, seed coat more or less split.
96308. No. 8573. Station no. 603. Medium large, slightly mottled.
96309. No. 8574. Station no. 604. Medium size, straw- to olive-yellow with pale hilum.
96310. No. 8575. Station no. 605. Medium size, straw- to olive-yellow; mottled with brown; seed coat more or less split.
96311. No. 8576. Station no. 606. Medium size, olive-yellow with pale hilum ; heavily mottled with brown; seed coat more or less split.
96312 and 96313. Straw- to olive-yellow with pale hilum.
96312. No. 8577. Station no. 607. Medium large.
96313. No. 8578. Station no. 608. Medium size, mottled with brown.
96314. No. 8579. Station no. 609. Medium size, olive-yellow with pale hilum; mottled with dark brown.
96315. No. 8580. Station no. 610. Medium size, straw-yellow with pale hilum; mottled with brown.
96316. No. 8581. Station no. 611. Modium large, olive-yellow with pale hilum ; slightly mottled with brown.

## 95706 to 96383-Continued

96317 and 96318. Medium size, oliveyellow with pale hilum; mottled with dark brown.
96317. No. 8582. Station no. 612.
96318. No. 8583. Station no. 613.

96319 and 96320 . Olive-yellow with pale hilum ; mottled with brown.
96319. No. 8584. Station no. 614. Medium size.
96320. No. 8585. Station no. 615. Medium small.
96321. No. 8586. Station no. 616. Medium size, straw- to olive-yellow with pale hilum; mottled with brown.

96322 and 96323. Black with green germ.
96322. No 8587. Station no. 617. Medium small.
96323. No. 8588. Station no. 618. Medium size.
96324. No. 8589. Station no. 619. Medium size, green with pale hilum and green germ; mottled with brown; seed coat split.
96325 to 96328. Medium size, green with brown hilum and green germ; mottled with brown.
96325. No. 8590. Station no. 620. Seed coat split.
96326. No. 8591. Station no. 621.

96327 . No. 8592. Station no. 622. Slightly flattened.
96328. No. 8593. Station no. 623.
96329. No. 8594. Station no. 624. Medium small, straw-yellow with pale hilum; heavily mottled with brown.
96330. No. 8595. Station no. 625. Medium size, green with pale hilum and green germ; slightly mottled with brown.

96331 and 96332. Medium size, green with brown hilum ; slightly mottled with brown.
96331. No. 8596. Station no. 626.
96332. No. 8597. Station no. 627.

96333 and 96334, Medium size, green with pale hilum and green germ.
96333. No. 8598. Station no. 628. 96334, No. 8599. Station no. 629. Slightly mottled with brown, seed coat more or less split.
96335 to 96337 . Black with yellow germ. 96335, No. 8600. Station no. 630. Medium size.
96336. No. 8601. Station no. 631. Medium small, slightly flattened. 96337. No. 8602. Station no. 632. Medium size, slightly flattened.
96338. No. 8603. Station no. 633. Medium size, straw- to olive-yellow with pale hilum ; slightly mottled with brown.
96339 to 96350 . Black with yellow germ. 96339. No. 8604. Station no. 634. Medium size, slightly flattened.

## 95706 to 96383-Continued

96340. No. 8605. Station no. 635. Medium small.
96341. No. 8606. Station no. 636. Medium small.
96342. No. 8607. Station no. 637. Medium size, slightly flattened.
96343. No. 8608. Station no. 638. Very small, nearly round.
96344. No. 8609. Station no. 639. Small.
96345. No. 8610 . Station no. 640. Medium size, slightly flattened.
96346. No. 8611. Station no. 641. Medium size.
96347. No. 8612. Station no. 642. Small, slightly flattened.
96348. No. 8613. Station no. 643. Medium small.
96349. No. 8614. Station no. 644. Small.
96350. No. 8615. Station no. 645. Medium size, slightly flattened.
96351. No. 8616. Station no. 646. Medium size, green with brown hilum and green germ.
96352. No. 8617. Station no. 647. Medium small, black with yellow germ; slightly flattened.

96353 to 96356. Medium size, black with yellow germ.
96353. No. 8618. Station no. 648. Slightly flattened.
96354. No. 8619. Station no. 649. Much flattened.
96355 . No. 8620. Station no. 650. Slightly flattened.
96356. No. 8621. Station no. 651.
96357. No. 8622. Station no. 652. Medium size, reddish brown.
96358. No. 8623. Station no. 653. Medium size, brown.
96359. No. 8624. Station no. 654. Medium large, straw-yellow with pale hilum; heavily mottled with brown.
96360. No. 8625. Station no. 655. Medium large, olive-yellow with pale hilum; heavily mottled with brown.
96361. No. 8626. Station no. 656. Medium large, black with yellow germ.
96362 to 96364 . Medium size, olive-yellow with brown hilum; mottled with brown.
96362. No. 8627. Station no. 657.
96363. No. 8628. Station no. 658.
96364. No. 8629. Station no. 659.
96365. No. 8630. Station no. 660. Medium large, black with yellow germ.
96366. No. 8631. Station no. 661. Medium size, olive-yellow with brown hilum ; slightly mottled with brown.
96367. No. 8632. Station no. 662. Medium size, straw- to olive-yellow with brown hilum; slightly mottled with brown.
96368. No. 8633. Station no. 663. Medium small, straw-yellow with brown hilum.

## 95706 to 96383 -Continued

96369. No. 8634. Station no. 664. Medium size, olive-yellow with pale hilum.

96370 and 96371 . Medium size, strawto olive-yellow with pale hilum; slightly mottled with brown.
96370. No. 8635. Station no. 665.
96371. No. 8636. Station no. 666.
96372. No. 8637. Station no. 667. Medium large, brown and black.
96373. No. 8638. Station no. 668. Medium size, straw-yellow with black hilum ; heavily mottled with brown.
96374 and 96375 . Medium size, strawyellow with brown hilum.
96374. No. 8639. Station no. 669. 96375. No. 8640. Station no. 670. Nearly round.
96376. No. 8641. Station no. 671. Medium size, light straw-yellow with dark-brown hilum; seed coat badly split.
96377. No. 8642. Station no. 672. Medium size, straw-yellow with darkbrown hilum; heavily mottled with dark brown.
96378. No. 8643. Station no. 673. Medium small, straw-yellow with very dark-brown hilum; mottled with brown.

96379 to 96381 . Medium size, straw-yellow with brown hilum; heavily mottled with brown.
96379. No. 8644. Station no. 674.
96380. No. 8645. Station no. 675.
96381. No. 8646. Station no. 676.

96382 and 96383. Straw-yellow with brown hilum ; very heavily mottled with dark brown.
96382. No. 8647. Station no. 677.
96383. No. 8648. Station no. 678.

## 96384 to 96389.

From India. Seeds presented by W. O'Brien, Hyderabad, Deccan. Received January 28, 1932.
96384. Annona squamosa L. Annonaceae.

Sugar-apple.
Sitapal. A wild form of the sugarapple found on trap formation at Hyderabad, Deccan. The fruiting season is two months, from October to December, in India.
96385. Brassica oleracea botrytis L. Brassicaceae.

Cauliflower.
A form acclimatized at Darjeeling Hills which grows better than English seed from the plains.
96386. Carica candamarcensis Hook. f. Papayaceae.
Hill papaw. Collected on the Nilgiri Hills, southern India, between 6,000 and 7,000 feet altitude.

For previous introduction see 66651 .
96387. Carica papaya L. Papayaceae.

Papaya.
Mixed varieties.

## 96384 to 96389 -Continued

96388. Basella rubra L. Basellaceae.

Malabar nightshade. A succulent her baceous freely branched climber, native to Bengal, and cultivated throughout India. The juice of the leaves is used in native medicine for catarrhal affections, and the leaves and stems are used as a potherb as we use spinach.

For previous introduction see 74555.
96389. Solanum melongena L. Solanaсеае.

Eggplant.
A large round green eggplant whose fruits weighed up to 4 pounds.

96390 to 96420. Castanea crenata Sieb. and Zucc. Fagaceae. Japanese chestnut.
From Japan. Scions obtained by R. Kent Beattie, Bureau of Plant Industry. Received February and March 1928. Numbered in January 1932.

96390 to 96404, Varieties cultivated in the Experiment Station at Ayabe, Kyoto
F'u, January 26, 1928.
96390. Nos. 418 and 419. Sho-gwatsu. Nuts ripen early in October ; not considered a good variety.
96391. Nos. 422 and 423. Shimokatsugi (small). Nuts ripen after the middle of October; a very good quality.
96392. Nos. 428 and 429. Chokoji. Nuts ripen about the middle of October; a good quality.
96393. Nos. 432 and 433. Nishigaki. Nuts ripen the end of October; not a very good variety.
96394. Nos. 452 and 453. Yoro. Nuts ripen late in October; a medium good variety.
96395. Nos. 454 and 455. Futakura. Nuts ripen the middle of October; a medium good variety.
96396. Nos. 456 and 457. Kenaga. Nuts ripen before the middle of October; very good variety, one of the best.
96397. Nos. 458 and 459. Honjo. Nuts ripen the first of October ; one of the very best varieties.
96398. Nos. 460 and 461. Wazo. Nuts ripen after the middle of October; a very good variety.
96399. Nos. 466 and 467. Obata. Nuts ripen the first of October; a poor variety.
96400. Nos. 468 and 469. Heiwa. Nuts ripen the first of October; quite a good variety.
96401. Nos. 472 and 473. Gokuwase. Nuts ripen the middle of September; a good variety.
96402. Nos. 486 and 487. Sobadane. Nuts ripen toward the end of September; not a very good variety.
96403. Nos. 488 and 489. Kamadaniwase. Nuts ripen the middle of September; not a good variety.
96404. Nos. 490 and 491. Kamadantokute. Nuts ripen after the middle of October; quality undeterminable.

## 96390 to 96420 -Continued

96405. No. 613. Shibaguri. Collected February 5, 1928, by Kurihara at Shizuoka Ken, Tagato Gun, Kitakano Mura, Kashiwakubo. A wild tree about 20 feet high and about 20 inches in diameter.
96406 to 96414. Cultivated varieties obtained at the Okitsu Agricultural Experiment Station, February 6, 1932.
96406. No. 616. Togenashi. Nuts ripen the first half of October. Fruit spineless.
96407. No. 618. Yashima. Nuts ripen the middle of October.
96408. No. 622. Kasaharawase.
96409. No. 623. Tanabata. Nuts ripen the latter half of August.
96410. No. 629. Ogawanigo. Tree has not fruited at the experiment station.
96411. No. 633. Shidare (weeping). Originally from Nagano Ken.
96412. No. 634. Taishowase. Nuts ripen late in August or early in September.
96413. No. 639. Ashigarawase. Nuts ripen early in September.
96414. No. 643. Katayama. Nuts ripen the latter part of October.
96415. No. 667. Genko. Collected February 23, 1928, at Kasagi, Kyoto Fu, in the orchard of Mr. Kita, from an orchard where 8,000 chestnut trees were planted and in two years all but 100 died. This tree has no Endothia on it and may be resistant. Genko is a renaming of the variety $0-T a m b a$, which means almost any large chestnut from Tamba.
96416. No. 670. Kumageguri. Collected from a nearby nursery February 24, 1928 and sent in by Hainichi Kudo, of the Tomoni Experiment Station, Yamaguehi Ken.
96417. No. 671. Kasaharawase. From the Gifu Ken Agricultural Experiment Station, February 26, 1928.
96418 to 96420 . Cultivated varieties sent in February 1928 by Shigewa Hayashi, Yamaguchi Ken, Kuga Gun, Sakuwe Mura.
96418. No. 672. Higan.
96419. No. 673. Toyotama.
96420. No. 674. Kambei.
96421. Pistacia vera L. Anacardiaceae.

Pistache.
From Syria. Seeds presented by Movses N. Demirjian, Aleppo. Received January 29, 1932.
Native-grown nuts of first quality.
96422 to 96472.
From Morocco. Plants and cuttings presented by H. Brayard, director, Station Expérimentale, Marrakech. Received January 29, 1932.
96422 to 96438 . Amygdalus spp. Amygdalaceae.
96422 to 96430 . Amygdalus communis L. (Prunus amygdalus Stokes).

Almond.

## 96422 to 96472 -Continued

96422. Aboid. From Tunisia.
96423. Constantini. From Tunisia.
96424. Moshevonne.
96425. Tournefort. From France.
96426. Zaaf. From Tunisia.
96427. F. 1.
96428. F. 2.
96429. $L$ '.
96430. L. L.

96431 to 96438. Amygdalus persica I. (Prunus persica Stokes). Peach. Originally from Spain.
96431. Amarilla de calenda.
96432. Bienvenido.
96433. Oampiel amarillo.
96434. De Calente.
96435. De Sartaga.
96436. Reus.
96437. Roja de Segorbino.
96488. Selecta del Pringe del Junio.
96439. Ficus carica L. Moraceae.

Common fig.
Lerida fraga. Originally from Spain. 96440 to 96443 . MALUS SYLVESTRIS Mill. (Pyrus malus L.). Malaceae. Apple. 96440. De la Rosa. From Spain.
96441. Douce de Sfax. From Tunisia.
96442. Fornorino. From Tunisia.
96443. Meski. From Tunisia.
96444. Olea muropaiea L. Oleaceae.

Common olive.
Gordal. Cuttings of plants originally from Spain.
96445 to 96455. Prunus armeniaca L. Amygdalaceae.

Apricot.
Nos. 96445 to 96448 were originally from Spain.
96445. Bullida.
96446. Canino.
96447. Carnelos.
96448. De Anton.
96449. De Portugal. From Portugal.

Nos. 96450 to 96455 were originally from Spain.
96450. Galta Rocha.
96451. Giletan.
96452. Patisarca.
96453. Primerizo.
96454. Real fino.
96455. Rouge Hatif.

96456 to 96459 . Prunus spp. Amygdalaceae.

Plum.
96456. PRUNUS sp.

Akubotankio. From Japan.
96457. Prunus sp.

De San Juan. From Spain.

## 96422 to 96472 -Continued

96458. PRUNUS sp.

Reine Claude de Corse. From Corsica.
96459. Prunus sp.

A native wild plum.
96460. Punica granatum L. Punicaceae. Pomegranate. Raaf Raff.
96461. Pybus longipes Coss. and Dur. Malaceae.

Pear.
A native wild pear.
96462. Pyrus sp. Malaceae.

Pear. Carnera fina. From Spain.
96463 to 96472 . Vitis vinifera L. Vitaceae.

European grape.
96463. Abbo.
96464. Adari.
96465. Asseghin.
96466. Bou Saah.
96467. El Gouz.
96468. Feriana.
96469. Geir.
96470. Kemish ali blanc. From Algeria.
96471. Kind Djemal.
96472. Ain-el-Aija.

96473 and 96474 . Saccharum officinabum L. Poaceae. Sugarcane.
From Ile de la Reunion. Cuttings presented by Prof. A. Kopp, director, Station Agronomique, St. Denis. Received January 20, 1932.
96473. Naz.
96474. Uba Marot.
96475. Malpighia glabra L. Malpighiaceae.

Barbados-cherry.
From Texas. Plants presented by A. T. Potts, president, Baker-Potts Nursery Co., Harlingen. Received February 4, 1932.

A tropical American shrub up to 6 feet high with slender branches and ovate to elliptic entire leaves. The rose-red flowers, nearly an inch across, have fringed petals and are borne in umbels of 3 to 5 . The acid scarlet berries, the size of cherries, are used for jams and preserves.

For previous introduction see 95087 .

## 96476 and 96477.

From China. Seeds presented by G. Weidman Groff, Lingnan University, Canton. Received February 1, 1932.
96476. Citrus sp. Rutaceae.

No. 31. A wild fruit collected in the eastern Hangheng district, South Kwangtung.
96477. Severinia buxifolia (Poir.) Ten. (Atalantia buxifolia Oliver). Rutaceae.
No. 19. A subtropical thorny shrub resistant to alkali and salt. It has shiny green leaves, clusters of small white flowers, and dark-red berrylike fruits.

For previous introduction see 75969.
96478. Capparis flexuosa L. Capparidaceae.
From the West Indies. Seeds collected by David Fairchild and P. H. Dorsett, agricultural explorers, Bureau of Plant Industry, with the 1931-32 Allison $V$. Armour expedition. Received February 2, 1932.
No. 2607. Collected on Beata Island, Dominican Republic, January 18, 1932. A scandent shrub with long pods wh.ch open gradually and expose the bright red inside. The seeds are covered with a white coating of soft glistening material which remains moist. Found on dry limestone rocks.

For previous introduction see 90902.
96479. Phaseolus calcaratus Roxb. Fabaceae.

Rice bean.
From Cuba. Seeds presented by Ing. Antonio Portuondo, director, Estacion Experimental Agronomica, Santiago de las Vagas, Province de la Habana. Received February 2, 1932.
Frijol Mambi. An introduced bean which has become spontaneous in some Provinces of Cuba; it is used both as food for men and cattle and as a cover crop.

## 96480 and 96481.

From Arizona. Seeds presented by F. J. Crider, Boyce Thompson Southwestern Arboretum, Superior. Received February 3, 1932.
96480. Yucca mlata Engelm. Liliaceae.

A very striking arborescent yucca, the larger trees reaching a height of 16 to 23 feet, simple or with a few short branches at the top. The long pallid leaves are white-margined, rigidy divergent, and reach a maximum width of half an inch; they are soon finely and copiously filiferous. The white bell-shaped flowers with lanceolate petals are in a large panicle on a long exserted peduncle, often twice the length of the rest of the plant. The capsule is stout oblong and usually symmetrical, very smooth, and of a clear straw color at maturity; the seeds are exceptionally large and some are nearly half an inch long.

For previous introduction see 48150.
96481. Yucca macrocarpa Engelm. Liliaceae.
An arborescent plant 10 to 15 feet high sometimes branched above, native to Arizona. The smooth rigidly divergent blue-green leaves, 1 to 3 inches wide, are sparingly filiferous along the margins, and the white flowers are borne in dense tomentose panicles close to the leaves.
96482 to 96491. Phoenicaceae. Palm.
From the West Indies. Seeds collected by David Fairchild and P. H. Dorsett, agricultural explorers, Bureau of Plant Industry, with the 1931-32 Allison $V$. Armour expedition. Received February. 2, 1932.

## 96482 and 96483. Coccothrinax sp.

A very handsome slender fan palm with a trunk about 20 feet high and about 3 inches in diameter. The under side of the leaves is silvery and the fruit is dark purple. Found on sand dunes near the seacoast.
96482. No. 2597. Collected January 1, 1932 on Great Inagua Isle, Bahamas.

## 96482 to 96491 -Continued

96483. No. 2614. Collected January 17, 1932 on the island of Beata, Dominican Republic.
96484. Linoma alba (Bory) O. F. Cook.

No. 2637. Collected January 23, 1932, in the public square at Basseterre, St. Kitts. A form of this well-known arecalike palm with yellow or orange petioles and veins on the leaves of the young plants. It reaches a height of about 30 feet, and the pinnate leaves are 4 to 8 feet long. It is native to tropical Asia.

For previous introduction see 93407.
96485. Elaeis guineensis Jacq.

African oil palm.
No. 2575. Collected January 9, 1932, at Nassau, New Providence, Bahamas, in the garden of Mrs. Edward George. A tall and evidently a very old tree, but still bearing fruit.
96486. Livistona chinensis (Jaca.) R. Br.

Chinese fan palm.
No. 2555. Collected January 1, 1932, on New Providence. A palm, native to China, with a short thick trunk up to 6 feet high and 1 foot thick, having a crown of reniform palmately divided leaves 4 to 6 feet across on petioles about 5 feet long, which are armed below the middle with recurved brown spines more than an inch long.

For previous introduction see 93412.
96487. Pseudophoenix saonae O. F. Cook.

Nos. 2619 and 2620. Collected January 20, 1932, on Saona Island off the southeast coast of Dominican Republic. A tall palm over 25 feet high with graygreen leaves and great bunches of brilliant scarlet fruits. It suggests in habit a small Royal palm.

## 96488. Pseudophoenix sargenti Wendl.

No. 2585 . The so-called Hog cabbage palm, collected January 10, 1932, in Nassau, New Providence, in the garden of Mrs. Edward George. A palm which is wild on Harbour Island and on several of the Bahama Keys, where it grows well in the rocky limestone formation of the islands.

## 96489. Inodes causiarum O. F. Cook.

No. 2621. Collected January 20, 1932, on Saona Island near the beach. A palm 35 feet high with the trunk 18 inches in diameter; the fan-shaped leaves are 12 feet long and 6 feet across. This species of palm has proved hardy at Gainesville, Fla., and deserves a wide distribution because of its striking beauty when young as well as when old.
96490. Seaforthia elegans R. Br.

No. 2589. Collected January 10, 1932. in Nassau, New Providence, in the garden of Mrs. Edward George. A palm up to 30 feet in height. native to the southern coast of Australia and the neighboring islands. The dark-green pinnate fronds are 15 feet long, and the small fruits are oval and very fibrous.

For previous introduction see 93410. 96491. Thrinax sp.

No. 2636. Collected January 24, 1932 in the public square at Basseterre. St. Kitts. A handsome palm 15 feet high, with large drooping fan-shaped leaves and beautiful snow-white fruits borne on

## 96482 to 96491 -Continued

long inflorescences that project beyond the leaves, giving the palm a very showy appearance.

## 96492 to 96499.

From India. Seeds presented by W. O'Brien, Hyderabad, Deccan. Received February 6, 1932.
96492 and 96493. CAPSICUM ANNUUM L. Solanaceae.

Common redpepper.
Goa chillie. Peppers which are not pungent and which under suitable cultivation attain a length of 6 or 7 inches. Acclimated to India, but said to have originated in some Portuguese possession in South America or Central America.
96492. Chilli Larji Mukhi, facing the sun.

## 96493. Hot Indian.

96494. Carica papaya L. Papayaceae.

Papaya.
96495 to 96497 . Citrullus vulgaris Schrad. Cucurbitaceae. Watermelon.
96495. Arracai Travelle.
96496. Loaland.
96497. Rays Kushi Rives.

96498 and 96499. CUCUMIS melo $\mathrm{L}_{\text {. }} \mathrm{Cu}$ curbitaceae.

Melon.
96498. Rays Lucknow.
96499. Surdah Kabul.

## 96500 to 96518.

From the West Indies. Material collected by David Fairchild and P. H. Dorsett, agricultural explorers, Bureau of Plant Industry, with the 1931-32 Allison V. Armour expedition. Received February 2, 1932.
96500. Ananas sativus Schult. f. Bromeliaceae.

Pineapple.
No. 2638. Variety Ripley. Plants presented by Mr. Kelsick. superintendent, Agricultural Experiment Station at Basseterre, St. Kitts. January 23, 1932. A large-fruited, golden-yellow pineapple of delicious flavor and texture, but not resistant to the pineapple wilt. A fine variety for domestic consumption, but not for shipping.
96501. Asparagus sp. Convallariaceae.

No. 2574. Collected January 9, 1932, at Nassau, New Providence, in the garden of Mrs. Edward George. A climbing species with delicate dink or lavender and white blooms.
96502. Bucida buceras L. Combretaсеае.
No. 2601. Collected $n$ Inagua, Ba hamas, January 15. 1932. A so-called oak with leaves 3 inches long and 2 inches wide. A tree up to 75 feet high with a diameter of 3 to 4 feet and having spatulate leaves clustered at the ends of the branches. The spikes of inconspicuous flowers are followed by small slightly fleshy drupes about a quarter of an inch long. It is native to the West Indies and tropical America.
96503. Capsicum frutescens L. Solanaceae.

Bush redpepper.
No. 2584. Collected January 10, 1932, at Nassau, New Providence. A salmon-

## 96500 to 86518-Continued

pink pepper that looks like a cross between the yellow Haitian variety and a deep red variety. For trial in comparison with the Haitian variety.
96504. Carica papaya L. Papayaceae.

Papaya.
No. 2582. Collected at Nassau, New Providence, January 12, 1932. A round small-fruited variety of excellent flavor, very sweet, and without the pnpleasant smell which is characteristic of many papayas.
96505. Curcuma longa L. Zinziberaceae. Turmeric.
No. 2641. Tubers from the market at Basseterre, St. Kitts, January 23, 1932.
96506. Dioscorea trifida L. f. Dioscoreaceae.

Yampi.
No. 2631. Tubers collected in the Basseterre market, St. Kitts, January 23, 1932. A veryं smail tuber-producing species with thin skins and, when baked, of a mealy consistency.
98507. Helicterms Jamaicensis Jacq. Sterculiaceae.
No: 2600. Collected on Salt Pond Hill, Great Inagua, Bahamas, January 15, 1932. A shrub or small tree up to 25 feet high, native to the West Indies. The cordate leaves, 2 to 6 inches long, are covered with stellate hairs. The white flowers, 2 to 3 inches across, are borne in few-flowered clusters and are followed by spirally twisted pods 1 to 2 inches long.
96508. Exogonivm briospgrmum (Dest.) Choisy. Convolvulaceae.

Morning-glory.
No. 2611. Collected January 18, 1932, on rocky cliffs at Beata Island, Dominican Republic. Tubers of a beautiful freeflowering twining morning-glory with very attractive purple-pink or magentapink flowers in great masses.
96509. Jacaranda cambulea (L.) Griseb. Bignoniaceae.
No. 2561. Collected at Nassau, New Providence. A tree, native to the West Indies with bipinnate leaves made up of 4 to 8 branches each bearing 8 to 16 pairs of obliquely oblong leaflets 1 inch long. The glabrous blue flowers, 1 to 2 inches long, are borne in lax panicles.
96510. Lycopersicon msculentum Mill. Solanaceae.

Tomato.
No. 2591. The Gem. Collected at Gun Point, Eleuthera Island, Bahamas, January 11, 1932. A small, deep-red tomato $11 / 2$ inches in diameter and of good flavor. It is much esteemed, as it ripens early and lasts until late in the season.
96511. Marcgravia umbellata L. Marcgraviaceae.
No. 2639. Collected on Mount Misery, St. Kitts, at 1,700 feet altitude, January 24 1932. A climbing epiphytic shrub with creeping and rooting sterile branches bearing nearly sessile cordate leaves. The flowering branches bear oblong to linear leaves and umbels of greenish flowers said to be fertilized by birds.
96512. Consolea moniliformis (L.) Brit-
ton (Opuntia moniliformis Haw.). Cactaceae.

## 96500 to 86518 -Continued

No. 2604. Seeds and plants collected on dry rocky formation on Beata Island, January 17, 1932. A striking and really beautiful tree with the trunk covered with spines sometimes 8 inches long. The red flowers are small and not very showy, but the surfaces of the fruits are aerolated, giving them an attractive appearance.

## 96513. Ormosia sp. Fabaceae.

No. 2632. Collected January 24, 1932, at 1,400 feet altitude on Mount Misery, St. Kitts. A tall handsome forest tree with very showy red and black seeds.

## 96514. PLUMERIA BARAHONENSIS Urban. Apocynaceae. <br> Frangipani.

No. 2608. Collected January 18. 1932, on Beata Island. A very variable species of frangipani found growing on the cilfs in calcareous rock formation; some of the trees were 30 feet high and a foot in diameter. The white flowers an inch across, are in clusters and very fragrant.
96515. PlUMERIA sp. Apocynaceae.

No. 2602. From Great Inagua, Bahamas, January 15, 1932 . A dwarf species, up to 15 feet high, with small fragrant flowers and small seed pods. May prove of value as a dooryard tree.
96516. Prosopis chilensis (Molina) Stuntz ( $P$. julifiora DC.). Mimosaceae. Algaroba.
No. 2598. Collected January 15, 1932, near Mathewstown, Great Inagua, Bahamas. Seeds from a handsome old tree growing on the shore.

For previous introduction see 80771.
96517. Stylosanthes hamata (L.) Taub. Fabaceae.
No. 2599. Collected January 15, 1932, on Salt Pond Hill, Great Inagua. A woody perennial, 1 to 2 feet high, native to the West Indies and tropical America. The trifoliolate leaves have prominently veined linear-elliptic leaflets about 1 inch long, and the small yellow flowers are borne in short dense spikes. It is of possible value as a cover crop.
96518. Vitex agnus-castus L. Verbenaceae.

Lilac chaste-tree.
No. 2573. Collected January 9, 1932, at Nassau, New Providence, in the garden of Mrs. Edward George. A large tree with very aromatic foliage and delicate lavender flowers.

## 96519 to 96527.

From Japan. Seeds purchased from the Chugai Shokubutsu Yen, Yamamoto, Kawabegun, near Kobe. Received February $3,1932$.
96519. Acer bufinerve Sieb. and Zucc.

Maple.
A small deciduous Japanese maple with small bluish-white young shoots and dark green irregularly serrate 3-lobed or obscurely 5 -lobed leaves. The flowers are in erect racemes about 3 inches long, and the keys are up to three fourths of an inch long. Occasionally the young foliage, the leafstalks, and the midribs are red.

For previous introduction see 91522.
96520. Acer tegmpintosum Maxim. Aceraceae.

Yaple.

## 96519 to 96527-Continued

A tree with 3 - to 5 -lobed cordate serrulate leaves 2 to 6 inches long, native to Manchuria and Chosen. The small flowers are in slender pendulous racemes 3 to 4 inches long and are followed by winged fruits which spread almost horizontally.

For previous introduction see 90654 .
96521. DAPHNIPHYLLUM GLAUCESCENS Blume. Euphorbiaceae.
An East Indian tree with entire ob-long-lanceolate leaves, inconspicuous flowers, and fleshy drupes.
96522. DAPHNIPHYLLUM MACROPODUM Miquel. Euphorbiaceae.
An evergreen shrub with elliptic-oblong, dark-green leathery leaves 5 to 8 inches long, inconspicuous flowers, and small ellipsoidal fruits in axillary racemes 3 inches long. Native to eastern Asia.
96523. Iris minuta Franch. and Sav. Iridaceae.
A curious little yellow-flowered beardless iris, apparently only known as a cultivated plant in Japan, but said to grow wild in Chosen (Korea). The flowers, which appear in April or May, have short, pale-yellow standards, and the rounded falls are marked with brown. The leaves are short at flowering time, but eventually reach a beight of about 12 inches.
96524. LEUCOTHOÄ KHISKEI Miquel. Ericaceae.
A slender spreading evergreen Japanese shrub with ovate-oblong remotely crenate-serrate leaves 1 to 3 inches long and axillary and terminal racemes of large white cylindrical fiowers closely resembling the American $L$. racemosa.

96525 to 96527 . RHODODENDRON spp. Eriсасеае.
96525. RHODODENDRON RETICULATUM D. Don. (R. dilatatum Miquel).
A much-branched deciduous Japanese shrub up to 25 feet high belonging to the section Sciadorhodion. The branchlets are yellow brown; the reticulate broadly ovate leaves, 2 to 3 inches long, are in clusters of 2 to 3 , and the slightly 2 -lipped, rotate-campanulate flowers are rose purple to magenta. There are two forms-the ordinary form with 10 stamens, often called $R$. rhombicum, and a form with 5 stamens called $\boldsymbol{R}$. dilatatum.

For previous introduction see 95542.
96526. RHODODENDRON sp.
96527. RHODODENDRON sD.

## 96528 and 96529.

From England. Plants purchased from V. N. Gauntlett \& Co., Ltd., Japanese Nurseries, Chiddingfold, Surrey. Received February 8, 1932 .
96528. LONICERA CHAETOCARPA Rehder. Caprifoliaceae.

Honeysuckle.
An upright shrub about 6 feet high, native to western China, with oblong leaves, nodding yellowish flowers, and red fruits.

For previous introduction see 76582.

## 96528 and 96529—Continued

96529. Lonicera pyrenaica L. Caprifoliaceae.

Pyrenees honeysucmie.
A small upright shrub 3 to 4 feet high native to southern Europe. The leaves are ovate to oblong, blue-green above and whitish below, and the nodding flowers, on slender stalks, are pinkish white and nearly an inch long. The subglobose berries are red.

96530 to 97251. Soja max (L.) Piper (Glycine hispida Maxim.). Fabaceae.

Soybean.
From Chosen. Seeds arranged for by the Dorsett and Morse expedition and sent through the American consulate at Tokyo, Japan. Received February 6, 1932.

A collection of soybeans presented by the Seisen Shijo (western branch) of the Agricultural Experiment Station of the Chosen Government, Shariin, October 24, 1931.

Notes by W. J. Morse.
96530 and 96531 . Medium size, straw-yellow with brown hilum.
96530. Nc. 8649. Station no. 679.
96531. No. 8650. Station no. 680. Little purple spot.
96532. No. 8651. Station no. 681. Medium large, straw-yellow with darkbrown hilum; slightly mottled with brown.
96533. No. 8652. Station no. 682. Medium small, straw- to olive-yellow with brown hilum; mottled with dark brown.
96534. No. 8653. Station no. 683. Medium small, straw-yellow with brown hilum; heavily mottled with dark brown.
96535. No. 8654. Station no. 684. Medium size, straw-yellow with lightbrown hilum.
96536 and 96537. Medium size, straw-yellow with brown hilum.
96536. No. 8655. Station no. 685. Mottled with brown.
96537. No. 8656. Station no. 686. Slightly flattened.
96538. No. 8657. Station no. 687. Medium size, straw-yellow with a lightbrown hilum.
96539. No. 8658. Station no. 688. Me-dium-size, straw-yellow with pale hilum ; heavily mottled with brown.
96540. No. 8659. Station no. 689. Medium size, straw-yellow with pale hilum; heavily mottled with brown; more or less purple spot.
96541. No. 8660. Station no. 690. Medium size, straw-yellow with brown hilum ; heavily mottled with brown.
96542. No. 8661. Station no. 691. Medium small, straw-yellow with brown hilum.
96543 and 96544. Medium size, straw-yellow with brown hilum; slightly mottled with brown.
96543. No. 8662. Station no. 692.
96544. No. 8663. Station no. 693.

## 96530 to 97251 -Continued

96545 and 96546. Medium size, straw-yellow with pale hilum; mottled with brown.
96545. No. 8664. Station no. 694.
96546. No. 8665. Station no. 695. Slightly mottled.
86547. No. 8666. Station no. 696. Medium large, straw-yellow nearly round with a pale hilum; seed coat slightly split; some purple spot.
96548. No. 8667. Station no. 697. Medium size, straw-yellow with brown hilum; heavily mottled with brown.
96549 to 96552 . Medium size, straw-yellow with pale hilum.
96549. No. 8668. Station no. 698. Mottled with brown.
96550. No. 8669. Station no. 699. Mottled with brown.
96551. No. 8670. Station no. 700.
96552. No. 8671. Station no. 701. Slightly mottled with brown.
96553. No. 8672. Station no. 702. Medium size, straw-yellow with black hilum; heavily mottled with black.
96554. No. 8673. Station no. 703. Medium size, black with yellow germ.
96555 to 96560 . Medium size, brown with green germ.
96555. No. 8674. Station no. 704.
96556. No. 8675. Station no. 705.
96557. No. 8676. Station no. 706.
96558. No. 8677. Station no. 707.
96559. No. 8678. Station no. 708.
96560. No. 8679. Station no. 709.

96561 to 96564 . Medium size, green with slate-black hilum and green germ.
96561. No. 8680. Station no. 710.
96562. No. 8681. Station no. 711.
96563. No. 8682. Station no. 712.
96564. No. 8683. Station no. 713.

96565 to 96573 . Green with slate-black hilum and green germ.
96565. No. 8684. Station no. 714. Medium size, mottled with black, seed coat slightly split.
96586. No. 8685. Station no. 715. Medium size.
96567. No. 8686. Station no. 716. Medium large, seed coat wrinkled and split.
96568. No. 8687. Station no. 717. Medium large, seed coat somewhat split, slight purple spot.
96569. No. 8688. Station no. 718. Medium size.
96570. No. 8689. Station no. 719. Medium size, seed coat somewhat wrinkled and split.
96571. No. 8690. Station no. 720. Large size, seed coat somewhat wrinkled.
96572. No. 8691. Station no. 721. Medium size, seed coat slightly wrinkled and split.

96530 to 97251 -Continued
96573. No. 8692. Station no. 722. Medium size, seed coat slightly wrinkled.
96574. No. 8693. Station no. 723. Medium large, green with brown hilum and green germ ; seed coat more or less split.
96575 to 96577 . Medium size, green with slate-black hilum and green germ.
96575. No. 8694. Station no. 724. Seed coat somewhat wrinkled.
96576. No. 8695. Station no. 725. Sped coat somewhat wrinkled and split.
96577. No. 8696. Station no. 726.

96578 to 96580 . Medium size, green with dark-brown hilum and green germ.
96578. No. 8697. Station no. 727.
96579. No. 8698. Station no. 728.
96580. No. 8699. Station no. 729. Slightly mottled with brown.
96581. No. 8700. Station no. 730. Medium size, straw-yellow to green with brown hilum; some purple spot.
96582. No. 8701. Station no. 731. Medium size, green with brown hilum and green germ.
96583. No. 8702. Station no. 732. Medium large, green with dark-brown hilum and green germ; heavily mottled with brown.
96584. No. 8703. Station no. 733. Medium size, green with dark-brown hilum and green germ.
96585. No. 8704. Station no. 734. Medium size, green with brown hilum and green germ.
96586. No. 8705 . Station no. 735. Medium small, green with brown hilum; slightly mottled with brown.
96587. No. 8706. Station no. 736. Medium small, green with brown hilum and green germ; slightly mottled with brown.
96588. No. 8707. Station no. 737. Me dium size, green with brown hilum; slightly mottled with dark brown.
96589. No. 8708. Station no. 738. Medium size, green with dark-brown hilum ; heavily mottled with brown.
96590. No. 8709. Station no. 739. Medium small, green with brown hilum and yellow germ.
96591 to 96594 . Green with brown hilum and green germ.
96591. No. 8710. Station no. 740. Medium small, mottled with dark brown.
96592. No. 8711. Station no. 741. Medium size, slightly mottled with dark brown.
96593. No. 8712. Station no. 742. Medium size, seed coat slightly split.
96594. No. 8713. Station no. 743. Medium large.
96595. No. 8714. Station no. 744. Medium size, olive, heavily mottled with black.
96596 to 96598 . Medium size, green with brown hilum and green germ.

## 96530 to 97251 -Continued

96596. No. 8715. Station no. 745.
96597. No. 8716. Station no. 146. Mottled with brown.
96598. No. 8717. Station no. 747. Slightly mottled with brown.
96599. No. 8718. Station no. 748. Medium size, green with large dark-brown hilum and green germ; slightly mottled with brown; seed coat more or less wrinkled and split.
96600 and 96601 . Medium size, green with brown hilum and green germ; slightly mottled with brown.
96600. No. 8719. Station no. 749.
96601. No 8720. Station no. 750.
96602. No. 8721. Station no. 751. Medium small, green with brown hilum and green germ.
96603 and 96604 . Green with brown hilum and green germ; slightly mottled with brown.
96603. No. 8722. Station no. 752. Very small.
96604. No. 8723. Station no. 753. Medium size.
96605. No. 8724 Station no. 754. Medium small, green with brown hilum and green germ ; mottled with brown.
96606. No. 8725. Station no. 755. Medium size, green with pale hilum and green germ ; mottled with brown.
96607. No. 8726. Station no. ${ }^{1756}$. Medium size, green with brown hilum and green germ; seed coat more or less wrinkled.
96608. No. 8727. Station no. 757. Medium size, green with brown hilum; seed coat slightly wrinkled.
96609 to 96611 . Medium size, green with brown hilum and green germ.
96609. No. 8728. Station no. 758.
96610. No. 8729. Station no. 759. Slightly mottled with brown.
96611. No. 8730. Station no. 760. Slightly affected with purple spot.
96612. No. 8731. Station no. 761. Medium size, straw- to olive-yellow with yellow to green germ.
96613 to 96615. Medium size, green with brown hilum and green germ; seed coat more or less wrinkled.
96613. No. 8732. Station no. 762.
96614. No. 8733. Station no. 763. Seed coat split.
96615. No. 8734. Station no. 764.
96616. No. 8735. Station no. 765. Medium size, straw-yellow to green with brown hilum and green germ.
96617 to 96620 . Medium size, green with brown hilum and green germ.
96617. No. 8736. Station no. 766.
96618. No. 8737. Station no. 767.
96619. No. 8738. Station no. 768. Mottled with brown, seed coat slightly wrinkled and split.
96620. No. 8739. Station - no. 769. Slightly mottled with brown.

## 96530 to 97251 -Continued

96621 and 96622. Medium small, green with brown hilum and green germ.
96621. No. 8740. Station no. 770.
96622. No. 8741. Station no. 771. Mottled slightly with brown.
96623 to 96626. Medium size, green with brown hilum and green germ ; slightly mottled with brown.
96623. No. 8742. Station no. 772.
96624. No. $8743 . \quad$ Station no. 773.
96625. No. 8744. Station no. 774.
96626. No. 8745. Station no. 775. Seed coat slightly wrinkled and split.
96627. No. 8746. Station no. 776. Medium size, straw-yellow to green with brown hilum and green germ; seed coat slightly wrinkled and split.
96628. No. 8747. Station no. 777. Medium size, green with brown hilum and green germ; slightly mottled with brown; seed coat split.
96629 and 96630. Medium size, green with brown hilum and green germ; seed coat wrinkled.
96629. No. 8748. Station no. 778.
96630. No. 8749. Station no. 779. Seed coat split.
96631. No. 8750. Station no. 780. Medium size, olive-yellow to green with green germ; slightly mottled with brown.
96632. No. 8751. Station no. 781. Medium size, straw-yellow to green with brown hilum and olive-yellow to green germ; mottled with brown.
96633. No. 8752. Station no. 782. Medium large, green with paile hilum and green germ; slightly mottled with brown; seed coat slightly split.
96634 and 96635 . Medium size, green with light brown hilum and green germ.
96634. No. 8753. Station no. 783.
96635. No. 8754. Station no. 784.
96636. No. 8755. Station no. 785. Medium large, green with brown hilum and green germ; slightly mottled with brown; seed coat split.
96637. No. 8756. Station no. 786. Medium size, straw-yellow to green with brown hilum and green germ; mottled with brown.
96638. No. 8757. Station no. 787. Medium size, olive-yellow to green with dark-brown hilum and green germ; heavily mottled with dark brown.
96639. No. 8758. Station no. 788. Medium size, green with brown hilum and green germ; heavily mottled with dark brown.
96640 to 96643 . Medium size, green with pale hilum and green germ.
96640. No. 8759. Station no. 789.
96641. No. 8760. Station no. 790. Mottled with brown.
96642. No. 8761. Station no. 791. Mottled with brown.
96643. No. 8762. Station no. 792. Mottled with brown.

## 96530 to 97251 -Continued

96644. No. 8763 . Station no. 793. Medium small, olive-yellow to green with pale hilum and green germ; mottled with brown.
96645. No. 8764. Station no. 794. Medium large, green with pale hilum and green germ; mottled with brown.
96646. No. 8765 . Station no. 795. Medium size, green with pale hilum and green germ; slightly mottled with brown.
96647. No. 8766. Station no. 796. Medium size, olive-yellow to green with pale hilum and green germ; heavily mottled with brown.
96648. No. 8767. Státion no. 797. Medium size, green with pale hilum and green germ; heavily mottled with brown.
96649. No. 8768 . Station no. 798. Medium size, olive-yellow to green with pale hilum and yellowish-green to green germ; heavily mottled with brown.
Ө6650. No. 8769. Station no. 799. Medium small, black with yellow germ; slightly flattened.
98651 and 96652 . Medium size, black with yellow germ.
96650. No. 8770. Station no. 800.
96651. No. 8771. Station no. 801.
96652. No. 8772. Station no. 802. Large size, black with yellow germ; slightly flattened.
96654 and 96655 . Medium size, black with yellow germ.
96653. No. 8773. Station no. 803.
96654. No. 8774. Station no. 804.

96656 to 96662 . Medium large, black with yellow germ.
96656. No. 8775. Station no. 805.
96857. No. 8776. Station no. 806.
96658. No. 8777. Station no. 807.
96859. No. 8778. Station no. 808.
96860. No. 8779. Station no. 809.
96861. No. 8780. Station no. 810.
96862. No. 8781. Station no. 811.

96668 to 96686 . Black with yellow germ.
96663. No. 8782. Station no. 812. Large size.
96664. No. 8783. Station no. 813. Large size.
96685. No. 8784. Station no. 814. Medium size.
96866. No. 8785. Station no. 815. Medium large.
96667. No. 8786. Station no. 816. Medium small.
96668. No. 8787. Station no. 817. Large size.
98669. No. 8788. Station no. 818. Medium size, seed coat slightly split.
96670. No. $8789 . \quad$ Station no. 819. Large size.
96671. No. 8790. Station no. 820. Large size.

## 96530 to 97251 -Continued

96672. No. 8791. Station no. 821. Medium size.
96673. No. 8792. Station no. 822. Medium large.
96674. No. 8793. Station no. 823. Medium size.
96675. No. 8794. Station no. 824. Medium size.
96676. No. 8795. Station no. 825. Medium large.
96677. No. 8796. Station no. 826. Medium large.
96678. No. 8797. Station no. 827. Medium to medium large.
96679. No. 8798. Station no. 828. Medium large.
96680. No. 8799. Station no. 829. Medium large.
96681. No. 8800. Station no. 830. Medium large.
96682. No. 8801. Station no. 831. Medium size.
96683. No. 8802. Station no. 832. Medium large, seed coat split.
96684. No. 8803. Station no. 833. Medium large.
96685. No. 8804. Station no. 834. Medium large.
96686. No. 8805. Station no. 835. Medium large.
96687. No. 8806. Station no. 836. Medium size, brown with yellow germ.
96688 to 96715 . Black with yellow germ.
96688. No. 8807. Station no. 837. Medium size.
96689. No. 8808. Station no. 838. Large size.
96690. No. 8809. Station no. 839. Medium large.
96691. No. 8810. Station no. 840. Medium large.
96692. No. 8811. Station no. 841. Medium large.
96693. No. 8812. Station no. 842. Large size, seed coat slightly split.
96694. No. 8813. Station no. 843. Madium large.
96695. No. 8814. Station no. 844. Medium large.
96696. No. 8815. Station no. 845. Medium size.
96697. No. 8816. Station no. 846. Medium large.
96698. No. 8817. Station no. 847. Large size.
96699, No. 8818. Station no. 848. Large size, seed coat split.
96699. No. 8819. Station no. 849. Medium large.
96700. No. 8820. Station no. 850. Large size.
96701. No. 8821. Station no. 851. Large size.
96702. No. 8822. Station no. 852. Medium large.
96703. No. 8823. Station no. 853. Medium large.

## 96530 to 97251 -Continued

96705. No. 8824. Station no. 854. Medium size.
96706. No. 8825. Station no. 855. Medium large.
96707. No. 8826. Station no. 856. Medium small.
96708. No. 8827. Station no. 857. Medium small.
96709. No. 8828. Station no. 858. Medium small.
96710. No. 8829. Station no. 859. Medium small.
96711. No. 8830. Station no. 860. Medium size.
96712. No. 8831. Station no. 861. Medium small.
96713. No. 8832. Station no. 862. Medium small.
96714. No. 8833. Station no. 863. Medium small.
96715. No. 8834. Station no. 864. Medium size.

96716 to 96722 . Medium small, black with yellow germ.
96716. No. 8835. Station no. 865.
96717. No. 8836. Station no. 866.
96718. No. 8837. Station no. 867.
96719. No. 8838. Station no. 868.
96720. No. 8839. Station no. 869.
96721. No. 8840. Station no. 870.
96722. No. 8841. Station no. 871.
96723. No. 8842 . Station no. 872 . Medium small, black with yellow germ.
96724. No. 8843. Station no. 873. Medium large, black with green germ.
96725 to 96727 . Medium size, black with yellow germ.
96725. No. 8844. Station no. 874.
96726. No. 8845. Station no. 875.
96727. No. 8846. Station no. 876.
96728. No. 8847. Station no. 877. Large size, black with yellow germ, seed coat split.
96729 to 96738 . Black with yellow germ.
96729. No. 8848. Station no. 878. Medium small.
96730. No. 8849. Station no. 879. Medium large.
96731. No. 8850. Station no. 880. Medium size.
96732. No. 8851. Station no. 881. Medium small.
96733. No. 8852. Station no. 882. Medium size.
96734. No 8853. Station no. 883. Medium size.
96735. No. 8854. Station no. 884. Medium size, seed coat split.
96736. No. 8855. Station no. 885. Very small.
96787. No. 8856. Station no. 886. Medium small.
96738. No. 8857. Station no. 887. Medium small.

## 96530 to 97251 -Continued

96739 to 96743 . Black with yellow germ, seed coat split.
96739. No. 8858. Station no. 888. Large size.
96740. No. 8859. Station no. 889. Medium large.
96741. No. 8860. Station no. 890. Large size.
96742. No. 8861. Station no. 891. Large size.
96743. No. 8862. Station no. 892. Large size.
96744 and 96745. Medium large, black with yellow germ; seed coat slightly split.
96744. No. 8863. Station no. 893.
96745. No. 8864. Station no. 894.
96746. No. 8865. Station no. 895. Medium large, black with yellow germ; seed coat split into fine network on sides.
96747 to 96749 . Medium large, black with yellow germ ; seed coat slightly split.
96747. No. 8866. Station no. 896.
96748. No. 8867. Station no. 897.
96749. No. 8868. Station no. 898.
96750. No. 8869. Station no. 899. Large size, black with yellow germ; seed coat slightly split.
96751. No. 8870 . Station no. 900. Medium large, black with yellow germ; seed coat slightly split.
96752. No. 8871. Station no. 901. Medium large, black with yellow germ; seed coat slightly split into network on sides.
96753. No. 8872. Station no. 902. Medium large, black with yellow germ; seed coat slightly split.
96754 and 96755 . Medium large, black with yellow germ; seed coat split into network on sides.
96754. No. 8873. Station no. 903.
96755. No. 8874. Station no. 904.
96756. No. 8875. Station no 905. Large size, black with yellow germ ; seed coat slightly split.
96757 to 96762 . Medium large, black with yellow germ ; seed coat split into coarse network.
96757. No. 8876. Station no. 906.
96758. No. 8877. Station no. 907.
96759. No. 8878. Station no. 908.
96760. No. 8879. Station no. 909.
96761. No. 8880. Station no. 910.

96762 . No. 8881. Station no. 911.
96763. No. 8882. Station no. 912. Medium large, black with yellow germ; seed coat split into fine network.
96764. No. 8863. Station no. 913. Medium large, black with yellow germ; seed coat split into coarse network.
96765. No. 8864. Station no. 914. Medium large, black with yellow germ; seed coat split into fine network.
96766. No. 8865. Station no. 915. Medium large, black with yellow germ.

## 96530 to 97251 -Continued

96767 to 96770 . Medium large, black with yellow germ ; seed coat split in to coarse network.
96767. No. 8886. Station no. 916.
96768. No. 8887. Station no. 917.
96769. No. 8888. Station no. 918.
96770. No. 8889. Station no. 919.

96771 to 96775 . Medium large, black with yellow germ.
96771. No. 8890. Station no. 920. Seed coat split into fine network.
96772. No. 8891. Station no. 821. Seed coat split into coarse network.
86778. No. 8892. Station no. 922.
96774. No. 8893. Station no. 923. Seed coat split into coarse network.
96775. No. 8894. Station no. 924. Seed coat split into coarse network.
96776. No. 8895. Station no. 925. Large size, black with yellow germ ; seed coat split into coarse network.
9677\%. No. 8896. Station no. 926. Medium large, black with yellow germ; seed coat split into fine network.
96778 to 96780 . Medium large, black with yellow germ; seed coat split into course network.
96778. No. 8897. Station no. 927.
86779. No. 8898. Station no. 928.
96780. No. 8899. Station no. 929.

96781 and 96782 . Medium large, black with yellow germ.
96781. No. 8900. Station no. 930. Seed coat split into fine network.
96782. No. 8901. Station no. 931. Seed coat split into coarse network.
96783 and 96784. Medium size, straw-yellow with pale hilum; mottled with brown.
96783. No. 8902. Station no. 832. Heavily mottled.
96784. No. 8903. Station no. 933. Slightly mottled.
96785. No. 8904. Station no. 934. Medium size, straw-yellow with darkbrow hilum; mottled with dark brown.
96786 and 96787 . Medium size, strawyellow with pale hilum.
96786. No. 8905. Station no. 936.
96787. No. 8906. Station no. 936. Mottled with brown.
96788. No. 8907. Station no. 937. Medium size, straw-yellow with lightbrown hilum; mottled with brown.
96789. No. 8908. Station no. 938. Medinm size, straw- to olive-yellow with brown hilum; heavily mottled with brown.
96790. No. 8909. Station ${ }^{2}$ no. 939. Medium large, olive-yellow ; mottled with brown.
96791. No. 8910. Station no. 940. Mesum lapge, traw-yellow with brown hilum ; heavily mottled with brown.
96788. No. 8011: Station no. 941. Medium large, straw wellow with pale

## 96530 to 97251 -Continued

hilum ; mottled with brown; seed cont wrinkled and split.
96793. No. 8912. Station no. 942. Medium size, straw-yellow with brown hilum ; mottled with brown.
96794 to 96796. Medium small, straw-ye? low with brown hilum.
96794. No. 8913. Station no. 943.
96795. No. 8914. Station no. 944.
96796. No. 8915. Station no. 945. Heavily mottled with brown.
96797 to 96800 . Medium size,' straw-yellow with pale hilum; mottled with brown.
9679\%. No. 8916. Station no. 946. Slightly mottled.
96798. No. 8917. Station no. 947.
96799. No. 8918. Station no. 948. Slightly mottled.
96800. No. 8919. Station no. 949. Slightly mottled.
96801. No. 8920. Station no. 950. Medium size, straw-yellow with brown hilum; slightly mottled with brown.
96802. No. 8921. Station no. 951. Medium small, black and brown with black formed in concentric rings.
96803 to 968 ub. Medium size, straw-gellow with pale hilum.
96803. No. 8922. Station no. 852.

96804, No. 8923 . Station no. 953. Slightly mottled with brown; some purple spot.
96805. No. 8924. Station no. 984. Slightly mottled with brown.
96806. No. 8925. Station no. 955. Medium size, straw-yellow with brown hilum; mottled with brown.
96807. No. 8926. Station no. 956. Medium size, straw- to olive-yellow with pale hilum; seed coat slightly split.
96808. No. 8927. Station no. 957. Medium small, straw-yellow with pale hilum ; slightly mottled with brown.
96809. No. 8928. Station no. 958. Medium size, straw-yellow with pale hilum; slightly mottled with brown.
96810. No. 8929. Station no. 959. Kedium size, olive-yellow with dark-brown hilum ; slightly mottled with brown.
96811. No. 8930. Station mo. 960. Mo dium size, straw-yellow with darkbrown hilum; heavily mottled with dark brown.
96812. No. 8931. Station no. 961. Medium size, straw-yellow with pale hilum.
96818. No. 8932. Station ao. 962. Medium small, straw-yellow with black hilum; mottied with black and brown.
96814 and 88815. Straw-yellow with pale hilum; slightly mottled with brown.
96814. No. 8933. Station mo. 963. Me dium size.
96815, No. 8934, Station no. 964. Medium large.
96916. No. 8935. : Station no. 965. Medium size, straw-yellow with brown hilum; slightly mottled with brown.

## 96530 to 97251 -Continued

96817. No. 8936. Station no. 966. Medium size, straw- to olive-yellow with pale hilum; some purple spot.
96818. No. 8937. Station no. 967. Medium size, straw-yellow with pale hilum; slightly mottled with brown.
96819. No. 8938. Station no. 968. Medium large, black with yellow germ; seed coat split.
96820. No. 8939. Station no. 969. Medium size, black and brown with the black arranged in concentric rings; yellow germ.
96821. No. 8940. Station no. 970. Medium size, brown with yellow germ.
96822. No. 8941. Station no. 971. Medium size, straw-yellow with pale hilum; mottled with brown.
96823. No. 8942. Station no. 972. Medium size, straw- to olive-yellow with black hilum; mottled with dark brown.
96824 and 96825. Medium size, straw-yellow with brown hilum; mottled with brown.
96824. No. 8943. Station no. 973. Heavily mottled.
96825. No. 8944. Station no. 974.
96826. No. 8945. Station no. 975 . Very small, straw-yellow with dark-brown hilum; mottled with brown.
9682\%. and 96828. Medium size, straw-yellow, heavily mottled with brown.
9882\%. No. 8946. Station no. 976. Brown hilum.
g6828. No. 8947. Station no. 977. Pale hilum.
96827. No. 8948. Station no. 978. Medium size, straw-yellow with pale hilum; mottled with brown.
96830 and 96881. Medium size, straw-yellow, slightly mottled with brown.
96828. No. 8949. Station no. 979. Brown hilum.
96829. No. 8950. Station no. 980. Pale hilum.
g6832: No. 8951. Station no. 981. Medium small, straw-yellow with darkbrown hilum.
96883 to 96835 . Medium size, straw-yellow, mottled with brown.
96830. Noı 8952. Station no. 982. Pale hilum.
g0834. No. 8953. Station no. 983. Brown hilum.
96835:. No. 8954. Station no. 984. Pale hilum:
96831. No. 8955: Station no. 985. Small size, brown hilum; heavily mottled with brown.
96832. No. 8956. Station no. 986. Medium large, straw-yellow with brown hilum; slightly mottled with brown.
96833. No. 8957. Station no 987. Medium size, straw-yellow with pale hilum; slightly mottled with brown.
98889 and 88830. Medium size, straw-yellow, slightly mottled with brown.
96834. No. 8958. Station no. 988. Dark-brown. hilum.

## 96530 to 97251 -Continued

96840. No. 8959. Station no. 989. Pale hilum.
96841. No. 8960. Station no. 990. Medium size, straw- to olive-yellow with pale hilum.
96842 and 96843. Medium size, straw-yellow with brown hilum.
96842. No. 8961. Station no. 991. Heavily mottled with brown.
96843. No. 8962. Station no. 992.

96844 to 96846. Straw-yellow with pale hilum.
96844. No. 8963. Station no. 993.. Medium size.
96845. No. 8964. Station no. 994. Medium small.
96846. No. 8965. Station no. 995. Medium.
96847. No. 8966. Station no. 996. Medium size, light straw-yellow with brown hilum; slightly mottled with brown.
96848. No. 8967. Station no. 997. Medium size, olive-yellow, with darkbrown hilum; slightly mottled with dark brown.
96849 and 96850. Medium size, straw-yellow.
96849. No. 8968. Station no. 998. Pale hilum.
96850. No. 8969. Station no. 999. Lightbrown hilum.
96851. No. 8970. Station no. 1000. Medium small, black with green germ.
96852. No. 8971. Station no. 1001. Medium size, olive-yellow with darkbrown hilum; slightly mottled with dark brown.
96853. No. 8972. Station no. 1002. Medium size, green with brown hilum and green germ.
96854 and 96855. Medium size, straw-yellow with brown hilum.
96854. No. 8973. Station no. 1003.
96855. No. 8974. Station no. 1004.
96856. No. 8975. Station no. 1005. Medium size, straw-yellow with pale hilum.
96857. No. 8976. Station no. 1006. Medium size, straw-yellow with black hilum; mottled with black.
96858 and 96859. Olive-yellow with black hilum; heavily mottled with black.
96858. No. 8977. Station no. 1007. Medium size.
96858. No. 8978. Station no. 1008. Small size, nearly round.
96860. No. 8979. Station no. 1009. Small size, straw-yellow with black hilum, nearly round; heavily mottled with black.
96861. No. 8980. Station no. 1010. Very small, nearly round, straw- to oliveyellow with black hilum ; heavily mottled with black.
96862 and 96868. Medium size, strawyellow with black hilum.
96868. Na. 8981. Station no. 1011. Mottled with dark brown.

## 96530 to 97251 -Continued

96883. No. 8982. Station no. 1б12. Mottled with brown.
96864 to 96866 . Medium size, straw-yellow with dark-brown hilum.
96884. No. 89 83. Station no. 1013.
96885. No. 8984. Station no. 1014.
96886. No. 8985. Station no. 1015.
96887. No. 8986. Station no. 1016. Medium small, straw-yellow with brown hilum; slightly mottled with brown.
96888. No. 8987. Station no. 1017. Medium size, straw-yellow with darkbrown hilum; slightly mottled with brown.
96889. No. 8988. Station no. 1018. Small size, straw- to olive-yellow with darkbrown hilum; nearly round and slightly mottled with brown.
96870 to 96874 . Straw-yellow with brown hilum; slightly mottled with brown.
96890. No. 8989. Station no. 1019. Medium small.
96891. No. 8990. Station no. 1020. Medium size.
96892. No. 8991. Station no. 1021. Medium size, some purple spot.
96893. No. 8992. Station no. 1022. Medum size.
96894. No. 8993. Station no. 1023. Medium small, nearly round.
96895. No. 8994. Station no. 1024. Very small, nearly round, straw-yellow with pale hilum; slightly mottled with brown.
96896. No. 8995. Station no. 1025. Medium size, straw-yellow with brown hilum ; slightly mottled with brown.
96897. No. 8996. Station no. 1026. Medium large, straw- to olive-yellow with light-brown hilum; slightly mottled with brown.
96878 and 96879 . Medium size, straw-yellow, mottled with brown.
96898. No. 8997. Station no. 1027. Brown hilum.
96899. No. 8998. Station no. 1028. Pale hilum.
96900. No. 8999. Station no. 1029. Medium size, straw-yellow with lightbrown hilum.
96881 and 96882 . Medium size, straw-yellow with brown hilum ; slightly mottled with brown.
96901. No. 9000. Station no. 1030.
96902. No. 9001. Station no. 1031.
96903. No. 9002. Station no. 1032. Medium size, straw-yellow with pale hilum ; mottled with dark brown.
96904. No. 9003. Station no. 1033. Medium size, straw-yellow with brown hilum ; heavily mottled with brown.
96885 to 96891 . Medium size, straw-yellow, slightly mottled with brown.
96905. No. 9004. Station no. 1034. Pale hilum.
96906. No. 9005. Station no. 1035. Light-brown hilum.
96907. No. 9006. Station no. 1086. Pale hilum.

## 96530 to 97251 -Continued

96888. No. 9007. Station no. 1037. Light-brown hilum.
96889. No. 9008. Station no. 1038. Brown hilum.
96890. No. 9009. Station no. 1089. Light-brown hilum.
96891. No. 9010. Station no. 1040. Light-brown hilum.
96892. No. 9011. Station no. 1041. Me dium small, straw yellow with palo hilum; mottled with brown.
96893. No. 9012. Station no. 1042. Meaium size, olive-yellow with black hilum; heavily mottled with black.
96894. No. 9013. Station no. 1043. Modium large, olive-yellow with darkbrown hilum; seed coat more or less split.
96895. No. 9014. Station no. 1044. Me dium size, olive-yellow with lightbrown hilum.
96896 and 96897 . Medium size, very daitbrown with green germ.
96896. No. 9015. Station no. 1045.
96897. No. 9016. Station no. 1046.
96898. No. 9017. Station no. 1057. Nodium size, green with brown hilum.
96899. No. 9018. Station no. 1048. Modium size, straw- to olive-yellow with light-brown hilum; mottled with brown.
96900 and 96901 . Medium size, green with dark-brown hilum.
96900. No. 9019. Station no. 1049.
96901. No. 9020. Station no. 1050.

96902 to 96904 . Green with brown hilum: slightly mottled with brown.
96902. No. 9021. Station no. 1051. Medium small.
96903. No. 9022. Station no. 1052. Medium size.
96904. No. 9023. Station no. 1053. Medium size.
96905. No. 9024. Station no. 1054. Medium size, olive with black hilum and yellow germ; very heavily mottled with black.
96906. No. 9025. Station no. 1055. Mo dium size, black with yellow germ.
96907 and 96908 . Medium size, black and brown with black arranged in concentric rings.
96907. No. 9026. Station no. 1056.
96908. No. 9027. Station no. 1057.
96909. No. 9028. Station no. 1058. Medium size, straw-yellow with pale hilum; heavily mottled with dart brown.
96910. No. 9029. Station no. 1059. Medium size, straw-yellow with black hilum; heavily mottled with black.
96911. No. 9030. Station no. 1060. Medium size, olive-yellow and black.
96912. No. 9031. Station no. 1061. Medium size, light brown with a pale hilum ; seed coat somewhat split.
96913. No. 9032. Station no. 1062. Small size, nearly round light brown with pale hilum ; very similar to Brownio (17256).

## 96530 to 97251 -Continued

96914. No. 9033. Station no. 1063. Medium size, reddish brown.
96915. No. 9034 . Station no. 1064. Medium size, olive-brown ; seed coat more or less split.
96916. No. 9035. Station no. 1065. Medium size, brown.
96917. No. 9036. Station no. 1066. Medium size, black; seed coat split into fine network.
96918. No. 9037. Station no. 1067. Medium size, black with green germ.
96919. No. 9038. Station no. 1068. Medium size, slightly flattened, black with yellow germ.
96920. No. 9039. Station no. 1069. Medium size, reddish brown; seed coat more or less spit.
96921. No. 9040. Station no. 1070. Small size, brown.
96922. No. 9041. Station no. 1071. Medium size, straw- to olfve-yellow with pale hilum; heavily . mottled with brown and black.
96923. No. 9042. Station no. 1072. Medium size, olive-yellow with brown hilum ; heavily mottled with brown.
96924. No. 9043. Station no. 1073. Medium size, dark brown with yellow germ.
96925. No. 9044. Station no. 1074. Medium size, straw-yellow with darkbrown hilum ; mottled with dark brown.
96926. No. 9045. Station no. 1075. Medium size, straw- to olive-yellow with dark-brown hilum; mottled with brown.
96927. No. 9046. Station no. 1076. Very small, straw-yellow with darkbrown hilum.
96928 and 96929. Straw-yellow with brown hilum ; heavily mottled with brown.
96928. No: 9047. Station no. 1077. Small size.
96929. No. 9048. Station no. 1078. Medium size.
96930. No. 9049. Station no. 1079. Medium size, slightly flattened, straw-yellow with dark-brown hilum; slightly mottled with brown.
96931. No. 9050. Station no. 1080. Medium size, straw-yellow with darkbrown hilum; mottled with dark brown.
96932. No. 9051. Station no. 1081. Medium size, straw- to olive-yellow with dark-brown hilum ; mottled with dark brown.
96933. No. 9052. Station no. 1082. Medium size, green with dark-brown hilum ; heavily mottled with dark brown.
96934. No. 9053. Station no. 1083. Medium large, straw-yellow with darkbrown hilum; heavily mottled with brown.
96935. No. 9054. Station no. 1084. Medium size, olive-yellow with dark-brown hilum; heavily mottled with dark brown.
96936. No. 9055. Station no. 1085. Medium size, straw-yellow with brown hilum; mottled with brown.

## 96530 to 97251-Continued

96937. No. 9056. Station no. 1086. Large size, black with yellow germ.
96938. No. 9057. Station no. 1087. Medium small, nearly round, straw-yellow with brown hilum; mottled with brown.
96939 and 96940. Medium size, olive with black hilum; heavily mottled with brown.
96939. No. 9058. Station no. 1088.
96940. No. 9059. Station no. 1089. Nearly round.
96941. No. 9060. Station no. 1090. Medium small, olive-yellow with black hilum ; heavily mottled with black.
96942. No. 9061. Station no. 1091. Small size, nearly round, olive with black hilum ; heavily mottled with black.
96943 to 96949. Medium small, nearly round, olive, with black hilum; heavily mottled with black.
96943. No. 9062. Station no. 1092.
96944. No. 9063. Station no. 1093.
96945. No. 9064. Station no. 1094.
96946. No. 9065. Station no. 1095.
96947. No. 9066. Station no. 1096.
96948. No. 9067. Station no. 1097.
96949. No. 9068. Station no. 1098.
96950. No. 9069. Station no. 1099. Medium size, nearly round, olive with black hilum; heavily mottled with black.
96951 and 96952: Medium size, straw-yellow with black hilum ; heavily mottled with black.
96951. No. 9070. Station no. 1100. Nearly round.
96952. No. 9071. Station no. 1101.

96953 and 96954 . Medium small, straw- to olive-yellow with black hilum ; heavily mottled with black.
96953. No. 9072. Station no. 1102.
96954. No. 9073. Station no. 1103.

96955 to 96957 . Medium large, straw-yellow with black hilum ; slightly mottled with black.
96955. No. 9074. Station no. 1104.
96956. No. 9075. Station no. 1105.
96957. No. 9076. Station no. 1106.
96958. No. 9077. Station no. 1107. Medium size, straw-yellow. with black hilum.
96959 to 96961 . Medium size, straw-yellow with dark-brown hilum ; mottled with brown.
96959. No. 9078. Station no. 1108.
96960. No. 9079. Station no. 1109.
96961. No. 9080. Station no. 1110.
96962. No. 9081. Station no. 1111. Medium small, nearly round, straw-yellow with black hilum ; mottled with black.
96963. No. 9082. Station no. 1112. Medium size; straw-yellow with darkbrown hilum; mottled with dark brown.

## 96530 to 97251 -Continued

96964. No. 9083. Station no. 1113. Medium size, nearly round, straw-yellow with brown hilum; slightly mottled with brown; seed coat split.
96965. No. 9084. Station no. 1114. Medium size, straw-yellow with black hilum ; mottled with black.
96966. No. 9085. Station no. 1115. Medium size, nearly round, straw-yellow with dark-brown hilum; mottled with dark brown.
96967. No. 9086. Station no. 1116. Medium size, straw- to olive-yellow with dark-brown hilum ; mottled with dark brown.
96968. No. 9087. Station no. 1117. Medium size, straw-yellow with darkbrown hilum.
96969. No. 9088. Station no. 1118. Medium size, straw-yellow with brown hilum ; slightly mottled with brown.
96970. No. 9089. Station no. 1119. Medium large, straw-yellow with darkbrown hilum; seed coat somewhat split.
96971. No. 9090. Station no. 1120. Medium size, straw-yellow with brown hilum ; somewhat mottled with brown.

96972 and 96978 . Medium large, strawyellow with black hilum ; mottled with brown and black;
96972. No. 9091. Station no. 1121. Seed coat very much split.
96973. No. 9092. Station no. 1122. Seed coat much split.
96974. No. 9093. Station no. 1123. Medium large, straw-yellow with darkbrown hilum; seed coat slightly wrinkled and split.
96975 and 96976. Straw-yellow with brown hilum ; mottled with brown ; seed coat badly split.
96975. No. 9094. Station no. 1124. Medium size.
96976. No. 9095. Station no. 1125. Medium large.
96977. No. 9096. Station no. 1126. Medium size, straw-yellow with brown hilum ; slightly mottled with brown.
96978. No. 9097. Station no. 1127. Medium size, straw-yellow with brown hilum; mottled with brown; seed coat slightly split.
96979. No. 9098. Station no. 1128. Medium size, olive-yellow with darkbrown hilum; slightly mottled with brown.
96980. No. 9099. Station no. 1129. Medium size, straw-yellow with brown hilum; very heavily mottled with dark brown.
96881. No. 9100. Station no. 1130. Medium size, straw-yellow with darkbrown hilum; mottled with dark brown.
96982. No. 9101. Station no. 1131. Medium large, straw-yellow with slateblack hilum; mottled with black.
90983. No. 9102. Station no. 1132. Medium size, straw-yellow with brown hilum.

## 96530 to 97251 -Continued

96984. No. 9103. Station no. 1133. Medium size, straw-yellow with large dark-brown hilum; slightly mottled with brown.
96985. No. 9104. Station no. 1134. Medium size, nearly round, straw-yellow with dark-brown hilum ; slightly mottled with brown.
96986. No. 9105. Station no. 1135. Medium size, olive-yellow with brown hilum; heavily mottled with dark brown.
96987. No. 9106. Station no. 1136. Medium size, olive-yellow with darkbrown hilum; slightly mottled with dark brown.
96988. No. 9107. Station no. 1137. Medium large, straw-yellow with darkbrown hilum; slightly mottled with dark brown.
96989. No. 9108. Station no. 1138. Medium size, straw- to olive-yellow with dark-brown hilum; heavily mottled with dark brown.
96990 and 96991. Medium size, strawyellow with dark-brown hilum; heavily mottled with dark brown.
96990. No. 9109. Station no. 1139. Nearly round.
96991. No. 9110. Station no. 1140.
96992. No. 9111. Station no. 1141. Medium size, straw- to olive-yellow with dark-brown hilum; slightly mottled with dark brown.
96993 to 96995 . Medium size, straw-yellow with dark-brown hilum; slightly mottled with brown.
96993. No. 9112. Station/ no. 1142. Heavily mottled with dark brown.
96994. No. 9113. Station no. 1148.
96995. No. 9114. Station no. 1144. Slightly tiattened.
96996. No. 9115. Station no. 1145. Very small, nearly round, straw-yellow with dark-brown hilum; heavily mottled with dark brown.
96997. No. 9116. Station no. 1146. Small size, straw- to olive-yellow with darkbrown hilum; heavily mottled with dark brown.
96998. No. 9117. Station no. 1147. Medium size, straw-yellow with darkbrown hilum; slightly mottled with dark brown.
96999. No. 9118. Station no. 1148. Small size, straw- to olive-yellow with darkbrown hilum; heavily mottled with dark brown.
97000 to 97002 . Straw-yellow with brown hilum ; mottled with brown.
97000. No. 9119. Station no. 1149. Medium large.
97001. No. 9120. Station no, 1150. Large size.
97002. No. 9121. Station no. 1151. Medium size.
97003 and 97004. Medium small, strawto olive-yellow with brown hilum; heavily mottled with brown.
97003. No. $9122 . \quad$ Station no. 1152. Hilum and mottling are both dark brown.

## 96530 to 97251 -Continued

97004. No. 9123. Station no. 1153.
97005. No. 9124. Station no. 1154. Medium size, straw- to olive-yellow with brown hilum; mottled with brown.
97006. No. 9125. Station no. 1155. Medium large, straw-yellow with darkbrown hilum ; mottled with brown.
97007. No. 9126. Station no. 1156. Large size straw-yellow with pale hilum; slightly mottled with brown.
97008 and 97009 . Straw-yellow with darkbrown hilum ; mottled with brown.
97008. No. 9127. Station no. 1157. Medium large.
97009. No. 9128. Station no. 1158. Medium size.
97010 and 97011. Medium size, strawyellow with brown hilum ; mottled with brown.
97010. No. 9129. Station no. 1159.
97011. No. 9130. Station no. 1160.
97012. No. 9131. Station no. 1161. Medium large straw- to olive-yellow with brown hilum; heavily mottled with brown.
97013. No. 9132. Station no. 1162. Medium size, straw-yellow with brown hilum ; mottled with brown.
97014. No. 9133. Station no. 1163. Medium size, straw- to olive-yellow with brown hilum; mottled slightly with brown.
97015. No. 9134. Station no. 1164. Large size, straw- to olive-yellow with lightbrown hilum; mottled with brown; seed coat more or less split.
97016 and 97017. Medium size, strawyellow with brown hilum ; heavily mottled with brown.
97016. No. 9135. Station no. 1165.
97017. No. 9136. Station no. 1166.

97018 and 97019. Medium size, strawyellow, heavily mottled with brown.
97018. No. 9137. Station no. 1167. Hilum dark brown.
97019. No. 9138. Station no. 1168. Hilum brown.
97020. No. 9139. Station no. 1169. Medium size, straw- to olive-yellow with dark-brown hilum ; mottled with dark brown.
97021. No. 9140. Station no. 1170. Medium small, nearly round, straw-yellow with dark-brown hilum; mottled with brown.
97022. No. 9141. Station no. 1171. Medium size, straw-yellow with brown hilum; heavily mottled with brown.
97023 and 97024 . Straw-yellow with darkbrown hilum ; slightly mottled with dark brown.
97023. No. 9142. Station no. 1172. Medium large.
97024. No. 9143. Station no. 1173. Medium large.
97025. No. 9144. Station no. 1174. Medium size, slightly flattened, straw-yellow with dark-brown hilum; heavily mottled with dark brown.

## 96530 to 97251-Continued

97026. No. 9145. Station no. 1175. Medium size, straw-yellow with darkbrown hilum; mottled with dark brown.
97027. No. 9146. Station no. 1176. Medium size, straw-yellow with brown hilum; mottled with brown.
97028. No. 9147. Station no. 1177. Medium size, straw-yellow with darkbrown hilum; slightly mottled with brown.
97029 and 97030 . Medium size, strawyellow with brown hilum; mottled with brown.
97029. No. 9148. Station no. 1178.
97030. No. 9149. Station no. 1179.
97031. No. 9150. Station no. 1180. Medium large, straw-yellow with lightbrown hilum; slightly mottled with dark brown; seed coat slightly cracked.
97032. No. 9151. Station no. 1181. Medium size, straw-yellow with pale hilum ; mottled with brown.
97033. No. 9152. Station no. 1182. Medium large, straw-yellow with lightbrown hilum; slightly mottled with dark brown.
97084 and 97035. Medium size, straw yellow with pale hilum ; heavily mottled with dark brown.
97034. No. 9153. Station no. 1183.
97035. No. 9154. Station no. 1184.

97036 and 97087. Medium size, nearly round, straw-yellow with dark-brown hilum; mottled with dark brown.
97036. No. 9155. Station no. 1185. Slightly mottled.
97037. No. 9156. Station no. 1186. Heavily mottled.
97088 to 97040 . Medium size, straw-yellow with pale hilum ; mottled with brown. 97038. No. 9157. Station no. 1187. Heavily mottled with dark brown.
97039. No. 9158. Station no. 1188.
97040. No. 9159. Station no. 1189. Heavily mottled.
97041 and 97048 . Straw-yellow, slightly mottled with brown.
97041. No. 9160. Station no. 1190. Very small; pale hilum.
97042. No. 9161. Station no. 1191. Medium size; brown hilum.
97043 to 97046 . Medium size, straw-yellow with brown hilum ; mottled with brown.
97043. No. 9162. Station no. 1192.
97044. No. 9163. Station no. 1193.
97045. No. 9164. Station no. 1194.
97046. No. 9165. Station no. 1195. Heavily mottled with brown.
97047 and 97048. Medium size, strawyellow with brown hilum.
97047. No. 9166. Station no. 1196.
97048. No. 9167. Station no. 1197. Slightly mottled with brown.
97049. No. 9168. Station no. 1198. Medium size, straw- to olive-yellow with pale hilum ; mottled with brown; seed coat somewhat split.

## 96530 to 97251 -Continued

97050. No. 9169. Station no. 1199. Medium size, straw-yellow with brown hilum; slightly mottled with brown.
97051. No. 9170. Station no. 1200. Medium size, straw- to olive-yellow with pale hilum; heavily mottled with brown.

97052 to 97056 . Medium size, straw-yellow with brown hilum ; mottled with brown. 97052. No. 9171. Station no. 1201. Slightly mottled.
97053. No. 9172. Station no. 1202. Heavily mottled.
97054. No. 9173. Station no. 1203. Slightly mottled.
97055. No. 9174. Station no. 1204. Somewhat mottled.
97056. No. 9175. Station no. 1205. Slightly mottled.
97057 and 97058 , Medium size, strawyellow with light-brown hilum; mottled with brown.
97057. No. 9176. Station no. 1206. Slightly mottled.
97058. No. 9177. Station no. 1207.
97059. No. 9178. Station no. 1208. Medium size, straw-yellow with brown hilum; heavily mottled with brown; seed coat more or less split.
97060 to 97063 . Medium size, strawyellow with brown hilum ; slightly mottled with brown.
97060. No. $9179 . \quad$ Station no. 1209.
97061. No. 9180. Station no. 1210.
97062. No. 9181. Station no. 1211.
97083. No. 9182. Station no. 1212.
97064. No. 9183. Station no. 1213. Medium small, straw-yellow with brown hilum ; mottled with brown.
97065. No. 9184. Station no. 1214. Medium size, straw-yellow with brown hilum; heavily mottled with brown; seed coat more or less split.
97066. No. 9185. Station no. 1215. Medium small, straw-yellow with brown hilum; heavily mottled with brown.
97087. No. 9186. Station no. 1216. Medium size, straw-yellow with brown hilum.
97068. No. 9187. Station no. 1217. Medium size, straw-yellow with brown hilum; slightly mottled with brown; seed coat more or less split.
97069. No. 9188. Station no. 1218. Medium size, straw-yellow with brown hilum; mottled with brown; seed coat slightly split.
97070 to 97072 . Medium size, straw-yellow, with brown hilum; slightly mottled with brown
97070. No. 9189. Station no. 1219.
97071. No. 9190. Station no. 1220.
97072. No. 9191. Station no. 1221. Seed coat slightly split.
97073. No. 9192. Station no. 1222. Medium size, nearly round straw-yellow with brown hilum; mottled with brown.

## 96530 to 97251 -Continued

97074. No. 9193. Station no. 1223. Medium size, straw-yellow with brown hilum; heavily mottled with brown; seed coat slightly split.
97075. No. 9194. Station no. 1224. Medium large, straw- to olive-yellow with pale hilum; mottled with brown; seed coat more or less split.
97076. No. 9195. Station no. 1225. Medium size, straw-yellow with brown hilum; heavily mottled with brown.
97077 and 97078 . Straw-yellow with brown hilum ; mottled with brown.
97077. No. 9196. Station no. 1226. Medium small.
97078. No. 9197. Station no. 1227. Medium size
97079 to 97081 . Straw-yellow with brown hilum; slightly mottled with brown.
97079. No. 9198. Station no. 1228. Medium size.
97080. No. 9199. Station no. 1229. Medium size.
97081. No. 9200. Station no. 1230. Medium small.
97082. No. 9201. Station no. 1231. Medium size, straw-yellow with brown hilum; slightly mottled with brown; seed coat more or less split.
97083. No. 9202. Station no. 1232. Medium size, straw-yellow with brown hilum ; mottled with brown.
97084. No. 9203. Station no. 1233. Medium size, slightly flattened, strawyellow with brown hilum.
97085. No. 9204. Station no. 1234. Medium size, straw-yellow with brown hilum; mottled with brown.
97086. No. 9205. Station no. 1235. Medium size, light straw-yellow with brown hilum; seed coat slightly split.
97087 and 97088 . Medium size, straw-yellow with light-brown hilum.
97087. No. 9206. Station no. 1236.
97088. No. 9207. Station no. 1237. Slightly mottled with brown; seed coat slightly split.
97089 and 97090 . Medium size, straw-yel low with brown hilum; mottled with brown.
97089. No. 9208. Station no. 1238.
97090. No. 9209. Station no. 1239. Slightly mottled.
97091. No. 9210. Station no. 1240. Medium small, straw-yellow with brown hilum.
97092. No. 9211. Station no. 1241. Medium size, straw-yellow with lightbrown hilum; slightly mottled with brown.
97093 to 97095 . Medium size, straw-yellow with brown hilum.
97093. No. 9212. Station no. 1242. Seed coat slightly split.
97094. No. 9213. Station no. 1243. Mottled with brown.
97095. No. 9214. Station no. 1244. Heavily mottled with brown.
97096 and 97097 . Medium size, straw-yellow with light-brown hilum; mottled with brown.

## 96530 to 97251-Continued

97096. No. 9215. Station no. 1245.
97097. No. 9216. Station no. 1246. Slightly mottled.
97098 to 97100 . Medium size, straw-yellow with brown hilum; mottled with brown.
97098. No. 9217. Station no. 1247. Slightly mottled and seed coat slightly split.
97099 . No. 9218. Station no. 1248. Slightly mottled.
97099. No. 9219. Station no. 1249. Heavily mottled.
97101 and 97102. Straw yellow with brown hilum; slightly mottled with brown.
97100. No. 9220. Station no. 1250. Medium large.
97101. No. 9221. Station no. 1251. Medium small.
97103 and 97104 . Straw-yellow with pale hilum; mottled with brown.
97102. No. 9222. Station no. 1252. Medium size, seed coat more or less split.
97103. No. 9223. Station no. 1253. Very small, slightly mottled.
97105 and 97106. Medium large, strawyellow with light-brown hilum; mottled with brown; seed coat split.
97104. No. 9224. Station no. 1254. Heavily mottled.
97105. No. 9225. Station no. 1255. Slightly mottled.
97106. No. 9226. Station no. 1256. Medium large, nearly round, straw-yellow with dark-brown hilum; slightly mottled with dark brown; seed coat badly wrinkled and split.
97107. No. 9227. Station no. 1257. Medium large, straw-yellow with darkbrown hilum ; heavily mottled with brown; seed coat badly wrinkled and split.
97108. No. 9228. Station no. 1258. Medium large, straw-yellow with lightbrown hilum; slightly mottled with brown ; seed coat slightly split.
97109. No. 9229. Station no. 1259. Medium large, straw- to olive-yellow with pale hilum; slightly mottled with brown; seed coat more or less split.
97111 and 97112. Medium size, strawyellow with light-brown hilum ; mottled with brown.
97110. No. 9230. Station no. 1260. Heavily mottled and seed coat badly split.
97111. No. 9231. Station no. 1261. Seed coat slightly split.
97112. No. 9232. Station no. 1262. Medium size, straw- to olive-yellow with light-brown hilum; mottled with brown.
97113. No. 9233. Station no. 1263. Medium size, straw-yellow with pale hilum ; mottled with brown.
97115 and 97116. Straw-yellow with pale hilum ; slightly mottled with brown.
97114. No. 9234. Station no. 1264. Medium large, seed coat slightly split.

## 96530 to 97251 -Continued

97116. No. 9235. Station no. 1265. Medium size.
97117 and 97118 . Straw-vellow with lightbrown hilum; heavily mottled with brown.
97117. No. 9236. Station no. 1266. Medium large, seed coat slightly split.
97118. No. 9237. Station no. 1267. Medium size.
97119. No. 9238. Station no. 1268. Medium size, straw-yellow with pale hilum; mottled with brown.
97120. No. 9239. Station no. 1269. Medium size, straw- to olive-yellow with light-brown hilum; slightly mottled with brown, seed coat slightly split.
97121. No. 9240. Station no. 1270. Medium size, straw-yellow with darkbrown hilum; slightly mottled with brown.
97122 and 97123 . Medium size, straw-yellow with pale hilum; mottled with brown.
97122. No. 9241. Station no. 1271.
97123. No. $9242 . \quad$ Station no. 1272. Slightly mottled and seed coat slightly split.
97124 to 97126 . Medium size, straw-yellow with slate-black hilum.
97124. No. 9243. Station no. 1273.
97125. No. 9244. Station no. 1274.
97126. No. 9245. Station no. 1275.
97127. No. 9246. Station no. 1276. Medium small, straw-yellow with lightbrown hilum; heavily mottled with brown.
97128 and 97129. Straw-yellow with pale hilum; heavily mottled with brown.
97128. No. 9247. Station no. 1277. Medium size.
97129. No. 9248. Station no. 1278. Medium large, seed coat badly split.
97130 and 97131 . Medium large, strawyellow with light-brown hilum; mottled with brown ; seed coat split.
97130. No. 9249. Station no. 1279.
97131. No. $9250 . \quad$ Station no. 1280. Seed coat badly split.
97132. No. 9251. Station no. 1281. Medium size, straw-yellow with brown hilum ; heavily mottled with brown.
97133 and 97134. Medium size strawyellow with light-brown hilum.
97133. No. $9252 . \quad$ Station no. 1282.
97134. No. 9253. Station no. 1283. Slightly mottled with brown.
97135. No. 9254. Station no. 1284. Medium size, straw-yellow with brown hilum ; slightly mottled with brown.
97136 to 97138. Medium size, straw-yellow with pale hilum ; slightly mottled with brown.
97136. No. 9255. Station no. 1285. Seed coat slightly split.
97137. No. 9256. Station no. 1286.
97138. No. 9257. Station no. 1287.

97139 and 97140 . Medium size, straw-yellow with light-brown hilum ; mottled with brown.

## 96530 to 97251 -Continued

97139. No. 9258. Station no. 1288. Slightly mottled, seed coat more or less split.
97140. No. 9259. Station no. 1289. Heavily mottled.
97141 to 97144 . Medium size, straw-yellow with pale hilum; mottled with brown.
97141. No. 9260. Station no. 1290. Slightly mottled.
97142. No. 9261. Station no. 1291. Slightly mottled, seed coat slightly split.
97143. No. 9262. Station no. 1292. Slightly mottled.
97144. No. 9263. Station no. 1293. Heavily mottled, seed coat slightly split.
97145. No. 9264. Station no. 1294. Medium size, straw-yellow with lightbrown hilum; slightly mottled with brown ; seed coat slightly split.
97146 and 97147 . Medium size, straw-yellow with brown hilum; heavily mottled with brown; seed coat slightly split.
97146. No. 9265. Station no. 1295.
97147. No. 9266. Station no. 1296.

97148 and 97149 . Straw-yellow with lightbrown hilum; slightly mottled with brown; seed coat slightly split.
97148. No. 9267. Station no. 1297. Medium size.
97149. No. 9268. Station no. 1298. Medium large.
97150. No. 9269. Station no. 1299. Medium size, straw-yellow with pale hilum; slightly mottled with brown.
97151 and 97152 . Straw-yellow with brown hilum ; heavily mottled with brown.
97151. No. 9270. Station no. 1300. Medium size, seed coat slightly split.
97152. No. 9271. Station no. 1301. Large size, seed coat badly split.
97153. No. 9272. Station no. 1302. Medium size, straw-yellow with pale hilum ; heavily mottled with brown.
97154. No. 9273. Station no. 1303. Medium size, straw-yellow with brown hilum; mottled with brown.
97155. No. 9274. Station no. 1304. Medium large, straw-yellow with pale hilum : slightly mottled with brown; seed coat badly split.
97156 and 97157 . Medium size, straw-yellow with brown hilum; mottled with brown.
97156. No. 9275. Station no. 1305. Slightly mottled.
9715\%. No. 9276. Station no. 1306. Heavily mottled, seed coat badly split.
97158. No. 9277. Station no. 1307. Medium large straw-yellow with pale hilum; slightly mottled with brown; seed coat badly split.
97159. No. 9278. Station no. 1308. Medium size, straw-yellow with brown hilum; slightly mottled with brown.
97160 and 97161 . Medium size, strawyellow with light-brown hilum; slightly mottled with brown; seed coat split.

## 96530 to 97251 -Continued

97160. No. 9279. Station no. 1309.
97161. No. 9280. Station no. 1310.
97162. No. 9281. Station no. 1311. Me dium large, straw-yellow with brown hilum ; heavily mottled with brown.
97163 and 97164 . Straw-yellow with lightbrown hilum; mottled with brown.
97163. No. 9282. Station no. 1312. Modium size.
97164. No. 9283. Station no. 1313. Modium large, seed coat slightly split.
97165. No. 9284. Station no. 1314. Modium size, straw- to olive-yellow with pale hilum; slightly mottled with brown; seed coat split.
97166 to 97168 . Medium size, straw-yellow with brown hilum; heavily mottled with brown; seed coat badly split.
97166. No. 9285. Station no. 1315.
97167. No. 9286. Station no. 1316.
97168. No. 9287. Station no. 1317.
97169. No. 9288. Station no. 1318. Modium large, straw-yellow with brown hilum ; heavily mottled with brown; seed coat badly split.
97170. No. 9289. Station no. 1319. Modium size, straw-yellow with lightbrown hilum; slightly mottled with brown; seed coat slightly split.
97171 and 97172 . Medium size, straw-yellow with pale hilum; slightly mottled with brown.
97171. No. 9290. Station mo. 1320. Seed coat slightly split.
97172. No. 9291. Station no. 1321.
97173. No. 9292. Station mo. 1322. Medium size, straw- to olive-yellow, with pale hilum; heavily mottled with brown; seed coat badly split.
97174. No. 9293. Station no. 1323. Medium size, straw-yellow with light. brown hilum; slightly mottled with brown.
97175. No. 9294. Station no. 1324. Medium large, straw-yellow with lightbrown hilum; heavily mottled with brown ; seed coat badly split.
97176 to 97178 . Medium size, straw-yellow with pale hilum ; slightly mottled with brown. -
97176. No. 9295. Station no. 1325. Seed coat badly split.
97177. No. 9296. Station no. 1326.
97178. No. 9297. Station no. 1327.
97179. No. 9298. Station ne. 1328. Modium size, straw-yellow with lightbrown hilum; slightly mottled with brown ; seed coat slightly split.
97180 and 97181 . Medium size, straw-yellow with brown hilum ; mottled with brown.
97180. No. 9299. Station no. 1329. Slightly mottled.
97181. No. 9300. Station no. 1330. Heavily mottled, seed coat badly split.
97182. No. 9301. Station no. 1331. Medium size, straw- to olive-yellow with brown hilum; heavily mottled with brown; seed coat slightly split.

## 96530 to 97251 -Continued

97183. No. 9302. Station no. 1332. Medium large, straw-yellow with brown hilum.
97184. No. 9303. Station no. 1333. Medium : size, straw-yellow with pale hilum ; slightly mottled with brown.
97185. No. 9304. Station no. 1334. Medium size, straw- to olive-yellow with brown hilum; heavily mottled with brown.
97186. No. 9305. Station no. 1335. Medium size, straw-yellow with lightbrown hilum; mottled with brown.
87187 and 97188 . Medium size, straw-yellow with brown hilum; mottled with brown.
97187. No. 9306. Station no. 1336.
g7188. No. 9307. Station no. 1337. Heavily mottled.
87189 to 97192 . Medium size, straw-yellow with pale hilum ; slightly mottled with brown.
97188. No. 9308. Station no. 1338.
97189. No. 9309. Station no. 1339.
97190. No. 9310. Station no. 1340. Heavily mottled, seed coat split.
g7192. No. 9311. Station no. 1341. Seed coat split.
97191. No. 9312. Station no. 1342. Medium size, straw-yellow with pale hilum; seed coat split.
87194 an ${ }^{7}$ 97195. Medium size, straw-yellow ; slightly mottled with brown.
97192. No. 9313. Station no. 1343. Light-slate hilum.
97193. No. 9314. Station no. 1344. Pale hilum.
97194. No. 9315. Station no. 1345. Medium size, light straw-yellow with pale hilum ; mottled with brown.
97197 and 97198 . Medium size, straw-yellow with light-brown hilum ; mottled with brown.
97195. No. 9316. Station no. 1346.
97196. No. 9317. Station no. 1347.

27199 to 97201 . Medium size, straw-yellow with pale hilum; mottled with brown. 97199. No. 9318. Station no. 1348. Seed coat split.
g7200. No. 9319. Station no. 1349. Slightly mottled.
97201. No. 9320. Station no. 1350. Slightly mottled.
87202 and 97203 . Medium size, straw-yellow with light-brown hilum; mottled with brown.
97802. No. 9321. Station no. 1351.
97203. No. 9322. Station no. 1352.

87204 and 97205 . Medium size, straw-yellow with light-brown hilum; mottled with brown; some purple spot.
97204. No. 9323. Station no. 1353. Slightly mottlea.
97205. No. 9324 . Station no. 1354. Heavily mottled.
97206 and 97207. Medium size, straw-yellow ; mottled with brown.

## 96530 to 97251 -Continued

97206. No. 9325. Station no. 1355. Light-brown hilum.
97207. No. 9326. Station no. 1356. Pale hilum.
97208 to 97211. Medium size, straw-yellow with light-brown hilum; slightly mottled with brown.
97208. No. 9327. Station no. 1357.
97209. No. 9328. Station no. 1358.
97210. No. 9329. Station no. 1359.
97211. No. 9330. Station no. 1360.
97212. No. 9331. Station no. 1361. Medium size, straw-yellow with brown hilum; slightly mottled with brown.
97213 and 97214 . Medium size, straw-yellow with light-brown hilum; mottled with brown.
9'7213. No. 9332. Station no. 1362.
97213. No. 9333. Station no. 1363.
97214. No. 9334. Station no. 1364. Medium size, straw-yellow with pale hilum; mottled with brown ; seed coat slightly split.
97216 to 97218 . Medium size, straw-yellow with pale hilum; slightly mottled with brown.
97215. No. 9335. Station no. 1365.

9721'. No. 9336. Station no. 1366.
97218. No. 9337. Station no. 1367.
97219. No. 9338. Station no. 1368. Medium size, straw-yellow with lightbrown hilum; heavily mottled with brown.
97220. No. 9339. Station no. 1369. Medium small, straw- to olive-yellow with brown hilum; heavily mottled with brown.
97221 and 97222. Medium size, straw-yellow with light-brown hilum; slightly mottled with brown.
97221. No. 9340. Station no. 1370.
97222. No. 9341. Station no. 1371.

97223 to 97826. Straw-yellow with lightbrown hilum ; mottled with brown.
97223. No. 9342. Station no. 1372. Medium size, heavily mottled.
97224. No. 9343. Station no. 1373. Medium small.
97225. No. 9344. Station no. 1374. Medium small, heavily mottled.
97226. No. 9345. Station no. 1375. Medium size, slightly mottled.
97227. No. 9346. Station no. 1376. Medium size, nearly round, straw-yellow with pale hilum; slightly mottled with brown; seed coat badly cracked.
97228 and 97229. Medium size, straw-yellow with dark-brown hilum; heavily mottled with dark brown.
97228. No. 9347. Station no. 1377.
97229. No. 9348. Station no. 1378.
97230. No. 9349. Station no. 1379. Medium small, straw-yellow with pale hilum ; slightly mottled with brown.
97231. No. 9350. Station no. 1380. Medium size, straw-yellow with brown hilum; seed coat slightly cracked around hilum.

## 96530 to 97251 -Continued

97232 to 97284 . Medium size, straw-yellow with light-brown hilum ; mottled with brown.
97232. No. 9351. Station no. 1381. Heavily mottled.
97233. No. 9352. Station no. 1382. Heavily mottled.
97234. No. 9353. Station no. 1383.

97235 to 97243 . Medium size, straw-yellow with brown hilum; heavily mottled with brown.
97235. No. 9354. Station no. 1384. Affected with purple spot.
97236. No. 9355. Station no. 1385. Seed coat split.
97237. No. 9356. Station no. 1386.
97238. No. 9357. Station no. 1387. Seed coat badiy split.
97239. No. 9358. Station no. 1388.
97240. No. 9359. Station no. 1389.
97241. No. 9360. Station no. 1390.
97242. No. 9361. Station no. 1391.
97243. No. 9362. Station no. 1392. Some purple spot.
97244. No. 9363. Station no. 1393. Medium size, straw-yellow with brown hilum ; slightly mottled with brown.
97245. No. 9364. Station no. 1394. Medium size, straw-yellow with lightbrown hilum ; mottled with brown.
97246. No. 9365. Station no. 1395. Medium size, straw- to olive-yellow with pale hilum; mottled with brown; seed coat slightly split.
97247 to 97251 . Medium size, straw-yellow with light-brown hilum; mottled with brown.
97247. No. 9366. Station no. 1396. Heavily mottled.
97248. No. 9367. Station no. 1397. Heavily mottled.
97249. No. 9368. Station no. 1398. Slightly mottled, seed coat slightly split.
97250. No. 9369. Station no. 1399. Seed coat badly split.
97251. No. 9370. Station no. 1400. Slightly mottled.
97252, Cyphomandra betacea (Cav.)
Sendt. Solanaceae. Tree-tomato.
From New Zealand. Seeds presented by Dr. O. Farp Thomas, Wellington. Received February 9, 1932.
A sport of a black variety of the treetomato, which becomes 6 feet high. The entire leaves have a disagreeable odor if touched, and the violet-colored tomatolike flowers are followed by oval blue-black fruits over 2 inches long. The fruit ripens in the winter where frosts are not severe and is superior to the ordinary variety.
97253. Prunus domestica L. Amygdalaceae. Common plum.
From Chevy Chase, Md. Scions presented by A. Hrdička, United States National Museum. Received February 9, 1932.
This prune, received from Czechoslovakia by Dr. Hrdlicka, appears very similar to

## 97253-Continued

the French prune in character of fruit, but the latter does not succeed in the climate of Washington, whereas Dr. Hrdlicka's tree bears well annually, and the fruit seems almost immune from the attacks of curculio and other pests. The ripening season is September and October.

For previous introduction see 91792
97254. Pueraria collettil Prain ( $\boldsymbol{P}_{5}$ siamica Craib). Fabaceae.
From Siam. Seeds presented by Dr. 파. . B . Smith, Department of Fisheries, Ministry of Lands and Agriculture, Bangkok. Beceived February 11, 1932.
A more or less shrubby tropical per ennial 5 or 6 feet high, with leaves composed of thick velvety pubescent leaflets, and purplish flowers 4 inches lomg in axillary racemes. Native to Upper Burma
97255. Asystasia gangetica (L.) T

Anders. . Acanthaceae.
From British Guiana. Seeds presented by J. S. Dash, director, Botanic Gardens, Georgetown. Received February 11. 1932.

A zigzag subshrub 1 to 4 feet tall, native to India. The cordate to ovate leaves are 1 to 4 inches long, and the yellow, dingywhite or dark-violet flowers are narrow be low and inflated above.

For previous introduction see $\mathbf{8 7 1 3 9}$.
97256 and 97257.
From India. Seeds presented by W. Keele, Himalayan Research Institute, Nagar Kulu, Punjab. Received February 11. 1932.
97256. Citrus limonia Osbeck. Rutacese.

Lemon.
A thick-skinned lemon collected t Taklesh, Rampur.

97258. ZeLkOVA FORMOEANA Haygata Ulmaceae.
From Japan. Seeds presented by F. Sbebi director, Government Research Institute, Department of Forestry, Taihokz, Tal wan. Received February 12, 1932.
Collected in the Sinchiku Prefectare, Taiwan. This resembles Zelkova acumb nata, differing chiefly in the shape of time achenes, which have less prominent max gins. It is a somewhat elmlike tree with leathery narrow leaves of variable shape, up to 4 inches long. Native to Taiwan.
97259. Oryza Latifolia Desv. Poaceae.

IRice.
From Cuba. Seeds presented by $\mathrm{iDr}_{\mathrm{D}}$ D. ILC Van Dine, local director Thopical Piant Research Foundation, Central Baraguf. Baraguá. Received February 10, 1932.
Collected November 20, 1931, at Ingenio Jababo, Oriente Province.

For previous introduction :and description see 95596 .

## 97260 to 97265.

From the West Indies. Scions collected \&y David Fairchild and P. H.: Dorsett, agrcultural explorers, Bureau of .Plant Im-

## 97260 to 97265-Continued

dustry, with the 1931-32 Allison V. Armour expedition. Received February 8, 1932.

From the Dominica Botanic Garden, Dominica, Leeward Islands. Presented by F. G. Harcourt, agricultural curator and superintendent, Agricultural Department, January 29, 1932.

97260 to 97264. Citrus spp. Rutaceae.
97260. Citrus aurantium L.

Seville orange.
No. 2714.
97261 to 9 '7264. Citrus aurantifolia (Christm.) Swingle.

Lime.
97261. No. 2708. Harcourt Hybrid No. 29. A cross between the Woglum lime (F.P.I. 29110), which Mr. Woglum sent from India in 1910 , and the West Indian lime. The hybrid is resistant to withertip and yet retains the superficial character of the West Indian lime.
97262. No. 2709. Harcourt Hybrid No. 42. This hybrid is larger than No. 2708 ( 97261 ), has the shape of a lemon and has the flavor of a lime. From the lime-breeding station, Rossau Valley, Dominica.
97263. No. 2712. A hybrid lime, a cross between the West Indian lime and Citrus aurantifolia.
97264, No. 2713. A hybrid between the Woglum lime and the West Indian lime. It is shaped like the Woglum, but is smaller and has the fiavor of a lime.
97865. MANGIFLRA INDICA L. Anacardiaceae.

Mango.
No. 2710. Said to be the wild mango from India. May prove of value as a stock.
97266 to 97279.
Erom France. Plants purchased from $E$. Turbat \& Cie., Orleans. Received February 10, 1932.
97866. BERCHEMIA LINEATA (L.) DC. Rhamnaceae.

Supplejack.
A diffuse shrub with somewhat twining branches, native to China. The Droadly orbicular leaves are 1 inch long, and the small flowers, in clusters of two or three in the axils of the leaves at the ends of the branches, are followed by fieshy ovoid blue fruits one quarter inch long.
97267. BHBCHEMIA RACEMOSA Sieb. and Zucc. Rhamnaceae.

Japanese supplejack.
A deciduous twining shrub with ovate leaves 1 to 3 inches long and large terminal panicles of greenish flowers followed by small ellipsoidal berries which at first are red and later change to black. It is native to Japan.

For previous introduction see 86875 .
87868. BIGNONIA sp. Bigmoniaceae.

Trumpetcreeper.
Mnve. Gallen. A form with salmon-red flowers.
97268 to 97276. CEANOTHUS sp. Rhamnaceae.
97269. Albert Pittet. A variety with pink flowers.

## 97266 to 97279 -Continued

97270. Charles Detriche.

A variety with dark-blue flowers.
97271. Gladiateur.
97272. Indigo. A variety with indigoblue flowers.
97273. Perle Rose. A variety with nice carmine-rose flowers.
97274. Ringuet-Guindon.
97275. Richesse. A variety with pure rose flowers.
97276. Roseus carmineus. A variety with carmine-pink flowers.
97277. LigUSTRUM CHENAULTII. Hickel. Oleaceae.

Privet.
A deciduous shrub or small tree, closely related to $L$. compactum, native to southwestern China. The branchlets have conspicuous white lenticels, the lanceolate leaves are about 1 foot long, and the small white flowers are followed by bluish-black fruits.
97278. LIGUSTRUM JAPONICUM Thunb. Oleaceae.

Japanese privet.
Mme. H. Lemoine.
97279. Philadelphus limoinei Lemoine. Hydrangeaceae. Lemoine mockorange.
Coup d'Argent.

## 97280 to 97291.

From the West Indies. Seeds collected by David Fairchild and P. H. Dorsett, agricultural explorers, Bureau of Plant Industry, with the 1931-32 Allison V. Armour expedition. Received February 8 , 1932.

97280 to 97290 . Phoenicaceae. Palm.
97280. BaCtris pavoniana Mart.

No. 2648. Collected January 26, 1932, in Blubber Valley, Antigua, Leeward Islands. A beautiful palm, 50 feet tall, with feathery leaves more striking than those of the Royal palm. The trunks of old trees are smooth, but those of young trees are covered with bands of black spines which later fall off. The leaves are also armed with black spines. The fruit is as large as a walnut. This is apparently an almost extinct species. Blubber Valley is the only place where it is found.
97281. BENTINCKIA NICOBARICA (Kurz) Beccari.
No. 2707. Collected January 29, 1932, in the Botanic Garden, Dominica, Leeward Islands. A very tall slender feather palm, 60 to 70 feet high and only 9 inches in diameter at the base. Native to Nicobar Islands, India.
97282. RHYTICOCCOS AMARA (Jaca.) Beccari.
No. 2702. Collected in the Botanic Garden, Dominica, January 29, 1932. A tall slender, perfectly straight, feather palm 50 feet high with leaves 15 feet long, The golden-yellow fruits, 2 inches long by $11 / 2$ inches wide, are covered with a pulp flled with long fibers. This pulp ferments easily and develops butric acid. The seed is large and of the characteristic coconut * shape.

## 97280 to 97291 -Continued

97283. Coccothrinax sp.

No. 2597. Collected January 15, 1932, at Great Inagua, Bahamas.
97284. Euterpe moulis Mart.

Para palm.
No. 2703. Collected January 28, 1932, in the Botanic Garden, Dominica. A palm, native to Brazil, 40 feet high, with a slender inclined trunk pinnate leaves, and fruits the size of marbles. A nutritious beverage is made by the natives from the fibrous flesh surrounding the seeds.

For previous introduction see 79539. 97285. Euterpe sp.

No. 2711. Collected February 2, 1932, at Bar de l'Isle, St. Lucia, Windward Islands. A slender undergrowth palm, 30 to 40 feet tall and 3 inches in diameter. The pinnae are long and delicate, and the rachis and petiole are dark reddish green. The inflorescence varies from nearly white to cerise; the fruit is shining black.
97286. Roystonea oleracea (Jacqu). O. F. Cook.

No. 2676. Collected January 31, 1932, at Mount Joy, Dominica, the home of Stephen Haweis. The great Royal palm of South America, also called the cabbage palm. It grows to a height of 130 feet, with a diameter of $21 / 2$ feet, and is a far statelier palm than $R$. regia, which is usually grown in Florida. There is a question as to whether this glorious palm is really in culture in Florida; what goes under this name may be a hybrid of the two species.

## 97287. Pinanga kuHlii Blume.

No. 2677. From the Botanic Garden, Dominica, January 29, 1932. A stout rapid-growing palm native to the lower altitudes of western Java, becoming 16 to 25 feet high. with annulate stems 2 inches in diameter. reddish when young, and beautiful terminal fronds with pinnate blades 4 feet long and half as wide. This is one of the hardiest species of Pinanga known.

For previous introduction see 81689 .
97288. PTYCHOSPERMA MACARTHURI Wendl.
No. 2678. Collected in the Botanic Garden, Dominica, January 29, 1932. A palm, native to Australia, which grows to a height of 30 feet, but is usually a dwarf in cultivation with suckers from the base, making a bushy plant. The smooth-ringed trunk is $\underset{\text { crowned by a dense cluster of pinnate }}{\text { leaves with arching leaflets } 6 \text { to } 9}$ leaves with
inches long.

For previous introduction see 93417. 97889. Sabal Glabra (Mill.) Sarg. (S. adansoni Guerns.).

Bluestem palmetto.
No. 2671. From the Botanic Garden, Dominica. January 28, 1932. An attractive palm 30 feet high. The smooth tapering trunk is marked at regular intervals with scars.
97290. Sabal glaucescens Lodd.

Palmetto.
No. 2670. Collected January 26 1932, in the Botanic Garden, Antigua,

## 97280 to 97291 -Continued

Leeward Islands. A handsome palm 40 to 50 feet high with fan-shaped leaves 5 to 7 feet in diameter on petioles 8 feet long.

For previous introduction see 66238.
97291. Maytenus reynosioides Urb. Celastraceae.
No. 2613. Collected January 18, 1932, on dry rocks on Beata Island, Dominican Republic. A shrub 10 to 15 feet high with stout branches and spirally alternate obovate leaves one third inch long. The small brownish flowers, solitary in the axils, are followed by orange fruits one fourth inch in diameter which open upon drying and show an attractive glistening white arillus.

97292 to 97296. Aizoaceae.
From Africa. Seeds presented by C. Starke \& Co., Ltd., Mowbray, Cape Town, through Mrs. C. I. DeBevoise, Greens Farms, Conn. Received February 11, 1932.
97292. GLotitiphyllum DiPRESSUM (Haw.) N. E. Brown (Mesembryanthe mum depressum Haw.). Figmarigold.
A stemless prostrate succulent, native to southern Africa, with narrow tongueshaped, recurved-depressed acute leaves, and yellow flowers with petals somewhat recurved.

For previous introduction see 79484.

## 97293. Glottiphyllum sp.

## 97294. Hereroa stanleyil Hort.

A name for which a place of publication and a description have not been found. A trade catalog describes it as producing an abundance of yellow flowers.
97295. Punctillaria magnifipunctata N. E. Brown.

A plant forming clumps of 3 to 4 inches high. The leaves, normally in one or two pairs, are very stout, ascendingspreading, 1 to 3 inches long and up to an inch thick at the base, enlarging above, nearly flat on the face, convex, and bluntly keeled on the back. Native to the Karoo region of southern Africa.
97296. Punctillaria nobile Hort.

A name for which a place of publication and a description have not been found. A trade catalog describes it as a handsome stemless succulent with large bright-yellow flowers.

## 97297 to 97302.

From Africa. Scions presented by J. B. Plessis, Chef du Jardin d'Essais, Sifax, Tunisia. Received February 11, 1932.
97297. Ceratonia siliqua L. Caesalpiniaceae.

Carob.
97298 to 97301 . Malus spp. Malaceae.
Apple.
97298. Malus sp.

Aigre.
97299. Malus sp.

Halou (Douce).
97300. Malus sp.

Meski.

## 97297 to 97302 -Continued

97301. Malus sp.<br>Mesteri (de Monaster).

97302. Prunus armeniaca L. Amygdalaсеае.

Apricot.
Amor Leuch.
97303 to 97305. PistacIa spp. Anacardiaceae.
From Palestine. Seeds presented by the Jewish Colonization Association, Haifa, at the request of Prof. R. W. Hodgson, University of California. Received February $2,1932$.
87303. Pistacia Lentiscus L. Lentisk.

A wild shrub common in the Mediterranean regions where it grows on poor soil and withstands severe drought. It produces a gum used by the Arabs as a perfume; and an edible oil known as shinia, used as a substitute for olive oil, is obtained from the berries.

For previous introduction see 54694.
97304. Pistacia mutica Fisch. and Mey. Terebinth.
A deciduous tree up to 35 feet high, with pinnate foliage. It is sometimes used as a stock for Pistacia vera. Native to the eastern Mediterranean region.

For previous introduction see 81355.
97305. Pistacia terebinthus palestina (Boiss.) Engl.
A small tree or bush from 4 to 6 feet high, which grows in limestone soil up to 2,000 feet altitude in the eastern Mediterranean region. It is used as a stock on which to graft the better varieties of cultivated pistache.

For previous introduction see 95068.

## 97306 to 97316.

From the West Indies. Seeds collected by Davíd Fairchild and P. H. Dorsett, agricultural explorers, Bureau of Plant Industry, with the 1931-32 Allison $V$. Armour expedition. Received February 2, 1932.
97306. BRADBURYA VIRGINIANA (L.) Kuntze (Centrosema virginianum Benth.). Fabaceae.

Piedmont butterfly-pea.
No. 2594. Collected on Spanish Wells Island, Bahamas, January 10, 1932, A long-podded vigorous legume found climbing over bushes, similar to the rice bean.
97307. Columbrina ferruginosa Brongn. Rhamnaceae.
No. 20. Collected on Rum Key, Bahamas, January 7, 1932. A low tree with rusty tomentose branchlets, ovate to oblong entire leaves 6 inches long, yel-lowish-green flowers in umbellike clusters, and small black fruits with shining black seeds. It is native to the West Indies.

For previous introduction see 90909.
97308. Crotalaria pumila Orteg. Fabaceat.
No. 2588. Collected January 11, 1932, at Gun Point, Eleuthera Island, Bahamas. A low-spreading vigorous shrub with yellow flowers, found growing wild in cleared spaces.

## 97306 to 97316 -Continued

97309. Datura chlorantha Hook. Solanaceae.
No. 2587. Collected January 11, 1932, on Spanish Wells Island, Bahamas. A small tree or bush with very fragrant double yellow flowers, followed by pods covered with blunt spines.
97310 and 97311. Dolicholus minimus (L.) Medic. Fabaceae.

A legume which may have value as a green manure.
97310. No. 2615. Collected January 18, 1932, on the wind-swept side of Beata Island, Dominican Republic.
97311. No. 11. Collected January 4, 1932, on Cat Island, Bahamas.
97312. Galactia spiciformis Torr. and Gray. Fabaceae.
No. 2593. Collected January 11, 1932. at Gun Point, Eleuthera Island, Bahamas. A wild species with blue flowers found growing over stumps and scrub in the hammock at Gun Point.
97313. Galactia sp. Fabaceae.

No. 25. Collected January 15, 1932, on Salt Pond Hill, Great Inagua, Bahamas. A strong growing vine with pinkpurple flowers.
97314. Mimosa baHamensis Benth. Mimosaceae.
No. 21. Collected on Rum Key, Bahamas, January 7, 1932. An ornamental shrub or small tree with very small compound leaves and numerous thin redbrown seed pods about one-half inch wide and 2 to 3 inches long.
97315. Phasfolus Lathyroides I. Fabaceae.
No. 28. Collected January 15, 1932 on Salt Pond Hill, Great Inagua, Bahamas. A legume with brown-red flowers.
97316. JACQUINIA ARMILLARIS Jacq. Theophrastaceae.
No. 2623. Collected on Saona Island, Dominican Republic, January 20, 1932 . A tree growing near the coast with a trunk mottled gray and dark brown. The large thick coriaceous leaves are light green, and the spikes of fragrant white flowers scent the air with a delicate perfume.

## 97317 to 97323.

From Mexico and Chile. Seeds collected by H. G. MacMillan and C. O. Erlanson, Bureau of Plant Industry. Received February 13, 1932.
Nos. 97313 to 97320 were bought in the market at Santiago, Chile, January 11, 1932.
97317. Citruluus vulgaris Schrad. Cucurbitaceae.

Watermelon.
No. 6. Sandia del Pais. A round melon with green skin; said to be a native variety.
97318. CUCUMIS MELO L. Cucurbitaceae.

Melon.
No. 7. Melon del Pais. Said to be a native variety.
97319. LENS ESCULENTA Moench. Fabaсеае.

Lentil.
No. 4.

## 97317 to 97323-Continued

97320. Lens esculenta Moench. Fabaceae.

Lentil.
No. 5. A larger type than No. 4.
97321. LYcopersicon esculentum Mill. Solanaceae.

Tomato.
No. 1. From Acapulco, Mexico, December 17, 1931. A small round red tomato, $11 / 2$ to 2 inches in diameter; bought in the market.
97322 and 97323. Phaseolus vulgaris L. Fabaceae.

Common bean.
Bought in the market at Santiago, Chile, January 11, 1932.
97322. No. 2. A tan-colored bean.
97323. No. 3. A gray bean.

## 97324 to 97329.

From China. Seeds collected by the Forrest expedition, 1930-32, to southwestern China and presented by Maj. Lionel de Rothschild, London, England. Received February 13, 1932.
97324. Litsea sp. Magnoliaceae.

No. 29966.
97325. Litsea sp. Magnoliaceae.

No. 29970.
97326. MANGLIETIA FORRESTII W. W. Smith. Magnoliaceae.
No. 30430. A tree sometimes 50 feet high, with rather stiff oblong-lanceolate acuminate leaves about 9 inches long and fragrant white flowers with nine or ten oblong sepals 2 to 3 inches long. Native to Yunnan, China. This Manglietia is closely allied to M. fordiana, a species from southeastern China.
97327. Quencus sp. Fagaceae. Oak. No. 30404.
97828 and 97889. THEA FORRBSTII Diels. Theaceae.
For previous introduction and description see 95560 .
97328. No. 29721.
97329. No. 29721-a.

97330 to $97332 .^{\circ}$ Hordeum vulgare cohleste L. Poaceae.

Six-rowed barley.
From Japan. Seeds presented by T. Mizuuchi, director, Agricultural Experiment Station, Fukuoka. Received February 15, 1932.
Motimugi (Dagomugi). A collection of barley with waxy endosperm, introduced for the use of Department specialists.
97880. No. 1. Purple seed.
97881. No. 2. Purple seed.
97882. No. 3. White seed.
97333. (Undetermined.)

From Africa. Seeds presented by W. L. Thompson, M. D., Mount Silinda, Southern Rhodesia. Received February 10, 1932.

Purchased in the market at Victoria, Southern Rhodesia. A fruit which consists of small nuts growing on a coblike receptacle, like kernels of corn on a cob.
97334. SEVERINIA BUXIFOLIA (Poir.) Ten. (Atalantia buxifolia Oliver). Rutaceae.
From China. Seeds presented by G. Weidman Groff, Lingnan University, Canton. Received February 15, 1932.
No. 69. Collected January 11, 1932, near Pakhoi.

For previous introduction and description see 96477.
97335 to 97338 . ANANAs spp. Bromeliaceae.

Pineapple.
From Brazil. Plants presented by F. C. Camargo, Estacão de Pomicultura de Deodoro, Rio de Janeiro. Received February 15, 1932.
97335. ANANAS SATIVUS BRACTRATUS (Lindl.) mez.
No. 29/31. A wild pineapple, very abundant in the eastern part of Brazil. The fruits are cylindrical, about 4 inches in diameter and 6 inches long.
97336 to 97338 . ANANAS SATIVUS Schult. f.
97336. No. $11 / 31$. Microcephalus. From São Paulo. A dwarf form with small unpalatable fruits.
97337. No. 214/31. Luiz Carceres. From São Paulo.
97338. No. 114/31. Moura. From Matto Grosso.
97339. Soja max (L.) Piper (Glycine hispida Maxim.). Fabaceae.

Soybean.
From Japan. Seed presented by Ishimitsa \& Co., Kobe, through Tsutakawa \& Co., Seattle, Wash. Received February 16, 1932.

Daizu.
97340 to 97346. PRUNUS DOMESTICA L. Amygdalaceae.

Common plum.
From Germany. Scions presented by C. F. Rudloff, Kaiser Wilhelm Institut, Minchebe g. Received March 11, 1930. Numbered in February 1932.
97340. No. 39. Jaurus.
97341. No. 41. Adana.
97342. No. 46. Adana.
97343. No. 55. Adabayar.
97344. No. 61. Arifil.
97345. No. 62. Arifil.
97346. No. 63. Arifil.

97347 to 97353 . Pyrus spp. Malaceae.

## Pear.

From Japan. Scions collected by $P$. $\mathbf{H}$. Dorsett and W. J. Morse, agricultural explorers, Bureau of Plant Industry. Received March 12, 1930. Numbered in February 1932.

## 97347. Pyrus sp.

No. 4120. Chojuro. A midseason variety received February 15, 1930, from the Agricultural Experiment Station. Tachikawa, Tokyo.
97348. PyRUS sn.

No. 4108. Meigetsu. Received February 14, 1930, from the Saitama Ken Agrb cultural Experiment Station.

## .97347 to 97353-Continued

97349. Pyrus sp.

No. 4344. Meigetsu. A Japanese pear received from the Horticultural Institution, Department of Agriculture, Kyoto Imperial University, Kyoto, February 24, 1930.
97350. Pyrus sp.

No. 4112. Okusankichi. Received February 14, 1930 from the Saitama Ken Agricultural Experiment Station.

## 97351. Pyrus sp.

No. 4118. Shinchu. An early variety received February 15, 1930, from the Agricultural Experiment Station, Tachikawa, Tokyo.
97352. Pyrus sp.

No. 4106. Waseaka. Received February 14, 1930, from the Saitama Ken Agricultural Experiment Station.

## 97353. Pyrus sp.

No. 4119. Waseaka. Received February 14, 1930, from the Agricultural Experiment Station, Tachikawa, Tokyo. A midseason variety.
97354 to 97374 . SOLANUM TUBEROSUM L. Solanaceae.

Potato.
From the Union of Soviet Socialist Republics. Tubers presented by the Institute of Plant Industry, Leningrad. Received February 16, 1932.
A collection of potatoes developed by Dr. V. P. Alekseev, plant introducer, Sukhum Subtropical Branch of the All-Union Institute of Plant Industry, Sukhum, Caucasus.

## 97354. No. 8.

97355. No. 10.
97356. No. 25.
97357. No. 53.
97358. No. 60.
97359. No. 62.
97360. No. 66.
97361. No. 78.
97362. No. 81.
97363. No. 83.
97364. No. 89.
97365. No. 91.
97366. No. 108.
97367. No. 111.
97368. No. 114.
97369. No. 140.
97370. No. 159.
97371. No. 161.
97372. No. 172.
97373. No. 219.
97374. No. 85.

97375 to 97413. RHODODENDRON spp. Ericaceae.

From North Wales. Seeds presented by Henry McLaren, Bodnant, Tal-y-Cafn. Received February 17, 1932.
97375 and 97376. RHododendron ArboREUM J. E. Smith. Tree rhododendron.
97375. Sir Oharles Lemon.
97376. Mrs. Henry Shilson.
97377. RHODODENDRON ARBOREUM X GRIFFITHIANOM.
Beauty of Tremough.
87378. RHododmidron arboreum $\times$ THOMSONII.

## Harrisii.

97379. RHododmndron augustinii Hemsl.

An evergreen shrub up to 4 feet high,
native to Hupeh, China. The lanceolate

## 97375 to 97413 -Continued

to broadly oblanceolate leaves are 3 inches long, and the lilac-purple flowers with yellow-green spots are 2 to 3 inches across.
97380. Rhododendron baileyi Balf. f.

A small shrub up to 3 feet high, native to southern Tibet. The obovate leaves 1 to 2 inches long are closely scaly above and are very densely covered beneath with overlapping cinnamon scales. The short broad flowers, one half inch long, are red-purple with darker spots on the three upper petals and are borne in terminal racemose clusters containing up to 14 flowers.
97381. Rhododendron barbatum X thomsonil.
Shilsonii.
97382. RHODODENDRON CALLIMORPHUM Balf. and Smith.
A shrub 4 to 9 feet high, native to western Yunnan, China. The thin leathery leaves 1 to 2 inches long are elliptic to broadly ovate and are dark green above and glaucous below. The soft-rose flowers in terminal umbels of 5 to 8 are openly campanulate, and the base of the tube is somewhat pouched and is marked on the inside with a crimson blotch.
97383. RHODODENDRON CALOPHYTUM Franch.
A shrub or tree from 15 to 50 feet high, native to western Szechwan, China. The bright-green leathery leaves are 8 to 12 inches long, and the rosy-white to red flowers, 2 to 3 inches long, are borne in loose racemose clusters of up to 30 .
97384. Rhododendron calostrotum Balf. and Ward.
A low shrub 1 foot high, native to southern Burma. The obovate leaves 1 inch long are densely covered above with greenish scales, and the lower surface is pale red with numerous flaky scales. The widely funnel-shaped flowers, 1 inch long, are bright red purple and are borne in pairs at the ends of the branchlets.
97385. RHODODENDRON CAMPYLOCARPUM $\times$ GRIFFITHIANUM.
Penjerrick.
97386. RHODODENDRON CAMPYLOGYNUM Franch.
A shrub up to 6 feet high, native to western Yunnan, China. The thick obovate leaves are an inch in length, and the widely companulate rose-purple to almost black-purple flowers, 1 inch long, are borne in terminal clusters of one to three.
97387. RHododendron charitopes Balf. and Farrer.
A low shrub 1 foot high, native to Upper Burma, India. The obovate, bluntly mucronate leaves, 1 to 2 inches long, nre glabrous above and glaucous and densely scaly beneath. The broadly tubular flowers, 1 inch long, are clear appleblossom pink speckled with crimson and are borne in threes at the ends of the branchlets.
97388. RHODODENDRON CHARTOPHYLLUM Franch.
Variety praecox. A form in which the leaves are completely deciduous.

## 97375 to 97413-Continued

97389. RHODODENDRON CILIATUM Hook. f. Fringed rhododendron.
A Himalayan rhododendron of somewhat dwarf habit, bearing many snall loose trusses of pink-white flowers less than 3 inches wide. It rarely exceeds 6 feet in height.

For previous introduction see 68343.
97390. Rhododendron cuneatum W. K? Smith.
A small shrub 4 feet high with ellip-tical-oval leaves, silky brown beneath, and deep layender flowers.

For previous introduction see 59254.
497391. RHODODENDR@N DAVIDSONIANUM Rehd. and Wils. Davidson rhododendron.
A shrub up to 10 feet high, native to western China, with semi-evergreen oblong leaves 1 to 3 inches long, glaucous beneath, and terminal and axillary clusters of lavender-pink flowers an inch across, somewhat resembling those of the nearly related $R$. mucronulatum.

For previous introduction see 78329.
97392. RHODODENDRON

FDGEWORTHII Hook. f.
A shrub often epiphytic, 4 to 6 feet high, native to the Himalayas in Sikkim, India. The elliptic-ovate leaves, 4 inches long, are strongly bullate above and densely cobwebby tomentose beneath. The fragrant white or pink-tinged flowers are broadly tubular and 3 to 4 inches long.
97393. Refododmndion fortunei Lindl.

A shrub 10 to 12 feet high, native to Chekiang, China. The oblong-elliptic leaves, 3 to 10 inches long, are dark green above and pale glaucous green beneath. The inflorescence is a loosely racemose umbel of 6 to 12 funnel-campanulate, pale-rose flowers 3 to 4 inches across.
97394. RHODODEMDRON Balf. and Smith.
A shrub 3 feet high which grows in swampy meadows. The small ellipticalelongate leaves are pale yellow beneath, and the flowers are rich lavender blue.

For previous introduction see 59615.
97895. RHOdodmidion insigne Hemsl. and Wils.
A shrub 5 to 12 feet high, native to Szechwan, China. The leathery oblong to oblanceolate leaves, 3 to 6 inches long, are glabrous and dark green above und are covered beneath with a shining tawny-gray tomentum that has a coppery sheen. The flowers, a cluster of eight or more in a short lax corymb, are widely campanulate, 2 inches long, and various shades of pink with crimson spots on the inside.
97396. Rhododendzon loderi Millais.

King George. A hybrid between $R$. fortunei and R. griffthianum.
97897. RHODODENDRON MADDINI Hook. f.

A shrub 6 to 8 feet high with redstemmed dark-green leaves. The large delicately fragrant flowers, tinged with rose, are produced in threes at the ends

## 97375 to 97413-Continued

of the branches. Native to the Himalayas.

For previous introduction see 68345.
97398. RHododendron mollicomum Balf. and Smith.
A small shrub with softly pubescent branchlets. native to Yunnan, China. The narrowly lanceolate leaves, 1 inch long, are softly pubescent on both surfaces and are also scaly beneath. The narrowly tubular crimson flowers, pubescent outside, are in axillary pairs crowded near the ends of the branchlets.
97399. RHododendron orbiculart Decaisne.
A much-branched shrub 6 to 9 feet high and 10 to 13 feet broad, native to Szechwan, China. The orbicular leaves are cordate-auriculate at the base with the lobes overlapping and are bright green above and glaucous-papillate beneath. The rosy campanulate flowers, 2 to 3 inches long, are borne in a loose corymb of 7 to 10 .
97400. RHODODENDRON RACEMOs UM Franch. Mayflower rhododendron.
An upright Chinese shrub up to 6 feet high, with scaly branchlets, elliptic to obovate leaves which are glabrous above and glaucous beneath, and few-flowered clusters of pink flowers, so abundantly produced as to completely cover the plant.

For previous introduction see 86761.
97401. RHododendron reticulatum D. Don.
For previous introduction and description see 96525.
97402. RHODODENDRON ROYLEI Hook. 1 . (R. cinnabarinum Hook. f.).

The flowers of this evergreen shrub, produced in terminal heads, are usually a dull cinnabar red, but in some forms the corolla is orange red on the outside and yellowish within. It is native to the mountainous region of Sikkim and Bhutan, India.

For previous introduction see 58928.
97403. Rhododindron souliei Franch.

A shrub 6 to 12 feet high, native to western Szechwan, China. The leathery leaves are broadly ovate to orbicular, 2 to 4 inches long, dark green above and light glaucous green beneath. The sau-cer-shaped, white to deep-rose flowers, 2 inches across, are borne in racemose umbels of five to eight.
97404. RHododendron spinulifmerum $\times$ racemosum.

## Spinulosum.

97405. Rhododendron strigillostm Franch.
A shrub 8 to 20 feet high, native to Szechwan, China. The oblanceolate leaves. 3 to 6 inches long, are bright green and smooth above and clothed beneath with scattered crisped hairs, except the prominent midrib, which is covered with loose tawny tomentum. The fleshy tubularcampanulate, deep-red flowers, 8 to 12 in an umbel, are nearly 2 inches long and 2 inches across.

## 97375 to 97413 -Continued

97406. RHODODENDRON SUTCHUENENSE Franch.
A shrub 3 to 10 feet high, native to southwestern China. The narrowly elliptical to oblanceolate leaves, 4 to 10 inches long, are smooth and dark green above and pale and smooth beneath except the midrib, which is covered with a loose woolly tomentum. The widely campanulate flowers, 2 to 3 inches long, are rose piak, spotted deeper rose inside, and are borne in a dense corymbose raceme.
97407. RHODODENDRON THOMSONII $\times$ FORTUNEI.
97408. RHODODENDRON THOMSONII $\times$ GRIFFITHIANUM.
Cornish Cross.
97409. RHODODENDRON WASONII Hemsl. and Wils. (R. rhododactylum. Hort.).
A shrub 4 feet high, native to western Szechwan, China. The ovate leaves, 2 to 4 inches long, are dark glossy green above and are clothed beneath with a umiform scurfy felt which is white on the young leaves, but turns later to a bright brown or rusty red. The funnelcampanulate flowers, 2 inches long, are pinkish in this form, but are creamy yellow in the typical form.
97410. RHODODENDRON WILLIAMSIANUM Rehd. and Wils.
A shrub 3 to 5 feet high with horizontal branches, native to Szechwan, China. The leathery cordate leaves, 2 inches long, are bright green above, and the lower surface is glaucous, papillate and punctulate with small glands and hairs. The three to five campanulate flowers, 2 inches long, are pale rose without spots.
97411. Rhododendron YuNNANENSE Franch.

Yunnan rhododendron.
A low shrub, 6 feet or less high with narrowly elliptic, somewhat hairy leaves, and few-flowered clusters of broadly fun-nel-shaped flowers, white with the upper lobes spotted blood red. Native to Yunnan, China.

For previous introduction see 94131. 97412. RHODODENDRON sp.

Oarylons Cross.
97413. RHODODENDRON sp.

Related to $\boldsymbol{R}$. mollicomum.
97414 to 97422 . ZEA MAYS L. Poaceae. Corn.
From Australia: Seeds presented by Dr. H. Wenholz, director of plant breeding, Department of Agriculture, Sydney, New South Wales. Received February 18, 1932.

A collection of Fitzroy corn from the Grafton Experiment Station, New South Wales, introduced for the use of Department specialists.
97414. No. 368-a-1-2-1-1.
97415. No. 368-a-1-2-1-2.
97416. No. 368-a-1-2-1-8.
97417. No. 200-b-3-1-1
97418. No. 372-a-1-1-1-5.
97419. Line C.
97420. Line E.

## 97414 to 97422-Continued

97421. Line 200-b-5-1-1.

97422, Line 200-b-1-1-3.
97423 to 97490 . Prunus spp. Amygdalaceae.

From the Union of Soviet Socialist Republics. Seeds presented by V. P. Alekseev, plant introducer, Sukhum Subtropical Branch of the All-Union Institute of Plant Industry, Sukhum, Caucasus. Received February 18, 1932.
Collected from various parts of the Caucasus region. Introduced for the use of Department specialists.

97423 to 97485. Prunus CErasifera divaricata (Ledeb.) C. Schneid. Plum.
F.P.I. $\stackrel{\text { Lenin- }}{\text { grad }}$ No. No.
97423. 10970.
97424. 31339.
97425. 31342.
97426. 31345.
97427. 37246.
97428. 37247
97429. 37248.
97430. 37249.
97431. 37250.
97432. 37251.
97433. 37254.
97434. 37255.
97435. 37256.
97436. 37257.
97437. 37262.
97438. 37263.
97439. 37266.
97440. 37268.
97441. 37272.
97442. 37295.
97443. 37296.
97444. 37297.
97445. 37298.
97446. 37299.
97447. 37300.
97448. 37301.
97449. 37302.
97450. 37303.
97451. 37304.
97458. 37305.
87453. 37319.

97454, 37320.
F.P.I. $\quad \underset{\text { grad }}{\text { gran }}$

No. No.
97455. 37321.

97456, 37328.
97457. 37329.
97458. 37330:
97459. 37335.
97460. 37339.
97461. 37340.
97462. 37341.
97463. 37342.
97464. 37343.
97465. 37344
97466. 37345.
97467. 37353.
97468. 37357.
97469. 37358.
97470. 37369.
97471. 37370.
97472. 37383.
97473. 37384
97474. 37394.
97475. 37397.
97476. 37399.
97477. 37400.
97478. 37404.
97479. 37410.
97480. 37412.
87481. 37434.
97482. 37435.
97483. 37436.
97484. 37438.
97485. 37439.
97486. Prdnts domestlca $\times$ armbniaca.

No. 37797. A natural hybrid of the prune and apricot.
97487 to 97490. Prunus CERASIFERA DIvaricata (Ledeb.) C. Schneid. Plum.
97487. Leningrad No. 41200. Round black. A large tree nearly 25 feet high with slightly oval, mediumsized fruits of dark violet color which become almost black at ma-

## 97423 to 97490-Continued

turity; the flesh is yellowish red with a mild, very pleasant subacid flavor. The fruits make an excellent jelly.
'97488. Leningrad No. 41340.
97489. Leningrad No. 41341.
97490. Leningrad No. 41344.
*97491. JUbaEOPSIS CAFFRA Beccari. Phoenicaceae.

Palm.
From the Union of South Africa. Seeds presented by E. Percy Phillips, principal botanist, Department of Agriculture Pretoria. Received February 18, 1932.
A southern African palm up to 20 feet high, with leaves 12 to 15 feet long. The edible fruits, about the size of walnuts, differ from those of Cocos by the position of the germinating holes which, in the latter genus, are situated near the base of the nut, but in Jubaeopsis near its equator. The endosperm is hollow, as in the coconut, but without milk.

For previous introduction see 41484.
:97492. Cassia diphylla L. Caesalpiniaceae.

From Puerto Rico. Seeds presented by Robert R. Davis, plant breeder, Agricultural Experiment Station, Mayaguez. Received February 24, 1932.
A much-branched herbaceous plant, 1 to 2 feet high, native to tropical America. The :single pair of leaflets, 1 inch long, are obliquely obovate, and the yellow flowers :are borne in axillary clusters. Of possible value as a green-manure or cover crop.

## :97493 to 97517.

From England. Plants purchased from Hillier \& Sons, Winchester. Received February 19, 1932.
:97498 to !87509. Acme spp. Aceraceae.
Maple.
:97493. Acer nufinerve Sieb. and Zucc.
Albo-limbatum. A form having leaves with a broad margin of white spots.
:97494. Acer barbinerve Maxim.
A shrubby maple, native to Manchuria, with coarsely toothed 5 -lobed leaves.

For previous introduction see 95545. c97495. Acer Carpinifolium Sieb. and Zace.

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

For previous introduction see 95540 . 97496. Acer circinatum Pursh.

## Vine maple.

A shrub or small tree up to 40 feet high, with bright-green 7- to 9 -lobed leaves 3 to 4 inches across, cordate at the base and doubly serrate on the margins. The purple and white flowers are in corymbs of 6 to 20 and are followed by winged fruits which spread horizontally. It is native to northwest America.

## 97493 to 97517-Continued

97497. ACER CISSIFOLIUM (Sieb. and Zucc.) Koch.
A Japanese maple of compact rounded habit becoming 30 feet or more high, with leaves composed of three leaflets $u p$ to 4 inches long. The minute flowers are produced in May with the leaves, and the keys, about 1 inch long, occur in long racemes. In autumn the foliage turns red and yellow.

For previous introduction see 95546.
97498. ACEr davidi Franch.

A native Chinese maple, 50 to 60 feet high, with large oval heart-shaped coarsely toothed leaves and long pendent clusters of samaras.

For previous introduction see 71176. 97499. Acer diabolicum Blume.

Devil maple.
A tree up to 30 feet high, with 5lobed leaves 4 to 8 inches across, the broadly ovate lobes being coarsely and remotely dentate. The racemes of yellow flowers are followed by winged fruits with bristly nutlets. It is native to Japan and closely resembles A. francheti of central China.

For previous introduction see 81726 .
97500. Acer griseum (Franch.) Pax.

Paperbark maplo.
A handsome maple, native to western China, which becomes 30 feet high under favorable conditions. The leaves are trifoliolate. The striking feature of this maple is the cinnamonbrown papery bark which flakes oft like that of the river birch.

For previous introduction see 77821. 97501. Acer Lobelit Ten.

A tree up to 60 feet high, with ascending branches and glaucous branchlets, related to the Coliseum maple, Acer cappadocicum, and also a native of Italy. The leaves, 4 to 6 inches across, are usually divided into flive long-acuminate lobes and are dark green above and slightly paler beneath. The corymbs of small flowers are followed by winged fruits which spread at a wide angle.
97502. ACER MAXIMOWICzII Pax.

A small tree, native to central China, with 3 - to 5 -lobed leaves 2 to 3 inches long. the lobes doubly serrate and the middle one much elongated into a taillike appendage. The flowers are borne in racemes and are followed by wideangled winged fruits on slender pedicels.
97503. Acer miyabei Maxim.

A deciduous tree, native to Japan, 30 to 40 feet high, with a trunk 18 inches in diameter, deeply 3-lobed leaves, downy yellow flowers in corymbs 2 to 3 inches long, and keys up to an inch long.

For previous introduction see 80268.
97504. ACER NIKOENSE (Miquel) Maxim.

A tree up to 40 feet high, native to Japan and central China, with attractive foliage somewhat like the boxelder, which becomes brilliant red or purple if the autumn.

For previous introduction see $\mathbf{9 5 5 4 1}$.

## 97493 to 97517 -Continued

97505. Acer oblongum Wall.

A subtropical maple which becomes 40 to 50 feet high, with a trunk 1 to 2 feet in diameter and dark-green oblong entire leaves up to 7 inches long. The reddish wood is used for making agricultural implements.

For previous introduction see 93172. 97506. ACER RUBRUM TOMENTOSUM Kirch.

Red maple.
A form of the red maple, with 5lobed leaves, pubescent beneath, and bright-red flowers.
97507. A Cifr tetramerum betulifoliUM (Maxim.) Rehder.
A form distinguished from the type by its glabrous, slightly lobulate, ovate to oblong-ovate leaves and by the broader wings of the fruits. It is native to China.
97508. ACER TETRAMERUM TILIIFOLIUM Rehder.
A form distinguished from the type by the cordate leaves, five-nerved at the base, and resembling those of a smallleaved linden. It is native to Szechwan, China.
97509. Acer triflorum Komarov.

A tree up to 25 feet high, with glabrous branchlets. The leaves are made up of three oblong-lanceolate leaflets with entire or coarsely toothed margins, and the flowers, in groups of three, are followed by densely pubescent fruits having wide-spreading, nearly straight wings about 2 inches long. It is native to Chosen and Manchuria.

For previous introduction see 90655.
97510. Eucryphia glutinosa (Poepp. and Endl.) Focke (E. pinnatifolia Gay). Eucryphiaceae.
An evergreen shrub from 3 to 10 feet high, which is particularly attractive because of its large white flowers, 2 to 3 inches across, not unlike a large single rose with a tuft of stamens in the center. It does best in rather moist situations protected from the strongest rays of the sun.

For previous introduction see 62008.
97511 to 97513 . Lonicera spp. Caprifoliaceae.

Honeysuckle.
97511. Lonicera thibetica Bur. and Franch.

Tibetan honeysuckle.
A shrub up to 5 feet high, with widespreading slender, often-procumbent branches. The oblong-lanceolate leaves, 1 to 2 inches long, dark green and glossy above and white tomentose beneath, are usually opposite, but sometimes are in whorls of three. The palepurple tubular-funnelform fragrant flowers are about half an inch long and are followed by red fruits. It is native to Tibet and western China.
97512. Lonicera trichosantha Bur. and Franch. Slender honeysuckle.
A robust deciduous shrub 8 feet high, native to Szechwan, China. The whole plant has a rounded dense leafy habit and a pale grayish aspect. The dull gray-green leaves are paler beneath, and the pale-yellow flowers fade to a deeper shade. The berries are red.

For previous introduction see 66583.

## 97493 to 97517-Continued

97513. LONiemra deflexicalyx xerou CaLYX (Diels) Rehder. (L. xerocaly, Diels).
A rare shrub 15 to 20 feet high with: horizontal branches, narrow leaves of rich green, and large rich golden-yellow flowers which appear in May and June. It is an exceedingly handsome species with small tomato-red fruits.

For previous introduction see 55956.
97514 to 97516 . Prunus serrulata Lindl. Amygdalaceae. Oriental cherry.
97514. Benifugen.
97515. Fugenzo.
97516. Albo-Pleno.
97517. Sorbus aucuraria edulis Dieck. Malaceae. European mountain ash.
A nearly glabrous form having purplish petioles and the leaflets serrate usually only above the middle. The larger fruits have a slightly acid agreeable flavor and are used for preserves.

For previous introduction see 81712 .

## 97518 and 97519.

From Algeria. Scions presented by David Lalou, Laghoust, through Oscar S. Heizer, American consul, Algiers. Received February $25,1932$.
97518. Malus sp. Malaceax. Apple.

A small yellow apple from the garden of Mr. Lalou.
97519. Pyrus sp. Malaceae. Pear.

A wild pear from the garden of Mr . Lalou.
97520. Punica granatume L. Punicaceae. Pomegranate.
From Palestine. Cuttings presented by Asaph Grasovsky, senior horticultural officer. Department of Agriculture, Forests and Fisheries, Jerusalem. Received February 25, 1932.
Red Absota, Asmais. From the Jericho Horticultural Station. A variety bearing dark-purple or black fruits which are rather attractive in appearance but inferior in quality.
97521. Podophyllum emod Wall. Berberidaceae. Himalayan mayapple.
From India. Seeds presented by the curator, Indian Museum, Industrial Section, Calcutta. Received February 27, 1932.
Collected by the divisional forest officer, Kashmir Division, Knantnag, Kashmir. A perennial herb about a foot high, native to India. It is much like our native species, with leaves 5- to 7-lobed, marbled and shaded with deep bronze in spring. The flowers are pale rose to white and are followed by egg-shaped fruits of deep reddish color.

For previous introduction see 94294.

## 97522 to 97532.

From the West Indies. Material collected by David Fairchild and P. H. Dorsett, agricultural explorers, Bureau of Plant Industry, with the 1931-32 Allison V. Armour expedition. Received February 23, 1932.

## 97522 to 97532-Continued

97b22. Ananas sativus Schult. f. Bromeliaceae.

Pineapple.
No. 2729. February 3, 1932. St. Lucia, Windward Islands. Cuttings of the Black Antigua pineapple presented by E. H. Walter, curator of the St. Lucia Botanic Garden. Said to be a small sweet pineapple of good color and tender flesh. Not recommended as a shipping pineapple, but for home use.
97523. ANNONA sp. Annonaceae.

No. 2744. Cuttings collected on Be quia, Grenadine Islands. An Annona with foliage very similar to A. squamosa, but much darker green, and brown-purple fruits, which although about the same size and general shape as those of $A$. squamosa, are much firmer and have an entirely different type of protuberances.
97524. Calathea allouia (Aubl.) Lindl. Marantaceae.
No. 2727. Llereb or topi-nambour. Collected February 2, 1932, on St. Lucia and presented by Mrs. Charles W. Doorley. A plant which produces a large number of small egg-shaped, thin-skinned tubers on its slender roots. The tubers have a delicate sweetish fiavor and are used boiled and in soup.
97525. Citrus aurantium L. Rutaceae. Seville orange.
No. 2714. Collected January 29, 1932, in the Botanic Garden, Dominica.
97526. Citrus sp. Rutaceae.

No. 2830. From Port-of-Spain, Trinidad, February 14, 1932 . A sport or hybrid with a very thin rough green-yellow skin, thick tough segment walls, and tender flesh comparable with a good grapefruit.
97527. Heliconia sp. Musaceae.

No. 2813. Collected near Grand Etang Lake at 2000 feet altitude in the mountains of Grenada, Windward Islands. A most striking and decorative species with immense floral bracts forming a curious inflorescence 2 feet long with alternate bracts 6 inches long and 2 inches wide. The bracts are vivid scarlet with golden-yellow margins. The plant requires a continuous supply of moisture and is suited for culture in ponds or water gardens where it can be shaded.
97528. KaEmpFeria ovalifolia Roxb. Zinziberaceae.
No. 2728. Resurrection lily. Roots presented by Mrs. Charles W. Doorley, St. Lucia. A gingerlike plant with orchidlike, very fragrant mauve flowers which appear at Easter time.
97529. Manihot esculenta Crantz (M. utilissima Pohl). Euphorbiaceae.

Cassava.
No. 2752. Cuttings collected February 5, 1932, on St. Vincent, Windward Islands.

For previous introduction and description see 95666 .
97530. Maranta arundinacea L. Marantaceae. Bermuda arrowroot.
No. 2759. Rhizomes collected on St. Vincent, February 5, 1932. One of the principal crops of the island. This arrowroot requires a light soil and plenty of water, but it cannot be grown

## 97522 to 97532-Continued

successfully except where there is plenty of cheap labor.
97531. (Undetermined.)

No. 2726. St. Lucia, February 3, 1932. Seeds of a tall handsome tree with large ovate leaves, glossy above, and strawcolored fruits 2 inches long which enclose large glossy brown seeds the size of chestnuts.
97532. Maba inconstans (Jacq.) Griseb. Diospyraceae.
No. 2745. Cuttings collected February 5, 1932, on Bequia, Grenadine Islands. A small attractive tree with gray bark. and large glossy leaves. The small dark berries are eaten by the children.

## 97533 to 97536.

From South America. Seeds presented by M. J. Rivero, Cali, Colombia, through C. B. Doyle, Bureau of Plant Industry. Received February 25, 1932.
97588. Aristolocila sp. Aristolochiaceae-
97534. Tibouchina sp. Melastomaceae.

A flowering shrub.
97535. Zamia sp. Cycadaceae.
97536. (Undetermined.)

A timber tree.
97537. Ceiba acuminata. (S. Wats.) Rose. Bombacaceae.

Pochote.
From Mexico. Seeds presented by H. Fred Smith, Alamos, Sonora. Received February $24,1932$.
A close relative of the kapok tree, Ceiba pentandra. A large or medium-sized tree with a spiny trunk, compound leaves, and hard oblong fruits about 7 inches long, which contain a whitish down used for stuffing pillows, life preservers, and for making candlewicks. Native to western and southern Mexico.

For previous introduction see 91619.
97538. Lycopersicon esculentum Mill. Solanaceae.

Tomato.
From Argentina. Seeds presented by E. F. Schultz, Assistant Director, Estaciór Experimental Agrícola, Tucuman. Received February 29, 1932.

Cherry tomato. A small-fruited precocious variety of the ordinary tomato, grown on the dry side of the high mountain range west of Tucuman.
97539 to 97553 . Phoenicaceae. Palm.
From the West Indies. Seeds collected by David Fairchild and P. H. Dorsett, agricultural explorers, Bureau of Plant Industry, with the 1931-32 Allison $V$. Armour expedition. Received February 23, 1932.
97539. Acanthorifiza aculeata (Liebm.) Wendl.

Rootspine palm.
No. 2797. Collected in the Botanic Garden of Grenada, Windward Islands, February 10, 1932. A palm, native to Mexico, with a trunk 30 to 40 feet high, armed at the base with spines formed of the thickened aerial roots. The orbicular fan-shaped leaves are about 5 feet in diameter on stalks 4 feet long; the flowers are dark creamy pink.

For previous introduction see 80170 .

## 97539 to 97553 -Continued

97540. ARECA Catechu L. Betel palm.

No. 2802. Collected on Grenada, February 9,1932 . The betel palm is considered one of the most graceful, bearing at the top of its trunk, 40 to 100 feet high, a large crown of pinnately divided leaves 4 to 6 feet long, the lowest usually pendulous. The ovoid smooth fruits, 1 to 2 inches in diameter, are orange yellow or scarlet, and furnish the well-known betel nut. It is native to southeastern Asia.

For previous introduction see 81583.

## 97541. PTYCHOSPERMA sp.

No. 2798. Collected at Grenada, Februbary 10, 1932. A handsome cluster palm which has pinnate leaves with obliquely truncated pinnae. The slender stems rising from a common base make this, if possible, even more attractive than the yellow palm, Chrysalidocarpus lutescens.
97542. Attalea cohune Mart. Cohune.

No. 2746. Collected in the Botanic Garden of St. Vincent, Windward Islands, February 4, 1932. A magnificent feather-leaved palm, native to the West Indies and Central America, which reaches a height of 40 feet, with leaves about 20 feet long, produced abundantly at the top of the trunk. The yellowish flowers are borne very freely, and the ovoid fruit, 2 to 3 inches long, contains the seed or nut which yields an oil of considerable value, as it is of high quality, and finds a ready sale for cooking purposes.

For previous introduction see 92891.
97543. Attalea spectabilis Mart.

No. 2840. Collected in the Botanic Garden, Port-of-Spain, Trinidad, February 13, 1932. A nearly stemless palm with large pinnate erect or spreading leaves up to 20 feet long. It is native to the banks of the Amazon in Brazil.

For previous introduction see 80175 .
97544. Tilmia sp.

No. 2735. Collected February 2, 1932 in the Botanic Garden at Bar de l'Isle, St. Lucia, Windward Islands. A slender spiny feather palm over 20 feet high which grows in the high altitudes of the mountain crests on the island of St. Lucia.

## 97545. PTYCHOSPERMA Sp.

No. 2838. Collected February 1.3, 1932 near the Government House in the Botanic Garden, Port-of-Spain, Trinidad. A spineless feather palm which forms clumps 9 feet high and has dark-red fruit.
97546. Cyrtostachys renda Blume.

No. 2834. From Port-of-Spain, Trinidad, February 15, 1932. Presented by Mrs. Fitt, daughter of Eugene André, orchid hunter and explorer of the Orinoco. Sealing wax palm. A handsome palm with scarlet leaf sheaths. A Sumatran palm of stately habit, about 25 feet high, with a slender spineless trunk crowned by a graceful cluster of pinnately divided leaves.

For previous introduction see 93406.

## 97539 to 97553 -Continued

97547. Livistona altissima Zoll.

No. 2799. Collected February 10, 1932, in the Botanic Garden, Grenada, Grenadine Islands. A graceful palm, native to the East Indies, up to 80 feet high, with fan-shaped leaves. The hardwood is valued by the natives of the East Indies for construction work.

For previous introduction see 90802 .
97548. Livistona rotundifolia (Lam.) Mart.

Java fan palm.
No. 2800. Collected in the Botanic Garden, Grenada, February 10, 1932. An erect pinnate-leaved palm, native to tropical Asia, about the same size as the coconut palm. The hard durable wood is used for general construction.

For previous introduction see 93413.
97549. Tilmia sp.

No. 2829. Collected February 13, 1932, on Trinidad. A slender palm with pinnate leaves whose pinnae are ornately truncate. The trunk and leaf petioles are covered with dark-red spines.
97550. ROYSTONEA BORINQUENA O. F.

Cook. Puerto Rico royal palm.
No. 2839. Collected February 13, 1932, at Port-of-Spain, Trinidad. A much shorter and more robust palm than either R. regia or $R$. oleracea, with a smaller seed than either.
97551. ROYSTONEA OLERACEA (Jacq.) O. F. Cook.
No. 2837. Collected in the Botanic Garden, Port-of-Spain, Trinidad, February 13, 1932.

For previous introduction and description see 97286.
97552. SABAL GLAUCESCENS Lodd.

Palmetto,
No. 2801. Collected February 10, 1932, in the Botanic Garden, Grenada, Grenadine Islands.

For previous introduction and description see 97290.
97553. Jessenia oligocarpa Griseb. and Wendl.
No. 2833. A tall, hañdsome, slender feather palm, 35 to 40 feet high, related to Euterpe. The dark-brown fruits are oval. The tree thrives on rather poor soil and seems to prefer the shade. It may be suitable as a house plant.
97554 to 97557 . Pyrus spp. Malaceae. Pear.
From India. Scions presented by His Highness Government, Jammu and Kashmir, Kashmir Province, Srinagar, through M. R. Fotidar, assistant director of horticulture. Received February 25, 1932.
Strains of the Williams pear, introduced into India from France, obtained for the use of Department specialists.

## 97554. Pyrus sp.

## Williams.

97555. Pyrus sp.

Williams; early. This is said to be the same as the Bartlett.
97556. Pyrus sp.

Williams; medium. A midseason variety resembling the Bartlett.

## 97554 to 97557-Continued

97557. PyRUs sp.

Williams; late. A late variety resembling the Bartlett.

97558 and 97559. ANANAS SATIVUS Schult. f. Bromeliaceae. Pineapple.
From Brazil. Plants presented by F. C. Camargo, Estacão de Pomicultura de Deodoro, Rio de Janeiro. Received February 29, 1932.
97558. No. 184/31. Roxo de guaratiba.
97559. No. 185/31. Verde de guaratiba.

## 97560 to 97580 .

From the West Indies. Seeds collected by David Fairchild and P. H. Dorsett, agricultural explorers, Bureau of Plant Industry, with the 1931-32 Allison V. Armour expedition. Received February 23, 1932.
97560. AERIDES LAWRENCIAE SANDERIANUM (Reichenb. f.) Sander. Orchidaceae.
No. 2762. Presented February 3, 1932, by Mrs. Charles W. Doorley, St. Lucia, Windward Islands. An erect leafystemmed orchid without pseudobulbs, native to the Philippines. A. lawrenciae has leaves 1 foot long and 2 inches broad and the fragrant white flowers, 1 to 2 inches long, are in racemes as long as the leaves. The form sanderianum differs in having narrower leaves and yellowish flowers.
97561. ANNONA RETICULATA L. Annonaceae.

Custard-apple.
No. 2744. Collected February 5, 1932, on Bequia, Grenadine Islands.
97562. Artocarpus Communis Forst. Moraceae.
No. 2715. Purchased in the market at St. Lucia, February 3, 1932. A form whose seeds are its chief attraction, as they are roasted and eaten. The pulp is also used, but is considered inferior to that of the seedless breadfruit.
97563. ARTOCARPUS INTEGRA (Thunb.) L. Moraceae.

Jackfruit.
No. 2811. Collected in the Botanic Garden, Grenada, Grenadine Islands, January 10, 1932.
97564. Cactus intortus Mill. Cactaceae.

No. 2628. From St. Kitts, Leeward Islands, January 23, 1932 . Turkscap cactus. A red-brown cactus with the upper part shaped like a Turk's cap. The small pink flowers are followed by deep pink fruits filled with black seeds. It is a slow-growing species adapted to conditions where rather heavy summer rains and winter droughts occur.
97565. CALLIANDRA SURINAMENSIS Benth. Mimosaceae.
No. 2822. Collected February 10, 1932, in the Botanic Garden, Grenada. A beautiful large open branching shrub with showy flowers composed of many long pink and white stamens.
97566. Capparis flexuosa L. Capparidaсеае.
No. 2618. Collected in a dry savanna pond on Saona Island Dominican Republic, January 20,1932 . A shrub or small tree up to 25 feet high with long flexuose branches, oblong leaves 2 to 3

## 97560 to 97580 -Continued

inches long. clusters of small white or pale-rose flowers, and fruits 3 to 7 inches long, which gradually open and expose the bright red pulp inside. It is native to Cuba.
97567. Cassia bacillaris L. Caesalpiniaсеае.
No. 2765. Collected January 28, 1932, in the Botanic Garden at Dominica, Leeward Islands. A small tree of rather straggly habit, suitable for street and park planting. The golden-yellow flowers an inch or more in diameter are in loose flowering racemes.

For previous introduction see 68020.
97568. CHRYSOPHYLLUM sp. Sapotaceae.

No. 2717. Collected in the forest of Bar de l'Isle, St. Lucia, February 31932. A tall tree with large glossy leaves and long pointed fruits covered with a rough fuzz. The parrots seem very fond of the fruit. Introduced as a possible stock for the star-apple.
97569, COCCOLOBA GRANDIFOLIA Jacq. ( $O$. pubescens L.). Polygonaceae.
No. 2656. Collected January 26, 1932 , at 1,200 feet altitude on Boggy Peak above McCarthy Valley, Antigua, Leeward Islands. A giant-leaved specieswhich, when grown in the shade, has leaves 3 feet in diameter. It is a rare species related to the seagrape.
97570. Crescenntia cucurbitina L. Bignoniaceae.
No. 2826. Collected in the Botanic Garden at Grenada, February 10, 1932. A shade tree with abundant foliage and fruits three fourths of an inch in diameter which contain a single seed.
97571. Ficus sp. Moraceae.

Fig.
No. 2758. Collected on Mayero, Grenadine Islands, February 6, 1932. A treewith a trunk a foot in diameter and aerial roots; found growing in an ex. tremely dry and wind-swept situation at the summit of a very rocky hill. Theleaves were large and glossy, and the masses of almost white fruits turn pink as they ripen.
97572. Ficus sp. Moraceae.

Fig.
No. 2793. From the Botanic Garden, Carriacou, Grenadine Islands, February 8, 1932. A handsome clean gray-barked. tree with spreading drooping branches. after the habit of $F$. benjamina, but bearing lemon-yellow fruits one half inch in. diameter.
97573. MYRISTICA FRAGRANS Houtt. Myristicaceae.

Common nutmes.
No. 2832. Collected February 10, 1932, at Avondale, Grenada, Grenadine Islands. An East Indian tree, 20 to 25 feet high, with smooth gray-brown bark, oval darkgreen sharp-pointed leaves 3 to 6 inches. long, slightly aromatic when bruised, and pale yellow flowers in axillary racemes, followed by nearly spherical pearlike drupes. The flesh of these drupes is yellow and full of astringent juice and encloses a hard-shelled nut, the seed of which is the nutmeg of commerce.

For previous introduction see 93534.
97574 and 97575. Pitcairnia corallina Linden. Bromeliaceae.
The outer leaves of this Colombian species are hard, dry, and spineless; the-

## 97560 to 97580 -Continued

inner leaves have brown-spined petioles and broad plicate recurved blades. The coral-red flowers, 3 inches long, are in a raceme borne on a bright-red scape a foot high.

For previous introduction see 89494.
97574. No. 2723. Collected January 28, 1932 in the Botanic Garden, Dominíca, Leeward Islands.
97575. No. 2808. Collected in the Botanic Garden, Grenada, Grenadine Islands, February 10, 1932.
97576. Plumeria alba L. Apocynaceae.

Frangipani.
No. 2766. Collected on Mayero, Grenadine Islands, February 6, 1932. Found in thickets on the rocks overlooking the sea where it was exposed to the drying salt-spray laden trade winds. A tree up to 30 feet high, native to the West Indies. The linear-lanceolate, subcoriaceous leaves, 10 inches long, are glabrous above and densely white-tomentose beneath. The salver-shaped flowers, 2 inches across, are white with a yellow eye and are borne in compact clusters.
8757\%. Portlandia grandiflora L. Rubiaceae.
No. 2825. Collected at Port-of-Spain, Trinidad, February 12, 1932. A tropical shrub up to 15 feet high, native to the West Indies, with opposite elliptical leathery leaves and axillary fragrant white flowers which are funnel-form and 5 inches long.

For previous introduction see 80189 .
97578. Pterygota alata (Roxb.) R. Br. Sterculiaceae.
No. 2651. Collected in the Botanic Garden at St. Johns, Antigua, Leeward Islands, January 26, 1932 . A large tree, native to India, having ash-colored bark and yellow-tomentose branchlets. The large heart-shaped leaves, 10 inches long and 7 inches wide, are clustered at the ends of the branches. The panicles of densely tomentose flowers, without petals, are shorter than the leaves.
97579. Tabebuia leucoxyla DC. Bignoniaceae.
No. 2831. Collected January 29, 1932, on Dominica, Leeward Islands. White cedar. A tree with clean gray bark, deep green leaves, and large pale-pink flowers. It is much prized in the West Indies as an ornamental, as well as for its strong hard white wood, which is used for furniture.
97580: STEGNOSPERMA HALIMIFOLIUM Benth. Phytolaccaceae.
No. 2606. Collected January 18, 1932, at Beata Island, Dominican Republic. A pretty scandent shrub with red-brown fruits which when ripe open and expose a magenta aril that almost conceals the shiny black seed. In habit it is very much like the bittersweet and could probably be used in the same way for house decoration.

## 97581 to 97629.

From Scotland. Seeds presented by the Royal Botanic Garden, Edinburgh. Received February 24, 1932.
97581 to 97583 . ALlium spp. Liliaceae.
Onion.

## 97581 to 97629—Continued

97581. Allium oreophilum Meyer.

A bulbous perennial with linear to lanceolate leaves and hemispheric umbels of purple-lavender flowers. It is native to the mountains of the Caucasus region.

For previous introduction see 91796.
97582. Allium victorialis L.

For previous introduction and description see 95570 .
97583. Allium wallichianum Steud.

A tall eastern Asiatic onion with narrow flat leaves about 3 feet long and purple flower heads.

For previous introduction see 91801.
97584. Alyssum trichostachyum Rupr. Brassicaceae.
A yellow-flowered herbaceous perennial from the mountains of the western Caucasus. It is closely related to $A$. montanum, differing chiefly in being larger and more pubescent.
97585. Anthemis cinerea Panc. Asteraceae.

Camomile.
A perennial camomile from Bulgaria with ashy white pubescent ovate or spatulate leaves and showy daisylike flowers on stems a foot high.
97586. Anthemis macedonica Boiss. and Orph. Asteraceae.
An annual composite with numerous abbreviated ascending stems, mostly unbranched, bearing small, white-rayed flower heads. Native to the mountains of Macedonia.
97587 to 97596 . Plumbaginaceae. Thrift.
97587. Armeria adamovicil Halacsy.

A cespitose perennial with a dense rosette of broadly linear leaves and white flower heads on scapes 7 to 9 inches high. Native to Macedonia.
97588. Ameria berlengensis Daveau.

A woody cespitose perennial which becomes 2 feet in diameter. The lanceolate leaves form a dense rosette, and the large rosy flowers are on numerous scapes. Native to Portugal.
97589. Statice chilensis (Boiss.) Macloskie.
An alpine perennial native to Chile with linear acuminate basal leaves and purplish flowers borne on a slender scape.

## 97590. Armeria elongata Hoffm.

A tufted perennial with a rosette of flat linear leaves and small white flowers on a tall slender scape. Native to central Europe.
97591. Statice fasciculata Vent.

A glabrous perennial, subshrubby at the base, with narrow grassy leaves and dense heads of pale-pink armerialike flowers. It is native to south western Europe.

For previous introduction see 95497.
97598. Armeria longearistata Boiss. and Reut.
A perennial herb with a rosette of flaccid lanceolate leaves 2 to 3 inches

## 97581 to 97629-Continued

long and white flowers on a scape about a foot high. Native to southern Spain.
97593. Statrci macloviana (Cham.) Macloskie.
A perennial herb with a rosette of grasslike leaves and pinkish flowers on slender scapes. Native to southern Europe.
97594. Staticie pungens Brot.

A woody plant about 6 inches high with rigid lanceolate somewhat glaucous leaves 2 to 3 inches long and rosy flowers in small heads on simple scapes. Native to Spain.
97595: ARMERIA sardoa Spreng.
A somewhat woody perennial with short furrowed filiform leaves and small subspherical flower heads on slender scapes. It is native to Sardinia.
97596. Statice sibirica (Turcz.) Ledeb.
A low herbaceous perennial, native to Siberia, with a rosette of linear glabrous leaves. The small white flowers are borne in a compact head at the top of a naked scape 12 to 18 inches high.
'97597. BuLbinElLA HOokeri (Colenso) Cheeseman. Liliaceae.
For previous introduction and description see 95667.
s97598 to 97600. Chrysanthimum spp. Asteraceae.
:97598. Chrisanthemum Caucasicum Pers.
A perennial chrysanthemum, native to the Caucasus, with white flowers and bipinnate leaves with linear-subulate subdivisions.

For previous introduction see 40630. 97599. CHRYSANTHEMUM PULVERULENTUM Lag. (Pyrethrumi hispanicum Willk.).
A herbaceous perennial with a woody 'base, deeply pinnatifid lower leaves, and linear stem leaves. The plant is very variable in size and habit, but usually spreads to form prostrate mats from which the flowers, white to yellow or even purplish yellow, rise on almost naked 6 to 8 inch stems. Native to -central Spain.

For previous introduction see 95479 . 97600. Cheysanthemum mawil Hook. f. A short woody perennial, native to Morocco, forming margueritelike bushes 1 to 2 feet high, with small woolly gray triangular-oblong pinnatifid leaves. The long-stalked flowers are 1 to 2 inches across have reddishpurple disks, and 3 -toothed white rays that are reddish on the back.

For previous introduction see 95480 .
:97601. Dipelta funnanensis Franch. Caprifoliaceae.
A shrub 10 to 15 feet high, native to western China, with opposite entire lanceolate leaves 3 to 6 inches long and leafy racemes of 2-lipped tubular-campanulate pinkish to purple flowers having shieldilike floral bracts.

For previous introduction see 94000.

## 97581 to 97629-Continued

97602. Draba subamplexicaulis Meyer. Brassicaceae.
A hardy herbaceous perennial with a rosette of oblong purplish leaves and small white flowers on erect stems 1 to 2 inches high. Native to the Altai Mountains, Siberia.
97603 to 97607. Dracocerphalum spp. Menthaceae. Dragonhead.
97603. Dracocephalum isabillae Forrest.
A mintlike perennial 12 to 18 inches
high, native to China, with leaves 1 inch long. divided into 5 to 7 linear segments, and spikes 5 to 6 inches long made up of verticillate clusters of dragon-shaped, deep blue-purple flowers 1 to 2 inches long.

For previous introduction see 91808.
97604. Dracocephalum ruprechit Regel.
A dwarf compact perennial 1 to 2 feet high, with ovate-lanceloate incised and toothed leaves and axillary clusters of rose-purple to lilac tubular 2 -lipped flowers 1 inch long. It is native to Turkistan.

For previous introduction see 91809.
97605. Dracocephalum ruyschiana $L$.

Siberian dragonhead.
For previous introduction and description see 95670 .
97606. Dracocephalum Spiciosum Benth.
A robust herbaceous perennial 18 inches high, with radical leaves on petioles up to 1 foot long. The leat blades are orbicular-cordate, crenate, and 2 to 4 inches across; the tubular flowers, 1 inch long, are blue-purple with black spots and are borne in dense heads. It is native to the Himalayas in India.

For previous introduction see 93201.
97607. Dracocephalum tanguticum Maxim.
An erect herbaceous perennial, 1 to
2 feet high, with pinnately cut leaves 2 inches long and sky-blue flowers an inch long in interrupted spikes.
97608 to 97612 . FUCHSIA spp. Onagraceae.

## 97608. Fuchsia bacillaris Lindl.

A compact plant with short-jointed branches and very small flaring: mouthed rosy drooping flowers. Native to Mexico.
97609 and 97610. FUCHSIA CORYMBIflora Ruiz and Pav.
97609. A handsome Peruvian fuchsia with large serrate long-pointed leaves and deep-red flowers. The plant becomes tall, but requires support in order to attain full height. It is adapted for training on pillars or pergolas in the warmest parts of the United States.
97610. Alba. A form with white flowers.
97611. Fuchisia procumbens R. Cunn.

Trailing fuchata. A slender spreading shrub with fragrant flowers. A good plant for the rock garden if the climate is mild.

## 97581 to 97629 -Continued

97612. FUCHSIA thymifolia H. B. K.

A shrub 3 to 6 feet high, with small ovate nearly opposite leaves pubescent above, red flowers having obovate undulate petals, and red fruits.

For previous introduction see 90091.
97613 to 97616 . Kalanchoe spp. Crassulaceae.
97613. Kalanchoe bentil C. H. Wright.

A succulent with dull olive-green stems about 3 feet high, thick fleshy spreading and recurved terete leaves 3 to 6 inches long, and panicles of erect tubular white flowers half an inch long, the buds being pink. It is native to Arabia.

For previous introduction see 91822. 97614. Kalanchoe carnea N. E. Brown.

A succulent perennial with simple stems about 2 feet high, oval to obovate, crenate-dentate leaves, and branched cymes of light rose or pink very fragrant flowers. Native to southern Africa.

For previous introduction see 86231. 97615. Kalanchoe crenata Haw.

A succulent perennial, native to tropical Africa, 2 to 6 feet high, with a thick fibrous root, oblong or roundish oval-crenate leaves about 2 inches long, and bright-yellow flowers half an inch long in terminal and axillary cymes.

For previous introduction see 93091 . 97616. Kalanchoe rotundifolia Haw.

A succulent perennial, 1 to 3 feet high, with a slender stem which has a few leaves at the base and is naked above. The fleshy leaves, 1 to 2 inches long, vary in shape from broadly obovate to spatulate and are entire or crenate. The small orange or yellow flowers are borne in flat-topped panicles. Native to South Africa.

For previous introduction see 88752.
97617. Gaya lyallii (Hook. f.) Baker f. (Plagianthus lyallii Hook. f.). Malvaceae.

Lacebark.
A beautiful tree up to 30 feet high, graceful and spreading, with the branchlets covered with stellate hairs. The cordate leaves are 2 to 4 inches long on slender petioles and the large white flowers, an inch across, are borne in axillary clusters. Native to New Zealand.

For previous introduction see 89237.
97618 and 97619. PODOPHYLLUM EMODI Wall. Berberidaceae.

Himalayan mayapple.
97618. For previous introduction and description see 97521 .
97619. Variety chinense. Probably a form from China.
97620. Ranunculus gramineus L. Ranunculaceae.

Grassy buttercup.
A smooth herbaceous perennial with rosettes of linear to lanceolate leaves and bright-yellow flowers on stalks 6 to 12 inches high. It is native to Europe.

For previous introduction see 95494.

## 97581 to 97629-Continued

97621 to 97627 . RHododendion spp. Ericaceae.
97621. RHODODENDRON CAMPYLOCARPUM Hook. f.
For previous introduction and description see 97386 .
97622. RHODODENDRON CHARTOPHYLLUM Franch.
A fine species native to Yunnan, China, where it grows at altitudes between 9,000 and 12,000 feet. It is deciduous at flowering, and the large flowers are all shades from white to mauve, deep pink, and even blue smoke colored.

For previous introduction see 97388.
97623. RHODODENDRON DECORUM Franch.
A western Chinese evergreen shrub with glabrous leaves, glaucous beneath, and broadly bell-shaped white or pink flowers 2 inches across.

For previous introduction see 86759.
97624. RHODODENDRON GALACTINUM Balf. f.
A tree, 15 to 22 feet high, native to Szechwan, China. The oblong to lanceolate leaves, 5 to 8 inches long, are glabrous and dark green above and covered beneath with buff-gray or palecinnamon indumentum. The bellshaped flowers, over 1 inch long, are in clusters of about 15, and are palerose with deep crimson blotches inside.
97625. RHODODENDRON HIPPOPHAEOIDES Balf. and Smith.
For previous introduction and description see 97394 .
97626. RHODODENDRON PENTAPHYLLUM Maxim. ( $R$. quinquefolium roseum Rehder). Fiveleaf azalea.
A deciduous shrub of the section Rhodora, up to 25 feet high with usually five elliptic-lanceolate leaves at the ends of the branches. The rose-pink flowers, 1 to 2 inches across, are solitary or in twos, appearing before or with the leaves which turn orange or crimson in the autumn. Native to Japan.

For previous introduction see 92033.
97627. Rhododendron pSEUdOYANTEInum Balf. f.
A shrub 1 to 9 feet high, with ovate-lanceolate thick and rigid leaves: up to 3 inches long, glossy dark green above and pale green beneath. The campanulate flowers, 2 inches across, are pink spotted crimson within and are in a racemose umbel of 9 or more flowers.

For previous introduction see 66477 .
97628. SyRinga tomentella Bur. and Franch. (S. adamiana Balf. and
Smith). Oleaceae. Felty lilac.
A bushy shrub, about 10 feet high, with elliptic leaves which are hairy beneath and loose long-branched spikes of fine mauve-pink flowers, produced in late May and early June. It is native to western China.

For previous introduction see 91833.

## 97581 to 97629-Continued

97629. Sybinga Pinetorum W. W. Smith. Oleaceae.

Iilac.
A shrub related to S. microphylla, about 10 feet high, with densely pilose branchlets, ovate to ovate-lanceolate leaves 2 to 4 inches long, and purplish flowers in panicles about $\hat{y}$ inches long. It is native to southwestern China.

For previous introduction see 86765 .

## 97630 to 97656

From India. Seeds presented by W. Koelz, Himalayan Research Institute, Nagar, Kulu, Punjab. Received February 11, 1932.
97630. Aesculus assamica Griffith. Aesculaceae.

From Kulu, Punjab. A tree up to 4 feet in diameter, found between 7,000 and 9,000 feet altitude. A moderatesized deciduous tree with soft white closegrained wood; the 5 to 7 leaflets are shortly petioled, and the narrowly lanceolate panicles of white and yellow flowers are as long as the leaves.

- For previóus introduction see 39102.

97631. Aquilegia sp. Ranunculaceae.

Columbine.
Collected at Wakka, Zankskar, at 14,000 feet altitude. A columbine with very attractive blue flowers and very glaucous blue-gray foliage.
97632. Buxus sp. Buxaceae.

Box.
From Sirham, Kulu, Punjab. A box, 4 feet high, found in open spaces in fir forest between 8,000 and 9,000 feet altitude.
97633. Cicer sp. Fabaceae.

Collected at Pensi La, Zankskar, at 14,000 feet altitude.
97634. Clematis sp. Ranunculaceae.

Collected in Ladakh Province at 14,000 feet altitude. A very attractive clematis with large yellow flowers.
97635. Cotoneaster sp. Malaceae.

Collected at an altitude of 6,000 feet at Darkali, Rampur-Bushahr. An arborescent cotoneaster which becomes 20 feet high.
97636. Cotoneaster sp. Malaceae.

Collected at Potang La at 13,000 feet altitude. A large shrub with attractive habit, foliage, and fruit.
-97687. Cucurbita maxima Duchesne. Cucurbitaceae. Squash.
From Darkali, Rampur-Bushahr, at 8,000 feet altitude. A green squash which sometimes grows to weigh 40 pounds. The yellow flesh is of superb flavor; considered the best of its kind in cultivation there and superior to anything in America. The natives say that it thrives best if the climate is not too hot. It seems to be confined to a very small valley here.
97638. Cucurbita Pepo L. Cucurbitaceae.

Pumpkin.
Collected at Darkali, Rampur-Bushahr. An edible pumpkin.

## 97630 to 97656-Continued

97639. Delphinium sp. Ranunculaceae. Larkspur.
Collected below Pensi La, Zankskar, at 14,000 feet altitude.
97640. Dianthus sp. Silenaceae.

Collected at 12,000 feet altitude in Rangãum, Zankskar. A very attractive little pink dianthus found on a wellwatered slope.
97641. Euonymus sp. Celastraceae.

From Kulu, Punjab. A small tree or shrub collected in a forest between 8,000 and 9,000 feet altitude.
97642. Euonymus sp. Celastraceae.

Collected at Darkali, Rampur-Bushahr. A large evergreen forest tree which is very attractive in its fruiting season. It tolerates snow for two months, but not much frost.
97643. Hypericum sp. Hypericaceae.

From Darkali, Rampur-Bushahr. An attractive shrub 4 feet high collected at the forest edge at 8,000 feet altitude.

97644 and 97645. PEDICULARIS spp. Scrophulariaceae.

Collected at Rangdum, Zankskar, at 13,000 feet altitude.

## 97644. Pedicularis sp.

A plant nearly 3 feet high, with flowers which are probably yellow.
97645. Pedicularis sp.

A very attractive form with roselavender flowers.
97646. Pinus Gerardiana Wall. Pinaceae.

Pine,
Seeds purchased at Kunawar, RampurBushahr. A very attractive tree from the dry uplands. It has about the same ecological relationships as Pinus. edulis.
97647. Rhododendron arbormum J. E.

Smith. Ericaceae. Tree rhododendron,
From Rampur-Bushahr. A very attractive tree up to $21 / 2$ feet in diameter, which grows between 7,000 and 9,000 feet altitude on slopes too isolated for other trees. It will tolerate snow and frost.

For previous introduction see 97378.
97648. Rosa sp. Rosaceae. Rose.

From Kulu, Punjab. A rose with beautiful pink flowers, which flowers sparingly. Collected in the forest between 8,000 and 10,000 feet altitude.
97649 and 97650 . Skimmia lauriola
(DC.) Sieb. and Zucc. Rutaceae.

Collected in Kulu, Punjab. An evergreen, strongly aromatic shrub found throughout the temperate Himalayas at altitudes ranging from 6,000 to 10,000 feet. The white flowers are crowded into terminal panicles, and the red fleshy oval fruits are less than an inch in length. The timber is used to make hoe and ax handles.

For previous introduction see 55704.
97649. A shrub 2 feet high, growing in the shade. The very interesting flowers have a musky scent.
97650. Seeds received mixed with Juniperus pseudosabina.

## 97630 to 97656-Continued

97651. Viburndm sp. Caprifoliaceae.

Collected at Rampur-Bushahr in a forest at 8,000 feet altitude. A well-formed shrub, 15 feet hign, laden with attractive clusters of scarlet berries which are pleasantly acid.
97652. Viburnum sp. Caprifoliaceae.

Collected at Kulu, Punjab, between 8,000 and 10,000 feet altitude. This viburnum blooms from December until April in this region.
97653. (Undetermined.)

From Rampur-Bushahr. A shrub 2 feet high, collected in dense forest at 7,000 feet altitude. The fruit and foliage are very attractive, and the flowers are said to be likewise.
97654. (Undetermined.)

From Abring, Zankskar. A shrubby perennial, 4 feet high, chiefly interesting for its fragrance. Collected on a dry slope at 12,000 feet altitude.
97655. (Undetermined.)

Collected on an arid slope at 11,000 feet altitude in Ladakh Province. A prostrate shrubby perennial with large white fragrant flowers.
97656. (Undetermined.)

From Darkali, Rampur-Bushahr. Mon-key-apple. An attractive small tree found growing in an oak forest at 9,000 feet altitude. The fruit is edible and said to be very attractive to monkeys.

97657 to 97678 . RHODODENDRON spp. Ericaceae.
From England. Seeds presented by J. R. Stevenson, Ascot. Received February 25, 1932.
97657. RHODODENDRON ARBOREUM J. E. Smith.

Tree rhododendron.
For previous introduction and description see 97647 .
97658. Rhododendron burmanicum Hutchinson.
A large shrub, native to southwestern Burma, with oblanceolate to obovate evergreen leaves, densely scaly on both surfaces. The green-yellow fragrant campanulate flowers, in 5 - or 6 -flowered umbellate clusters. are scaly all over the outside.
97659. RHODODENDRON CALOPHYTDM Franch.
For previous introduction and description see 97383.
97660. RHODOdENDRON CROCEDM Balf. and Smith.

Forrest No. 12731. A shrub up to 22 feet high, with somewhat papery oblong leaves 5 inches long and flesh-yellow, red-spotted flowers over 1 inch long in racemose umbels. Native to Yunnan.

For previous introduction see 94111.
97661. RHODODENDRON DECORUM Franch.

For previous introduction and description see 97623 .
97662. RHODOdENDRON FALCONERI Hook. f.

This shrub or tree, which sometimes attains a height of 30 feet. is native to

## 97657 to 97678 -Continued

northeastern India. The large deep-green; leaves, often a foot long, and the whitish densely clustered flowers, make it a very fine ornamental.

For previous introduction see 58921.
97663. RHODODIDNDRON FLOCCIGERUM Franch.

Forrest No. 19769. A shrub 4 feet high found in the alpine regions of Tsehchung Mekong, Yunnan, China. The linear-elliptical leaves are rich green and covered with brown deciduous wool. The flowers are red with a purplish tinge.

For previous introduction see 59474.
97664. RHODODENDRON. FULVUM Balf. ands Smith.
A straggling tree, 9 to 18 feet high, native to western Yunnan, China. Theobovate leathery leaves, 6 to 8 inches long, are glabrous above and are covered. beneath with a pale-fawn to deep-crim. son suedelike indumentum. The inflorescence is a loosely rounded umbellate truss of about 20 companulate flowers 1 to 2 inches long, which are white with a deep-rose flush and have a crimgon. blotch at the base.
97665. Rhododendran
griersoniandm: Balf. and Forr.
Forrest No. 15851. A shrub 5 to 10 . feet high, native to western Yunnan; China. The narrowly lanceolate leaves, 4 to 8 inches long, are green above and. covered beneath with a loose whitish to buff woolly tomentum. The funnel-campanulate flowers, in clusters of 5 to 12 . are 2 to 3 inches long and are bright geranium-scarlet dappled inside with darker spots.
97666. RHODODmidion HaEMATODRS. Franch.
Forrest No. 6773. A shrub up to 10 feet high, native to Yunnan, China. The oblong to obovate leaves, 2 to 4 inches long, are dark green above and densely: rufus-woolly-tomentose beneath. The fleshy tubular-campanulate flowers, in umbels of 6 to 8 , are inches long and have five pouches at the base of the crimson corolla.

## 97667. RHOdOdindion hodgsonir Hook. f.

This is considered one of the finest rhododendrons for foliage; the leathery dark-green leaves are up to 18 inches in length, glossy above and covered with a brown-red down beneath. The rosy lilac flowers, 2 inches wide, are in dense rounded trusses about 6 inches wide.

For previous introduction see 58924.
97668. RHododendron insigne Hemsl. and Wils.
Wilson No. 1339.
For previous introduction and description see 97395 .
97669. RHODODENDRON LACTEUM Franch.

Forrest No. 6778. A tree 15 to 30 feet high, native to Yunnan, China. The thick leathery oblong-elliptic leaves, 4 to 7 inches long, are glabrous above and covered beneath with a dull-fawn suedelike indumentum. The wide-campanulate creamy white to canary yellow flowers are 2 inches long and are borne in a large racemose umbel made up of 20 to 30 flowers.

## 97657 to 97678 -Continued

97670. RHODODENDRON NERIIFLORUM Franch.
A shrub 3 to 6 feet high, native to midwestern Yunnan, China. The oblong to oval leaves, 2 to 4 inches long, are dark-green and smooth above, and covered beneath with white waxy papillae. The fleshy tubular campanulate crimson flowers are about 2 inches long, and the calyx is fleshy and colored like the corolla.
97671. RHODODENDRON NIVEUM HOOK. f.

A shrub or small tree 12 to 15 feet high, native to the Sikkim Himalayas in India. The branchlets are covered with dense white felty tomentum, and the obovate-lanceolate leaves, 4 to 6 inches long, are glabrous above and covered beneath with felty tomentum which is at first white but becomes grayish brown. The tubular-campanulate magenta flowers are over 1 inch long and are borne in a rounded compact mass of 15 to 20.
97672. RHODODENDRON ORBICULARE DEcaisne.
For previous introduction and description see 97399 .
97673. RHODODENDRON OREODOXA Franch.

A shrub or small tree, native to western Szechwan, China. The narrowly elliptic, leathery leaves, 2 to 4 inches long, are glabrous above and glaucous beneath. The openly campanulate palerose flowers are nearly 2 inches across and are borne in a racemose umbel of about a dozen flowers.
97674. RHODODENDRON PRAEVERNUM Hutchinson.
A medium-sized compact shrub, native to Hupeh, China. The leathery ellipticoblanceolate leaves, 4 to 7 inches long, are dark green above and pale gray green below. The companulate fowers, 2 inches across, are white suffused rose with a large dark wine-red blotch at the base and smaller spots above, and are borne in a terminal umbel of about 10 flowers.
97675. RHODODENDRON ROYLEI HOok. f. ( $R$. cinnabarinum Hook. f.).
Variety Blandfordiaeflorum. A form with the flowers red outside, like the type, but yellow or greenish yellow inside.
97676. RHODODENDRON SOULIEI Franch.

For previous introduction and description see 97403.
9767\%. RHODODENDRON THOMSONII Hook. f.
A Himalayan shrub up to 15 feet high, growing at altitudes between 10,000 and 11,000 feet, with glabrous obovate leaves 3 inches long and clusters of 6 to 8 blood-red flowers 2 inches across.

For previous introduction see 76911.
97678. RHODODENDRON VERNICOSUM Franch.
Forrest No. 5881. A spreading shrub 6 to 25 feet high, native to Szechwan and Yunnan, China. The thick leathery ob-long-oval leaves, 3 to 5 inches long, are glabrous above and glaucous beneath. The widely funnel-campanulate flowers, 1 to 2 inches long, are white to brightrose, sometimes with crimson markings, and are borne in racemose umbels of

## 97657 to 97678-Continued

about 10 flowers. The geographic form, ouanthum, is reported to be hardly distinguishable from the type.
97679 to 97682 . Springa spp. Oleaceae.
From Canada. Scions presented by F. L. Skinner, Dropmore, Manitoba. Received February 26, 1932.
97679 to 97681, Syringa Prestonian McKelvey.

Hybrid lilac.
A collection of hybrids between Syringa reflexa and $S$. villosa developed at the Manitoba Nursery by Mr. Skinner.
97679. Handel. Flowers deep lilac rose, in a very heavy cluster.
97680. Heloise. Flowers pink fading to white.
97681. Hiawatha. A very dark rosecolored lilac, the same shade as Rosa rugosa.
97682. SYRINGA SWEGINzOWII Koehne and

Ling.
Chengtu lilac.
The sweginzowii hybrids have a more open panicle and are all very pale colored, usually white fushed with pink.

## 97683 to 97712.

From England. Plants purchased from Maurice Prichard \& Sons, Ltd., Riverslea Nurseries, Christchurch, Hants. Received February 26, 1932.
97683 to 97697. CAMPANULA CARPATICA Jacq. Campanulaceae.

## Carpathian bellfower.

A collection of new varieties which flower in July and August.
97683. Carillon.
97684. Chewton Joy.
97685. Claribel.
97686. Convexity.
97687. Cream Star.
97688. Mr8. V. Frere,
97689. Loveliness.
87690. Opal.
97691. Priory Bells.
87692. Queen of Somerville.
97693. Riverslea Giant.
97694. Riverslea Improved.

97695, The Pearl.
97696. Triumphant.
97697. Multiflora.

97698 to 97705 . Erica spp. Ericaceae.
97698 to 97708. Erica carnea L. Spring heath.
A spring heath which grows 8 inches high.
97698. Mrs. S. Doncaster. Flowers light pink.
87699. King George. A winterflowering variety with bright rich-pink flowers.
97700. Queen of Spain. Flowers rosy red.
97701. Praecod rubra. A form which commences to bloom in January; the flowers are a very rich shade of pink.

## 97683 to 97712-Continued

97702. Rubra. Flowers deep ruby pinl.
97703. Vivelli. A form with dark foliage and deep-rose flowers.
97704 and 97705 . Erica vagans L. Cornish heath.
97704. Mrs. F. D. Maxwell. Flowers deep salmon pink.
97705. St. Keverne. A new variety with pretty salmon-pink flowers.
97706. Eryngium alpinum L. Apiaceae. Bluetop eryngo.
James Ivory. A wonderful form of Eryngium alpinum with large deep-blue feathery teazle-shaped flowers.

97707 to 97711 . Tradescantia spp. Commelinaceae.

Spiderwort.
The tradescantias are showy border plants which grow up to 2 feet high and flower all through the summer.

9770\%. Tradescantia sp.
Iris Pritchard. A variety with white flowers heavily stained with azure blue, and blue center. It grows 18 inches high and blooms in August and September.

## 97708. Tradescantia sp.

James Crawford Weguelin. A plant 18 inches high, with large flowers of a uniform light azure blue.
97709. Tradescantia sp.

James Stratton. A new variety with large flowers $2 \frac{1}{2}$ inches from tip to tip, deep delphinium mauve, slightly shaded with rose.

## 97710. Tradescantia sp.

Leonora. The very fine flowers are a deep rich glowing violet.
97711. Tradescantia sp.

Purewell Giant. An extremely effective variety with light mauve-blue flowers.
97712. Verbina bonariensis L. Verbenaceae.
A villous-hirsute herbaceous plant, 2 to 4 feet high, native to Brazil. The partly clasping leaves, 2 to 3 inches long, are serrate with broad teeth, and the small bright-purple flowers are borne in dense spikes.

## 97713 to 97739.

From Asia. Seeds presented by Capt. F. Kingdon Ward, London, England. Received February 27, 1932.
A collection of seeds of economic plants from the Adung Valley, Tibet, between 6,000 and 11,000 feet altitude.

## 97713. Amaranthus <br> paniculatus <br> Tassel amaranth.

The seed is roasted or popped, ground into meal, and made into sweet cakes; the meal is also said to be eaten with sugar and milk.

For previous introduction see 64451.
97714 and 97715. Brassica rapa L. Brassicaceae.

Turnip.
97714. Collected at Jite.

## 97713 to 97739 -Continued

97715. A large red-skinned species, more like a Swede than a turnip, full of sugar, flesh firm, hard in parts. Grown at 11,000 feet altitude in the $R$ dong district of southeastern Tibet. Harvested in September.
97716 and 97717. Chaetochloa italica (L.) Scribn. Poaceae. Millet.
97716. Chenopodium album L. Chenopodiaceae.
97717. Cucurbita moschata Duchesne. Cucurbitaceae.

Cushaw.
97720. Eleusine coracana (L.) Gaertn. Poaceae. African millet.

97721 and 97722. Fagopyrum tataricum (L.) Gaertn. Polygonaceae.

Kangra buckwheat.
97723 to 97726 . Hordeum vulgare coeleste L. Poaceae. Six-rowed barley.
97723. Collected near the headwaters of the Irrawaddy in the Ridong district at 10,000 feet altitude.
97724. From Jite.
97725. Collected in the Adung Valley at 6,000 feet altitude.
97726. A variety grown locally.
97727. Perilla frutescens (L.) Britton. Menthaceae. Green perilla.
97728. Phaseolus vulgaris L. Fabaceae. Common bean.
A variety grown locally.
97729 and 97730. Pisum sativum L. Fabaceae.
97729. A variety with brown seeds.
97730. A variety with gray seeds.
97731. Primula sp. Primulaceae.

Primrose.
No. 10040.
97732. Prunus padus L. Amygdalaceae. European bird cherry.
Collected near the headwaters of the Irrawaddy, in a forest, between 10,000 and 12,000 feet altitude. A small tree with white flowers which are followed by small, rather tart, deep-red fruits.
97733. Ribes sp. Grossulariaceae.

Gooseberry.
The Tibetan wild gooseberry collected in the outer conifer belt between 9,000 and 11,000 feet altitude. The fruit is small, hard, red, and inedible.
97734. Ribes sp. Grossulariaceae.

Red currant.
A stout bush with edible fruit, col. lected in the forest region between 10,000 and 11,000 feet altitude.
97735 and 97736. SOJa max (L.) Piper. Fabaceae.

Soybean.
97737 and 97738 . Triticum turgidum L. Poaceae. Poulard wheat.
97737. Collected at Jite.
97738. Collected in the Ridong district, between 10,000 and 11,000 feet altitude.
97739. Zea mays L. Poaceae. Corn. A variety grown locally.

## 97740 to 97745.

From the West Indies. Material collected by David Fairchild and P. H. Dorsett, agricultural explorers, Bureau of Plant Industry, with the 1931-32 Allison $V$. Armour expedition. Received February 29, 1932.

## 97740. Arenga nengleri Beccari. Phoenicaceae.

No. 2684. Collected in the Botanic Gardens, Dominica, Leeward Islands, January 29, 1932. A cluster palm with no trunk, which suckers from the ground and forms clumps 10 feet across. The pinnae are 16 inches long and over an inch wide and are fishtail shaped. The fruits are red and less than an inch in diameter.
97741. Calathea sp. Marantaceae.

No. 2730. Tubers presented by Mrs. Charles W. Doorley, from the garden of the Government House, St. Lucia, Windward Islands, February 3, 1932. The leaves of this perennial herb are wine colored in the center, and the flower spike 8 inches high is the same color. The calatheas are shade-loving and acidor neutral-soil plants and useful only where they are given constant care.
97742 and 97743. Dioscorena spp. Dioscoreaceae.

Tubers purchased in the market at Dominica, Leeward Islands, January 29, 1932.

## 97742. Dioscorea alata L.

Winged yam.

## No. 2706. The lady yam.

97743. Dioscorea trifida L. f.

Yampie
No. 2705. Cuscus yam. A small yam which is delicious when baked and served with drawn butter,
97744. Rajania cordata L. (R. pleioneura Griseb.). Dioscoreaceae.

Cockscomb-yam.
No. 2704. Waw waw. Tubers purchased in the market at Dominica, January 28, 1932. A species which grows wild in the wet lands of the island. It is not cultivated, probably because an abundance can be obtained by digging in the forest.

For previous introduction see 29129.
97745. Habmanthus multiflorus Martyn. Amaryllidaceae.
Bulbs of the fire-lily or poison-lily; a flame of fire without leaves, very characteristic.
97746. CRYPTOMERIA JAPONICA (L. f.) D. Don. Pinaceae.

## Common cryptomeria.

From Japan. Seeds presented by Prof. Mitsunaga Fujioka, Division of Forestry, College of Agriculture, Tokyo Imperial University, Komaba, Tokyo. Received March 1, 1932.
A beautiful Japanese evergreen forest tree, growing to a height of 300 feet and attaining a diameter of 7 feet. It will withstand considerable frost.

For previous introduction see 91788.
97747. Mangifera indica L. Anacardiaceae.

Mango.
From the island of Guam. Plants presented by C. W. Edwards, director, Agricultural Experiment Station. Received October 20, 1926. Numbered in March, 1932.

Saipan. The fruit of this mango is much inferior to that of the Carabao and other leading mango varieties, but it is relatively very hardy. Seedlings come into bearing in from 4 to 5 years and it makes a good stock.

For previous introduction see 97265.
97748. Dahlia rosea Cav. Asteraceae.

From Chile, South America. Tubers collected by H. G. MacMillan and C. O. Erlanson, Bureau of Plant Industry. Received March 8, 1932.
No. 28. Collected January 16, 1932 in a garden at Puerto Varas. A cultivated variety with double red flowers.

## 97749. Berberis parvifolia Sprague.

 Berberidaceae. Barberry.From Sweden. Seeds presented by Hortus Bontanicus Bergianus, Stockholm. Re ceived March 4, 1932.

A low shrub from western China, with half-evergreen, occasionally spiny-toothed leaves, golden-yellow flowers, and globose berries of a terra-cotta color.

For previous introduction see 67137.

## 97750 to 97790.

From the West Indies. Seeds collected by David Fairchild and P. H. Dorsett, agricultural explorers, Bureau of Plant Industry, with the 1931-32 Allison $V$. Armour expedition. Received February 29, 1932.
97750. Acacia cunninghamil Hook. Mimosaceae.
No. 2659. Collected in the Botanic Garden on Antigua, Leeward Islands, January 26, 1932. A tree strikingly like a eucalypt in character; its phyllocadia much resemble the so-called leaves of that genus. The curious seed pods appear to be strung along the stems.
97751. anacardium occidentale L. Anacardiaceae.

Cashew.
No. 2725. Collected in the Botanic Garden on St. Lucia, Windward Islands, February 3, 1932. The cashew nut of commerce.
97752. Bauhinia monandra Kurz. Caesalpiniaceae. Butterfly bauhinia.
No. 2791. Collected February 8, 1932, on Carriacou, Grenadine Islands. An ornamental tropical African bush or small tree with handsome pink flowers variegated with yellow and spotted with red.

For previous introduction see 88512.
97753. Bucida buceras L. Combretaceae.
No. 2653. Whitewood. Presented by the head gardener at the St. John's Botanic Garden, Antigua, January 26, 1932. A large handsome tree similar to No. 2601 ( 96502 ). Of probable value as a windbreak, as these trees are found on

## 97750 to 97790 -Continued

the wind-swept hillsides of the islands, growing both on limestone and clay soils.

For previous introduction see 96502 .
97754. Cacara mosa (L.) Kuntze. Fabaceae.

Yam-bean.
No. 2663. Collected January 24, 1932, on Mount Misery, Antigua. Found climbing over a tree in the rain forest.

97755 and 97756. CAJANUS INDICUS Spreng. Fabaceae. Pigeonpea.
Collected on Bequia, Grenadine Islands, February 5, 1932.
97755. No. 2742. Willow stem. A variety characterized by having its pods at the tips of the slender branches which hang over like willow twigs. It is grown as an annular crop for export, but is not considered so good a variety as the Rose pea.
97756. No. 2743. Rose pea. This is the favorite variety on Bequia Island. The dark-brown pods are in bunches at the tips of short branches; the seeds are light pinkish yellow.
97757. Anneslia tergemina (L.) Britt. and Rose (Calliandra tergemina Benth.). Mimosaceae.
No. 2690. Bois Ravine. Collected January 29, 1932, in the Botanic Garden on Dominica, Leeward Islands. A shrub or small tree which makes an exceedingly attractive hedge and is in bloom most of the time. When the foliage first appears it is pink, turning to yellow green and later to dark green. The showy part of the flower is the bundle of stamens colored in bands of pink. white, and red.
For previous introduction see 55790.
97758. Canavalia maritima (Aubl.) Thouars. Fabaceae.
No. 2612. Collected on Beata Island, Dominican Republic, January 11, 1932 . A leguminous plant found growing on the beach of pure shell and limestone. It produces a good mat of foliage, and may be useful as a sand binder or as a green manure.
For previous introduction see 91236.
97759. Capparis cynophallophora L. Capparidaceae.
No. 2596. Collected at the base of Salt Pond Hill, Great Inagua, Bahamas, January 15, 1932 . A handsome small tree with leaves that are glossy above and rusty scaly underneath. The fragrant flowers have long purple filaments. and the long straw-colored pods are borne on the long gynophore, the stalk of the pistil.
97760. Carica papaya L. Papayaceae.

Papaya.
No. 2789. Purchased in the market at Roseau, Dominica, Leeward Islands, January 30, 1932 . A small variety not larger than an orange, with bright sal-mon-colored flesh one half inch thick and the outside of an unusually brilliant color. The flesh is sweet with a delicious flavor.

## 97750 to 97790-Continued

97761. Chrysophyllum bicolor Poir. Sapotaceae.
No. 2716. St. Antonie, St. Lucia, Windward Islands, February 3, 1932. A tree up to 50 feet high, with golden-silky twigs and leathery elliptic leaves 2 to 3 inches long, dark-green above and silvery beneath. The small flowers are borne in fascicles and are followed by the brown oblong edible fruits 1 to 2 inches long. It is native to the West Indies.
97762. Trimeza martinicensis (Jacg.) Herb. (Cipura martinicensis H. В. К.). Iridaceae.
No. 2655. Collected January 26, 1932, on Antigua, Leeward Islands. A yellow irislike plant 18 inches high with small round rhizomes having intensely yellow flesh, light-green leaves, and small yellow flowers. Found wild in the grass on the hillsides of McCarthy Valley, near Boggy Peak. Said to grow down almost to sea level in Antigua where it is endemic.
97763. Cordia $\triangle$ Lba (Jacq.) Roem. and Schult. Boraginaceae.
No. 2635. White manjack or Moral. Collected on St. Kitts, Leeward Islands, January 23, 1932. An attractive evergreen tree about 30 feet high, with large light-green glossy leaves. The fruits are translucent, pinkish white, and very mucilaginous.

For previous introduction see 90911.
97764 and 97765 . Cracca spp. F'abaceae.
Collected January 29, 1932, in the Botanic Garden on Dominica, Leeward Islands.
97764. Cracca candida (DC.) Kuntze (Tephrosia candida DC.).
No. 2721. A low shrub with slender branches and large clusters of reddish or white flowers. It is the preferred cover crop in the lime plantations of Dominica.

For previous introduction see 81413 .
97765. Cracca villosa hirta (Buch.Ham.) Kuntze (Tephrosia hirta Buch.-Ham.).
No. 2770. A low-growing species highly esteemed as a nitrifying legume for orchards.

For previous introduction see 76097. 97766. DATURA METEL FASTUOSA (L.) Safford. Solanaceae.
No. 2590. Collected in Nassau, New Providence Island, Bahamas, January 12, 1932. An ornamental herbaceous annual which varies in height from 2 to 6 feet. It has entire or deeply toothed leaves about 4 inches long and flowers 7 inches or more in length, varying in color from white to lavender or rose.

For previous introduction see 91416 .
97767. Dolichos lablab L. Fabaceae. Hyacinth-bean.
No. 2749. Collected near Grand Bay, Cannouan, Grenadine Islands. A variety with white seeds.
97768. HYMENAEA COURBARIL L Caesalpiniaceae.

Courbaril.
No. 2731. From St. Lucia, Windward Islands, February 3, 1932. A tall handsome tree with glossy leaves in pairs.

## 97750 to 97790 -Continued

The large pods are very hard and contain a greenish powdery material that is edible. The willowy character of the twigs should make it a good tree to plant in hurricane regions.

For previous introduction see 47559.
97769. Ipomoea polyanthes Roem. and Schult. Convolvulaceae.

Morning-glory.
No. 2780. Collected January 30, 1932 in Dominica, Leeward lslands. A yellowflowered morning-glory.
97770. Ixora lutea Hutch. Rubiaceae.

No. 2668. Collected in the Botanic Garden, Dominica, January 28, 1932 . A glabrous shrub with sessile or subsessile leaves, oblong, with rounded or cordate base and sometimes an acuminate top. It differs from $I$. coccinea by having a laxer inflorescence and pale yellow flowers with larger ovate-rhomboid corolla lobes.
97771. JASMINUM AZORICUM L. Oleaceae. Azores jasmine.
No. 2787. Collected at Orangetown, St. Eustatius Island, Dutch West Indies. A slender vine forming a mass of dark gray-green foliage and bearing long white tubular fragrant 7-parted flowers in loose cymes. The berries are black.

For previous introduction see 43802.
97772. Lawsonia inermis L. Lythraceae.
No. 2660. Presented by the head gardener of the Botanic Gardens, Antigua, Leeward Islands. This is the henna bush of the Orient, used by women to stain their finger nails. The foliage contains an orange dye. This bush is considered one of the best hedge plants here, comparable to Dodonea viscosa.
97773. Lobelia persicaefolia Lam. Campanulaceae.
No. 2674. Collected along the roadside at 1,200 feet altitude in Dominica, Leeward Islands, January 31, 1932. A perennial herb with a rather weedy appearance and brilliant crimson flowers.
97774. Myristica fragrans Houtt. Myristicaceae.

Common nutmeg.
No. 2739. Collected February 4, 1932, in the Botanic Garden at St. Vincent, Windward Islands.

For previous introduction and description see 97573.

## 97775. Opuntia sp. Cactaceae.

No. 2667. Collected on St. Kitts, Leeward Islands, January 23, 1932 . A small handsome unusually attractive form with few spines, almost smooth, and peach red fruits with red flesh which is sour but refreshing.
97776. Passiblora suberosa L. Passifloraceae.

Cork passionflower.
No. 2625. Collected on Saona Island, Dominican Republic, January 20, 1932. Several of the small-fruited passifioras are valued as ornamentals, and this woody climber properly comes under that class. The small flowers are green, and the fruit is a black berry.

For previous introduction see 91827.

## 97750 to 97790 -Continued

97777. Passiflora quadrangularis I. Passifloraceae.

Giant granadilla.
No. 2645. From St. Kitts, January 24, 1932. A vine with large very luscious fruits, growing in acid soil.
97778. Pitcairnia bracteata Ait. Bromeliaceae.
No. 2767. Collected on St. Vincent, February 4, 1932. A very short-stemmed shrubby plant resembling a billbergia, with a dense rosette of narrow somewhat spiny leaves and a central spikelike raceme of red or yellow flowers. It is native to St. Vincent.
97779. Pitcairnia coccinea Hort. Bromeliaceae.
No. 2723. A very striking ornamental with lax sprays of large tubular scarlet flowers which rise from a mass of typical bromelialike leaves, collected in the Botanic Garden, Dominica, Leeward Islands.
97780. Albizzia berteriana (Balb.) Fàwcett and Rendle (Pithecollobium berterianum Benth.). Mimosaceae.
No. 2747. Collected in the Botanic Garden, St. Vincent, March 4, 1932 . A tree over 100 feet high with smooth gray bark, long tough branches, and small rather thin follage which offers no re sistance to the West Indian hurricanes. It does not cast a dense shade, but its clean gray buttressed trunk is most at tractive and suited for large avenue effects and as a stately tree in parks.
97781 and 97782. Plumeria obtusa L. Apocynaceae.
A handsome small tree with dark-green leathery leaves and rather small white flowers with a yellow eye.
97781. No. 2570. Collected on Rum Key, Bahama Islands, January 6, 1932.
97782. No. 2627. Collected on Beata Island, Dominican Republic, January 27, 1932.
97783. QUAMOCLIT COCCINEA (L.) Moench. Convolvulaceae. Scarlet starglory.
No. 2768. Collected at the Government House, St. Lucia, Windward Islands, February 3, 1932. A-vine with entire cordate leaves over 2 inches long and 2 inches wide and many brilliant scarlet flowers with the corolla tube curved.
97784. RANDIA formosa (Jacq.) Schum. Rubiaceae.
No. 2664. Collected in the Botanic Garden, Dominica, Leeward Islands, January 28, 1932. An attractive flowering shrub with long white fragrant flowers. Each flower has a long slender tube and flat salver-shaped corolla. The small fruits are striped different tints of greenish yellow and are about the size of a gooseberry. They are said to be edible.
97785. Solanum mammosum L. Solanaceae.
No. 2741. Collected Februaxy 3, 1932, on St. Lucia. A strikingly ornamental, very spiny shrub, covered with large globose orange-colored fruits over 2 inches in diameter. The fruits are said to be poisonous, and evidently cattle and sheep do not touch them.

For previous introduction see 90935.

## 97750 to 97790 -Continued

97786. Stylosanthes hamata (L.) Taub. Fabaceae.
No. 43. Collected January 23, 1932, at Orangetown, St. Eustatius Island, Dutch West Indies.

For previous introduction and description see 96517.
97787. TABEBUIA LeUCOXYLA DC. Bignoniaceae.
No. 2646. White cedar. Collected January 24, 1932, on St. Kitts, Leeward Islands.

For previous introduction and description see 97579.
97788. Tabebuia pentaphylla (L.)
Hemsl. Bignoniaceae.

No. 2647. Collected January 26, 1932, in the Botanic Gardens at St. Johns, Antigua, Leeward Islands. A handsome tropical deciduous tree about 35 feet high, native to Central America. During its flowering period, from January to March, the numerous large clusters of pink flowers make this tree very attractive.

For previous introduction see 81429.
97789. TAMARINDUS Indica L. Caesalpiniaceae.
No. 2748. Collected February 6, 1932, on Bequia, Grenadine Islands. A largetruited tamarind with pods nearly 6 inches long and over an inch in diameter ; they are thin skinned and rich in pulp of a delicate flavor. The pods are used in the manufacture of tamarind sirup. The young trees bear larger pods than the old trees.
97790. Tillandsia utriculata L. Bromeliaceae.
No. 2644. Collected January 5, 1932, on Conception, Bahamas. An immense species with flower clusters said to be 8 to 10 feet high.

## 97791. LINUM USITATISSIMUM L. Linaceae. <br> Flax.

From Africa. Seeds presented by the Agricultural Department, Nairobi. Kenya Colony, through Simpson \& Whitelaw, Ltd., seed merchants, Nairobi. Received March 5, 1932.
Locally grown linseed introduced for the use of Department specialists.

## 97792 to 97799.

From Palestine. Seeds presented by the deputy director, Department of Agriculture, Forests, and Fisheries, American Colony, Jerusalem. Received March 5, 1932.

97792 to 97797 . Trifolium spp. Fabaceae. Clover.
97792. Trifolium campestre Schreb.

A biennial or annual clover up to about 20 inches high, prostrate or ascending, with bright-yellow flowers. It is native to central Europe.

For previous introduction see 78808.
97793. Trifolium clypeatum $L$.

For previous introduction see 28792 .

## 97792 to 97799 -Continued

## 97794. TRIfolium Lappaceum L.

This plant is one of the less vigorous of the genus. It has a somewhat reclining habit of growth; the rather soft and delicate stems are seldom more than 12 or 15 inches long.

For previous introduction see 31057 .
97795. Trifolium loiseledri Rouy ( $T$. purpureum Loisel., not Gilib.).
An annual clover, closely related to $T$. angustifolium, but differing in having somewhat broader leaflets and shorter flower heads. Native to sandy places in the fields of central Europe.
97796. Trifolium scutatum Boiss.

An annual clover with erect or procumbent stems up to a foot high, narrow obovate leaflets, and yellow flower heads. Native to Asia Minor.
97797. Trifolium Loishleuri Rouy ( $T$.
purpureum Loisel., not Gilib.).
For previous introduction and description see 97795 .
97798. Ziziphus jujuba Mill. Rhamnaceae. Common jujube.
A tree with small brownish fruits from 1 to 2 inches in length.

For previous introduction see 90297.
97799. ZIZIPHUS SPINA-CHRISTI (L.) Willd.
A small tree with bright-green cordate leaves and ovoid fragrant red-brown fruits, the size of a hazel nut.
97800. Pistacia vera L. Anacardiaсеае.

Pistache.
From Syria. Scions presented by Arshak Maroukian, through Sahac Sahacian Bab-el-Faraj, Aleppo. Received March 7, 1932.
A good variety, collected in the vicinity of Aleppo.

## 97801 to 97803.

From Africa. Seeds presented by P. R. L. Putnam, Penje, Avakubi, Belgian Congo. Received March 7, 1932.
97801. Cucurbita moschata Duchesne. Cucurbitạceae.

Cushaw.
An edible hard-shelled squash.
97802. Randia sp. Rubiaceae.

A shrub growing both in the dense forest and on village plazas. The flowers are ornamental, and the full-grown but unripe fruit is beaten to a pulp and used by the natives to paint designs on their bodies. When dry the juice becomes jet black and cannot be removed for several days.
97803. Sarcophrynium sp. Marantaceae.

A shrub found in the less shady parts of the forest. Clumps of the leaves are ornamental, as are also the bright-red seed capsules which are 3-chambered, each chamber containing one seed. The broad durable leaves are used by the natives for thatching their huts; the skin of the stems of the leaves makes excellent smooth mats; the shoots are boiled or fried as a vegetable and the seeds are roasted and eaten.

97804 to 97816. Phoenicaceae.
Palm.
From the West Indies and British Guiana. Seeds collected by David Fairchild and P. H. Dorsett, agricultural explorers, Bureau of Plant Industry, with the 1931-32 Allison $V$ Armour expedition. Received March 7, 1932.
97804. (Undetermined.)

No. 2956. Collected February 19, 1932, in the Botanic Station at Scarborough, Tobago. A graceful feather palm with a smooth trunk 15 feet high and 6 inches in diameter. The fruits are oblong cylindrical, pointed, 1 inch long by $11 / 2$ inches in diameter.
97805. Archontophoenix alexandrae (F. Muell.) Wendl. and Drude.
No. 2983. Collected February 25, 1932, in the Botanic Garden, Georgetown, British Guiana. A pinnate-leaved palm 70 to 80 feet high, with leaves several feet long, of lanceolate, usually entire leaflets, 1 to 2 feet long and whitish beneath. The green-yellow flowers are borne in a cluster about 1 foot long and are followed by small round fruits. It is native to Queensland, Australia.

For previous introduction see 91772 .
97806. PTYCHOSPERMA sp.

No. 2953. Collected February 19, 1932, in the Botanic Station, Scarborough, Tobago. An attractive cluster palm whose pinnate leaves have obliquely truncated pinnae.

## 97807. ArECA TRIANDRA Roxb.

No. 2954. Collected February 19, 1932, in the Botanic Station, Scarborough, Tobago. A graceful spineless palm ultimately about 25 feet high, usually with several trunks which bear crowns of pinnate leaves 4 to 6 feet in length. The fruits, about the size of an olive, are orange-scarlet. Native to India.

For previous introduction see 93400 .
97808. Astrocaryum tucuma Mart.

No. 2986. Purchased in the market at Georgetown, British Guiana, February 25, 1932. The orange-colored fruits, the shape of acorns, have oily flesh which is a deep orange color and full of fiber, but has a sweetish and somewhat nutty flavor.
97809. Astrocaryum segregatum Drude.

No. 2987. Purchased in the market at Georgetown, British Guiana, February 23,1932 . A rather low-growing Brazilian palm with a spiny trunk and large pinnate leaves armed with stout black spines along the midribs. The fragrant smooth oily fruits, over an inch in diameter, have yellow-orange flesh with very little fiber and a flavor something like a hazel nut.
97810. Astrocaryum sp.

No. 2957. Collected on Tobago, Windward Islands, February 20, 1932. A very spiny slender palm found on the mountain side at 1,000 feet altitude.
97811. Copernicia cerifera Mart.

Carnauba palm.
No. 2977. From the Botanic Garden, Georgetown, British Guiana, February 25, 1932. The wax palm of Brazil, which has fan-shaped leaves and grows

## 97804 to 97816 -Continued

to a height of 25 feet. From the leaves is obtained carnauba wax, which is used in making phonograph records.

For previous introduction see 71917.
97812. Desmoncus sp.

No. 2951. Collected February 16, 1932 , in the Forest Reserve, Trinidad. A climbing palm, covered with spines, found in the deep forest. The bunches of deep-scarlet fruits are very attractive.
97813. Euterpe oleracia Mart.

No. 2955. Collected on Tobago, Windward Islands, February 20, 1932 . A graceful palm with a trunk seldom more than 4 inches in diameter. It is said that fats suitable for oils and soaps can be derived from its blue-black berrylike fruits.

For previous introduction see 50481.
97814. HYPHAENE THEBAICA (L.) Mart.

Doum palm.
No. 2980. Collected in the Botanic Gardens, Georgetown, British Guiana, February 25 , 1932. A palm about 30 feet high which is noted as one of the few branching palms. It grows in alkaline sandy and clay soils and is distributed from upper Egypt to central Africa. The stems of old trees are sometimes forked 3 or 4 times. The beautiful yellowishbrown fruits are borne in long clusters of one to two hundred. In upper Egypt people of the poorer classes eat the fibrous husk, which tastes much like gingerbread, but is rather hard. The hard tough wood is used for domestic utensils. It is one of the most striking and picturesque of the palms and is capable of withstanding severe droughts under desert conditions, as well as the moistureladen atmosphere of British Guiana.

For previous introduction see 85741.
97815. Licuala grandis (Bull.) Wendl.

No. 2978. Collected in the Botanic Garden. Georgetown, British Guiana February 25,1932 . A dwarf palm with the stem clothed with the dead leaf sheaths. The erect spreading fan-shaped leaves have closely plicate segments which are two-lobed at the end. Native to the island of New Pommern, Bismarck Archipelago.

For previous introduction see 81589.
97816. Livistona hoogendorpil Andre.

No. 2982. Collected in the Botanic Garden, Georgetown, British Guiana, February 25,1932 . A form with blue fruits. A tall Javanese palm with fan-shaped leaves 4 to 6 feet wide on spiny petioles, 3 to 5 feet long, red-brown at the base and becoming olive green near the blade. The blades are made up of 10 to 12 plicate pendulous segments, with five to seven acute lobes at the apex.

For previous introduction see 95088.

## 97817 and 97818.

From India. Seeds presented by D. N. Mahta, second economic botanist, Central Province at the request of the director of agriculture Nagpur. Received February 26, 1932.
9781'. ALysicarpus rugosus (Willd.) DC. Fabaceae.

An erect annual legume, native to southern Asia and Africa. The tough

## 97817 and 97818 -Continued

stems are 3 to 4 feet high, and the roots bear nitrogen nodules.

For previous introduction see 71803.
97818. Indigofera Linifolia (L. f.) Retz. Fabaceae. Indigo.

A legume with fine stems and numerous small leaves, growing to a height of 6 to 8 inches. Considered one of the best pasture plants of the Ganges Valley.

For previous introduction see 33608 .
97819. Capsicum annuum L. Solanaceae.

Common redpepper.
From India. Seeds presented by W. O'Brien, Hyderabad, Deccan. Received March 11, 1932.

Goa chillie. Grown in Goa, Portuguese India.

For previous introduction and description see 96492.

## 97820 and 97821.

From the West Indies. Material collected by David Fairchild and P. H. Dorsett, agricultural explorers, Bureau of Plant Industry, with the 1931-32 Allison $V$. Armour expedition. Received March 15 1932.
97820. Dioscorea esculenta (Lour.) Burkill. Dioscoreaceae. Lesser yam.
No. 2878. Tuber collected in the Botanic Garden, Trinidad, February 15, 1932. A smooth-skinned, white-fleshed yam with the sweetish taste characteristic of most varieties of this species. The single tuber received is roughly cylindrical and of good size, weighing 15 ounces and measuring 8 inches long by nearly 3 inches thick.
97821. Zinziber officinale Roscoe. Zinziberaceae.

Ginger.
No. 2891. Roots of Jamaica ginger, purchased in the market at Trinidad, February 17, 1932.
97822. Tubraea obtusifolia Hochst. Meliaceae.
From Los Angeles, Calif. Seeds presented by P. D. Barnhart. Received March 8, 1932.

An attractive dwarf evergreen shrub, native to southern Africa, 4 to 6 feet high, which bears, between October and March, an abundance of white flowers which have strap-shaped petals 2 inches long. When in bloom the pure white flowers cover the plant and it is a veritable bouquet. When the capsules dehisce, the pretty seeds remain in the valves; hence whether the plant is in flower or in fruit, it is an ornament to any garden.

For previous introduction see 80214.
97823. Pseudophoenix sargenti Wendl. Phoenicaceae.

Palm.
From the West Indies. Seeds collected by G. G. Albury, commissioner, The Bight, Cat Island, Bahamas, at the request of
Dr. Fairchild. Received March 21, 1932.
For previous introduction and description see 96488 .

## 97824 to 97827.

From the West Indies. Material collected by David Fairchild and P. H. Dorsett, agricultural explorers, Bureau of Plant Industry, with the 1931-32 Allison V. Armour expedition. Received March 7, 1932.
97824. Ananas Sativus Schult. f. Bromeliaceae. Pineapple.
No. 2928. Suckers of a wild pineapple found along the roadside in the eastern part of Trinidad. It grows in light sandy soil which is seldom dry and where it is not exposed to the intense sunlight for more than a few hours a day. May be useful for breeding purposes.

97825 to 97827 . Citrdes spp. Rutaceae.
97825. Citrus aurantifolia (Christm.) Swingle.

Lime.
No. 2942. From Charlotteville, Tobago, Windward Islands.
97826. Citrus medica L. Citron. No. 2933. From the market at Port-of-Spain, Trinidad, February 18, 1932. A fruit with very thick, golden-yellow skin, acid yellow flesh, and very small seeds.
97827. Citrus grandis (L.) Osbeck. Grapefruit.
No. 2931. From the Scarborough Botanic Station, Tobago, February 19, 1932. A locally selected seedling of exceptionally good flavor, but very seedy and not very juicy.

## 97828 and 97829.

From Madagascar. Seeds presented by R. Decary, Ambovombe, through C. F. Swingle, Bureau of Plant Industry. Received March 16, 1932.
97828. Euphorbia sp. Euphorbiaceae.

Collected in December 1930 in the Administrator's garden at Ambovombe.
97829. (Undetermined.)

Fengotra or 'Angoka. A large tropical tree, native to Madagascar, which resembles the Royal poinciana (Delonix regia). The trunk sometimes attains a diameter of over 3 feet. The leaves appear in October (in Madagascar), and the flowers are borne in December. The pod becomes 16 inches long.
97830. Citrus sp. Rutaceae.

From the Union of Soviet Socialist Republics. Seeds presented by Maj. C. R. Olberg, Tiflis, Transcaucasia. Received March 21, 1932.
A wild lemon which is used as a stock on which to bud the mandarin orange.

## 97831 to 97833. Castanea crenata

 Sieb. and Zucc. Fagaceae.Japanese chestnut.
From Japan. Scions presented by Sanichi Ishihara, Agricultural Experiment Station, Gifu Ken. Received March 14, 1932.
97831. Ginyose.
97832. Kanotsume.
97833. Kasahara Wase.

## 97834 to 97852.

From the West Indies. Seeds collected by David Fairchild and P. H. Dorsett, agricultural explorers, Bureau of Plant Industry, with the 1931-32 Allison V. Armour expedition. Received March 7, 1932.
97834. APmiba tibourbot Aubl. . Tiliaceae.
No. 2945. Collected at Charlotteville, Tobago, Windward Islands, February 21 1932. Monkey comb. A tree with light soft wood and seed pods which resemble sea urchins, as they are covered with long brittle spines. Through an opening in the top may be seen the small gray seeds peculiarly marked with a black spot. The tree is rare on the island of Tobago, but is said to be quite common in the Canal Zone.
87835. Baryxylum inermi (Roxb.) Pierre (Peltophorum ferrugineum Benth.) Caesalpiniaceae.
No. 2934. Collected in the Botanic Garden at Tobago, February 18, 1932. A large handsome leguminous tree bearing large terminal spikes of bright-yellow flowers. A good shade tree.
97836. Begonia sp. Begoniaceae.

No. 2924. A wild, vigorous-growing species with small white flowers, collected in the Roseau River Canyon, Dominica, Leeward Islands.
97887. Camsalpinia coriaria (Jacq.) Willd. Caesalpiniaceae. Divi-divi.

No. 2821. Collected February 10, 1932 in the Botanic Garden, Grenada, Grenadine Islands. A leguminous tree, able to grow under almost arid conditions in tropical countries. The pods are very rich in tannin and for years have formed an important source of tanning material.

For previous introduction see 69397.
97888. Calophyllum antilianum Britton (C. calaba Jacq.). Clusiaceae.

Oaleba-trec.
No. 2815. From Grenada, February 10 1932. A large native tree, up to 100 feet high. The dark-green leathery elliptic-oblong leavet are 8 to 8 inches long, and the small white fragrant flowers, borrie in small racemes, are fohowed by hard-shelled fruits about 1 inch in diameter.

07tag. Cithabmyydum apinosum L. Verbenatede.
No. 2737. Collected February 8, 1932, on St. Lucia, Windward Islands. St: sama. A tree 60 feet high which is a close relative of the fidllewood ( $O$. fruticoswim), but with shining black berries which make it a more decorative tree. It is used as a shade tree.
For previous introduction see 43651.
97840. Clerodendrum fallax Lindl. Verbenaceae.
No. 2923. From Port-of-Spain, Trinidad, February 18, 1932. A large shrub with heart-shaped velvety leaves 10 to 12 inches in diameter. The bright-scarlet flowers, on red stalks, are followed by very decorative dark-blue fruits. The shrub is used as a border plant with striking effect.

For previous introduction see 33767 .

## 97834 to 97852-Continued

97841. Tontanda guianmest Aubl. (Ooccosipsilum guianense Schum.). Rubiaceae.
No. 2918. Collected in the St. Andrews district, Trinidad, February 18, 1932. A partly trailing herb growing over the ground in the moist forest. It bears gorgeous bright royal-blue berries and would be a most attractive plant for use in moist shady berders.
97842. Cordia alliodora (Ruiz and Pav.) Cham. Boraginaceae.
No. 2863. Collected in Trinidad, February 17, 1932. The so-called Cypre of Trinidad. A large tree which becomes 8 or 9 feet in diameter and is conspicuous on the landscape with its graywhite flowers which exhale faint perfume. As it grows in the drier parts of Trinidad, it may prove a good street tree in the southern United States.

## 97843. Costus sp. Zinziberaceae.

No. 2925. From the Arena Forest, Trinidad, February 16, 1932 . A large coarse-leaved undershrub found in the rain forest of Trinidad. Its conelike inflorescence is rather attractive.
97844. Eriosema violacra (Aubl.) Don. Fabaceae.
No. 2894. Collected February 17, 1932, on the Mausica Savanna, Trinidad. A promising perennial legume for wet lands with high water table. It grows over 4 feet high, and the upright woolly branches are rather sparsely set with foliage.
97845. Ficus sp. Moraceae.

IIS.
No. 2794. Collected on Carriacou, Grenadine Islands, February 8, 1932. A medium-sized tree found on a hillside, exposed to the trade winds which sweep over the island. The light-green leathery leaves, 4 to 6 inches long, have prominent midribs. The branches are covered with very decorative small figs. Each fig has red-brown patterns of spots and areoles about each spot, giving it a most charming appearance.
97846. GEOPHILA HERBACBA (Jacq.) Schum. Rubiaceae.
No. 2903. From the Botanic Garden, Trinidad, February 15, 1932. A woody creeper that grows in the woods among roots and makes an attractive cover. The white flowers are followed by red berries. It may prove useful in borders in shady places where water is abundant.
978E7. ICHTHYOMETHIA PISCIPULA (L.) Hitchc. Fabaceae.
No. 2790. From Carriacou, February 8, 1932. An attractive leguminous shade tree of spreading habit which becomes 50 feet high with clean gray trunks and large pinnate leaves. The large racemes of pale-pink flowers appear before the leaves and somewhat resemble the black locust. The wood is used for cart building.
97848. Ixora sp. Rubiaceae.

No. 2902. From Port-of-Spain, Trinidad, February 16, 1932. An unrecorded hybrid of Eugene Andre's creation. The flowers are light pink, with half of the under side of each petal pink and the other half white. Presented by his daughter, Mrs. Nora C. Fill.

## 97834 to 97852 -Continued

97849. Kigelia pinnata (Jacq.) DC. Bignoniaceae.
No. 2666. From the Botanic Garden, Dominica, Leeward Islands, January 28, 1932. The sausage tree of Abyssinia. A good shade tree with leaves rough like sandpaper and pendent flower spikes 8 feet long. It is a very curious tree when in bloom.

For previous introduction see $\mathbf{5} 2170$.
97850. Lycopersicon esculentum Mill. Solanaceae.

Tomato.
No. 2896. From the Cotton Research Station, St. Augustine, Trinidad, February 17. 1932 . Supposed to be the original wild tomato of the Peruvian Andes.
97851. Scutellaria ventenatil Hook. Menthaceae.

Skullcap
No. 2824. From the Botanic Garden, Port-of-Spain, Trinidad, February 2, 1932. A plant with very beautiful deepcrimson flowers which is used as a border plant in the Botanic Garden. It resembles sage, but is not quite as showy.
97852. Solanum macranthum Dunal. Solanaceae.
No. 2946. From Trinidad, February 16, 1932. Potato tree. A very rapidgrowing tree with large dark-green spiny leaves and a great profusion of large blue-violet flowers which change color from day to day, becoming a pale blue and later fading to white.

## 97853 to 97859.

From China. Seeds and scions collected by Peter Liu, Hopeh Province. Received March 10, 1932.

All material, except 97853 and 97855 , was collected at Panshan, northwest of Chichow, Hopeh Province.
97853 to 97857. Castanea mollissima Blume. Fagaceae. Hairy chestnut.
97853. Seeds collected at Tsunhuachow.
97854. Scions of the Early ohestnut.
97855. Huchiuyu. Scions collected in the village north of Chichow.
97856. Scions of the Late ohestnut.
97857. Scions of Ju Jou Li, meaning one chestnut only in each thorny coat.
97858. Diospyros kaki L. f. Diospyraceae.
Scions of a large-fruited persimmon.
97859. Pyrus sp. Malaceae.

Pear.
Scions of the Honey pear.
97860 to 97909.
From the West Indies. Seeds collected by David Fairchild and B. H. Dorsett, agricultural explorers, Burreau of Plant Industry, with the 1931-32 Allison $V$. Armour expedition. Received February 29, 1932.
97860. Abelmoschus moschatus Medic. Malvaceae.
No. 2786. Collected on St. Lucia, Windward Islands, February 3, 1932 . Wild okra. An ornamental annual 3 to 12 feet high, which bears large lightyellow flowers with deep dark-chocolate purple spots in the throat.

97860 to 97909-Continued
97861. AcACIA SCORPIOIDES (L.) W. F. Wight (A. arabica Willd.). Mimosaceae.
No. 2761. From Cannouan, Grenadine Islands, February 6, 1932 . An attractive tree with yellow flowers followed by moniliform gray flattened pods.
97862. Albizzia sp. Mimosaceae.

No. 2795. Collected February 8, 1932, on Carriacou, Windward Islands. A strikingly beautiful tree over 50 feet high and 18 inches in diameter, with gray bark and delicate fine pinnate leaves. The abundance of dry pods reminds one of the lebbek tree.
97863. Asystasia gangetica (L.) T. Anders. Acanthaceae.
No. 2718. Collected on St. Lucia, February $3,1932$.

For previous introduction and description see 97255 .

## 97864. Bauhinia sp. Caesalpiniaceae.

No. 2764. From Cannouan, February 6, 1932. A spiny bush 20 feet high with very slender branches and small leaves. The flowers are said to be white.
97865 and 97866. Bradburya virginiana (L.) Kuntze (Centrosema virginianum Benth.). Fabaceae.

Piedmont butterfly-pea.
A long podded vigorous legume, similar to the rice bean.
97865. No. 2722. Collected from a trellis at Government House, St. Lucia, February 3, 1932.
97866. No. 2778. Collected along the roadside on Bequia, Grenadine Islands, February 5, 1932.
97867. Calopogonium orthocarpum Urban. Fabaceae.
No. 2785. From the Botanic Garden, Dominica, Leeward Islands, January 29 , 1932. A small-podded variety which is used as a cover crop in the island.
97868. Cassia nodosa Buch.-Ham. Caesalpiniaceae.
No. 2779. Collected on St. Lucia, February 5 , 1932 . A moderate-sized deciduous tree with long drooping branches and glossy leaves; in the spring it bears a profusion of beautiful pink rosescented flowers in dense clusters on long stalks. The leaves and flowers appear at the same time.

For previous introduction see 93777 .
97869. Casuarina triangularis Hort. Casuarinaceae.
No. 2740. Collected in the Botanic Gardens, Dominica, January 29, 1932. A striking species of this genus with a crooked angular trunk. The so-called leaves are finer and of a gray-green cast, and the pods are a little larger than those of of. equisetifolia.
97870. Cracca villosa hirta (Buch.Ham.) Kuntze (Tephrosia hirta Buch.Ham.). Fabaceae.
No. 2658. From the Botanic Garden, Roseau, Dominica, January 27, 1932.

For previous introduction and description see 97765.

## 97860 to 97909-Continued

97871. Cracca villosa purpurea (L.) Kuntze (Tephrosia purpurea Pers.). Fabaceae.
No. 2783. Wild senna. Collected January 23, 1932, at Basseterre, St. Kitts, Leeward Islands. A legume with redpurple flowers, which appears promising as a cover crop.

For previous introduction see 88150.
97872 to 97880 . Crotalaria spp. Fabaceae.
97872. Crotalaria incana L.

No. 2633. Collected January 21, 1932, on a roadside on St. Eustatius, Dutch West Indies. A tall yellowflowered trifoliolate species.

For previous introduction see 75879. 97873 and 97874 . Crotalaria retusa L. For previous introduction see 88151 .
97878. No. 2774. Collected February 5, 1932, on Cannouan. A pubescent species with simple leaves and yellow flowers.
97874. No. 2777. Collected February 5, 1932, on Bequia. A yel-low-flowered species.
97875. Crotalaria usaramoensis Baker f.
No. 2772. Collected at the Experiment Station near Castries, St. Lucia, February 2, 1932. A leguminous plant which forms a dense low growth and endures partial shade.

For previous introduction see 91469 . 97876. Crotalaria verrucosa L.

No. 2773. Collected February 5, 1932, on Bequia. A small weedy looking species with entire pubescent leaves and blue flowers. It may have drought-resistant characteristics.

For previous introduction see 81518. 97877. Crotalaria sp.

No. 2630. Collected on Monkey Hill, St. Kitts, January 23, 1932.
97878. Crotalaria anagyroides H. B. K.

No. 2642. Collected on St. Kitts, January 24, 1932 . A shrubby vigorous species over 7 feet high, with mucronate pubescent trifoliolate leaves and terminal inflorescence of brilliant yellow flowers.

For previous introduction see 91468. 97879. Crotalaria retusa L.

No. 2652. From St. Kitts, January 24, 1932.

For previous introduction and description see 97874 .
97880. Crotalaria sp.

No. 2649. Collected on St. Eustatius, January 29, 1932. A species with gray leaves.
97881. Datura metel fastuosa (L.) Safford. Solanaceae.
No. 49. Collected on Cannouan, February 6, 1932.

For previous introduction and description see 97766 .

## 97860 to 97909 -Continued

97882. Dolicholus sp. Fabaceae.

No. 2640. Collected on St. Kitts, January 23, 1932. a climbing legume with yellow flowers.
97883. PHASmolus adenanthus $G$. Meyer. Fabaceae.
No. 2775. Collected February 3, 1932, on St. Lucia. A climbing legume with pods over 3 inches long. Flowers not seen.
97884. Guilandina ovalifolia (Urban) Britton. Caesalpiniaceae.
No. 2603. Collected on Beata Island, Dominican Republic. A very prickly vine which is one of the few that can stand the constant salt breezes of the coast. It differs from Guilandia bonduc in having perfectly globular golden-brown seeds.
97885 and 97886. Indigofera suffruticosa Mill. Fabaceae. Indigo.
A slender, yellow-flowered bushy legume, 3 to 5 feet high, producing a rather scanty growth, which is not considered one of the best cover crops.

For previous introduction see 67845.
97885. No. 2634. Collected January 22, 1932, on St. Eustatius, where it was found growing wild.
97886. No. 2661. Collected January 26, 1932, in the Botanic Garden at Roseau, Dominica.
97887. Teramnus Labialis (L.) Spreng. Fabaceae.
No. 2769. Collected February 3, 1932, on St . Lucia. A legume found growing on the dry side of the island. It twined up over the tall grasses, and its great productiveness and the vigor of its growth are in its favor as a cover crop, although there is little substance in its foliage.
97888. Jasminum azoricum L. Oleaceae.

Azores jasmine.
No. 2592. Collected at Nassau, New
Providence, Bahamas, January 10, 1932.
For previous introduction and description see 97771 .
97889. Meibomis sp. Fabaceae.

No. 2782. Collected on Dominica, January 30, 1932 . A decumbent species with very small trifoliolate leaves. It is found commonly in the pastures of several of the British West Indies.
97890. Myrospermum frutescens Jacq. Fabaceae.
No. 2784. Cercipo tree. Collected in the Botanic Garden, Dominica, January 29, 1932. A large tropical-American leguminous tree with showy white flowers. It is worth a trial for street and park purposes.
97891. Pennisetum setosum (Swartz) L. Rich. Poaceae.

No. 2662. Collected on St. Kitts. January 24, 1932. Said to be a valuable pasture grass.

For previous introduction see 92940.
97892 to 97896. Phasfolus spp. Fabaceae.
97892 and 97893. Phaseolus lathyROIDES L.
Collected on St. Lucia, February 2 and 3, 1932.

## 97860 to 97909-Continued

97892. No. 2719. A wild legume with small green seeds and narrow dark-brown pods; collected in the grounds of the experiment station.
97893. No. 2771. Collected on the roadside. A dark dusky red-flowered legume of rather scraggly habit. Not very promising looking as a cover crop, but it may be quite decorative under culture.
97894 and 97895 . Phaseolus vulgaris L. Common bean.
No. 2586. Collected on Eleuthera, Bahama Islands, January 11, 1932. The bean commonly used by the people of the island, who pronounce it excellent for cooking but not so palatable as the pigeonpea.
97894. White beans.
97895. Red spotted white beans.
97896. Phaseolus sp.

No. 46. Collected January 11, 1932, at Spanish Wells, Bahama Islands. A rather long small round poded bean growing at the edge of trails and cultivated land.
97897. Stizolobium aterrimum Piper and Tracy. Fabaceae.

Mauritius bean.
No. 2738. From St. Lucia, February 3, 1932. A black-seeded velvetbean bought in the market where it was sold as coffee.
97898. Tabernaemontana sp. Apocynaceae.
No. 2595. Collected in Nassau, January 12 1932. A shrub with fragrant white flowers which are followed by two fleshy pods which, as they split open, expose rows of brilliant orange seeds. The arillus stains one's fingers bright orange.
97899. Tillandsia sp. Bromeliaceae.

No. 2732. From St. Lucia, February 3, 1932. A large species with purple inforescence which climbs to the top of large trees, completely covering them. There are more beautiful and showy species, but this is the most vigorous and abundant ever seen.
97900. TOLUIFERA PEREIRAD (Klotzsch) Baill. Fabaceae. Balsam-of-Peru.
No. 2650. From Port Orange, St. Eustatius, January 22, 1932. A handsome tree with glossy green foliage. It will probably be a good street tree.

For previous introduction see 66245.
97901. Stegnosparma halimitiolitu Benth. Phytolaccaceae.
No. 2605. From Beata Island, Dominican Republic, January 17, 1932.

For previous introduction and description see 97580.
97902. Ziziphus sp. Rhamnaceae

No. 2781. Collected January 25, 1932, in the Botanic Garden, Dominica. A large tree, a foot in diameter, with drooping branches and small greenish fruits the size of small marbles which are scarcely edible. Introduced for comparison with forms now growing in this country.

## 97860 to 97909-Continued

97903. (Undetermined.)

From Beata Island, Dominican Republic. Received without notes.
97904, Portlandia domingensis Britton. Rubiaceae.
No. 2624. Collected January 20, 1932, on Saona Island, Dominican Republic. A strand shrub with glossy evergreen leaves and large angular pods. Flowers not seen, but the shrub may be valuable for windbreak purposes.
97905. Bumelia obovata (Lam.) DC. Sapotaceae.
No. 2622. Collected January 20, 1932, on Saona Island. A handsome evergreen tree about 20 feet high, with dark-green coriaceous obovate leaves and small black sweet berries. As the tree was growing near the coast, it would be suitable for culture on wind-swept beaches, and may prove a good hedge or windbreak tree.
97906. (Undetermined.)

No. 2788. Collected January 20, 1932, on the strand of Saona Island. A tree with long glossy coriaceous leaves and a habit that may make it an excellent windbreak tree on salty land.
97907. (Undetermined.)

No. 2654. Collected on St. Kitts, January 24, 1932, at 1.700 feet altitude. A shrub with attractive bluish fruits borne in clusters on long pendent branches.

## 97908. Lonchocarpus sp. Fabaceae.

No. 2680. Collected on St. Eustatius, January 22, 1932. An attractive tree 50 feet high with a stately trunk and gray clean bark, but rather thin foliage. It may be useful as a street tree.
97909. Lonchocarpus sp. Fabaceae.

No. 45. Collected at St. Lucia. February 3, 1932 . A small ornamental tree found in a dry situation.
97910 to 97918. Phoenicaceae. Palm.
From Surinam and British Guiana. Seeds collected by David Fairchild and $P$. H. Dorsett, agricultural explorers, Bureau of Plant Industry, with the 1931-32 Allison V. Armour expedition to the West Indies. Received March 14, 1932.
97910. Astrocaryum paramaca Mart.

No. 3685. Purchased in the market at Paramaribo, Surinam, March 2, 1932. A low-growing very attractive shadeloving pinnate palm from 6 to 8 feet high, with the pinnae all in one plane. The inflorescence consists of a single central upright spadix to which the fruits are attached by a peduncle 1 inch long. The fruits are small, an inch long, with tiny black spines and a tough oily endosperm.

## 97911. Elaeis melanococca Gaertn.

No. 3683. Collected near Station Onverwacht, Surinam, March 3. 1932. A wide-spreading low, palm which grows in damp situations. It is closely related to the African oil palm (Elaeis guineensis), and from the kernels a clear ofl is extracted in, small quantities by the natives, who prize it highly for cooking.

For previous introduction see 92196 .

## 97910 to 97918 -Continued

97912. Englerophomix regia (Mart.) Kuntze (Maximiliana regia Mart.).
No. 3684. Maripa palm. Purchased in the market at Paramaribo, Surinam, March 3, 1932. This is a massive pinnate palm up to 50 feet high, with persistent leaf petioles and immense leaves, reminding one of the Cohune. The subacid fruits have thin fleshy pulp and are much appreciated by the natives.
97913. Euterpe edulis Mart. Para palm.

No. 3690. Collected at Paramaribo, Surinam, March 3, 1932.

For previous introduction and description see 97284.

## 97914. Livistona hoogmndorpil Andre.

No. 3651. From the Georgetown Botanic Garden, British Guiana, February 23, 1932. A form with black fruits.

For previous introduction and description see 97816.
97915. Mauritia flexuosa L. f.

No. 3652. From near Flagstaff, British Guiana, February 23, 1932. A palm, native to tropical Brazil, which grows to a height of 150 feet and 30 inches in diameter. The leaves are from 9 to 16 feet long. This is one of the so-called ivory-nut palms. The fruit is spherical, about the size of a small apple, and covered with small smooth reticulated scales. The spadix loaded with fruit is of immense weight, often more than two men can carry.

For previous introduction see 93533. 97916. Phoenix sp.

No. 3658. Collected in the Botanic Garden. Georgetown, British Guiana, February 26, 1932. A low-growing form with scarcely any stem. The small red fruits turn black at maturity.
97917. Livistona australis (R. Br.) Mart.

Australian fan palm.
No. 3686. Collected March 4, 1932 in Paramaribo, Surinam. A tall slender palm from 30 to 40 feet high with smooth trunk, 8 to 10 inches in diameter, and a dense crown of circular leaves, 3 to 4 feet in diameter, divided nearly to the base into narrow plicate segments. The moderately hard light-colored wood is occasionally used for light construction work; the leaves are used for baskets; and the unexpanded fronds, after being dipped in boiling water, are dried, shredded, and the fiber is used in making hats resembling Panama hats.

For previous introduction see 80186.
97918. Thrinax sp.

No. 3689. Collected March 4, 1932, near Georgetown, British Guiana. A graceful palm with brilliant white fruit the size of marbles.
97919 to 97922 . APIUM spp. Apiaceae.
From France. Seeds presented by Prof. D. Bois, Museum of Natural History, Paris. Received March 12, 1932.

## 97919. APIUM AMMI Urban.

A tropical annual with fusiform roots and either cespitose or with a branched stem 2 or 3 feet high. The leaves vary from linear to laciniate, and the small white flowers are in small umbels. Native to Brazil.

## 97919 to 97922-Continued

97920. Apium graveolins L. Celery.

Introduced for the use of Department specialists.

## 97921. ApIUM NODIFLorum Reichenb. f.

A perennial native to fields and open places in western Germany. The stem of this species does not take root at the internodes.
97922. APIUM REPENS Reichenb. f.

A perennial herb with coarsely pinnately cut leaves. The stem develops roots anywhere along the internodes. Native to swampy places in northern Germany.
97923. Lonchocarpus Nicou (Aubl.) DC. Fabaceae. Nicou.
From Peru. Roots presented by William J. Dennis, Des Moines, Iowa. Received March 22, 1982.
A woody vine, climbing to the tops of trees, with alternate compound leaves made up of about seven ovate sharp-pointed leaflets and axillary spikes of pea-shaped purple flowers. It is native to Guiana and Peru, where the roots are used as flish poison.

For previous introduction see 88328.

## 97924 to 97941.

From the West Indies and the Guianas. Seeds and scions collected by David Fairchild and P. H. Dorsett, agricultural explorers; Bureau of Plant Industry, with the 1931-32 Allison V. Armour expedition. Received March 14, 1932.
97924. Alpinia exaltata (L. f.) Roem. and Schult. Zinziberaceae.
No. 3676. March 3, 1932. Purchased in the market at Paramaribo, Surinam. The purplish-brown fruits of this plant are used to flavor curry sauce and to give it its yellow color. The flavor is superior to that of turmeric.
97925. ANANAS \&ATIVUS Schult. I. Bromeliaceae.

Pineapple.
No. 2993. Purchased in the market at Georgetown, British Guiana, February 24,1932 . A long rather slender sugarloaf shaped pineapple of a rather inferior flavor. Introduced for breeding purposes.
97926. Asystasia gangetica (L.) T. Anders. Acanthaceae.
No. 2964. Collected at the Botanic Garden, Demerara, Georgetown, British Guiana, February 24, 1932.

For previous introduction and description see 97255 .
97927 to 97930 . Citrus spp. Rutaceae.
97927 and 97928. Citrus grandis (L.) Osbeck.

Grapefruit.
97927. No. 3662. Scions and seed collected in the Javanese village of Lelydorp, near Paramaribo, Surinam, March 4, 1932 . Very large pear-shaped fruits with thick skin, pink flesh, and pink partitions.
97928. No. 3663. Collected near Lelydorp, Surinam, March 4, 1932. Scions of a red-fleshed Javanese variety which is said to be sweeter than the variety sent in under 3662 (97927).

## 97924 to 97941-Continued

97929. Citrus medica L.

Citron.
No. 2998. Collected at Georgetown, British Guiana, February 25, 1932. Scions of a peculiarly shaped citron which turns a deep-orange color as it ripens.
97930. Citrus grandis (L.) Osbeck. Grapefruit.
No. 3687. Alamoen. Collected at Paramaribo, Surinam, March 2, 1932. A flattened and irregular shaped grapefruit with a large cavity in the center, thick segment walls, and very tender follicles. Said to be the best grapefruit grown in Surinam.
97931. Crotalaria juncea L. Fabaceae. Sunn-hemp.
No. 3699. Collected March 1, 1932, at the Experiment Garden, Paramaribo, Surinam. A tall-growing species with yellow flowers.

For previous introduction see 81421.
97932. FICUS salicifolia Vahl. Moraceae.

Fig.
No. 3656. Collected at the Georgetown Botanic Garden, British Guiana, February 24, 1932. A remarkable form of ficus with long linear to lanceolate leaves and small fruits not over a quarter of an inch through. The fruits are covered with chocolate spots, making them very attractive. The tree climbs and twines about itself, much as Ficus aurea climbs over its host tree.
97933. Gmelina asiatica L. Verbenaceae.
No. 2969. Collected in the Botanic Garden, Georgetown, British Guiana, February 25, 1932. A small tree with thorny drooping branches and odd-looking trumpet-shaped flowers of a bright lemon yellow. The fruits, about the size of a small plum, are creamy yellow, and as they lie untouched on the ground under the tree, we infer that they are not edible.
97934. Ixora lutea Hutchinson. Rubiaсеае.
No. 2975. Collected February 25, 1932, in the Botanic Garden, Georgetown, British Guiana. An attractive form with light creamy-yellow flowers.

For previous introduction see 97770 .
97935. Maba inconstans (Jacq.) Griseb. Diospyraceae.
No. 3697.' Collected on Pigeon Hill, Tobago, February 20, 1932. A form with edible fruits. To be tried as a stock for better varieties of persimmons.

For previous introduction see 97532 .
97936 and 97937. MANGIFERA indica L. Anacardiaceae.

Mango.
Purchased in the market at Paramaribo, Surinam, March 1, 1932.

For previous introduction see 97747 .
97936. No. 3694. A medium-sized kid-ney-shaped mango with a pronounced scarlet blush. The very fibrous flesh has a flavor much like the Haden, although it is darker red and more purplish.
97937. No. 3695. A large nearly round mango of very good flavor.

## 97924 to 97941 -Continued

97938. Petrea volubilis L. Verbenaceae.

No. 3653. Variety alba. Collected in the Botanic Garden, Georgetown, British Guiana, February 26, 1932. A woody climber native to tropical South America and the West Indies. The beautiful white flowers are borne in loose pendent sprays which hang gracefully from the slender arching branches. These combined with the rigid green leaves produce a striking effect.

For previous introduction see 81476 .
97939. Plumeria rubra L. Apocynaсеае.

Nosegay frangipani.
No. 2806. Collected in the Botanic Garden, Grenada, Grenadine Islands, February 10, 1932. An immense tree which bears shell-pink flowers.

For previous introduction see 59647.
97940. Randia formosa (Jacq.) Schum. Rubiaceae.
No. 2994. Collected along the Lamaba Canal in British Guiana, February 26, 1932.

For previous introduction and description see 97784.
97941. Xilopia frutescens Aubl. Annonaceae.
No. 3681. Collected March 3, 1932, at Onverwacht, Surinam. A peculiar-looking tree with glaucous blue-green leaves which are narrow lanceolate and pointed. Great masses of small fruits are produced. These have an aromatic taste, but are not bitter. This may prove of value as a shade or avenue tree.

## 97942 to 97949.

From Japan. Seeds presented by M. Tozawa, director, Forest Experiment Station, Keijo, Chosen. Received March 16, 1932.
97942. AbIES HOLOPHYLLA Maxim. Pinaceae.

Needle fir.
A tall handsome fir, eventually 100 feet or more high, with stout spreading or ascending branches and dark-green foliage.

For previous introduction see 90649 .
97943. Acer triflorum Komarov. Aceraceae.

Maple.
For previous introduction and description see 97509.
97944. Alnus hirsuta sibirica (Fisch.) C. Schneid. Betulaceae.

Alder.
A handsome tree, native to Siberia, 60 feet high of broad pyramidal habit and vigorous growth. The broadly ovate leaves, about 5 inches long, are dark green above and glaucous beneath.

For previous introduction see 90787.
97945. BUXUS MICROPHYLLA KOREANA Nakai. Buxaceae.
A variety which differs from the usual form by its low stature, thicker leaves, and pubescent branchlets. It is native to Chosen.
97946. Larix dahurica Turcz. Pinaceae. Dahurian larch.
Received as variety Koreana.

## 97942 to 97949-Continued

97947. Picea Jmzonnsis (Sieb. and Zucc.) Carr. Pinaceae. Yeddo spruce.
A Japanese tree up to 150 feet high, with dark-gray bark and slender horizontally spreading branches. The leaves are silvery white above and dark green beneath, and the staminate flowers are orange crimson.
For previous introduction see 90666.
97948. Picea koyamai Shiras. (P. koraiensis Nakai). Pinaceae. Spruce.
A narrowly pyramidal tree 60 feet high, native to Japan and Chosen, with red-brown bloomy branchlets and compressed leaves half an inch long, with two white bands above. The palebrown cylindrical cones are 2 to 3 inches long.

For previous introduction see 78404.
97949. Pinus tabulamformis Carr. ( $P$. leucosperma Maxim.). Pinaceae. Pine.
A pine up to 75 feet high with darkgray bark on the trunk, red on the branches, and orange or gray-yellow branchlets. The glaucescent leaves, usually two in a cluster, are stout and 3 to 6 inches long, and the ovoid cones, 2 to 4 inches long, are pale tawny yellow. changing to dark brown and persisting for several years.

For previous introduction see 90793.

## 97950 to 97968.

From the West Indies. Seeds collected by David Fairchild and P. H. Dorsett, agricultural explorers, Bureau of Plant Industry, with the 1931-32 Allison $V$. Armour expedition. Received March 7, 1932.
97950. Anneslia purpurea (L.) Britton (Alliandra purpurea Benth.). Mimosaceae.
No. 2757. Collected on Mayero Island, February 6, 1932. A very pretty shrub with handsome crimson flowers borne in heads on the gray shoots. It is suited to wind-swept situations near the sea.
97951. Bignonia sp. Bignoniaceae.

Trumpetcreeper.
No. 2810. Collected in the Botanic Garden, Grenada, Grenadine Islands, February 7, 1932. An immense vine which has completely covered a giant saman tree. Introduced for comparison with the forms now growing in this country.
97952. Cactus caesius (Wendl.) Britt. and Rose. Cactaceae.
No. 2949. Turksciap or melon cactus. Collected in the Trinidad Botanic Garden, February 15, 1932. A less showy variety and with a less pronounced cap than $C$. intertus, No. 2628 ( 97564 ), bu ${ }^{+}$ a dooryard curiosity that seems to interest many people.
97953. Camodnsia maxima Welw. Fabaceae.
No. 2897. Collected in the Botanic Garden, Port-of-Spain, Trinidad, February 15, 1932 . A strong-growing vine with delicately fragrant white flowers fringed with gold.

For previous introduction see 54805 .

## 97950 to 97968-Continued

97954. Cassia javanica L. Caesalpiniaceae.
No. 2850. Collected in the Botanic Garden, Trinidad, February $13,1932$. Apple blossom cassia. A small tree, deciduous in the dry season, but covered with gorgeous pink flowers over 2 inches across borne in large clusters during the spring and early summer.

For previous introduction see 94185.
97955. Clitoria rubiginosa Juss. Fabaceae.
No. 2926. Collected at the Botanic Station at Scarborough, Tobago, February 19, 1932. A slender twining vine 10 feet tall. The flowers are said to be white with purplish-crimson veins, and 2 inches across. May prove of value as a cover crop.

For previous introduction see 48604.
97956 to 97958 . Crotalaria spp. Fabaceae.
97956. Crotalaria incana L.

No. 2932. Collected February 19, 1932, along the sea wall at Scarborough, Tobago.

For previous introduction and description see 97872 .
97957. Crotalaria retusa L.

No. 2818. Collected February 10, 1932 on Grenada. A bushy species with yellow and red flowers, found growing in a very dry situation.
97958. Crotalaria retusa L.

No. 2823. Collected in Dominica, Leeward Islands, January 30, 1932. A yellow-flowered species found along the roadside.
97959. Diospyros Ifrensis Britton. Diospyraceae. Persimmon.
No. 2879. Bois charbon. Collected in the forest reserve, Trinidad, February 16, 1932. A medium-sized forest tree reaching a girth of 4 feet. The wood is blackish, and the small fruits $11 / 2$ inches in diameter are green to brown outside with dark flesh. Of possible use as a stock on which to graft the better varieties of persimmons.
97960. Entada polystachya (L.) DC. Mimosaceae.
No. 2944. Collected February 20, 1932 at Tobago, Windward Islands. A stronggrowing vine with dark-green pinnate leaves and rather inconspicuous fowers which are followed by interesting large papery pods 8 to 10 inches long and 2 inches or more wide. These pods break up into winged seeds that drop out from the persistent margins of the pods, leaving the margin like the rim of a picture frame.

For previous introduction see 92896.
97961. Galactia sp. Fabaceae.

No. 59. Collected January 18, 1932 on Beata Island, Dominican Republic. A vine found growing over a bush.
97962. Hibiscus collinsil Hort. Malvaceae.
No. 2812. Collected February 10, 1932 in the Botanic Garden, Grenada. A small tree with large palmately-veined leaves; said to have white flowers, one petal of which is streaked with mauve.

## 97950 to 97968 -Continued

97968. Capsicum frutescens baccatum (L.) Irish. Solanaceae.

Bush redpepper.
No. 2880. From Port-of-Spain, Trinidad, February 17, 1932 . An erect shrubby perennial about 3 feet high, with slender flexuose branches, small white flowers, and small red fruits about one fourth inch in diameter. Native to tropical America.

For previous introduction see 96503.
97964. Meibomia Cana (Gmel.) Blake (Desmodium supinum DC.). Fabaceae.
No. 52. Collected February 6, 1932, on Cannouan, Grenadine Islands. A plant 12 to 18 inches high found growing on a very dry hillside. The small flowers are pink.
97965. Meibomia cana (Gmel.) Blake (Desmodium supinum DC.). Fabaceae. No. 2936. Collected in the Botanic Garden, Tobago, February 19, 1932.
97966. Passiflora rubra L. Passifioraceae.
No. 2952. Collected January 7. 1932, near Eleuthera Bluff, Eleuthera, Bahama Islands. A softly pubescent vine with crescent-shaped cordate leaves 2 to 4 inches broad, green-white flowers 2 inches across, and red fruits 2 inches long. It is native to the West Indies.
97967. (Undetermined.)

No. 2920. Collected near Argyle, Spring Village, St. Vincent, Windward Islands, February 5, 1932 . A small evergreen tree with waxlike fragrant white flowers and showy scarlet berries one half inch in diameter.
97968. (Undetermined.)

From Port-of-Spain, Trinidad. An orchid with a very attractive delicate deep purple flower not over three eighths of an inch across. From the Huggins orchid collection.

## 97969 to 97974.

From Canada. Seeds presented by the Department of Agronomy, University of Manitoba, Winnipeg. Received March 12, 1932.
A collection of grasses introduced for pasture-research investigations by Department specialists.
97969. Agropyron tenerum Vasey. Poaceae.

Slender wheatgrass.
97970. Dactylis glomerata L. Poaceae.

Orchard grass.
97971. Festuca elatior L. Poaceae. Meadow fescue.
97972. Midicago sativa L. Fabaceae.

Alfalfa.
97973. Phledm pratense L. Poaceae.

Timothy.
97974. Trifolium pratense L. Fabaceae. Red clover.

## 97975 to 97986.

From the West Indies. Seeds collected by David Fairchild and P. H. Dorsett, agricultural explorers, Bureau of Plant Industry, with the 1931-32 Allison V. Armour expedition. Received March 15, 1932.

## 97975 to 97986 -Continued

97975. Barringtionia asiatica (L.) Kurz. Lecythidaceae.
No. 2803. Collected in the Botanic Garden on Grenada, Grenadine Islands, and on St. Vincent, Windward Islands, February 5, 1932. A handsome tree 50 feet high, with thick leathery leaves, bright green and a foot long, racemes of large showy flowers having white petals, and crimson-tipped stamens resembling a brush. The smooth shining black fruits are shaped like a 4 -sided pyramid and are 3 to 4 inches long on each side. It is native to the East Indies.

For previous introduction see 93541.
97976. Cedrmla odorata L. Meliaceae.

Cigarbox-cedar.
No. 2937. Collected in the Botanic Garden, Tobago, Windward Islands, February 19, 1932. The West Indian cedar or Acajou. A rapidly growing tree of beautiful appearance, the wood of which is used for the cigar boxes of commerce. The wood is soft, easily worked, sweet scented, and immune from the attacks of many insects.

For previous introduction see 94770 .
97977. Centrolobium paraense Tul. Fabaceae.
No. 2844. Collected February 13, 1932, in the Botanic Garden, Trinidad. Porcupine tree. A tree with large leaves and large curious fruits like gigantic maple seeds, with wings 6 inches long and which whirl as they fall. The eggshaped basal portion, as large as a pullet's egg, is covered with spines like a sea-urchin.
97978 and 97979. DoLichos Lablab L. Fabaceae. Hyacinth-bean.
Collected February 16, 1932, at Port-of-Spain, Trinidad.
97978. No. 2921. A small white variety which is used as food in Trinidad.
97979. No. 2922. A large-seeded variety which is not considered as good as the smaller-seeded one (No. 2921) [97978].
97980. Lagerstroemia speciosa (Muench.) Pers. (L. flos-reginae Retz.).
Lythraceae. Queen crapemyrtie.
No. 2855. Collected February 13, 1932, in the Botanic Garden, Port-ofSpain, Trinidad. A tree 50 to 60 feet high, with leaves 4 to 8 inches long and large panicles of flowers which change color from rose to purple from morning to evening. This tree is native to eastern Bengal and India where it is cultivated as an avenue tree.

For previous introduction see 94194.
97981. Ochrosia sp. Apocynaceae.

No. 2845. Collected February 13, 1932, in the Botanic Garden, Port-of-Spain, Trinidad. A tree with dark-green glossy leaves and brilliant showy red fruits.
97982. Alpinia sp. Zinziberaceae.

No. 2919. Collected February 9, 1932, on Grenada, Grenadine Islands. Found in moist forest near Grand Etang at 1,500 feet altitude. Said to be a striking plant with colored bracts and showy scarlet flowers.

## 97975 to 97986-Continued

97983. COLA HETEROPHYLLA (Beauv.) Schott and Endl. Sterculiaceae.
No. 2847. The Mahae. Collected in the Botanic Garden, Port-of-Spain, Trinidad, February 13, 1932. A large tree found growing in very poor soil. Its wood is soft and light, 31 pounds per cubic foot, and is easily worked. The flowers are not showy, but the pods are bright scarlet, covered with stinging hairs. Introduced for trial as a street or windbreak tree.
97984. TERMINALIA ARJUNA (Roxb.) Wight and Arn. Combretaceae.
No. 2859. Collected February 13, 1932, in the Botanic Garden, Port-of-Spain, Trinidad. Arjan. A very large tree with smooth green or whitish bark, found on river banks throughout central and southern India. The leaves are narrowly oblong, about 9 inches long, and the flowers, which appear in April and May, are borne in terminal panicles. This tree yields a transparent gum which is used as a drug in northern India; the bark is used for tanning, and the wood is used for carts and agricultural implements.

For previous introduction see 66156.
97985. Terminalia bellerica (Gaertn.) Roxb. Combretaceae.
No. 2852. Collected February 13, 1932, in the Trinidad Botanic Garden. The small round fruits of this handsome tropical Indian tree have been exported from India for tanning purposes under the name myrobalans. The yellow-gray wood is used for general construction. The tree also has merit as a shade tree for avenues, with its huge buttressed trunk and long horizontal branches.

For previous introduction see 94080 .
97986. WARSZEWICZIA COCCINEA (Vahl) Klotzsch. Rubiaceae.
No. 2856. Collected in the Botanic Garden, Port-of-Spain, Trinidad, February 13, 1932. An ornamental tree with dark-green foliage and clusters of small flowers each a quarter of an inch across. One sepal of each cluster is brilliant scarlet and $21 / 2$ inches long, making a startling splash of color against the dark leaves. The tree blooms during the wet season, whereas most of the showy flowering trees of the Tropics bloom in the dry season.

For previous introduction see 92197.

## 97987 to 98000.

From the Netherlands. Plants purchased from B. Ruys, Ltd., Royal Moerheim Nurseries, Dedemsvaart. Received March 16, 1932.
97987. Statice sp. Plumbaginaceae.

Hybrid Gigantea. A plant about 3 feet high, with large flower heads of a clear-rose color. Excellent for cut flowers.
97988. Aster frikartil Hort. Asteraceae.
Said to be a globular plant 2 to 3 feet high, with very large sky-blue flowers having orange-yellow centers. It flowers from August to November.
97989 to 97991. Crindm Pownllii Baker. Amaryllidaceae.

Powell crinum.
A bulbous plant with about 20 spreading strap-shaped leaves 3 to 4 feet long

## 97987 to 98000-Continued

and usually 8 rose-colored flowers in large showy heads, terminating a scape a foot or more high. It is considered to be a hybrid between $C$. longifolium and C. moorei.
97989. Album. Flowers white.
97990. Intermealum. Flowers pink.
97991. Flowers dark rose.
97992. Erinacea pungens Boiss. Fabaсеае.
A low deciduous shrub 12 to 15 inches high, native to the western Mediter ranean region. The spatulate leaves, less than half an inch long, are borne only at the tips of the rigid pubescent branches, and the violet-blue pea-shaped flowers, 1 inch long, are borne in axillary clusters of one to three.

## 97993. Hmdera helix L. Araliaceae.

English ivy.
Conglomerata minima. A very dwarf, creeping ivy, suitable for the rockery.
97994. ILex altaclarensis Dallim. Aquifoliaceae.

Holly.
Camelliaefolia. Leaves elliptic or oblong, acuminate, dark olive green, very glossy, entire or with a few spines near the apex.
97995. ILEX AQUIFOLIUM L. Aquifoliaсеае.

English holly.
Pyramidalis. A form with ascending branches, forming a narrow oblong head.
97996 to 98000. Potintillan spp. Rosaceae. Cinquefoll.
97996. Potmitilla fruticosa L.

Shrubby cinquefoil.
Beesii. A very beautiful dwarf shrub with attractive silver-gray foliage and an abundance of rich canary-yellow flowers.
97997. Potentilla fruticosa dayurica (Nestl.) Seringe.

Dahurian cinquefoil.
A dwarf compact shrub less than 2 feet high, with small leaves having lustrous brown stipules tipped with a tuft of conspicuous hairs. The solitary yellow flowers are about 1 inch across.
97998. Potentilla fruticosa FrimbRICHsiniI (Spaeth) Rehd.

Friedrichsen cinquefoll.
A form with rather large pubescent leaflets, glaucous beneath, and lightyellow flowers. It is considered to be a hybrid between $P$. fraticosa and $P$. fruticosa davurica.
97999. Potentiluta fruticosa partiFolia (Fisch.) Wolf.
A dwarf form with seven ellipticoblong glabrescent leaves and paleyellow flowers.
98000. POTENTILLA FRUTICOSA PYRMNAICA Willd. (P. prostrata Lap.).

Alpine shrubby cinqueroil.
A dwarf alpine form of dense habit, with small lanceolate leaflets and bright-yellow flowers.
98001 to 98009. Castanea montisgray Blume. Fagaceae. Hairy chestind
From China. Seeds and scions collectectex Peter Liu and sent through Owen 1.

## 98001 to 98009-Continued

Dawson, agricultural commissioner, Shanghai. Received March 16, 1932.
98001. Seeds collected in the village of Leeyuan, north of Langshan. A very sweet yellow chestnut with a thin skin.
98002. East mountain chestnut of Miyun. Seeds purchased in a fruit shop at Miyun, 50 miles northeast of Peiping.
98003. Seeds purchased from a fruit dealer at Tangshan.
Nos. 98004 to 98006 are scions collected in the village of Heishanssu, northwest of Miyun.
98004. The white dew or early chestnut of Miyun. A chestnut which ripens early in September.
98005. The middle ripening chestnut of Miyun. This chestnut ripens about a week later than the one sent under 98004 .
98006. The late chestnut of Miyun. A chestnut which ripens the middie of September.
Nos. 98007 to 98009 are scions collected in the village of Leeyuan, north of Tangshan.
98007. Middle autumn chestnut. A rather rare chestnut which ripens late in September.
98008. Second ripening chestnut. This chestnut is said to ripen about a week later than the white dew or early chestnut of Miyun (98004). It is the most commonly grown chestnut in this region.
98009. White dew or early chestnut. A chestnut which ripens early in September.

## 98010 to 98012.

From the Union of South Africa. Seeds presented by the McGregor Museum, Kimberley. Received March 11, 1932.
98010. Alon schlechteri Schoenl. Liliaceae.
From Griqualand West. An aloe with olive-green leaves about 8 inches long, armed on the margin with brown horny deltoid prickles. The light-yellow flow-
ers are in dense racemes about 6 inches long, on a short peduncle.

For previous introduction see 94242 .
98011. Alow sp. Liliaceae.
98012. Tarchonanthus minor Less. Asteraceae.
A strongly resin-scented shrub native to southern Africa, with oblong to obovate, entire leaves 1 to 2 inches long, and short racemes of small woolly flower heads. It is said to be a good stock feed and to be drought resistant.

For previous introduction see 94241.
98013 to 98017. GossYPIUM spp. Malvaceae.

Cotton.
From the West Indies. Seeds collected by Gaines R. Wilson on Moires Island, Bahamas. Received February 26, 1932 .
Bolls collected in the settlement on the western side of the island, and each boll is from a different plant.

## 98013 to 98017-Continued

98013. Gossypium sp.

$$
\text { No. } 932 .
$$

98014. GOSSYPIUM sp.

No. 933.
98015. Gossypium sp.

No. 934.
98016. Gossypium sp.

No. 935.
98017. Gossypium sp.

No. 936.
98018 to 98022. Gossypium spp. Malvaceae.

Cotton.
From the Bahamas. Seeds collected by Hugh M. Matheson at the request of David Fairchild. Received March 1, 1932.
98018. Gossypium sp.

No. 937.
98019. Gossypium sp.

No. 938.
98020. Gossypium sp.

No. 939.
98021. Gossypium sp.

No. 940 .
98022. GoSSypium sp.

No. 941.
98023 and 98024. Amygdalus persica L. Amygdalaceae. Peach.

From Java. Seeds presented by A. M. Cramer, of Cramer \& Zoon, Wonosobo. Received March 18, 1932.
A collection of local peach varieties introduced for the use of Department specialists.
98023. From a tree growing in the yard of Mr. Cramer at 4,400 feet altitude. The fragrant fruit is nearly round, well colored, and almost without bitterness. The average rainfall is 140 inches and the tree has a true resting period during the latter part of the dry season (July-September), when it is quite bare of leaves.
98024. Collected in native villages between 5,000 and 6,700 feet altitude. At the higher level frosts occur during the dry season, and the trees have a true resting period. The fruit is quite fragrant, but very bitter.

## 98025 to 98031.

From China. Seeds presented by G. Weidman Groff, Lingnan University, Canton. Received March 18, 1932.
98025. Citrus Sinensis (L.) Osbeck.
Rutaceae. Rutaceae.

Orange.
No. 34. Purchased in the Fachow market, Fachow district, Kwangtung, December 28, 1931. A large round juicy sweet orange.
98026. Fobtunblla sp. Rutaceae.

Kumquat.
No. 35. Purchased in the Fachow market December 28, 1931. Kat. A wild flat fruit, not very plentiful in the market. Said to have come from the hills.

## 98025 to 98031-Continued

98027 to 98031. Severinia
buxifolia (Poir.) Ten. (Atalantia buxifolia Oliver). Rutaceae.
For previous introduction and description see 97334.
98027. No. 45. Collected in southern Kwangtung near the coast where it was subjected to brackish water.
98028. No. 48. Collected January 1, 1932, from upland areas in the vicinity of Kwangchowaan.
98029. No. 49. Collected January 1, 1932, from low salty lands near Chikhan, Kwangchowaan, southern Kwangtung.
98030. No. 50. Collected January 1, 1932, from the wall of Lonkong City, southern Kwangtung.
98031. No. 65. January 8, 1932. Large vigorous plants collected in the vicinity of Pakhoi, southern Kwangtung, in hedges and open patches in light sandy soil, not far from the sea.

## 98032 to 98044.

From Chile. Seeds collected near Ancud, Chiloe Island, by H. G. MacMillan and C. O. Erlanson, Bureau of Plant Industry. Received March 8, 1932.
98032. Berberis buxifolia Lam. Berberidaceae. Magellan barberry. No. 25. Collected January 25, 1932, in open country and sandy soil. An erect bushy partially evergreen barberry 6 to 8 feet high, with hard leathery oblongobovate leaves up to an inch long, small solitary amber-yellow flowers, and globular dark-purple fruits. Native to southern Chile, where it is cultivated for its edible berries.

For previous introduction see 78917.
98033. Euphorbia lathyrus L. Euphorbiaceae.

Caper spurge.
No. 27. Collected January 30, 1932, near Castro. A herbaceous plant 4 feet tall found in sandy soil in open situations. The stem contains an abundance of milky juice. It may prove of value as a rubber-producing plant.
98034. Gunnera chilensis Lam. Haloragidaceae.

Chilean gunnera.
No. 19. Nalca. January 24, 1932. An herb 1 foot high found in open sandy soil, usually on steep slopes. The smail orangelike fruit is on a branched fleshy fruiting receptacle. For use as an ornamental.
98035. Lupinus arbordots Sims. Fabaсеае.

Tree lupine.
No. 9. January 22, 1932. An ornamental herbaceous plant 4 feet high, found cultivated in the gardens of Ancud.
98036 and 98037. Phaseolus vulgaris L. Fabaceae.

Common bean.
98036. No. 8. Collected January 20, 1932, and thought to be of Russian origin.
98037. No. 12. Said to be indigenous to Chiloe Island.
98038. Ribes sp. Grossulariaceae.

Gooseberry.
No. 24. Collected January 31, 1932. A pink gooseberry about three fourths of

## 98032 to 98044 -Continued

an inch in diameter, with weak spines on the berry. Said to be indigenous to southern Chile.
98039. Sophora tetraptera J. Miller. Fabaceae.

Fourwing sophora.
No. 11. Pelu. A tree 20 to 30 feet high found in sandy soil at the edge of woods. The green pinnate leaves and large clusters of pale-yellow flowers make it an attractive ornamental.
98040. Nertera depressa Banks and Soland. Rubiaceae.
No. 21. Madresalva. A procumbent herbaceous plant with red or orange-red berries, found growing in exposed places. Introduced as a rock-garden plant.
98041. Margyricarpus setosus Ruiz and Pav. Rosaceae.
No. 23. Collected January 23, 1932, on the sandy beach. A dwarf heathlike creeping evergreen shrub about 1 foot high, with odd-pinnate leaves, very small greenish flowers, and shows white berries which persist for some time. It is native to Peru.

For previous introduction see 91048.
98042. Enargea radicans (Ruiz and Pav.) F. Muell. Liliaceae.
No. 22. Collected January 23, 1932. An ornamental climbing woody vine with bright-orange berries. It is common in shaded situations, and the natives use it to make brooms and brushes.
98043. Aristotelia chilmesis (Molina).

Stuntz (Aristotelia macqui L'Her.). Elaeocarpaceae.
No. 18. A small ornamental tree 15 to 20 feet high, found in beach thickets. The purple fruit resembles the wild cherry.
98044. Rhaphithamnus Cyanocarpus (Bert.) Miers. Verbenaceae.
No. 20. Collected January 24, 1932, in a beach thicket. A hedge plant 5 feet high, with small glossy evergreen leaves and sharp thorns. It produces an abundance of small blue berries which make it very attractive. Horses as well as cattle eat this plant the year round and seem fond of it.

For previous introduction see 41494.

## 98045 to 98051.

From the West Indies and British Guiana. Seeds collected by David Fairchild and $P$. H. Dorsett, agricultural explorers, Bureau of Plant Industry, with the 1931-32 Allison V. Armour expedition. Received March 14, 1932.
98045. Erythrina sp. Fabaceae.

No. 3700. Collected near Charlotteville, Tobago, Windward Islands, on a mountain side. A low tree with rather showy salmon-colored flowers an inch long, followed by curved pods a foot long.
98046. Hibiscus sp. Malvaceae.

No. 3654. Collected February 26, 1932 near Georgetown, British Guiana. A wild species with attractive yellow flowers and pubescent leaves, found overhanging the narrow fresh-water canal through the peat savanna near Flagstaff, on the Lamaha Conservancy.

## 98045 to 98051-Continued

98047. Lecytwis zabucajo Aubl. Lecythidaceae.

Sapucaya nut.
No. 2963. Collected February 15, 1932, on Trinidad. The sapucaya nut is native to the Amazon Valley and adjacent regions, and many people consider it even better flavored than the Brazil nut. The somewhat triangular nuts are over 2 inches long and about an inch wide. They are borne in large woody urn-shaped capsules about 10 inches in diameter, with close-fitting lids at the top. The tree is a slow grower and requires a long time to reach the bearing stage.

For previous introduction see 92030 .
98048. PASPALUM PLICATULUM Michx. Poaceae.

Black grass.
No. 2941. Collected on Tobago, February 20, 1932. An upright cespitose perennial grass about 3 feet high. It is native to Uruguay.

For previous introduction see 62050.
98049. Passiflora mollissima (H. B. K.) Bailey. Passifloraceae.

Softleaf passionfiower.
No. 2995. Collected February 23, 1932, in the market at Georgetown, British Guiana. A yellow fruit about the size of an egg, with a rather soft flexible skin. The fruit is unusually aromatic, and the slightly acid flesh has a delightfully pleasant flavor.
98050. QUASSIA AMARA L. Simaroubaceae.
No. 2972. Collected in the Botanic Garden at Georgetown, British Guiana, February 23, 1932. A shrubby tree, native to tropical America. The opposite dark-green pinnate leaves have winged petioles and are made up of five elliptical leaflets with pink veins. The racemes of small crimson flowers are followed by ovoid black fruits about half an inch long.
98051. (Undetermined.)

No. 2989. Collected near Georgetown, British Guiana, on the Lamaha Canal, February 26, 1932. A large-leaved tree which bears greenish-yellow fruits the size of a large plum. The very small seeds are scattered through the slightly acid agreeable pulp.

## 98052 to 98056.

From the Union of Soviet Socialist Republics. Scions presented by V. P. Alekseev, plant introducer, Sukhum Subtropical Branch of the All-Union Institute of Plant Industry, Sukhum, Caucasus. Received March 19, 1932.
A collection of scions from Tuapse, northern Caucasus, introduced for the use of Department specialists.

98052 to 98055 . Juglans regia L. Jug.
landaceae.
98052. No. 135177.
98053. No. 135178.
98054. No. 135179.
98055. No. 135180.
98056. Pyrus sp. Malaceae.

Pear.
No. 135181. Cherkess.

## 98057 to 98071.

From the West Indies. Seeds collected by David Fairchild and P. H. Dorsett, agricultural explorers, Bureau of Plant Industry, with the 1931-32 Allison V. Armour expedition. Received March 15, 1932.
98057. ALYSICARPUS VAGINALIS NUMMULarifolius (L.) Baker. Fabaceae.
No. 2792. Collected on Carriacou, Grenadine Islands, February 8, 1932, at 900 feet altitude. A low creeping annual legume which forms a mat of stems and foliage not over half an inch thick. It may prove a good legume to mix with lawn grass.

For previous introduction see 67838.
98058. Crotalaria verrucosa L. Fabaсеае.

No. 2950. Collected on Tobago, Windward Islands, February 19, 1932.

For previous introduction and description see 97876 .
98059. ERythrina PaLlida Britt. and Rose. Fabaceae.
No. 2914. The coral or jumbie bean. Collected February 16, 1932, from a very large tree at Port-of-Spain, Trinidad, that has triangular-shaped leaves; and the coral-red seeds, one fourth to one third black, are used for necklaces.

## 98060. Erythrina sp. Fabaceae.

No. 2796. Collected February 9, 1932, on Carriacou, Grenadine Islands, near the Botanic Garden. A form with white flowers.
98061. Midibomia cana (Gmel.) Blake (Desmodium supinum DC.). Fabaceae.
No. 2861. Collected at Port-of-Spain, Trinidad, February 15, 1.932.

For previous introduction and description see 97965.

## 98062. Mucuna sp. Fabaceae.

No. 2895. Collected February 17, 1932, at Port-of Spain, Trinidad. A vine which covers tall forest trees. The yellow flowers are followed by large pods, 5 inches long and 2 inches wide, which certain 3 or 4 large decorative seeds. When young the pods are covered with stinging hairs, hence the name cow-itch.
98063. Mucuna sloanei Fawc. and Rendle. Fabaceae. Horse-eye bean.
No. 2938. Collected on Pigeon Mountain. Tobago, February 20, 1932. A highclimbing woody vine, native to Florlda and the West Indies. The trifoliolate leaves have thin ovate leaflets 3 to 6 inches long, silky pubescent beneath, and the yellow flowers, 2 to 3 inches broad, are borne in an umbellate cluster on a stalk about the length of the leaf petiole.

98064 and 98065. Phasholus vulgaris L. Fabaceae.

Common bean.
Collected at Port-of-Spain, Trinidad, February 17, 1932.
98064. No. 54. Small black beans purchased in the market. They are said to be bush beans.
98065. No. 55. A locally grown red bush bean.

## 98057 to 98071-Continued

88066. Ptherocarpus I NDICUS Willd. Fabaceae.

Padouk.
No. 2816. Collected in the Botanic Garden, Grenada, Grenadine Islands, February 10, 1932. A very attractive unarmed tree 40 feet high with long slender branches and long pinnate glossy green leaves. The seeds are borne in almost circular papery pods, with a wing running all the way around the circumference.

For previous introduction see 67589.
98067. Teramnus labialis (L.) Spreng. Fabaceae.
No. 2927. Collected February 19, 1932, at the Tobago Botanic Station at Scarborough.

For previous introduction and description see 97887.
98068. Tounatea simplex (Vahl.) Taub. Caesalpiniaceae.
No. 2814. Collected in the St. George Botanic Garden, Grenuda. A globularheaded tree about 20 feet high, with dull yellow-orange spindle-shaped pods containing one or two bean-shaped black seeds with a white arillus.

For previous introduction see 79545.
98069. Forestifra rhamnifolia Griseb. Oleaceae.
No. 2819. Collected February 10, 1932, on the driest part of Grenada. A tall shrub or small tree up to 30 feet high, native to the West Indies. The elliptical to obovate leaves are 2 to 4 inches long, and the inconspicuous flowers are followed by bright-blue ovoid ffuits one half inch long, borne in axillary clusters.
98070. Camsalpinia paucijuga Benth. Caesalpiniaceae.
No. 2828. Braziletto wood. From Port-of-Spain, Trinidad, February 13, 1932. A beautiful large spreading timber tree which is covered in season with small fragrant yellow flowers.
98071. Quararibaida turbinata (Swartz) Poir. Bombacaceae. Swizzle-stick-tree.
No. 2805. Collected February 9, 1932, in the Botanic Garden of Grenada. A handsome shade tree with large darkgreen leaves. The small white slightly fragrant flowers are borne in the leaf axils.

## 98072 to 98075.

From Australia. Seeds presented by the Queensland Acclimatisation Society, Brisbane. Received March 22, 1932.
98072 to 98074. Carica papaya L. Papayaceae.

Papaya.
98072. Hawaiian variety.
98073. Selected seeds from the best varieties grown by the Society.
98074. Selected seeds from an improved variety grown by the Society.
98075. Passiflora mollissima (H. B. K.) Bailey. Passifloraceae.

Softleaf passionflower.
For previous introduction and description see 98049 .

## 98076 to 98086.

From France. Seeds presented by Vil-morin-Andrieux \& Cie., Verrieres-le-Buisson. Received March 23, 1932.
98076 to 98082 . Cotoneaster spp. Malaceae.
98076. Cotoneaster sp.

559-A.
98077. Cotoneaster sp.

719 Schneider.
98078. Соtoneaster sp.

## Farrer.

98079. Cotoneaster sp. 2007 Hers.
98080. Cotoneaster sp. 2061 Hers.
98081. Соtoneaster sp. 2119 Hers.
98082. Cotoneaster sp.

## $44.14 \mathrm{M} . \mathrm{V}$.

98083. Pterostyrax hispida Sieb. and Zucc. Styracaceae.

Fragrant epaulette-tree.
A tree up to 50 feet high, with slender spreading branches. obovate to oblong leaves 3 to 7 inches long, and fragrant creamy white flowers in pendulous panicles. Native to China and Japan.
98084. Stachyurus chinensis Franch. Stachyuraceae.
A shrub up to 15 feet high, native to central China. The ovate longpointed leaves are 2 to 5 inches long and crenate-serrate on the margins. The yellow-green bell-shaped flowers appear in spring before the leaves and hang in racemes 2 to 4 inches long.
98085. Zanthoxylum alatum planiSPINUM (Sieb. and Zucc.) Rehd. and Wils. Rutaceae. Prickly-anh.
A Japanese shrub 7 to 13 feet high, much branched at the base, sometimes with a short trunk. The dark-brown spreading branches, drooping a little at the tips, bear stout straight spines in pairs and evergreen pinnate leaves, darkgreen above and paler beneath. The small red fleshy fruits are persistent and emit a very agreeable aromatic odor when bruised. The shrub may be used as an ornamental or as a hedge plant.

For previous introduction see 64183.
98086. Zanthoxylum sp. Rutaceae.

Prickly-ash.
No. 7443 M. V.
98087 to 98096.
From Cuba. Material presented by Robert M. Grey, superintendent, Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos. Received March 23, 1932.
98087 to 98090 . Bougainvillema sp. Nyetaginaceae.
98087. Bougainvillea sp.

Harvard No. 1.
98088. Bougainvillea sp.

Harvard No. 14.
98089. Bougainviliea sp.

Harvard No. 1!!.

## 98087 to 98096-Continued

98090. Bougainvillia sp.

Harvard No. 25.
98091. Camoensia maxima Welw. Fabaceae.
For previous introduction and description see 97953.
98092. Pandorea ricasoliana (Tanf.) Baill. Bignoniaceae.

Ricasol pandorea.
An evergreen climbing shrub with pinnate leaves of 7 to 11 ovate-serrate leaflets an inch long, dark green above, pale beneath, and loose terminal panicles of large campanulate flowers 2 inches long, light pink striped with red. Native to southern Africa.

For previous introduction see 81186. 98093. Saraca indica L. Caesalpiniaceae.

Common saraca.
A medium-sized Indian tree with pinnately compound leaves of 6 to 12 oblong leathery leaflets 6 to 9 inches long and fragrant orange-red flowers in compact panicles.

For previous introduction see 90890 .
98094. Tabebuia sauvallei Britton. Bignoniaceae.
A shrub with papery compound leaves and terminal cymes of small dark-red flowers. Native to Trinidad, British West Indies.
98095. TABEBUIA SERRATIFOLIA (Vahl) Nicholson. Bignoniaceae.
An evergreen tree, native to the West Indies, with digitately compound leaves made up of 4 or 5 oblong-ovate leaflets 3 to 5 inches long and terminal panicles of yellow funnelform flowers.

For previous introduction see 62108.
98096. Terminalia myriocarpa Heurck and Muell. Arg. Combretaceae.
A very valuable timber tree of northeastern Assam. It reaches a height of 80 to 100 feet, is deciduous, and the fruits ripen in January and February while the tree is bare.

For previous introduction see 94081.
98097. Lycopersicon esculentum Mill. Solanaceae.

Tomato.
From Cuba. Seeds presented by Prof. J. G. Jack, from Atkins Institution of the Arnold, Arboretum, Soledad, Cienfuegos, through T. A. Fennell, Bureau of Plant Industry. Received March 8, 1932.
Riñon. A rather small or medium-sized tomato, much flattened, oblately rounded or curved towards the stem, and much wrinkled. Professor Jack believes this is simply a degenerate form of the improved cultivated tomato which has become established as a wild plant in Cuba. It is said, however, to withstand very trying conditions and to grow luxuriantly at times when all other tomatoes fail.

## 98098 and 98099.

From Tasmania. Seeds presented by L. A. Evans, Hobart. Received March 7, 1932.
98098. INDIGOFERA AUSTRALIS Willd. Fabaceae.

Indigo.
An erect Australian shrub 2 to 4 feet high, with pinnately compound leaves and

## 98098 and 98099-Continued

dense racemes of showy red flowers. It may be suitable for growing as an ornamental in the warmer parts of the United States.

For previous introduction see 77441.
98099. Trifolium repens L. Fabaceae. White clover.
The flowers have long pedicels.
98100 to 98136.
From Japan. Plants purchased from the Yokohama Nursery Co., Yokohama. Received March 24, 1932.
98100. Abelia grandiflora Rehder, Caprifoliaceae.

Glossy abelia.
A half-evergreen shrub 3 to 6 feet high, considered to be a hybrid between $A$. chinensis and A. uniflora. The ovate leaves, 1 to 2 inches long, are lustrous dark green above, and the pink-flushed white flowers, 1 inch long, are borne in leafy panicles during an exceedingly long period.
98101. abblia spathulata Sieb. and Zucc. Caprifoliaceae.
A low deciduous shrub $u_{p}$ to 4 feet high; native to Japan. The ellipticlanceolate serrate leaves are 1 to 2 inches long, and the funnel-shaped flowers, 1 inch long, borne in axillary pairs, are white with a yellow throat.
98102 to 98133 . Acer spp. Aceraceae.
Maple.
98102 to 98109. ACER PALMATUM Thunb.

Japanese maple.
98102. Akikaze nishiki; leaves green with irregular yellow variegation.

98103, A o b a-no-fuye; regularly palmate green leaves.
98104. Atro-purpureum variegatum (Toyama) ; deeply serrated darkmaroon leaves with white variegation.
98105. Atropurpureum (Nomura); deep-maroon, large regularly palmate leaflets.
98106. A tropurpureum dissectum ; richly-fringed deep-maroon leaves inclined to droop.
98107. Aureum; roundish, obtusely cut yellow leaves.
98108. Dissectum ; green leaves, richly fringed and inclined to droop.
98109. Hatsuyuki; broad, 5-lobed, white-margined leaves.

98110 and 98111. ACER JAPONICUM Thunb. Fullmoon maple.
98110. A shrub or small tree native to Japan. The 7 - to 11 -lobed cor date doubly serrate leaves, 3 to 6 inches across, are bright green in summer and turn crimson in the autumn. The purple flowers are borne in long-stalked nodding corymbs and are followed by winged fruits spreading nearly horizontally.
98111. Filicifolium. A form with leaves divided nearly to the base into 9 to 11 pinnatisect lobes.

## 98100 to 98136-Continued

88112. ACER N IK OFNSE (Miquel) Maxim.
For previous introduction and description see 97504 .

98118 to 98133. ACER PALMATUM Thunb. Japanese maple.
98113. Nishikigasane; palmate leaves, yellow variegated.
98114. Nusatoriyama; small 3-lobed leaves, white, very slightly pink shaded.
98115. Okushimo ; small beautiful green leaves with involute margins.
98116. Osakazuki ; leaves large, regularly palmate, light maroon changing to blood red in autumn.
98117. Oshiu-beni; leaves deep maroon, but more deeply cut and smaller than those of variety atropurpureum.
98118. Reticulatum (Shigitatsu) ; leaves with green veins on yellow ground.
98119. Rosa-marginalis (Hikasayama) ; crimson-margined small green leaves.
98120. R 08 eum (Kagiri) ; small palmate leaves margined with pink.
98121. Sanguineum Chishio; small leaves, blood red, regularly palmate.
98122. Sanguineum Seigen; bloodred palmate leaves, coloring in middle spring.
98123. Scolopendrifolium (Aoshime-no-uchi) ; green narrow leaves like a hartstongue fern.
88124. Scolopendrifolium . rubrum (Akashime-no-uchi); red leaves with narrow lobes.
98125. Shishigashira; very curious rotate leaves.
98126. Trifidum (Tokayede) ; 3lobed leaves changing to bright red in the autumn.
98127. Tsumagaki; small regularly palmate green leaves tipped with brown.
98128. Tsuru-nishiki; plain green, deeply cut ribbonlike leaves.
98129. Uriha-nishiki; broad melonlike green leaves with yellowish variegation.
98130. Versicolor (Oridono-nishiki); very attractive crimson lfaves irregularly variegated with white and green.
98131. Wabihito; green leaves with featherlike lobes.
98132. Washi-no-o; leaves with long threadlike deeply serrated green lobes.
98133. Atropurpureum variegatum; bright-crimson leaves with deepmaroon variegation.
98134 and 98135. Prunus mumb Sieb. and Zucc. Amydalaceae.

Japanese apricot.

## 98100 to 98136-Continued

98134. A variety with double pink flowers.
98135. A variety with double red flowers.
98136. RHODODENDRON DEGRONIANUM Carr. (R. metternichii pentamerum Maxim.). Ericaceae.
A native wild form in Japan, differing in having a 5-lobed corolla. $R$. metternichii is an evergreen shrub up to 4 feet high with oblong leaves 3 to 6 inches long covered with rusty tomentum beneath. The campanulate, rose-colored, usually 7 -lobed flowers are 1 to 2 inches across, spotted within with purple and are borne in clusters of 8 to 15.

## 98137. SCHEFFLERA ACTINOPHYLLA

 (Endl.) Harms. Araliaceae.From Australia. Seeds presented by J. A. Hamilton, Carbeen, via Cairns, Queensland. Received March 23, 1932.
A handsome evergreen tree up to 40 feet high, native to Queensland, with compound leaves made up of 6 to 16 leathery oblong leaflets a foot long. The racemes, several feet long, of fragrant flowers are followed by small heads of angled dry fruits. This is a very good honey tree and does best in moist situations.

For previous introduction see 79145.
98138. Cucumis sativus L. Cucurbitaceae. Cucumber.
From the Union of Soviet Socialist Republics. Seeds presented by Maj. C. R. Olberg, Tiflis, Transcaucasia. Received March 21, 1932.
A cucumber cultivated along the southern coast of the Caspian Sea, adjacent to Persia. It is 8 to 12 inches long and over 2 inches in diameter, with a smooth medium-green skin; the flesh is crisp and tender, of an indescribable flavor, and is eaten like an apple without any preliminary preparation except peeling.

## 98139 to 98161.

From England. Plants purchased from Edwin Beckett, Superintendent, Aldenham House Gardens, Elstree, Herts. Received March 25, 1932.
98189. ACER CAPPADOCICUM Gleditsch (A. laetum Meyer). Aceraceae.

Coliseum maple.
For previous introduction and description see 95565.
98140. Callicarpa koreana Hort. Verbenaceae.
A name for which a place of publication and a description have not been found.
98141. CALYCANTHUS FERTILIS Walt. Calycanthaceae.

Pale sweetshrub.
A shrub up to 10 feet high, native to the eastern part of the United States from Pennsylvania to Alabama. The elliptic-ovate leaves, 2 to 6 inches long, are glaucous beneath and the green-purple to red-brown flowers are 1 to 2 inches across.
98142. Ceanothus sp. Rhamnaceae.

Topaze.

## 98139 to 98161-Continued

98143. BAILLONIA JUNCEA (Gill. and Hook.) Briquet (Diostea juncea Miers). Verbenaceae.
A shrub or small tree up to 20 feet high, native to Chile and Peru. The rushlike branches have distant pairs of small ovate dentate leaves, and the small pale-lilac flowers are borne in dense lateral and terminal spikes 1 to 2 inches long. The plant resembles Spartium junceum in habit.
98144. Dregea singnsis Hemsl. Asclepiadaceae.
A woody vine, native to China, with ovate-cordate papery leaves, 2 to 6 inches long, smooth above and densely tomentose beneath. The white or pink milkweedlike flowers are half an inch long and are borne in ample cymes.
98145. Forsythia intermedia densiflora Koehne. Oleaceae.
A form with spreading and pendulous branches, much crowded, flat, rather pale flowers with slightly recurved lobes.
98146 to 98148. Lavandula spica L. Menthaceae. Lavender.
98146. Miss Duddington. A charming variety with blue flowers.
98147. Munstead blue. An early flowering plant of bushy habit that produces many spikes of blue flowers.
98148. Twickel purple. A plant with fine bold foliage and good heads of deep-purple flowers.
98149 to 98152 . Lonicera spp. Caprifoliaceae. Honeysuckle.
98149. Lonicera muendeniensis Rehder.
Considered to be a hybrid between Lonicera bella and L. ruprechtiana, closèly resembling $L$. bella, but differing in having more acuminate and darker green leaves.
98150. Lonicera tatarica L.

Tatarian honeysuckle.
Punicea. A form with bright-red flowers.
98151. Lonicera trichopoda Franch.

A low slender-branched shrub 3 to 5 feet high, native to Yunnan, China. The oblong-ovate pubescent leaves are 1 to 2 inches long, and the creamy white flowers, tinged with pink, are borne in axillary pairs and are followed by bright-red berries.
98152. Lonicera sp.
98153. Pertya sinensis Oliver. Asteraceae.
A slender upright shrub 6 feet high, native to central China. The ovate to lanceolate entire leaves are 2 to 3 inches long, and the pinkish bell-shaped flower heads are solitary on slender pedicels.
98154 and 98155 . Gaya lyallin (Hook. f.) Baker f. (Plagianthus lyallii Hook f.). Malvaceae.
98154. For previous introduction and description see 97617 .
98155. Ribifolia. A form with the leaves deeply lobed.
98156 and 98157. Sorbus aucuparis L. (Pyrus aucuparia Ehrh.) Malaceae. European mountain-ash.

## 98139 to 98161-Continued

98156. A round-headed tree 20 to 40 feet high. The young branchlets are pubescent, becoming gray-brown with age. The leaves, 9 to 15 inches long, are composed of 11 to 13 oblong to oblong-lanceolate serrate leaflets entire towards the base, dull green above and pubescent beneath or rarely glabrous. The small white flowers are in flat corymbs 4 to 6 inches broad and are followed by bright-red globose fruits one third of an inch in diameter.
98157. Fructu-luteo. A form with yellow fruits.
98158. Malus Sylvestris Mill. (Pyrus malus L.). Malaceae.

Apple.
Veitch's Scarlet.
98159. Ruscus aculeatus L. Convallariaceae.

Butchersbroom.
Hermaphroditus. Said to be a form with perfect flowers, all of which bear fruits freely each year.
98160. Vinca difformis Pourr. Apocynaceae.

Periwinkle.
An evergreen subshrub with prostrate leafy branches and ascending flowering shoots. The ovate leaves are 1 to 3 inches long and the pale-lilac flowers, an inch across, are solitary in the upper axils. It is native to southern Europe and northern Africa.

For previous introduction see 92762 .
98161. Vinca minor L. Apocynaceae.

Common periwinkle.
La Grave. A form with pale-blue flowers.

## 98162 to 98164.

From Australia. Seeds presented by F. H. Baker, Richmond, Victoria. Received March 17, 1932.
98162. Callistimon citrinus (Curtis) Skeels (C. lanceolatus DC.). Myrtaceae.

Lemon bottlebrush.
An evergreen shrub up to 12 feet high, with lanceolate leaves 1 to 3 inches long reddish when young, and spikes, 2 to 4 inches long, of small flowers with long bright-red stamens. Native to southeastern Australia.

For previous introduction see 93832 .
98163. Hakea laurina R. Br. Proteaceae. Sea-urchin hakea.
A tall Australian shrub up to 30 feet high, remarkable for its showy crimson flowers. These are in globular heads about 2 inches in diameter, from which numerous golden styles protrude an inch or so in all directions.

For previous introduction see 95322 .
98164. Kennedia monophylla Vent. Fabaceae.
An Australian vine with single lanceolate leaflets and terminal panicles and axillary racemes of pea-shaped flowers ranging from white through rose to purple.

For previous introduction see $\mathbf{7 7 9 7 0}$.
98165. Calyptrogyne occidentalis (Swartz) G. Maza. Phoenicaceae.

Manaca palm.
From Cuba. Plants presented by Robert M. Grey, superintendent, Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos. Received March 28, 1932.
A beautiful and rare native palm with a straight smooth stem sometimes reaching a height of 50 feet. The pinnate leaves are 8 to 12 feet long.

For previous introduction see 90869 .
98166. Brosimum utile (H. B. K.) Karst. (B. galactrodendron Don.). Moraceae.

Cow-tree.
From the Republic of Panama. Seeds presented by H. S. Blair, Puerto Armuelles,
Province de Chiriqui. Received March 17, 1932.
A large tree up to 75 feet high, native to Central America. The elliptic-ovate coriaceous leaves, 4 to 10 inches long, are green above and golden-brown beneath. The globose receptacles bear one staminate and one pistillate flower, the latter developing into a fleshy yellow 1 -seeded fruit. When incisions are made in the bark a milky liquid flows out which is said to be nourishing.

## 98167 to 98194.

From Tunisia. Scions and seeds presented by the chief of the agricultural service, Tunis, at the request of Professor Bioletti and Prof. R. W. Hodgson. Received March 30, 1932.
98167. Ceratonia siliqua L. Caesalpiniaceae. Carob.
Scions of a hermaphroditic carob tree from Sfax.
98168 to 98173 . Malus sylvestris Mill. ( Pyrus malus L.). Malaceae. Apple.
Scions of indigenous varieties of apples.
98168. Bou Tubgaia from Tabarka.

98169 to 98172 . From Sfax.
98109. Ghara. 98171. Meski.
98170. Halou. 98178. Mestiri.
98173. An unnamed variety from Tunis.
98174 to 98176. Pistacia spp. Anacardiaceae.
98174. Pistacia teribinthus L.

False terebinth.
Seeds of a locally grown variety.
98175 and 98176. Pistacia vera L. Pistache.
98175. Scions from a pistillate tree. 98176. Scions from a staminate tree.
98177. Pbunus armeniaca L. amygdalaceae.

Apricot.
Amor-Leuch; scions from Sfax.
98178. Pyrus sp. Malaceae. Pear.

Scions of a native pear from the estate of M. Comte, at Sidi Bou Ali.
98179 to 98193 . Vitis vinifera L. Vitaceae.

European grape.
Scions collected at the School of Agriculture in Tunis.

## 98167 to 98194 -Continued

98179. Baioudi Khchin.
98180. Basegin blanc.
98181. Beldi.
98182. Chaouch rose.
98183. Sekesli.
98184. Hami, a thick-skinned type.
98185. Hami, a tough-skinned type.
98186. Kaali (Kahli).
98187. Marsiliane.
98188. Medina.
98189. Muscat de Pantellana.
98190. Olivette blanche.
98191. Antigua.
98192. Arricha.
98193. Vedifiren.
98194. Ziziphus JuJuba Mill. Rhamnaceae. Common jujube.
Scions of a locally grown variety.
98195. Pyrus salicifolia Pall. Malaceae. Willow-leaved pear.
From the Union of Soviet Socialist Republics. Seeds presented by V. P. Alekseev, plant introducer, Sukhum Subtropical Branch of the All-Union Institute of Plant Industry, Sukhum, Caucasus. Received March 24, 1932.
No. 135191. From Azerbaidjan, Divichinskii District, village of Bilidji. Collected by Rubtjor on an Asiatic expedition for the Institute of Plant Industry. A round-headed tree 20 to 25 feet high, with a short stout trunk and beautiful willowlike grayish to silvery leaves, 1 to 3 inches long, scarcely more than half an inch wide. The dense corymbs of white flowers are borne freely in April.

For previous introduction see 51885.
98196. Spinacia oleracea L. Chenopodiaceae.

Spinach.
From Africa. Seeds presented by Moses Albert Azancot, Tangier, Morocco. Received March 24, 1932.
A variety of spinach appreciated for its large size.

## 98197 to 98199.

From Scotland. Seeds presented by William Robb, director of research, Scottish Society for Research in Plant Breeding, Corstorphine, Midlothian. Received March 25, 1932.
A collection of forage grasses introduced for the use of Department specialists.
98197. Dactylis glommrata L. Poaceae.

No. Ce 1.
98198. Lolium perenne L. Poaceae.

No. Ca 1.
98199. Phleum pratensi L. Poaceae.

Timothy.

## 98200 to 98219.

From the Union of Soviet Socialist Republics. Seeds presented by M. P. Petrov, director, Repetek Sand Desert Station (Turkmenistan), Sand Desert Karakum, through the Institute of Plant Industry, Leningrad. Received March 21, 1932.
These seeds have been introduced as of possible value in experiments being carried on in the arid regions of the southwestern United States.
98200. AGRIOPHYLLUM MINUS Fisch. and Mey. Chenopodiaceae.
No. 134844. An annual, native to sandy deserts in Turkmenistan, with sessile linear-subulate leaves and inconspicuous axillary flowers.

For previous introduction see 92959 .
98201. Agropyron orientale lasianthum Boiss. Poaceae. Wheat-grass.
No. 134855. An annual grass, thickly branched at the base, with numerous mostly prostrate stems scarcely 8 inches high. Native to Asia Minor and northern Africa.

For previous introduction see 64092.
98202. AMMODENDRON CONOLlyi Bunge. Fabaceae.
No. 134846. An evergreen silky leaved Siberian shrub, used as a sand binder.

For previous introduction see 94923.
98203. Aristida pennata karelini Trin. and Rupr. Poaceae. Grass.
No. 134848. A perennial grass of possible value as a forage crop.

For previous introduction see 94924.
98204. Aristida pennata minor. Litv. Poaceae.

Grass.
No. 134847. A perennial grass of possible value as a forage crop.

For previous introduction see 92965 .
98205. Atriplex dimorphostegia Kar. and Kir. Chenopodiaceae.
No. 134852. An annual 18 inches high with alternate membraneous ovate leaves and terminal or axillary inconspicuous flowers. Native to dry regions in Arabia and Persia.

For previous introduction see 92968.
98206. Bromus tectorum L. Poaceae. Bromegrass.
No. 134854. An annual grass, to be tested as a ground cover.

For previous introduction see 92969.
98207 to 98209. Calligonum spp. Polygonaceae.
98207. Calligonum captimedusae Schrenk.
No. 134841. A leafless shrub with dichotomus branches, small reddish flowers in the axils of the sheaths, and nutlike fruits covered with filamentous reddish spines. Possibly of value as an ornamental in desert regions and as a sand binder. It is native to western Asia.

For previous introduction see 94928.
98208. Calligonum comosum L'Hef.

No. 134839. A densely brapehed shrub 10 to 15 feet high, with minute

## 98200 to 98219-Continued

subulate leaves and small ovate, densely spiny, nutlike fruits. Native to the eastern Mediterranean region.

For previous introduction see 94930 .
98209. Calligonum setosum Litv.

No. 134840. A leafless shrub much like $C$. caput-medusae, but the filaments on the fruits are brownish and are longer and more slender. It is native to the Caspian region.

For previous introduction see 92974.
98210. Carex physodes Bieb. Cyperaceae.
No. 134837. A perennial sedge usually about 6 inches high, rarely more, native to sandy deserts of Turkistan, with filiform leaves and panicles of brownish globose membranous perigynia or sacs half an inch across.

For previous introduction see 94933.
98211. Convolvulus divaricatus Regel and Schmalh. Convolvulaceae.
No. 134842. A densely hairy, erect or ascending plant, with small ovate acute sessile leaves two fifths of an inch long and very small terminal or axillary flowers. Native to sandy places near Khiva, central Asia.

For previous introduction see 92976 .
98212. Ephedra alata Decaisne. Gnetaceae.
No. 134851. A tall, freely-branching shrub with rough green equisetumlike branches, small scalelike leaves, and inconspicuous flowers. Native to Arabia and northern Africa. Of value as a possible source of ephedrine.

For previous introduction see 94934.
98213. Eremosparton flaccidum Litv. Fabaceae.
No. 134850. A bushy tree about 15 feet high, native to sandy places in the trans-Caspian region. The branchlets are threadlike and limp, and the small flowers are dark violet.

For previous introduction see 94935 .
98214. FGRULA Litwinowiana K.-Pol. Apiaceae.
No. 134845 . A low hairy herbaceous perennial with numerous small triangular pinnately cut leaves and inconspicuous flowers in compound umbels. Native to the trans-Caspian region.

For previous introduction see 92983.
98215. HALOXYLON AMMODHNDRON (Meyer) Bunge. Chenopodiaceae.

> Saxaul.

No. 134838. A shrub or tree up to 20 feet high, native to Turkistan. It has a gnarled trunk, light-green branchlets which are leafless, and small fruits with thin papery suborbicular wings.

For previous introduction see 92964 .
98216. Kochia stbllaris Moq. Chenopodiaceae.
No. 134853. An erect annual plant from the Desert of Karakum, Turkistan, a foot or less high, much branched, with flat linear leaves and very small greenish flowers.

## 98200 to 98219 -Continued

98217. Rheum turkestanicum Janschew. Polygonaceae.
No. 134836. A wild rhubarb from the trans-Caspian region over 2 feet high, with a large thick rhizome and a short thickened densely leafy stem. The cordate reniform leaves, up to 8 in number, are about a foot wide.

For previous introduction see 92987.
98218. Salsola arbuscula Pall. (S. richleri Hort.). Chenopodiaceae.
No. 134835. A shrub up to 15 feet high, native to Turkistan, with linear leaves 3 inches long and inconspicuous flowers. It is used as a sand binder along the trans-Caspian railway.

For previous introduction see 92989.
98219. Sal sola subaphilla Meyer. Chenopodiaceae.
No. 134834. A leafless, much-branched shrub about a foot high, native to desert places on the shores of the Caspian Sea.

For previous introduction see 92990.

## 98220 to 98229.

From the Union of South Africa. Seeds presented by F. Walton Jameson, city engineer, Kimberley. Received March 22, 1932.
98220. Callitris juniperoides (L.) Dur. and Schinz. Pinaceae.
A widely branched tree 20 to 60 feet high, with spirally arranged glaucousgreen leaves less than an inch long. The moderately hard yellowish wood is used for making furniture. It is native to the Cedarburg Mountains of South Africa at 3,000 to 4,000 feet altitude. This region has cold damp winters and hot dry summers.
98281. Callitris schwarzil Marloth. Pinaceae.
A handsome tree of pyramidal habit up to 50 feet high, with horizontal branches. It is closely related to $C$. oupressoides, differing in the structure of the cones and in being a larger tree. Native to the Cape of Good Hope.
9822\%. Carissa grandiflora (D. Mey.) DC. Apocynaceae.

A handsome shrub, native to southern Africa, which is now cultivated in southern Florida and California as an ornamental hedge plant and for its scarlet edible berries.

For previous introduction see 41504.

## 98283. DOVYALIS CAFFRA (Hook. and Harv.) Warb. Flacourtiaceae. <br> Kei-apple.

A very prickly shrub or small tree, native to tropical Africa, where it is used as a hedge. The pale-green leaves are over an inch long and nearly an inch wide. The edible fruit resembles a small yellow apple and is so exceedingly acid when fresh that it is said to be used as a pickle without vinegar.

For previous introduction see 44847.
08224. Harpiphyllum caffium Bernh. Anacardiaceae.
Kaffir plum. An evergreen tree with beautiful dark-green foliage. The timber resembles mahogany and is used for

## 98220 to 98229 -Continued

wagon making ; the Dutch call it eschenhout. The fruit is a red showy drupe with a pleasant acid taste but little pulp. The branches of the tree are sometimes planted as, fence posts, and these large "cuttings" take root and form trees. It is not a desert tree, but it will stand some drought.

For previous introduction see 34943.
98225. Leucadendron argenteum (L.) R. Br. Proteactae.

Witteboom or silver-leaf pine. A handsome evergreen South Atrican tree native only in the vicinity of Cape Town. The narrow white-silky leaves, up to 7 inches long, are commonly used as curios and for bookmarks.

For previous introduction see 73031.
98226. Nageia mlongata (Ait.) Kuntze ( нodocarpus elongatus L'Her.). Taxaceae.
Common yellow-wood. An evergreen slow-growing timber tree which becomes 80 to 100 feet high and 3 to 4 feet in diameter, with narrow leaves less than 2 inches long. The fine-grained wood is light, soft, moderately strong, elastic, and of a pale yellow-brown; it is largely used for furniture. This tree is the largest, most plentiful, and one of the most useful trees of Cape Colony.

For previous introduction see 56196.
98227. NAGEIA THUNBERGII (Hook.) F. Muell. (Podocarpus thunbergii Hook.). Taxaceae.
A fine evergreen timber tree, up to 100 feet tall and with a trunk 4 feet in diameter, which occurs throughout all the timber forests from Cape of Good Hope to Natal. The quality of the wood of this species is very similar to that of Nageia elongata, and for most purposes they are used interchangeably.
For previous introduction see 57267.
98228. Pallasia captenis Christm. (Calodendrum capensis Thunb.). Rutaceae.
A large and handsome tree with spreading branches in pairs or in threes. The ovate evergreen opposite leaves are 3 to 4 inches long. The white flowers, with linear-oblong reflexed petals 1 to 2 inches long, are in terminal panicles, and the shining black seeds, the size of hazelnuts, are borne in hard thick capsules. It is native to southern Africa.

For previous introduction see 80667 .
98229. Sparmannia africana L. f. THliaceae.
A handsome flowering shrub up to 12 feet or more high, with heart-shaped obscurely 5- to 7-lobed leaves about 5 inches long. The handsome white flowers, over an inch across, which appear in May are borne in small umbels in such profusion that this is considered one of the finest white-flowered plants in existence. It is native to southern Africa.

## 98230 to 98255.

From Leningrad, Union of Soviet Socialist Republics. Seeds presented by V. $P$ Alekseev, Division of New Cultures and Foreign Plant Introduction of the AllUnion Institute of Plant Industry. Received March 21, 1932.

## 98230 to 98255-Continued

98230 and 98231. Butia capitata $X$ eriospatha. Phoenicaceae. Palm.
For previous introduction and description see 95661.
98230. No. 135152.
98231. No. 135153.
98232. Castanea sativa Mill. Fagaceae. No. 135154.
98233 to 98237. Corylus avellana $L$. Betulaceae. Filbert.
98233. No. 135171. 98236. No. 135174. 98234. No. 135172. 98237. No. 135175. 98235. No. 135173.
98238. Juglans regia L. Juglandaceae. Persian walnut.
No. 135176. Collected near Aibga village, at 5,000 feot altitude.
98239. Prunus avium L. Amygdalaceae. sweet cherry

98230 to 98255 -Continued
No. 135192. From Tebezda, northern Caucasus.

98240 to 98255. PyRUS COMMUNIS L. Malaceae. Common pear.
98240. No. 135155. 98248. No. 135163.
98241. No. 135156. 98249. No. 135164.
98242. No. 135157. 98250. No. 135165.
98243. No. 135158. 98251. No. 135166.
98244. No. 135159. 98252. No. 135167.
98245. No. 135160. 98253. No. 135168.
98246. No. 135161. 98254. No. 135169.
98247. No. 135162. 98255. No. 135170.
98256. Castanea crenata Sieb. and Zucc. Fagaceae. Japanese chestnut.
From Japan. Seeds presented by N. Suyetake, through the American consul, Tokyo. Received March 31, 1932.

No. 9371. Otanba.

## INDEX OF COMMON AND SCIENTIFIC NAMES

Abelia, glossy. See Abelia grandiflora.
Abelia grandiflora, 98100.
spathulata, 98101.
Abelmoschus moschatus, 97860.
Abies sp., 95616.
holophylla, 97942.
Acacia arabica. See A. scorpioides. cunninghamii, 97750. scorpioides, 97861.
Acanthorhiza aculeata, 97539.
Acer barbinerve, 97494.
cappadocicum, $95565,98139$.
carpinifolium, 97495.
circinatum, 97496.
cissifolium, 97497.
davidi, 97498.
diabolicum, 97499.
divergens, 95566.
griseum, 97500 .
hyrcanum, 95562.
ibericum. See A. monspessulanum ibericum.
insigne, 95564.
japonicum, 98110, 98111.
laetum. See A. cappadocicum.
lobelii, 97501.
maximovoiczii, 97502.
miyabei, 97503.
monspessulanum ibericum, 95563.
nikoense, 97504, 98112.
oblongum, 97505.
palmatum, 98102-98109, 98113-98133.
quinquelobum. See $A$. divergens.
rubrum tomentosum, 97506 .
rufinerve, $96519,97493$.
tegmentosum, 96520 .
tetramerum betulifolium, 97507.
tetramerum tiliifolium, 97508.
triforum, 97509, 97943 .
Achras zapota, 95688.
Aerides lawrenciae sanderianum, 97560.
Aesculus assamica, 97630 .
Agriophyllum minus, 98200.
Agropyron orientale lasianthum, 98201. tenerum, 95657, 97969.
Albizzia sp., 97862 . berteriana, 97780.
Alder. See Alnuis hirsuta sibirica.
Alfalfa. See Medicago sativa.
Algaroba. See Prosopis chilensis.
Alliandra purpurea. See Anneslia purpurea.

Allium albidum, 95567.
lepidum, 95568.
oreophitum, 97581.
pseudostrictum, 95569.
victorialis, $95570,97582$.
wallichianum, 97583 .
Almond. See Amygdalus communis.
Alnus hirsuta sibirica, 97944.
Aloe sp., 98011.
schlechteri, 98010.
Alpinia sp., 97982.
exaltata, 97924.
Alysicarpus rugosus, 97817. vaginalis nummularifolius, 98057.
Alyssum trichostachyum, 97584.
Amaranth, tassell. See Amaranthus paniculatus.
Amaranthus paniculatus, 97713.
Ammodendron conollyi, 98202.
Amygdalus communis, 96422-96430. persica, 96431-96438, 98023, 98024.
Anacardium occidentale, 97751.
Ananas sativus, 96500, 97336-97338, 97522,
97558, $97559,97824,97925$. sativus bracteatus, 97335.
Anneslia purpurea, 97950 . tergemina, 97757.
Annona sp., 97523. reticulata, 97561. squamosa, 96384.
Anthemis cinerea, 97585. macedonica, 97586.
Anthericum hookeri. See Bulbinella hookeri.
Apeiba tibourbou, 97834.
Apium ammi, 97919.
graveolens, 97920. nodiflorum, 97921. repens, 97922.
Apple. See Malus spp.
Apricot. See Prunus armeniaca. Japanese. See P. mume.
Aquilegia sp., 97631.
Archontophoenix alexandrae, 97805.
Areca catechu, 97540.
triandra, 97807.
Arenga engleri, 97740.
Aristida pennata karelini, 98203.
pennata minor, 98204.
Aristolochia sp., 97533.
Aristotelia chilensis, 98043. macqui. See A. chilensis.

Armeria adamovicii. 97587.
berlengensis, 97588.
elongata, 97590.
longearistata, 97592 sardoa, 97595.
Arrowroot, Bermuda. See Maranta arundinacea.
Artocarpus communis, 97562.
integra, 97563.
Asparagus sp., 96501.
Aster frikartii, 97988.
Astrocaryum sp., 97810. paramaca, 97910.
segregatum, 97809. tucuma, 97808.
Asystasia gangetica, 97255, 97863, 97926. Atalantia buxifolia. See Severinia buxifolia.
Atriplex dimorphostegia, 98205.
Attalea cohune, 97542. spectabilis, 97543.
Azalea. fiveleaf. See Rhododendron pentaphyllum.

Bactris pavoniana, 97280.
Baillonia juncea, 98143.
Balsam-of-Peru. See Toluifera pereirae.
Barbados-cherry. See Malpighia glabra.
Barberry. See Berberis parvifolia.
Magellan. See B. buxifolia.
Barley. See Hordeum vulgare coeleste.
Barringtonia asiatica, 97975.
Baryxylum inerme, 97835.
Basella rubra, 96388.
Bauhinia sp., 97864.
monandra, 97752.
Bauhinia, butterfly. See Bauhinia monandra.
Bean. See Phaseolus spp.
common. See P. vulgaris.
horse-eye. See Mucuna sloanei.
Mauritius. See Stizolobium aterrimum.
rice. See Phaseolus calcaratus.
Begonia sp., 97836.
Bellfower, Carpathian. See Campanula oarpatica.
Bentinckia nicobarica, 97281.
Berberis buxifolia. 98032. jarvifolia, 97749.
Berchemia lineata, 97266. racemosa, 97267.
Bignonia spp., 97268.97951.
Bottlebrush, lemon. See Callistemon oitrinus.
Bougainvillea spp., 98087-98090.
glabra $\times$ butae (Crimson Lake), 95611,
spectabilis lateritia $\times$ butae, 9561295614.

Bourreria ovata, 95695.
Box. See Buaus spp.
Bradburya virginiana, 97306, 97865, 97866.
Brassica oleracea botrytis, 96385. rapa, 97714, 97715.
Breadnut. See Artocarpus communis.
Bromegrass. See Bromus tectorum. common. See B. inermis.
Bromus inermis, 95658, 95682-95685. tectorum. 98206.
Brosimum galactrodendron. See Brosimum utile.
utile, 98166.
Bucida buceras, $96502,97753$.
Buckwheat, Kangara.' See Fugopyrum tataricum.
Bulbinella hookeri, 95667, 97597.
Bumelia obovata, 97905.
Buphthalmum salicifolium, 95669
Butchersbroom. See Ruscus aculeatus.
Butia capitata $\times$ eriospatha, 95661, 98230, 98231.

Buttercup, grassy. See Ranunculus gramineus.
Butterfly-pea, Piedmont. See Bradburya virginiana.
вихия sp., 97632.
microphylla koreana, 97945.
Oacara erosa, 97754.
Cactus caesius, 97952. intortus, 97564.

Caesalpinia coriaria, 97837 paucijuga, 98070.
Cajanus indicus, $97755,97756$.
Calaba-tree. See Calophyllum antillanum.
Calathea sp., 97741. allouia, 97524.
Galliandra surinamensis, 97565. tergemina. See Anneslia tergemina.
Callicarpa koreana, 98140.
Calligonum caput-medusae, 98207. сотовит, 98208.
setosum, 98209.
Callistemon citrinus, 98162.
lanceolatus. See C. citrinus.
Callitris juniperoides, 98220.
schwarzii, 98221.
Calodendrum capensis. See Pallasia capen8 is.
Calophyllum antillanum, 97838. calaba. See C. antillanum.
Oalopogonium orthocarpzm, 97867.
Calyoanthus fertilis, 98141.
Oalyptrogyne occidentalis, 98165.
Camoensia maxima, 97953, 98091.
Camomile. See Anthemis cinerea.
Campanula carpatica, 97683-97697.
Canavalia maritima, 97758.
Capparis cynophallophora, 97759. flexuosa, 96478, 97566.
Capsicum annuum, 96492, 96493, 97819. frutescens, 96503.
frutescens baccatum, 97963.
Cares physodes, 98210.
Carica candamarcensis, 96386.
рарауа, 95687, 96387, 96494, 96504, 97760, 98072-98074.
Caris8a granaifiora, 98222.
Carob. See Geratonia siliqua.
Cashew. See Anacardium occidentale.
Cassava. See Manihot esculenta.
Cassia bacillaris, 97567.
diphylla, 97492.
javanica 97954.
поdosa, 97868.
Castanea crenata, 95576-95579, 9639096420. 97831-97833, 98256.'
henryi, 95631-95633.
mollissima, 95561 95615, 95634-95648,
95663, 95664, 97853-97857, 9800198009.
sativa. 98232.
Castanopsis spp., 95556, 95630.
Casuarina triangularis, 97869.
Cauliflower. See Brassica oleracea botrytis.
Ceanothus spp., 97269-97276, 98142.
Cedrela odorata 97976.
Ceiba acuminata, 97537.
Celery. See apium graveolens.
Centrolabium paraensie, 97977.
Centrosema virginianum. Sec Bradburya virginiana.
Ceratonia siliqua, 97297, 98167.
Chaetochloa italica, 97716. 97717.
Chenopodium album, 97718.
Chaste-tree, lilac. See Vitex agnus-castus.
Cherry, European bird. See Prunus padus. oriental. See P. serrulata. sweet. See P. avium.
Cherry-laurel. See Laurocerasus officinalis.
Chestnut. See Castanea sp.
hairy. See C. mollissima.
Japanese. See C. crenata.
Spanish. See C. sativa.
Chrysanthemum caucasicum, 97598. mawii, 97600.
pulverulentum, 97599.
Chrysophyllum sp, 97568.
bicolor, 97761 .
Oicer sp., 97633.
Cigarbox-cedar. See Cedrela odorata.
Cinquefoil. See Potentilla spp.
alpine shrubby. See P. fruticosa pyrenaica.
Dahurian. See P. fruticosa davurica.
Friedrichsen. See P. fruticosa friedrichsenii.
shrubby. See $P$. fruticosa.
Cipura martinicensis. See Trimeza mar-
tinicensis.
Cissus intermedia, 95689.

Citharexylum spinosum, 97839.
Citron. See Citrus medica.
Citrullus vulgaris, 95580, 96495-96497, 97317.

Citrus spp., 96476, 97526, 97830. aurantifolia, 97261-97264, 97825.
aurantium, $97260,97525$.
grandis, 97827, 97927, 97928, 97930.
limonia, 97256.
medica, $97826,97929$.
sinensis, $97257,98025$.
Olematis sp., 97634.
Clerodendrum fallax, 97840.
Olitoria rubiginosa, 97955.
Clover. See Trifolium spp.
red. See T. pratense.
white. See T. repens.
Coccoloba grandifolia, 97569. pubescens. See C. grandifolia.
Coccosipsilum guianense. See Tontanea guianense.
Coccothrinac spp., 96482, 96483, 97283.
Cockscomb-yam. See Rajania pleioneura.
Cohune. See Attalea cohune.
Oola heterophylla, 97983.
Columbine. See Aquilegia sp.
Columbrina ferruginosa, 97307.
Conocarpus erecta, 95690.
Consolea moniliformis, 96512.
Convolvulus divaricatus, 98211.
Copernicia cerifera, 97811.
Cordia alba, 97763.
alliodora, 97842.
Corn. See Zea mays.
Corylus avellana, 98233-98237.
Costus sp., 97843.
Cotoneaster spp., 97635, 97636, 9807698082.

Cotton. See Gossypium spp.
Courbaril. See Hymenaea courbaril.
Cow-tree. See Brosimum utile.
Cracca candida, 97764 .
villosa hirta, 97765, 97870. villosa purpurea, 97871
Crapemyrtle, queen. See Lagerstroemia speciosa.
Oremanthodium sp., 95618. farreri, 95617.
Orescentia cucurbitina, 97570.
Crinum, Powell. See Crinum powellii.
Crinum powellii, 97989-97991.
Crotalaria spp., 97877.97880.
anagyroides, 97878.
incana, $97872,97956$.
juncea, 97931 .
pumila, 97308.
retusa, 97873, 97874, 97879, 97957, 97958.
usaramoensis, 97875.
verrucosa, 97876, 98058.
Cryptomeria, common. See Cryptomeria japonica.
Cryptomeria japonica, 97746.
Cucumber. See Cucumis sativus.
Cucumis melo, 95553, 96498, 96499, 97318. sativus, 98138 .
Cucurbita maxima, 97637.
moschata, 97719, 97801. реро, 97638.
Curcuma longa, 96505 .
Currant, red. See Ribes sp., 97734.
Cushat. See Cucurbita moschata.
Custard-apple. See Annona retioulata.
Cyphomandra betacea, 97252.
Cyrtostachys renda, 97546.
Dactylis glomerata, 97970, 98197.
Dahlia rosea, 97748.
Daphniphyllum beddomii, 95619. glaucescens, 96521. macropodum, 96522 .
Datura chlorantha, 97309.
metel fastuosa, $97766,97881$.
Delphinium sp., 97639.
Desmodium supinum. See Meibomia cana.
Desmoncus sp., 97812.
Dianthus sp., 97640 .
Dioscorea alata, 95665, 97742.
esculenta, 97820 .
trifda, 96506, 97743.

Diospyros ierensis, 97959
kaki, $95649,97858$.
sinensis, 95650.
Diostea juncea. See Baillonia juncea.
Dipelta yunnanensis, 97601.
Divi-divi. See Caesalpinia coriaria.
Dolicholus sp., 97882.
minimus, $97310,97311$.
Dolichos lablab, 97767, 97978, 97979.
Dovyalis caffra, 98223 .
Draba subamplexicaulis, 97602.
Dracocephalum isabellae, 97603.
ruprechti, 97604.
ruyschiana, 95670, 97605.
speciosum, 97606.
tanguticum, 97607 .
Dragonhead. See Dracocephalum spp.
Siberian. Se D. ruyschiana.
Dregea sincnsis, 98144.
Ecballium elaterium, 95571.
Eggplant. See Solanum melongena.
Elaeis guineensis, 96485 . melanococca, 97911
Eleusine coracana, 97720.
Enargea radicans, 98042.
Englerophoenix regia, 97912.
Entada polystachya, 97960 .
Epaulette-tree, fragrant. See Pterostyrax hispida.
Ephedra alata, 98212.
Epimedium hexandrum. See Vancouveria hexandra.
Eremosparton flaccidum, 98213.
Erica carnea, 97698-97703. vagans, $97704,97705$.
Erinacea pungens, 97992.
Eriosema violacea, 97844
Eryngium alpinum, 97706. bourgati, 95672. violetta, 95673.
Eryngo. See Eryngium spp. bluetop. See E. alpinum
Erythrina spp., 98045, 98060. pallida, 98059.
Euchlaena mexicana, 95686.
Eucryphia glutinosa, 97510. pinnatifolia. See E. glutinosa.
Eиопутия spp., 95620, 97641, 97642.
Euphorbia sp., 97828. lathyrus, 98033.
Euterpe sp., 97285. edulis, 97284.97913. oleracea, 97813.
Exogonium eriospermum, 96508.
Fagopyrum tataricum, 97721, 97722.
Feronia elephantum. See F. limonia. limonia, 95594.
Ferula litwinowiana, 98214.
Fescue, meadow. See Festuca elatior.
Festuca elatior, 97971.
Ficus spp., 97571, 97572, 97845. callosa, 95582. carica, $95598,96439$. jacquiniaefolia, 95691. salicifolia, 97932.
Fig. See Ficus spp. common. See ${ }^{\text {F. carica }}$
Figmarigold. See Glottiphyilum depressum.
Filbert. See Corylus avellana.
Fir. See Abies spp. needle. See A. holophylla.
Flax. See Linum usitatissimum.
Forestiera rhamnifolia, 98069.
Forsythia intermedia densiflora, 98145.
Fortunella sp., 98026.
Frangipani. See Plumeria spp. nosegay. See Prubra.
Fuchsia bacillaris, 97608. corymbiflora, 97609, 97610. procumbens, 97611. thymifolia, 97612 .
Fuchsia, trailing. See Fuchsia procumbens.
Galactia spp., 97313, 97961.
spiciformis, 97312.
striata, 95692.
Galega officinalis, $95674,95675$.
Gaya lyallii, 97617, 98154, 98155.

Geophila herbacea, 97846.
Geranium. See Pelargonium endlicherianum.
Ginger. See Zinziber officinale.
Glottiphyllum sp., 97293. depressum, 97292.
Glycine hispida. See Soja max.
Gmelina asiatica, 97933.
Goatsrue, common. See Galega offoinalis.
Gooseberry. See Ribes spp., 97733, 98038.
Gossypium spp., 98013-98022. davidsonii, 95656.
Gouania lupuloides, 95704.
Granadilla, giant. See Passifora quadrangularis.
Grape, European. See Vitis vinifera.
Grapefruit. See Oitrus grandis.
Grass. See Aristida spp.
See also Poa sp.
black. See Paspalum plicatulum.
orchard. See Dactylis glomerata.
Guilandina ovalifolia, 97884.
Gunnera, Chilean. See Gunnera chilensis.
Gunnera chilensis, 98034.
Haemanthus multiflorus, 97745.
Hakea laurina, 98163.
Hakea, sea-urchin. See Hakea laurina.
Haloxylon ammodendron, 98215.
Harpephyllum caffrum, 98224.
Heath, Cornish. See Erica vagans. spring. See $\boldsymbol{E}$. carnea.
Hedera helix, 97993.
Heliconia sp., 97527.
Helicteres jamaicensis, 96507.
Henna. See Lawsonia inermis.
Hereroa 8 tanleyii, 97294 .
Hibiscus sp., 98046.
collinsii, 97962.
Holly. See Ilex altaclarensis. Englich. See I. aquifolium.
Honeysuckle. See Lonicera spp. Pyrenees. See L. pyrenaica. slender. See L. trichosantha. Tatarian. See L. tatarica. Tibetan. See L. thibetica.
Hordeum vulgare coeleste, 97330-97332, 97723-97726.
Hyacinth-bean. See Dolichos lablab.
Hymenaea courbaril, 97768.
Hypericum sp., 97643 .
Hyphaene thebaica. 97814.
Iohthyomethia piscipula, 97847.
Ilew altaclarensis, 97994. aquifolium, 97995 .
Indigo. See Indigofera spp.
Indigofera australis, 98098. linifolia, 97818 . suffruticosa, 97885, 97886.
Inodes causiarum, 96489.
Ipomoea polyanthes, 97769. tuba 95693.
Iris minuta, 96523.
Ivy, English. See Hedera helix.
Ixora sp., 97848.
lutea, 97770, 97934.
Jacaranda caerulea, 96509.
Jackfruit. See Artocarpus integra.
Jacquemontia jamaicensis, 95694.
Jacquinia armillaris, 97316.
Japanese apricot. See Prunus mume.
Jasmine, Azores. See Jasminum azorioum.
Jasminum azoricum, 97771.97888.
Je.senia oligocarpa, 97553 .
Jubaeopsis caffra, 97491.
Juglans regia, 98052-98055, 98238.
Jujube, common. See Ziziphus jujuba.
Kaempferia ovalifolia, 97528.
Kalanchoe bentii, 97613. carnea, 97614.
crenata, 97615.
globulifera coccinea. 95552. rotundifolia, 97616.
Kei-apple. See Dovyalis caffra.
Kennedia monophylla, 98164.
Kigelia pinnata, 97849.
Kochia stellaris, 98216.
Kumquat. See Fortunella sp.

Lacebark. See Gaya lyallii.
Lagerstroemia flos-reginae. See L. speciosa. 8peciosa, 97980.
Larch, Dahurian. See Larix dahurica.
Larix dahurica, 97946.
Larkspur. See Delphinium sp.
Laurocerasus officinalis, 95662.
Lavandula spica, 98146-98148.
Lavender. See Lavandula spica.
Lawsonia inermis 97772.
Lecythis zabucajo, 98047.
Lemon. See Citrus limonia.
Lens esculenta, 97319, 97320.
Lentil. See Lens esculenta.
Lentisk. See Pistacia lentiscus.
Leucadendron argenteum, 98225.
Leucothoè keiskei, 96524 .
Licuala grandis, 97815.
Ligustrum chenaultii, 97277.
japonicum, 97278.
Lilac. See Syringa spp.
Chengtu. See S. sweginzowii.
felty. See S. tomentella.
hybrid. See S. prestoniae
Lilium nepalense burmanicum, $95557,95621$. ochraceum, 95622.
Lily. See Lilium spp.
Lime. See Citrus aurantifolia.
Linoma alba, 96484.
Linum usitatissimum, 97791.
Litsea spp., $97324,97325$.
Livistona altissima, 97547.
australis, 97917.
chinensis, 96486.
hoogendorpii, 97816, 97914. rotundifolia, 97548.
Lobelia persicaefolia, 97773.
Lolium perenne, 98198.
Lonchocarpus spp., 97908. 97909. nicou, 97923.
Lonicera sp., 98152. chaetocarpa, 96528.
deflexicalyx xerocalyx, 97513.
muendenlensis, 98149 .
pyrenaica, 96529.
tatarica, 98150 .
thibetica, 97511.
trichopoda, 98151.
trichosantha, 97512.
xerocalyx. See L. deftexicalyx xerocalyx.
Lupine, tree. See Lupinus arborews.
Lupinus arboreus, 98035.
Lycopersicon esculentui. 95583-95592, 96510, 97321, 97538, $97850,98097$.

Maba inconstans, 97532, 97935.
Magnolia insignis, 95624.
rostrata, 95623
Malpighia glabra, 96475.
Malus spp., 97298-97301. 97518. sylvestris, $96440-96443,98158,98168-$
98173.

Mangifera indica, 97265, 97747, 97936, 97937.

Manglietia forrestii, 97326.
Mango. See Mangifera indica.
Manihot esculenta, 95593. 95666. 97529. utilissima. See M. esculenta.
Maple. See Acer spp.
Coliseum. See A. cappadocicum.
devil. See A. diabolicum.
fullmoon. See $A$. japonicum.
hornbeam. See A. carpinifolium. Japanese. See A. palmatum.
paperbark. See A.griseum.
red. See $A$. rubrum tomentosum.
vine. See A. circinatum.
Maranta arundinacea, 97530 .
Marcgravia umbellata, 96511 .
Margyricarpus setosus, 98041.
Mauritia flexuosa, 97915.
Maximiliana regia. See Englerophoenix regia.
Mayapple, Himalayan. See Podophyllum emodi.
Maytenus reynosioides. 97291.
Meadowrue. Sce Thalictrum spp. columbine. See T. aquilegifolium. dusty. See T. glaucum.

Meadowrue-Continued
low. See T. minus.
Yunnan. See ' $T_{\text {. }}$ dipterocarpum.
Medicago sativa, 97972.
Meibomia sp., 97889.
cana, $97964,97965,98061$.
Melon. See Cucumis melo.
Mesembryanthemum depressum. See Glottiphyllum depressum.
Millet. See Ohaetochloa italica.
African. See Eleusine coracana.
Mimosa bahamensis, 97314.
Mockorange, Lemoine. See Philadelphus lemoinei.
Morning-glory. See Exogonium eriospermum.

See also Ipomoea polyanthes.
Mountain-ash, European. See Sorbus aucuparia.
мисипа вр., 98062.
sloanei, 98063.
Myristica fragrans, 97573, 97774.
Myrospermum frutescens, 97890.
Nageia elongata, 98226.
thunbergii, 98227.
Nepeta macrantha, 95676.
Nertera depressa, 98040.
Nicou. See Lonchocarpus nicou.
Nightshade, bitter. See Solanum dulcamara.
black. See S. nigrum.
Nomocharis sp ., 95626.
pardanthina, 95558.
pardanthina farreri, 95625.
Nutmeg, common. See Myristica fragrans.
Oak. See Quercus sp.
Ochrosia sp., 97981.
Olea europaea, 96444.
Olearia myrsinoides erubescens, 95597.
Olive, common. See Olea europaea.
Onion. See Allium spp.
Opuntia sp., 97775.
moniliformis. See Consolea moniliformis.
Orange. See Citrus sinensis.
Seville. See C. aurantium.
Ormosia sp., 96513.
Oryza cubensis, 95595.
latifolia, 95596, 97259.
Oxeye, willowleaf. See Buphthalmum salicifolium.
Padouk. See Pterocarpus indicus.
Pallasia capensis, 98228.
Palm. See Archontophoenix alexandrae, Areca triandia, Arenga engleri, Astrocaryum spp., Attalea spectabilis, Bactris pavoniana, Bentinckia nicobarica, Butia capitata $\times$ eriospatha, Coocothrinax spp., Cyrtostachys renda, Desmoncus sp., Elaeis melanococoa, Englerophoenix regia, Euterpe spp., Inodes causiarum, Jessenia oltgocarpa, Jubaeopsis caffra, Licuala grandis, Linoma alba, Livistona spp., Mauritia flexuosa, Phoenico spp., Pinanga kuhlii, Pseudophoenic spp., Ptychosperma spp., Rhyticoccos amara, Roystonea oleracea, Seaforthia elegans, Thrinax spp., and Tilmia sp.
African oil. See Elaeis guineensis.
Australian fan. See Livistona australis.
betel. See Areca cateohu.
Carnauba. See Copernicia cerifera.
Chinese fan. See Livistona chinensis. doum. See Hyphaene thebaica.
Java fan. See Livistona rotundifolia. manaca. See Calyptrogyne occidentalis.
Para. See Euterpe edulis.
Puerto Rico Royal. See Roystonea borinquena.
Roebelen date. See Phoenix roebelenii. rootspine. See A canthorhiza aculeata.
Palmetto. See Sabal glaucescens.
bluestem. See S. glabra.

Pandorea ricasoliana, 98092.
Pandorea, Ricasol. See, Pandorea ricaso.
liana.
Papaya. See Carica papaya.
Paspalum plicatulum, 98048.
Passiflora cupraea, 95696.
mollissima, $98049,98075$.
pectinata, 95697, 95698.
quadrangularis, 97777.
rubra, 97966.
suberosa, 97776.
Passionflower, Cork. See Passiflora suberosa.
softleaf. See P. mollissima.
Pea. See Pisum sativum.
Peach. See Amygdalus persica.
Pear. See Pyrus spp.
common. See P. communis.
willow-leaved. See $P_{\dot{d}}$ salicifolia.
Pedioularis spp., 97644, 97645.
Pelargonium enälicherianum, 95677.
Peltophorum ferrugineum. See Baryxylum inerme.
Pennisetum setosum, 97891.
Perilla frutescens, 97727 .
Perilla, green. See Perilla frutescens.
Periwinkle. See Vinca difformis.
common. See $V$. minor.
Persimmon. See Diospyros spp. kaki. See D. kaki.
Pertya sinensis, 98153.
P'etrea volubilis, 97938.
Phaseolus sp., 97896.
adenanthus, 97883.
calcaratus, 96479.
lathyroides, $97315,97892,97893$.
vulgaris, $95699,97322,97323,97728$,
97894, 97895, 98036, 98037, 98064, 98065.

Philadelphus lemoinei, 97279.
Phleum arenarium, 95554.
phleoides, 95555.
pratense, $97973,98199$.
Phoenix sp., 97916. roebelenii, 95700.
Picea jezoensis, 97947.
koraiensis. See P. koyamai. koyamai, 97948.
Pigeonpea. See Cajanus indicus.
Pinanga kuhlii, 97287.
Pine. See Pinus spp.
Italian stone. See $P$. pinea.
lacebark. See P. bungeana.
Pineapple. See Ananas spp.
Pinus bungeana, 95651-95653. gerardiana, 97646.
leucosperma. See P. tabulaeformis.
pinea, 95701.
tabulaeformis, 97949.
Pistache. See Pistacia vera.
Pistacia lentiscus, 97303.
mutica, 97304.
terebinthus, 98174.
terebinthus palestina, 97305.
vera, $96421,97800,98175,98176$.
Pisum sativum, 97729, 97730.
Pitcairnia bracteata, 97778. coccinea, 97779. corallina, $97574,97575$.
Pithecollobium berterianum. See Albizzia berteriana.
Plagianthus lyalli. See Gaya lyallii. Plum. See Prunus spp. common. See P. domestica.
Plumeria sp.. 96515. alba, 97576
barahonensis, 96514.
obtusa, 97781, 97782.
rubra, 97939.
Poa sp., 95581.
Pochote. See Ceiba acuminata.
Podocarpus elongatus. See Nageia elongata. thunbergii. See N. thunbergii.
Podophyllum emodi, 97521, 97618, 97619.
Pomegranate. See Punica granatum.
Portlandia domingensis, 97904.
grandifora, 97577.
Potato. See Solanum tuberosum.

## Potentilla fruticosa, 97996

fruticosa davurica, 27997.
fruticosa friedrichsenti, 97998.
fruticosa parvifolia, 97999.
fruticosa pyrenaica, 98000.
prostrata. See P. fruticosa pyrenaica.
Prickly-ash. See Zanthozylum spp.
Primrose. See Primula sp.
Primula sp., 97731.
Privet. See Ligustrum chenaultii.
Japanese. See L. japonicum.
See also Ligustrum spp.
Prosopis chilensis, 96516.
juliflora. See P. chilensis.
Prunus spp., 96456-96459.
amygdalus. See Amygdalus communis.
armeniaca, 96445-96455, 97302, 98177. avium, 98239.
cerasifera divaricata, 97423-97485, 97487-97490.
domestica, 97253, 97340-97346.
domestica $\times$ armeniaca, 97486.
laurocerasus. See Laurocerasus offi cinalis.
mume, 95659, 95660, 9813装, 98135.
padus, 97732.
persica. See Amyqdalus persica.
serrulata, 97514-97516...
Pseudophoenix saonae, 96487.
sargenti, 96488, 97823.
Pterocarpus indicus, 98066.
Pterostyrax hispida, 98083.
Pterygota alata, 97578.
Ptychosperma spp., 97541, 97545, 97806. macarthuri, 97288.
Pueraria collettii, 97254.
siamica. See P. collettii.
Pumpkin. See Oucurbita pepo.
Punctillaria magnifipunctata, 97295. nobile, 97296.
Punica granatum, 96460, 97520.
Pyrethrum hispanicum. See Chyrsanthe-
mum pulverulentum.
Pyrus spp., 96462, 97347-97353, 97519, 97554-97557. 97859, 98056, 98178. aucuparia. See Sorbus aucuparia. communis, 98240-98255. longipes, 96461 .
malus. See Malus sylvestris. salicifolia, 98195.

Quamoclit coccinea, 97783.
Quararibaea turbimata, 98071.
Quassia amara, 98050.
Quercus sp., 97327.
Rajania cordata, 97744.
pleioneura. See $R$. cordata.
Fandia sp., 97802.
formosa, 97784, 97940.
Ranunculus gramineus, 97620.
Raspberry. See Rubus sp.
Redpepper, bush. See Capsicum frutescens. common. See C. annuит.
Rhaphithamnus cyanocarpus, 98044.
Rheum turkestanicum, 98217.
Rhododendron spp., 96526, 96527, 97412, 97413.
arboreum, 97375, 97376, $97647,97657$.
arboreum $\times$ grifithianum, 97377 .
arboreum $\times$ thomsonii, 97378.
augustinii, 97379.
baileyi, 97380.
barbatum $\times$ thomsonii, 97381.
brachycarpum, 95629.
burmanicum, 97658.
callimorphum, 97382.
calophytum, 97383, 97659.
calostrotum, 97384.
сатриlocarpum, 97621.
campylocarpum $\times$ grifithianum, 97385 . campylogynum, 97386.
charitopes, 97387.
chartophyllum, 97388, 97622.
ciliatum, 97389.
cinnabarinum. See R. roylei.
сrосеит, 97660.
cuneatum, 97390.

Rhododendron spp.-Continued
davidsonianum, 97391.
decorum, 97623,97661 .
degronianum, 98136.
dilatatum. See R. reticulatum.
edgeworthii, 97392.
falconeri, $9766 \%$.
floccigerum, 97603.
fortunei, 97393.
fulvum, 97664.
galactinum, 97624.
griersonianum, 97605
haematodes, 97666.
hippophaeoides 97394, 97625.
hodgsonii, 97667.
insigne, 97395,97668 .
lacteum, 97669.
loderi, 97396.
maddeni, 97397.
metternichii pentamerum. See R. degronianum.
mollicomum, 9739\&.
neriiflorum, 97670 .
niveum. 97671.
orbiculàre, 97399 . ч7¢72.
oreodoxa, 97673.
pentaphyllum, 97626.
praevernum, 97674.
pseudoyanthinum, 97627.
quinquefolium roseum. See R. pentaphyilum.
racemosum, 97400.
reticulatum, $96525,97401$.
rhododactylum. See R. wasonii.
roylei, 97402, 97675.
souliei 97403, 97676.
spinuliferum $\times$ racemosum, 97404.
strigillosum, 97405.
sutchuenense, 97406.
thomsonii, 97677.
thomsonii $\times$ fortunei, 97407.
thomsonii $\times$ griffithianum, 97408.
vernicosum, 97678.
wasonii, 97409.
williamsianum, 97410.
yunnanense, 97411.
Rhododendron, Davidson. See Rhododendron davidsonianum.
fringed. See $R$. ciliatum.
Fujiyama. See R. brachycarpum.
Maytlower. See $R$. racemosum.
tree. See $R$. arboreum.
Yunnan. See R. yunnanense.
Rhyticoccos amara, 97282.
Ribes spp., $97733,97734,98038$.
Rice. See Oryza spp.
Rosa sp., 97648.
Rose. See Rosa sp.
Roystonea borinquena, 97550.
oleracea, $97286,97551$.
Rubus sp., 95654.
Rusсия aculeatus, 98159.
Ryegrass, perennial. See Lolium perenne.
Sabal adansoni. See S. glabra.
glabra, 97289.
glaucescens, 97290, 97552.
Saccharum officinarum, 96473, 96474.
Salsola arbuscula, 98218.
richleri. See S. arbuscula.
subaphylla, 98219.
Sapium sebiferum, 95655.
Sapodilla. See Achras zapota.
Sapucaya nut. See Lecythis zabucajo.
Saraca, common. See Saraca indica.
Saraca indica, 98093.
Sarcophrynium sp., 97803.
Saxaul. See Haloaylon ammondendron.
Scheflera actinophylla, 98137.
Scutellaria ventenatii, 97851.
Seaforthia elegans, 96490.
Sesame. See Sesamum orientale.
Sesamum orientale, $95702,95703$.
Severinia buxifolia, 96477, 97334, 9802798031.

Skimmia laureola, 97649, 97650.
Skullcap. See Scutellaria ventenatii.
Soja max, 95706-96383, 96530-97251,
$97339,97735.97736$.

Solanum dulcamara, 95573.
macranthum, 97852 .
таттовит, 97785 .
melongena, 96389 .
nigrum, 95572.
tuberosum, 97354-97374.
Sophora, fourwing. See Sophora tetraptera.
Sophora tetraptera, 98039.
Sorbus aucuparia, 98156.98157.
auouparia edulis, 97517.
Soybean. See soja max.
Sparmannia africana, 98229.
Spiderwort. See Tradescantia spp.
Spinach. See Spinacia oleracea.
Spinacia oleracea, 98196.
Spruce. See Picea koyamai.
Yeddo. See P. jazoensis.
Spurge, caper. See Euphorbia lathyrus.
Squash. See Cucurbita maxima.
Squirting-cucumber: See Ecballium elaterium.
Stachys grandifora, 95668.
Stachyurus chinensis, 98084.
Starglory, scarlet. See Quamoclit coccinea. Statice sp., 97987
chilensis, 05089.
fascirnzıしa, 97591.
madoloviana. 97598.
pungens, 97594.
sibirica, 97508.
Steqnosperma halimifolium, 97580, 97901.
Stizolobium aterrimum, 97897
Stylosanthes himata, 96517, 97786.
Styrax sp., 95559.
Sugar-apple. See Annona squamosa.
Sugarcane. See Saccharum officinarum.
Sunn-hemp. See Crotalaria juncea.
Supplejack. See Berchemia lineata.
Japanese. See B. racemosa.
Sweetshrub, pale. See Calycanthus fertilis.
Swizzle-stick-tree. See Quararibaea turbinata.
Syringa adamiana. See S. tomentella. pinetorum, 97629.
prestoniae, 97679-97681.
sweginzowii. 97682.
tomentella, 97628 .
Tabebuia leucoxyla, 97579, 97787.
pentaphylla, 97788.
sauvallei 98094.
serratifolia, 98095.
Tabernaemontana sp., 97898.
Talinum paniculatum, 95705.
Tallowtree, Chinese. See Sapium sebiferum.
Tamarind. See Tamarindus indica.
Tamarindus indica, 97789.
Tamarisk. See Tamarix spp.
Tamarix hohenackeri. 95574.
pallasii. See T. pentandra. pentandra, 95575.
Tarchonanthus minor, 98012.
Teosinte. See Euchlaena mexicana.
Tephrosia candida. See Oracca candida.
hirta. See O. villosa hirta.
purpurea. See C. villosa purpurea.
Teramnus labialis. 97887, 98067.
Terebinth. See Pistacia mutica. false. See P. terehinthus.
Terminalia arjuna, 97984. bellerica. 97985. myriocarpa, 98096.
Thalictrum anuileqifalium, 95599, 95600. chelidonit, 95601.
delavayt, $\mathbf{9 5 6 0 2}$.
dipterocarpum, 95603.
fondleri, 95604.
flexuosum, 95605.
glaucuim. 95606.
majus; 95607.
minus, 95608.

Thalictrum aquilegifolium-Continued odoratum, 95609. saxatile. 95610.
Thea spp., $95627,95628$.
forrestil, $95560,97328,97329$.
Thrift. See Armeria spp.
See also Etatice spp.
Thrinax spp., $96491,97918$.
Tibouchina sp., 97534.
Tillandsia sp., 97899. utriculata, 97790.
Tilmia spp., 97544, 97549.
Timothy. See Phileum spp.
Toadlily. See Tricyrtis spp. hairy See T. hirta. speckled. See T. macropoda.
Toluifera pereirae, 97900.
Tomato. See Lycopersicon esculentum.
Tontanea guianense, 97841.
Tounatea simplex, 98068.
Tradescantia spp., 97707-97711.
Tree-tomato. See Cuphomandra betacea.
Tricyrtis hirta, 95678.
macropedn. 95679. pilosa, 45680.
Trifolium cainpestre, 57792 . clypeatum, 97793.
lappaceum. 97794.
loiseleuri, 97795, 97797. pratense, 97974. ригриісит. See T. loiseleuri. repens, 98099 scutatum, 97796.
Trimeza martinicensis, 97762.
Tritioum turgidum, 97737, 97738.
Trumpetcreeper. See Bignonia, spp.
Turmeric. See Curcuma longa.
Turnip. See Brassica rapa.
Turraea obtusifolia, 97822.
Undetermined, 97333, 97531, 97536, 97653$97656,97804.97829,97903,97906,97907$, 97967, 97968, 98051.

Vancouveria hexandra, 95671.
Verbena bonariensis. 97712.
Viburnum spp., 97651, 97652.
Vinca. difformis, 98160.
minor, 98161.
Vitex agnus-castus, 96518.
Vitis vinifera, 96463-96472, 98179-98193.
Walnut, Persian. See Juglans regia.
Warszewiczia coccinea, 97986.
Watermelon. See Citrullus vulgaris.
Wheat, poulard. See Triticum turgidum.
Wheatgrass. See Agropyron orientale lasi-
anthum.
slender. See $A$. tenerum.
Wood-apple. See Feronia limonia.
Xylopia frutescens, 97941.
Yam, lesser. See Dioscorea esculenta. winged. See D. alata.
Yam-bean. See Cacara erosa.
Yampie. See Dioscorea triflda.
Yucca elata, 96480.
macrocarpa, 96481.
Zamia sp., 47535.
Zanthoxylum sp., 98086.
alatum planispinum, 98085.
Zea mays, 97414-97422, 97739.
Zelkova formosana, 97258.
Zephyranthes ajax,. 95681.
Zephyrlily. See Zephyranthes ajax.
Zinziber officinale. 97821.
Ziziphus sp., 97902.
jujuba, 97798. 98194
spina-christi, 97799.


[^0]:    ${ }^{1}$ It should be understood that the names of horticultural varieties of fruits, vegetables, cereals. and other plants used in this inventory are those under which the material was received when introduced by the Division of Foreign Plant Introduction, and, further that the printing of such names here does not constitute their official publication and adoption in this country. As the different varieties are studied, their entrance into the American trade forecast, and the use of varietal names for them in American literature becomes necessary, the foreign varietal designations appearing in this inventory will besubject to change with a view to bringing the forms of the 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 inven-. tories are appearing in this country for the first time, and there are no seed samples or herbarium specimens with ripe seeds with which the new arrivals may be compared. The only identification possible is to see that the sample received resembles seeds of other species of the same genus or of related genera. The responsibility for the identifications therefore must necessarily often rest with the person sending the material. If there is any question regarding the correctness of the identification of any plant received from. this division, herbarium specimens of leaves and flowers should be sent in so that definiteidentification can be made.

