

UNITED STATES DEPARTMENT OF AGRICULTURE



INVENTORY No. 96✓



Washington, D. C.

Issued February, 1930

PLANT MATERIAL INTRODUCED BY THE OFFICE OF FOREIGN PLANT INTRODUCTION, BUREAU OF PLANT INDUSTRY, JULY 1 TO SEPTEMBER 30, 1928 (NOS. 77261 TO 77595)

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INTRODUCTORY STATEMENT

The most outstanding plant material contained in this inventory, No. 96, covering the period from July 1 to September 30, 1928, is the collection of 51 sugarcane varieties (*Saccharum officinarum*, Nos. 77334 to 77384) procured by E. W. Brandes in New Guinea for use in his official investigations. Part of the interest in this shipment is due to the fact that Doctor Brandes is the first agricultural explorer to use an airplane for his collecting tour. Doctor Brandes not only collected sugarcanes in person but also obtained the cooperation of P. H. Goldfinch, Sydney, Australia, who sent in a collection of 44 varieties (Nos. 77496 to 77539). Another lot of five varieties (Nos. 77298 to 77302) was received from Argentina.

As in the previous inventory, the bulk of the plant material received in this period comes from the Southern Hemisphere. Through the activities of Mrs. Frieda Cobb Blanchard two collections of Australian plants (Nos. 77273 to 77292 and Nos. 77441 to 77447), as well as a collection from New Zealand (Nos. 77540 to 77582), were received.

Through O. F. Cook there was received a collection of rubber-producing plants (Nos. 77387 to 77394) from Haiti. Five kinds of cover crops (Nos. 77293 to 77297) from Ceylon may be of value for the southern United States. Another interesting shipment consists of apricot varieties (*Prunus armeniaca*, Nos. 77466 to 77472) from Palestine. A bamboo native to Japan (*Sasa tessellata*, No. 77333) was received from France to be added to the growing bamboo collection at the Barbour Lathrop Plant Introduction Garden at Savannah, Ga.

The growing interest in flowering cherries warrants a note of the collections presented by the Arnold Arboretum (*Prunus* spp., Nos. 77261 to 77266 and Nos. 77404 to 77411). Along this same line is a shipment of six varieties (*Prunus* spp., Nos. 77313 to 77318) from Capt. Collingwood Ingram, of England.

Various plants have been obtained for study as ornamentals, some of them quite unknown as yet and others not commonly grown in this country. As compared to other inventories their number here is relatively small and none

call for special mention, save perhaps the several *Lycoris* species (Nos. 77586 to 77588) and the *Nerines* (Nos. 77590 to 77592), all of them species long known to cultivation but not sufficiently used even in parts of our country where they are known to be hardy.

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.

OFFICE OF FOREIGN PLANT INTRODUCTION,
Washington, D. C., August 14, 1929.

INVENTORY¹

77261 to 77267.

From Jamaica Plain, Mass. Scions presented by E. H. Wilson, Arnold Arboretum. Received August 8, 1928.

77261 to 77266. PRUNUS spp. Amygdalaceae.

77261. PRUNUS INCISA Thunb.
Mame cherry.

An ornamental Japanese shrub or small tree about 25 feet high. The flowers, which appear in drooping clusters before the deeply cut leaves, are white or rosy, with bright-red calyxes, and the anthers are bright yellow. The petals fall early, but the calyxes, which gradually grow brighter, remain on the young fruits for some time and are very showy.

For previous introduction see No. 74428.

77262. PRUNUS MAACKII Rupr.
Amur cherry.

A Manchurian bird cherry, 40 feet or more in height, with very smooth brownish yellow bark which peels off like that of a birch. The leaves are pointed and very finely toothed, and the white flowers are in short racemes borne on the previous season's wood.

For previous introduction see No. 64239.

77263 to 77265. PRUNUS SERRULATA Lindl.
Oriental cherry.

77263. Variety *Ohosuitzakura* [red cherry from Chosen]. Tree of spreading habit; young foliage reddish brown; flowers uniformly pink, up to 1½ inches in diameter, single or semidouble, in clusters of two to four, produced in great abundance.

For previous introduction see No. 47133.

77261 to 77267—Continued.

77264. Variety *Masuyama* [probably named for some Japanese person]. Tree spreading, up to 15 feet high; bark reddish brown; young foliage brownish green; buds deep pink, truncate; flowers up to 1½ inches in diameter, double, light pink shading deeper toward the margins and opening flat, similar to *Horinji* but a little less double and presenting a more clean-cut appearance. A very attractive variety.

77265. Variety *Miyako* [beauty or prosperity]. Tree of upright habit; bark dark brown; young foliage light brown; buds deep pink, truncate; flowers semidouble opening rather flat, up to 1½ inches in diameter, almost white in center, becoming pink toward the fimbriate petal tips and on back, in drooping clusters. A very attractive variety.

77266. PRUNUS SUBHIETELLA Miquel.
Higan cherry.

Higanzakura [Higan signifies equinox in Japanese]. Tree very spreading, up to 40 feet high; bark gray, smooth. Flowers single, light pink, appearing before the leaves. This is perhaps superior to *Yoshino* for mass effect, because of the compact habit of growth and the great numbers of flowers produced.

77267. SYRINGA PINNATIFOLIA Hemsl.
Oleaceae. Finnate lilac.

A western Chinese shrub up to 10 feet high, with pinnate leaves 2 to 4 inches long made up of 7 to 11 ovate to lanceolate leaflets. The lilac-tinged white flowers are in short panicles 2 to 3 inches long.

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

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

77268. GARCINIA BINUCAO (Blanco)
Choisy. Clusiaceae. Binukao.

From Manila, Philippine Islands. Seeds presented by José S. Camus, Acting Director of the Bureau of Agriculture. Received September 5, 1928.

A large tropical tree, native to the Philippines, up to 100 feet high, with clusters of small red flowers and globular yellow fruits 2 inches in diameter. It is a possible stock for the mangosteen.

For previous introduction see No. 63853.

77269. WASHINGTONIA SONORAE S. Wats.
Phoenixaceae. Palm.

From Soledad, Cienfuegos, Cuba. Seeds presented by R. M. Grey, Superintendent of the Biological Laboratory and Botanical Garden. Received August 14, 1928.

A palm up to 25 feet high, native to Sonora, Mexico, with fan-shaped leaves, about 3 feet broad, copiously divided into drooping fibers on the margin and the petioles armed with stout curved spines. The flower cluster is 5 to 8 feet long, and the small black fruits are said to be edible.

77270. ACER sp. Aceraceae. Maple.

From Japan. Seeds collected by R. K. Beattie, Bureau of Plant Industry. Received August 20, 1928.

No. 701. July 26, 1928. A very attractive maple growing on the trail between Hajikano and Tenmokuzan, in the mountains of the northeastern part of Yamana-shi Ken.

77271. ADANSONIA DIGITATA L. Bom-
bacaceae. Baobab.

From Dar es Salaam, Tanganyika Territory, Africa. Seeds presented by A. H. Kirby, Director, Department of Agriculture. Received August 20, 1928.

An African tree about 60 feet high and sometimes 30 feet in diameter, with palmate leaves divided into five to seven leaflets, large white flowers 6 inches across, and large gourdlike fruits with pulp which is edible.

For previous introduction see No. 76635.

77272. ROSA ODORATA GIGANTEA (Col-
lett) Rehd. and Wils. Rosaceae.
Giant tea rose.

From Melbourne, Australia. Seeds presented by Alister Clark, through Mrs. Frieda Cobb Blanchard, University of Michigan, Ann Arbor, Mich. Received August 10, 1928.

A strong climbing evergreen rose, native to Burma, with creamy white single flowers 4 to 6 inches across. It resembles somewhat the Cherokee rose, but is hardy only in the far South.

77273 to 77292.

From Sydney, Australia. Seeds presented by Mrs. Frieda Cobb Blanchard, University of Michigan, Ann Arbor, Mich. Received August 13, 1928.

77273 to 77275. ACACIA spp. Mimosaceae.

77273. ACACIA ACUMINATA Benth.

A tree 30 to 40 feet high, native to Western Australia, with falcate-linear phyllodes 3 to 10 inches long and small flower spikes an inch long. The wood, which has an odor re-

77273 to 77292—Continued.

sembling raspberry jam, is dark reddish brown, close-grained, and hard, and is suitable for ornamental woodwork and for fence posts.

For previous introduction see No. 48982.

77274. ACACIA MICROBOTRYA Benth.

A tall Western Australian shrub with falcate-lanceolate phyllodes 3 to 5 inches long and short racemes of small globular flower heads.

For previous introduction see No. 48053.

77275. ACACIA ROSSEI F. Muell.

A tall heathlike shrub, native to Western Australia, with short linear-falcate phyllodes and corymbs of small flower heads.

77276. BRUNONIA AUSTRALIS J. E. Smith.
Goodeniaceae.

A silky hairy tufted perennial, native to Australia, with a rosette of linear-obovate entire leaves 2 to 4 inches long and scapes 6 to 12 inches high bearing globular blue flower heads less than an inch in diameter.

77277. CALOTHAMNUS GILESH F. Muell.
Myrtaceae.

An Australian shrub with linear-terete leaves and loose clusters of reddish flowers.

For previous introduction see No. 67070.

77278. CASSIA EREMOPHILA A. Cunn.
Caesalpiniaceae.

A handsome Australian shrub 5 feet high, with leaves made up of two pairs of narrow leaflets and yellow flowers. The leaves and pods are said to be eaten by stock.

For previous introduction see No. 52353.

77279. CYANOSTEGIA LANCEOLATA Turcz.
Verbenaceae.

An erect glutinous shrub, native to western Australia, with lanceolate leaves 1 to 2 inches long and loose terminal pyramidal panicles of purple flowers followed by small 1-seeded fruits covered with long branching hairs.

77280. DAMPIERA WELLSIANA F. Muell.
Goodeniaceae.

A tufted perennial, native to Western Australia, with thick glabrous radical leaves and erect wooly tomentose stems bearing bracted globular heads of small blue flowers.

77281 to 77283. EUCALYPTUS spp. Myrta-
ceae.

77281. EUCALYPTUS BURRACOPPINENSIS
Maiden and Blakely.

A Western Australian shrub or small tree 8 to 15 feet high, with thick light-green lanceolate leaves 4 to 6 inches long, small axillary clusters of rather large yellowish white flowers, and flattened top-shaped fruits.

77282. EUCALYPTUS ERYTHRONEMA
Turcz.

A small Australian tree with reddish bark, thick shining lanceolate leaves 3 inches long, and recurved umbels of red flowers.

77273 to 77292—Continued.

77283. *EUCALYPTUS MACROCARPA* Hook.

A stout Australian shrub or small tree up to 15 feet high with thick rigid cordate glaucous leaves 6 inches long and large solitary brilliant orange to crimson flowers.

For previous introduction see No. 48990.

77284. *GOODENIA CAERULEA* R. Br. Goodeniaceae.

A tufted herbaceous perennial, native to Western Australia, with several angled stems a foot high, rigid linear leaves, and axillary blue flowers nearly an inch long.

77285 to 77287. *ISOPOGON* spp. Proteaceae.77285. *ISOPOGON DIVERGENS* R. Br.

A bushy glabrous shrub 2 to 4 feet high, native to Western Australia, with leaves 2 to 5 inches long pinnately divided into rigid slender terete segments. The conspicuous purple flowers an inch long are borne in conelike clusters.

77286. *ISOPOGON SCABRIUSCULUS* Meissn.

A much-branched rigid Western Australian shrub with linear nearly terete leaves 3 to 6 inches long and small globular conelike clusters of flowers covered with dense white hairs.

77287. *ISOPOGON SPHAEROCEPHALUS* Lindl.

An erect shrub several feet high, native to Western Australia, with the branches sprinkled with long spreading hairs. The linear to lanceolate leaves are 2 to 4 inches long, and the flowers in the conelike clusters are densely covered with yellow hairs.

77288. *KENNEDIA COMPTONIANA* (Andrews) Link (*Hardenbergia comptoniata* Benth.). Fabaceae.

A twining herbaceous or subshrubby Australian vine with three to five cordate linear to ovate leaflets and long sprays of deep violet-blue flowers.

For previous introduction see No. 47191.

77289. *KENNEDIA PROSTRATA* R. Br. Fabaceae.

A prostrate pubescent Australian vine with leaves composed of three cordate broadly obovate leaflets an inch long and axillary peduncles bearing two to four scarlet flowers.

For previous introduction see No. 56576.

77290. *PIMELEA SYLVESTRIS* R. Br. Thymelaeaceae.

A Western Australian shrub, 2 to 3 feet high, with opposite concave-lanceolate leaves less than an inch long and small yellowish or pinkish flower heads surrounded by four to six broad persistent bracts.

77291. *PITYRODIA RACEMOSA* (Turcz.) Benth. Verbenaceae.

An erect shrub about 2 feet high, native to Western Australia, densely covered with loose floccose white wool. The thick soft oblong clasping leaves are opposite and nearly an inch long, and the blue sagelike flowers are in racemose clusters.

77273 to 77292—Continued.

77292. *STACHYSTEMON VERMICULARIS* Planch. Euphorbiaceae.

An erect glabrous shrub, native to Western Australia, with wiry stems a foot high, linear leaves less than an inch long, and inconspicuous flowers clustered at the ends of the branches.

77293 to 77297.

From Peradeniya, Ceylon. Seeds purchased from the manager of the publication depot and central seed store of the Department of Agriculture. Received August 14, 1928.

77293. *BRADBURYA PUBESCENS* (Benth.) Kuntze (*Centrosema pubescens* Benth.).

A tropical American leguminous vine with trifoliate leaves and small yellowish flowers, which is used as a cover crop.

For previous introduction see No. 76771.

77294. *CALOPOGONIUM MUCUNOIDES* Desv. Fabaceae.

A tropical American legume with stems 3 to 10 feet long which form roots at each node, and racemes 1 to 4 inches long of pale-blue flowers. It forms a mat of foliage 1 to 2 feet thick and is used as a cover crop.

For previous introduction see No. 76095.

77295. *DOLICHOS HOSEI* Craib. Fabaceae.

A creeping leguminous vine, native to the Malay States, with rich light-green leaves and yellow flowers. It is used as a cover crop in rubber plantations, also for green manure.

For previous introduction see No. 76102.

77296. *INDIGOFERA ENDECAPHYLLA* Jacq. Fabaceae.

Annual or biennial tropical African prostrate legume, 2 to 3 feet long, with seven to nine oblong leaflets and dense racemes of violet-purple flowers. It is used as a cover crop.

For previous introduction see No. 67844.

77297. *MEIBOMIA GYROIDES* (DC.) Kuntze (*Desmodium gyroides* DC.) Fabaceae.

A shrubby leguminous plant 8 to 10 feet high, native to the warmer parts of the central and eastern Himalayas. It has pubescent leaves and terminal racemes of reddish purple flowers.

For previous introduction see No. 76774.

77298 to 77302. *SACCHARUM OFFICINARUM* L. Poaceae. Sugarcane.

From Tucuman, Argentina. Cuttings presented by Dr. William E. Cross, Director, Estación Experimental Agrícola, through E. W. Brandes, Bureau of Plant Industry. Received August 25, 1928.

Promising mosaic resistant or immune varieties which have given good results in Argentina.

77298. No. 362. 77301. No. 454.

77299. No. 407. 77302. No. 472.

77300. No. 450.

77303. SOLANUM MELONGENA L. Solanaceae. Eggplant.

From Tiflis, Georgia, Russia. Seeds presented by the director of the Botanic Garden. Received August 20, 1928.

Locally grown seeds.

77304 and 77305. LACTUCA SATIVA L. Cichoriaceae. Lettuce.

From Yungui, Hunan, China. Seeds presented by Father Theophane Maguire, C. P., Catholic Mission, Passionist Fathers. Received August 30, 1928.

Ach. swen. A vegetable planted in this region during the early months of the year. When it has sprouted the sprouts are transplanted about a foot apart. The sturdy stem when developed is peeled and sliced into thin pieces. It may be prepared uncooked, eaten like cucumbers with vinegar, etc., or it may be cooked with meat juices until soft.

77304. A foreign variety.

77305. A native variety.

77306. CITRUS sp. Rutaceae. Cuban shaddock.

From Holguin, Cuba. Seeds presented by Thomas R. Towns. Received August 17, 1928.

A shaddock used as a stock for citrus varieties in Cuba; especially good for navel orange, but not for grapefruit or the kumquat.

For previous introduction see No. 68978.

77307. ERIOBOTRYA JAPONICA (Thunb.) Lindl. Malaceae. Loquat.

From Yungui, Hunan, China. Seeds presented by Father Theophane Maguire, C. P., Catholic Mission, Passionist Fathers. Received August 30, 1928.

The fruits are not large, and they are gathered in clusters because the seeds leave little meat. This variety makes delicious jam.

77308 to 77312. GOSSYPIMUM spp. Malvaceae. Cotton.

From Peru. Seeds obtained through O. F. Cook, Bureau of Plant Industry. Received July 26, 1928.

77308. GOSSYPIMUM sp.

No. 1. *Tanguis*. From Huacho Valley, Pisco.

77309. GOSSYPIMUM sp.

No. 2. *Tanguis*. From Huacho Valley, Pisco.

77310. GOSSYPIMUM sp.

No. 3. *Algodon tanguis*. From Unanue hacienda, Canete Valley.

77311. GOSSYPIMUM sp.

No. 4. *Algodon tanguis*. From Unanue hacienda, Canete Valley.

77312. GOSSYPIMUM sp.

No. 5. *Algodon tanguis*. From Hualcura hacienda, Canete Valley.

77313 to 77318. PRUNUS spp. Amygdalaceae.

From Benenden, Kent, England. Bud sticks presented by Capt. Collingwood Ingram. Received August 7, 1928.

77313. PRUNUS INCISA X SERRULATA.

Umineko.

77314. PRUNUS INCISA X SUBHIRTELLA.**77315 to 77317. PRUNUS SERRULATA Lindl. Oriental cherry.**

77315. *Daikoku* [the god of prosperity]. A variety introduced into England about 1905, with large purplish pink double flowers up to 2 inches wide. The thick purplish red buds are truncate at the end, and the young foliage is yellowish green.

For previous introduction see No. 72008.

77316. *Hokusai* [named by Captain Ingram after the famous Japanese artist]. Tree spreading, up to 20 feet high; young leaves bronze colored; flowers semidouble up to 2 inches in diameter, light pink, borne in loose clusters.

77317. *Chen's Weeping cherry*. Tree of medium size, with pendulous branches and a profusion of rather small but double deep-pink flowers resembling carnations.

77318. PRUNUS SERRULATA SACHALINENSIS (Schmidt) Makino (*P. sargentii* Rehder). Sargent cherry.

A tall handsome tree, native to northern Japan, up to 80 feet high, with smooth dark-brown bark and ovate or ovate-lanceolate, sharply serrate leaves up to 5 inches long. The single pink flowers, 1 to 1½ inches wide, are in few-flowered clusters, and the black fruits are about the size of peas. This wild Japanese cherry is considered by E. H. Wilson, of the Arnold Arboretum, Jamaica Plain, Mass., to be the parent of several of the finest double-flowered varieties of flowering cherries and also to be the most satisfactory stock on which to work these varieties.

For previous introduction see No. 73881.

77319. ANTHEMIS SANCTI-JOHAANNIS Stoy., Steff., and Turrill. Asteraceae.

From Victoria, British Columbia, Canada. Seeds presented by J. C. Bennett. Received August 31, 1928.

An ornamental herbaceous perennial, 3 to 4 feet high, native to the mountain slopes of Bulgaria at an altitude of 4,000 feet. The woolly stems, with few branches, have two to three times partly pinnate basal leaves, 5 to 7 inches long, the tips of which are armed with hard white acuminate points. The stem leaves are similar but gradually smaller, leaving bare stems 3 to 7 inches below the flower heads, which are solitary, 1 to 2 inches broad, and the ray flowers and disk are an intense orange, making a brilliant showing in contrast to the woolly leaves.

77320. PTYCHOSPERMA MACARTHURI Wendl. Phoenicaceae. Palm.

From Little River, Fla. Seeds presented by Charles F. Simpson. Received August 30, 1928.

77320—Continued.

An Australian cluster palm now 14 feet high and having about a dozen stems. It bears pinnate leaves eroded at the ends of the leaflets. It may seed at almost any time of the year. This palm was blown down and badly broken by the big hurricane, but it is beginning to regain something of its former beauty. (*Letter of August 22, 1928, from Mr. Simpson.*)

77321 to 77326.

From Madagascar. Seeds collected by Charles F. Swingle, Bureau of Plant Industry. Received August 21, 1928.

77321. BAPHIA CAPPARIDIFOLIA Baker.
Fabaceae.

No. 4426. From Mananika, Valley of Betsiboka, July 6, 1928. A shrub or tree, native to Madagascar, with slender branchlets, simple lanceolate leaves 2 to 3 inches long, and cymes of yellow flowers half an inch across.

77322. CITRUS GRANDIS (L.) Osbeck (*C. decumana* Murr.). Rutaceae.
Grapefruit.

July 3, 1928. Pink-fleshed grapefruit obtained in the market at Majunga. Several of the fruits obtained at this time were entirely seedless.

77323. GOSSYPIUM OBTUSIFOLIUM AFRICANUM Watt. Malvaceae. **Cotton.**

No. 4429. From Mananika, Valley of Betsiboka, July 6, 1928. A half-woody African shrub, 6 feet high, which differs from the Indian form in having more copious and finer wool. The flowers are yellow, changing to reddish.

For previous introduction see No. 63728.

77324. HIBISCUS SABDARIFFA L. Malvaceae. **Roselle.**

No. 4412. From Mananika, Valley of Betsiboka, July 6, 1928. A half-woody tropical shrub with a stem 3 to 6 feet high and 2 inches in diameter; horizontal branches; calyx succulent, acid, edible; flowers used for marmalade.

77325. URENA LOBATA L. Malvaceae.

No. 4383. From Madriovala, Valley of Betsiboka, July 5, 1928. An erect undershrub with cordate entire or lobed leaves 2 to 3 inches long, flowers an inch across, rose red at the base and small fruits armed with hooked bristles. The stems furnish a fiber used for bags and twine.

For previous introduction see No. 52228.

77326. (Undetermined.)

No. 4427. A large tree growing at Mananika, Valley of Betsiboka, July 6, 1928.

77327 to 77330. SOLANUM MELONGENA L. Solanaceae. **Eggplant.**

From Calcutta, India. Seeds presented by the curator of the industrial section of the Indian Museum. Received September 5, 1928.

77327. Elakeshi.

77329. Makre.

77328. Kul.

77330. Muktaveshi.

77331. CAPSICUM VIOLACEUM H. B. K. Solanaceae.

From Santa Cruz, Calif. Seeds presented by C. A. Reed. Received September 7, 1928.

The seeds of this variety were originally obtained in Peru in 1918 and planted in the hills near Santa Cruz in 1919. Two of the original plants are producing fruits, and the seeds received are from one of these plants which is now 9 feet high.

77332. CITRUS sp. Rutaceae. **Pison.**

From Sorsogon, Luzon, Philippine Islands. Seeds presented by P. J. Wester, Bureau of Agriculture, Manila. Received September 12, 1928.

Obtained in the market. A juicy fruit of subacid and very pleasant taste, something like a grapefruit but sweeter. Judging from the samples obtained, it is too fibrous and seedy for eating, but it might be that in cultivation much of the fiber would disappear. The trees are said to be 40 feet high and very vigorous, so this variety may prove a promising new citrus stock.

77333. SASA TESSELATA (Munro) Mak. and Shib. (*Arundinaria ragumowski* Pfitzer). Poaceae. **Bamboo.**

From Generargues, France. Plant purchased from Gaston Negre. Received January 28, 1928. Numbered July, 1928.

A Japanese bamboo, 3 to 6 feet high, with arching stems and broad rounded masses of large leaves.

For previous introduction see No. 75167.

77334 to 77384. SACCHARUM OFFICINARUM L. Poaceae. **Sugarcane.**

From Port Moresby, New Guinea. Cuttings collected by E. W. Brandes, Bureau of Plant Industry. Received September 12, 1928.

77384. No. 1.

77335. No. 2.

77336. No. 3.

77337. No. 4.

77338. No. 5.

77339. No. 6.

77340. No. 7.

77341. No. 21.

77342. No. 22.

77343. No. 23.

77344. No. 24.

77345. No. 25.

77346. No. 26.

77347. No. 251.

77348. No. 252.

77349. No. 253.

77350. No. 254.

77351. No. 255.

77352. No. 256.

77334 to 77384—Continued.

77353. No. 257.
 77354. No. 258.
 77355. No. 259.
 77356. No. 260.
 77357. No. 261.
 77358. No. 262.
 77359. No. 263.
 77360. No. 264.
 77361. No. 265.
 77362. No. 266.
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 77364. No. 268.
 77365. No. 269.
 77366. No. 270.
 77367. No. 271.
 77368. No. 272.
 77369. No. 273.
 77370. No. 274.
 77371. No. 275.
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 77373. No. 277.
 77374. No. 278.
 77375. No. 279.
 77376. No. 280.
 77377. No. 281.
 77378. No. 282.
 77379. No. 283.
 77380. No. 284.
 77381. No. 285.
 77382. No. 286.
 77383. No. 287.
 77384. No. 288.

77385 and 77386.

From Richmond, Australia. Seeds presented by F. H. Baker. Received September 7, 1928.

77385. CALLISTEMON CITRINUS (Curtis) Skeels (*C. lanceolatus* DC.). Myrtaceae. **Lemon bottlebrush.**

An Australian 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.

For previous introduction see No. 74424.

77386. HAKEA ACICULARIS (Vent.) Knight (*H. sericea* Schrad.). Proteaceae.

A tall evergreen Australian shrub or small tree with awl-shaped leaves 1 to 3 inches long and axillary clusters of small white flowers.

For previous introduction see No. 73855.

77387 to 77394.

From Haiti. Seeds obtained through O. F. Cook, Bureau of Plant Industry. Received September 11, 1928.

77385 and 77386—Continued.

77387 to 77391. CASTILLA spp. Moraceae.

Tropical trees from which rubber is obtained.

77387. CASTILLA ELASTICA Cery. **Rubbertree.**

A large deciduous tropical American forest tree from which rubber is obtained.

For previous introduction see No. 61483.

77388. CASTILLA PANAMENSIS O. F. Cook.

A large tree, native to Panama, with oblong leaves about a foot long which are very rough above and hairy beneath. The fruiting receptacles, produced in great profusion, are orange-red and are very showy. This tree is commonly planted in Central America as a shade tree.

For previous introduction see No. 30514.

77389. CASTILLA sp.

77390. CASTILLA sp.

X-1.

77391. CASTILLA sp.

X-2.

77392. CRYPTOSTEGIA GRANDIFLORA R. Br. Asclepiadaceae. **Palay rubbervine.**

An erect woody climber of unknown nativity, but now cultivated in many places in the Tropics of both hemispheres as an ornamental, and occasionally growing as an escape from cultivation. The flowers, reddish purple becoming pale pink, are about 2 inches in diameter, resembling those of our common milkweed, and are produced in short spreading cymes. In India the plant is called *palay* and is cultivated for the rubber obtained from the juice.

For previous introduction see No. 75218.

77393. FUNTUMIA ELASTICA (Preuss) Stapf. Apocynaceae. **Lagos rubbertree.**

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

For previous introduction see No. 73991.

77394. HEVEA BRASILIENSIS (H. B. K.) Muell. Arg. Euphorbiaceae. **Para rubbertree.**

From Bayeux, Haiti. A tropical Brazilian tree now extensively cultivated for rubber.

For previous introduction see No. 72980.

77395 and 77396. CUCUMIS MELO L. Cucurbitaceae. **Melon.**

From Kashan, Persia. Seeds obtained from Aqal Hassan Agha Assady. Received September 18, 1928.

77395. No. 1.

77396. No. 2.

77397 and 77398. CANNABIS SATIVA L.
Moraceae. Hemp.

From Valdivia, Chile. Seeds presented by J. A. Momberg, through L. H. Dewey, Bureau of Plant Industry. Received September 20, 1928.

77397. A variety grown at the city of Valdivia.

77398. A variety grown at Lanco.

77399. NICOTIANA TABACUM L.
Solanaceae. Tobacco.

From Port Moresby, New Guinea. Plants collected by E. W. Brandes, Bureau of Plant Industry. Received September 13, 1928.

A variety grown by the natives in New Guinea.

77400 and 77401. LILIUM spp.
Liliaceae. Lily.

From Chosen. Bulbs collected by R. K. Beattie, Bureau of Plant Industry. Received July 10, 1928.

77400. LILIUM sp.

No. 686. June 1, 1928. Plants growing in the shade of trees by the trail at Makaen, about 6 miles northeast of Chonanji, in the Inner Kongosan or Diamond Mountains.

77401. LILIUM sp.

No. 700. June 12, 1928. A red-flowered lily, with dark spots inside the flower, growing in dry rocky places on the hills west of Shinchido, which is located on the railroad between Heijo and Chinnampo. The plants were in bud when gathered.

77402. PASSIFLORA LIGULARIS JUSS.
Passifloraceae. Sweet granadilla.

From Peru. Seeds presented by Gale H. Carter, Grace Line, New York City, N. Y. Received September 1, 1928.

These granadilla seeds are especially selected from the common variety which grows in the district of Lima.

For previous introduction see No. 54035.

77403. ANANAS MAGDALENAE (Andre)
Standl. Bromeliaceae.

From Summit, Canal Zone. Seeds presented by J. E. Higgins, Plant Introduction Garden. Received July 7, 1928.

Pita de Colombia. A wild tropical American pineapple with bright-red subglobose fruits 6 inches in diameter on long stalks. The long leaves contain a fiber used for rope and twine, and the acid fruits are eaten either raw or cooked.

77404 to 77411. PRUNUS spp.
Amygdalaceae.

From Jamaica Plain, Mass. Seeds presented by E. H. Wilson, Arnold Arboretum. Received July 11, 1928.

77404. PRUNUS CONCINNA Koehne.

A small upright shrub, native to the mountains of central China. The single light-pink flowers with deeper pink calyxes, about an inch across, are produced in great abundance and form a pleasing combination with the deep-green young foliage and gray bark.

77404 to 77411—Continued.**77405. PRUNUS INCISA** Thunb.
Mame cherry.

For previous introduction and description see No. 77261.

77406. PRUNUS INCISA SERRATA Koidz.

Differs from the typical form chiefly in having leaves with almost simple serrations and long aristate teeth.

77407. PRUNUS NIPPONICA Mats.

A bushy tree, up to 20 feet high, with oval, long-pointed doubly serrate leaves 1 to 3 inches long and single, light-pink flowers an inch across, solitary or in twos or threes. It is a handsome cherry when in full bloom.

77408. PRUNUS SERRULATA SACHALINENSIS (Schmidt) Makino (*P. sargentii* Rehder).
Sargent cherry.

For previous introduction and description see No. 77318.

77409. PRUNUS SERRULATA SPONTANEA (Maxim.) Wilson.

This is the *Yamazakura* [mountain cherry] of southern Japan. It is a rather common wild tree in thickets from the extreme south to about the central portion in the vicinity of Nikko. Under favorable conditions it becomes a spreading tree 60 feet or more in height, and differs from *Prunus serrulata sachalinensis* in having smaller flowers. Its chief value appears to be as an understock for the cultivated varieties of flowering cherries.

For previous introduction see No. 55717.

77410. PRUNUS SUBHIRTELLA Miquel.
Higan cherry.

For previous introduction and description see No. 77266.

77411. PRUNUS SUBHIRTELLA AUTUMNALIS Makino.

Jugatsuzakura [October cherry; literally tenth-month cherry]. Tree spreading, with a rounded crown, about 20 feet high; flowers rosy pink, semidouble, about half an inch in diameter, abundantly produced early in October, with a smaller crop of flowers in the spring; sometimes the heavier crop of flowers is borne in the spring.

For previous introduction see No. 69091.

77412. CITRUS AURANTIFOLIA (Christm.)
Swingle. Rutaceae. Lime.

From Manila, Philippine Islands. Seeds presented by P. J. Wester, Bureau of Agriculture, through W. T. Swingle, Bureau of Plant Industry. Received July 7, 1928.

Mindoro. A Philippine variety with juicy thin-skinned fruits which are the size and shape of a small lemon and very precocious.

77413. MERREMIA PELTATA (L.) Merr.
Convolvulaceae. Morning-glory.

From Los Banos, Laguna Province, Philippine Islands. Seeds collected by O. W. Pflueger, Los Banos School of Forestry, and presented by P. J. Wester, Bureau of Agriculture, Manila. Received July 9, 1928.

77413—Continued.

Tampinita. A Philippine morning-glory with large dark-green leaves and large clusters of very showy yellow flowers.

77414. CYCAS sp. Cycadaceae.

From Kobe, Japan. Plants obtained by Prof. H. H. Bartlett, Director, Botanic Gardens and Arboretum, University of Michigan, Ann Arbor. Received August 25, 1927. Numbered July, 1928.

Dwarf cycads put on the S. S. *President Van Buren* for decorating the ship. They are a specialty of the nurserymen at Kobe and seem to be different from the ones common in greenhouses in the United States. They are ornamental palmlike woody plants, with glossy green pinnate leaves, and are native to tropical Asia.

77415 to 77420. SACCHARUM OFFICINARUM L. Poaceae. Sugarcane.

From Australia. Cuttings obtained through E. W. Brandes, Bureau of Plant Industry. Received July 12, 1928.

These varieties were collected in northern New South Wales.

77415. *H. Q. 5.* 77418. *Bogela.*

77416. *N. G. 14.* 77419. *Mahona.*

77417. *N. G. 16.* 77420. *Q. 813.*

77421. BRASSICA sp. Brassicaceae.

From Peking, China. Seeds presented by J. E. Ferguson, through W. T. Swingle, Bureau of Plant Industry. Received July 12, 1928.

P'iao ts'ai. A bitter Chinese cabbage.

77422. CITRUS SINENSIS (L.) Osbeck. Rutaceae. Orange.

From Rehoboth, Palestine. Bud wood presented by Albert Kaufmann, through A. Friedman, Palestine Jewish Colonization Association, Jaffa. Received July 14, 1928.

The Jaffa or Shamouti orange of Jaffa, Palestine, is a large oval bright-orange fruit of excellent quality, maturing from October to April. The fruit is practically seedless, the skin usually thick, and the flesh of excellent quality. This variety is the basis of the rapidly developing Palestine orange industry. Ninety-five per cent of the fruit is marketed in England.

For previous introduction see No. 75226.

77423 to 77432.

From Chosen. Seeds collected by R. K. Beattie, Bureau of Plant Industry. Received July 3, 1928.

77423. ACER sp. Aceraceae.

No. 696. Trail southwest of Onselri, toward Shinkeiji, Outer Kongosan or Diamond Mountains, June 6, 1928. A small attractive maple with good dark-green leaves.

77424. AQUILEGIA sp. Ranunculaceae. Columbine.

No. 692. A Japanese columbine with red and yellow flowers, growing among rocks and coarse decomposed granite on the banks of a river at Choanji, Inner Kongosan or Diamond Mountains, May 31, 1928.

77423 to 77432—Continued.**77425. BERBERIS AMURENSIS Rupr. Berberidaceae. Amur barberry.**

No. 697. A wild barberry growing near the river at Choanji, Inner Kongosan or Diamond Mountains, June 1, 1928. An eastern Asiatic shrub up to 10 feet high, with yellowish gray branchlets, 3-parted spines an inch long, elliptic leaves 2 to 3 inches long, 10-flowered to 25-flowered pendulous racemes, and bright-red fruits.

For previous introduction see No. 72406.

77426. (Undetermined.)

No. 688. Makaan, near Choanji, Inner Kongosan or Diamond Mountains, June 1, 1928.

77427. RODGERISIA sp. Saxifragaceae.

No. 691. A Japanese herbaceous perennial growing among rocks along the river at Choanji, Inner Kongosan or Diamond Mountains, June 1, 1928.

77428. ROSA sp. Rosaceae. Rose.

No. 699. A wild rose growing by the roadside at Atami, Shizuoka Ken, May 6, 1928.

77429 to 77432. SALIX spp. Salicaceae. Willow.**77429. SALIX sp.**

No. 689. A small silky-leaved willow growing among rocks on the bank of the river at Choanji, Inner Kongosan or Diamond Mountains, June 1, 1928.

77430. SALIX sp.

No. 690. A slender willow, about 25 feet high, growing at Shimpori, Inner Kongosan or Diamond Mountains, June 1, 1928.

77431. SALIX sp.

No. 694. A willow tree, about 30 feet high, growing above Fire Dragon Falls, on the trail to Makaan, near Choanji, Inner Kongosan or Diamond Mountains, June 1, 1928.

77432. SALIX sp.

No. 695. A willow growing near Fire Dragon Falls, on the trail to Makaan, near Choanji, Inner Kongosan or Diamond Mountains, June 1, 1928.

77433. PRUNUS CAPULI Cav. Amygdalaceae. Capulin.

From Orizaba, Mexico. Seeds presented by Dr. C. A. Purpus, Zacuapam, Vera Cruz, Mexico. Received July 19, 1928.

A tropical American tree up to 40 feet high, with lanceolate long-pointed coriaceous leaves 6 to 8 inches long, stout racemes 4 to 6 inches long of small white flowers followed by nearly black globose edible fruits half an inch in diameter.

For previous introduction see No. 62688.

77434. SOLANUM MACROCARPON L. Solanaceae.

From Luchenza, Nyasaland Protectorate, Africa. Seeds presented by L. S. Norman. Received July 13, 1928.

77434—Continued.

A stout undershrub with a much-branched smooth stem and ovate-sinuate margined leaves 8 inches long. The racemose cymes, opposite the leaves, bear blue-purple flowers, 1 to 2 inches broad, which are followed by globose yellow fruits the size of an apple.

For previous introduction see No. 76688.

77435. FRAGARIA sp. Rosaceae.**Strawberry.**

From Juneau, Alaska. Plants presented by the district forester, through G. M. Darrow, Bureau of Plant Industry. Received July 14, 1928.

A strawberry from the coast region of Alaska which differs from the usual form in having thinner leaves and in having the seeds more deeply embedded in the receptacle.

77436. EHRHARTA CALYCINA J. E. Smith. Poaceae.**Perennial veldt grass.**

From Perth, Western Australia. Seeds presented by Elder, Smith & Co. Received July 14, 1928.

A grass 4 feet high which is popular as forage in Western Australia where it was introduced accidentally by the camel owners in fodder imported from South Africa. It is said to be very nutritious.

For previous introduction see No. 75200.

77437. EPHEDRA ALATA Decaisne. Gnetaeae.

From Algiers, Algeria, Africa. Seeds presented by Dr. L. Trabut, Government botanist, through W. T. Swingle, Bureau of Plant Industry. Received July 10, 1928.

A tall freely branching shrub with rough, green equisetumlike branches, small scalelike leaves, and inconspicuous flowers, native to northern Africa and Arabia. Of possible value as a source of ephedrine.

77438. EPHEDRA ALATA Decaisne. Gnetaeae.

From Algiers, Algeria, Africa. Seeds presented by Dr. René Maire, University of Algiers, through W. T. Swingle, Bureau of Plant Industry. Received July 17, 1928.

For previous introduction and description see No. 77437.

77439 and 77440. SOLANUM spp. Solanaceae.

From Bangkok, Siam. Seeds presented by Dr. E. D. Merrill, Dean of the College of Agriculture of the University of California, Berkeley, through W. T. Swingle, Bureau of Plant Industry. Received July 17, 1928.

77439. SOLANUM sp.

Mawangton. A tropical bush.

77440. SOLANUM sp.

A tropical vine.

77441 to 77447.

From Australia. Seeds presented by Mrs. Frieda Cobb Blanchard, University of Michigan, Ann Arbor. Received July 14, 1928.

77441 to 77447—Continued.**77441. INDIGOPERA AUSTRALIS Willd. Fabaceae. Indigo.**

An erect Australian shrub, 2 to 4 feet high, with pinnately compound leaves and 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 No. 61059.

77442. LINOSPADIX MONOSTACHYA (Mart.) Wendl. (*Bacularia monostachya* F. Muell.). Phoenicaceae.**Walkingstick palm.**

From National Park, Macpherson Range, Queensland, at an altitude of 3,500 feet. An Australian shrub 6 to 12 feet high with stems an inch in diameter, pinnate leaves 2 to 4 feet long, flower clusters often longer than the leaves, and ovoid green fruits half an inch in diameter.

77443. MACROZAMIA sp. Cycadaceae.

From Broken Bay, north of Sydney. An Australian cycaslike plant with pinnate leaves, of value as an ornamental.

77444. OLEARIA TERETIFOLIA (Sond.) F. Muell. (*Aster teretifolius* F. Muell.). Asteraceae. Daisytree.

From National Park, Macpherson Range, Queensland, at an altitude of 4,000 feet. A broomlike Australian shrub up to 5 feet high, which stands clipping and might be used as a hedge plant. It is covered with masses of small white flowers which give the bush a snowlike appearance.

For previous introduction see No. 47192.

77445. PITTOSPORUM sp. Pittosporaceae.

From National Park, Macpherson Range, Queensland, at an altitude of 4,000 feet. A very pretty shrub, especially when in fruit.

77446. POTHOS LONGIPES Schott. Araceae.

From National Park, Macpherson Range, Queensland, at an altitude of 3,500 feet. A tall-climbing Australian shrub clinging by aerial roots, leaves with a winged petiole 5 or 6 inches long, and a blade usually not as long as the petiole, decurved and lanceolate. The flowers resemble those of the Indian turnip, and the ripe fruit is a cluster of red berries.

77447. SWAINSONA GALEGIFOLIA (Andrews) R. Br. (*S. coronillaefolia* Salisb.). Fabaceae. Goat's rue senna-pea.

From the Botanic Garden, Melbourne, Victoria. A low shrubby Australian plant with compound vetchlike leaves and scarlet-orange flowers borne on long axillary stems.

For previous introduction see No. 76945.

77448. CHAENOMELES LAGENARIA WILSONII Rehder. Malaceae.

From Elstree, Herts, England. Seeds presented by the Hon. Vicary Gibbs, Aldenham House Gardens. Received July 17, 1928.

A western Chinese shrub up to 20 feet high, with long persisting lustrous dark-green leaves and bright early-appearing salmon-pink flowers 1 to 2 inches across.

For previous introduction see No. 58605.

77449. PRUNUS MAJESTICA Koehne.
Amygdalaceae.

From Benenden, Kent, England. Seeds presented by Capt. Collingwood Ingram. Received July 17, 1928.

A large handsome tree up to 70 feet tall, growing in southwestern China at an altitude of 4,000 feet. It has large broadly lanceolate-serrate leaves, small umbels of rosy to white flowers, and ovoid dark-red fruits.

For previous introduction see No. 58013.

77450. EPHEDRA DISTACHYA L. (E. vulgaris Rich.) Gnetaceae.

Common jointfir.

From Peshawar, Northwest Frontier Province, India. Seeds presented by Nawazieh Ali, Professor of Botany, through John R. Ives, American vice consul, Karachi, India. Received July 23, 1928.

A low procumbent shrub, native to southern Europe and Asia, with erect dark-green branches, scalelike leaves, inconspicuous flowers, and globose red berries. A possible source of ephedrin.

For previous introduction see No. 61418.

77451. CYTISUS PALMENSIS (Christ) Hutchinson. Fabaceae. Tagasaste.

From Rabat, Morocco. Seeds presented by Dr. E. Miede, Station de Sélection et d'Essai de Semences. Received July 23, 1928.

A shrubby Canary Island legume with silvery gray leaves, which is valuable as a forage crop.

For previous introduction see No. 65584.

77452 and 77453. HEDYSARUM spp. Fabaceae.

From Oran, Algeria. Seeds presented by Prof. A. Faure. Received July 20, 1928.

77452. HEDYSARUM CAPITATUM Desf.

An annual Algerian legume with purple flowers, of possible value for forage or green manure.

For previous introduction see No. 66143.

77453. HEDYSARUM PALLIDUM Desf.

A decumbent perennial legume, native to northern Africa, with compound pubescent leaves, clusters of purple-streaked white flowers, and spiny articulated pods. It has been recommended for green manure in olive orchards.

For previous introduction see No. 66146.

77454. INGA SPECTABILIS Willd. Mimosaceae.

From Summit, Canal Zone. Seeds presented by J. E. Higgins, Plant Introduction Gardens. Received May 7, 1928. Numbered July, 1928.

A large handsome tropical American tree with leaves composed of two pairs of wide coriaceous leaflets, spikes of greenish white flowers, and enormous thick pods containing an edible whitish pulp.

77455 and 77456. SOLANUM MELONGENA L. Solanaceae. Eggplant.

From Buitenzorg, Java. Seeds presented by Dr. W. M. Docters van Leeuwen, Director of the Botanic Gardens. Received July 26, 1928.

77455. Variety *brevioliaceum*.

77456. Variety *viride*.

77457. FLACOURTIA INDICA (Burm. f.) Merr. (F. ramontchi L'Herit.). Flacourtiaceae. Ramontchi.

From Manila, Philippine Islands. Seeds presented by P. J. Wester, Bureau of Agriculture. Received July 24, 1928.

A spiny arborescent Philippine shrub 20 feet high, with crenate leaves, small white flowers, and smooth dark-purple fruits containing a sweet juicy pulp.

For previous introduction see No. 61648.

77458. GOSSYPIUM PERUVIANUM Cav. Malvaceae. Peruvian cotton.

From Chira Valley, Peru. Seeds obtained through O. F. Cook, Bureau of Plant Industry. Received July 26, 1928.

A cotton which grows to a height of 12 feet.

For previous introduction see No. 73132.

77459. SACCHARUM OFFICINARUM L. Poaceae. Sugarcane.

From Herradura, Cuba. Cuttings presented by F. S. Earle. Received July 2, 1928.

Creole.

77460. CITRUS AURANTIFOLIA (Christm.) Swingle. Rutaceae. Lime.

From Manila, Philippine Islands. Seeds presented by P. J. Wester, Bureau of Agriculture. Received July 28, 1928.

For previous introduction and description see No. 77412.

77461 to 77465.

From Omsk, Russia. Seeds presented by S. Maskovsky, Director of the West Siberian Agricultural Experiment Station, through H. N. Vinall, Bureau of Plant Industry. Received July 27, 1928.

Siberian varieties.

77461. BROMUS INERMIS Leyss. Poaceae. Bromegrass.

No. 4040.

77462. MEDICAGO FALCATA L. Fabaceae. Yellow-flowered alfalfa.

No. 1694.

77463. MEDICAGO SATIVA L. Fabaceae. Alfalfa.

No. 1450.

77464. MELILOTUS ALBA Desr. Fabaceae. White sweetclover.

No. 8079.

77465. VICIA CRACCA L. Fabaceae. Cow vetch.

No. 8081.

77466 to 77472. PRUNUS ARMENIACA L.
Amygdalaceae. **Apricot.**

From Jerusalem, Palestine. Seeds presented by A. Grasovsky, southern inspectorate of agriculture. Received July 30, 1928.

77466. *Frangi*.

77467. *Klabi*.

77468. *Lozi*. A variety with sweet kernels.

77469. *Mawi*.

77470. *Mustekawi*. A variety with bitter kernels.

77471. *Mustekawi*. A variety with sweet kernels.

77472. *Wardi*.

77473. BRACHIARIA BRIZANTHA
(Hochst.) Stapf. Poaceae. **Grass.**

From Luchenza, Nyasaland Protectorate, Africa. Seeds presented by L. S. Norman. Received July 18, 1927. Numbered August, 1928.

A tall tropical African perennial grass, up to 6 feet high, with a short stout rhizome, erect stems, and very narrow leaves up to 15 inches long. It is one of a series of nine grasses selected by T. D. Maitland, former botanist of Uganda, as being the most promising indigenous grasses for forage there.

For previous introduction see No. 75293.

77474. BRACHIARIA BRIZANTHA
(Hochst.) Stapf. Poaceae. **Grass.**

From east Africa. Seeds collected by L. W. Kephart and R. L. Plemmel, agricultural explorers, Bureau of Plant Industry. Received March 17, 1928. Numbered August, 1928.

No. 386. Government plantation, Kampala, Uganda.

For previous introduction and description see No. 77473.

77475. LYCOPERSICON ESCULENTUM Mill.
Solanaceae. **Tomato.**

From Tucuman, Argentina. Seeds presented by Dr. W. E. Cross, Director, Estación Experimental Agrícola. Received August 1, 1928.

Paraná. A variety from Argentina.

77476 and 77477.

From Jerusalem, Palestine. Bulbs and seeds presented by E. R. Sawyer, Department of Agriculture, Forests, and Fisheries. Received August 2, 1928.

77476. *COLCHICUM DECAISNEI* Boiss. Melanthiaceae.

Seeds and bulbs. This variety, native to Syria, differs very little from *Colchicum laetum*, which in turn is much like *C. autumnale*. The rosy lilac flowers appear without the leaves in late October.

77477. *CROCUS HYEMALIS* Boiss. and Blanche. Iridaceae.

Seeds of a late autumn or winter-flowering crocus common around Jerusalem. The flowers are white, deep orange in the throat, with varying feathers of deep purple on the backs of the outer segments.

77478 to 77480. FICUS CARICA L.
Moraceae. **Fig.**

From Grande Kabylie, Algeria, Africa. Scions presented by E. Rolland, Comice Agricole de Tizi Ouzou. Received February 4, 1926. Numbered August, 1928.

77478. *Carma adjar*.

77479. *Sultane*.

77480. *Sultane du Marabout*.

77481. FICUS CARICA L. Moraceae.
Fig.

From Italy. Bud sticks presented by Dr. Mario Calvino, San Remo. Received August 24, 1926. Numbered August, 1928.

Pissalutto. Bud sticks from the best plant of this variety growing in the Hanbury Botanical Garden of La Mortola, Ventimiglia. It is an old Italian variety cultivated in Ventimiglia and San Remo and is the best variety for fresh and dried fruit.

77482. FICUS CARICA L. Moraceae.
Fig.

From Palestine. Cuttings presented by Amram Khazanoff, the Palestine Jewish Colonization Association, Haifa. Received May 13, 1927. Numbered August, 1928.

Kharrobbi. From the Ram Allah Mountains of Judea.

77483. PHALARIS TRUNCATA Guss.
Poaceae. **Grass.**

From Algiers, Algeria, Africa. Seeds presented by Dr. L. Trabut, Government botanist. Received August 6, 1928.

A perennial grass, about 2 feet high, native to the Mediterranean region. The flowers are borne in a dense spike like timothy.

For previous introduction see No. 46952.

77484. EXACUM ZEYLANICUM Roxb.
Gentianaceae.

From Peradeniya, Ceylon. Seeds presented by F. A. Stockdale, Director, Department of Agriculture. Received August 7, 1928.

An erect East Indian annual a foot high, with leaves at the base and a terminal cluster of large deep-purple flowers having bright-orange stamens.

For previous introduction see No. 66835.

77485 and 77486. SOLANUM MELONGENA L.
Solanaceae. **Eggplant.**

From Zanzibar, Africa. Seeds presented by V. H. Kirkham, Director, Agricultural Department. Received August 7, 1928.

77485. A wild variety.

77486. A cultivated variety.

77487. SOLANUM MELONGENA L.
Solanaceae. **Eggplant.**

From Eala, Belgian Congo, Africa. Seeds presented by E. Wirion, Director, Botanic Garden. Received August 6, 1928.

A violet-fruited Congo variety.

77488. MACARANGA GRANDIFOLIA
(Blanco) Merr. Euphorbiaceae.

77488—Continued.

From Manila, Philippine Islands. Seeds presented by P. J. Wester, Bureau of Agriculture, through Peter Bisset, Bureau of Plant Industry. Received July 12, 1928.

A Philippine ornamental, with large leaves like an Anthurium which may become a very showy conservatory plant.

77489. POLYTRIAS AMAURA (Buehse) Kuntze (*P. praemorsa* Hack.). Poaceae. Java grass.

From Port of Spain, Trinidad, British West Indies. Plants presented by W. G. Freeman, Director of the Trinidad Department of Agriculture. Received June 6, 1928. Numbered September, 1928.

A common lawn and pasture grass native to low altitudes in Java.

For previous introduction see No. 32111.

77490 and 77491. CAJANUS INDICUS Spreng. Fabaceae. Pigeon pea.

From Honolulu, Hawaii. Seeds presented by Prof. F. G. Krauss, University of Hawaii. Received September 19, 1928.

77490. Variety New Era strain D.

77491. Variety New Era strain X.

77492. SOLANUM sp. Solanaceae.

From Java. Seeds presented by P. J. Wester, Bureau of Agriculture, Manila, Philippine Islands. Received September 24, 1928.

Kubiu. A Brazilian plant said to be used as a vegetable in Java. It is probably very tender and does not endure frost.

77493 to 77495. CUCURBITA MAXIMA Duchesne. Cucurbitaceae. Squash.

From Sydney, New South Wales, Australia. Seeds presented by G. D. Ross, Undersecretary, Department of Agriculture. Received September 21, 1928.

77493. Cowra crown.

77494. Hawkesbury.

77495. Triangle.

77496 to 77539. SACCHARUM OFFICINARUM L. Poaceae. **Sugarcane.**

From Sydney, New South Wales, Australia. Cuttings presented by P. H. Goldfinch, acting general manager of the Colonial Sugar Refining Co., at the request of E. W. Brandes, Bureau of Plant Industry. Received September 21, 1928.

Mr. Goldfinch says that these cuttings belong to the 21 N. G. series, a designation which indicates that they were collected in New Guinea in 1921.

77496. No. 1.

77497. No. 2.

77498. No. 3.

77499. No. 4.

77500. No. 5.

77501. No. 6.

77502. No. 7.

77503. No. 9.

77504. No. 10.

77496 to 77539—Continued

77505. No. 11.

77506. No. 12.

77507. No. 13.

77508. No. 14.

77509. No. 15.

77510. No. 16.

77511. No. 17.

77512. No. 18.

77513. No. 19.

77514. No. 20.

77515. No. 21.

77516. No. 22.

77517. No. 23.

77518. No. 24.

77519. No. 25.

77520. No. 29.

77521. No. 30.

77522. No. 31.

77523. No. 32.

77524. No. 33.

77525. No. 34.

77526. No. 35.

77527. No. 36.

77528. No. 37.

77529. No. 44.

77530. No. 49.

77531. No. 50.

77532. No. 51.

77533. No. 52.

77534. No. 53.

77535. No. 54.

77536. No. 55.

77537. No. 56.

77538. No. 57.

77539. No. 58.

77540 to 77582.

From Nelson, New Zealand. Seeds presented by A. Wilkinson, Hon. Secretary and Treasurer of the New Zealand (Nelson) Alpine and Rock Garden Society. Received September 13, 1928.

77540. ACAENA sp. Rosaceae.

A herbaceous perennial, native to New Zealand, with alternate, pinnate leaves having incised leaflets and small flowers in terminal or interrupted spikes.

77541. ALBECTRYON EXCELSUM Gaertn. Sapindaceae. Titoki.

A handsome New Zealand tree up to 60 feet high and 2 feet in diameter, with pinnately compound leaves having four to six pairs of obliquely lanceolate leaflets 4 inches long, brownish silky beneath, and panicles a foot long of small flowers without petals but having large dark-red anthers. The tough elastic wood is used for ax handles, etc.

For previous introduction see No. 73992.

77540 to 77582—Continued.

77542. ABISTOTELIA FRUTICOSA Hook. f.
Elaeocarpaceae.

An erect or decumbent much-branched shrub, 3 to 8 feet high, native to New Zealand. The coriaceous leaves vary from linear to obovate and are entire, crenate, serrate, or lobed. The small flowers are solitary or in small racemes and are followed by small yellowish berries.

77543. ARTHROPODIUM CIRRHATUM (Forst. f.) R. Br. Liliaceae.

A herbaceous perennial up to 3 feet high, with shining grasslike leaves and showy panicles of white flowers an inch across, having the stamens covered with pink bristles.

For previous introduction see No. 77173.

77544 to 77546. ASTELIA spp. Liliaceae.

77544. ASTELIA CUNNINGHAMII Hook. f.

A densely tufted epiphytic or terrestrial herb, native to New Zealand. The linear leaves are about 5 feet long, and the small reddish yellow to maroon flowers are borne in large panicles on scapes 1 to 3 feet high and covered with white silky hairs. The fruits are small red globose berries.

77545. ASTELIA NERVOSA Banks and Soland.

A stout densely tufted New Zealand perennial often forming extensive masses in moist forests on swampy ground. The spreading lanceolate leaves are 3 to 8 feet long with the midrib and several other nerves colored red. The fragrant greenish black flowers are borne in large panicles on scapes 1 to 2 feet high and are followed by bright orange-yellow berries.

77546. ASTELIA PETRIEII Cockayne.

An attractive densely tufted perennial native to New Zealand, where it forms large patches in alpine meadows. The long-pointed sword-shaped leaves are 1 to 3 feet long, smooth and shining above and silvery white beneath. The inconspicuous flowers are in short panicles hidden among the leaves.

77547. BULBINELLA HOOKERI (Colenso) Cheeseman. Liliaceae.

A New Zealand herbaceous perennial varying in size from 3 to 4 inches up to 3 feet. The numerous glaucous green leaves are linear, and the loose racemes of bright-yellow flowers are on slender scapes up to 10 inches high.

77548. CASSINIA YAUILLIERSII (Homb. and Jacq.) Hook. f. Asteraceae.

An erect closely branched New Zealand shrub up to 8 feet high, with narrowly oblong leathery leaves half an inch long, densely white tomentose beneath, and dense terminal corymbs of white flowers.

For previous introduction see No. 76564.

77549 to 77551. CELMISIA spp. Astera-
ceae.

77540 to 77582—Continued.

77549. CELMISIA ARMSTRONGII Petrie.

A herbaceous perennial, native to New Zealand, with short stout stems crowned by radiating sword-shaped leaves, 18 inches long, having an orange midrib and covered with satiny tomentum. The heads of white flowers, 1 to 2 inches broad, are borne on white cottony scapes about the length of the leaves.

77550. CELMISIA CORIACEA (Forst. f.) Hook. f.

A herbaceous perennial, native to New Zealand, with a short stout stem crowned with lanceolate leaves 1 to 2 feet long from which arise several stout woolly scapes 3 feet high bearing heads of white flowers more than 3 inches broad.

77551. CELMISIA SPECTABILIS Hook. f.

A New Zealand herbaceous perennial, often forming large patches, with short stout stems and numerous linear-oblong thick leaves, 6 inches long, covered with silvery hairs above and densely matted pale buff wool beneath. The several stout cottony scapes are longer than the leaves and bear white flower heads 1 to 2 inches broad.

77552. CHORDOSPARTIUM STEVENSONI Cheeseman. Fabaceae.

A leafless shrub or small tree up to 20 feet high, native to New Zealand, with long slender pendulous branches and racemes, 1 to 2 inches long, of small purple flowers.

77553. COPROSMA RUGOSA Cheeseman.
Rubiaceae.

A densely branched New Zealand shrub, 4 to 10 feet high, with yellowish brown branchlets, opposite or fascicled linear leaves less than half an inch long, small axillary flowers, and broadly oblong translucent pale-blue berries half an inch long.

77554 to 77556. DIANELLA INTERMEDIA Endl. Liliaceae.

A herbaceous perennial, native to New Zealand, with numerous sword-shaped leaves, 3 feet long, crowded at the base of a scape 2 feet high, which bears a spreading panicle of small purplish flowers having bright-orange anthers, and followed by broadly oblong blue berries.

77554. [No data.]

77555. A pale blue-berried variety.

77556. A dark blue-berried variety.

77557. DRACOPHYLLUM TRAVERSII Hook. f. Epacridaceae.

A New Zealand tree up to 30 feet high and 2 feet in diameter, with leathery lanceolate leaves 2 feet long and terminal spikelike panicles, 1 to 2 feet long, of reddish flowers.

77558. DRACOPHYLLUM URVILLEANUM A. Rich. Epacridaceae.

A shrub 4 to 8 feet high, native to New Zealand, with slender erect branches, very narrowly linear leathery leaves 5 inches long, and small white or red flowers in racemes on short lateral branchlets.

77559. GAULTHERIA OPPOSITIFOLIA Hook. f. Ericaceae.

77540 to 77582—Continued.

A New Zealand shrub, 2 to 8 feet high, with leathery cordate leaves 1 to 3 inches long and compound axillary and terminal racemes of small white flowers.

For previous introduction see No. 48166.

77560. *GAYA LYALLII* (Hook. f.) Baker f. Malvaceae.

One of the most beautiful of the New Zealand trees, up to 30 feet high, graceful and spreading, with the growing parts covered with stellate hairs. The cordate-crenate leaves are 2 to 4 inches long on slender petioles, and the large white flowers, an inch across, are borne in axillary clusters.

For previous introduction see No. 48167.

77561. *HYMENANTHERA CRASSIFOLIA* Hook. f. Violaceae.

A low rigid prostrate or erect densely branched shrub, native to New Zealand, with grayish white shiny branches, thick leathery spatulate leaves with entire, sinuate, or lobed margins, small flowers, and broadly oblong purplish berries.

77562. *HYMENANTHERA DENTATA ALPINA* Kirk. Violaceae.

A New Zealand shrub 1 to 2 feet high forming a densely compact mass of spiny branches, with very small thick leathery leaves, minute flowers, and globose berries.

77563. *LIBERTIA GRANDIFLORA* (R. Br.) Sweet. Iridaceae.

A densely tufted herbaceous perennial, native to New Zealand, with stiff leathery linear leaves up to 3 feet long, and a flowering stem as tall as the leaves bearing a branching panicle of white flowers each an inch broad.

For previous introduction see No. 77190.

77564. *LIBERTIA IXIODES* (Forst. f.) Spreng. Iridaceae.

A New Zealand herbaceous perennial very similar to *Libertia grandiflora*, but with the leaves 1 to 2 feet long and the flowers one-half to 1 inch broad.

77565. *LINUM MONOGNUM* Forst. f. Linaceae. **Flax.**

A smooth perennial herb 1 to 2 feet high, native to New Zealand, with scattered linear-lanceolate leaves an inch long and large white flowers an inch across in terminal corymbs.

For previous introduction see No. 52371.

77566. *METROSIDEROS PERFORATA* (Forst.) A. Rich. Myrtaceae.

A tall woody climber, native to New Zealand, with sessile leathery ovate to orbicular leaves half an inch long and leafy terminal panicles of small white flowers.

77567. *MYRTUS OBCORDATA* (Raoul) Hook. f. Myrtaceae.

A New Zealand shrub up to 15 feet high, with slender spreading branches, opposite leathery obcordate leaves half an inch long, solitary axillary white flowers, and broadly ovoid dark-red or violet berries a quarter of an inch long.

77568. *NOTHOPANAX ARBOREUM* (Forst.) Seem. Araliaceae.

77540 to 77582—Continued.

A round-headed New Zealand tree up to 25 feet high, with stout brittle branches. The five to seven palmately folioate leathery leaves are made up of serrate-oblong leaflets 4 to 7 inches long. The flowers are in broad terminal compound umbels and are followed by purplish black fruits broader than long and more than a quarter of an inch in diameter.

For previous introduction see No. 43599.

77569 to 77571. *OLEARIA* spp. Asteraceae. **Daisytree.**

77569. *OLEARIA AVICENNIAEFOLIA* (Raoul) Hook. f.

A small branching New Zealand tree up to 20 feet high, with white tomentose branchlets, alternate entire lanceolate leaves 2 to 4 inches long, and large much-branched corymbs of small cylindrical flower heads.

77570. *OLEARIA ILICIFOLIA* Hook. f.

A shrub or small tree, 5 to 20 feet high, with a strong musky odor, native to New Zealand. The alternate rigid leathery linear-lanceolate leaves are 2 to 4 inches long and clothed beneath with thin yellowish white tomentum. The numerous campanulate flower heads are in large rounded much-branched corymbs.

77571. *OLEARIA NUMMULARIFOLIA* Hook. f.

A closely branched New Zealand shrub with stout viscid branchlets, alternate coriaceous orbicular leaves half an inch long, and small solitary flower heads.

77572. *OURISIA CROSBYI* Cockayne. Scrophulariaceae.

A slender herbaceous perennial a foot high, native to New Zealand, with radical leaves having petioles 2 inches long and thin oblong blades 1 to 2 inches long. The clusters of three to five small white flowers with yellow throats are borne on slender stems.

77573. *PACHYSTEGIA INSIGNIS* (Hook. f.) Cheeseman (*Olearia insignis* Hook. f.). Asteraceae.

A robust spreading New Zealand shrub, 6 to 9 feet high, with stout densely tomentose branches, thick leathery oblong entire leaves, 3 to 7 inches long, white tomentose beneath, and large hemispherical heads, 3 inches in diameter, of white flowers on penduncles a foot long.

77574. *PARSONSIA HETEROPHYLLA* A. Cunn. Apocynaceae.

A tall slender branching New Zealand vine, woody at the base, with coriaceous leaves varying from linear to obovate 2 to 4 inches long, and terminal and axillary many-flowered cymes of small fragrant white flowers, followed by cylindrical pods 6 inches long.

77575. *PITTIOSPORUM CORNIFOLIUM* A. Cunn. Pittosporaceae.

A slender sparingly branched epiphytic New Zealand shrub 2 to 5 feet high, with entire coriaceous lanceolate to obovate leaves 2 to 3 inches long and 1-flowered to 3-flowered umbels of small flowers followed by ovoid capsules which in ripening open and display the orange-colored interior and the black seeds.

77540 to 77582—Continued.

77576. PITTOSPORUM DALLII Cheeseman.
Pittosporaceae.

A round-topped tree up to 18 feet high, native to New Zealand, with sharply toothed oblong leathery leaves 2 to 4 inches long and dense terminal compound clusters of fragrant white flowers half an inch broad.

77577. POMADERIS APETALA Labill.
Rhamnaceae.

A shrub or small tree up to 15 feet high, native to New Zealand and Australia, with oblong-ovate crenulate leaves 4 inches long, having gray or whitish stellate pubescence beneath and axillary and terminal panicles 3 to 7 inches long of small flowers without petals. The foliage is said to be eaten readily by stock.

For previous introduction see No. 57935.

77578. RHIPOGONUM SCANDENS Forst.
Smilacaceae.

A tall climbing New Zealand shrub with oblong coriaceous leaves 3 to 5 inches long, small greenish flowers in axillary and terminal clusters, followed by bright-red globose berries. The long tough elastic stems have been used to make baskets.

77579. SENECEO ELABAGNIFOLIUS Hook. f.
Asteraceae.

A spreading shrub 4 to 10 feet high, native to New Zealand, with ovate leathery leaves, 2 to 5 inches long, pale buff tomentose beneath, and stout branched terminal panicles of small flower heads.

77580. SENECEO PERDICIODES Hook. f.
Asteraceae.

A round-topped New Zealand shrub 2 to 6 feet high, with toothed oblong leaves 2 inches long and leafy corymbs of top-shaped yellow flower heads.

77581. VERONICA TRAVERSII Hook. f.
Scrophulariaceae.

A small compact New Zealand shrub 2 to 5 feet in diameter, with spreading leathery oblong leaves an inch long and racemes of small white flowers at the tips of the branches.

77582. VERONICA sp. Scrophulariaceae.

A subalpine veronica of which there are more than 100 species native to New Zealand, varying from creeping vines to small trees, with flowers in axillary or terminal racemes, spikes, or panicles.

77583. ILEX CORNUTA Lindl. and Paxt.
Aquifoliaceae. Chinese holly.

From Washington, D. C. Plants grown from cuttings collected by Paul Russell, Bureau of Plant Industry. Received September 5, 1928.

A form of the Chinese holly with nearly spineless leaves. These cuttings were taken from a pistillate shrub about 9 feet high, growing in the National Botanic Garden.

77584 to 77594.

From Rhenock, Sikkim State, India. Seeds and bulbs presented by R. B. and D. S. Pradhans, the Chandra nursery. Received September, 1928.

77584 to 77594—Continued.

77584. CINCHONA SUCCIRUBRA Pavón. Rubiaceae.

Seeds of a Peruvian tree up to 40 feet high, with broad leaves. It is suitable for cultivation on hillsides in frost-free regions. The bark is used in the manufacture of quinine.

For previous introduction see No. 60293.

77585. LILIUM GIGANTEUM Wall. Liliaceae. Giant lily.

Seeds of a Himalayan lily which grows at altitudes between 7,500 and 9,000 feet, close to the surface in rich black mold, where it is covered with snow from November to April. The smooth hollow stems, 6 to 9 feet high, are sometimes used for musical pipes. The handsome cordate leaves, shining dark green above and paler beneath, are 10 to 12 inches long on petioles of equal length; both become smaller near the apex. In the large white fragrant flowers, often 12 to a raceme, the perianth tube is slightly greenish and the inner surfaces of the segments are tinged with deep purple.

For previous introduction see No. 76902.

77586 to 77588. LYCORIS spp. Amaryllidaceae. Cluster-amaryllis.

77586. LYCORIS AUREA (L'Her.) Herbert.

A Chinese bulbous perennial with sword-shaped leaves which die down before the appearance of the golden-yellow flowers, 3 to 4 inches across, borne in an umbel on a scape 1 to 3 feet tall.

77587. LYCORIS SANGUINEA Maxim.

A Japanese bulbous perennial with linear leaves dying down before the red flowers appear in an umbel on a scape 12 to 18 inches high.

77588. LYCORIS SQUAMIGERA Maxim.
Hardy cluster-amaryllis.

A Japanese bulbous perennial with linear leaves which die down before the appearance of the rosy lilac fragrant flowers.

77589. MERENDERA SOBOLIFERA Fisch. and Mey. Melanthiaceae.

Bulbs of a small fragile perennial, native to Asia Minor and Persia, with three linear leaves and one to three lilac flowers 1 to 2 inches across.

77590 to 77592. NERINE spp. Amaryllidaceae.

77590. NERINE FLEXUOSA (Jacq.) Herbert.

Variety *alba*. A white form of this South African bulbous perennial with four to six bright-green linear leaves a foot long and a scape 2 to 3 feet high, bearing an umbel of 10 to 20 pale-pink flowers an inch long.

77591. NERINE PUDICA Hook. f.

A South African bulbous perennial with four to six glaucous-linear leaves 8 inches long and a scape 12 to 18 inches high, bearing an umbel of four to six white flowers.

77584 to 77594—Continued.

77592. *NERINE SARNIENSIS* (L.) Herbert.
Guernsey-lily.

A bulbous perennial, native to South Africa, with bright-green linear leaves a foot long, appearing after the bright-crimson flowers which are borne in an umbel of 10 to 12 on a scape 12 to 18 inches high.

For previous introduction see No. 67972.

77593. *PHALOCALLIS HERBERTII* (Herbert) Kuntze (*Cypella herbertii* Herbert).
Iridaceae.

Bulbs of a perennial, native to Argentina, with linear plaited leaves a foot long and a branching scape 2 to 3 feet high, with yellow flowers 3 inches across.

For previous introduction see No. 33997.

77594. *PRUNUS CERASOIDES* D. Don (*P. piddum* Roxb.).
Amygdalaceae.

77584 to 77594—Continued.

Sikkim cherry. Seeds of an Indian cherry, native to the temperate slopes of the Himalayas, with sharply serrate lanceolate leaves 3 to 5 inches long, umbels of pendulous campanulate rosy red to white flowers, and red fruits, half an inch long, having a scanty red or yellowish acid flesh.

For previous introduction see No. 76908.

77595. *DILLENIA MINDANAENSIS* Elmer.
Dilleniaceae.

From Manila, Philippine Islands. Seeds presented by P. J. Wester, Bureau of Agriculture. Received September 14, 1928.

An ornamental Philippine tree with large dark-green coarsely serrated leaves, handsome yellow flowers, and smooth green acid fruits the size of an apple. The thick fleshy sepals and the interior of the fruits are edible and are used for making preserves.

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