# UNITED STATES DEPARTMENT OF AGRICULTURE



# **INVENTORY No. 123**



Washington, D. C.

▼

**Issued January**, 1940

# PLANT MATERIAL INTRODUCED BY THE DIVISION OF PLANT EX-PLORATION AND INTRODUCTION, BUREAU OF PLANT INDUSTRY, APRIL 1 TO JUNE 30, 1935 (Nos. 110198-111857)

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# INTRODUCTORY STATEMENT

This inventory, No. 123, records the plant material (Nos. 110198 to 111857) received by the Division of Plant Exploration and Intro-

duction during the period from April 1 to June 30, 1935.

As a direct result of the agricultural explorations carried on in central Asia by H. L. Westover and C. R. Enlow, of the Bureau of Plant Industry, the Department received nearly 500 lots of seeds from the Institute of Plant Industry, Leningrad, Union of Soviet Socialist Republics. One particular shipment (Nos. 111477–111585) consisted almost wholly of distinct local strains of forage grasses; another shipment (Nos. 111605–111685) was made up entirely of local strains of alfalfa and other species of *Medicago*. This material is intended primarily for the use of the specialists of the Soil Conservation Service of this Department, and will be tested in the colder and drier sections of the West.

During the summer of 1935, W. A. Archer was still collecting in northern South America and, during the period covered by this inventory, nearly 200 lots of seeds were sent in by him, mostly from Colombia. As before, leguminous plants occupied a conspicuous place in these collections, while the markets of small villages and towns yielded seeds of numerous local strains of vegetables and fruits that will be tested in the vegetable-breeding program for our South-

ern States.

Eighty-three lots of grasses (Nos. 111249-111331), including several not before introduced into the United States, were presented by the Jardin Botanique de l'Université de Cluj, Rumania. Grasses also constituted the greater part of 37 lots of seeds from Australia (Nos. 110518-110555), presented by the Division of Plant Industry, Canberra.

The introduction of nearly 50 species and varieties of Allium from widely scattered sources throughout the globe is a result of an attempt to assemble and grow all available members of this hitherto much-neglected genus. These will, of course, be of value to vegetable breeders interested in the close relatives of those species commonly grown for food, but their introduction will also bring about a more definite knowledge concerning the ornamental value of many little-

known species.

Several apparently new species of *Prunus* and *Solanum* are recorded in a shipment of 58 lots of seeds presented by A. H. Lee, Kulu, Punjab, India (Nos. 111764–111821), along with a considerable number of new perennial and woody plants of ornamental value, mostly from the temperate highlands of northern India. Two other shipments of new or rare, mostly woody, plants from western China also should be noted: One of 12 lots (Nos. 111737–111748), presented by Lord Aberconway, Tal-y-Cafn, North Wales; the other of 53 lots of seeds (Nos. 111349 to 111401) from H. H. Chung, National Wu-Han University, Hupeh, China.

The botanical determinations of seeds introduced have been made and the nomenclature determined by Paul Russell, who has had gen-

eral supervision of this inventory.

B. Y. Morrison,
Principal Horticulturist, in Charge.

Division of Plant Exploration and Introduction, Washington, D. C., January 18, 1939.

# INVENTORY

110217

Poaceae.

From England.

# 110198 to 110212.

rom Italy. Plants purchased from Fra-telli Sgaravatti, Saonara (Padova). Re-celved April 2, 1935. From Italy.

Introduced for Department specialists.

170198 to 110292. Amygdalus Persica Amygdalaocae. Pes Peach.

110198. Agostinella.

110199. Clara Mayer.

110200. Lugliatica.

110201. Paviagialla. 110202. Perla di Zolia.

110203. MALUS SYLVESTRIS Mill. Malaceae. Apple.

Renetta di Berk.

110204 and 110205. PRUNUS ARMENIACA L. Apricot. Amygdalaceae.

110204. Bianco de Carpentras.

110205. Della val Venosta.

110206 to 110212. PYRUS COMMUNIS L. Common pear. Malacese

110206. Bergamotta d'estate.

110207. Butirra a sapore di mandorla, 110208. Butirra Liegel.

110209. Conte di Parigi.

110210. Direttoro Alphand.

110211. Moscatello S. Pietro.

110212. Soldato Agricoltere.

110213 to 110216. ERIOBOTRYA JAPONICA (Thunb.) Lindl. Malaceae. Loquat.

From Syria. Scions presented by Mahmud Shurwaf, Beirut. Received April 2, 1935. Introduced for Department specialists.

For previous introduction see 104381.

110218. Ahmar.

110215. Khoudrie. 110216. Mawie.

110214. Baidee.

A perennial grass with loosely tufted culms, originally from New Zealand.

For previous introduction see 73392.

110220. FESTUCA RUBRA GENUINA Gren. and Godr. Creeping red fescue.

110221. FESTUOA

rom England. Seeds presented by Sutton-& Song Ltd., Reading. Received March 26, 1935.

110217. FESTUCA OVINA DURIUSCULA (L.) Koch Hard fescue.

A grass which does well on sterile or stony soil.

For previous introduction see 55834.

For previous introduction see 109897.

110219. FESTUCA RUBRA COMMUTATA Gaud. Chewings fescue.

110218. FESTUCA CAPILLATA Lam.

Introduced for Department specialists.

spp. Feacue.

Hair fescue.

A loosely tufted, perennial grass over a foot high, native to central Europe.

110221. FESTUCA RUBRA L.

A glaucescent form of red fescue.

For previous introduction see 109899.

110222. ABRUS PRECATORIUS L. Fabaceae. Rosary-pea.

rom Cuba. Seeds presented by Robert M. Grey, Superintendent, Atkins Institution of the Arnold Arboretum, Soledad, Clentuegos, through F. G. Walsingham. Received March 27, 1935. Numbered in From Cuba. April 1935.

Var. Alba. A white well-known rosary-pea. A white-flowered form of the

¹ It should be understood that the names of varieties of fruits, vegetables, cereals, and ether plants used in this inventory are those under which the material was received when introduced by the Division of Plant Exploration and 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 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, berbarium specimens of leaves and flowers should be sent in so that definite identification can be made. can be made.

110223. ZEPHYRANTHES SD. daceae.

From Trinidad, British West Indies. Bulbs presented by Dr. S. C. Harland, Cotton Research Station. Received April 5, 1935.

pink-flowered species, collected in Co-

# 110224 and 110225.

rom Scotland. Seeds presented by the Royal Botanic Garden, Edinburgh. Re-ceived February 25, 1930. Numbered in From Scotland. April 1935.

110225. ALLIUM NUTANSL. Liliaceae.

For previous introduction see 104629.

110225. ALLIUM NUTANS L. Li liaceae

110226. ALLIUM TANGUTICUM Regel. Onion. Lillaceae.

From England. Seeds presented by the Royal Botanic Garden, Kew. Received Murch 1, 1935. Numbered in April 1935. For previous introduction see 78997.

110227. ALLIUM CAERULEUM Pall. Lilia-

om the Netherlands. Bulbs purchased from C. G. Van Tubergen, Ltd., Zwanen-burg Nurseries, Haarlem. Received No-vember 1, 1930. Numbered in April 1935. From

A blue-flowered onion with slender grassy leaves and 14-inch stalks bearing close heads of small deep-blue flowers.

For previous introduction see 106747.

# 110228 to 110245.

om Africa. Seeds presented by J. B. H. Lejeune, Director, Experiment Station of Kisozi, Kisozi, Ruanda-Urundi. Received March 21, 1935. Numbered in April 1935. From Africa.

110228 to 110233. Phaseelus vulgaris L. Fabaccae. Common bean.

A collection of beans from the territory of Urundi,

110228. A white bean.

110229. A white bean veined with violet.

110230. A white bean veined with black.

110231. A brown bean.

110232. A black bean.

110233. A pink bean veined with brown.

110234 and 110235. RICINUS COMMUNIS L. Euphorbiaceae. Cantor-bean.

Collected in the territory of Urundi.

110234. The common type.

110235. A form with larger seeds.

-110236 to 110245. SORGHUM VULGARE Pers. Poaceae. Sorghum.

Sorghums from the territory of Ruanda.

110236. Igihori.

110237. Nyagachara.

110238. Mugabo.

110239. Amauenzi.

110240. Urukina.

110241. Nyirogikori.

110242. Amagunu.

Amarylli- 110228 to 110245—Continued.

110243. Amagunu B.

110244. Ruyonge.

110245. Rugori.

110246 to 110253. Sorghum vulgare Pers. Poaceae. Sorghum.

om India. Seeds presented by the Agri-cultural Research Institute, Coimbatore, South India. Received March 25, 1935. From India. Numbered in April 1935.

110246. Pearly white seed.

110247. Chalky or milky-white seed.

110248. Brown seed.

110249. Red se∈d.

110250. Yellow seed without brown tint.

110251. White seed with yellow base.

110252. Yellow seed with brown tint.

110253. White seed with red base.

L. 110254 to 110260. AVENA SATIVA Poaceae. Oats.

om Italy. Seeds presented by Professor Todoro, Instituto Sperimentale di Cereali-cultura, Bologna. Received March 25, 1935. Numbered in April 1935. From Italy.

110254. Bruna delle Alpi. No. 227.

110255. Crema. No. 226.

110256. Di Laconia. No. 224.

110257. Nera di Tunisia. No. 221. A very early-maturing black oat.

110258. Romana primaverile. No. 9.

110259. Rousse. No. 220.

110260. Soldanelle primaverile. No. 232.

#### 110261 and 110262.

From British Guiana. Seeds presented by the Director of Agriculture, Georgetown, at the request of W. A. Archer, Bureau of Plant Industry. Received March 26, 1935. Numbered in April 1935.

Introduced for Department specialists.

110261. ALEXA Sp. Fabaceae.

Hairaballi.

110262. STRYCHNOS NUX-VOMICA L. Inganaceae.

For previous introduction see 7210.

# 110263 and 110264.

com England. Plants presented by G. T. Spinks, University of Bristol Research Station, Long Ashton, Bristol. Received April 4, 1935. From England.

Introduced for Department specialists.

110263. FRAGARIA Sp. Rosaceae

Strawberry.

Royal Sovereign.

110264. Rubus fruticosus L. Rosaceae.

Blackberry.

Ashton Cross.

# 110265 and 110266.

From the Union of South Africa. Spresented by E. G. Bryant, Prieska. ceived March 26, 1935. Seeds

Introduced for Department specialists.

# 110265 and 110266 Continued.

110265. ENNEAPOGON BRACHYSTACHYUS (Jaub. and Spach) Stapf. Poaceae.

A perennial grass, often cespitose, native to Arabia and northern Africa, with geniculately ascending, slender stems 2 to 6 inches long.

110266. PENNISETUM CILIARE (L.) Link. Poaceae. Grass.

A perennial grass with ascending stems up to 2 feet long. Native to southern Africa.

For previous introduction see 75345.

110267 to 110269. AMYGDALUS PERSICA L. Amygdalaceae. Peach.

From Brazil. Seeds presented by C. A. Kurg, Chefe, Departamento Genetica, Instituto Argonomico de São Paulo. Received March 29, 1935. Numbered in April 1935.

Local varieties from Campinus, Minas Geraes, originally selected and propagated from trees naturalized in Brazil. Introduced for Department specialists.

116267. Abobora.

110269. Branca.

110268. Amarella.

110270. LAWSONIA INERMIS L. Lythraceae. Henna.

From Florida. Seeds presented by Hamilton P. Traub, Horticultural Field Laboratory, Bureau of Plant Industry, Orlando. Received March 23, 1935. Numbered in April, 1935.

The henna bush of the Orient; the foliage contains an orange dye. It is a good hedge plant, comparable to Dodonaea viscosa.

For previous introduction see 97722.

# 110271 to 110273.

From Ecuador. Seeds collected by Mrs. Ynes Mexia, Bureau of Plant Industry. Received March 15, 1935. Numbered in April 1935.

110271. BOMAREA Sp. Amaryllidaceae.

Collected on the lower slopes of the volcano of Pichincho, Province of Pichincho, December 29, 1934, between 9 000 and 12,000 feet altitude. A climbing shrub about 6 feet high; the flowers are crimson without and orange, flecked with black, on the inside. The shrub is quite common in this region and is seen also in the valleys of Quito south of Chillo.

For previous introduction see 108820.

110272. CEDRELA ODORATA L. Meliaceae.
Cigarbox-cedar.

From Quito, January 1934. West Indian or Spanish cedar. The soft fragrant wood is easily worked and is in great demand for cigar boxes. The tree is also used for shade on coffee plantations.

For previous introduction see 104253.

110273, Passiflora Ligularis Juss. Passifloraceae. Sweet granadilla.

From the market in the Valle de Chillo, January 1935.

For previous introduction see 109983.

# 110274. (Undetermined.)

From Cochin-China. Seeds presented by M. Poilane, Arboretum de Erang Bom, Erang Bom, Received August 21, 1934. Numbered in April 1935.

110275 to 110278. Solanum Tuberosum L. Solanaceae. Potato.

From Germany. Tubers presented by Dr. A. Schlumberger, Horticultural Institute, Received April 8, 1935.

A collection of scab-resistant potatoes introduced for Department specialists.

110275. Aal.

110277. Rheingold.

110276. Ostragis.

110278. Treff As.

110279 to 110282. FESTUCA RUBRA COM-MUTATA Gaud. Poaceae.

Chewings fescue.

From New Zealand. Seeds presented by A. S. Paterson & Co., Ltd., Dunedin. Received April 2, 1935.

Introduced for Department specialists.

110279. Leg.

110281. Pol.

110280. Cun.

110282. M.J.

110283 and 110284. PRUNUS ARMENIACA L. Amygdalaceae. Apricot.

From Michigan. Plants presented by Stanley Johnson, Superintendent, Horticultural Experiment Station, South Haven. Received April 8, 1935.

Introduced for Department specialists.

110283. Isabella.

110284. Phillips.

# 110285 to 110301.

From China. Seeds collected by Prof. Ira J. Condit, University of California, College of Agriculture, Los Angeles. Received March 28, 1935. Numbered in April 1935.

110285. ACANTHOPANAX TRIFOLIATUM (L.) C. Schneid. Araliaceae.

From Swatow, Kwangtung. A hardy spiny climbing shrub, native to western China, with slender-stemmed, three-parted, light-green leaves and compound terminal umbels of small greenish flowers followed by small black berries.

For previous introduction see 63330.

110286. ARGYREIA OBTUSIFOLIA Lour. Convolvulaceae.

From Canton district, Kwangtung. A woody unarmed climber, native to southern Indo-China, with ovate, obtuse leaves and panicles of showy, white flowers followed by bright-red fruits.

110287. BISCHOFIA TRIFOLIATA (Roxb.)
Hook. Euphorbiaceae.

From Swatow, Kwangtung. A handsome tropical tree, native to southeastern Asia, with bronze-green, trifoliolate leaves; suitable for street planting in subtropical regions.

For previous introduction see 67677.

110288. HIBISCUS TILIACEUS L. Malvaceae. Linden hibiscus.

From Swatow, Kwangtung. A tall shrub or small tree up to 30 feet high, widely cultivated in the Tropics. The broadly cordate leaves are hoary beneath, and the yellow flowers are 2 to 3 inches long.

For previous introduction see 98781.

# 110285 to 110301—Continued.

110289. ILEX PUBESCENS Hook, and Arn. Aquifoliaceae.

From Chinchow, Kwangtung, on the North River at 1,000 feet attitude, No vember 1934. An evergreen shrub or small tree native to southeastern China, with densely pubescent, slender branches, entire acute ovat-oblong leaves about 3 inches long, and axillary umbels of small lilac colored, rarely white, flowers followed by small red berries.

110290. PSICHOTRIA SERPENS L. Rubiaceae.

From Swatow, Kwangtung, January 19, 1935. A woody trailer with stems 2 to 6 feet long, opposite, ovate-acute succulent leaves, and terminal corymbs of small inconspicuous flowers. Native to the East Indies.

110291. RANDIA SINENSIS Roem. and Schult. Rubiaceae.

From near Lingman University, Canton, November 23, 1934. A spiny surub about 5 feet high, native to southern China, with simple lanceolate leaves and terminal racemes of small white flowers followed by spherical fluits up to an inch in diameter.

110292 to 110294. RAPHANUS SATIVUS L. Brassicaceae. Radish.

A collection of Manchurian radishes presented by Dr. S. Kumazawa, D. rector of the Vegetable Breeding Station, Talhoku, Taiwan, January 25, 1935.

110292. A round red radish.

110293. A radish with red flesh and green skin.

110294. Green skin variety.

110295. RHUS sp. Anacardiaceae. Sumac.

From White Cloud Mountain at 1,500 feet artitude, near Canton, December 16, 1934. A subtropical shrub with beautiful autumn-colored foliage.

110296. Rosa CYMOSA Tratt. Rosaceae.

From the Baptist Mission Compound, Swatow, Kwangtung, January 19, 1935. A tall bushy climber with clusters of small, single, white flowers and dull-red hips.

For previous introduction see 32949.

110297. SMILAX RIPARIA A. DC. Smilacaceae. Greenbrier.

From near Linguan University, Canton, December 20, 1934. An unarmed herbaceous climber with umbels of red berries. Native to southeastern China.

110298. VIBURNUM LUZONICUM FORMOSA-NUM (Hance) Rehd. Caprifoliaceae.

From a hillside near Taihoku, Taiwan, January 24, 1935. A slender-branched shrub with ovate, membranous, sinuate-dentate leaves, terminal corymbs of fragrant white flowers, and ovoid red fruits. Native to Taiwan.

110299. VIBURNUM ODORATISSIMUM Ker. Caprifoliaceae. Sweet viburnum.

From the Baptist Mission Compound, Swatow, Kwangtung, November 12, 1934. An evergreen shrub or small tree with shining leathery leaves up to 8 inches long. The fragrant white flowers are pro-

# 110285 to 110301—Continued.

duced in large broad panicles and are followed by red fruits which turn black as they ripen.

For previous introduction see 66321.

110300. VANIERIA Sp. Moraceae.

From near Linguan University, Canton, November 27, 1934. Received under the name "rectispina," for which a place of publication has not been found: The vanierias are woody, spiny plants, native to southeastern Asia, closely related to the cudranias. The inconspicuous flowers are followed by fleshy subglobose fruits that resemble mulberries.

110301. (Undetermined.)

From near the Lingnan University, Canton, January 9, 1935. Received as Eurya chinensis, but the seeds are not of that genus.

#### 110302 to 110307.

From the Union of Soviet Socialist Republics. Seeds presented by the Institute of Plant Industry, Leningrad, through H. L. Westover and C. R. Enlow, Bureau of Plant Industry. Received March 21, 1935. Numbered in April 1935.

The field numbers are those of the Westover-Enlow series. Introduced for Department specialists.

110302. AGROPYRON DESERTORUM (Fisch.) Schult. Poaceae. Wheatgrass.

No. 1346. From the Lower Volga region.

110303. AGROPYRON STRIGOSUM (Bieb.)
- Boiss. Poaceae. Wheatgrass.

No. 1347. For previous introduction see 101140.

110304. ATRIPLEX TATARICA L. Chenopodiaceae. Saitbush.

No. 1351. A bushy annual up to 3 feet tall. Native to coastal deserts in Asia Minor.

For previous introduction see 109421.

110305. CAREX STENOPHYLLA Wahlenb. Cy-

No. 1349. A perennial grasslike herb with triangular stems from 2 to 10 inches high. Native to dry grounds in northern Eurasia.

110306. Kochia Prostrata (L.) Schrad. Chenopodiaceae.

 $N_0.\ 1350.$  A more or less prostrate, shrubby perennial with linear leaves. Native to Asia Minor.

110307. POA TATARICA Fisch. Poaceae. Bluegrass.

No. 1348. A tall tufted perennial grass, native to dry regions of southeastern Europe and Asia Minor.

# 110308 and 110309.

From Ecuador. Seeds collected by Mrs. Ynes Mexia, Bureau of Plant Industry. Received March 15, 1935. Numbered in April 1935.

110308. BEGONIA sp. Begoniaceae.

No. 6861-a. Acangogarach. From Napo-Pastaza Province, February 7, 1935, at 1,000 feet altitude, in dense forest. A climbing form 15 feet high with red flowers.

110308 and 110309-Continued.

110309. TEPHROSIA TOXICARIA (Sw.) Pers. Fabaceae.

No. 6836-a. Barbasco chico. From Napo-Pastaza Province, February 5, 1935, near Payo in an open field, at 1,100 feet altitude. A plant about 5 feet high with whitish flowers.

110310. MALUS SYLVESTRIS Mill. Malaceae. Apple.

From Idaho. Scions presented by Ed. L. Dailey, Priest River. Received April 11, 1935.

A seedling apple, introduced for Department specialists.

110311. PHYTELEPHAS MACROCARPA Ruiz and Pav. Phoenicaceae.

Ivory-nut palm.

From Ecuador. Seeds collected by Mrs. Ynes Mexia, Bureau of Plant Industry. Received March 15, 1935.

No. 6905—a. Chilimoyo. From Napo-Pastaza Province near Canelos in dense forest. A tall tropical-American palm with a thick rough trunk and foliage resembling the coconut palm. The large bony fruits are commonly used for making buttons.

For previous introduction see 93759.

110312 to 110315. EREMURUS spp. Liliaceae. Desertcandle.

From the Union of Soviet Socialist Republics. Seeds presented by the Institute of Plant Industry, Leningrad, through H. L. Westover and C. R. Enlow, Bureau of Plant Industry. Received April 5, 1935.

Introduced for Department specialists.

The field numbers are those of the Westover and Enlow series.

110312. EREMURUS AURANTIACUS Baker.

No. 1352. A perennial herb over a foot high, native to Afghanistan, with small yellow flowers in a dense raceme 6 inches long.

110313. EREMURUS ROBUSTUS Regel.
Giant desertcandle.

No. 1353. A tall hardy herbaceous perempirit with pale-pink flowers on a stulk 5 to 8 feet high. Native to Turkistan.

For previous introduction see 107528.

110314. EREMURUS TAURICUS Stev.

No. 1354. A large xerophytic perennial with a rosette of broadly linear acute leaves a foot or more long and white flowers in a simple dense raceme over a foot long on a stout scape as long as the leaves. It is native to the mountains of Turkey and is closely related to the yellow-flowered Eremurus spectabilis.

For previous introduction see 100638.

110315. EREMURUS Sp.

No. 1355. From central Asia.

110316 to 110324. CUCURBITA spp. Cucurbitaceae.

From Czechoslovakia. Seeds purchased from A. Spaldak, Experimental Arboretum, Olomouc. Received April 5, 1935.

110316 to 110320. CUCURBITA MAXIMA Duchesne. Squash.

110316 to 110324—Continued.

110316. Round green.

110317. Round yellow.

110318. No. 1411.

110319. No. 1407.

110320. Received as Cucurbita pepo × melopepo.

110321 to 110324. CUCURBITA PEPO L. Pumpkin.

110321. Long, green, pear-shaped.

110322. Yellow, egg-shaped.

110323. Yellow.

110324. No. 1419.

# 110325 to 110327.

From Cuba. Seeds presented by Robert M. Grey, Superintendent, Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos, through F. G. Walsingham. Received April 8, 1935.

110325. COMBRETUM GRANDIFLORUM Don. Combretaceae.

An ornamental climbing shrub producing long flowering branches of brilliant red flowers in closely packed spikes. It is native to upper Guinea and the Congo region, in tropical Africa, and is adapted to hot muggy summers and very dry winters.

For previous introduction see 72993.

110326. ELAEODENDRON sp. Celastraceae

Seeds originally from the Department of Agriculture, Mauritius.

110327. TERMINALIA SUPERBA Engl. and Diels. Combretaceae.

A large handsome tree, 60 to 120 feet high, with obovate-oblong leaves 4 to 6 inches long and small whitish flowers in spikes as long as the leaves. Native to tropical Africa.

110328 to 110331. NICOTIANA spp. Solanaceae. Tobacco.

From Iraq. Seeds presented by M. S. Radi, Director of Agriculture, Baghdad. Received April 10, 1935.

A collection of tobaccos from Iraq and the Near East, introduced for Department specialists.

110328. NICOTIANA RUSTICA L.

110329 to 110331. NICOTIANA TABACUM L.

110332. Juglans Nigra L. Juglandaceae. Black walnut.

From Canada. Scions presented by Dane Learn, Aylmer, Ontario. Received April 18, 1935.

Introduced for Department specialists. Learn.

110333. Fragaria sp. Rosaceae. Strawberry.

From England. Plants presented by the East Malling Research Station, East Malling, Kent. Received April 18, 1935.

Introduced for Department specialists. Royal Sovereign.

# 110334 to 110338.

From England. Plants presented by Sir Arthur W. Hill, Director, Royal Botanic Gardens, Kew, Surrey. Received April 19,

110334. ARUNDINARIA ANCEPS Mitf. Bamboo.

Because of the uncertainty of its origin, Because of the uncertainty of its origin, this arundinaria was named anceps. It is now believed to be native to northern India. The culms are round and slender and are reported to grow 10 to 15 feet high in England. On small plants there are two or three branches at each node, with rather long branchlets having 8 to 10 linear-lanceolate leaves. The leaves are light green, over 3 inches long and three-eighths of an inch wide. The tessellation (cross venation) is minute and unusually regular.

For previous introduction see 89699.

110335. CHIMONOBAMBUSA FALCATA (Nees)
Bamboo.

A slender clump bamboo growing to a height of 20 feet, but not exceeding half an inch in diameter, having the young stems covered with a bluish-white, waxy coating soon turning yellowish green. The light-green, striate-veined leaves are 4 to 6 inches long by one-third of an inch wide, with downy sheaths. The species is not very hardy, being native to the lower slopes of the Himalayas in north-western India. western India.

For previous introduction see 45902.

110336. SINARUNDINARIA NITIDA (Mitf.) Bamboo. Nakai. Poaceae.

A bamboo, native to central China, which becomes 15 feet tall in England. The light-green leaves, four to six on a branch, are over 2 inches long by three-eighths of an inch wide and have three pairs of prominent secondary veins and six intermediate veins. The tessellation is close and regular and the culm sheaths are rather persistent. are rather persistent.

For previous introduction see 89704.

110337. THAMNOCALAMUS SPATHIFLORUS (Trin.) Munro. Poaceae. Bamboo.

A running bamboo, native to the north-A running bamboo, native to the north-western Himalayas, said to grow 20 to 25 feet high. The thin delicate leaves, three to six on a branch, are up to 3 inches long by seven-sixteenths of an inch wide. The midrib and secondary veins are in-conspicuous. There are three pairs of the latter and five to seven intermediate veins between. The tessellation is rather close and regular. In its native habitat the species is said to occur as undergrowth in conferous forests, and it is inferred that it will prefer partial shade. it will prefer partial shade.

For previous introduction see 89706.

110338. PSEUDOSASA DISTICHA (Mitf.) Nakai.

A dwarf bamboo of running habit growing 3 to 5 feet high, with rather narrow leaves 2 to 4 inches long, in pro-nouncedly distictions arrangement.

For previous introduction see 101174.

110339. ALLIUM CEPA L. Liliaceae. Onion.

From Germany. Seeds presented by Rudolph Neumuler, Frankenthal, Pfalz. Received April 15, 1935.

Gochsheim, a pear-shaped onion; introduced for Department specialists.

110340 to 110349. CUCURBITA SDD. Cucurbitaceae.

From Yugoslavia. Seeds presented by Ive Volaric, Stenjevec, Croatia. April 20, 1935.

Introduced for Department specialists.

110340 to 110343. CUCURBITA MAXIMA Du-Squash. chesne.

These varieties are used baked for food.

110340. Misirace.

110341. Stambolka.

110342. Velike bele za peii. (A large variety.)

110343. Stambolka of Belentija.

110344 to 110349. CUCURBITA PEPO L. Pumpkin.

110344. Poliske I.

110345. Poliske II.

110346. Riberke za kuhat, for home use.

110347 and 110348. For home use; also fed to hogs.

110347. No. 10. 110348. No. 11.

110349. No. 12. Fed to hogs.

#### 110350 to 110449.

From the Union of Soviet Socialist Republics. Seeds presented by the Department of New Cultures, Institute of Plant Industry, Leningrad, through H. L. Westover and C. R. Enlow, Bureau of Plant Industry. Received March 20, 1935. Numbered in April 1935.

Introduced for Department specialists; the field numbers are those of the Westover and Enlow series.

110350 to 110352. ALOPECURUS PRATENSIS
L. Poaceae. Meadow foxtail.

110350. No. 1246. From Armenia.

110351. No. 1247. From Georgia, Transcaucasia.

110352. No. 1248. From Georgia, Transcaucasia.

110353. ARRHENATHERUM ELATIUS Beauv. Poaceae. Tall oatgrass.

No. 1255. From Azerbaijan.

For previous introduction see 89311.

110354 to 110357. ASTRAGALUS spp. Faba-Milkvetch.

110354. No. 1249. From Armenia.

110355. No. 1250. From Armenia.

110356. No. 1251. From Armenia.

110357. No. 1252. From Georgia, Transcaucasia.

110358. BECKMANNIA ERUCAEFORMIS
Host. Poaceae. Sloughs (L.) Sloughgrass.

No. 1256. From Armenia.

110359. BRACHYPODIUM PINNATUM (L) Grass. Beauv. Poaceae.

No. 1258. From Georgia, Transcaucasia.

110360. Bromus Japonicus Inunb. Poa-Bromegrass. ceae.

No. 1259. From Georgia, Transcaucasia.

# 110350 to 110449—Continued.

110361. BROMUS Sp. Poaceae Bromegrass.

No. 1257. From Karallis, Armenia.

110362 to 110376. DACTYLIS GLOMERATA L. Poaceae. Orchard grass.

110362. No. 1260. From Georgia, Transcaucasia.

110363, No. 1261. From Armenia.

110364. No. 1262. From Armenia.

110365. No. 1263. From Georgia, Transcaucasia.

110366. No. 1264. From Armenia.

110367. No. 1265. From Armenia.

110368. No. 1266. From Armenia.

110369. No. 1267. From Georgia, Transcaucasia.

110370. No. 1268. From Georgia, Transcaucasia.

110371. No. 1269. From Georgia, Transcaucasia. From near Tiflis,

110372. No. 1270. From Armenia.

110373. No. 1271. From Daghestan.

110374. No. 1272. From Georgia, Transcaucasia.

110375. No. 1273. From Georgia, Transcaucasia.

110376. No. 1274. From Armenia. 110377. FESTUCA OVINA L. Poaceae. Sheep fescue.

No. 1275. From Armenia.

110378. FESTUCA RUBRA L. Poaceae. Red fescue.

No. 1276. From Armenia.

110379 to 110384. GALEGA spp. Fabaceae. Goatsrue.

110379. GALEGA ORIENTALIS Lam.

No. 1281. From Georgia, Transcaucasia.

For previous introduction see 108629. 110380. GALEGA Sp.

No. 1253. From Georgia, Transeaucasia.

110381. GALEGA Sp.

No. 1277. From Armenial

110382. GALEGA Sp.

No. 1278. From Armenia.

110383. GALEGA Sp.

No. 1279. From Georgia, Transcau-(asia.

110384. GALEGA SD.

No. 1280. From Georgia, Transcau casia.

110385 to 110387. KOELERIA spp. Ponceae. Grass.

110385. KOELERIA CRISTATA (L.) Pers.

From Georgia, Transcaucasia.

110386 and 110387. Konleria Hirsuta Gaud.

141792-39-

# 110350 to 110449—Continued.

From Armenia, A slender perennial grass with upright, densely tufted culms up to 2 feet high. Native to central Europe.

110386. No. 1282. 110387. No. 1285.

110388. LATHYRUS PRATENSIS L. Fabacese. Yellow vetchling.

No. From Georgia, Transcau-1286. casia.

110789. MELICA TRANSSILVANICA Schur. Poaceae.

From Karaklis, Armenamino to 3 feet high, No. 1287. A perennial grass up to 3 fee closely related to Melica ciliata. to central Europe.

110390 to 110392. MELILOTUS OFFICINALIS (L.) Lam. Fabaceae. Sweetclover.

110390. No. 1288. From Armenia.

110391. No. 1289. From Georgia, Transcaucasia.

From Tiflis, Georgia. 110392. No. 1290. Transcaucasia.

110404. ONOBRYCHIS 110393 to Fabaceae. Sanfoin. Hill.

110393. No. 1297. From Armenia.

From Georgia, Trans-110394. No. 1291. caucasia.

110395. No. 1292. From Azerbaijan.

110396, No. 1293. From Georgia, Transcaucasia.

110397. No. 1294. From Armenia.

110398. No. 1295. From Armenia

110399. No. 1296. From Armenia.

110400. No. 1298. From Armenia.

110401. No. 1299. From Daghestan. 110402. No. 1300. From Georgia, Transcaucasia,

110403. No. 1301. From Armenia.

110404. No. 1302. From Armenia.

110405. Onobrychis sp. Fabaceae. No. 1803. From Georgia, Transcaucasia.

110406, ONOBRYCHIS Sp. Fabaceae.

From Georgia, Transcau-No. 1304.

110407 to 110412. PHLEUM spp. Poaceae. Timothy.

110407 to 110410. PHLEUM PRATENSE L. 110407. No. 1344. From Georgia,

Transcaucasia. 110408. No. 1306. From Georgia, Transcaucasia.

110409. No. 1307. From Armenia.

110410. No. 1308. From Georgia. Transcaucasia.

110411. PHLEUM sp.

No. 1305. From Armenia.

110412. PHLEUM PRATENSIS L.

No. 1283. From Armenia.

nia. Fabaceae. **Pea.** 110413. PISUM SATIVUM L.

No. 1343. From Armenia. 110350 to 110449—Continued.

110414 to 110444. TRIFOLIUM spp. Fabaceae.

110414 and 110415. TRIFOLIUM ALPESTRE

110414. No. 1309. From Armenia. 110415. No. 1310. From Armenia.

110416. TRIFOLIUM AMBIGUUM Bieb.

No. 1311. From Armenia.

110417 and 110418. TRIFOLIUM ELEGANS Savi.

A smooth perennial clover with stems 8 to 20 inches long, found throughout Europe and the Caucasus, especially in siliceous soils. The flowers are whitish or pink, and the plant is used for forage.

For previous introduction see 56672.

110417. No. 1312. From Armenia.

110418. No. 1313. From Armenia.

110419 to 110428. TRIFOLIUM PRATENSE L. Red clover.

110419. No. 1314. From Georgia, Transcaucasia.

110420. No. 1315. From the State Farm, Bideny, Armenia.

110421. No. 1316. From Armenia.

110422. No. 1317. From Georgia, Transcaucasia.

110423. No. 1318. From Armenia.

110424. No. 1319. From Barmakin, Georgia, Transcaucasia.

110425. No. 1320. From the State Farm, Bideny, Armenia.

110426. No. 1321. From the State Farm, Bideny, Armenia.

110427. No. 1339. From Lenkoran, Armenia.

110428. No. 1322. From Georgia, Transcaucasia.

110429. TRIFOLIUM REPENS.
White clover.

No. 1323. From Armenia.

110480 to 110482. TRIFOLIUM RESUPINA-TUM L. Strawberry clover.

110430. No. 1324. From the State Farm, Bideny, Armenia.

110431. No. 1325. From Afghanistan.110432. No. 1326. From Persia.

110483. TRIFOLIUM SUBTERRANUM L. Subterranean clover.

No. 1333. From Lenkoran, Armenia.

110434. TRIFOLIUM sp.
No. 1327. From Armenia. Received

No. 1327. From Armenia. Received under the name "trichaeifolium," for which a place of publication has no been found.

110435. TRIFOLIUM SD.

No. 1328. From Georgia, Transcaucasia.

110436. TRIFOLIUM sp.

No. 1329. From Georgia, Transcau-

110350 to 110449—Continued.

110437. TRIFOLIUM sp.

No. 1330. From Georgia, Transcaucasia.

110438. TRIFOLIUM sp.

No. 1331. From Georgia, Transcaucasia.

110439. TRIFOLIUM sp.

No. 1332. From the Borzhom region, Georgia, Transcaucasia.

110440. TRIFOLIUM Sp.

No. 1334. From Georgia, Transcau-

110441. TRIFOLIUM sp.

No. 1335. From Georgia, Transcaucasia.

110442. TRIFOLIUM SD.

No. 1336. From the State Farm, Z. U. K., Georgia, Transcaucasia.

110443. TRIFOLIUM sp.

No. 1337. From Daghestan.

110444. TRIFOLIUM Sp.

No. 1338. From the State Farm, Bideny, Armenia.

110445. Trisetum Flavescens (L.) Beauv. Poaceae. Grass.

No. 1254. From Armenia. A grass resembling tall meadow oatgrass, growing on open ground, in copses, and in meadows, which may prove valuable as a forage.

For previous introduction see 101585.

110446 to 110449. VICIA spp. Fabaceae. Vetch.

110446. VICIA Sp.

No. 1342. From Armenia.

110447. VICIA Sp.

No. 1341. From Georgia, Transcau-

110448. VICIA sp.

No. 1340. From Georgia, Transcaucasia.

110449. VICIA Sp.

No. 1345. From Armenia.

# 110450 to 110466.

From England. Plants purchased from Maurice Pritchard & Sons, Christchurch, Hants, England. Received April 20, 1935.

Introduced for Department specialists.

110450 to 110452. ASTER spp. Asteraceae.

110450. Marjorie.

110451. Nancy.

110452. Victor.

110453 to 110461. KNIPHOFIA spp. Liliaceae.

110453. Dr. Legate.

110454. Greybeard.

110455. Lighthouse.

110456. Mrs. Samuel Smith.

110450 to 110466—Continued.

110457. Northiae Kathari.

110458. Preziosa.

110459. R. Wilson Kerr.

110460. Searchlight.

110461. Vincent's Delight.

110462 to 110466. TRADESCANTIA VIRGINI-ANA L. Commelinaceae.

110462. Henry Marshall.

110463. Lilac Time.

110464. Pauline.

110465. Purple Dome.

110466. Delicate pale gray.

110467 to 110478. Prunus spp. Amygdalaceae.

From Germany. Plants purchased from Otto Schmitz-Hübsch, Merten, Kreis Bonn. Received April 2, 1935.

Introduced for Department specialists.

110467 to 110471. PRUNUS AVIUM L. Sweet cherry.

110467. Büttners rote Knorpelkirsche.

110488. Dönissens gelbe Knorpelkirsche.

110469. Grosse schwarze Knorpelkirsche.

110470. Hedelfinger Riesen.

110471. Jabulay.

110472 and 110473. X PRUNUS EFFUSA (Host) Schneid. Duke cherry.

A semisour cherry.

110472. Kaiserin Eugense.

110473. Königin Hortense.

110474 and 110475. PRUNUS AVIUM L. Sweet cherry.

110474. Coburger Maiherzkirsche.

. 110475. Mohrenkirsche.

110476. × PRUNUS EFFUSA (Host) Schneid. Duke cherry.

Rote Maikirsche. A semisour cherry.

110477 and 110478. PRUNUS CERASUS L. Sour cherry.

110477. Königliche Amarelle.

110478. Schattenmorelle.

# 110479 to 110505.

From Manchuria. Seeds presented by B. W Skvortzov, botanical department, second high school, Chinese Eastern Railway, Harbin, through H. G. MacMillan, Bureau of Plant Industry. Received April 12, 1935.

Introduced for Department specialists.

110479. ACONITUM KUSNEZOFFII Reichenb. Ranunculaceae. Monkshood.

An erect hardy herbaceous perennial, native to northeastern Asia, with terminal clusters of bluish flowers.

For previous introduction see 101395.

110480. AGROPYRON REPENS (L.) Beauv. Poaceae. Quackgrass.

For previous introduction see 110063.

110479 to 110505—Continued.

110481. BECKMANNIA SYZIGACHNE (Steud.) Fern. Poaceae.

For previous introduction see 108618.

110482 and 110483. CHLORIS VIRGATA Swartz. Poaceae. Feather fingergrass.

110484. CLEISTOGENES SEROTINA (L.) Keng. Poaceae. Grass.

A loosely tufted or solitary perennial grass over a foot high, native to low grounds in southern Europe.

110485. DIGITARIA Sp. Poaceae.

Grass.

110486. ECHINOCHLOA CRUSGALLI (L.) Beauv. Poaceae. CRUSGALLI Grass.

For previous introduction see 109825.

110487. ELYMUS DAHURICUS Turcz. Poaceae. Grass.

For previous introduction see 108486.

110488. Eragrostis Pilosa (L.) Beauv. Poaceae. Grass.

For previous introduction see 109819.

110489. ERIOCHLOA VILLOSA (Thunb.) Kunth. Poaceae. (Thunb.)

For previous introduction see 109820.

110490. GLYCINE GRACILIS SEVORTZOV. Fa-baceae.

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

110491. Sofa sp. Fabaceae.

Received under the name "ussuriensis," for which a place of publication has not been found.

110492. HETEROPAPPUS HISPIDUS (Thunb.) Less. Asteraceae.

A perennial herb, native to eastern Asia, with rough stems and linear leaves. The clear-blue, asterlike flower heads are borne singly at the ends of the branchlets, forming broad corymblike clusters 8 to 10 inches across.

For previous introduction see 101398.

110493 to 110496. LESPEDEZA spp. Fabaceae.

110493 and 110494. LESPEDEZA BIÇOLOR Turcz.

110495. LESPEDEZA DAURICA (Laxm.) Schindler.

A tall annual up to 3 feet high, with small white flowers.

For previous introduction see 108230. 110496, LESPEDEZA sp.

110497. MEDICAGO LUPULINA L. Fabaceae.

110498 and 110499. MELILOTUS SUAVEOLENS Ledeb. Fabaceae.

For previous introduction see 90558.

110500. SETARIA LUTESCENS (Weigel) Hubbard. Poaceae. Grass.

110501. SETARIA VIRIDIS (L.) Beauv. Poaceae. Grass. 110479 to 110505—Continued.

110502. THLADIANTHA DUBIA Bunge. Cu curbitaceae.

A tuberous rooted climber with palegreen, heart-shaped leaves and numerous campanulate yellow flowers. Native to northern China.

For previous introduction see 90410.

110503 to 110505. VICIA spp. Fabaceae.

110503. VICIA JAPONICA A. Gray.

For previous introduction see 81659.

110504. VICIA Sp.

110505. VICIA JAPONICA A. Gray.

110506. Saccharum spontaneum L. Poaceae. Grass.

From India. Cuttings presented by the Imperial Sugar Cane Station, Colmbatore. Received April 25, 1935.

Introduced for Department specialists.

Variety Burma. A grass closely related to sugarcane.

For previous introduction see 106899.

110507 and 110508. OLEA EUROPAEA L. Oleaceae. Olive.

From Spain. Cuttings presented by Ramon Sala, Balagu r-Pc., Lerida. Received April 25, 1935.

Introduced for Department specialists.

110507. Cordovi variety.

110508. An unnamed variety which produces very large fruits, but does not bear a large crop.

# 110509 to 110513.

From China. Plants presented by the Lingnan University, Canton. Received April 9, 1935.

Introduced for Department specialists.

116509. ARUNDINARIA AMABILIS McClure. Poaceae.

A bamboo with erect cylindrical culms usually 20 feet high, rarely 40 feet, and mear-lanceolate leaves about a foot long; probably of garden origin.

110510. BAMBUSA TULDOIDES Munro. Po

Chang ko chuk. A thick-walled, stiff, straight bamboo of the sympodial type cultivated for its culms which in well-established clumps are 24 feet high and about 5 inches in circumference. It is one of the most important economic bamboos in this part of China.

For previous introduction see 80875.

110511. PHYLLOSTACHYS sp. Poaceae.

110512. Schizostachyum funghomii Mc-Clure. Poaceae.

A cultivated clump bamboo, native to southern China, with erect culms up to 30 feet high and about 3 inches in diameter.

110513. (Undetermined.)

An undetermined bamboo.

110514. PASSIFLORA LIGULARIS Juss. Passifloraceae. Sweet granadilla.

From Venezuela. Seeds presented by Dr. Henry Pittier. Received April 19, 1935.

Introduced for Department specialists.

For previous introduction see 110273.

110515. NICOTIANA TABACUM L. Solanaceae. Tobacco.

From Peru. Seeds presented by the Estación Agronomica de Piura. Received April 18, 1935.

A wild tobacco collected in the fields around Lima; introduced for Department specialists.

110516 and 110517. PRUNUS ARMENIACA
L. Amygdalaceae. Apricot.

From Michigan. Scions and trees purchased from Frank Keplinger, Farwell. Received April 26, 1935.

Introduced for Department specialists.

110516. Admiral Byrd.

110517. Sherman.

110518 to 110555.

From Australia. Seeds presented by Dr. A. McTaggart, Senior Plant Introduction Officer, Division of Plant Industry, Canberra, Federal Commonwealth Territory. Received April 17, 1935.

A collection of forage plants introduced for Department specialists; the field numbers are those of the Federal Commonwealth Territory.

110518 and 110519. Bromus spp. Ponceae. Bromegrass.

110518. Вкомия sp.

FCT. No. 1963.

110519. Bromus sp.

FCT. No. 1494.

110520. DESCHAMPSIA CAESPITOSA (L.)
Beauv. Poaceae. Tufted hairgrass.
FCT. No. 3639.

FCI. No. 3039.

For previous introduction see 109077.

110521 to 110552. FESTUCA spp. Poaceae. Fescue.

110521. FESTUCA ALOPECUROS Schousb.

FCT. No. 2518. An annual grass, native to the western M diterraneaa region, with tufted culms up to a foot high, seldom reaching 2 feet high.

110522. FESTUCA AMETHYSTINA L.

FCT. No. 2383. A densely cespitose perennial grass with fibrous roots, stout culms, and very nariow leaves. Native to the Mediterranean countries.

For previous introduction see 58700.

110523 and 110524. FESTUCA ELATION ARUNDINACEA (Schreb.) Wimm.

For previous introduction see 108501.

110523. FCT. No. 5609.

110524. FCT. No. 5760.

110525. FESTUCA CAPILLATA Lam. Hair fescue.

FCT. No. 2475.

# 110518 to 110555-Continued.

110526 to 110531. FESTUCA ELATION L. Meadow fescue.

110526. FCT. No. 1144.

110527. FCT. No. 5875.

110528, FCT, No. 2100.

110529. FCT. No. 5610.

110530. FCT. No. 5712.

110531. FCT. No. 5713.

110532. FESTUCA RUBRA HETEROPHYLLA (Lam.) Mutel. Shade fescue.

FCT. No. 2101. A densely tufted perennial grass, used for lawns in shady places. Native to Europe.

110533. FESTUCA MAIREI St. Yves.

FCT. No. 1499. A grass native to Morocco.

For previous introduction see 74166. 110534. Festuca Maritima L.

FCT. No. 5792. A tufted annual grass, native to Spain, with culms about a foot high.

110535. FESTUCA OVINA L. Sheep fescue. FCT. No. 2102.

110536 to 110538. FESTUCA OVINA SUL-CATA Hack.

110536. FCT. No. 2092.

110537. FCT. No. 2385.

110538. FCT. No. 2093.

110539 to 110541. FESTUCA OVINA VALE-SIACA (Schleich.) Link.

A perennial grass, with slender culms about 1 foot high. Native to central Europe.

110539. FCT. No. 2094.

110540. FCT. No. 2386.

110541. FCT. No. 2478.

110542. FESTUCA VARIA Haenke.

FCT. No. 2362.

110543 to 110547. FESTUCA RUBRA L. Red fescue.

110548. FCT. No. 1294.

110544. FCT. No. 3460.

110545. FCT. Uo. 2104.

110546. FCT. No. 5761.

110547. FCT. No. 1295.

110548. Festuca Rubra Commutata Gaud. Chewings fescue.

FCT. No. 1293.

110549. FESTUCA SPADICEA L.

FCT. No. 2363.

For previous introduction see 89827.

110550. FISTUCA VARIA Haenke.

FCT. No. 2387.

For previous introduction see 89828.

110551. FESTUCA Sp.

FCT. No. 2519.

.110552. FESTUCA Sp.

FCT. No. 2103.

# 110518 to 110555....Continued.

110553 to 110555. SCLEROPOA RIGIDA (L.) Griseb.

An annual tufted grass up to a foot in height, with linear, sharp-pointed leaves and rigid panicles. Native to Asia Minor.

For previous introduction see 58709.

110553. FCT. No. 1763.

110554. FCT. No. 2477.

110555, FCT. No. 2520.

#### 110556 to 110558,

From Paraguay. Seeds presented by the Botanic Garden, Asunción. Received April 18, 1935.

Introduced for Department specialists.

110556. MALVASTRUM sp. Malvaceae.

Originally from Napalpi, Chaco, Argentina.

110557. MALVASTRUM sp. Malvaceae.

110558. SPHAERALCEA BONARIENSIS (Cav.) ... Griseb. / Malyaceae.

A tender shrubby perennial about 1 foot high. Native to Argentina.

# 110559 to 110590.

was received as seed.

From France. Seeds and bulbs presented by the Director, Botanic Garden, Nantes. Received April 20, 1935.

Introduced for Department specialists.
Unless otherwise mentioned, the material

11.0559 to 110567. ALLIUM spp. Liliaceae.

### 110559. ALLIUM CARINATUM L.

Bulblets of a species with narrowly linear leaves and lilac-purple flowers, produced in a comparatively large head. It is found throughout southern Europe, especially in the Alps.

For previous introduction see 104626.

110560. ALLIUM CEPA L.

110561. ALLIUM OCHROLEUCUM Waldst. and Kit.

An allium, native to central Europe, with terete stems over a foot high, linear leaves, and umbels of 15 to 26 yellowish-white flowers.

110562. ALLIUM ODORUM L.

A European onion cultivated in Japan for its leaves, which are produced abundantly in the spring and eaten as greens.

For previous introduction see 78986.

110563. ALLIUM OLERACEUM L.

Bulblets of a central European allium with stems 2 to 3 feet high, semiterete leaves, and greenish-yellow flowers.

110564. ALLIUM PORRUM L. Leek.

110565. ALLIUM SIBIRICUM L.

An allium, native to Siberia, with semiterete leaves, cylindrical scape up to 2 feet high, and an umbel of many rose-colored flowers.

# 110559 to 110590-Continued.

110566. ALLIUM SPHAEROCEPHALON L.

Bulbs of a European onion with a scape 1 to 2 feet high, leafy only a third of its length. The half-terett leaves are much shorter than the stem and the bright or dark-purple flowers are freely borne in globose or ovoid umbels about an inch in diameter.

110567. ALLIUM VINEALE L.

Bulblets of a pink-flowered wild onion, about a foot high, native to England.

For previous introduction see 78999.

Cucurbitaceae. 110568. CUCUMIS MELO L.

110569 to 110574. CUCURBITA PEPO L. Cucurbitaceae. Pumpkin. curbitaceae.

110569. Annulata.

110570. Oviformis.

110571. Patisson.

110572. Platycarpa striota.

110573. Pyriformis.

110574. Verrucosa.

110575 to 110580. FESTUCA spp. Poaceae. Fescue.

110575. FESTUCA ELATIOR ARUNDINACEA (Schreb.) Wimm.

110576. FESTUCA OVINA GLAUCA (Lam.) Koch. Blue fescue.

110577. FESTUCA RUBRA L. Red fescue.

110579. FESTUCA 110578 and RUBRA HETEROPHYLLA (Lam.) Mutel.

110580. FESTUCA SPADICEA L.

110581. Poa NEMORALIS L. Poaceae.
Wood bluegrass.

For previous introduction see 78805.

110582 to 110584. RHEUM spp. Polygo-Rhubarb. naceae.

110582. RHEUM AUSTRALE Don.

For previous introduction see 31037.

110583. RHEUM OFFICINALE Baill.

For previous introduction see 104375.

110584. RHEUM RHAPONTICUM L Common rhubarb.

110585 to 110590. SOLANUM Spp. Solanaceae.

110585. SOLANUM CILIATUM Lam.

A spiny perennial with cordate leaves and small clusters of white flowers.

110586. SOLANUM DULCAMARA L.

Bitter nightshade.

110587. SOLANUM GUINEENSE L.

For previous introduction see 93096.

110588. SOLANUM MELONGENA I Eggplant.

110589. SOLANUM MINIATUM Bernh.

An annual, native to southern Europe, with unarmed stems over a foot high, ovate glabrous leaves, and racemes of small white flowers.

110590. SOLANUM NIGRUM L. Black nightshade.

#### 110591 to 110593.

om Guatemala, Seeds collected Nancy Bell Fairchild, at Antigua, ceived April 22, 1935. collected by Re-

110591. CASSIA Sp. Caesalpiniaceae.

A shrub with vellow flowers.

110592. CEDRELA Sp. Meliaceae.

110593. (Undetermined.)

Jaupa.

#### 110594 to 110611.

om England. Seeds presented by the Director, Cambridge University Botanic Garden. Received April 18, 1935. From England.

Introduced for Department specialists.

110594. CUCUMIS SATIVUS L. Cucurbita-

110595 to 110597. LYCOPERSICON ESCULENTUM Mill. Solanaceae. Tomato.

110595. [No varietal name.]

110596. Cerasiforme.

110597. Piriforme.

110598 to 110604. Passifiora spp. Passifioraceae Passionflower.

110598. Passiflora Banksii Benth.

An evergreen climber with broad three-lobed leaves nearly 3 inches across and about 2 inches wide. Native to New South Wales and Queensland.

For previous introduction see 35104.

110599. PASSIFLORA CAPSULARIS L.

A tall slender climber with red tendrils, two-lobed leaves, and solitary, rosy-red flowers about 2 inches across. Native to Brazil and northeastern and Paraguay.

For previous introduction see 45168.

110600. PASSIFLORA EDULIS Sims Purple granadilla.

110601. PASSIFLORA GRACILIS Jacq. Crinkled passionflower.

A Brazilian vine with smooth slender stems and bluntly three-lobed, membranous leaves up to 3 inches long. The pale-green to whitish flowers are about 1 inch across, and the ovoid purplish fruits are about 2 inches long.

For previous introduction see 49026.

110602. Passiflora Ligularis Just Sweet granadilla.

110603. PASSIFLORA LUTEA L. Yellow passionflower.

For previous introduction see 43115.

110604. PASSIFLORA SUBEROSA L.

Cork passionflower.

A woody climber with roundish, three-lobed leaves, small greenish-yellow flowers, and ovoid black berries. Native to tropical America.

For previous introduction see 97776.

110605 to 110607. PISUM spp. Fabaceae. Pea.

110605. PISUM JOMARDI Schrank.

A hardy white-flowered annual pea about 3 feet high, native to Egypt. For previous introduction see 104858.

#### 110594 to 110611—Continued.

110606. PISUM SATIVUM L.

110607. PISUM SATIVUM UMBELLATUM L.

A form of the ordinary garden pea with the flowers in umbellike clusters.

For previous introduction see 59396.

110608 to 110611. SOLANUM spp. Solana ceae.

110608. SOLANUM ATROPURPUREUM Schrank.

For previous introduction see 104863.

110609. SOLANUM CAPSICASTRUM Link. False Jerusalem-cherry.

110610. SOLANUM MARGINATUM L. f. Nightshade.

A prickly shrub from 3 to 6 feet high with white-tomentose, blue-veined foliage and white, blue-veined flowers about 1 inch in diameter. Native to ktniopia.

For previous introduction see 25097.

110611. SOLANUM MELONGENA L. Eggplant.

110612. JUBAEA CHILENSIS (Molina) Baill. Phoenicaceae. Sirup palm.

Grace & Co., Santiago, at the request of H. G. McMillan, Bureau of Plant Industry. Received April 18, 1935.

A Chilean palm, 40 feet high, which thrives on very dry soil. The pinnate leaves are 6 to 12 feet long, and the coconutlike fruits are 2 inches in diameter. It is ornamental but a slow grower.

For previous introduction see 89995.

# 110613 and 110614.

From Cuba. Seeds presented by R. M. Grey, Superintendent of the Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos, through F. G. Walsingham. Received April 24, 1935.

110613. ACROCOMIA MEXICANA Karw. Palm.

A prickly palm about 20 feet high, with a spiny, brown-woolly trunk often a foot thick and terminal leaves from 6 to 8 feet in length. The sheathing bases of the leaves are armed with long black spines, and the spathe also is very spiny. The fragrant yellow flowers are followed by round fruits in very long clusters. This palm is found in the cooler parts of Mexico up to 3,000 feet altitude.

For previous introduction see 101695.

110614. CRESCENTIA CUJETE L. Bignoniaceae. Calabash-tree.

A handsome tree, native to tropical America, with wide-spreading branches and glossy, oblong, dark-green leaves 4 to 6 inches long. The globose, pendulous fruits, 18 to 20 inches in diameter, have woody shells, and, when dried are used for domestic purposes.

For previous introduction see 102279.

110615 to 110617. ZEPHYRANTHES spp. Amaryllidaceae.

From Mexico. Bulbs purchased from Dr. C. A. Purpus, Zacuapam, Huatusco, Vera Cruz. Received April 30, 1935.

# 110615 to 110617-Continued.

110615. ZEPHYRANTHES PALLIDA M. Roem.

A tropical American zephyranthes with narrow-linear, radical leaves about 1 foot long and large white flowers tinged with red.

110616 and 110617. ZEPHYBANTHES VERECUNDA Herb.

A bulbous perennial with narrowly lanceolate leaves and funnel-shaped flowers, 1 to 2 inches long, which vary in color from greenish white to red. It is native to the highlands of central Mexico.

For previous introduction see 91835.

110616, A form with white flowers tinged with rose red.

110617. A form with light rose-red flowers.

#### 110618 to 110633.

From Sweden. Seeds presented by the Director, Botanic Garden, Upsala. Received April 18, 1935.

Introduced for Department specialists.

110618. CUCURBITA PEPO L. Cucurbitaceae. Pumpkin.

110619. FESTUCA AMETHYSTINA L. Poaceae. Fescue.

110620. FESTUCA ELATIOR ARUNDINACEA (Schreb.) Wimm. Fescue.

110621. IRIS RUTHENICA Ker. Iridaceae.

A Chinese iris with a tuft of linear leaves about 6 inches long at flowering time, becoming a foot long later. The outer segments of the violet-scented flowers are lilac, marked with bluish purple; the inner segments are deep purple violet.

For previous introduction see 67004.

110622. Passiflora suberosa L. Passifloraceae. Cork passionflower.

For previous introduction see 110604.

110623 and 110624. PISUM SATIVUM L. Fabaceae. Pea.

110623. Medullare.

110624. Saccharatum.

110625 to 110629. RHEUM spp. Polygonaceae. Rhubarb.

110625. RHEUM FRANZENBACHII Muenter.

For previous introduction see 105160.

110626. RHEUM MACROPTERUM Mart.

For previous introduction see 69106.

110627. RHEUM OFFICINALE Baill. 110628. RHEUM UNDULATUM L.

For previous introduction see 104648.

110629. RHEUM WEBBIANUM Royle.

A stout perennial up to 6 feet high, native to the Himalayas at altitudes of 10,000 to 14,000 feet.

110630 to 110633. SOLANUM spp. Solanaceae.

110630. SOLANUM CAPSICASTRUM Link. False Jerusalem-cherry.

110631. SOLANUM DULCAMARA L. Bitter nightshade.

#### 110618 to 110633—Continued.

110632. SOLANUM SISYMBRIFOLIUM Lam.
A plant with small round black fruits.

For previous introduction see 93098.

110633. SOLANUM TRIFLORUM CALOPHYL-LUM (Phil.) Bitter.

A coarse annual nightshade, native to Argentina and Chile.

110634 to 110637. FESTUCA Spp. Poaceae. Fescue.

From New South Wales. Seeds presented by G. D. Ross, Under Secretary, Department of Agriculture, Sydney. Received April 24, 1935.

Introduced for Department specialists.

110634 and 110635. FESTUCA ELATIOR L. Meadow rescue.

110636. FESTUCA ELATIOR ARUNDINACEA (Schreb.) Wimm.

110637. FESTUCA RUBRA L. Red fescue.

# 110638 to 110663.

From Sweden. Seeds presented by Dr. A. H. Magnusson, Director, Botanic Garden, Goteborg. Received April 22, 1935.

Introduced for Department specialists.

110638 to 110648. ALLIUM spp. Liliaceae. Onion.

110638. ALLIUM CERNUUM Roth.
Nodding onion.

For previous introduction see 66425. 1106.9. ALLIUM DELICATULUM Sievers.

A Siberian allium about a foot high, with three or four filitorm leaves and straw-colored flowers in flat umbels.

110640. ALLIHM FLAVUM L.

A wild onion with an upright or ascending stem up to a foot high, narrowly linear leaves about as long as the stem, and small yellow bell-shaped flowers in a rather dense cluster. Native to dry rocky places, especially in chalky soit, in south-central kurope.

For previous introduction see 104632. 110641. ALLIUM FRIGIDUM Boiss. and Heidr.

An allium with stems 3 to 5 inches high, two to three semi-terete leaves, and small umbels of reddish-yellow flowers. Native to Greece.

110642. ALLIUM HELDREICHII Boiss.

A Grecian species, a foot or less in height with thin terete leaves shorter than the scape and rosy flowers.

For previous introduction see 58873.

110643. ALLIUM ODORUM L.

For previous introduction and description see 110562.

110644. ALLIUM PULCHELLUM Don.

An onion with narrow-linear leaves about 1 foot long and a rather dense unable of bell-shaped, violet flowers. Native to Asia Minor.

For previous introduction see 104634.

110638 to 110663—Continued.

110645. ALLIUM SENESCENS L.

A wild European onion, 1 to 2 feet high, with narrow erect often twisted leaves and numerous rather small pink or lilac flowers in dense heads.

For previous introduction see 78993.

110646. ALLIUM STELLATUM Fraser.

For previous introduction see 78994.

110647. ALLIUM TANGUTICUM Regel.

For previous introduction see 110226...

110648. ALLIUM VICTORIALIS L.

For previous introduction see 108779.

110649 to 110652. FESTUCA spp. Poaceae. Fescue.

110649. FESTUCA OVINA BRACHYPHYLLA (Schult.) Piper. Appine fescue.

An alpine perennial grass, native to central Europe.

110650. FESTUCA OVINA INDIGESTA (Boiss.) Hack.

A dwarf perennial grass, native to Spain at altitudes between 6,000 and 9,000 feet.

110651. FESTUCA VARIA ALPESTRIS (Roem. and Schult.) Hack.

A perennial grass, native to the mountains of central Europe, with culms 1 to 2 feet high.

110652. FESTUCA VARIA SCOPARIA Kern. and Hack.

A perennial grass about a foot high, native to western Europe.

110653. QUAMOCLIT COCCINEA (L.) Moench. Convolvulaccae. Scarlet starglory. For previous introduction see 97783.

110654 to 110656. LYCOPERSICON ESCULENTUM Mill. Solanaceae. Tomato.

110657. RHEUM ALEXANDRAE Batal. Polygonaceae.

A stout herbaceous perennial, native to China, with a rosette of elliptic-ovate, dark, glossy-green leaves, and flower stems 3 to 4 feet high, bearing large pale-yellow, overlapping leafile bracts.

For previous introduction see 105159.

110658 to 110663. SOLANUM spp. Solanaceae.

110658. SOLANUM AVICULARE FORSt. f. Nightshade.

A bushy shrub, 6 to 8 feet high, with laciniate leaves 10 inches long, small cymes of large dark-purple flowers, and y-llowish fuits 1 inch in diameter which are used for making marmalade.

For previous introduction see 95397.

110659. SOLANUM GRACILE Otto.

A slender branching perennial about 2 feet high, with oval to oblong-laneeo-late leaves and white flowers in small racemes, followed by black berries. Native to tropical America.

110660. SOLANUM HETERODOXUM Dun.

A tall annual, native to Mexico, with pilose stems 2 to 3 feet high, lobed leaves, and pale-blue flowers followed by black berries.

### 110638 to 110663—Conttinued.

110661. SOLANUM HUMILE Lam.

A dwarf, shrubby perennial with ovate leaves and violet-colored flowers. Known only in cultivation.

110662. SOLANUM LUTEUM Mill.

A hairy herb, with branching stems over 2 feet high, woolly ovate leaves, and umbels of small white flowers followed by yellow berries. Native to temperate South America.

110663. SOLANUM MINIATUM Bernh.

For previous introduction and description see 110589.

#### 110664 to 110675.

From Australia. Seeds presented by Dr. H. Wenholz, Department of Agriculture, Sydney, New South Wales. Received April 26, 1935.

A collection of seeds from the Bathurst Experiment Farm, introduced for Department specialists.

110664 to 110670. ALLIUM CEPA L. Lilia-ceae. Onion.

110664. Barletta B. 3212.

110665. Dubbo White.

110666. Lord Howe Island B. 3149.

100667. Odorless B. 3347.

110668. Hunter River Brown Spanish.

110669. Maitland White.

110670. White Pearl.

110671. APIUM GRAVEOLENS L. Apiaceae. Celery.

South Australian celery.

110672 to 110675. DAUCUS CAROTA L. Apiaceae. Carrot.

110672. Colonial B. 345.

110673. Fine Long Red B. 343.

110674. Long Bunching.

110675. Coreless Long Red.

110676. HABRANTHUS BRACHYANDRUS (Baker) Sealy. Amaryllidaceae.

From Argentina. Bulbs presented by Ing. Paul Ramella, Director de la Estación Experimental Central, Bergamino. Received May 4, 1935.

A Paraguayan habranthus with three or four erect, pale-green leaves and a peduncle about a foot long bearing a single flower; this has a large funnel-shaped perianth, purplish red with pale pink tips.

110677. Oryza sativa L. Poaceae.

Rice.

From the Fiji Islands. Seeds presented through the Division of Cereal Crops and Diseases, Bureau of Plant Industry. Received April 27, 1935.

Sonacalif rice; introduced for Department specialists.

110678. BAUHINIA PURPUREA L. Caesalpiniaceae.

From India. Seeds presented by F. G. Dickason, through Winfield E. Scott,

141792-39-3

### 110678—Continued.

American consul, Rangoon, Burma. Received April 25, 1935.

A small tree with pink flowers; collected February 17, 1935, in the nursery at Judson College, Rangoon.

110679 to 110681. NICOTIANA TABACUM L. Solanaceae. Tobacco.

From Brazil. Seeds presented by Henrique Barradas, Ministerio da Agricultura Campo de Sementes de Fumo, Tracuateua. Received April 30, 1935.

Introduced for Department specialists.

110879. Barury.

110680, Pretinho.

110681. Saracá.

#### 110682 to 110684.

From Cuba. Seeds presented by R. M. Grey, Superintendent of the Atkins Institution of the Arnold Arboretum, Soledad, Clenfuegos, through F. G. Walsingham. Received April 29, 1935.

Introduced for Department specialists.

110682. X Dombeya Cayeuxii Andre. Sterculiaceae.

A hybrid between Dombeya mastersii and D. wallichii. It is a handsome shrub about 6 feet high, with large cordate leaves and pendent corymbs of showy pink flowers. The parents are native to tropical Africa and Madagascar, respectively.

110683. Dombeya spectabilis Bojer. Sterculiaceae.

A tree up to 30 feet high, with large velvety cordate-lobed leaves and drooping umbels of showy scarlet flowers. Native to Madagascar.

110684. AVERRHOA BILIMBI L. Oxalidaceae. Bilimbi.

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

For previous introduction see 108253.

#### 110685 to 110764.

From Lithuania. Seeds and bulbs presented by Dr. C. Regel, Director, Botanic Garden, Kaunas. Received April 24, 1935.

Introduced for Department specialists, and, unless otherwise specified, the material was received as seeds.

110685. AGROPYRON Sp. Poaceae. Grass.

110686 to 110702. ALLIUM spp. Liliaceae. Onion.

110686. ALLIUM AFLATUNENSE B. Fedtsch.

A large allium with broad-oblong leaves and umbels of purple flowers on a scape up to 4 feet high. Native to Turkistan.

110687. ALLIUM ALBIDUM Fisch.

A species with clustered oblong bulbs, very narrow semi-terete leaves, and white or yellowish-white flowers. Native to the southeastern part of Europe.

For previous introduction see 95567.

# 110685 to 110764-Continued.

110688. ALLIUM CANADENSE L.
Meadow garlic.

Bulbs received.

110689. ALLIUM CARINATUM L.

Bulbs received.

For previous introduction and description see 110559.

110690. ALLIUM CAERULEUM Pall.

For previous introduction and description see 110227.

110691. ALLIUM FISTULOSUM L.
Welsh onion.

110692. ALLIUM FISTULOSUM L. Welsh onion.

Bulbs received under the varietal name "viviparum," for which a place of publication and a description have not been found.

110693. ALLIUM FLAVUM L.

For previous introduction and description see 110640.

110694. ALLIUM PULCHELLUM Don.

For previous introduction and description see 110644.

110695. ALLIUM SATIVUM L. Garlic.
Bulbs received.

110696. ALLIUM SCHOENOPRASUM L. Chives.

110697. ALLIUM SCORODOPRASUM L. Bulbs received.

For previous introduction see 73528. 110698. ALLIUM SIBIRICUM L.

For previous introduction and description see 110565.

110699. ALLIUM STELLATUM Fraser.

For previous introduction see 110646.

110700. ALLIUM SUAVEOLENS Jacq.

An allium up to 18 inches high with flat, linear leaves and an umbel of numerous pink fragrant flowers. Native to central Europe.

110701. ALLIUM URCEOLATUM Regel.

Bulbs of an onion, native to Turkistan, with linear leaves and bright-blue flowers borne in a hemispherical head.

For previous introduction see 66433.

110702. ALLIUM VIVIPARUM Kar. and Kir.

An allium, native to Siberia, with flattened leaves and hemispherical umbels of small azure flowers.

110703. ARRHENATHERUM ELATIUS (L.)
Beauv. Poaceae. Tall oatgrass.

For previous introduction see 110353.

110704 to 110719. CUCURBITA spp. Cucurbitaceae.

110704 and 110705. CUCURBITA MAXIMA Duchesne. Squash.

110706 and 110707. CUCURBITA MOS-CHATA Duchesne.

110706. Maliformis striata

110707. Maliformis striata maxima.

#### 110685 to 110764—Continued.

110708 to 110719. CUCURBITA PEPO L. Pumpkin.

110708. Cucumiformis aurea viridi striata

110709. Cucumiformis striata.

110710. Elongata striata.

110711. Lageniformis verrucosa viridis.

110712. Maliformis aurea.

110713. Maliformis aurea striata.

110714. Maliformis lutea.

110715, Maliformis striata minor.

110716. Paragonica.

110717. Pyriformis albo-striata.

110718. Puriformis striata oblonga.

110719. Pyriformis verrucosa.

110720 to 110723. FESTUCA spp. Poaceae. Fescue.

110720. FESTUCA ELATIOR L.

Meadow fescue.

110721. FESTUCA MAIREI St. Yves.

For previous introduction and description see 110533.

110722. FESTUCA MYUROS L.

An annual grass with culms about a foot high and narrow leaf blades. Native to Europe.

For previous introduction see 107057.

110723. FESTUCA ELATIOR L.
Meadow fescue.
110724. MUHLENBERGIA FOLIOSA (Roem.

110724. MUHLENBERGIA FOLIOSA (Roem. and Schult.) Trin. Poaceae.

A perennial grass of garden origin with decumbent culms rooting at the

110725 to 110756. NICOTIANA TABACUM L. Solanaceae. Tobacco.

110725. Albanensis.

110726. Amersfoort.

110727. Atropurpurea.

110728. Atrosanguinea.

110729. Brazil.

base.

110730. Derebeinska.

110731. Drinovce.

110732. Ercezovina stolak.

110733. Friedrichstaler.

110734. Galente.

110735. Gigantea.

110736. Gundi.

110737. Havanensis.

110738. Kentucky.

110739. Longifolia.

110740. Macrophylla.

110741. Maryland.

110742. Muscateller.

110743. Ohio.

110744. Platana arcadia.

# 110685 to 110764—Continued.

110745. Portorico.

110746. Saloniki.

110747. Samsun.

110748. Spagnuolo di Comiso.

110749. Sumatra.

110750. Surmalinsky.

110751. Tiubek.

110752. Tukkulak.

110753. Unguschet.

110754. Virginica.

110755. Wigandioides.

110756, Brazil beneventano.

110757. PHASEOLUS VULGARIS L. Fabaccae. Common bean.

Butterkönigin.

110758 to 110761. RHEUM spp. Polygo-Rhubarb. naceae.

110758. RHEUM PALMATUM L.

Received under the varietal name "przewalskii," for which a place of publication and a description have not been found.

110759. RHEUM PALMATUM TANGUTI-CUM Maxim.

A tall perennial up to 6 feet high, with large rounded cordate leaves. Native to northeastern Asia.

see For previous introduction 31035.

110760. RHEUM RHAPONTICUM L Common rhubarb.

110761. RHEUM UNDULATUM L. Rhubarb.

previous introduction 110628.

110762. SOLANUM CAPSICASTRUM Link. Solanaceae. False Jerusalem-cherry

110763. ARALIA sp. Araliaceae.

110764. SOLANUM DULCAMARA L. Sola-naceae. Bitter nightshade.

Albiflora.

#### 110765 to 110817.

From France. Seeds and bulblets presented by the Muséum d'Histoire Naturelle, Paris. Received April 26, 1935.

Introduced for Department specialists and, unless stated otherwise, the material was received as seeds.

110765 to 110786. ALLIUM spp. Liliaceae. Onion.

110765. ALLIUM ANGULOSUM L.

An onion originally from Tonkin, French Indo-China, the leaves of which are used like chives.

For previous introduction see 59347.

110766. ALLIUM CANADENSE L. Meadow garlic.

Bulblets received.

110767. ALLIUM CARINATUM L.

110768. ALLIUM DIOSCORIDIS Sibth. and Smith.

# 110765 to 110817—Continued.

A tall white-flowered onion up to 3 feet high, with long, broadly linear leeled leaves as long as the scape. The nodding umbel consists of 20 to 30 flowers. Native to France and Corsica.

For previous introduction see 95355.

110769. ALLIUM FALLAX Schult. f.

An Austrian allium 5 to 10 inches high, with linear leaves and lilac-purple flowers in a hemispherical head.

For previous introduction see 104883.

110770. ALLIUM FISTULOSUM L. Welsh onion.

110771. ALLIUM FLAVUM L.

110772. ALLIUM MOLY L. Lilv leek.

An allium with broad glaucous leaves and a scape 10 to 15 inches high, bearing a compact head of brightyellow flowers. Native to sewith the scale of Europe.

For previous introduction see 91381.

110773. ALLIUM MUTABILE Michx. Wild onion.

An allium with linear leaves about 1 foot long and a dense erect umbel of white, pink, or rose-colored flowers. Native to the southeastern United to States.

110774. ALLIUM NUTANS L.

A Siberian species with narrow leaves, all radical, and nodding heads of rosy-white flowers.

For previous introduction see 58688.

110775. ALLIUM OBLIQUUM L.

A species cultivated in Siberia as a substitute for garlic. It has narrowly egg-shaped bulbs and stems up to 3 feet in height.

For previous introduction see 73525.

110776. ALLIUM ODORUM L.

110777. ALLIUM OLERACEUM L.

Bulblets received.

110778. ALLIUM PANICULATUM L.

A Mediterranean allium up to 2 feet th. with linear half-terete leaves and purplish flowers.

For previous introduction see 66952. 110779. ALLIUM POLYPHYLLUM Kar. and Kir.

A Siberian species, 1 to 2 feet high, with flat, linear leaves and rose-col-ored flowers.

For previous introduction see 60230. 110780. ALLIUM ROTUNDUM L.

A Hungarian allium, about 2 feet high, with broadly linear leaves and a globular head of purple or rarely whitish flowers.

110781. ALLIUM SCHOENOPRASUM L. Chives.

110782. ALLIUM SPHAEROCEPHALON L.

For previous introduction and description see 110566.

# 110765 to 110817—Continued.

110783. ALLIUM STRICTUM Schrad.

An allium, native to Siberia, with several linear leaves on a stem over a foot high and an umbel of rose-colored flowers.

# 110784. ALLIUM SUBHIRSUTUM L.

A Mediterranean allium with narrow, hairy-margined leaves a foot long and white flowers.

For previous introduction see 91380.

#### 110785. ALLIUM URSINUM L.

A wild European onion which grows in large masses in the open woods. When in flower it is very effective clothing the ground with its broad green leaves, above which the numerous umbels of white flowers are borne on scapes a foot high.

For previous introduction see 78998.

#### 110786. ALLIUM VINEALE L.

Bulblets received.

For previous introduction and description see 110567.

# 110787. CARICA PAPAYA L. Papayaceae. Papaya.

110788. CARICA QUERCIFOLIA (St. Hil.) Benth, and Hook.

For previous introduction see 105864.

110789. CUCUMIS SATIVUS L. Cucurbitaceae. Cucumber.

110790 to 110792. Cucurbita spp. Cucurbitaceae.

110790. CUCURBITA MAXIMA Duchesne. Squash.

110791. CUCURBITA MOSCHATA Duchesne.
Cushaw.

110792. CUCURBITA PEPO L. Pumpkin. 110793 to 110801. FESTUCA spp. Poaceae. Fescue.

110793. FESTUCA ALOPECUROS Schousb.

For previous introduction and description see 110521.

110794. FESTUCA CAPILLATA Lam. Hair fescue.

110795. Festuca Dertonensis (All.) Asch. and Graebn.

An annual grass with decumbent stems about a foot high. Native to southern Europe.

110796. FESTUCA ELATIOR L. Meadow fescue.

110797. FESTUCA ELATIOR ARUNDINACEA (Schreb.) Wimm.

110798. FESTUCA MAIREI St. Yves.

For previous introduction see 110721.

110799. FESTUCA MYUROS L.

For previous introduction and description see 110722.

110800. FESTUCA OVINA DURIUSCULA (L.) Koch.

For previous introduction and description see 110217.

110801. FESTUCA SPADICEA L.

# 110765 to 110817-Continued.

110802. Catapodium tuberculosum Moris. Poaceae. Grass.

An annual grass about 8 inches high, with slender stems. Native to southern Europe.

For previous introduction see 74161.

110803. FESTUCA sp. Poaceae. Fescue.

110804. Festuca sp. Poaceae. Fescue.

110805 and 110806. Lycopersicon escu-Lentum Mill. Solanaceae. Tomato.

110807. Passiflora GRACILIS Jacq. Passifloraceae. Crinkled passionflower.

For previous introduction and description see 110601.

110808. PHASEOLUS LUNATUS L. Fabaceae. Lima bean.

110809. SCLEROPOA RIGIDA (L.) Griseb. Poaceae. Grass.

For previous introduction and description see 110555.

**110810** to **110817**. Solanum spp. Solana ceae.

110810. SOLANUM AURICULATUM Ait. Nightshade.

A shrubby perennial, 4 feet high, with large hairy mulleinlike leaves up to 7 inches long and small violet flowers in dense corymbs. Native to Madagascar.

For previous introduction see 104593.

110811. SOLANUM CALDASII Humb. and Bonnl.

A white-hairy perennial with unequally pinnatisect leaves 4 inches long and small flowers one-half inch across, in long-stalked racemes. Native to Ecuador.

For previous introduction see 104594.

110812. SOLANUM DULCAMARA L. Bitter nightshade.

110813. SOLANUM GRACILE Otto.

For previous introduction and description see 110659.

110814. SOLANUM HETERODOXUM Dun.

For previous introduction and description see 110660.

110815. SOLANUM SISYMBRIFOLIUM Lam.

For previous introduction and description see 110632.  $\,$ 

110816. SOLANUM SODOMEUM L. Nightshade.

A subtropical bushy evergreen about 3 feet high with small violet flowers. Native to the warmer regions of the Old World.

For previous introduction see 8881.

110817. SOLANUM TRIFLORUM Nutt.

For previous introduction see 104598.

110818 to 110821. SOLANUM TUBEROSUM L. Solanaceae. Potato.

From Norway. Tubers presented by the Åkervekstforsøkene Landbrukshøiskolen, Oslo. Received May 3, 1935.

# 110818 to 110821—Continued.

Introduced for Department specialists.

110818. No. 1.

110819, No. 2.

110820. No. 3. A new variety derived from a cross between *Hindenburg* and *Centifolia*. It is wart immune and resistant to late blight and black scab. It has also proved to be a heavy yielder with well-shaped tubers.

110821. No. 4. Centifolia.

# 110822 to 110829.

From Cuba. Seeds presented by R. M. Grey, Superintendent of the Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos, through F. G. Walsingham. Received April 27, 1935.

110822. Albizzia sp. Mimosaceae.

110823. ARCHONTOPHOENIX ALEXANDRAE (F. Muell.) Wendl. and Drude. Phoenicaceae. Palm.

A pinnate-leaved palm 70 to 80 feet high, with leaves several feet long and lanceolate, usually entire, leaflets up to 2 feet in length and whitish beneath. The yellow-green flowers are borne in a cluster about a foot long and are followed by small dry round fruits. It is native to Queensland, Australia.

For previous introduction see 104679.

110824. BIGNONIA MAGNIFICA Bull. Big noniaceae.

A vigorous climbing vine, native to Colombia, with attractive deep-green simple elliptic-ovate leaves and large trumpet-shaped flowers over 3 inches across. These range in color from mauve to purple red, the throat being primrose.

For previous introduction see 76488.

110825. CASSIA GRANDIS L. f. Caesalpiniaceae. Pink-shower.

A leguminous tree, 40 to 50 feet high, that produces masses of pale-pink flowers in the early spring before the leaves appear. Native to Panama.

For previous introduction see 106917.

110826 and 110827. COCHLOSPERMUM VITIFOLIUM (Willd.) Spreng. Cochlospermaceae.

From Cuba. Seeds presented by the Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos, through F. G. Walsingham. Received April 27, 1935.

A deciduous shrub or small tree, native to Central America, with grapelii'e leaves and bright-yellow flowers, sometimes 6 inches across, in large clusters.

For previous introduction see 93266.

110826. Cuban type.

110827. Panama type.

110828. LYCOSERIS OBLONGIFOLIA Rusby. Asteraceae.

A shrub about 8 feet high, with leathery lanceolate leaves, densely white-hairy beneath, and showy orange-yellow flower heads. Native to Guatemala.

110829. MYRCIARIA CAULIFLORA (Mart.) Berg. Myrtaceae. Jaboticaba.

A Brazilian tree up to 35 feet high, with narrowly elliptic acuminate leaves, short-pedicelled flowers produced directly

#### 110822 to 110829—Continued.

from the bark of the trunk and branches, and purplish-violet, globose edible fruits up to nearly 2 inches in diameter.

For previous introduction see 105745.

#### 110830 to 110832.

From Venezuela and Colombia. Bulbs collected by W. A. Archer, Bureau of Plant Industry. Received May 3, 1935.

Introduced for Department specialists.

110830. FURCRAEA sp. Amaryllidaceae.

No. 3193. Collected near Capacho, Tachira, Venezuela, March 12, 1935.

110831. GLADIOLUS PSITTACINUS Hook. Iridaceae. Parrot gladiolus.

No. 3262. Palmada San Jose. From a mountain plateau in Colombia, March 24, 1935. A gladiolus with a stout stem 3 feet or more high and usually four rigid swordlike leaves up to 2 feet long. The many-flowered spike reaches a foot or more in length. The flowers are a rich yellow, grained and overlaid with red, particularly about the margins of the segments.

For previous introduction see 57797.

110832. AMARYLLIS BELLADONNA L. Amaryllidaceae.

No. 3261. Azucana. From a paramo swamp in Colombia, March 24, 1935. Flowers pink and white.

110833. Furcraea cubensis (Jacq.) Vent. Amaryllidaceae.

From Haiti. Bulbils presented by Russell Bean. Received May 25, 1935.

Collected March 6, 1935, south of Fort Liberty Bay, Haiti, found growing on lime soil in partial shade. A nearly trunkless, succulent plant with lanceolate, brightgreen leaves 3 to 6 feet long which yield fiber softer and finer than sisal. The small greenish-white flowers are borne on a stalk sometimes 20 feet high. The bulbils are as plentiful as seeds.

For previous introduction see 33493.

110834 to 110837. AVENA SATIVA L. Poaceae. **Oats.** 

From the Union of Soviet Socialist Republics. Seeds presented by G. N. Shlykov, Department of New Cultures, Institute of Plant Industry, Leningrad. Received May 8, 1935.

Introduced for Department specialists.

110834. No. 3444. Zhemtshuzhina. From Vyatka.

110835. No. 8231. No. 26-2015. From Ukraine.

110836. No. 8232. No. 21–18. From Ukraine.

110837. No. 7237. Verkhnistchesky 053. From Ukraine.

# 110838 and 110839.

From Mexico. Seeds purchased from Dr. C. A. Purpus, Zacuapam, Huatusco, Vera Cruz. Received April 30, 1935.

110838. AECHMEA BRACTEATA (Sw.) Griseb. Bromeliaceae.

A West Indian epiphyte, with 12 to 20 spiny, oblong, radical leaves about 2 feet

# 110838 and 110839-Continued.

long and a showy spike of small yellow flowers on a stout scape up to 3 feet

110839. AECHMEA MEXICANA Baker.

A tropical epiphyte with a basal rosette of 20 to 30 large, fine-toothed leaves and a lax panicle of crimson flowers borne on a long stalk arising from the center of the plant. Native to central Mexico.

For previous introduction see 108016.

#### 110840 to 110844.

From Germany. Seeds presented by Gebrüder Dippe A. G., Quedlinburg. Received April 26, 1935.

Introduced for Department specialists.

110840. BETA VULGARIS L. Chenopogia. Common beet.

Delicacy. A blood-red table beet of excellent flavor.

110841. Brassica oleracea botrytis L. Brassicaceae. Cauliflower.

Success

110842. CUCUMIS SATIVUS L. Cucurbita-Cucumber. ceae.

Ideal. A pickling cucumber.

110843 and 110844. Phaseolus vulgaris L. Fabaceae. Common bean,

Stringless wax bushbeans.

110843. Dippegold. 110844. Superba.

#### 110845 to 110858.

From Colombia and Venezuela. Seeds collected by W. A. Archer, Bureau of Plant Industry. Received April 30, 1935. Introduced for Department specialists.

110845. BOCCONIA FRUTESCENS L. Papav-

No. 3280. Trompillo. Presented April 4, 1935, by Dr. Perez, Departamento Tollma, Colombia. A large showy shrub 10 feet high, with large deeply lobed attractive leaves which are pale beneath. The small greenish-yellow flowers are borne in great numbers in large pendent panicles often a foot long.

For previous introduction see 88211.

110846. HYLOCEREUS POLYRHIZUS (Weber)
Britt. and Rose. Cactaceae.
Nightblooming cereus.

No. 3268. Pitahaya. From the market at Bogotá, Colombia, March 27, 1935. A triangular-stemmed cactus, sometimes a shrub and in other situations a climbing vine, with large bright-red flowers. The plant is cultivated for its pale-yellow fruits which are about 5 inches long, something like an artichoke in appearance, with pulp of delicious flavor.

For previous introduction see 54973.

110847. CESTRUM MUTISH Willd. naceae.

No. 3222. Tinto. Pamplona, Colombia. March 23, 1935. A shrub 4 to 10 feet high, with oblong-acuminate leaves and 3222.pale-green flowers.

110848. CESTRUM SANTANDERIANUM Francey. Solanaceae.

No. 3255. Collected March 24, 1935, in a paramo swamp along the highway between Pamplona and Malaga, Colombia.

# 110845 to 110858—Continued.

A bushy shrub up to 20 feet high, with oblong or elliptic leaves about 5 inches long and pale greenish-yellow flowers in loose clusters in the upper axils. Native to northern South America.

110849. TEPHROSIA TOXICARIA (Sw.) Pers. Fabaccae.

No. 3279. Barbasco. From the Departamento del Hulla, Colombia, April 4, 1935. Presented by Dr. Pérez Arbalaez.

110850 and 110851. CUCUMIS MELO L. Cu-Melon.

From the Bogotá, Colombia market, March 27, 1935.

110850. No. 3269. 110851, No. 3270.

110852. PLATYMISCIUM DIADELPHUM Blake. Fabaceae.

No. 3214. Peraco. March 19, 1935. Outskirts of Cucuta, Colombia. A shrub 2 to 6 feet high, or sometimes a tree, found in dry semidesert areas growing among cacti.

110853. MAMMEA AMERICANA L. Clusia-Mamey.

No. 3271. Zapote mamey. From the market at Bogotá, Colombia, April 2, 1935. A tropical tree with glossy darkgreen foliage and large gray-green, edible. fruits.

For previous introduction see 98868.

110854. NICOTIANA TABACUM L. ceae. Common tobacco.

No. 3277. From La Uribe, near Bo-golá, Colombia, April 3, 1935. A culti-vated plant 15 feet high, with vermilion

110855. Passiflora sp. Passifloraceae.

No. 3267. Curuba de castilla. From the market at Bogotá, Colombia, March 27,

110856. PAULLINIA FUSCESCENS H. B. K. Sapindaceae.

No. 3207. From the outskirts of San Cristobal, Tachira, Venezuela, March 13, 1935. A twining vine, native to northern Brazil, with bright-red fruits.

110857. PHYLLANTHUS SALVIAEFOLIUS H. B. K. Euphorbiaceae.

No. 3273. Cedrillo, Barbasquillo, Chirrinchao. From La Uribe, near Bogotá, Colombia, April 3, 1935. A shrub 15 to 20 feet high, native to Colombia.

110858. Physalis sp. Solanaceae.

No. 3265. Uchuba. From the market at Bogotá, Colombia, March 27, 1935. A cultivated fruit, used for jellies and pre-

110859. LUPINUS sp. Fabaceae.

From Washington, D. C. Seeds presented by Dr. A. Hrdlička, Curator, Division of Physical Anthropology, United States National Museum. Received May 6, 1935. A pink lupine collected on Kodiak Island, Alaska, in the summer of 1934.

110860. Gossypium Kirkii Masters. Malvaceae.

From Trinidad, British West Indies. Seeds presented by Dr. S. C. Harland, Empire Cotton Growing Corporation, Cotton Re-search Station. Received April 27, 1935. Introduced for Department specialists.

#### 110860—Continued.

A bushy, somewhat climbing plant from eastern tropical Africa with palmately five-lobed leaves and light-yellow flowers.

For previous introduction see 80210.

110861. CYCAS SIAMENSIS Miquel. Cycadaceae.

From Burma, India. Seeds presented by W. V. Palmer, silviculturist, Mayayo. Received May 3, 1935.

A small eventually palmlike tree with a trunk 2 to 6 feet high, much swollen at the base. The stiffly spreading light-green, pinately compound leaves are 3 feet long, and the ovoid fruits, about 6 inches long, are covered with orange wool. Native to Siam.

For previous introduction see 102373.

110862. HETEROSPATHE ELATA Scheff. Phoenicaceae. Palm.

From Manila, Philippine Islands. Seeds presented by David Barry, Jr., Los Angeles, Calif. Received May 11, 1935.

Bongo. A tall unarmed palm with a straight slender stem and long pinnate leaves, growing in protected situations where the rainfall is evenly distributed. It is one of the most attractive and graceful palms and will make a good plant for the conservatory and possibly a good house plant. Native to Netherland India.

110863. ZEPHYBANTHES sp. Amaryllidaceae.

From Mexico. Bulbs purchased from Dr. C. A. Purpus, Zacuapam, Huatusco, Vera Cruz. Received May 11, 1935.

Introduced for Department specialists.

A species with white flowers.

# 110864 and 110865.

From Puerto Rico. Seeds presented by Atherton Lee, Director, Agricultural Experiment Station, Mayaguez. Received May 8, 1935.

Introduced for Department specialists.

110864. Cassia Nodosa Buch.-Ham. Caesalpiniaccae.

A moderate-sized, deciduous tree with long drooping branches and glossy bipinnate leaves. In the spring it bears a profusion of beautiful pink, rose-scented flowers in dense long-stalked racemes. The leaves and flowers appear at the same time. Native to northwestern India.

For previous introduction see 101435.

110865. ERYTHRINA POEPPIGIANA (Walp.)
O. F. Cook (E. micropteryx Poepp.).
Fabaceae.
Bucare.

 ${\bf A}$  handsome, tender, leguminous tree with showy red flowers; native to Peru.

For previous introduction see 102606.

110866. ZEPHYRANTHES TUBISPATHA (L'Herit.) Herb. Amaryllidaceae.

From the British West Indies. Bulbs presented by F. G. Harcourt, Agricultural Superintendent, Agricultural Department, Dominica. Received May 15, 1935.

Brufita blanca. A summer flowering plant with four or five narrow-linear leaves 5 to 12 inches long and a slender scape 4

# 110866—Continued.

inches long bearing a white flower about 2 inches in length. Native to the West Indies. For previous introduction see 107148.

110867. ILEX CORNUTA Lindl. and Paxt. Aquifoliaceae. Chinese holly.

Plants growing at the United States Plant Introduction Garden, Chico, Calif. Numbered in May, 1935, for convenience in distribution.

A seedling of P. I. 24638; this has a beautiful round habit of growth, and the large, attractive berries are parthenocarpic.

110868. Poa palustris L. Poaceae. Fowl meadow grass.

From Canada. Seeds presented by H. F. Roberts, University of Manitoba, Winnipeg. Received May 8, 1935.

For previous introduction see 104677.

# 110869 and 110870.

From Cuba. Seeds presented by R. M. Grey, Superintendent of the Atkins Institution of the Arnold Arboretum. Soledad, Cienfuegos, through F. G. Walsingham. Received May 10, 1935.

110869. HETEROPHRAGMA ADENOPHYLLUM (DC.) Seem. Bignoniaceae.

A handsome tree related to the catalpa, but adapted for cultivation in tropical regions only, as it is very susceptible to frost. It reaches a height of 30 to 50 feet, with large opposite pinnate leaves and woolly, brownish-yellow flowers in terminal panicles. Native to tropical Africa.

For previous introduction see 105788.

110870. Tecoma stans (L.) Juss. Bignoniaceae.

# 110871 to 110877.

From the Union of Soviet Socialist Republics. Seeds presented by the Botanic Garden, Samara 2. Received May 13, 1935. Introduced for Department specialists.

110871. ARTEMISIA GLAUCA Pall. Asteraceae.

A herbaceous perennial up to 2 feet high. Native to Siberia.

110872. ASTER HOLOPHYLLUS Hemsl. Asteraceae.

An annual or biennial, with oblonglinear puberulent leaves and small skyblue flower heads. Native to the Amur River region, Siberia.

110873. ASTRAGALUS ALOPECUROIDES L. Fabaceae. Foxtail milkvetch.

An erect pubescent Siberian species 2 to 5 feet high, with narrowly oval leaves and yellow flowers produced in thick oblong spikes.

For previous introduction see 66536.

110874. CAYLUSEA ABYSSINICA (Fres.) Fisch. and Mey. Resedaceae.

A bushy annual up to 3 feet high, with narrow leaves and large racemes of inconspicuous flowers. Native to Ethiopia.

110875. LATHYRUS sp. Fabaceae.

110876. Lycopersicon esculentum Mill. Solanaceae. Tomato.

#### 110871 to 110877—Continued.

110877. Lycopersicon esculentum Mill. Solanaceae. Tomato.

Reine de Hative.

# 110878 to 110882.

From the Union of Soviet Socialist Republics. Seeds presented by the Botanic Garden of the Academy of Sciences, Minsk. Received May 11, 1935.

Introduced for Department specialists.

110878. DESCHAMPSIA CAESPITOSA (L.)
Beauv. Poaceae. Tufted hairgrass.

110879 to 110882. Festuca spp. Poaceae. Fescue.

110879. FESTUCA OVINA L. Sheep fescue.

110880. FESTUCA OVINA DURIUSCULA (L.) Koch.

110881. FESTUCA OVINA GLAUCA (Lam.) Koch.

110882. FESTUCA OVINA SULCATA Hack.

#### 110883 to 110975.

From Colombia and Venezuela. Seeds collected by W. A. Archer, Bureau of Plant Industry. Received May 3, 1935.

Introduced for Department specialists.

110883. ABELMOSCHUS ESCULENTUS (L.) Moench. Malvaceae. Okra.

No. 3126. Quimbombo. From the market at Barquisimento, Venezuela, March 2, 1935. The seeds are roasted and ground to make a beverage like coffee.

110884. LEUCAENA GLAUCA (L.) Benth. Mimosaceae.

No. 3216. From Cucuta, Colombia, March 19, 1935.

For previous introduction see 94782.

110885. Acnistus sp. Solanaceae.

No. 3188. Uvita. Collected March 12, 1935, near Capacho, Tachira, Venezuela. A small tree 10 to 20 feet high, with white flowers. It is cultivated for its edible fruits.

110886. ALLIUM SCHOENOPRASUM L. Liliaceae. Chives.

No. 3168. Cebollin. Locally grown seed purchased March 7, 1935, at Casa de Hierro, a hostelry in the Andes, Venezuela.

110887. ALTHAEA ROSEA (L.) Cav. Malvaceae. Hollyhock.

No. 3148. From El Sol de los Andes, near San Cristobal, Tachira, Venezuela, March 8, 1935. A cultivated hollyhock with fringed pink petals.

110888. Ambrosia cumanensis H. B. K. Ambrosiaceae.

No. 3199. Altamisia. From San Cristobal, Tachira, Venezuela, March 13, 1935. A herbaceous perennial about 2 feet high. Native to Venezuela.

110889. Anethum graveolens L. Apiaceae. Dill.

No. 3130. *Hinojo*. From the market at Barquisimento, Venezuela, March 2. 1935. A cultivated plant, used medicinally and as a refreshing drink.

110883 to 100975-Continued.

110890. ASPIDOSPERMA Sp. Apocynaceae.

No. 3201. From San Cristobal, Tachira, Venezuela, March 13, 1935. A slender tree 20 feet high.

110891. BANISTERIOPSIS Sp. Malpighia-

No. 3117. Collected between Valencia and Guatoporo, Carabobo, Venezuela, February 26, 1935. A small shrub 2 to 3 feet high with semitwining branches.

110892. Banisteriopsis sp. Malpighiaceae.

No. 3192. From near Capacho, Tachira, Venezuela, March 12, 1935. A woody vine about 20 feet high.

110893 to 110895. BAUHINIA spp. Caesalpiniaceae.

110893 and 110894. BAUHINIA CUMANENSIS H. B. K.

Bejuca de cadena. Collected along the highway between Valencia and El Cambul, Carabobo, Venezuela, February 23, 1935. A shrubby climber about 30 feet long, native to Venezuela, with bifid ovate leaves and terminal racemes of small white fragrant flowers.

110893. No. 3085. 110894. No. 3098.

110895. BAUHINIA MOLLICELLA Blake.

No. 3179. Librito. From near Capacho, Tachira, Venezuela, March 12, 1935. A spiny tree about 20 feet high, with white flowers. Native to Venezuela

110896, BENINCASA HISPIDA (Thunb.) Cogn. Cucurbitaceae. Waxgourd.

No. 3135. Pepino extranjero. From the market at Barquisimento, Venezuela. March 2, 1935. A cultivated waxgourd 6 by 7 inches, covered with thick gray bloom. The white flesh smells like a cucumber. It is boiled as a vegetable, also used raw in salads. Probably introduced from China by the local Chinese.

For previous introduction see 105334.

110897. Bowdichia virgilioides H. B. K. Fabaceae.

No. 3120. Chaparro. Collected between Valencia and Guataporo, Carabobo, Venezuela, February 26, 1935. A small, usually crooked tree about 25 feet high, with leathery compound leaves and terminal panicles of small blue flowers, followed by seed pods which turn reddish when near maturity. Native to dry regions in Venezuela and Brazil.

For previous introduction see 109916.

110898. CENTROSEMA PUBESCENS Benth. Fabaceae.

No. 3218. Collected between Cucuta and Pamplona, Colombia, March 20, 1935.

For previous introduction see 110173.

110899 to 110901. BRASSICA spp. Brassicaceae.

110899 and 110900. Locally grown seed from Casa de Hierro, Chachopo, Merida, Venezuela, March 7, 1935.

110899. Brassica campestris L. Rutabaga.

No. 3164. Ruta.

# 110883 to 110975—Continued.

110900. BRASSICA OLERACEA BOTRYTIS L. Cauliflower.

No. 3167. Coliflor.

110901. BRASSICA Sp.

No. 3128. Mostaza. From the market at Barquisimento, Venezuela, March 2, 1935. A mustard cultivated for birdseed.

110902 and 110903. BUDDLEIA AMERICANA L. Loganiaceae.

A shrub or small tree with fragrant small yellow flowers in panicled spikes. Native to tropical America.

110902. No. 3071. Collected on the road between Caracas and Cabo Blanco, Federal District, Venezuela, February 16, 1935.

110903. No. 3189. Salvia, Santa Maria. Collected near Capacho, Tachira, Venezuela, March 13, 1935.

110904. CAJANUS INDICUS Spreng. Fabaceae. Pigeonpea.

No. 3187. Quinchocho. From near Capacho, Tachira, Venezuela, March 12, 1935. A shrub 6 to 10 feet high with yellow flowers. It is cultivated and used as a food.

110905. CALOTROPIS PROCERA Ait. Asclepiadaceae.

No. 3067. Collected on the road between Caracas and Cabo Blanco, Federal District, Venezuela, February 15, 1935. The giant milkweed, which becomes a shrub 6 to 15 feet high. The stems furnish a fine fiber, and the floss from the fruits is used for stuffing mattresses. Introduced from India, the plant has now become naturalized in Venezuela.

For previous introduction see 73507.

110906. CANAVALIA MACROPLEURA Piper. Fabaceae.

No. 3041. From near Sabana Grande, Federal District, Venezuela, February 12, 1935. A woody vine native to Venezuela.

110907. CAPSICUM sp. Solanaceae.

No. 3136. From Barquisimento. Venezuela, March 3, 1935. A cultivated ornamental.

110908. CARDIOSPERMUM GRANDIFLORUM Sw. Sapindaceae.

No. 3115. Farolita de la virgen. Collected between Valencia and Guataporo, Venezuela, February 26, 1935. A woody vine up to 25 feet long, with biternate leaves about 8 inches long and white flowers in axillary corymbs. Native to Jamaica.

110909. URVILLEA ULMACEA H. B. K. Sapindaceae.

No. 3186. From near Capacho, Tachira, Venezuela, March 12, 1935. A large climbing shrub with tendrils, trifoliolate leaves, and axillary racemes of small whitish flowers. Native to Venezuela

em.

110910 and 110911. CARICA PAPAYA L. Papayaceae.

Papaya.

From the market at Barquisimento, Venezuela, March 2, 1935. 110883 to 110975—Continued.

110910. No. 3132. Lechosa. A cultivated fruit 13 by 3 inches, with pale cream-colored flesh.

110911. No. 3131. Lechosa. A cultivated fruit 8 by 4 inches, five-ribbed, with orange-colored flesh.

110912. Cassia sp. Caesalpiniaceae.

No. 3194. Brusca negra. From near Capacho, Tachira, Venezuela, March 12, 1935.

110913. PHYTOLACCA ICOSANDRA L. Phytolaccaceae.

No. 3173. Tabonera. From Casa de Hierro, Chachopo, Merida, Venezuela, March 7, 1935. An erect ornamental perennial, somewhat succulent, 3 to 10 feet high, with elliptic-ovate leaves 3 to 12 inches long, greenish flowers, and racemes of black berries. Native to tropical America.

110914. CLEOME ACULEATA L. Capparidaceae.

No. 3206. From near San Cristobal, Tachira, Venezuela, March 13, 1935. An annual up to 3 feet high, with digitately three-foliolate leaves and small solitary white flowers. Native to tropical America.

For previous introduction see 107762.

110915. CLITORIA DENDRINA Pittier. Fabaceae.

No. 3092. Along the highway between Valencia and El Cambul, Carabobo, Venezuela, February 23, 1935. A shrubby tree about 15 feet high, with small dark-purple flowers in dense terminal clusters which appear before the trifoliolate leaves. Native to Venezuela.

110916. TEPHROSIA CINEREA (L.) Pers. Fabaceae.

No. 3212. From a dry river bed near San Cristobal, Tachira, Venezuela, March 13, 1935. A shrubby perennial with a thick rootstalk, slender ascending stems 3 to 4 feet long, and small purplish flowers in rather dense showy racemes. Native to the West Indies.

For previous introduction see 109928.

110917. BENTHAMANTHA CARIBAEA (Jacq.) Kuntze. Fabaceae.

No. 3154. Near El Cobre, Tachira, Venezuela, along the roadside, March 8, 1935. A shrub up to 6 feet high.

For previous introduction see 109929.

110918. TEPHROSIA TOXICARIA (Sw.) Pers. Fabaceae.

No. 3200. Barbasco de raiz. San Cristobal, Tachira, Venezuela, March 13, 1935.

For previous introduction and description see 110309.

110919 to 110921. Croton spp. Euphorbiaceae.

110919. CROTON PUNGENS Jacq.

No. 3223. Collected between Cucuta and Pamplona, Colombia, March 20, 1935. A small shrub about 6 feet high, native to Brazil, with small creamcolored flowers.

# 110883 to 110975-Continued.

110920. CROTON GOSSYPHFOLIUS Vahl.

No. 3190. Near Capacho, Tachira, Venezuela, March 12, 1935. A slender tree up to 45 feet high. Native to Trinidad.

110921. CROTON DOLICHOSTACHYUS Pittier.

No. 3146. Pringamoza. Collected between Barquisimento and Carora, Lara, Venezuela, March 6, 1935. A shrub or small tree up to 9 feet high. Native to Venezuela.

110922 and 110923. CUCURBITA MOSCHATA Duchesne. Cucurbitaceae. Cushaw.

Aullama. From the market at Barquisimento, Venezuela, March 2, 1935. A small squash, 12 by 8 inches, with green skin covered with yellow blotches.

110922. No. 3133. 110923. No. 3134.

110924. DALBERGIA sp. Fabaceae.

No. 3202. From San Cristobal, Tachira, Venezuela, March 13, 1935. A large tree.

110925. DATURA ARBOREA L. Solanaceae. Floripondio.

No. 3224. Collected between Cucuta and Pamplona, Colombia, March 20, 1935. A shrub or small tree with ovate-lanceolate leaves and large trumpet-shaped, greenish-white, fragrant flowers.

For previous introduction see 91414.

110926. DAUCUS CAROTA L. Apiaceae. Carrot.

No. 3163. Zanahoria. Chachopo, Merida, Venezuela. Locally grown seed purchased at Casa de Hierro, Venezuela, March 7, 1935.

110927 and 110928. ESPELETIA spp. Asteraceae.

Frailejon. An attractive yellow-flowered shrub up to 4 feet high, found growing in paramos, where it makes small thickets. The dense wool that covers the leaves is used in making cushions and mattresses.

110927. No. 3157. From the roadside near El Cobre, Tachira, Venezuela, March 8, 1935.

110928. No. 3243. From the highway beween Pamplona and Malaga, Colombia, March 24, 1935.

110929. Ficus angustifolia Blume. Moraceae.

No. 3140. Matapolo. From near Timotes, Venezuela, March 6, 1935. A woody vine up to 20 feet long. Native to the Moluccas, Netherland India.

110930. GLIRICIDIA SEPIUM (Jacq.) Kunth. Fabaceae.

No. 3119. Mataraton. Collected between Valencia and Guataporo, Carabobo, Venezuela, February 26, 1935. A small tree up to 30 feet high, with alternate compound leaves. The flowers resemble those of the black locust in size, but are pink.

For previous introduction see 106990.

110931. Gossypium Hirsutum L. Malvaceae. Upland cotton.

#### 110883 to 110975—Continued.

No. 3217. Collected between Cucuta and Pamplona, Colombia, March 20, 1935. Scanty plants 2 feet high; either wild or escaped from cultivation.

For previous introduction see 102751.

110932. Gossypium sp. Malvaceae.

No. 3221. Collected between Cucuta and Pamplona, Colombia, March 20, 1935. Plants 3 feet high, probably escaped from cultivation.

110933 and 110934. Hordeum vulgare L. Poaceae. Barley.

Cebada. From the market at Barquisimento, Venezuela, March 2, 1935. Used for making soft drinks.

110933, No. 3124, 110934, No. 3125,

110935. JATROPHA URENS L. Euphorbia-

No. 3144. Pringamoza. Collected between Barquisimento and Carora, Lara, Venezuela, March 6, 1935. A shrubby perennial up to 10 feet high, covered with stinging hairs; with ternate leaves 6 to 15 inches across and small sweet-scented white flowers. Native to tropical America.

110936 to 110938. LACTUCA SATIVA L. Cichoriaceae. Garden lettuce.

110936. No. 3165. Lechuga laza. From Casa de Hierro, Chachopo, Merida, Venezuela, March 7, 1935. A curly lettuce.

110937. No. 3166. Lechuga blanco. From Casa de Hierro, Chachopo, Merida, Venezuela, March 7, 1935. A white lettuce.

110938. No. 3137. Lechuga. From the market at Barquisimento, Venezuela, March 2, 1935.

110939. LINUM USITATISSIMUM L. Linaceae. Flax.

No. 3129. Linaza. From the market at Barquisimento, Venezuela, March 2, 1935.

For previous introduction see 109970.

110940. LONCHOCARPUS SERICEUS (Poir.) H. B. K. Fabaceae.

No. 3185. Zapato. From near Capacho, Tachira, Venezuela, March 12, 1935. A slender tree up to 60 feet high with racemes of lavender flowers.

For previous introduction see 106996.

110941. LONCHOCARPUS PUNCTATUS H. B. K. Fabaceae.

No. 3213. Peraco. Near San Antonio, Venezuela, March 18, 1935. A small tree or shrub about 9 feet high. Native to Venezuela.

110942 to 110944. Lupinus spp. Fabaceae.

110942. LUPINUS Sp.

No. 3156. Chocho. From paramo near Timotes, Merida, Venezuela, March 7, 1935, at 13,000 feet altitude. An herb 2 feet high, with purple flowers.

110943 and 110944. LUPINUS PANICULATUS Desr.

# 110883 to 110975-Continued.

A stout perennial lupine over 2 feet high, with lanceolate leaflets and racemes of showy purple flowers, the standards pink tipped and with a yellow margin. Native to Peru.

110943. No. 3155. Chocho, Quinchocho. From Sabana Grande, Venezuela, March 8, 1935.

110944. No. 3196. Tuna. From San Cristobal, Tachira, Venezuela, March 13, 1935.

110945 and 110946. LYCOPERSICON ESCU-LENTUM Mill. Solanaceae. Tomato.

110945. No. 3159. From Sabana Grande, Merida, Venezuela, March 8, 1935. Escaped from cultivation; fruit up to 1 inch in diameter.

110946. No. 3215. Ovita. From the Cucuta market, Colombia, March 19, 1935. A small, red, five-ribbed to mato with scanty seeds, dry pulp, and tough skin. Said to be a local variety.

110947. NICOTIANA TABACUM L. Solanaceae. Tobacco.

No. 3162. A cultivated tobacco purchased at the Casa de Hierro, Chachopo, Merida, Venezuela, March 7, 1935. Locally grown seed.

110948. OENOTHERA TETRAPTERA Cav. Onagraceae.

No. 3242. From the highway between Pamplona and Malaga, Colombia, March 24, 1935. A perennial about a foot high, with alternate subpinnate leaves and large, solitary flowers, white, becoming rose with age. Native to Mexico.

110949. ORTHROSANTHUS CHIMBORACENSIS (H. B. K.) Baker. Iridaceae.

No. 3151. Paramo near Bailadores, Tachira, Venezuela, March 8, 1935. An irislike plant, native to the Andes, where it grows at the frost line, 12,500 feet or more altitude. It has a stout woody rhizome, grasslike leaves a foot or more long, and small blue flowers, opening in succession along a lax narrow panicle.

110950 and 110951. PASSIFLORA spp. Passifloraceae.

From the market at San Cristobal. Venezuela, March 9, 1935. A cultivated vine. The fruits are used in making a refreshing drink.

110950. PASSIFLORA Sp.

No. 3176. Parchita.

110951. PASSIFLORA Sp.

No. 3175. Curuba. A pale creamcolored, faintly scented fruit, 3 inches long and 2 inches in diameter, with seeds enclosed in orange-colored pulp which smells and tastes something like grapefruit.

110952. PAULLINIA ERIANTHA Benth. Sapindaceae.

No. 3183. Collected near Capacho, Tachira, Venezuela, March 12, 1935. A woody vine, native to Colombia and Peru.

110953. PHYSALIS sp. Solanaceae.

No. 3237. Collected along the highway between Pamplona and Malaga, Colombia, March 24, 1935. An herb I foot high; the flowers are cream-colored with a brown star-shaped marking at the base of the corolla.

110883 to 110975—Continued.

110954 to 110956. PIPER spp. Piperaceae.

110954. PIPER TUBERCULATUM Jacq.

No. 3118-A. Between Valencia and Guataporo, Carabobo, Venezuela, February 28, 1935. A slender shrub 10 feet high.

110955 and 110956. From San Cristobal, Tachira, Venezuela, March 13, 1935.

110955. PIPER Sp.

No. 3209. Cordoncillo.

110956. PIPER sp.

No. 3211.

110957 and 110958. SAMANEA SAMAN (Jacq.) Merr. Mimosaceae.

The raintree of the West Indies. A large spreading tree up to 60 feet high, native to Central America, but widely distributed throughout the Tropics as an ornamental shade tree.

For previous introduction see 99004.

110957. No. 3122. Saman. Collected between Valencia and Guataporo, Carabobo, Venezuela, February 26, 1935.

110958. No. 3208. Saman. Collected at San Cristobal, Tachira, Venezuela, March 13, 1935.

110959. POLYGONUM PUNCTATUM Ell. Polygonaceae. Fleeceflower.

No. 3198. From near San Cristobal, Tachira, Venezuela, March 13, 1935, found growing in a ditch. A slender shrub 2 to 3 feet high with white flowers.

For previous introduction see 106580.

110960. PSIDIOPSIS MORITZIANUM Berg. Myrtaceae.

No. 3150. Siete curos. From Sabana Aura, Tachira, Venezuela, March 8, 1935. An ornamental evergreen shrub about 6 feet high, with small sweet aromatic guavalike fruits.

110961. RUPRECHTIA sp. Polygonaceae.

No. 3191. From near Capacho, Tachira, Venezuela, March 12, 1935. A tree about 15 feet high.

110962 to 110965. SERJANIA spp. Sapinda-

110962. SERJANIA RHOMBEA Radlk.

No. 3184. Near Capacho, Tachira, Venezuela, March 12, 1935. A climbing shrub, native to Venezuela.

110963 and 110964. SERJANIA GLABRATA H. B. K.

A climbing shrub with alternate biternate leaves. Native to the temperate regions of Peru.

For previous introduction see 109871.

110963. No. 3177. Near Capacho, Tachira, Venezuela, March 12, 1935.

110964. No. 3116. Collected between Valencia and Guataporo, Carabobo, Venezuela, February 26, 1935. A vine 30 feet high.

110965. SERJANIA Sp.

No. 3178. From near Capacho, Tachira, Venezuela, March 12, 1935.

#### 110883 to 110975—Continued.

Pedalia-110966. SESAMUM ORIENTALE L. Sesame. ceae

No. 3123. Ajonjali. From the market Barquisimento, Venezuela, March 2, 1935.

For previous introduction see 104263.

110967, SOLANUM SD. Solanaceae.

No. 3195. *Tuna*. From San Cristobal, Tachira, Venezuela, March 13, 1935. An herb 2 feet high, with ovoid or ellipsoid orange fruits.

110968. TAGETES APETALA Posada. Aster-

No. 3147. Ruda de perro, Amapola. From El Sol de los Andes, near San Cristobal, Tachira, Venezuela, March 8, 1935. An erect annual, native to Colom-bia at an altitude of about 5,500 feet.

110969. TRAGOPOGON PORRIFOLIUS Vegetable-oyster. choriaceae.

No. 3169. From Casa de Hierro, Chachopo, Merida, Venezuela, March 7, 1935.

110970. TRIPLARIS FELIPENSIS Polygonaceae.

No. 3197. Palo Santo. From San Cristobal, Tachira, Venezuela, March 13, 1935. A tree up to 20 feet high, with ovate-elliptic leaves about 1 foot long. Native to Venezuela at about 1,000 feet altitude.

110971 to 110975. ZEA MAYS L. Poaceae Corn.

Cultivated varieties used for food.

110971. No. 3203. Blandito. From San Cristobal, Tachira, Venezuela, March 13, 1935.

110972. No. 3161. Chiquito. From Tovar, Tachira, Venezuela, March 7, 1935. A white variety which produces well in cold climates. Stalks 2 to 3 feet high, ears 6 to 8 inches long, 1 to 3 per stalk.

110973. No. 3138. Cariaca. From the market at Barquisimento, Venezuela, March 2, 1935.

110974. No. 3204. Blanco. From San Cristobal, Tachira, Venezuela, March 13, 1935.

110975. No. 3160. Chiquito, Chimirito, Perrito. From Tovar, Tachira, Vene-zuela, March 7, 1935. A yellow form of No. 3161. [See 110972 for description.]

# 110976 to 110989.

Turkistan.

From the Union of Soviet Socialist Republics. Seeds presented by W. Kern, Botanic Garden, Academy of Sciences, Alma-Ata, Kazakstan. Received May 9, 1935.

Introduced for Department specialists.

110976 to 110978. ALLIUM spp. Liliaceae. 110976. ALLIUM GLACIALE Vved.

An allium with terete stems about 1 foot high, linear leaves, and dense umbels of small pink flowers. Native to Native to

110977. ALLIUM MONADELPHUM Turcz.

An allium, native to eastern Siberia, with terete leaves and a scape over 1 foot high, with a dense umbel of small rose-purple flowers.

# 110976 to 110989-Continued.

110978. ALLIUM PLATYSPATHUM Schrenk.

An allium with a scape 3 to 6 inches high, several linear leaves, and an umbel of small purple flowers. Native to Turkistan.

110979. ALLIUM Sp.

110980. FESTUCA ELATIOR AR (Schreb.) Wimm. Poaceae. ARUNDINACEA Fescue.

For previous introduction see 110797.

110981. FESTUCA OVINA SULCATA Hack.
Fescue.

For previous introduction see 110882.

110982 to 110984. IRIS spp. Iridaceae.

110982. IRIS SONGARICA Schrenk,

A densely tufted Apogon iris about 1 foot high, with narrow-linear, strongly ribbed leaves up to a foot in length and two to three lilac-colored flowers over an inch long. Native to central

For previous introduction see 110132.

110983. IRIS Sp.

110984. IRIS SD.

110985. PICEA SCHRENKIANA Fisch. and Mov Pinaceae. Schrenk spruce.

A large tree up to 100 feet high, with ashy gray branchlets, often narrowly pyramidal in habit. The dark-green, rigid leaves are over an inch long, and the dark shining brown cylindric cones are 3 to 5 inches long and an inch in diameter. Native to central Asia at altitudes between 4,500 and 10,000 feet.

For previous introduction see 52659.

110986 to 110989. RHEUM spp. Polygona-Rhubarb. ceae.

110986 and 110987. RHEUM SONGARICUM Schrenk.

coarse herbaceous perennial with deeply cordate, reniform leaves. Native to alkaline deserts in central Asia.

For previous introduction see 110147.

110988. RHEUM WITTROCKII Lundstroem.

tall broad-leaved European species with light-pink flowers and fruits.

For previous introduction see 69107. 110989. RHEUM sp.

# 110990 to 111018.

From Colombia. Seeds collected by W. A. Archer, Bureau of Plant Industry. Re-ceived May 10, 1935.

Introduced for Department specialists.

110990. Bocconia frutescens L. Papaveraceae.

No. 3308. Trompeto. Collected along the railroad track between Anolaima and Cachipay, Cundinamarca.

For previous introduction and description see 110845.

110991. Bomarea sp. Amaryllidaceae.

No. 3275. Pecosa. From La Uribe, near Bogotá, April 3, 1935. A climbing plant which grows 20 feet high, with golden-brown flowers marked with darker

#### 110990 to 111018—Continued.

110992. DIOCLEA SERICEA H. B. K. Faba-

No. 3291. From La Esperenza, Cundinamarca, April 11, 1935. A tender shrubby twiner about 4 feet long, with ternate leaves and long axillary racemes of showy lavender flowers. Native to Colombia.

110993. CANAVALIA sp. Fabaceae.

No. 3345. From La Esperenza, Cundinamarca, April 12, 1935.

110994. Сакіса РАРАЧА L. Рарауасеае. Рарауа.

No. 3292. From La Mesa, Cundinamarca, April 13, 1935. A cultivated papaya.

110995. CHAMAECRISTA FLAVICOMA (H. B. K.) Greene. Caesalpiniaceae.

No. 3303. From Anolaima, Cundinamarca, April 16, 1935. A small yellow-flowered shrub 2 to 3 feet high. Native to Venezuela.

110996. CISSAMPELOS PAREIRA L. Menispermaceae.

No. 3290. From La Esperenza, Cundinamarca, April 11, 1935. A climbing shrub, with peltate, downy leaves and small-greenish flowers in axillary cymes, followed by red drupes. Native to tropical America.

110997 and 110998. CLIBADIUM SURINA-MENSE L. Asteraceae.

A plant 4 to 7 feet high, with white flowers occurring in thick stands.

For previous introduction see 108257.

110997. No. 3281. From La Esperenza, Cundinamarca, April 11, 1935.

110998. No. 3305. From Anolaima, Cundinamarca, April 16, 1935.

110999. CENTROSEMA PLUMIERI (Turp.) Benth. Fabaceae.

No. 3338. From La Esperenza, Cundinamarca, April 11, 1935. A tropical ornamental vine, native to Brazil, with red and white flowers. It is of value as a green manure.

For previous introduction see 109917.

111000. CROTON GOSSYPHFOLIUS Vahl. Euphorbiaceae.

No. 3287. From La Esperenza, Cundinamarca, April 11, 1935.

For previous introduction and description see 110920.

111001. ERYTHRINA CORALLODENDRUM L. Fabaceae. Coraltree.

No. 3311. Chochito, Cortes, Perez Collected April 16, 1935, along the railroad track between Anolaima and Cachipay, Cundinamarca. A Central American tree about 20 feet high, with showy crimson flowers in loose racemes. It is cultivated in Colombia as an ornamental and for living fence posts.

111002. GALACTIA VELUTINA Benth. Fabaceae.

No. 3288. From La Esperenza, Cundinamarca, April 11, 1935. A slender perennial climber, seft-hairy throughout with oval-obtuse leaflets and purple flowers. Native to British Guiana.

For previous introduction see 108220.

110990 to 111018—Continued.

111003. NICOTIANA sp. Solanaceae.

No. 3296. Tabaquilla. From Anolaima, Cundinamarca, April 16, 1935. A cultivated ornamental herb 3 feet high, with the basal leaf up to 6 inches long and viscid-pubescent as in tobacco. The flowers are crimson.

111004. NICOTIANA ALATA Link and Otto. Solanaceae. Winged tobacco.

No. 3297. Tabaquilla. From Anolaima, Cundinamarca, April 16, 1935. A cultivated ornamental herb, 3 feet high, with viscid leaves and white flowers which are deep plnk inside.

For previous introduction see 42334.

111005 to 111008. Passiflora spp. Passifloraceae.

From Mesa, Cundinamarca, April 13, 1935.

No. 3293. Fruits slightly ribbed, golden yellow, oval, 2½ by 3½ inches.

111005. PASSIFLORA Sp.

111006. PASSIFLORA Sp.

No. 3294. Curuba de India. Fruits 2¾ by 3¾ inches; ground color pale greenish cream, with bright red blush which may cover the major part of the surface.

111007. Passiflora sp.

No. 3295. Curuba de India. Fruits the same size and shape as 3294 (PI. 111006), but pale green without the red blush.

111008. PASSIFLORA RUBRA L.

No. 3309. From the railroad between Anolaima and Cachipay, Cundinamarca, April 17, 1935. A softly pubescent vine with crescent-shaped, cordate leaves 2 to 4 inches broad, greenish flowers 2 inches across, and red fruits 2 inches long. Native to the West Indies.

For previous introduction see 102353.

111009 and 111010. PHYLLANTHUS ACUMINATUS Vahl. Euphorbiaceae.

From La Esperenza, Cundinamarca, April 11, 1935. A large shrub or sometimes a tree 25 feet high, with ovateacuminate leaflets 1 inch long and small greenish flowers.

For previous introduction see 106936.

111009. No. 3282. 111010. No. 3289.

Nos. 111011 to 111013 were collected at La Uribe, near Bogotá, April 3, 1935.

111011. PIPER sp. Piperaceae.

No. 3274. Cordoncillo. A shrub 10 feet high with small greasy, globular fruits.

111012 to 111014. POLYGONUM spp. Polygonaceae. Fleeceflower.

111012. POLYGONUM SAGITTATUM L.

No. 3276. Barbasco. A form with pink flowers.

111013. POLYGONUM HYDROPIPEROIDES Michx.

No. 3278. Barbasco. A form with white flowers.

#### 110990 to 111018—Continued.

111014. POLYGONUM PUNCTATUM Ell.

No. 3312. Barbasco. From the rail-road between Anolaima and Cachipay, Cundinamarca, April 17, 1935. A plant with red stems found on small knolls, but not near water. The dry plant has a peppery odor.

For previous introduction and description see 110959.

111015. POTHOMORPHE PELTATA (L.) Mig. Piperaceae.

No. 3285. From La Esperenza, Cundinamarca, April 11, 1935. An erect shrub with rounded-cordate, peltate leaves, closely allied to Piper. Native to western India

For previous introduction see 107767.

111016. TAGETES APETALA Posada. Asteraceae.

No. 3286. Ruda. From La Esperenza, Cundinamarca, April 11, 1935.

For previous introduction and description see 110968.

111017. VIGNA PILOSA (Klein) Baker. Fa-Cowpea.

No. 3283. From La Esperenza, Cundinamarca, April 11, 1935.

For previous introduction see 30963.

111018. ZEA MAYS L. Poaceae.

No. 3337. From Cachipay, Cundinamarca, April 17, 1935. A cultivated popcorn.

#### 111019 to 111023.

From the Union of Soviet Socialist Republics. Bulbs presented by the Plant Quarantine Board, Sukhum, Abkhasia, Transcaucasus. Received May 20, 1935.

Bulbs collected in the Abkhasian Mountains and in the plains and deserts of Turkistan; introduced for Department specialists.

111019. COLCHICUM sp. Melanthiaceae.

111020. GALANTHUS sp. Amaryllidaceae.

111021. MUSCARI sp. Liliaceae.

111022. PANCRATIUM sp. Amaryllidaceae.

111023. POLIANTHES TUBEROSA L. Ama-Tuberose.

For previous introduction see 21635.

111024. Solanum tuberosum L. Sola-Potato. naceae.

From Colombia. Tubers collected by W. A. Archer, Bureau of Plant Industry. Received May 25, 1935.

Introduced for Department specialists.

No. 3373. Papa criolla amarilla. Frem the market at Popayan, Cundinamarca, May 7. 1935.

111025. CITRUS GRANDIS (L.) Osbeck. Grapefruit. Rutaceae.

From Brazil. Budsticks presented by Dr. Agesilau Bitancourt, Subdirector de Bio-logia Vegetal, São Paulo. Received May 25, 1935.

Introduced for Department specialists.

Paraiso. A sweet grapefruit with a rind of uniform thickness, pink flesh, and rather coarse juice vesicles. Some of the fruits weigh over 5 pounds.

111026. ZEPHYRANTHES Sp. Amarylli-

From Colombia. Bulbs collected by W. A. Archer, Bureau of Plant Industry. Received May 22, 1935.

Introduced for Department specialists.

No. 3307. Collected along the railroad between Anolaima and Cachipay, Cundinamarca, April 17, 1935. A pink-flowered form.

# 111027 and 111028.

From the Straits Settlements. Seeds presented by the Director, Botanic Gardens, Singapore. Received May 21, 1935.

Introduced for Department specialists.

111027. CALAMUS SCIPIONUM Lour. Phoenicaceae. Rattan palm.

A climbing palm 40 to 50 feet high, with alternate pinnatisect leaves 4 to 5 feet long; the male spadix is 20 feet long and the female 10 feet. This rattan is native to Malaysia, where the canes are used for making furniture, for which purpose it is especially suitable because of the ease with which it splits.

For previous introduction see 51708.

111028. DAEMONOROPS GRANDIS (Griff,) Mart. Phoenicaceae.

A climbing palm from the Malay Peninsula, with very stout, more or less prickly stems and pinnatisect leaves about 15 feet long, with narrow leaflets over a foot in length.

111029 to 111033. PISTACIA VERA L. Anacardiaceae. Pistachio.

From the Union of Soviet Socialist Republics. Seeds presented by A. M. Popov, Institute of Plant Industry, of the Lenin Academy of Agricultural Sciences, Leningrad. Received May 20, 1935.

Introduced for From Azerbaijan. for Department scientists.

111029. No. 1668. 111032. No. 1672.

111030. No. 1670. 111033. No. 1669.

111031, No. 1671.

#### 111034 to 111039.

From Colombia. Seeds collected by W. A. Archer, Bureau of Plant Industry. Received May 16, 1935.

Introduced for Department specialists,

111034 to 111036. TEPHROSIA Spp. ceae.

111034. TEPHROSIA CINEREA (L.) Pers.

No. 3342. Barbasco. From Tocaima, Cundinamarca, April 19, 1935.

For previous introduction and description see 110916.

111035. TEPHROSIA TOXICARIA (Sw.) Pers.

No. 3350. Barbasco. From Obanda, April 6, 1935.

For previous int scription see 110918. introduction and de-

111036. TEPHROSIA Sp.

No. 3352. *Barbasco*. From Valle de Cauca, Huila, April 1935.

# 111034 to 111039—Continued.

111037. Passiflora antioquiensis Karst. Passifloraceae.

No. 3344. Curuba de Antioquia. From La Mesa, Cundinamarca, April 20, 1935. A woody vine with deeply three-lobed leaves and large purple flowers, solitary in the leaf axils. It is cultivated for its edible, spindle-shaped green fruits over 4 inches long and 1½ inches in diameter. Native to Colombia.

111038. PAULLINIA sp. Sapindaceae.

No. 3339. From Tocaima, Finca Chucunday, Cundinamarca, April 19, 1935. A climbing shrub whose red fruits are borne in clusters on the stem.

111039. POLYGONUM sp. Polygonaceae.

No. 3351. Barbasco. From Neiva, Huila, April 6, 1935.

#### 111040 to 111103.

From India. Seeds presented by the Lloyd Botanic Garden, Darjeeling, at the request of the Director of the Botanical Survey of India, Calcutta. Received May 13, 1935.

Introduced for Department specialists.

111040, CLEMATIS BUCHANIANA DC. Ranunculaceae.

A vigorous Himalayan species which will cover a large wall space with buoyant hairy leaves and in September is covered with cymes of pendent, fragrant, whitish-yellow flowers.

For previous introduction see 52676.

111041. CLEMATIS CONNATA DC. Ranunculaceae.

A large woody climbing vine native to the temperate Himalayas at altitudes between 4,000 and 10,000 feet. The leaves are made up of three to seven broadly cordate leaflets 2 to 4 inches long, with coarsely serrate or three-lobed margins, and the small creamy tubular flowers are borne in large panicles.

For previous introduction see 102755.

111042. CREPIS GLOMERATA (Decaisne) Benth. and Hook. Cichoriaceae.

A herbaceous perennial up to 6 inches high, with variable foliage and many densely crowded heads of yellow flowers. Native to the Himalayas between 13,000 and 17,000 feet altitude.

111043. CRYPTOLEPIS ELEGANS Wall. Asclepiadaceae.

A slender climber with oblong or linear-oblong leaves over 2 inches long and fragrant yellow flowers in axillary and terminal cymes. Native to eastern and northeastern India.

For previous introduction see 47669.

111044. CYNOGLOSSUM FURCATUM Wall. Boraginaceae.

A perennial, native to India, with numerous stems from a rosette of lanceolate, soft-haired, entire leaves. The small blue flowers are borne in long slender clusters similar to those of the forget-menot.

For previous introduction see 76034.

# 111040 to 111103-Continued.

111045. EMBELIA FLORIBUNDA Wall. Myrsinaceae.

A large evergreen woody climber with narrow leaves over 8 inches long and large, axillary, bushy racemes of very small white flowers. Native to northeastern India.

For previous introduction see 47677.

111046. ERIGERON Sp. Asteraceae.

111047. EUPHORBIA SIKKIMENSIS Boiss. Euphorbiaceae.

A stout perennial 3 to 4 feet high, native to the Sikkim Himalayas at altitudes of 8,000 to 10,000 feet. The linear-lanceolate, glabrous leaves are 2 to 4 inches long, and the small inconspicuous flowers are surrounded by broad ovate yellow bracts.

For previous introduction see 102759.

111048. GAULTHERIA NUMMULARIOIDES Don. Ericaceae.

A procumbent shrub covering banks with much-branched densely leafy stems, native to the Himalayas at altitudes up to 9,000 feet. The leathery ovate leaves are one-half inch long, and the small reddish, or nearly white, tubular flowers are solitary on densely bracted axillary pedicels; they are followed by small fieshy blue-black fruits.

For previous introduction see 102762.

111049. GENTIANA ELWESII C. B. Clarke. Gentianaceae.

A perennial herb about 1 foot high, with elliptic or oblong leaves and showy blue flowers about an inch long, in small terminal heads. Native to the Himalayas from 13,000 to 15,000 feet altitude.

111050. GERBERA KUNZEANA Braun and Aschers. Asteraceae.

A herbaceous perennial with a rosette of oblong to ovate lyrate-pinnatifid leaves 5 to 10 inches long and bracted scapes a foot high bearing white or pink asterlike flower heads 1 to 3 inches across. Native to temperate slopes of the Himalayas from 7,000 to 12,000 feet altitude.

For previous introduction see 86676.

111051. HERACLEUM WALLICHII DC. Apiaceae.

A stout perennial, about 4 feet high, with compound umbels of small yellow flowers. Native to the Himalayas at 10,000 feet altitude.

111052. HELWINGIA HIMALAICA Hook. f. and Thoms. Cornaceae.

An undershrub with lanceolate or ovate-lanceolate leaves and umbels of small greenish flowers. Native to the Himalayas between 5,000 and 9,000 feet altitude.

111053. HERACLEUM NEPALENSE D. Don. Apiaceae.

A herbaceous perennial 2 to 5 feet high, with large pinnate leaves and compound umbels of small white flowers. Native to the Himalayas between 5,000 and 12,000 feet altitude.

# 111040 to 111103—Continued.

111054. HYPERICUM HOOKERIANUM Wight and Arn. Hypericaceae. St. Johnswort.

A compact sbrub up to 6 feet high, with bright red-brown branches, evergreen leaves 1 to 4 inches long, and many-flowered corymbs of large golden-yellow flowers, each about 2 inches across. Native to the Himalayas.

For previous introduction see 102766.

111055. IMPATIENS URTICIFOLIA Wall. Impatientaceae.

A slender herb, 2 to 3 feet high, native to the temperate slopes of the Himalayas up to 12,000 feet altitude in Sikkim, India. The alternate membranous leaves, 4 to 6 inches long, are elliptic-ovate with a long point and have crenate margins. The flowers, nearly 1 inch in diameter, are yellow with white to purple streaks and are borne in small axillary clusters on slender pedicels.

For previous introduction see 99733.

111056. INULA HOOKERI C. B. Clarke. Asteraceae.

A simple or branched perennial herb, native to the Himalayas between 7,000 and 10,000 feet altitude. The shaggy stem is 1 to 2 feet high, with elliptic-lanceolate membranous leaves 3 to 5 inches long and terminal clusters of one to three yellow sunflowerlike heads 1 to 2 inches across.

For previous introduction see 100197.

111057. JUNIPERUS PSEUDOSABINA and Mey. Pinaceae. Fisch. Juniper.

A low shrub, with globose berries, na-tive to dry sunburned mountain slopes in Turkistan.

For previous introduction see 34140.

111058. LACTUCA HASTATA DC. Cichoriaceae.

A robust perennial up to 7 feet high, with pinnatifid leaves about a foot long and small heads of blue, purple, or darkred flowers. Native to the Himalayas between 4,000 and 12,000 feet altitude.

111059. LARIX GRIFFITHII Hook, f. and Thoms, Pinaceae.

A slender tree 20 to 60 feet high, with long pendulous branchlets and large erect cones 2 to 4 inches long. Native to the Himalayas from 8,000 to 12,000 feet alti-

111060. LEEA ASPERA Wall. Vitaceae.

• A shrubby perennial up to 4 feet high, with handsome pinnate foliage and juicy black fruits the size of large currants. Native to the Himalayas up to 6,000 feet altitude.

111061. LILIUM GIGANTEUM Wall. Lilia-Giant lily. ceae.

lily native to the Himalayas between A flly native to the Himalayas between 5,000 to 12,000 feet altitude, with bulbs that grow close to the surface. The hollow stems are 6 to 9 feet high, and the handsome cordate leaves are shining dark green above and paler beneath. The large fragrant white flowers, often 12 in a raceme, are slightly greenish without, and the inner surface of the segments is tinged with deep number. with deep purple.

For previous introduction see 105893.

#### 111040 to 111103—Continued.

111062. LILIUM WALLICHIANUM Schult. f. Liliaceae. Wallich lily.

A lily 4 to 6 feet high, with linear leaves 6 to 9 inches long and, usually, solitary waxy creamy-white fragrant flowers 9 inches long which are golden yellow at the base inside and green outside.

For previous introduction see 92409.

111063. MACHILUS GAMMIEANA King. Lauraceae.

An evergreen tree with linear or ob-lanceolate leaves about 6 inches long and axillary panicles of small whitish flowers. Native to the Himalayas at about 7,500 feet altitude.

111064. MECONOPSIS HORRIDULA Hook. f. and Thoms. Papaveraceae.

A low alpine perennial herb native to the Sikkim Himalayas at altitudes be-tween 14,000 and 17,000 feet. The lan-ceolate, nearly entire leaves are 3 to 5 inches long, and the blue-purple poppy-like flowers, 1 to 2 inches across, are borne singly on scapes 4 to 8 inches high.

For previous introduction see 99923.

111065. MECONOPSIS PANICULATA Prain. Papaveraceae.

A herbaceous perennial with yellow flowers found on the slopes of the Hima-layas in the provinces of Nepal, Sikkim, and Bhutan in northern India.

For previous introduction see 33362.

111066. MICROGLOSSA ALBESCENS Benth. Asteraceae.

An ornamental subtropical shrub with narrow, sharp-pointed leaves and heads of light\_lilac flowers. Native to the temperate Himalayas in India.

For previous introduction see 76038.

111067. MUSSAENDA MACROPHYLLA Wall. Rubiaceae.

A large shrub, native to the tropical Himalayas, with stout branches, slightly hairy leaves up to 10 inches in length, and cymes of flowers with brange-lobed corollas and white-lobed calyces.

For previous introduction see 47738.

111068. Nyssa sessiliflora Hook, f. and Tupelo. f. and

An Asiatic relative of the black gum (Nyssa sylvatica), which is a tree 60 feet tall, with oblong, punctate leaves. The soft, gray, even-grained wood is used for building purposes.

For previous introduction see 93221.

111069. OSTODES PANICULATA Blume. Euphorbiaceae.

An evergreen tree, native to India and Java, with pubescent branchlets and stout white-barked branches. The leathery, long-pointed serrate leaves are 8 to 12 inches long, and the inconspicuous flowers, in glabrous panicles a foot long, are followed by rough three-lobed woody capsules an inch long sules an inch long.

For previous introduction see 102769.

111070. NICANDRA PHYSALODES Gaertn. Solanaceae. Apple-of SALODES (L.) Apple-of-Peru.

For previous introduction see 95220.

# 111040 to 111103—Continued.

111071. POLYGONUM SPHAEROSTACHYUM Meisn. Polygonaceae. Fleeceflower.

A perennial herb 6 to 12 inches high, native to the Himalayas at an altitude of 15,000 feet in India and Tibet. The long-petioled radicle leaves are linear-lanceolate with crenulate margins, and the small drooping crimson flowers are borne in solitary erect cylindrical or capitate spikes.

For previous introduction see 100211.

111072. POLYGONATUM VERTICILLATUM (L.) All. Convallariaceae. Solomonseal.

A perennial herb with a creeping rootstock, angled and grooved stems 2 to 4 feet high, whorls of four to eight linear leaves 3 to 6 inches long, and axillary peduncles bearing two or three tubular, whitish flowers with green tips, followed by red berries. Native to Europe and temperate Asia.

For previous introduction see 93157.

111073. POTENTILLA GRIFFITHII Hook, f. Rosaceae.

An erect or ascending herbaceous perennial 1 to 2 feet high, with compound leaves about 2 inches long and yellow flowers in panicled corymbs. Native to the Himalayas between 6,000 and 14,000 feet altitude.

111074. PRIMULA ELONGATA Watt. Primulaceae. Primrose.

A primrose with a rosette of glabrous obvate leaves about 4 inches long and golden yellow flowers an inch across, in a small dense umbel on a scape a foot high Native to the Sikkim Himalayas at 13,500 feet altitude.

For previous introduction see 41581.

111075. PRIMULA FLORIBUNDA Wall. Primulaceae. Buttercup primrose.

A glandular-pubescent primrose 5 to 8 inches high, with ovate or elliptic membranous leaves and small golden-yellow, fragrant flowers in three to five dense superimposed umbels. Native to the Himalayas at altitudes of 2,500 to 6,500 feet.

111076. RHODODENDRON EDGEWORTHII Hook. f. Ericaceae.

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.

For previous introduction see 97392.

111077. RHODODENDRON GRANDE Wight. Ericaceae.

A tree up to 30 feet high, native to the Sikkim Himalayas between 8,000 and 10,000 feet altitude. The elliptic to oblanceolate leaves, 6 to 12 inches long, are shining deep green above and silvery white beneath. The mortar-shaped flowers, 2 to 3 inches long, are pale rose in the bud, opening creamy white with basal purple blotches, and are borne in large rounded clusters of 20 to 25.

For previous introduction see 102779.

111078. RUBUS ALPESTRIS Blume. Rosaceae. Raspberry.

A straggling shrub found on the temperate slopes of the Himalayas between 7,000 and 18,000 feet altitude.

For previous introduction see 41674.

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#### 111040 to 111103—Continued.

111079. RUBUS ELLIPTICUS J. E. Smith. Rosaceae. Yellow Himalayan raspberry.

A very stout shrub which, especially when young, is densely covered with long red, almost hairlike, spines. The flowers are white, and the deep yellow, almost orange, very juicy acid fruits are edible. The shrub is found in the Himalayas at altitudes between 6,000 and 7,000 feet.

For previous introduction see 76914.

111080 to 111082. SAUSSUREA spp. Asteraceae.

111080. SAUSSUREA DELTOIDEA (DC.) C. B. Clarke.

A tall herbaceous perennial 4 to 8 feet high, with large leaves having cottony lower surfaces. The extremely variable flower heads are often tipped with purple, and the corollas are white. Native to the central and eastern Himalayas at altitudes of 6,000 to 11,500 feet.

For previous introduction see 73154.

111081. SAUSSUREA GOSSIPIPHORA D. Don.

A curious perennial over a foot high, found in the Himalayas in poor soil among limestone rocks between 14,000 and 15,500 feet altitude. The plant grows as a white woolly mass, with linear-lanceolate basal leaves. The oblong and densely cottony bluish flower heads are buried among cottony scales.

For previous introduction see 59265.

111082. SAUSSUREA UNIFLORA Wall.

A slender herbaceous perennial about 2 feet high, native to the Himalayas at altitudes between 10,000 and 15,000 feet. The purple flowers are in campanulate heads about 2 inches across.

111083. Scabiosa Hookeri C. B. Clarke. Dipsacaceae.

A perennial herb with linear-spatulate leaves about 6 inches long and globose, dense, pale-violet flower heads over an inch in diameter, on scapes up to a foot high. Native to the Himalayas at 10,000 to 14,000 feet altitude.

111084. SELINUM PAPYRACEUM C. B. Clarke. Apiaceae.

A large branching perennial 2 to 6 feet high, with ovate tripinnate leaves, the lower ones a foot long, and compound umbels of small whitish flowers. Native to the Sikkim Himalayas.

111085. SELINUM TENUIFOLIUM Wall. Apiaceae.

A hardy perennial about 8 feet high, with fernlike foliage, the ultimate segments of the leaves being narrowly lance-olate and acute. The small white flowers are borne in umbels. Native to the Himalayas.

For previous introduction see 47790.

111086 to 111089. SENECIO spp. Astera-

111086. SENECIO ALATUS Wall.

A stout perennial 1 to 2 feet high, with membranous ovate leaves 5 to 12 inches long and yellow flower heads less than an inch across, in large panicles. Native to the Himalayas at altitudes of 6,000 to 13,000 feet.

# 111040 to 111103—Continued.

111087. SENECIO GRACILIFLORUS DC.

An erect perennial 2 to 6 feet high, with large pinnatifid leaves and corymbs of small erect or drooping yellow flower heads. Native to the Himalayas at altitudes of 8,000 to 13,000 feet.

111088. SENECIO LIGULARIA HOOK, f.

A stout perennial with cordate-sagittate leaves, 1 foot or less in diameter, and numerous many-flowered yellow flower heads. Native to the temperate Himalayas from 9,000 to 12,000 feet altitude.

111089. SENECIO SCANDANS Buch-Ham. Climbing groundsel.

An attractive autumn-flowering composite from the Himalayas, with a woody stem and climbing habit. The yellow flower heads are in few-flowered loose paniclelike clusters.

For previous introduction see 61623.

111090. SMILAX FEROX Wall. Smilacaceae.

A stout prickly shrub with ovate leathery leaves about 3 inches long and umbels of small red berries. Native to the Himalayas at altitudes of 5,000 to 8,000 feet.

111091. SMILAX RIGIDA Wall. Smilacaceae.

A small erect shrub with leathery, rounded-oval leaves about 1 inch long, a few small prickles, and dense umbels of small black berries. Native to the Himalayas at altitudes of 7,000 to 10,000 feet.

111092, SOLANUM MACRODON Wall. Sola-

An erect shrubby plant, clothed with minute, glistening, jointed hairs, growing at altitudes of 3,000 to 8,000 feet in the temperate Himalayas. The lanceolate leaves, 2 to 6 inches long, are setulose above, and the purple-rose or nearly white flowers are followed by small globose berries

For previous introduction see 49656.

111093 to 111095. SWERTIA spp. Gentianaceae.

111093. SWERTIA BIMACULATA (Sieb. and Zucc.) Hook. f. and Thoms.

An erect annual 2 to 6 feet in height, with numerous white or yellowish-green flowers in panicles. The plant is native to the eastern Himalayas at altitudes of 5,000 to 8,000 feet.

For previous introduction see 47807.

111094. SWERTIA DILATATA C. B. Clarke.

An herb 1 to 3 feet high, with lanceolate leaves over an inch long and paniculate cymes of greenish-yellow flowers. Native to the Himalayas between 4,000 and 12,000 feet altitude.

111095. SWERTIA PURPURASCENS (D. Don) Wall.

This species is very closely related to Swertia bimaculata, from which it differs in having purple flowers with reflexed corolla lobes. It grows on the western Himalayas at altitudes ranging from 5,000 to 12,000 feet.

For previous introduction see 47808.

# 111040 to 111103—Continued.

111096. SYMPLOCOS GLOMERATA King. Symplocaceae.

A shrub or small tree becoming 10 feet high, with narrow leathery leaves 6 inches long and axilliary clusters of small white flowers. This shrub is rather common in the hills of Sikkim and Bhutan, India, at altitudes of 1,000 to 8,000 feet.

For previous introduction see 55910.

111097. THALICTRUM CHELIDONII DC. Ranunculaceae.

A handsome ornamental plant 15 inches high, with pale-green foliage, pubescent beneath. The delicate silvery lavender flowers, over an inch across, are borne in graceful sprays. Native to the temperate Himalayas at altitudes between 8,000 and 12,000 feet.

For previous introduction see 102331.

111098. THALICTRUM CULTRATUM Wall. Ranunculaceae. Meadowrue.

A glabrous herbaceous perennial 2 to 4 feet high, with compound leaves made up of obovate leaflets half an inch long and lax panicles of greenish-white flowers. Native to the temperate Himalayas in India.

For previous introduction see 86688.

111099. THERMOPSIS LANCEOLATA R. Br. Fabaceae.

A perennial herb up to 2 feet high, with oblong-lanceolate leaflets and bright-yellow flowers in terminal racemes. Native to Siberia and Alaska, where it is found in moist sandy places.

For previous introduction see 110168.

111100. Uraria lagopus DC. Fabaceae.

A woody, densely cespitose perennial up to 12 feet high, with trifoliolate leaves and terminal and axillary racemes of purple flowers. Native to India from the Punjab to Assam.

For previous introduction see 47857.

111101. VACCINIUM RETUSUM (Griff.) Hook. f. Vacciniaceae.

A small shrub, usually epiphytic, native to the Himalayas beween 7,000 and 9,000 feet altitude, with obovate-oblong leaves about 1 inch long and racemes of small white flowers.

111102. VIBURNUM STELLULATUM Wall Caprifoliaceae.

A large evergreen shrub with ellipticlanceolate leaves about 3 inches long and small orange-red berries. Native to the temperate Himalayas and said to be hardy in England.

For previous introduction see 68348.

111103. WALLICHIA DENSIFLORA Mart. Phoenicaceae.

A low, usually cespitose palm found throughout the tropical Himalayas from Kumaon eastward. The pinnatisect leaves are 8 to 10 feet long, with linear-oblong segments, dentate, and white beneath. The dull-purple fruits are about one-half inch long.

For previous introduction see 94086.

111104 to 111128. DIGITARIA spp. | 111104 to 111128—Continued. Fingergrass. Poaceae.

From the Union of South Africa. Plants purchased from Dr. I. B. Pole Evans, Division of Plant Industry, Department of Agriculture, Pretoria. Received May 17, 1935.

A collection of different strains of the fingergrass; specialists. introduced for Department

111104. DIGITARIA PENTZII Stent.

The true woolly fingergrass.

111105, DIGITARIA SERIATA Stapf. Kuruman

111106. DIGITARIA Sp.

Port Elizabeth.

111107. DIGITARIA SD.

Inkruip.

111108. DIGITARIA SWAZILANDENSIS Stent. Swaziland.

111109. DIGITARIA DECUMBENS Stent.

Low Veld.

For previous introduction see 106624.

111110. DIGITARIA Sp.

Pangola River.

11111. DIGITARIA DIVERSINERVIS (Nees) Stapf.

Unkomaas. From the Natal coast. A perennial grass with weak ascending stems up to 18 inches high and linear-lanceolate leaves 1 to 3 inches long. Native to the Cape of Good Hope.

111112. DIGITARIA SP.

Makarikari.

111113. DIGITARIA SP.

Vukwe River.

111114. DIGITARIA Sp.

Pitsani.

111115. DIGITARIA Sp.

Muden.

111116. DIGITARIA SD.

Koster strain.

111117. DIGITARIA Sp.

Messina.

111118. DIGITARIA Sp.

Slurry.

111119. DIGITARIA Sp.

Molopo River.

111120. DIGITARIA PENTZII MINOR Stent. P. P. Rust.

111121. DIGITARIA Sp.

Olifants River strain.

111122. DIGITARIA Sp.

Hluhluwe strain.

111128. DIGITARIA Sp.

Smutsii strain.

111124. DIGITARIA SD.

Hertzogii.

111125. DIGITARIA Sp.

Pretoria Small strain.

111126. DIGITARIA SD.

Mbabana strain.

111127. DIGITARIA SP.

Government House strain.

111128. DIGITARIA SD.

Milanjiana grass.

#### 111129 to 111150.

From northern India. Seeds collected by the Asiatic Expedition. Received May 23,

A collection of medicinal seeds introduced for Department specialists.

111129. ANGELICA Sp. Apiaceae.

No. 13.

111130. ANGELICA Sp. Apiaceae.

No. 3.

111131 to 111134. CARDUUS spp. Asteraceae.

111131. CARDUUS SD.

No. 8.

111132. CARDUUS Sp.

No. 7.

111133. CARDUUS SD.

111134. CARDUUS Sp.

No. 15.

111135 to 111137. CIRSIUM Spp. Asteraceae.

111135. CIRSIUM sp.

No. 6.

111136. CIRSIUM sp.

No. 4.

111137. CIRSIUM Sp.

No. 5.

111138. GENTIANA sp. Gentianaceae.

No. 17.

111139. Ocimum Basilicum L. Mentha-Common basil.

No. 16.

111140. PINUS Sp. Pinaceae.

No. 22.

111141 to 111143. PLEUROSPERMUM Spp. Apiaceae.

111141. PLEUROSPERMUM SD.

111142. PLEUROSPERMUM Sp.

No. 21.

111143. PLEUROSPERMUM Sp.

No. 18.

111129 to 111150-Continued.

111144. PTEROCARPUS sp. Fabaceae.

No. 19.

111145. RHEUM sp. Polygonaceae.

No. 1.

111146. RHEUM sp. Polygonaceae.

No. 20.

111147 to 111149. SAUSSUREA SPP. Asteraceae.

111147. SAUSSUREA Sp.

No. 10.

111148. SAUSSUREA Sp.

No. 11.

111149. SAUSSUREA Sp.

No. 12.

111150. (Undetermined.)

No. 14.

111151 to 111153. FESTUCA spp. Poaceae.

From New Zealand. Seeds presented by Wright, Stephenson & Co., Ltd., Wellington, Received May 27, 1935.

Introduced for Department specialists.

111151. FESTUCA sp.

111152. FESTUCA SP.

111153. FESTUCA Sp.

# 111154 to 111196.

From the Union of Soviet Socialist Republics. Seeds presented by the Kazakstan Institute of Agriculture, Turkistan, through H. L. Westover and C. R. Enlow, Bureau of Plant Industry. Received May 20, 1935.

Introduced for Department specialists.

The field numbers are those of the Westover and Enlow series.

111154. AEGILOPS CYLINDRICA Host. Poaceae.

No. 1357. From southern Kazakstan.

For previous introduction see 108838.

111155. AGRIOPHYLLUM ARENARIUM Bieb. Chenopodiaceae.

No. 1356. From Alma Ata. An annual, native to the Caucasus region and Siberia.

111156. AGROSTIS ALBA L. Poaceae.

No. 1358. From Alma Ata.

For previous introduction see 109221.

111157. ALOPECURUS PRATENSIS L. Poaceae. Meadow foxtail.

No. 1390. From Alma Ata.

For previous introduction see 110352.

111158. ALOPECURUS ARUNDINACEUS Poir. Poaceae.

No. 1360. From Alma Ata. A perennial grass with creeping rhizomes and leafy stems over a foot high. Native to Europe and Asia.

111154 to 111196—Continued.

111159. Andropogon ischaemum L. Po-aceae.

No. 1363. From Alma Ata.

For previous introduction see 109460.

111160 to 111162. ASTRAGALUS spp. Fabaceae.

111160. ASTRAGALUS SIEVERSIANUS Pall.

No. 1362. From Alma Ata. An erect or ascending perennial, with oblong, hairy leaflets and axillary clusters of pale-yellow flowers. Native to central Asia.

For previous introduction see 110072.

111161. ASTRAGALUS SP.

No. 1364. From the mountains of southern Kazakstan.

111162. ASTRAGALUS SP.

No. 1365. From Alma Ata.

111163. Brassica Elongata Ehrh. Brassicaceae.

No. 1367. Tashkent. An annual herb native to south-central Europe.

For previous introduction see 67907.

111164 to 111166. Bromus spp. Poaceae. Bromegrass.

111164. Bromus squarrosus L.

No. 1370. From southern Kazakstan. For previous introduction see 108471.

111165. Bromus sp.

No. 1368. From Alma Ata.

111166. Bromus sp.

No. 1369. From southern Kazakstan. 111167. CALAMAGROSTIS EPIGEIOS (L.) Roth.

No. 1371. From Alma Ata. A stout perennial grass, native to Manchuria, where it grows on rather poor soil.

For previous introduction see 107662,

111168. CERATOCARPUS ARENARIUS L. Chenopodiaceae.

No. 1372. From southern Kazakstan. An annual, native to sandy situations in central Asia, with subulate, coriaceous leaves, and inconspicuous flowers.

111169. CYNODON DACTYLON (L.) Pers. Poaceae. Bermuda grass.

No. 1374. From Alma Ata.

For previous introduction see 109488.

111170. DACTYLIS GLOMERATA L. Poaceae. Orchard grass.

No. 1375. From southern Kazakstan.

For previous introduction see 110376.

111171. ELYMUS CRINITUS Schreb. Poaceae. Wild rye.

No. 1380. From Alma Ata. An annual grass over a foot high. Native to Asia Minor and the Transcaucasus region.

111172. FERULA KARATAVICA Regel and Schmalh. Apiaceae.

No. 1376. From the mountains of southern Kazakstan. A perennial herb 3 to 4 feet high, with broad biternate leaves

#### 111154 to 111196—Continued.

and umbels of flat ovate fruits. Native to Turkistan.

For previous introduction see 107536.

111173. FESTUCA ELATIOR ARUNDINACEA (Schreb.) Wimm. Poaceae. Fescue.

No. 1377. From the mountains of southern Kazakstan.

For previous introduction see 110980.

111174. FESTUCA OVINA L. Poaceae.

No. 1378. From the mountains of southern Kazakstan.

111175. GLYCYRRHIZA TRIPHYLLA Fisch. and Mey. Fabaceae. Licorice.

No. 1779. From southern Kazakstan. An erect perennial plant 1 to 2 feet high, with pinkish-white flowers. Native to Siberia.

For previous introduction see 61426.

111176. HEDYSARUM SONGARICUM Bong. Fabaceae.

No. 1381. From Alma Ata. An erect herbaceous perennial a foot or more high, with several branched stems, small compound leaves, and pink flowers in spikelike clusters. Native to central Asia.

For previous introduction see 105473.

111177. HERACLEUM VILLOSUM Fisch. Apiaceae.

No. 1382. From the mountains of southern Kazakstan. A tall stout biennial or triennial herb with pinnatifid leaves and large umbels of white flowers. Native to the Caucasus region.

111178. Kochia Trichophylla Stapf. Chenopodiaceae. Common summer cypress.

No. 1383. From southern Kazakstan.

111179. LATHYRUS PRATENSIS L. Fabaceae. Yellow vetchling.

No. 1384. From Alma Ata.

From previous introduction see 110388.

111180. LEPIDIUM REPENS (Schrenk) Boiss. Brassicaceae.

No. 1385. From southern Kazakstan. A stout perennial about a foot high, with oblong wavy-margined leaves and inconspicuous white flowers. Native to central Asia.

For previous introduction see 110080.

111181. LOTUS ANGUSTISSIMUS L. Faba ceae.

No. 1386. From Alma Ata. An upright, slender-stemmed, leguminous annual, about a foot high, with yellow flowers

For previous introduction see 87466.

111182. MEDICAGO FALCATA L. Fabaceae. Yellow-flowered alfalfa.

No. 1387. From Alma Ata.

For previous introduction see 109517.

111183. MELICA ALTISSIMA L. Poaceae.

No. 1401. From Alma Ata.

For previous introduction see 84455.

111184. MELILOTUS ALBA Desr. Fabaceae. White sweetclover.

111154 to 111196—Continued.

No. 1388. From Alma Ata.

For previous introduction see 109523.

111185. MELILOTUS OFFICINALIS (L.) Lam. Fabaceae. Sweetclover.

No. 1389. From Alma Ata.

For previous introduction see 110392.

111186. Onobrychis Pulchella Schrenk. Fabaceae.

No. 1391. From southern Kazakstan. An annual less than a foot high, with narrow leaflets and small pink flowers. Native to central Asia.

For previous introduction see 108939.

111187. NICANDRA PHYSALODES (L.) Gaertn. Solanaceae.

No. 1396. From southern Kazakstan.

For previous introduction see 111070.

111188. PHLEUM PANICULATUM Huds. Poaceae. Timothy.

No. 1392. From southern Kazakstan.

For previous introduction see 108946.

111189. PHYSALIS ALKEKENGI L. Solanaceae. Strawberry groundcherry.

No. 1397. From Alma Ata.

For previous introduction see 109347.

111190. PRANGOS ULOPTERA DC. Apiaceae.

No. 1395. From southern Kazakstan. A tall herbaceous perennial with linear-lobed leaves and small yellow flowers in compound umbels. Native to central Asia.

111191. PSORALEA DRUPACEA Bunge. Fabaceae.

No. 1394. From Tashkent. A woody perennial about a foot high, with roundish dentate leaflets nearly an inch long and small white flowers in dense axillary racemes. Native to central Asia.

For previous introduction see 106896.

111192. PUCCINELLIA sp. Poaceae.

No. 1366. From Alma Ata.

111193. SOPHORA ALOPECUROIDES L. Fabacese.

No. 1398. From Alma Ata. A semihardy, grayish, pubescent undershrub with upright branches and dense terminal racemes of yellow flowers. Native to western Asia.

For previous introduction see 60346.

111194. TRIGONELLA sp. Fabaceae.

No. 1399. From Alma Ata.

For previous introduction see 109392.

111195. TRIFOLIUM PRATENSE L. Fabaceae. Red clover.

No. 1400. From Alma Ata.

For previous introduction see 110428.

111196. VICIA sp. Fabaceae.

No. 1402. From Alma Ata.

111197. IPOMOEA PURPUREA (L.) Roth. Convolvulaceae.

Common morning-glory.

#### 111197—Continued.

From China. Seeds presented by the Director, Botanic Garden, the Sun Yat-Sen Tomb and Memorial Park Commission, Nanking. Received May 25, 1935.

Introduced for Department specialists.

For previous introduction see 24029.

111198. SPHAERALCEA MINIATA RHOMBI-FOLIA (Griseb.) Schum. Malvaceae.

From Argentina. Seeds presented by the Museo de la Plata, Buenos Aires, through Thomas H. Kearney, Bureau of Plant Industry. Received June 4, 1935.

A bushy shrub about 4 feet high, with lobed leaves and showy rose-colored flowers in few-flowered racemes. Native to Argentina.

111199 to 111206. LESPEDEZA spp. Fabaceae. Bushclover.

From France. Seeds presented by J. Dufrenoy, Station de Pathologie Végétale, La Grande Ferrade, Pont-de-la-Maye. Received May 25, 1935.

Introduced for Department specialists.

111199. LESPEDEZA MACROCARPA Bunge.

A variety with purple flowers.

For previous introduction see 92051.

111200. LESPEDEZA CAPITATA Michx.
Roundhead bushclover.

111201. LESPEDEZA CYRTOBOTRYA Miquel.

A shrub about 6 feet high, resembling Lespedeza bicolor in habit, with oval-oblong leaflets and dense clusters of purple flowers. Native to Japan.

For previous introduction see 104066.

111202. LESPEDEZA DAURICA (Laxm.) Schindler.

A tall annual up to 3 feet high, with small white flowers.

For previous introduction see 110495.

111203. LESPEDEZA FORMOSA (Vogel) Koehne. Purple bushclover.

An erect semishrubby plant 6 to 12 feet high, with trifoliolate leaves of oblong leaflets and racemes of rose-purple flowers. Native to Chosen.

For previous introduction see 104669.

#### 111204. LESPEDEZA KIUSIANA Nakai.

A tall herbaceous perennial 6 to 9 feet high, with small deep-purple flowers in axillary racemes 1 to 3 inches long. Native to Japan and Chosen.

111205. LESPEDEZA HIRTA (L.) Hornem.

111206. LESPEDEZA TOMENTOSA (Thunb.) Sieb.

A rather coarse, tall lespedeza which seeds freely. Native to Japan.

#### 111207 to 111214.

From Colombia. Seeds collected by W. A. Archer, Bureau of Plant Industry. Received May 22, 1935.

Introduced for Department specialists.

#### 111207 to 111214—Continued.

111207. Antigonon Leptopus Hook, and Arn. Polygonaceae.

No. 3361. Coralita. From the Agricultural Experiment Station, Palmira, May 2, 1935. A large-flowered variety.

For previous introduction see 104252.

111208. Aristolochia sp. Aristolochiaceae.

No. 3360. From the Agricultural Experiment Station, Palmira, May 2, 1935. A vine, cultivated as an ornamental.

111209. ARISTOLOCHIA ELEGANS Masters. Aristolochiaceae. Calicoflower.

No. 3359. From the Agricultural Experiment Station, Palmira, May 2, 1935. A slender vine, with long-stalked reniform leaves 2 to 3 inches across and solitary flowers with a yellow-green tube 1½ inches long, the limb 3 inches across, purple and white blotched and entirely devoid of any unpleasant odor. Native to Brazil.

111210. Barnadesia spinosa L. Astera

No. 3348. From the Salto de Tequendama, near Bogotá, April 22, 1935. A spiny, ornamental shrub with long arching branches and white flower heads which are pale pink at the base of the florets.

111211. Cassia Hirsuta L. Caesalpinia-

No. 3357. From near Cali, May 2, 1935. A shrub up to 2 feet high, covered throughout with long hairs. The compound leaves are made up of three to five pairs of ovate leaflets 2 to 3 inches long, and the small yellow flowers are borne in axillary racemes. Native to Brazil.

For previous introduction see 107156.

111212. CLEOME ANOMALA H. B. K. Capparidaceae.

No. 3347. From the Salto de Tequendama, near Bogotá, April 22, 1935. A hairy shrub up to 20 feet high, with digitate leaves, the lobes oblong-lance-late, membranous. The small whitish flowers are in terminal racemes. Native to Colombia.

111213, BENTHAMANTHA CARIBAEA (Jacq.) Kuntze. Fabaceae.

No. 3341. From Tocaima, Finca Chucunday, Cundinamarca, April 19, 1935. An erect shrub up to 6 feet high, found in the shade near rivers and creeks. The odd-pinnate leaves are 2 to 5 inches long, and the large flowers, yellow strined with red, are in axillary racemes. Native to tropical America.

111214. TEPHROSIA sp. Fabaceae.

No. 3362. Collected on dry mountain sides near the Agricultural Experiment Station, Palmira. The plants are 4 to 5 feet high, with racemes of small white flowers.

#### 111215 to 111217.

From Manchuria. Plants collected near Hailar by H. G. MacMillan and J. L. Stephens, Bureau of Plant Industry. Received October 5, 1934. Numbered in May, 1935.

Introduced for Department specialists.

#### 111215 to 111217—Continued.

111215. (Undetermined.)

No. 2. An undetermined grass.

111216 and 111217. CALAMAGROSTIS EPIGE-IOS (L.) Roth. Poaceae. Grass.

For previous introduction and description see 111167.

111216. No. 3. 111217. No. 4.

111218. DIPTERYX ODORATA (Aubl.)
Willd. (Coumarouna odorata Aubl.).
Fabaceae.
Tonka-bean.

From Venezuela. Seeds presented through P. Lorillard Co., New York City, N. Y. Received June 6, 1935.

Introduced for Department specialists. For previous introduction see 39142.

111219. Tephrosia vogelii Hook. f. Fabaceae.

From the Ivory Coast, Africa. Seeds presented by O. M. Freeman, Bureau of Plant Industry. Received in 1933. Numbered in June, 1935, for convenience in distribution.

A shrubby legume, native to tropical Africa; introduced for Department specialists.

For previous introduction see 98926.

111220. MANGIFERA INDICA L. Anacardiaceae. Mango.

From Haiti. Seeds presented by Pierre G. Sylvain, Service National de la Production Agricole et de l'Enselgnement Rural, Port-au-Prince. Received June 11, 1935.

Madame Francis; introduced for Department specialists.

111221, Medicago sativa L. Fabaceae.

From Ecuador. Seeds presented by Enrique Received May 29, 1935.

Guaranda. A native variety introduced for Department specialists.

111222. Arachis Hypogaea L. Fabaceae. Peanut.

From Antigua, British West Indies. Seeds presented by the Ffryes Estate. Received June 4, 1935.

Introduced for Department specialists. For previous introduction see 109840.

111223 to 111225. ALLIUM CEPA L. Liliaceae. Onion.

From Egypt. Seeds and bulbs presented by M. Stina, Heliopolis. Received June 6, 1935.

Introduced for Department specialists.

111223. Beheiri. (Bulbs.)

111224. Saidi. (Bulbs.)

111225. Seeds.

111226 and 111227. PHAEDRANASSA Spp. Amaryllidaceae.

From Ecuador. Seeds collected by Mrs. Ynes Mexia, Bureau of Plant Industry. Received June 11, 1935.

#### 111226 and 111227-Continued.

111226. PHAEDRANASSA LEHMANNI Regel.

A summer-blooming, bulbous plant with oblong-lanceolate leaves 6 to 8 inches long and an umbel of three or four nodding, bright-red flowers over an inch long on a scape. Native to Colombia at an altitude of 7,000 feet.

111227. PHAEDRANASSA VIRIDIFLORA Regel.

A Peruvian phaedranassa with a single lanceolate leaf about 1 foot long and an umbel of about four nodding flowers, over an inch long, green at the tip and whitish toward the base, on a scape as long as the leaf.

#### 111228 to 111235.

From the Union of South Africa. Seeds presented by the McGregor Museum, Kimberley. Received June 3, 1935.

111228. ACACIA DETINENS Burchell. Mimosaceae.

Zwart Haak (black thorn). A thorny shrub or small tree with small bifoliolate leaves and showy globular heads of small yellow flowers. Native to southern Africa.

For previous introduction see 48754.

111229. ALOE GLOBULIGEMMA Pole Evans. Liliaceae.

A stemless succulent with a rosette of erect-spreading, sword-shaped leaves 1 to 2 feet long, having cartilaginous wavy-toothed margins. The flower stalk, 3 to 4 feet high, carries a dense raceme a foot long of tubular flowers which are globular and red in the bud, becoming elongated and sulphur yellow tinged with red at the base. It is native to South Africa.

For previous introduction see 107275.

111230. ALOE GRANDIDENTATA Salm-Dyck. Liliaceae.

A short-stemmed, fleshy plant with a dense rosette of 12 to 20 bright-green lanceolate leaves a foot or more long, with crowded brown-tipped marginal teeth. The pale-red or reddish-yellow flowers are in three to seven racemes on a stout peduncle up to 2 feet long. Native to South Africa, where it is very robust and spreads rapidly.

For previous introduction see 81119.

111231. CARALLUMA LUTEA N. E. Brown. Asclepiadaceae.

Slang gaap. A dwarf leafless succulent with crowded purple-mottled green stems 4 inches long, sharply four-angled, and armed with stout horizontal teeth nearly half an inch long. The yellow flowers, in a cluster of 20 to 25, are 2 to 3 inches broad and most of them open at the same time. Native to South Africa.

For previous introduction see 78190.

111232. OLEA VERRUCOSA (Roem. and Schult.) Link. Oleaceae. Olive.

A tree up to 30 feet high, native to southern Africa, with linear-lanceolate leaves 3 inches long, covered with small yellow scales beneath, and short axillary panicles of inconspicuous flowers followed by small globose dry fruits.

For previous introduction see 99446.

111233. RHUS LANCEA L. f. Anacardiaceae. Sumac.

Karree-boom. A small bushy tree with gray bark and long-stalked leaves with

#### 111228 to 111235-Continued.

linear-lanceolate leaflets 4 to 5 inches long. It is a valuable hardwood tree for regions of limited rainfall. Native to the Cape of Good Hope.

For previous introduction see 106813.

111234. TRIRAPHIS FLECKII Hack. Poa-Grass. ceae.

A suberect, annual grass up to a foot high; native to the Union of South Africa.

111235. VERNONIA sp. Asteraceae.

From Barberton, a low veld region of the Transvaal.

#### 111236 to 111239. PHLEUM PRATENSE L. Poaceae. Timothy.

om Sweden. Seeds presented by the Swedish State Seed Testing Station, Stockholm. Received June 10, 1935.

Introduced for Department specialists.

111236 to 111238. Varieties developed by the Swedish Plant Breeding Institute the Swedi

111236. Bore.

111237. Bottnia.

111238. Gloria.

111239. Kümpe II, developed at the Weibullsholm Plant Breeding Institute.

#### 111240 to 111245. TRITICUM AESTIVUM L. Poaceae. Common wheat.

rom Turkey. Seeds presented by the Tobum Islahi Institute, Istanbul, through H. L. Westover and C. R. Enlow, Bureau of Plant Industry. Received June 13, From 1935.

The field numbers are those of the Westover-Enlow series.

Introduced for Department specialists.

111240. No. 1403. Bursa.

111241. No. 1404. Rursa-Kocaleuad

111242. No. 1405. Gebie-Darica.

111243. No. 1406. Kocaeli-Gebje.

111244. No. 1407. Edirv.

111245. No. 1408. Kirklarele Damirgikoy.

#### 111246 to 111248. PHLEUM PRATENSE L. Poaceae. Timothy.

om Wales. Seeds presented by the Welsh Plant Breeding Station, Aberystwyth. Received June 12, 1935. From Wales.

Introduced for Department specialists.

111246. No. S-48. A late flowering, leafy type, developed nent pastures.

1247. No. S-50. A relatively prostrate type with fine leaves; it is essentially a type for permanent pastures; derived from material collected from old British pastures.

111248. No. S-51. A late-flowering leafy type of lighter green color than usual; better as hay than for pasture.

#### 111249 to 111331.

om Rumania. Seeds presented by the Jardin Botanique de l'Université de Cluj. Received May 28, 1935.

#### 111249 to 111331-Continued.

Introduced for Department specialists.

111249. Aegilops sp. Poaceae.

111250. AGROPYRON CRISTATUM (L.) Gaertn. Poaceae. Wheatgrass.

111251. AGROPYRON INTERMEDIUM (Host) Beauv. Poaceae. Wheatgrass.

For previous introduction see 107481.

111252. Agrostis alba L. Poaceae. Redtop.

111253. AGROSTIS Sp. Poaceae. Bentgrass.

111254. AIRA sp. Poaceae.

111255 ALOPECURUS PRATENSIS L. Poa-ceae. Meadow foxtail.

111256. ANTHOXANTHUM ODORATUM L. Sweet vernalgrass.

For previous introduction see 107887.

111257. ARRHENATHERUM ELATIUS Tall oatgrass. Beauv. Poaceae.

For previous introduction and description see 110703.

111258 to 111264. AVENA spp. Poaceae. Grass.

#### 111258. AVENA BARBATA Brot.

An annual or biennial grass, up to inches high. Native to southern Europe.

For previous introduction see 66004.

111259, AVENA COMPRESSA Heuff.

A perennial grass over a foot high. Native to central and southern Europe.

An annual grass about 2 feet high. Native to central Europe.

111261. AVENA FATUA L. Wild oats.

For previous introduction see 108326. 111262. AVENA NUDA Hoejer.
Naked oats.

For previous introduction see 91319.

111263 and 111264. AVENA SATIVA

111265. BECKMANNIA ERUCAEFORMIS Host. Poaceae. Sloughgrass.

For previous introduction and description see 110358.

111266. BOUTELOUA CUR (Michx.) Torr. Poaceae. CURTIPENDULA

For previous introduction see 106421.

111267. Brachypodium pinnatum  $(T_{i})$ Grass. Beauv. Poaceae.

For previous introduction and description see 110359.

# 111268. BRIZA MAXIMA L. Poaceae. Big quaking grass.

An annual grass with erect or decumbent culms up to 2 feet high and large showy spikelets. Native to southern Europe.

#### 111269. BRIZA MEDIA L. Poaceae. Quaking grass.

A low perennial grass with erect culms. For previous introduction see 109043.

#### 111249 to 111331-Continued.

111270 to 111279. Bromus spp. Poaceae. Bromegrass.

111270. BROMUS ARVENSIS L.

An annual grass with erect culms up to 2 feet high. Native to eastern Europe.

111271. BROMUS CATHARTICUS Vahl.

An annual or biennial grass up to 2 high, native to South America. A good forage grass.

111272. BROMUS COMMUTATUS Schrad. Hairy chess.

An annual grass with tufted culms to 2 feet tall. Native to central Europe.

111273 and 111274. Bromus INERMIS Levss. Common bromegrass.

111275. Bromus Macrostachys Lanuginosus (Poir.) Coss. and Dur.

For previous introduction see 64914.

111276. BROMUS SECALINUS L. Chess.

. 111277. BROWIIS STERILIS L.

111278. Bromus Tectorum L.

111279. BROMUS ERECTUS Huds.

111280. RHAPHIS GRYLLUS (L.) Desv. Po-Grass. aceae.

A grass which forms a good sod even on dry rocky hillsides.

For previous introduction see 109361.

111281. COIX LACRYMA-JOBI L. Poaceae. Johs-tears.

111282. CORNUCOPIAE CUCULLATUM L. Po-

An ornamental annual grass, native to the Mediterranean countries.

For previous introduction see 74200.

111283. CYNOSURUS CRISTATUS L. Poaceae. Crested dogtail.

A tufted perennial 1 to 2 feet high with panicles 2 to 4 inches long.

For previous introduction see 109070.

111284. CYNOSURUS ECHINATUS L. Poa-Grass.

For previous introduction see 88721.

111285. DESCHAMPSIA Beauv. Poaceae. CAESPITOSA  $(\mathbf{L}_{\cdot})$ 

For previous introduction and description see 110878.

111286. DESMAZERIA SICULA (Jacq.) Dum. Grass. Poaceae.

An annual bushy upright slender-stemmed grass usually about 8 inches high. Native to the Mediterranean countries

For previous introduction see 74165.

111287. ELEUSINE CORACANA (L.) Gaertn. Poaceae. Ragi.

For previous introduction see 104078.

111288. ELYMUS CAPUT-MEDUSAE L. Poa-Grass.

An annual grass native to Europe,

For previous introduction see 108913.

111249 to 111331—Continued.

111289. ELYMUS SABULOSUS Bieb. Pos-Wild rye. ceae.

A perennial grass 2 to 4 feet high; native to the Caucasus region.

For previous introduction see 20646.

111290 to 111294. FESTUCA spp. Poaceae. Fescue.

111290. FESTUCA EI (Schreb.) Wimm'. ELATIOR ARUNDINACEA

previous introduction and description see 111173.

111291. FESTUCA GIGANTEA (L.) Vill. Great fescue.

For previous introduction see 107917.

111292. FESTUCA OVINA L. Sheep fescue.

111293. FESTUCA OVINA SULCATA Hack.

For previous introduction and description see 110981.

111294. FESTUCA Sp.

111295. HYSTRIX PATULA Moench. Pos-Bottlebrush. ceae.

111296. LAGURUS OVATUS L. Poaceae.
Rabbittail grass.

111297. LAMARCKIA AUREA (L.) Moench. Poaceae. Grass.

An annual grass with decumbent or erect stems 4 to 16 inches tall and soft flat leaves. Native to the Mediterranean region.

111298. LOLIUM REMOTUM Schrank. Po-Grass.

An annual grass, native to Europe, with stems over 2 feet high.

L. ro.. Darnel. 111299. LOLIUM TEMULENTUM ceae.

111300 and 111301. MELICA ALTISSIMA L. Роясеяе. Grass.

111302. MUHLENBERGIA Sp. Poaceae. Grass.

111303 to 111305. PANICUM spp. Poaceae. 111303. PANICUM CAPILLARE L.

111304 and 111305. PANICUM MILIACEUM Broomcorn millet.

111306. SETARIA VIRIDIS L.

111307. ECHINOCHLOA CR TACEA (ROXb.) W. F. CRUSGALLI FRUMEN-F. Wight. Poaceae. Japanese millet.

For previous introduction see 109825.

111308. PASPALUM RACEMOSUM Lam. aceae.

A tropical American grass with rather coarse tender stems and leaves, reaching a height of about 2 feet.

For previous introduction see 74169.

111309. PENNISETUM GLAUCUM (L.) R. Br. Poaceae. Pearl millet. Poaceae.

For previous introduction see 81210.

111310. PENNISETUM VILLOSUM R. Br. Po-Grass. aceae. For previous introduction see 88932.

111311 to 111313. PHALARIS spp. Poaceae.

111311. PHALARIS CANARIENSIS L. Canary grass.

For previous introduction see 88725.

#### 111249 to 111331—Continued.

111312. PHALARIS MINOR Retz.

For previous introduction see 109540.

111313. PHALARIS PARADOXA L.

An annual tufted grass over 2 feet high, native to the Mediterranean coun-

For previous introduction see 44697.

111314 to 111316. PHLEUM spp. Poaceae. Timothy.

111314. PHLEUM MICHELII All.

Native to southern Europe.

For previous introduction see 30233. 111315 and 111316. PHLEUM PRATENSE

111317 to 111320. Poa spp. Poaceae. Bluegrass.

111317. POA ANNUA L.

For previous introduction see 78802.

111318. POA BADENSIS Haenke.

A tufted perennial grass; native to central Europe.

111319. POA SD.

111320. POA sp.

111321. POLYPOGON Desf. Poaceae. MONSPELIENSIS (L.)

An annual European grass up to 2 feet high.

For previous introduction see 109143.

111322. SECALE CEREALE L. Poaceae. Rye.

111323 to 111326. SESLERIA SPD. Poaceae.

111323 and 111324. SESLERIA COERULEA Arduino. Moor grass.

A hardy, blue-gray, perennial grass over a foot high, native to the British Isles

For previous introduction see 53159.

111325 and 111326. SESLERIA Heuff. RIGIDA Grass.

A perennial grass, usually less than a foot high; native to central Europe.

111327. SETARIA VIRIDIS (L.) Beauv. aceae.

111328. SPOROBOLUS sp. Poaceae.

Poaceae.

111329. STIPA CAPILLATA L. Poaceae. Feathergrass.

For previous introduction see 109376. 111330. TRAGUS BERTERONIANUS Schult.

Grass. 111331. Uniola latifolia Michx. Poa-Grass.

#### 111332 and 111333. PHLEUM PRATENSE L. Poaceae.

From England. Seeds purchs A. G. Leightón Ltd., Whitchur shire. Received June 12, 1935. Seeds purchased from Ltd., Whitchurch, Shrop-

Early varieties; introduced for Department specialists.

111332. No. S-48. 111333. No. S-50. specialists.

#### 111334 to 111338.

From Mexico. Seeds and bulbs presented by Dr. C. A. Purpus, Huatusco, Vera Cruz. Received June 7, 1935.

111334 to 111336. AECHMEA spp. Bromeli-

111334. AECHMEA BRACTEATA (Sw.) Griseb.

For previous introduction and description see 110838.

111335. AECHMEA MEXICANA Baker.

For previous introduction and description see 110389.

111336. АВСНМЕА NUDICAULIS Griseb.

A species widely distributed in tropical America. The horny strap-shaped leaves, 2 to 3 feet long, are armed with small triangular marginal prickles, and the pale lemon-yellow flowers are in a lax drooping spike on a peduncle 1 to 2 feet length. feet long.

For previous introduction see 89440.

111337. ZEPHYRANTHES sp. Amaryllidaceae.

Bulbs of a variety with white flowers.

111338. ZEPHYRANTHES sp. ceae.

Bulbs of a variety with dark-red flowers.

111339 and 111340. PINUS SYLVESTRIS Scotch pine. L. Pinaceae.

From the Union of Soviet Socialist Republics. Seeds presented by G. N. Shlykov, Head of Department of New Cultures and Introduction, Lenin Academy of Agricultural Sciences, Leningrad. Received June

Local varieties of Scotch pine from White Russia, Union of Soviet Socialist Republics; introduced for Department specialists.

111339. No. 2031.

111340. No. 2186. Received under the varietal name rigensis.

111341. DALBERGIA COCHINCHINENSIS Pierre. Fabaceae.

rom Cuba. Seeds presented by R. M. Grey, Superintendent, Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos, through F. G. Walsingham. Received June 4, 1935.

Originally from the Botanic Gardens, Saigon, Cochin-China. A large tropical evergreen tree with a maximum height of about 80 feet, pinnate leaves 6 to 8 inches long, and small white flowers in axillary panicles 3 to 6 inches long. Native to Cochin-China.

111342. ULMUS AMERICANA L. American elm.

rom Canada. Cuttings presented by H. F. Roberts, Department of Botany, Univer-sity of Manitoba, Winnipeg. Received June 19, 1935.

Winnipeg elm; introduced for Department

#### 111343 to 111345.

From Ecuador. Seeds collected by Mrs. Ynes Mexia, Bureau of Plant Industry. Beceived May 23, 1935.

Collected April 19 and 20, 1935, near Archidona, Napo Canton, Napo-Pastazo Province, at 2,000 feet altitude; introduced for Department specialists.

111343. Passiflora sp. Passifloraceae.

No. 7284. Granadilla de Quiso. A vine found climbing over forest trees. The edible fruits have a thick leathery yellow skin.

111344. (Undetermined.)

No. 7262. Aya muyo. A vine with scarlet fruits, found climbing over small trees in open woods.

111345. (Undetermined.)

No. 7265. *Ti-caso*. A climbing shrub with attractive green six-lobed fruits. The vine is occasionally cultivated and the seeds used as food.

111346 and 111347. SACCHARUM SPON-TANEUM L. Poaceae. Grass.

From New Guinea. Seeds presented by Percival H. Leigh, Port Moresby, Papua. Received June 20, 1935.

For previous introduction and description see 110506.

111346. From Eriama Swamp near Port Moresby, Papua.

111347. From near Rona Falls, 8 miles from Port Moresby.

111348. TEPHROSIA VOGELII Hook, f. Fabaceae.

From Africa. Seeds presented by Miss Margaret Haines, Bangassou, French Equatorial Africa. Received June 20, 1935.

Introduced for Department specialists.

For previous introduction and description see 111219.

#### 111349 to 111401.

From China. Seeds presented by H. H. Chung, National Wu-Han University. Wu-chang, Hupeh. Received June 21, 1935.

Collected in Patung, Chienshih, and Enshih Districts of western Huneh, and introduced for Department specialists.

111349. CATALPA DUCLOUXII Dode. Bignoniaceae.

No. 55. A small tree, native to central and western China, with ovate-cordate leaves 4 to 8 inches in length and rosepink flowers, more than an inch long, borne in corymbose clusters.

For previous introduction see 100520.

111350. CEPHALOTAXUS Sp. Taxaceae.

No. 11.

111351. CLEMATIS APIIFOLIA OBTUSIDENTATA Rehd. and Wils. Ranunculaceae.

No. 104. A handsome woody climber about 12 feet high, with trifoliolate leaves, the leaflets coarsely dentate. The white flowers, less than an inch across, are in short dense axillary cymes. Native to western China.

111349 to 111401—Continued.

111352. CLEMATIS sp. Ranunculaceae.

111853. CORNUS KOUSA CHINENSIS OSborn. Cornaceae.

No. 63. A Chinese dogwood which becomes about 25 feet high, with dark-green, elliptic-ovate leaves nearly 6 inches long and showy white flowers 2 to 3 inches across, which appear in June after the leaves. The fruiting heads are globose, pinkish, and about an inch across.

For previous introduction see 77826.

111354. COTONEASTER Sp. Malaceae.

No. 82.

111355. EURYA CHINENSIS R. Br. Theaceae.

No. 25. An evergreen shrub up to 12 feet high, with obovate leaves over an inch long and inconspicuous greenish flowers in small axillary clusters, followed by berrylike fruits. Native to southern China.

For previous introduction see 102397.

111356. Fraxinus griffithii Clarke. Oleaceae. Ash.

No. 87. An ash about 30 feet high, with leaves composed of 5 to 11 leatherly elliptic leaflets about 4 inches long and panicles of small white flowers. Native to western China and northeastern India.

111357. GYMNOCLADUS CHINENSIS Baill. Caesalpiniaceae.

No. 23. A Chinese tree which closely resembles the Kentucky coffeetree, Gymnocladus dioica, but the oblong-obtuse leaflets are smaller and are pubescent on both sides. The lilac-purple flowers are borne in large panicles and appear before the leaves.

For previous introduction see 98373.

111358. HOVENIA DULCIS Thunb. Rhamnaceae. Raisintree.

No. 86. A deciduous tree with broadly ovate leaves, often 5 inches long, and inconspicuous white or greenish-white flowers. After flowering, the peduncles thicken and become edible, being brown, pulpy, and of a sweetish taste. Native to China; cultivated in Japan.

For previous introduction see 105319.

111359 and 111360. ILEX MICROCOCCA Maxim. Aquifoliaceae. Holly.

A large tree with deciduous, oblong leaves 3 to 4 inches long and very small red berries. Native to China and Japan.

For previous introduction see 100561.

111359. No. 18. 111360. No. 74.

111361. LIGUSTRUM COMPACTUM Hook. f. and Thoms. Oleaceae.

No. 95. A shrub or small tree sometimes 30 feet high, native to the mountains of southwestern China. The persistent leaves are 3 to 6 inches long, and the small white flowers in large panicles are followed by blue-black fruits.

For previous introduction see 103428.

#### 111349 to 111401—Continued.

111362. LIRIODENDRON CHINENSE (Hemsl.) Sargent. Magnoliaceae. Chinese tuliptree.

No. 90. An ornamental deciduous tree up to 50 feet high, native to central China. The leaves, 5 to 6 inches long, have four acute or acuminate lobes, rounded or slightly cordate at the base; the tuliplike flower is almost 2 inches long. This species is somewhat more tender than our native species, Liriodendron tulipifera.

For previous introduction see 105650.

111363. LITSEA sp. Lauraceae.

No. 19. The members of this genus are shrubs or small trees with alternate leathery leaves, small white or yellow flowers in umbellike clusters, and small usually black fruits.

111364. BENZOIN GRANDIFOLIUM Rehder. Lauraceae.

No. 59. An evergreen shrub or tree up to 60 feet high, with large oblong or oblanceolate lustrous leaves and umbels of numerous small yellow flowers appearing in March and April. Native to central China.

111365. LITSEA Sp. Lauraceae.

No. 78.

111366. LITSEA sp. Lauraceae.

No. 80.

111367. ORYZA SATIVA L. Poaceae. Rice. No. 53

111368. PTEROCARYA PALIURUS Batalin. Juglandaceae.

No. 60. A deciduous tree up to 60 feet high, with large pinnate leaves and long drooping racemes of winged fruits. Native to central China.

111369. PAULOWNIA TOMENTOSA (Thunb.) Sieb. and Zucc. Scrophulariaceae.

Royal paulownia-No. 57.

111370. PINUS ARMANDI Franch. Pinaceae. Armand pine.

For previous introduction see 105326.

111371. PITTOSPORUM GLABRATUM Lindl. Pittosporaceae.

No. 37. An evergreen shrub or small tree, native to northeastern India and central China, with oblong-lanceolate leaves. The small, fragrant yellow flowers, produced in corymbs, are succeeded by orange fruits.

For previous introduction see 105027.

111372. Prunus sp. Amygdalaceae.

No. 6.

111273. PYRACANTHA CRENATO - SERRATA (Hance) Rehder. Malaceae. Firethorn.

No. 84. A handsome spiny evergreen sbrub up to 7 feet tall, with corymbs of small white flowers and scarlet berries. Native to central and western China.

For previous introduction see 72814.

111374. RHAMNUS UTILIS Decaisne. Rhamnaceae. Buckthorn.

No. 24. A slender branched shrub up to 10 feet high, with narrow elliptic, yel-

#### 111349 to 111401-Continued.

lowish-green leaves 3 to 5 inches long, small yellowish-green flowers, and small black fruits. Native to central and eastern China.

For previous introduction see 76594.

111375. RHAMNUS sp. Rhamnaceae.

Buckthorn.

No. 85.

111376. RHUS Sp. Anacardiaceae.

No. 69

111377. RHUS SYLVESTRIS Sieb. and Zucc. Anacardiaceae.

No. 83. An ornamental tree up to 30 feet high, with 7 to 12 ovate to ovate-oblong leaflets and loose axillary panicles of small brownish-yellow fruits. The handsome foliage turns dark red or scarlet in the autumn. Native to China and Japan.

111378. STYRAX SUBERIFOLIA Hook, and Arn, Styracaceae.

No. 48. An evergreen tree up to 30 feet high, with oblong-lanceolate leaves about 2 inches long and small white flowers in few-flowered simple racemes. Native to southeastern China.

111379. CAMELLIA OLEOSA (Lour.) Rehd. Theaceae.

No. 64. An evergreen tree up to 25 feet high, with elliptic lanceolate leaves. The flowers, about 1 inch across, are white and fragrant, and a sweet oil, expressed from the seeds, is much esteemed in cooking. Native to eastern China.

For previous introduction see 99229.

111380 to 111384. VIBURNUM spp. Caprifoliaceae.

111380. VIBURNUM BUDDLEIFOLIUM C. H. Wright. Woolly viburnum.

No. 16. A densely tomentose shrub, native to central China, closely related to Viburnum veitchii. It is 6 feet high, with oblong-lanceolate leaves 3 to 6 inches long and dense clusters about 3 inches across of small white flowers and ovoid black fruits.

For previous introduction see 78557.

111381. VIBURNUM Sp.

No. 17.

111382. VIBURNUM sp.

No. 20.

111383. VIBURNUM BETULIFOLIUM Batal.

No. 51. An upright shrub up to 10 feet high, with coarsely toothed leaves, white flowers in cymes 2 to 4 inches wide, and red fruits. Native to central and western China.

For previous introduction see 66609.

111384. VIBURNUM PROPINQUUM Hemsl.

No. 9. An evergreen shrub with short lustrous reddish-brown branch-lets, elliptic to ovate-lanceolate, nearly entire leaves 2 to 4 inches long, and greenish-white flowers followed by globular blue-black fruits. Native to central and western China.

For previous introduction see 82382.

#### 111349 to 111401-Continued.

111385. CINNAMOMUM PEDUNCULATUM (Thunb.) Presl. Lauraceae.

No. 10. A semitropical evergreen tree 30 to 40 feet high, with thick oblong-lanceolate leaves 3 to 5 inches long and small whitish flowers in axillary corymbs. Native to China and Japan.

111386. (Undetermined.)

No. 14.

111387. (Undetermined.)

No. 15

111388. ILEX PURPUREA OLDHAMII (Miq.) Loes. Aquifoliaceae.

No. 21. An evergreen tree, about 30 feet tall, with shining-green, spineless leaves, rather more narrow than those of the type, and red berries. Native to southern China.

For previous introduction see 99236.

111389. ACANTHOPANAX sp. Araliaceae.

No. 28. A spiny shrub.

111390. MELIOSMA PANNOSA Hand.-Mazz. Sabiaceae.

No. 33. A small evergreen tree native to southwestern China, with cuneatelanceolate leaves and large terminal panicles of small yellow fragrant flowers.

111391. Antidesma delicatulum Hutch. Euphorbiaceae.

No. 34. A shrub up to 12 feet high, with papery oblong or oblong-lanceolate leaves about 3 inches long and small clusters of inconspicuous flowers followed by bright-red drupes. Native to western China.

111392. ENGELHARDTIA CHRYSOLEPIS Hance. Juglandaceae.

No. 35. A subtropical tree with leathery pinnate foliage resembling that of the walnut and small bracted nuts borne in attractive graceful catkinlike spikes more than a foot long. Native to Kwangtung, China.

111393. GARDENIA AUGUSTA (L.) Merrill. Rubiaceae. Cape-jasmine.

No. 42. An evergreen bush 7 feet high, with flowers which resemble a double white camellia, but with most exquisite perfume. The yellowish fruits are used by the Chinese to produce an indelible yellow dye.

For previous introduction see 99174.

111394. DAPHNIPHYLLUM MACROPODUM Miquel. Euphorbiaceae.

No. 50. An evergreen shrub with handsome elliptic-oblong, dark-green leatherv leaves 5 to 8 inches long, inconspicuous flowers, and small ellipsoidal fruits in axillary racemes 3 inches long. Native to eastern Asia.

111395. Dalbergia Dyeriana Prain. Fabaceae.

No. 52. A large shrubby climber with the branchlets sometimes hooked, pinnate leaves, and small whitish flowers in axillary panicles. Native to central and western China.

111396. Magnolia officinalis Rehd. and Wils. Magnoliaceae.

No. 61. A deciduous magnolia up to 45 feet high, with obovate, pale yellow-

#### 111349 to 111401-Continued.

ish-green leaves over a foot long and large white fragrant flowers produced in early summer at the end of the leafy young growth. Native to western China.

111397. IDESIA POLYCARPA Maxim. Flacourtiaceae.

No. 68.

111398. DAPHNIPHYLLUM GLAUCESCENS Blume. Euphorbiaceae.

No. 73. A tropical evergreen tree with entire, oblong-lanceolate leaves, inconspicuous flowers, and black fleshy drupes. The tree is valued for the ornamental character of its laurellike foliage. Native to the East Indies.

111399. LIGUSTRUM Sp. Oleaceae. Privet. No. 92

111400. POUPARTIA AXILLARIS (Roxb.) King and Prain. Anacardiaceae.

No. 94. A deciduous tree, native to western China, where it becomes 50 to 80 feet high with a gray-barked trunk often 3 feet in diameter near the base. The oval, yellow fruits, about an inch long, are eaten by the Chinese.

111401. (Undetermined.)

No. 96.

111402. CAPSICUM ANNUUM L. Solana-

From Europe. Seeds collected by Dr. Edgar Anderson, Arnold Arboretum Balkan Expedition. Received June 15, 1935.

Croatian peppers; from Krahan, Zagreb, Yugoslavia. A sweet yellow pepper of very high quality; commonly grown in the northern Balkans.

111403. OURATEA AGROPHYLLA (V a n Tiegh.) Urb. Ochnaceae.

From Cuba. Seeds presented by Robert M. Grey, Superintendent, Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos, through F. G. Walsingham. Received June 20, 1935.

An evergreen shrub or small tree, native to Cuba, with thick shining, coarsely dentate, oval-oblong leaves, and showy yellow flowers in terminal panicles.

#### 111404 to 111410.

From Panama. Seeds presented by Dr. Menalco Solis, Department of Agriculture and Industries, Panama. Received June 19, 1935.

Introduced for Department specialists.

111404. CAPSICUM ANNUUM L. Solanaceae. Redpepper.

Morrón.

111405 to 111409. LYCOPERSICON ESCULENTUM Mill. Solanaceae. Tomato.

111405, Ciruelo.

111406. Mercado.

111407. Monte Oscuro.

111408. Pacora.

111409. Soná

111410. SOLANUM MELONGENA L. Solanaceae. Eggplant.

Calidad.

111411. ZEPHYRANTHES SD.

From Mexico. Seed and bulbs presented by Dr. C. A. Purpus, Huatusco, Vera Cruz. Received June 24, 1935.

Collected from the mountains near Hua-

#### 111412 to 111414.

From Australia. Plants presented by George W. Althofer, Dripstone, New South Wales.

Received June 25, 1935.

Introduced for Department specialists.

111412. AMYGDALUS PERSICA NECTARINA Ait. Nectarine. Amygdalaceae.

Irrewarra nectarine.

111413 and 111414. PRUNUS SALICINA Lindl. Amygdalaceae. Japanese plum.

1413. Narrabeen. A large flattish red plum with yellow dots. The yellow flesh is juicy and sugary, and the stone is small; a good cropper. 111413. Narrabeen.

111414. Wilson. A medium large, round, bright-crimson plum with yellow flesh.

111415. BRASSICA RAPA L. Brassica-Turnip. селе.

From China. Seeds presented by Dr. J. F. Rock. Received June 20, 1935.

Introduced for Department specialists.

Rape turnip. A turnip grown by the Chinese tribes of southwestern China, as well as by the Tibetans. The young leaves, as well as the root, are used as a vegetable.

#### 111416 and 111417.

rom Siam. Seeds presented by Mrs. Wil-liam Harris, Prince Royal College, Chieng-From Siam. mai. Received June 19, 1935.

111416. CASSIA Sp. Caesalpiniaceae.

A cassia which blooms in Siam from May through July. The deep-pink flowers and leaves appear at the same time.

111417. CASSIA sp. Caesalpiniaceae.

A cassia with light-pink flowers that appear before the leaves. The flowering period in Siam is from 3 to 4 weeks, from late March to early April.

111418 and 111419. MACADAMIA TERNI-FOLIA F. Muell. Proteaceae.

Queensland-nut.

From Australia. Seeds purchased from S. M. Greer, Upper Dungary, Tweed River, New South Wales. Received June 25, 1935

An evergreen tree up to 50 feet high, native to eastern Australia. It is cultivated for its edible nuts which have sweet white flesh with the flavor of chestnuts, incased in a shell which is typically very hard.

For previous introduction see 103735.

111418. A medium-sized nut with a thin shell.

111419. Mammoth. A variety with large nuts.

111420 and 111421. Solanum TUBE-ROSUM L. Solanaceae. Potato.

From Colombia. Tubers collected by W. A. Archer, Bureau of Plant Industry. Received June 26, 1935.

Amarylli- | 111420 and 111421—Continued.

Cultivated potatoes collected May 15, 1935, between Dos Rios and La Union, El Cauca; introduced for Department special-ĒĖ

111420. No. 3396. Guata.

111421. No. 3397. Chaucha.

111422. CITRUS GRANDIS (L.) Osbeck. Rutaceae. Grapefruit.

From Brazil. Budwood presented by João Dierberger, Jr., São Paulo. Received June 28, 1935.

Introduced for Department specialists.

Zambôa variety. Budwood from a tree growing on the farm of Dierberger & Cia, Fazenda Citra, Limeira.

111423. DIGITARIA LITTORALIS PROS-TRATA Stent. Poaceae. Grass.

From the Union of South Africa. Seeds presented by D. Moses, African Explosives and Industries, Johannesburg. Received June 20, 1935.

Introduced for Department specialists.

A densely tufted grass with numerous runners rooting at the nodes.

For previous introduction see 91766.

#### 111424 and 111425.

rom Cuba. Seeds presented by Robert M. Grey, Superintendent, Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos, through F. G. Walsingham. Received June 17, 1935. From Cuba.

Originally from La Mortola, Ventimiglia, Italy; introduced for Department specialists.

111424. ALOE. Liliaceae.

A hybrid of Aloe striata; other parent unknown.

111425. DYCKIA FRIGIDA (Linden) Hook. f. Bromeliaceae.

A stemless succulent with a dense rosette of spiny, sword-shaped leaves up to 2 feet long, and a lateral ascending scape with a panicle about a foot long of showy yellow flowers. Native to Brazil.

111426 and 111427. ACTINIDIA CHINEN-sis Planch. Dilleniaceae. Yangtao.

From New Zealand. Seeds presented by H. R. Wright, Avondale, Auckland. Received June 25, 1935.

Introduced for Department specialists.

For previous introduction see 99144.

111428. TROPAEOLUM TUBEROSUM Ruiz and Pav. Tropaeolaceae. Nasturtium.

From Colombia. Tubers collected by W. Archer, Bureau of Plant Industry. ceived June 26, 1935.

No. 3398. Cybios, cubia. Collected between Dos Rios and La Union, El Cauca, May 11, 1935. A tuberous-rooted herbaceous climber, with red and yellow flowers, native to the highlands of northern South America, where the tubers are boiled and eaten as a vegetable. The plant is said to be able to withstand a slight frost.

For previous introduction see 99110.

#### 111429 and 111430. ZEPHYRANTHES spp. | 111431 to 111465—Continued. Amaryllidaceae. Zephyrlily.

From Mexico. Bulbs purchased from Dr. C. Conzatti, Oaxaca de Juarez, Oaxaca. Received June 28, 1935.

#### 111429. ZEPHYRANTHES CONZATTII Greenm.

A Mexican zephyranthes with a showy rose-colored or crimson-purple flower, on a scape about 7 inches high, appearing before the leaves. It thrives best on dry slopes.

#### 111430. ZEPHYRANTHES SESSILIS Herb.

A Mexican zephyrlily with three to six narrow linear leaves up to 1 foot long and an equally long scape bearing a showy white flower tinged with red.

#### 111431 to 111465.

From Colombia. Material collected by W. A. Archer, Bureau of Plant Industry. Received June 20, 1935.

Introduced for Department specialists; unless otherwise stated, the material is

111481. HIPPEASTRUM EQUESTRE (L. f.) Herb. Amaryllidaceae.

No. 3413. Cebolleta. From Moscoa, Comisario del Putumayo, May 21, 1935. Bulbs of a West Indian hippeastrum with six to eight strap-shaped leaves over a foot long, and an umbel of two to four red flowers over 4 inches long.

## 111432. BACCHARIS TRINERVIS RHEXIOIDES (H. B. K.) Baker. Asteraceae.

No. 3411. From Moscoa, Comisario del Putumayo, May 21, 1935. A semiclamber-ing lax herb 10 feet high, with narrow leaves about 3 inches long and yellow flower heads in dense panicles. Native to

111433. STIGMAPHYLLON BOGOTENSE Tr. and Planch. Malpighiaceae.

No. 3385. Collected near Popayan, May 10, 1935. A woody vine 20 feet high, with gummy buds and flowers. Native to Colombia.

111434 to 111438. BOMAREA spp. Amaryllidaceae.

The bomareas are a large genus of twining plants, native to tropical America. They have showy, often spotted flowers, usually in umbels.

#### 111434. BOMAREA Sp.

No. 3424. Peca. Sibundoy, Comisario del Putumayo, May 25, 1935. Tubers and rootstocks of a species with red flowers.

#### 111435. BOMAREA Sp.

No. 3384. Collected near Popayan, May 10, 1935. A form with orange-yellow flowers.

111436. Bomarea oligantha Baker.

No. 3378. From the roadside between Popayan and Tambo, May 7, 1935.

#### 111437. BOMAREA SD.

No. 3406. Collected in the Paramo del Tabano. Comisario del Putumayo, May 15, 1935. A vine 2 to 3 feet long with red flowers.

111438. BOMAREA Sp.

No. 3405. From the Paramo del Ta-bano, Comisario del Putumayo, May 15, 1935. Collected from plants growing in damp moss; the flower bracts were red and the flowers yellow.

111439. BUDDLEIA AMERICANA L. Loganiaceae.

No. 3421. From the mountains between Mocoa and Sibundoy. Comisario del Putumayo, May 24, 1935. A shrub 4 to 5 feet high with white flowers.

111440. CALEA GLOMERATA Klatt. Asteraceae

No. 3376. Chicharon. Collected along the roadside between Popayan and Tambo, May 7, 1935. A clambering shrub 15 feet high with aromatic leaves. Native to Colombia,

## 111441 to 111444. CARICA CANDAMARCENSIS. Hook, f. Papaya.

A small papaya, the fruit less than 4 inches long, with very thin flesh which is highly acid and is used only in making preserves and strups. The fruit is orange yellow when ripe, and the pale-yellow flesh has a spicy, aromatic flavor and fragrance, but is never eaten fresh.

For previous introduction see 106501.

111441. No. 3395. Chilauca. From the market at Pasto, May 15, 1935.

111442. No. 3417. From the mountains between Mocoa and Sibundoy, Comi-sario del Putumayo, May 19, 1935.

1443. No. 3372. Higo. From the market at Popayan, May 5, 1935. A form from the cold regions. The fruit is oval and smooth, i. e., not ribbed.

111444. No. 3371. Higuillo. From the market at Popayan, May 7, 1935. A form which grows in cold regions. The yellow fruits are five ribbed and slightly tapered towards the stem.

111445. CLEOME ANOMALA H. B. K. Capparidaceae.

No. 3420. Mano de oso. From Sibun-oy, Comisario del Putumayo, May 18, aoy, 1935.

For previous introduction and description see 111212.

111446. GYNANDROPSIS GRACILIS (Tr. and Planch.) Macbride. Capparidaceae.

No. 3423. From the mountains between Mocoa and Sibundoy, Comisario del Putumayo, May 24, 1935. An unarmed shrub with slender branches, ternate leaves, and orange-red flowers in long graceful terminal racemes. Native to Colombia.

111447. CLEOME sp. Capparidaceae.

No. 3427. From Mocoa, Comisario del Putumayo, May 19, 1935. An herb 3 to 4 feet high with greenish flowers.

111448. CLIBADIUM GLABRESCENS Blake. Asteraceae.

No. 3415. From the mountains between Mocoa and Sibundoy, Comisario del Putumayo, May 19, 1935. A slender aromatic shrub 4 to 6 feet high.

#### 111431 to 111465-Continued.

111449. CORIARIA THYMIFOLIA Humb. and Bonpl. Coriariaceae.

No. 3428. From near Santiago, Comisario del Putumayo, May 27, 1935. A clambering shrub about 10 feet high with black fruits. The bark and roots are said to be rich in tannin.

For previous introduction see 46224.

111450. TEPHROSIA CINEREA (L.) Pers. Fabaceae.

No. 3387. From El Bordo, Departamento El Cauca, May 10, 1935. An herb 6 to 10 inches high with pink flowers.

For previous introduction and description see 111034.

111451. TEPHROSIA TOXICARIA (Sw.) Pers. Fabaceae.

No. 3409. Guaranga. From Mocoa, Comisario del Putumayo, May 21, 1935.

111452 and 111453. DIOCLEA SERICEA H. B. K. Fabaceae.

For previous introduction and description see 110992.

111452. No. 3367. From Capinero, near Bogotá, April 26, 1935.

111453. No. 3391. Juan Blanco. From El Bordo, Departamento El Cauca, May 10, 1935.

111454. EUPHORBIA COTINIFOLIA L. Euphorbiaceae.

No. 3389. Manzanillo. From El Bordo, Departamento El Cauca, May 10, 1935. An unarmed shrub 10 to 15 feet high, with opposite, ovate, long-pointed leaves up to 2 inches long, and small inconspicuous flowers in terminal cymes. Native to the West Indies.

111455. INDIGOFERA LESPEDEZIOIDES H. B. K. Fabaceae.

No. 3381. Barbasquilla. From Gelina, near Popayan, May 9, 1935. A slender woody perennial, up to 3 feet high, with small leaflets and salmon-colored flowers in axillary racemes. Native to Mexico.

111456. INDIGOFERA SUFFRUTICOSA Mill. Fabaceae. Indigo.

No. 3392. Tinta. From Dos Rios, Departamento El Cauca, May 11, 1935.

111457. Lupinus sp. Fabaceae.

No. 3400. Chocho. Near Pasto, May 15, 1935. A shrub 2 feet high.

. 111458. Lycoseris oblongifolia Rusby. Asteraceae.

No. 3388. From El Bordo, Departamento El Cauca, May 10, 1935. A woody vine up to 30 feet long, with thick oblong leaves about 6 inches long and small solitary terminal heads of purple flowers. Native to Colombia.

, 111459. NICOTIANA TABACUM L. Solanaceae.

No. 3414. From Florencia, Comisario del Putumayo, May 1935.

111460 and 111461. PASSIFLORA CUMBA-LENSIS (Karst.) Harms. Passifloraceae.

A woody climber with trilobed leaves, the leaflets rhomboid, and solitary axillary pink flowers. Native to Colombia.

#### 111431 to 111465-Continued.

111460. No. 3401. Taosa. From the Paramo del Tabano, Comisario del Putumayo, May 15, 1935.

111461. Collected in Guayaquil, Ecuador, June 1935.

111462. Solanum sp. Solanaceae.

No. 3407. Culebrilla. From Mocoa, Comisario del Putumayo, May 21, 1935. A shrub up to 3 feet high, with yellow flowers striped with brown and red fruits.

111463 and 111464. SPIGELIA PEDUNCULATA H. B. K. Loganiaceae.

Guambia. From Comisario del Putumayo. A herbaceous perennial about 4 feet high, with pink flowers. Native to Colombia.

111463. No. 3426. Collected May 23, 1935, at Sibundoy.

111464. No. 3419. Collected May 18, 1935, at San Francisco.

111465. VIOLA TRICOLOR L. Violaceae.
Common pansy.

No. 3399. Collected near Pasto, Comisario del Putumayo, May 15, 1935. Seen several times, always near habitations.

For previous introduction see 28262.

#### 111466 to 111470.

From British Honduras. Seeds purchased from William A. Schipp, Punta Gorda, Temash River. Received June 26, 1935.

Introduced for Department specialists.

111466. CHAMAEDOREA GEONOMAEFORMIS Wendl. Phoenicaceae. Palm,

A small graceful palm about 4 feet high, with deeply pinnatisect leaves about 9 inches long. Native to Guatemala.

For previous introduction see 50520.

111467. CHAMAEDOREA OBLONGATA Mart Phoenicaceae. Palm

An erect spineless palm with a slender trunk about 8 feet high, with large pinnate leaves of 10 to 14 narrow segments. Native to Brazil.

111468 to 111470. Geonoma spp. Phoenicaceae. Palm.

111468. GEONOMA SP.

111469. GEONOMA BINERVIA Oerst.

A slender spineless palm up to 18 feet high, with pinnate leaves over 4 feet long and small black fruits. Native to Central America.

111470. G E O N O M A LONGEPETIOLATA Oerst.

A slender palm, native to Central America, with a smooth trunk 8 feet high and pinnatisect leaves over a foot long.

## 111471 to 111473. PHLEUM PRATENSE L. Poaceae. Timothy.

From Sweden. Seeds presented by Dr. G. Nilsson Lissner, Swedish Plant Breeding Institute, Svalöf. Received June 28, 1935.

Varieties developed at the Plant Breeding Institute, Svalöf; introduced for Department specialists. 111471 to 111473—Continued.

111471. Bors.

111472. Bottnia.

111473. Gloria

111474 to 111476. PHIEUM PRATENSE L. Timothy.

From the Union of Soviet Socialist Republics. Seeds presented by G. N. Shlykov, Department of New Cultures and Intro-duction, Institute of Plant Industry, Leningrad. Received June 27, 1935.

Introduced for Department specialists.

111474. No. 9862. From the Krasnie Experiment Station, Moscow region.

111475, No. 17799, From Kolhasi.

111476. No. 18180. From Morshansk.

#### 111477 to 111585.

From the Union of Soviet Socialist Republics. Seeds presented by the Institute of Plant Industry, Leningrad, through H. L. Westoyer and C. R. Enlow, Bureau of Plant Industry. Received June 20, 1935.

The field numbers are those of the West-over and Enlow series.

Introduced for Department specialists.

111477 to 111502. AGROPYRON spp. Poa-Wheatgrass.

111477 to 111480. AGROPYRON CRISTATUM (L.) Gaertn. Crested wheatgrass.

... 111477. No. 1409. 111479, No. 1412.

111478. No. 1410. 111480. No. 1413.

111481. AGROPYRON DESERTORUM (Fisch.) Schult.

No. 1411.

111482 to 111484. AGROPYBON RAMOSUM (Trin.) C. Richt.

A perennial grass about a foot high, native to central Asia.

111482. No. 1414. 111484. No. 1416. 111483. No. 1415.

111485 to 111498. AGROPYRON REPENS (L.) Beauv. Quackgrass.

111485. No. 1417. 111492. No. 1424.

111486. No. 1418. 111493, No. 1425. 111487. No. 1419. 111494. No. 1426.

111488. No. 1420. 111495. No. 1427.

111489. No. 1421. 111496. No. 1428.

111490. No. 1422. 111497. No. 1430. 111491, No. 1423 111498. No. 1431.

111499 to 111502. AGROPYRON spp.

111499. No. 1429. 111501. No. 1433.

111502. No. 1434. 111500, No. 1432

111503 to 111513. AGROSTIS ALBA L. Pos-Redtop. ceae

> 111509. No. 1444. 111508. No. 1435. 111504. No. 1436. 111510. No. 1445.

> 111505, No. 1437. 111511. No. 1446.

> 111512. No. 1447. 111506. No. 1440.

> 111513. No. 1441. 111507. No. 1442.

111508. No. 1443.

111477 to 111585-Continued.

111514 to 111517, ALOPECURUS SDD.

111514. ALOPECURUS PRATENSIS L. No. 1448.

111515 to 111617. ALOPPEURUS ARUNDI-NACEUS Poir.

111517. No. 1451. 111515. No. 1449. 111516. No. 1450.

111518. ASTRAGALUS ONOBRYCHIS L. Poaceae.

No. 1452

For previous introduction see 101410.

111519. ASTRAGALUS SEMIBILOCULARIS DC. Fabaceae.

No. 1453. An erect herbaceous perennial; native to Siberia.

111520. BECKMANNIA SYZIGACHNE (Steud.) Fern. Poaceae.

No. 1455.

111521 to 111534. BROMUS spn. Poacese. Bromegrass.

111521 111528. BROMUS · to INERMIS Common bromegrass. Leves.

111521. No. 1457. 111525, No. 1461.

111522. No. 1458. 111526. No. 1462.

111523. No. 1459. 111527. No. 1463.

111528. No. 1464. 111524. No. 1460.

111529. BROMUS TECTORUM L.

111530. Bromus Tomentellus Boiss. No. 1456.

111531. BROMUS SIBIRICUS Drob.

No. 1466.

No. 1465.

111532. Bromus inermis Leyss. Common bromegrass.

No. 1467.

111533. BROMUS Sp.

No. 1485.

111534. BROMUS SP.

No. 1487.

Fisch.

111535 to 111544. DACTYLIS GLOMERATA L. Orchard grass. Poaceae.

111540. No. 1474. 111535. No. 1469.

111541. No. 1475. 111536, No. 1470. 111542. No. 1476.

111537. No. 1471. 111538. No. 1472. 111548. No. 1477.

111544. No. 1478.

111539. No. 1473. 111545 and 111546. DESCHAMPSIA CAESPI-TOSA (L.) Beauv. Poaceae. Grass.

111545. No. 1438. 111546. No. 1439.

111547 to 111557. ELYMUS spp. Poaceae. Wild-rye.

111547 and 111548. ELYMUS DAHURICUS Turcz.

111547. No. 1479. 111548, No. 1480. 111549 to 111553. ELYMUS JUNCEUS. .111477 to 111585—Continued.

111549. No. 1481. 111552. No. 1509.

111550. No. 1507. 111553. No. 1510.

111551. No. 1508.

111554 and 111555. ELYMUS DASYSTA-CHYS Trin.

111554. No. 1482. 111555. No. 1483.

111556. ELYMUS SIBIRICUS L.

No. 1484.

111557. ELYMUS Sp.

No. 1486.

111558 to 111567. FESTUCA spp. Poaceae. Fescue.

111558 to 111560. FESTUCA ELATIOR L. Meadow fescue.

111558. No. 1492. 111560. No. 1494.

111559. No. 1493.

111561 to 111564. FESTUCA OVINA L. Sheep fescue.

111561. No. 1488. 111563. No. 1490.

111562. No. 1489. 111564. No. 1491.

111565 and 111566. FESTUCA RUBRA L. Red fescue.

111565. No. 1495. 111566. No. 1496. 111567. FESTUCA Sp.

No. 1497.

111568 to 111572. GALEGA spp. Fabaceae. Goatsrue.

111568 to 111571. GALEGA ORIENTALIS Lam.

111568. No. 1498. 111570. No. 1500.

111569. No. 1499. 111571. No. 1501.

111572. GALEGA sp.

No. 1502.

111573 to 111575. HEDYSARUM spp. Fabaceae.

111573 and 111574. HEDYSARUM HEDYSAROIDES (L.) Stuntz.

111573. No. 1503. 111574. No. 1504.

111575. HEDYSARUM POLYMORPHUM Ledeb.

No. 1505.

For previous introduction see 60342.

111576. HIEROCHLOE ODORATA (L.) Beauv. Poaceae. Sweetgrass.

No. 1506.

111577 and 111578. KOELERIA GRACILIS Pers. Poaceae. Grass.

111577. No. 1511. 111578. No. 1512.

111579 to 111581. LATHYRUS PRATENSIS L. Fabaceae. Yellow vetchling.

111579. No. 1513. 111581. No. 1515.

111580. No. 1514.

111582. LOTUS CORNICULATUS L. Fabaceae. Birdsfoot trefoil.

No. 1517

For previous introduction see 91982.

111477 to 111585—Continued.

111583. ORYZOPSIS Sp. Poaceae. Grass.

111584. PUCCINELLIA DISTANS (L.) Parl. Poaceae. Grass.

No 1454

111585. TRIFOLIUM sp. Fabaceae. Clover. No. 1516.

#### 111586 to 111602.

From Colombia. Seeds collected by W. A. Archer, Bureau of Plant Industry. Received in May and June 1935.

Introduced for Department specialists.

111586. BACCHARIS MORITZIANA Hieron Asteraceae.

No. 3375. Almanga. Collected May 7, 1935, on the roadside between Popayan and Tambo. A clambering shrub from 10 to 15 feet high. Native to northern South America.

111587. Briza MINOR L. Poaceae. Little quaking grass.

No. 3370. Illusion. From the market at Popayan, May 7, 1935. An erect annual grass up to 3 feet high; sold as an ornamental.

For previous introduction see 109044.

111588. CESTRUM MUTISH Willd. Solana-

No. 3346. Tinto. From Salto de Tequendama, near Bogotá, April 22, 1935.

For previous introduction see 110847.

111589 and 111590. CLIBADIUM SURINA-MENSE L. Asteraceae.

111589. No. 3356. Collected near Cali, May 2, 1935. A shrub up to 5 feet high.

111590. No. 3374. Pintadilla. Collected along the road between Popayan and Tambo, May 7, 1935. A shrub up to 10 feet high.

111591. TEPHROSIA TOXICARIA (Sw.) Pers. Fabaceae.

No. 3882. Barbasco. Collected near the railroad tunnel, at Helena, near Popayan, May 9, 1935.

111592. BENTHAMANTHA CARIBARA (Jacq.) Kuntze. Fabaceae.

No. 3341. From Tocaima, Finca Chucunday, Departamento Cundinamarca, May 19, 1935.

For previous introduction and description see 111213.

111593. ERIOSEMA VIOLACEA (Aubl.) Don. Fabaceae.

No. 3380. Collected at Helena, near Popayan, May 9, 1935. A slender unbranched herb, 3 feet high, with yellow flowers.

For previous introduction see 97844.

111594. MYRCIA XYLOPIOIDES (H. B. K.) DC. Myrtaceae.

No. 3366. Namu. From Cali, May 3, 1935. A tropical evergreen shrub up to 10 feet high, with lanceolate leaves and numerous small white flowers in axillary panicles. Native to Colombia.

#### 111586 to 111602 Continued.

111595. Figus Archeri Standley. Mora-

From Granja, De-Popayan, May 7, No. 3369. Uvillo. From Gra partamento de Cauca, Popayan, 1935.

111596. PALICOUREA LINEARIFLORA Wern-Rubiaceae. ham.

No. 3353. From Chapinero, near Bo-gotá, April 26, 1935. A slender shrub 10 to 15 feet high, with long drooping branches and pale greenish-cream flowers. Native to Colombia.

111597. PASSIFLORA sp. Passifloraceae.

No. 3368. Triponas. From the market at Cali, May 4, 1935. A small pale-yellow fruit overlaid with yellow mottling and stripes. The acid flavor resembles that of the grapefruit.

Verbenaceae. 111598. PETREA Sp.

No. 3358. From the Agricultural Experiment Station, Palmira, May 2, 1935.

A small ornamental tree, cultivated for its blue flowers.

111599. PHASEOLUS LATHYROIDES L. Faba-

May 2, No. 3363. From near Cali, May 2, 1935. A bean which is apparently indigenous. A semierect annual legume which makes a good growth on poor land. The dark-red flowers are very ornamental. It is cultivated as a cover crop.

For previous introduction see 106931.

111600. TERAMNUS UNCINATUS (L.) Sw. Fabaceae.

No. 3377. Along the roadside between Popayan and Tambo, May 7, 1935. A small vine with a fleshy taproot, native to tropical America. It is used as forage in Brazil and the Virgin Islands.

For previous introduction see 109986.

111601. AMBROSIA Sp. Ambrosiaceae.

way between Pamplona and March 24, 1935. No. 3256. ay between Altamisa. From the high-Malaga,

111602. Ambrosia sp. Ambrosiaceae.

No. 3219. Altamisa. Betwee and Pamplona, March 20, 1935. Between Cucuta

#### 111693 to 111735.

From the Union of Soviet Socialist Republics. Seeds presented by the Institute of Plant Industry, Leningrad, through H. L. Westoyer and C. R. Enlow, Bureau of Plant Industry. Received June 21, 1935.

Introduced for Department specialists.

The field numbers are those of the Westover and Enlow series.

111603. BECKMANNIA ERUCAEFORMIS Host. Poaceae. Sloughgrass.

No. 1629.

111604. Koeleria CRISTATA (L.) Pers. Grass. Poaceae.

No. 1599.

111605 to 111685. MEDICAGO spp. ceae.

111605 to 111617. MEDICAGO FALCATA I. Yellow-flowered alfalfa.

111605. No. 1518. 111612. No. 1525.

### 111603 to 111735—Continued.

111606. No. 1519. 111613. No. 1526. 111607, No. 1520. 111614. No. 1527. 111615. No. 1528. 111608. No. 1521. 111609. No. 1522. 111616. No. 1529. 111610. No. 1523. 111617. No. 1530. 111611. No. 1524.

111618. MEDICAGO HEMICYCLA Grossh.

No. 1531. A perennial alfalfa with ascending stems about 2 feet high. Native to the Transcaucasus region, at altitudes between 2,000 and 6,000 feet.

111619 to 111680. MEDICAGO SATIVA Alfalfa.

111619. No. 1532. 111650. No. 1563. 111620. No. 1533. 111651. No. 1564. 111621. No. 1534. 111652. No. 1565. 111622. No. 1535. 111653. No. 1566. 111623. No. 1536. 111654. No. 1567. 111624. No. 1537. 111655. No. 1568. 111656. No. 1569. 111625. No. 1538. 111626, No. 1539. 111657. No. 1570. 111627. No. 1540. 111658. No. 1571. 111628. No. 1541. 111659. No. 1572. 111629. No. 1542. 111660. No. 1573. 111630. No. 1543. 111661. No. 1574. 111631. No. 1544. 111662. No. 1575. 111632. No. 1545. 111668. No. 1576. 111633. No. 1546. 111664. No. 1577. 111634. No. 1547. 111665. No. 1578. 111635. No. 1548. 111666. No. 1579. 111636. No. 1549. 111667. No. 1580. 111637. No. 1550. 111668. No. 1581. 111638. No. 1551. 111669. No. 1582. 111639. No. 1552. 111670. No. 1583. 111640. No. 1553. 111671. No. 1584. 111641. No. 1554. 111672. No. 1585. 111642. No. 1555. 111673. No. 1586. 111643. No. 1556. 111674. No. 1587. 111644. No. 1557. 111675. No. 1588. 111645. No. 1558. 111676. No. 1589. 111646. No. 1559. 111677. No. 1590. 111678. No. 1591. 111647. No. 1560. 111648. No. 1561. 111679. No. 1592. 111649. No. 1562. 111680. No. 1593.

111681 to 111685. MEDICAGO spp.

111681. No. 1594. 111684. No. 1597. 111682. No. 1595. 111685. No. 1598.

111683. No. 1596.

111686. MELICA CILIATA L. Poaceae.

111687 to 111694. MELILOTUS spp. Fabaсеяе. Sweetclover. 111687 to 111689. MELILOTUS ALBA Desr. White sweetclover.

> 111687. No. 1601. 111689. No. 1603.

111688. No. 1602.

111603 to 111785—Continued.

111690 to 111692. MELILOTUS DENTATA (Waldst. and Kit.) Pers.

111692. No. 1606. 111690, No. 1604. 111691. No. 1605.

111693 and 111694. MELILOTUS OFFICI-NALIS (L.) Lam.

111693. No. 1607. 111694. No. 1608.

111695. Onobrychis arenaria DC. Fabaceae.

No. 1609.

For previous introduction see 108658.

111696. ONOBRYCHIS VULGARIS Hill. Fabaceae. Sanfoin. No. 1610.

111697 to 111700. PHALARIS ARUNDINACEA L. Poaceae. Reed canary grass.

111697. No. 1611. 111699. No. 1613. 111700. No. 1614. 111698, No. 1612.

111701 to 111708. PHLEUM spp. Poaceae. Timothy.

111701 to 111706. PHIEUM PHLEOIDES (L.) Karst.

111701, No. 1615. 111704. No. 1618. 111702. No. 1616. 111705. No. 1619.

111703. No. 1617. 111706. No. 1620.

111707 and 111708. PHLEUM PRATENSE L. 111708. No. 1622. 111707. No. 1621.

111709 to 111720. POA spp. Poaceae. Bluegrass.

111709 to 111716. POA PRATENSIS L. Kentucky bluegrass.

111709. No. 1624. 111713. No. 1631. 111710. No. 1626. 111714. No. 1623. 111711. No. 1628. 111715. No. 1625.

111712. No. 1630. 111716. No. 1627.

111717. POA sp.

No. 1632.

111718. POA SD.

No. 1633.

111719. POA PRATENSIS L. Kentucky bluegrass.

No. 1634.

111720. Poa sp.

No. 1635.

111721 to 111734. TRIFOLIUM spp. Faba-Clover.

111721. Trifolium repens L. White clover.

No. 1636.

111722 to 111731. TRIFOLIUM PRATENSE L. Red clover.

111722. No. 1639. 111727. No. 1645. 111723. No. 1640. 111728. No. 1646. 111724. No. 1641. 111729. No. 1647.

111725. No. 1642.

111730. No. 1648.

111731. No. 1649. 111726. No. 1643.

| 111603 to 111735—Continued.

111732 to 111734. TRIFOLIUM REPENS L: White clover;

111782. No. 1637. 111784, No. 1644: 111733. No. 1638.

111735. VICIA CRACCA L. Pabaceae. Cow wetch.

No. 1650.

111736. AMARYELIS Sp. Amaryllida-

From Brazil. Bulbs collected near Rio de Janeiro by Dr. Doris Cochran, United States National Museum. Received June

Collected about 50 yards from the seacoast.

#### 111737 to 111748.

From Wales. Seeds collected in western China and presented by Lord Aberconway, Bodnant Gardens, Tal-y-Cafn, North Wales. Received June 26, 1935.

1737. ALBIZZIA JULIBRISSIN MOLLIS (Wall.) Benth. Mimosaccae.

No. 86. A densely pubescent variety with broader, more leathery leaflets than the type. Native to Nepal.

111738. DALBERGIA MIMOSOIDES Franch. Fabaceae.

No. 42. A shrub 12 to 18 feet high, with pinnate leaves about 3 inches long and numerous small white flowers in axillary panicles. Native to southwestern China.

111739. EREMURUS CHINENSIS O. Fedtsch. Liliaceae.

No. 56. An eremurus about 2 feet high, with thin, flaccid, keeled, narrow leaves and flower spikes about 16 inches long. Native to western China.

111740. GORDONIA CHRYSANDRA COWAII. Theaceae.

No. 153. An evergreen shrub or tree up to 35 feet high, with shiny elliptic-ovate leaves about 4 inches long and large white or creamy-white flowers, sollitary or several in a raceme. Native to Yunnan, China, at altitudes between 5,000 and China, at 9,000 feet.

LUTEA Bur. and 111741. INCARVILLEA Franch, Bignoniaceae.

No. 1. A perential herb native to southwestern China at altitudes between 10,000 and 12,000 feet. The long-petioled radical leaves, 8 to 15 inches long, are pinnately divided into broad-lanceolate crenate segments, and the pendulous yellow flowers, 2 inches across, are borne in clusters of 6 to 20 on scapes 2 to 4 feet high. feet high.

For previous introduction see 100194.

111742. KETELEERIA DAVIDIANA (Bertrand) Beissner. Pinaceae.

No. 77. A coniferous tree, native to western China, closely allied to the firs. It sometimes becomes 100 feet tall, is of pyramidal habit, and has handsome glossy, green, firlike foliage.

For previous introduction see 105669.

#### 111737 to 111748—Continued.

111743. PHOTINIA FRANCHETIANA Diels. Malaceae.

No. 156. A small evergreen tree or shrub, with lustrous, obovate-elliptic or obovate leaves about 5 inches long and numerous panicles of small white flowers. Native to Yunnan, China, at about 7,000 feet altitude.

to 111746. RHODODENDRON spp. 111744 Ericaceae.

111744. RHODODENDRON BULLATUM Franch.

No. 158. A loosely branched shrub up to 8 feet high, native to Yunnan, China. The branchitts are densely and softly woolly; the elliptic-ovate leaves, 2 to 4 inches long, are puckered above and loosely woolly pubescent beneath; and the broadly tubular pink-tinged white flowers, 2 to 3 inches long, are borne in terminal clusters.

For previous introduction see 103137.

111745. RHODODENDRON CRASSUM Franch.

No. 129. A shrub 8 feet high, found in sonthwestern China between 10.000 and 12.000 feet altitude. The dark-gre'n, oval-oblong, acute leaves are greenish-brown punctate beneath; the white tubular flowers are up to 4 inches across.

For previous introduction see 84166. 111746. RHODODENDRON HAEMATODES Franch.

No. 131. 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 rufous-woolly tomentose beneath. The four-woolly tomentose beneath: 'Ine fleshy, tubular-campunulate, crimson flowers, in umbels of 6 to 8, are 2

For previous introduction see 97666.

111747. SORBUS POTERIIFOLIA Hand.-Mazz. Malaceae.

No. 136. A shrub up to 15 feet high, with pinnate leaves 2 to 4 inches long and corymbs of small crimson flowers. Native to southwestern China.

111748. TERNSTROEMIA GYMNANTHERA (Wight and Arn.) Sprague. Theaceae.

No. 150. An evergreen tree about 20 feet high, with oblong-ovate leaves and small, pale-yellow, fragrant flowers followed by yellow berries about the size of a cherry. Native to southeastern Asia.

#### T11749 to 111760.

From Ecuador. Seeds collected by Mrs. Ynes Maxia, Bureau of Plant Industry. Received June 25, 1935.

Introduced for Department specialists.

111749 to 111752. BOMAREA spp. Amaryllidaceae.

Collected near Baeza, Canton Napo, Province of Napo-Pastaza, at 6,000 feet altitude, May 5, 1935. Flowers not seen.

111749. BOMARBA Sp.

No. 7845. A perennial herb found climbing among the undergrowth along the trail.

111749 to 111760—Continued.

111750. BOMAREA Sp.

No. 7346. A clambering herb found in open forest.

111751. BOMAREA SD.

No. 7344. On the trail between Baeza and Papaliacta. A herbaceous climber on undergrowth in open woods. the trail between

111752. BOMAREA Sp.

No. 7347. A trailing plant found growing in light shade.

111753. GRIAS LORETENSIS R. Kunth. Lecythidaceae.

No. 7232. A slender-trunked tropical evergreen tree up to 45 feet high, with long narrow-lanceolate leaves and racemes of showy yellow flowers. Native to Peru to Peru.

111754. GUAREA Sp. Meliaceae.

No. 7084

111755. JACARANDA sp. Bignoniaceae. No. 7295.

111756. JUGLANS HONOREI Dode. Juglan-

No. 7338. Tocte. A wild walnut, native to the highlands of northern South America, which resembles closely the black walnut of the United States. The thick-shelled nut contains a kernel of mild pleasant flavor.

For previous introduction see 108822.

111757. Solanum sp. Solanaceae.

No. 7124.

111758. (Undetermined.)

No. 7240.

111759. (Undetermined.)

No. 7030.

111760. (Undetermined.)

No. 1240.

#### 111761 to 111763.

rom Africa. Seeds presented by the Experiment Station. Department of Agriculture, Southern Rhodesia, through H. S. Hering. Penacook, N. H. Received June 20, 1935.

Introduced for Department specialists:

111761. AGROPYRON CRISTATUM Gaertn. Poaceae. Crested wheatgrass. Variety Fairway.

141762 and 111763. CYNODON DACTYLON (L.) Pers. Poaceae. Bermuda grass.

111762. Variety' Royal Cape.

111763. Variety Magennis.

#### 111764 to 111821.

From India. Seeds presented by A. H. Lee, Bandrale, Kulu, Punjab, through Walter Koelz Grass Lake, Mich. Received June

Introduced for Department specialists.

111764. ALLIUM sp. Liliaceae.

No. 44.

111764 to 111821-Continued.

111765. AMPHICOME ARGUTA Royle. Bignoniaceae.

No. 56. A perennial herb with pink flowers.

111766. BARLERIA Sp. Acanthaceae. No. 40. An evergreen shrub.

111767. CALAMINTHA sp. Menthaceae.

No. 70. A herbaceous perennial with pink or violet flowers.

111768. CHAEROPHYLLUM sp. Apiaceae.

No. 6. A tall herbaceous perennial with white flowers.

111769. CHRYSANTHEMUM sp. Asteraceae. No. 18.

111770. CLEMATIS sp. Ranunculaceae. No. 25.

111771. COTONEASTER sp. Malaceae. No. 9.

111772. COTONEASTER sp. Malaceae. No. 10.

111773. DEUTZIA Sp. Hydrangeaceae.

111774. ELAEAGNUS Sp. Elaeagnaceae.

111775. ERIGERON sp. Asteraceae.

111776. Erigeron sp. Asteraceae.

111777. FESTUCA GIGANTEA (L.) Vill. Poaceae. Great fescue.

No. 33.

111778. HYPERICUM sp. Hypericaceae. No. 69.

111779. Indigofera sp. Fabaceae.

111780. LACTUCA sp. Cichoriaceae.

111781. LATHYRUS sp. Fabaceae. No. 71.

111782. LEPTODERMIS LANCEOLATA Wall. Rubiaceae.

No. 43. A spreading shrub 3 to 5 feet high, with lanceolate leaves 1 to 2 inches long and small white flowers in terminal heads. Native to the Himalayas from 4,000 to 10,500 feet altitude.

111783. Pieris sp. Ericaceae.

No. 75.

111784. PRIMULA sp. Primulaceae.
No. 17.

111785 to 111789. PRUNUS spp. Amygda-laceae.

111785. PRUNUS sp.

No. 23.

111786. PRUNUS Sp.

No. 3.

111764 to 111821—Continued.

111787. PRUNUS Sp.

111788. PRUNUS Sp.

No. 22.

111789. PRUNUS sp.

No. 4.

111790. RHUS sp. Anacardiaceae.

No. 61.

111791. RIBES sp. Grossulariaceae.

No. 34.

111792. RUMEX sp. Polygonaceae.

No. 66.

111793. RUMEX sp. Polygonaceae.

111794. Rosa sp. Rosaceae.

No. 68.

111795. Salvia Glutinosa L. Menthaceae. Sage.

No. 28. A perennial sage about 3 feet tall, glutinous hairy throughout, with ovate-oblong, dentate leaves up to 7 inches long and pale-yellow flowers an inch long in lax whorls. Native to Europe and Asia.

For previous introduction see 104587.

111796. Sorbaria lindleyana Maxim. Rosaceae.

No. 54.

111797 to 111799. SENECIO spp. Asteraceae.

111797. SENECIO Sp.

No. 15.

111798. SENECIO sp.

No. 57.

111799. SENECIO sp.

No. 20.

111800. GYNUBA ANGULOSA DC. Asteraceae.

No. 41. A succulent herbaceous plant 3 to 10 feet high, with large sessile, acuminate stem leaves 6 to 12 inches long; the basal leaves are sometimes 2 feet long. The yellow or purplish flower heads are up to an inch in length. Native to the temperate regions of the Himalavas.

For previous introduction see 47690.

111801 to 111803. SOLANUM spp. Solana-ceae.

111801. SOLANUM Sp.

No. 47.

111802. SOLANUM Sp.

No. 26.

111803. SOLANUM sp.

No. 11.

111804. SOPHORA MOLLIS (Royle) Grah. Fabaceae.

No. 1. A low shrub, with odd-pinnate leaves 6 inches long and small yellow flowers in numerous racemes 2 to 3 inches long. Native to the Himalayas at an altitude of about 4,000 feet.

111764 to 111821-Continued.

111805. VIBURNUM sp. Caprifoliaceae.

111806. (Undetermined.)

No. 7.

111807. (Undetermined.)

No. 59.

111808. BERBERIS sp. Berberidaceae.

No. 53.

111809. (Undetermined.)

117810. (Undetermined.)

No. 8.

111811. (Undetermined.)

No. 64.

111812. (Undetermined.)

No. 42.

111813. BERGENIA sp. Saxifragaceae.

No. 24.

111814. (Undetermined.)

No. 5.

111815. (Undetermined.)

111816. (Undetermined.)

No. 67.

111817. (Undetermined.)

No. 12.

111818. (Undetermined.)

111819. (Undetermined.)

No. 52,

111820. (Undetermined.)

No. 50.

111821. (Undetermined.)

No. 29.

111822 to 111825. Prunus spp. Amygdalaceae

From Norway. Plants purchased from Prof. Olav Moen, Planteskolen, Norges Landbrukshøiskole, Ås. Received May 21,

Introduced for Department specialists.

111822 to 111824. PRUNUS AVIUM L. Sweet cherry.

111822. Hedelfinger kjempe.

111823. White Spanish.

111824. Kronberg.

111825. PRUNUS CERASUS L. Sour cherry. Skyggekirselear.

111826 to 111849.

From Australia. Plants purchased from L. P. Rosen & Son, Carlingford, New South Wales. Received May 23, 1935.

Introduced for Department specialists.

111826 to 111849—Continued.

111826 to 111839. Amygdalus spp. Amygdalaceae.

111826 to 111836. Amygdalus Persica.

111826. Bell's November.

111827. Braddock.

111828. Duchess of Cornwall.

111829. Early Silver.

111830. Manning.

111831. Marquis of Downshire.

111832. Royal George Cling.

111833. Royal George Slip.

111834. Watt's Early.

111835. Wiggins.

111836. Wooton.

111837 and 111838. AMYGDALUS PERSICA.
NECTARINA Ait. Nectarine.

111837. Masterpiece.

111838. River's Orange.

111839. AMYGDALUS PERSICA L. Peach.

111840 to 111849. PRUNUS AVIUM L. Amygdalaceae. Sweet cherry.

111840. Bedford Prolific.

111841. Belle d'Orleans.

111842. Eagles.

111843. Early Lyons.

111844. Early Purple Guigne.

111845. Florence.

111846. Noble.

111847. Precoce de Boppard.

111848. Ramen Oliva.

111849. St. Margaret.

111850 to 111857. Prunus spp. Amygdalaceae.

From Sweden. Trees and scions purchased from Stensborgs Trädskolor, Karlstad. Received May 22, 1935.

Introduced for Department specialists.

111850 to 111855. PRUNUS AVIUM L. Sweet cherry.

111850. Bigarra allmän gulröd.

111851. Brysselska brunkörsbär.

111852. Elton.

111853. Bigarra svarta.

111854. Karlstads klarbär.

111855, Klarbär stora.

111856 and 111857. PRUNUS CERASUS L. Sour cherry.

111856. Ostheimer.

111857. Skuggmorell.



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