

# UNITED STATES DEPARTMENT OF AGRICULTURE



## INVENTORY No. 130



Washington, D. C.



Issued May 1942

### PLANT MATERIAL INTRODUCED BY THE DIVISION OF PLANT EXPLORATION AND INTRODUCTION, BUREAU OF PLANT INDUSTRY, JANUARY 1 TO MARCH 31, 1937 (Nos. 119267 to 123341)

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#### INTRODUCTORY STATEMENT

This inventory, No. 130, is a record of the plant material (Nos. 119267 to 123341) received by the Division of Plant Exploration and Introduction during the period from January 1 to March 31, 1937.

More than 4,000 introductions are recorded in this inventory, which is nearly twice as many as have ever been received before during a like period. They represent the wide collections from two exploring parties, each of which was primarily concerned with the collection of vegetable varieties in the several areas. In making these collections, both parties were instructed to keep in mind the choice of varieties that showed health and vigor of growth, even if the food quality of the plant was poor. Any and all types of vegetables were collected except those very recently introduced into the area. All were to be considered as potential breeding materials for the Southeastern Vegetable Breeding Station, Charleston, S. C., and for various State experiment stations.

H. L. Westover, forage crop specialist, and F. L. Wellman, vegetable pathologist, traveled through Turkey for this purpose, and Walter Koelz, a former explorer of the Department, collected in northern India.

In addition to these projects, the results of two other collecting trips appear in this inventory; those of W. A. Archer and Raymond Stadelman, who collected peanuts and tobaccos for special breeding studies, traveling through various Latin-American countries and observing both small noncommercial cultures and plants in the wild.

Other materials besides those covered by their main projects included useful crop plants and some ornamentals from all these areas.

Initial identifications of the seeds and determination of the nomenclature have been made by Paul Russell, who has had general supervision of this inventory.

B. Y. MORRISON,  
*Principal Horticulturist, in Charge.*

DIVISION OF PLANT EXPLORATION AND INTRODUCTION,  
*Washington, D. C., May 22, 1941.*

# INVENTORY<sup>1</sup>

NOTE.—This inventory is a historical record of plant material introduced for Department and other specialists. It is not to be considered as a list of plant material for distribution.

## 119267. *APLOPAPPUS CUNEIFOLIUS* Nutt. Asteraceae.

From Chile. Seeds collected by Clarence Elliott, of England, and presented by Ralph A. Fenton, of Oswego, Oreg. Received January 6, 1937.

A shrubby yellow-flowered composite with stiff alternate leaves; native to Chile.

## 119268. *CARICA PENTAGONA* Heilborn. Papayaceae.

From Ecuador. Cuttings presented by Luis A. Gattoni D., Quito. Received January 19, 1937.

*Babaco*. This is the most remarkable and valuable of the several interesting species of *Carica* cultivated in Ecuador, because of its large, very acid fruits, from which an excellent sauce is made, the relatively low temperatures which the plant can stand, and because of its habit of producing seedless fruits.

The plant is seen only under cultivation where it is a small tree about 3 m. high; the leaves are glabrous, like those of *Carica chrysopetala*, but with fewer and broader lobes. The fruits are about 30 cm. long and 7 to 12 cm. in diameter, truncate at the base and sharply acute at the apex. The flesh is about 1 cm. thick, white, distinctly fragrant, and very acid. It is eaten only after it is cooked. The large cavity in the center contains a quantity of white cottony substance and occasionally a few seeds.

For previous introduction see 62552.

## 119269 to 119271.

From Peru. Seeds presented by Cesar Vargas C., Universidad del Cuzco, Museo de Historia Natural, Sección Botánica, Cuzco. Received January 14, 1937.

## 119269. *FRAGARIA* sp. Rosaceae.

From Urubamba, 3,100 m. altitude, December 3, 1936.

## 119269 to 119271—Continued.

Nos. 119270 and 119271 were from Pílahuata, Paucartambo Valley, at 2,800 m. altitude, December 5, 1936.

## 119270. *RUBUS* sp. Rosaceae.

## 119271. *RUBUS* sp. Rosaceae.

## 119272. *SACCHARUM*. Poaceae.

Sugarcane.

From Barbados, West Indies. Seeds presented by the Department of Agriculture, Barbados, through E. W. Brandes, Bureau of Plant Industry. Received January 15, 1937.

## 119273. *CITRUS LIMONIA* Osbeck. Rutaceae. Lemon.

From India. Seeds collected by Walter Koelz, Bureau of Plant Industry. Received January 4, 1937.

No. 1650. *Gulgul, gombru*. From Bandrole, Kulu; Punjab, at 5,000 feet altitude, November 14, 1936. A remarkable lemon; the tree withstands a temperature of 18° F. and is covered with snow a month or so in the winter. It is quick-growing; one 3-year-old tree (3 feet high when planted) is now bearing and is 8 feet high. The fruit is large, of good flavor, and will keep in ordinary storage for over a year. The tree is quite ornamental, principally on account of its large strongly scented flowers.

## 119274 to 119286. *GLADIOLUS* spp. Iridaceae.

From the Union of South Africa. Seeds presented by A. Cheverton Buller, Dwarsriviers Hoek, Stellenbosch District, Cape Province. Received January 13, 1937.

## 119274. *GLADIOLUS ALATUS* L.

A gladiolus with flowers of a delightful fragrance, not unlike that of the sweet brier. The three upper segments are bright

<sup>1</sup> It should be understood that the names of varieties of fruits, vegetables, cereals, and other plants used in this inventory are those under which the material was received when introduced by the 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, herbarium specimens of leaves and flowers should be sent in so that definite identification can be made.

## 119274 to 119286—Continued.

orange scarlet, and the three lower ones are banded with greenish yellow and tipped with orange scarlet. The bulbs are not larger than ordinary peas and cannot survive long out of the ground.

For previous introduction see 116983.

119275. *GLADIOLUS ANGUSTUS* L.

A plant with an ascending stem up to 2 feet in height and narrow upright leaves with prominent midribs. The white scentless flowers which grow in a lax one-sided spike are narrow, straight, and funnel-shaped. It is a native of the Cape of Good Hope.

For previous introduction see 44723.

119276. *GLADIOLUS BLANDUS* Ait.

A species with sword-shaped leaves somewhat shorter than the stem, which is from 6 inches to 2 feet high and which bears 3 to 10 white or reddish-tinted scentless flowers over an inch long.

For previous introduction see 116984.

119277. *GLADIOLUS BREVIFOLIUS* Jacq.

A South African gladiolus, with firm linear leaves  $1\frac{1}{2}$  to 2 feet long and a very slender simple flower stem of equal length, with 4 to 12 pink or lilac flowers in a lax second spike. The lower segments are purplish at the throat.

119278. *GLADIOLUS DEBILIS* Ker.

A South African gladiolus with a very slender stem 1 to  $1\frac{1}{2}$  feet high, about 3 linear leaves and 1 to 3 whitish flowers in a lax spike. The obtuse segments are about three-fourths of an inch long and the inner ones are marked with a carmine, 3-lobed spot at the base of each.

119279. *GLADIOLUS GRANDIS* Thunb.

Closely related to *Gladiolus tristis*, this has 3 strongly terete leaves 12 to 18 inches long and a slender stem up to 2 feet high. The purplish, brown-tinted flowers are 2 to 3 inches long in a lax second spike. Like *Gladiolus tristis*, the flowers give off a pleasant scent during the night. Native to the Cape of Good Hope.

For previous introduction see 113571.

119280. *GLADIOLUS ALATUS NAMAQUENSIS* (Ker) Baker.

A variety differing from the type by the more robust habit, with sword-shaped leaves sometimes to 2 inches broad and more numerous flowers in the spike.

119281. *GLADIOLUS ORCHIDIFLORUS* Andr.

The 3 or 4 leaves of this gladiolus are linear, firm, crowded, and 6 to 12 inches long, and the 4 to 6 greenish, very fragrant flowers are in a very lax spike on a stem the same height as the leaves. Native to South Africa.

For previous introduction see 105293.

119282. *GLADIOLUS PSITTACINUS* Hook.  
Parrot gladiolus.

A gladiolus with a stout stem 3 feet or more in length and usually 4 rigid sword-like 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 overlain with red, particularly about the margins of the segments.

For previous introduction see 116985.

## 119274 to 119286—Continued.

119283. *GLADIOLUS RECURVUS* L.

A slender-stemmed species, up to 2 feet high, native to boggy sandy places in South Africa. The 2 to 6 mildly fragrant flowers which appear in August are borne in a very lax spike and vary in color from blue to flushed pink with minute blackish-lilac spots.

For previous introduction see 105295.

119284. *GLADIOLUS SCAPHOCHLAMYS* Baker.

A South African gladiolus related to *G. blandus*. It has 3 or 4 ensiform, rigid leaves about 1 foot long and a rigid stem  $1\frac{1}{2}$  to 2 feet high, with 6 to 8 straw-yellow flowers in a lax curved spike.

119285. *GLADIOLUS VITTATUS* Hornem.

A gladiolus about 1 foot high with several narrow linear leaves 6 to 9 inches long and numerous pink or whitish flowers in a stout curved spike. The nearly erect flowers are about 1 inch long, the limbs slightly longer, and the three lower segments with a purple central blotch. Native to South Africa.

119286. *GLADIOLUS WATERMEYERI* L. Bolus.

A species with 3 or 4 leaves about 10 inches long, conspicuously two-nerved, and very fragrant flowers  $1\frac{1}{2}$  inches long. The upper segments are usually greenish, flushed with pinkish buff, with conspicuous purple veins.

For previous introduction see 105298.

119287. *COLOCASIA ESCULENTA* (L.) Schott. Araceae. Dasheen.

From China. Tubers collected by F. A. McClure, Lingnan University, Canton. Received January 25, 1926. Numbered in January 1937.

No. 271. *Taai Fa Oo, Fa T'au Oo*. Canton, November 26, 1925. A dasheen resembling in general the Trinidad dasheen, but differing from it in certain respects. The corms tend to be tough when cooked, but the tubers are of good quality and fairly uniform in size and shape.

119288. *PAPAYER* sp. Papaveraceae.

Poppy.

Plants grown at the Plant Introduction Garden, Glenn Dale, Md. Numbered in January 1937.

Grown from seed collected in Turkistan, 1934-35, by H. L. Westover and C. R. Enlow, Bureau of Plant Industry; exact locality unknown.

## 119289 to 119294.

From the Union of South Africa. Seeds presented by the McGregor Museum, Kimberley. Received January 14, 1937.

119289. *COMBRETUM ERYTHROPHYLLUM* (Burch.) Sond. Combretaceae.

A tree up to 40 feet high, with unarmed, spreading branches and ovate-acute leaves which turn crimson in autumn. Native to tropical Africa.

For previous introduction see 112639.

119290. *DIMORPHOTHECA VISCOSA* (Andr.) Druce. Asteraceae.

A shrubby, much-branched perennial with variable leaves and deep-yellow flower heads. Native to South Africa.

119291. *OLEA VERRUCOSA* (Roem. and Schult.) Link. Oleaceae. Olive.



## 119289 to 119294—Continued.

119292. *RHUS LANCEA* L. f. Anacardiaceae.  
Sumac.

*Karree-boom*. A small bushy tree with gray bark and long-stemmed leaves, with linear-lanceolate leaflets 4 to 6 inches long. It is a valuable hardwood tree for regions of limited rainfall. Native to the Cape of Good Hope.

For previous introduction see 115811.

119293. *RHUS VIMINALIS* Ait. Anacardiaceae.  
Sumac.

*Karree-boom*. An evergreen tree up to 30 feet high, native to South Africa in semiarid regions at over 4,000 feet altitude. Sheep and goats browse on the foliage.

For previous introduction see 114495.

119294. *VENIDIUM FASTUOSUM* (Jacq.) Stapf. Asteraceae.

A showy annual a foot or more high, with lanceolate or obovate, irregularly lobed leaves 1 to 2 inches long and terminal solitary bright-orange flower heads up to 4 inches across. Native to South Africa.

For previous introduction see 106099.

119295. *LEBECKIA SERICEA* (Ait.) Thunb. Fabaceae.

From the Union of South Africa. Seeds presented by M. Henri, Officer in Charge, Veld Reserve, Fauresmith, Orange Free State. Received January 21, 1937.

A densely branched shrub about 3 feet high, with trifoliate leaves, linear-oblong leaflets up to 1½ inches long, and numerous small, deep-yellow flowers. Native to South Africa.

119296 to 119298. *ZEA MAYS* L. Poaceae.  
Corn.

From Turkey. Seeds collected by H. L. Westover and F. L. Wellman, Bureau of Plant Industry. Received January 14, 1937.

119296. No. 3276-A. From Edime.

119297. No. 2429-A. From 30 km. northwest of Susheri.

119298. No. 2929-A. From Biga.

119299. *TRITICUM AESTIVUM* L. Poaceae.  
Common wheat.

From the Netherlands. Seeds presented by the Instituut Voor Phytopathologie, Wageningen. Received January 8, 1937.

*Robusta* wheat.

119300 to 119407. *TRITICUM AESTIVUM* L. Poaceae.  
Common wheat.

From Turkey. Seeds collected by H. L. Westover and F. L. Wellman, Bureau of Plant Industry. Received January 5, 1937.

119300. No. 560. From the Isparta bazar, June 6, 1936.

119301. No. 760. From a mill near Tavas, May 30, 1936.

Nos. 119302 to 119304. From fields near Denizli, May 31, 1936.

119302. No. 763.

119303. No. 764.

119304. No. 774.

## 119300 to 119407—Continued.

119305. No. 811. From a field near Antalya, June 4, 1936.

119306. No. 1070. From a field 40 km. northwest of Izmir, June 10, 1936.

119307. No. 1071. From a field 10 km. west of Soma, June 10, 1936.

119308. No. 1110. From the Kirkagach bazar, June 11, 1936.

119309. No. 1170. From a field 90 km. west of Balikesir, June 16, 1936.

119310. No. 1232. From the Bursa bazar, June 18, 1936.

119311. No. 1281. From a field 10 km. east of Bandirma, June 18, 1936.

119312. No. 1292. From a field 6 km. east of Bursa, June 19, 1936.

Nos. 119313 and 119314. From fields near Ankara, June 25, 1936.

119313. No. 1358.

119314. No. 1360.

119315. No. 1376. From the Marash bazar, July 2, 1936.

Nos. 119316 to 119318. From the Marash bazar, July 2, 1936.

119316. No. 1387. *Romania* wheat.

119317. No. 1388. *Albistan Yazlık*.

119318. No. 1396. *Yoksul*.

119319. No. 1465. From a field 45 km. north of Gaziantep, July 3, 1936.

119320. No. 1465-A. White wheat from the village of Hodja Bay, about 15 km. southeast of Urfa, July 6, 1936.

Nos. 119321 and 119322. From fields east of Birejik, July 5, 1936.

119321. No. 1514. Field 5 km. east.

119322. No. 1516. Field 25 km. east.

Nos. 119323 and 119324. From the village of Hodja Bay, 15 km. south of Urfa, July 6, 1936.

119323. No. 1523. Red wheat.

119324. No. 1524. *Kaudakare*, best for bread.

119325. No. 1552. From the Urfa bazar, July 6, 1936.

119326. No. 1573. From a field 40 km. northeast of Urfa, July 7, 1936.

Nos. 119327 to 119331. From the Diyarbakir bazar, July 8, 1936.

119327. No. 1613. 119330. No. 1618.

119328. No. 1616. 119331. No. 1619.

119329. No. 1617.

119332. No. 1677. From a field 52 km. east of Diyarbakir, July 10, 1936.

Nos. 119333 and 119334. From the Elaziz bazar, July 13, 1936.

119333. No. 1696.

119334. No. 1704.

119335. No. 1768. From a field 20 km. southeast of Elaziz, July 13, 1936.

Nos. 119336 to 119340. From the Malatya bazar, July 16, 1936.

119336. No. 1823. White wheat for macaroni.

## 119300 to 119407—Continued.

119337. No. 1835.  
 119338. No. 1838. Soft white wheat.  
 119339. No. 1841. Strong red wheat.  
 119340. No. 1842. White wheat for macaroni.  
 Nos. 119341 to 119343. From fields north of Malatya, July 17, 1936.  
 119341. No. 1881. Field 50 km. north.  
 119342. No. 1893. Field 30 km. north.  
 119343. No. 1894. Field 42 km. north.  
 119344. No. 1910. From a field 28 km. southeast of Elaziz, July 13, 1936.  
 Nos. 119345 and 119346. From fields 25 km. north of Nigde, July 26, 1936.  
 119345. No. 2006.  
 119346. No. 2008.  
 119347. No. 2100. From a field on the slopes of Alma Dag, 25 km. southeast of Ankara, August 1, 1936.  
 119348. No. 2103. From a field 15 km. southeast of Ankara, August 1, 1936.  
 Nos. 119349 and 119350. From 106 km. east of Sivas, August 5, 1936.  
 119349. No. 2118.  
 119350. No. 2123.  
 Nos. 119351 to 119353. From the Sivas bazar, August 5, 1936.  
 119351. No. 2155.  
 119352. No. 2156.  
 119353. No. 2157.  
 Nos. 119354 to 119356. From fields southeast of Susheri, August 7, 1936.  
 119354. No. 2178. Field 46 km. southeast.  
 119355. No. 2179. Field 80 km. southeast.  
 119356. No. 2181. Field 46 km. southeast.  
 Nos. 119357 and 119358. From the Erzincan bazar, August 8, 1936.  
 119357. No. 2250. Medium wheat.  
 119358. No. 2253.  
 Nos. 119359 and 119360. From fields east of Erzincan, August 9, 1936.  
 119359. No. 2262. Field 114 km. east.  
 119360. No. 2271. Field 94 km. east.  
 119361. No. 2495. From a field 8 km. southwest of Shebinkarahisar, August 18, 1936.  
 119362. No. 2573. From a field 7 km. west of Terme, August 22, 1936.  
 119363. No. 2610. From a field 8 km. west of Samsun, August 23, 1936.  
 119364. No. 2661. From a field near Merzifon, August 25, 1936.  
 Nos. 119365 to 119370. Wheat from Konya, obtained at the Izmir Fair, August 22, 1936.  
 119365. No. 2932. White Rumanian wheat.  
 119366. No. 2933. Bearded white wheat.  
 119367. No. 2934. Hard wheat.  
 119368. No. 2935. *Camel tooth*. White wheat.  
 119369. No. 2936. Beardless white wheat.

## 119300 to 119407—Continued.

119370. No. 2937. White wheat.  
 Nos. 119371 and 119372. Wheat screenings from Turgutlu, obtained at the Izmir Fair, August 22, 1936.  
 119371. No. 2942.  
 119372. No. 2943.  
 Nos. 119373 to 119377. From the Kutahya bazar August 28, 1936.  
 119373. No. 2989. Medium wheat.  
 119374. No. 2991. A soft wheat of good quality.  
 119375. No. 2997. A soft wheat.  
 119376. No. 2999. A soft wheat; shriveled from too much rain.  
 119377. No. 3005. A hard wheat.  
 119378. No. 3022. A variety developed by Numan Bay at Eskishehir and being distributed to farmers. August 29, 1936.  
 Nos. 119379 to 119383. From the Amasya bazar October 6, 1936.  
 119379. No. 3058.  
 119380. No. 3059.  
 119381. No. 3062. *Bogozköy*.  
 119382. No. 3065.  
 119383. No. 3066.  
 Nos. 119384 to 119388. From the Yozgat bazar October 9, 1936.  
 119384. No. 3092. Soft wheat.  
 119385. No. 3093. A mixed sample of hard and soft wheat.  
 119386. No. 3096. Hard wheat.  
 119387. No. 3097. Hard wheat.  
 119388. No. 3098. Hard wheat.  
 119389. No. 3107. From a field 58 km. north of Kalecik, October 12, 1936.  
 Nos. 119390 to 119394. From the Chankiri bazar, October 12, 1936.  
 119390. No. 3109.  
 119391. No. 3110.  
 119392. No. 3111.  
 119393. No. 3112.  
 119394. No. 3113. Wheat No. 2.  
 Nos. 119395 and 119396. From the Inebolu bazar, October 12, 1936.  
 119395. No. 3114.  
 119396. No. 3115.  
 Nos. 119397 to 119399. From the Kastamonu bazar, October 14, 1936.  
 119397. No. 3186. Originally from the village of Arach.  
 119398. No. 3187. Originally from the village of Arach.  
 119399. No. 3188. *Devrekani*.  
 Nos. 119400 and 119401. From the Adapazari bazar, October 20, 1936.  
 119400. No. 3228.  
 119401. No. 3231.  
 119402. No. 3274. *Bintane* variety from the Adapazari Experiment Station, October 20, 1936.  
 Nos. 119403 and 119404. From the Edirne bazar, October 22, 1936.

## 119300 to 119407—Continued.

119403. No. 3280.

119404. No. 3281.

119405. No. 3329. The type commonly grown in the vicinity of Aydin. May 26, 1936.

119406. No. 3368. From a field 40 km. east of Bursa, June 19, 1936.

119407. No. 3373. From a field near Bursa, June 19, 1936.

## 119408 to 119416. NICOTIANA TABACUM L. Solanaceae. Common tobacco.

From Colombia. Seeds collected by Raymond Stadelman, Bureau of Plant Industry. Received January 5, 1937.

Samples of Colombian tobacco presented by Hernando Garcia B., Herbario Nacional, Bogota.

119408. *Bucaramanga*.119409. *Castilla negro*.119410. *Castilla negro*.119411. *Chocoma*.119412. *Cuba Espinaluno*.119413. *Giron*.119414. *La Fuente*.119415. *Habano*.119416. *Los Santos*.

## 119417 to 119445. HORDEUM spp. Poaceae.

From Turkey. Seeds collected by H. L. Westover and F. L. Wellman, Bureau of Plant Industry. Received January 5, 1937.

This material was all collected in the summer and autumn of 1936.

## 119417. HORDEUM BULBOSUM L.

No. 1935. From Birejik, July 22.

## 119418 to 119443. HORDEUM VULGARE L. Barley.

119418. No. 550. From the Isparta bazar, June 2.

119419. No. 730. From a field near Mugla, May 28.

119420. No. 805. From a field near Bujak, June 3.

119421. No. 1121. From the Kirkagach bazar, June 11.

119422. No. 1259. From the Bursa bazar, June 18.

119423. No. 1277. From a field 60 km. southwest of Bursa, June 18.

119424. No. 1285. From a field 45 km. northeast of Bandirma, June 18.

119425. No. 1359. From near Ankara, June 25; abundant in places on dry hills.

119426. No. 1467. From a field 40 km. north of Gaziantep, July 3.

119427. No. 1551. From the Urfa bazar, July 6.

Nos. 119428 and 119429. From the Diyarbekir bazar, July 8.

119428. No. 1621. 119429. No. 1625.

Nos. 119430 and 119431. From the Elaziz bazar, July 13.

## 119417 to 119445—Continued.

119430. No. 1695.

119431. No. 1713.

Nos. 119432 and 119433. From the Malatya bazar, July 16.

119432. No. 1831. White barley.

119433. No. 1840.

119434. No. 2180. From a field 80 km. southeast of Susheri, August 7.

119435. No. 2592. From a field 20 km. west of Samsun, August 23.

Nos. 119436 and 119437. Hull-less barley from Konya, obtained at the Izmir Fair, September 22.

119436. No. 2939. 119437. No. 2940.

119438. No. 2987. From the Kutahya bazar, September 28.

Nos. 119439 and 119440. From the Amasya bazar, October 6.

119439. No. 3061. 119440. No. 3063.

119441. No. 3099. From the Yozgat bazar, October 9.

119442. No. 3148. From the Kastamonu bazar, October 14; originally from the village of Arach.

119443. No. 3335. From a field near Burdur, June 3.

## 119444. HORDEUM sp.

No. 630. From Ephesus, May 24.

## 119445. HORDEUM sp.

No. 2769. From 35 km. south of Bursa on Ulu Dag at 6,500 feet altitude, September 8.

## 119446 to 119473.

From Venezuela. Seeds collected by Raymond Stadelman, Bureau of Plant Industry. Received January 6, 1937.

## 119446. LYCOPERSICON ESCULENTUM Mill. Solanaceae. Tomato.

From El Gamera, Sarare River, Apure.

## 119447 to 119473. NICOTIANA TABACUM L. Solanaceae. Common tobacco.

119447 to 119449. From Posetas (Rio Doradas), Tachira.

119447. No. 348. *Giron*.119448. No. 349. *Ambalema*.119449. No. 350. *Grande*.119450. No. 351. *Habano*. From Las Caobas (Rio Uribante), Apure.119451. No. 352. *Habano*. From Guaca (Rio Uribante), Zamora.119452. No. 353. *Caribe*. From Totumito (Rio Apure), Apure.119453. No. 354. *Orega de mula*. From Arturago (Rio Apure), Zamora.

119454. No. 355. From La Tigra (Rio Apure), Zamora.

Nos. 119455 to 119457 were collected along the Rio Apure in the State of Apure.

119455. No. 356. From Palmarito.

119456. No. 357. From Palmarito.

119457. No. 358. From San Vicente.

Nos. 119458 and 119459 were collected along the Rio Apure in the State of Zamora.

## 119446 to 119473—Continued.

119458. No. 359. From Nutrias.

119459. No. 360. From Santo Domingo.

Nos. 119460 and 119461 were collected along the Rio Apure in the State of Apure.

119460. No. 361. From Apurito.

119461. No. 362. From Banco Largo.

119462. No. 363. *Rabo de gallo*. From Boquerones, Rio Apure, Zamora.

Nos. 119463 to 119471 were collected along the Rio Apure in the State of Apure.

119463. No. 364. *Pailon*. From La Matanza.

119464. No. 365. From Los Pajaros.

119465. No. 366. From El Cochino.

119466. No. 367. From Panelita.

119467. No. 368. *Oreja de tigre*. From Los Indios.

119468. No. 369. From Picacho de Manati.

119469. No. 370. From Maria Luisa.

119470. No. 371. From Boca Apuie.

119471. No. 372. From La Cascabel.

Nos. 119472 and 119473 were collected at Caicara del Orinoco, State of Bolivar.

119472. No. 373.

119473. No. 374.

## 119474 to 119586.

From Turkey. Seeds collected by H. L. Westover and F. L. Wellman. Bureau of Plant Industry. Received January 6, 1937.

This material was all collected in the summer and autumn of 1936.

119474 to 119478. *AVENA SATIVA* L. Poaceae. Oats.

119474. No. 1172. From a field 80 km. west of Balikesir, June 16.

119475. No. 1284. From a field 8 km. east of Bandirma, June 18.

119476. No. 2018. From a field 15 km. north of Nigde, July 26.

119477. No. 2101. From a field 25 km. southeast of Ankara on the slopes of Alma Dag, August 1.

119478. No. 3282. From the Edirne bazar, October 22.

119479 to 119535. *MEDICAGO* spp. Fabaceae.119479 to 119490. *MEDICAGO FALCATA* L. Yellow-flowered alfalfa.

119479. No. 1847. From 11 km. west of Malatya, July 16.

119480. No. 1859. From the city park, Malatya, July 16.

119481. No. 1886. From 65 km. north of Malatya, July 17.

119482. No. 2106. From near Zara, June 5.

Nos. 119483 and 119484. Collected east of Sivas, August 5.

119483. No. 2108. From 84 km. east.

## 119474 to 119586—Continued.

119484. No. 2122. From 106 km. east.

119485. No. 2203. From 80 km. south-east of Susheri, August 7.

119486. No. 2496. From 8 km. south-west of Shebinkarahisar, August 18.

119487. No. 2586. From 8 to 20 km. west of Samsun, August 23.

119488. No. 2614. From Samsun, August 21.

Nos. 119489 and 119490. Collected southwest of Samsun, August 24.

119489. No. 2618. From 54 km. southwest.

119490. No. 2619. From 35 km. southwest.

119491 and 119492. *MEDICAGO SATIVA* L. Alfalfa.

119491. No. 558. From the Isparta bazar, June 2.

119492. No. 616. From the Izmir bazar, June 23.

119493. *MEDICAGO ORBICULARIS* (L.) All. Medick.

No. 673. From near Milas, June 26.

For previous introduction see 107559.

119494 to 119499. *MEDICAGO SATIVA* L. Alfalfa.

119494. No. 1157. From the Balikesir bazar, June 17.

119495. No. 1241. From the Bursa bazar, June 18.

119496. No. 1305. From the Bursa bazar, June 20.

119497. No. 1688. From the Elaziz bazar, July 13.

119498. No. 1726. Wild alfalfa from 20 km. southeast of Elaziz, July 13.

119499. No. 1795. From 35 km. south-west of Elaziz, July 14.

119500. *MELILOTUS OFFICINALIS* (L.) Lam.

No. 1828. From the Malatya bazar, July 16.

119501 to 119535. *MEDICAGO SATIVA* L. Alfalfa.

119501. No. 1871. From 50 km. north of Malatya, July 17.

119502. No. 1975. From Birejik, July 24. Wild alfalfa.

119503. No. 1936. From Birejik, July 22.

119504. No. 2013. Wild alfalfa from 20 km. north of Nigde, July 26.

119505. No. 2130. From the Sivas bazar, August 5.

119506. No. 2206. From 80 km. south-east of Susheri, August 2.

119507. No. 2249. From the Erzincan bazar, August 8.

119508. No. 2261. Wild alfalfa, found abundantly between Terjan and Erzerum, August 8.

119509. No. 2272. From 20 to 40 km. east of Erzincan, August 9.

## 119474 to 119586—Continued.

119510. No. 2317. Wild alfalfa from 10 km. north of Gemushane, August 10.

119511. No. 2351. From the Trabzon bazar, August 11.

119512. No. 2453. From Alma Dag, 25 km. southeast of Ankara, August 1.

119513. No. 2502. From 8 km. west of Mesudiye, August 8.

Nos. 119514 and 119515. Collected southeast of Amasya, August 25.

119514. No. 2634. From 20 km. south-east.

119515. No. 2636. From 50 km. south-east.

119516. No. 2665. From 35 km. south of Tokat, August 26.

119517. No. 2698. From the Amasya bazar, August 25.

119518. No. 2722. From Urgup, August 28.

119519. No. 2753. Wild alfalfa from Ulu Dag, 15 km. south of Bursa, September 8.

119520. No. 2978. Wild alfalfa from Ephesus, September 25.

119521. No. 2996. From the Kutahya bazar, September 28.

119522. No. 3018. From a field at Kutahya, September 28.

119523. No. 3069. From the Amasya bazar, October 6.

119524. No. 3185. From the Kastamonu bazar, October 14.

Nos. 119525 to 119528. Collected at Erzinjan, October 16.

119525. No. 3215. 119527. No. 3217.

119526. No. 3216. 119528. No. 3218.

119529. No. 3219. From Denizli, October 16.

119530. No. 3220. From Konya, October 16.

119531. No. 3221. From Kayseri, October 16.

119532. No. 3222. From Erzerum, October 16.

119533. No. 3223. From Yeshilkoy, October 16.

119534. No. 3224. From Mush (Mus), October 16.

119535. No. 3290. From the Edirne bazar, October 22.

## 119536 to 119540. MEDICAGO. Fabaceae. Medick.

A collection of hybrid alfalfas.

119536. No. 1979. From Birejik, July 24.

119537. No. 2110. From 106 km. east of Sivas, August 5.

119538. No. 2621. From 85 km. southwest of Samsun, August 24.

Nos. 119539 and 119540. Collected south of Tokat, August 26.

119539. No. 2681. From 15 km. south.

119540. No. 2689. From 21 km. south.

## 119474 to 119586—Continued.

119541 to 119548. SECALE CEREALE L. Poaceae. Rye.

119541. No. 822. From a field; en route from Aydin to Milas, May 26.

119542. No. 1072. From a field 10 km. west of Soma, June 10.

119543. No. 1167. From a field 8 km. west of Balikesir, June 16.

Nos. 119544 and 119545. Collected in a field 20 km. southeast of Elaziz, July 13.

119544. No. 1765.

119545. No. 1766.

119546. No. 1817. From the Malatya bazar, July 16.

119547. No. 2016. From a field 45 km. north of Nigde, July 26.

119548. No. 2102. From a field on the slopes of Alma Dag, 25 km. southeast of Ankara, August 1.

## 119549 to 119586. ZEA MAYS L. Poaceae. Corn.

119549. No. 1245. From the Bursa bazar, June 18.

119550. No. 1389. From the Marash bazar, July 2.

119551. No. 1556. From the Urfa bazar, July 6.

119552. No. 1712. From the Elaziz bazar, July 13.

119553. No. 1843. From the Malatya bazar, July 16.

119554. No. 1907. From Diyarbekir, July 8. This type is eaten roasted.

Nos. 119555 and 119556. From the Nigde bazar, July 27.

119555. No. 2036. 119556. No. 2044.

119557. No. 2131. From the Sivas bazar, August 5.

119558. No. 2239. From the Erzinjan bazar, August 8.

119559. No. 2365. From the Trabzon bazar, August 11.

119560. No. 2386. From Surmeneh, August 12.

119561. No. 2416. From the Rize bazar, August 13.

119562. No. 2429. From a field 30 km. northwest of Susheri, August 18.

119563. No. 2512. From a field near Trabzon, August 14.

119564. No. 2549. From the Samsun bazar, August 21.

119565. No. 2571. From 10 km. west of Charshamba, August 22.

Nos. 119566 and 119567. Collected in fields west of Samsun, August 23 and 24.

119566. No. 2596. From 5 km. west.

119567. No. 2620. From 20 km. south.

119568. No. 2633. From a field 30 km. southeast of Amasya, August 25.

119569. No. 2662. From a field between Tokat and Sivas, August 26.

119570. No. 2695. From a field south of Tokat, August 26.

## 119474 to 119586—Continued.

119571. No. 2751. From the slopes of Ulu Dag, 20 km. south of Bursa, September 7.
119572. No. 2938. From Urfa, obtained at the Izmir Fair, September 22.
119573. No. 2924. From Yalova, September 6.
119574. No. 2927. Popcorn from the Yalova bazar, September 12.
119575. No. 2929. From Biga, September 19.
119576. No. 3019. From Eskişehir, September 29.
119577. No. 3067. From the Amasya bazar, October 6.
119578. No. 3101. From the Yozgat bazar, October 9.
119579. No. 3116. From the Inebolu bazar, October 13.
119580. No. 3142. Popcorn from the Inebolu bazar, October 13.
119581. No. 3201. From the Chankiri bazar, October 13.
119582. No. 3230. From the Adapazari bazar, October 20.
119583. No. 3275. From the Adapazari Experiment Station, October 20.
- Nos. 119584 and 119585. From the Edirne bazar, October 22.
119584. No. 3276. Popcorn.
119585. No. 3278.
119586. No. 3374. From the Balıkesir bazar, June 6.

119587 to 119592. *TRITICUM AESTIVUM* L. Poaceae. Common wheat.

From Argentina. Seeds presented by the Ministerio de Agricultura de la Nación, Buenos Aires. Received January 11, 1937.

119587. LF. 23063. *Kanred* × *Florence*  
Fr. Chg: 27-7 × 5-1-24/34.
119588. LF. 23065. *Kanred* × *Florence*  
Fr. Chg: 27-7 × 11-1-10/34.
119589. LF. 23061. *Kanred* × *Florence*  
Fr. Chg: 27-7 × 5-1-5/34.
119590. LF. 23062. *Kanred* × *Florence*  
Fr. Chg: 27-7 × 5-1-13/34.
119591. LF. 23064. *Kanred* × *Florence*  
Fr. Chg: 27-7 × 8-1-3/34.
119592. LF. 23066. *Kanred* × *Florence*  
Fr. Chg: 27-7 × 11-1-23/34.

## 119593 to 119705.

From Turkey. Seeds collected by H. L. Westover and F. L. Wellman, Bureau of Plant Industry. Received January 11, 1937.

This material was all collected in the summer and autumn of 1936.

119593 to 119598. *AEGILOPS* spp. Poaceae.119593. *AEGILOPS SPELTOIDES* AUCHERI (Boiss.) Meyer.

No. 1595. From between Urfa and Diyarbakir, July 7. Found growing plentifully on basalt formation.

119594. *AEGILOPS BICORNIS* (Forsk.) Jaub. and Spach.

## 119593 to 119705—Continued.

No. 1077. From 50 km. northwest of Izmir, June 10.

119595. *AEGILOPS MUTICA* Boiss.

No. 1901. From dry plains 25 km. north of Malatya, July 17. An annual grass with erect stems about 12 inches high, native to Asia Minor.

119596. *AEGILOPS MUTICA* Boiss.

No. 2182. From 20 km. east of Susheri, August 7.

119597. *AEGILOPS SPELTOIDES* Tausch.

No. 1402. From 30 km. southeast of Gaziantep, July 2.

For previous introduction see 116293.

119598. *AEGILOPS SPELTOIDES* Tausch.

No. 1610. Found growing abundantly on dry basalt plains between Urfa and Diyarbakir, July 7.

119599 to 119608. *AGROPYRON* spp. Poaceae. Grass.119599 to 119601. *AGROPYRON CRISTATUM* (L.) Gaertn. Crested wheatgrass.

119599. No. 2015. From 25 km. north of Nigde, July 26.

119600. No. 2280. From 94 km. east of Erzinjan, August 9.

119601. No. 3409. From near Ankara, June 26. An early maturing dwarf variety found growing on dry plains.

119602. *AGROPYRON DIVARICATUM* Boiss. and Bal.

No. 1888. A perennial grass found 55 km. north of Malatya, July 17.

119603. *AGROPYRON INTERMEDIUM* (Host) Beauv.

No. 2902. From the ruins in Troy, September 18.

119604. *AGROPYRON JUNCUM* (L.) Beauv.

No. 2875. Beach grass from 1 km. west of Yalova, September 12.

For previous introduction see 115323.

119605. *AGROPYRON ORIENTALE* LASIANTHUM Boiss.

No. 1905. From 25 km. north of Malatya, July 17. An annual grass found on dry plains.

For previous introduction see 108846.

119606. *AGROPYRON PANORMITANUM* Parl.

No. 1937. From Birejik, July 22. A fibrous-rooted perennial grass with erect stems. Native to the Mediterranean region.

119607. *AGROPYRON* sp.

No. 1892. From 60 km. north of Malatya, July 17.

119608. *AGROPYRON* sp.

No. 2971. From 20 km. northeast of Izmir, August 24.

119609 to 119615. *AGROSTIS* spp. Poaceae. Bentgrass.119609 and 119610. *AGROSTIS SPICA-VENTI* L.

An annual grass, usually about 20 inches high, with feathery panicles 4 to 8 inches long. Native to Europe.

## 119593 to 119705—Continued.

For previous introduction see 109222.

119609. No. 1644. From 70 km. south of Diyarbekir, July 9.

119610. No. 2012. From 30 km. north of Nigde, July 26.

119611. AGROSTIS VERTICILLATA Vill.

No. 1848. From 11 km. west of Malatya, July 16.

119612. AGROSTIS sp.

No. 1176. From 40 km. west of Balikesir, June 16.

119613. AGROSTIS sp.

No. 2281. From 128 km. east of Erzinjan, August 9.

119614. AGROSTIS sp.

No. 2813. From Yalova Kaplijalari, September 11.

119615. AGROSTIS sp.

No. 2817. From Yalova Kaplijalari, September 11.

119616. ALOPECURUS PRATENSIS L. Poaceae. Meadow foxtail.

No. 617. From Ephesus, May 24.

119617. ANDROPOGON ISCHAEMUM L. Poaceae. Grass.

No. 2561. From 41 km. east of Samsun, August 22.

119618. ANTHOXANTHUM ODORATUM L. Poaceae. Sweet vernal grass.

No. 671. From south of Chine, June 26.

119619 to 119622. ABRHYNANTHERUM ELATIUS (L.) Beauv. Poaceae. Tall oatgrass.

119619. No. 1169. From 10 km. west of Balikesir, June 16.

119620. No. 1288. From 31 km. north-east of Bandirma, June 18.

119621. No. 2080. From Alma Dag, 36 km. southeast of Ankara, August 1.

119622. No. 2192. From 100 km. south-east of Susheri, August 7.

119623 to 119625. BRACHYPODIUM PINNATUM (L.) Beauv. Poaceae. Grass.

119623. No. 2112. From 100 km. east of Sivas at 6,000 feet altitude on rocky soil, August 6.

119624. No. 2183. From 100 km. south-east of Susheri, August 7.

119625. No. 2680. From 41 km. south of Tokat, August 26.

119626. BRIZA MAXIMA L. Poaceae. Big quaking grass.

No. 1190. From 5 km. west of Balikesir, June 16. An annual grass with erect or decumbent culms up to 2 feet high and large showy spikelets. Native to southern Europe.

For previous introduction see 11268.

119627 and 119628. BRIZA HUMILIS Bieb. Poaceae. Quaking grass.

An annual grass with ascending stems about 1 foot high. Native to the Near East.

119627. No. 3405. From 3 km. west of Ankara, June 25.

## 119593 to 119705—Continued.

119628. No. 3306. From 10 km. west of Gaziantep, May 1,

119629 to 119633. BROMUS spp. Poaceae. Bromegrass.

119629. BROMUS SECALINUS L. Chess.

No. 2228. From the Erzinjan bazar, August 8.

119630. BROMUS TECTORUM L.

No. 2188. From 100 km. southeast of Susheri, August 7.

119631. BROMUS TECTORUM L.

No. 2052. From Alma Dag, 25 km. southeast of Ankara, August 1.

119632. BROMUS sp.

No. 1287. From 40 km. northeast of Bandirma, June 18.

119633. BROMUS STERILIS L.

No. 2807. From Yalova Kaplijalari, September 11.

119634. CALAMAGROSTIS sp. Poaceae. Grass.

No. 2425. From 77 km. south of Giresun, August 17.

119635. CYNODON DACTYLON (L.) Pers. Poaceae. Bermuda grass.

No. 1900. A coarse type from dry plains 25 km. northeast of Malatya, July 17.

119636 to 119639. DACTYLIS GLOMERATA L. Poaceae. Orchard grass.

119636. No. 1196. From 80 km. west of Balikesir, June 16.

119637. No. 1645. From 70 km. south of Diyarbekir, July 9.

119638. No. 1869. From 60 km. north of Malatya in the mountains, July 17.

119639. No. 2208. From 60 km. south-east of Susheri, August 7.

119640. DESCHAMPSIA CAESPITOSA (L.) Beauv. Poaceae. Tufted hairgrass.

No. 2745. From Alma Dag, 35 km. south of Bursa, August 7.

119641. ERIANTHUS HOSTII Griseb. Poaceae. Grass.

No. 2852. From Yalova Kaplijalari, September 12. A perennial tufted reedlike grass about 6 feet high, with densely woolly panicles. Native to southern Europe and Asia Minor.

For previous introduction see 109495.

119642 to 119652. FESTUCA spp. Poaceae. Fescue.

119642 to 119648. FESTUCA OVINA L. Sheep fescue.

119642. No. 1884. From 45 km. north of Malatya, July 17.

Nos. 119643 and 119644. From Birejik, July 21.

119643. No. 1928. 119644. No. 1929.

119645. No. 2079. From Alma Dag, 25 km. southeast of Ankara, August 1.

119646. No. 2676. From 39 km. south of Tokat, August 26.

## 119593 to 119705—Continued.

119647. No. 2748. From Ulu Dag, 35 km. south of Bursa, August 7. A form with stiff grayish-green leaves; seldom eaten.

119648. No. 3424. From 3 km. north-east of Ankara, June 26.

119649. *FESTUCA* sp.

No. 724. From a lake bottom, 50 km. southeast of Mugla, May 28.

119650. *FESTUCA* sp.

No. 2746. From Ulu Dag, 35 km. south of Bursa, September 7.

119651. *FESTUCA* sp.

No. 2788. From Ulu Dag, 35 km. south of Bursa, September 9.

119652. *FESTUCA* sp.

No. 2832. From Yalova Kaplijalari, September 11.

119653. *GAUDINIA FRAGILIS* (L.) Beauv. Poaceae. Grass.

No. 1173. From 10 km. west of Balikesir, June 16. An annual ascending grass, up to 2 feet high, with thick, rough-hairy leaves. It is confined almost entirely to the Mediterranean countries.

For previous introduction see 74167.

119654. *KOELERIA PHELOIDES* (Vill.) Pers. Poaceae.

No. 632. A low-growing type found near Selchuk, May 24.

119655 to 119657. *LOLIUM* spp. Poaceae.119655. *LOLIUM PERENNE* L. Perennial ryegrass.

No. 1131. From lowlands south of Kirkagach, June 11.

119656 and 119657. *LOLIUM TEMULENTUM* L. Darnell.

119656. No. 765. From 2 km. north of Denizli, May 31.

119657. No. 2578. From 7 km. west of Terme, August 22.

119658. *MELICA CILIATA* L. Poaceae.

No. 1168. From 10 km. west of Balikesir, June 16.

For previous introduction see 111686.

119659. *MELICA MINUTA* L. Poaceae.

No. 624. From Ephesus, May 22.

For previous introduction see 117376.

119660 to 119665. *ORYZOPSIS* spp. Poaceae.119660 and 119661. *ORYZOPSIS COERULESCENS* (Desf.) Hack.

For previous introduction see 117384.

119660. No. 656. From 25 km. south-east of Izmir, June 25.

119661. No. 1930. From Birejik, July 21.

119662 and 119663. *ORYZOPSIS HOLCIFORMIS* (Bieb.) Hack.

A perennial grass with a thick short rhizome and stems 3 feet or more high. The panicles are a foot or more long. It is native to southern and southeastern Europe.

For previous introduction see 78797.

## 119593 to 119705—Continued.

119662. No. 777. From 35 km. west of Isparta, June 2.

119663. No. 2186. From 100 km. southwest of Susheri, August 7.

119664 and 119665. *ORYZOPSIS MILIACEA* (L.) Benth. and Hook.

For previous introduction see 109536.

119664. No. 2560. From 4 km. east of Samsun, August 22.

119665. No. 2948. From Kemal Pasha, September 23.

119666 to 119670. *PHALARIS* spp. Poaceae. Grass.119666. *PHALARIS BRACHYSTACHYS* Link.

No. 1647. An annual grass from 20 km. south of Diyarbekir, July 9.

119667. *PHALARIS PARADOXA* L.

No. 620. From Ephesus, June 24.

119668 to 119670. *PHALARIS TUBEROSA* L.

For previous introduction see 117386.

119668. No. 1565. From 30 km. north-east of Urfa, July 7.

119669. No. 1649. Found growing in large clumps 20 km. south of Diyarbekir, July 9.

119670. No. 2907. From 2 km. south of Biga, September 19.

119671 to 119676. *PHLEUM* spp. Poaceae. Timothy.119671 and 119672. *PHLEUM ARENARIUM* L.

For previous introduction see 109345.

119671. No. 1641. From 30 km. south of Diyarbekir, July 9.

119672. No. 2284. From 25 km. east of Erzinjan, August 9.

119673. *PHLEUM PRATENSE* L.

No. 2583. From 31 km. west of Samsun, August 23.

119674 to 119676. *PHLEUM SUBULATUM* (Savi) Aschers. and Graebn.

For previous introduction see 109547.

119674. No. 1094. From south of Akhisar, June 11.

119675. No. 1187. From 50 km. west of Balikesir, June 16.

119676. No. 2603. From 3 km. west of Samsun, August 23.

119677 to 119688. *POA* spp. Poaceae. Grass.119677 to 119682. *POA BULBOSA* L.

119677. No. 633. From the Izmir district, June 25.

119678. No. 1577. From 30 km. northeast of Urfa, July 7.

119679. No. 1887. From 42 km. north of Malatya, July 17.

119680. No. 2090. From 45 km. north of Nigde, July 26.

119681. No. 2771. From 6,500 feet altitude on Ulu Dag, 35 km. south of Bursa, September 8.

119682. No. 3308. From 10 km. west of Gaziantep, May 1.



## 119593 to 119705—Continued.

119683. *Poa* sp.

No. 1115. From 2 km. south of Kirkagach, June 11.

119684. *Poa* sp.

No. 1199. From 65 km. west of Balikesir, June 16.

119685. *Poa* sp.

No. 2066. From Alma Dag, 25 km. southeast of Ankara, August 1.

119686. *Poa* sp.

No. 2071. From Alma Dag, 25 km. southeast of Ankara, August 1.

119687. *Poa* sp.

No. 2337. From 55 km. south of Trabzon, August 10.

119688. *Poa* sp.

No. 2682. From 41 km. south of Tokat, August 26.

119689. *POLYPOGON MONSPELIENSIS* (L.) Desf. *Poaceae*. *Grass*.

No. 1443. From 60 km. north of Gaziantep, July 2. An annual grass with soft bristly green or yellowish spikes up to 6 inches long. A common weed on our Pacific coast.

For previous introduction see 109143.

119690. No. 119696. *RHAPHIS GRILLUS* (L.) Desv. *Poaceae*. *Grass*.

119690. No. 723. From dry limestone hills 45 km. southeast of Mugla, May 28.

119691. No. 1076. From 60 km. northwest of Izmir, June 10.

119692. No. 1171. From 65 km. west of Balikesir, June 16.

119693. No. 1175. From 40 km. west of Balikesir, June 16. Very common on the dry plains and hills of this region.

119694. No. 1399. From 15 km. southeast of Marash, where it forms bright green patches on dry rocky slopes, July 2.

119695. No. 1522. From 25 km. east of Birejik, July 5.

119696. No. 2834. From Yalova Kapli-jalari, September 11.

119697. *SECALE ANATOLICUM* Boiss. *Poaceae*. *Grass*.

No. 2060. From Alma Dag, 25 km. southeast of Ankara, August 1. A perennial grass with stems 2 to 3 feet high. Native to Asia Minor.

119698 to 119705. *STIPA* spp. *Poaceae*. *Feathergrass*.119698. *STIPA BROMOIDES* (L.) Beck.

No. 2911. From 50 km. east of Chakak Kale, September 19.

119699 and 119700. *STIPA PENNATA* L.

119699. No. 2062. From Alma Dag, 25 km. southeast of Ankara, August 1.

119700. No. 3384. From 3 km. west of Ankara, June 26.

119701. *STIPA SZOVITZIANA* Trin.

## 119593 to 119705—Continued.

No. 806. From 20 km. south of Burdur, June 3.

119702. *STIPA* sp.

No. 775. From 35 km. west of Isparta, June 2.

119703. *STIPA* sp.

No. 1068. From the Bergama ruins, June 10.

119704. *STIPA* sp.

No. 1762. From 40 km. southeast of Elaziz, July 13.

119705. *STIPA* sp.

No. 2009. From 20 km. north of Nigde, July 26.

119706. *BRASSICA OLERACEA CAPITATA* L. *Brassicaceae*. *Cabbage*.

From New Zealand. Seeds presented by Richard Norman, Otago, through Mrs. John Waldron, National Geographic Society, Washington, D. C. Received January 13, 1937.

*Maori cabbage*. A variety native to New Zealand, which grows rapidly and is a fine culinary plant; the seeds look like rape.

119707 and 119708.

From Kenya Colony, Africa. Seeds and bulbs purchased from the Mount Elgon Nurseries, Kama Kola, Mount Elgon, Kitale. Received January 11, 1937.

119707. *CLERODENDRUM MYRICOIDES* R. Br. *Verbenaceae*.

A tender erect evergreen shrub 3 to 5 feet high, with 2- to 4-lobed oblong leaves 2 to 6 inches long and small bicolored blue and white flowers in short terminal panicles. Native to tropical Africa.

119708. *AMMOCHARIS HETEROSTYLA* (Bullock) Mil.-Redh. and Schw. *Amoryllidaceae*.

Bulbs of an amaryllid with glaucous green, strap-shaped, spreading leaves about 10 inches long and up to 18 erect, mildly fragrant flowers in an umbel; the narrow segments are 2 to 3 inches long. The fresh flowers are creamy white with a pinkish tube; as they age, usually in 2 or 3 days, they become dull rose over all. Native to South Africa.

119709 to 119804.

From Buenos Aires, Argentina. Seeds and bulbs collected by W. A. Archer, Bureau of Plant Industry. Received January 4, 1937.

Collected in markets and seed stores in Buenos Aires, November 25 to 27, 1936, and, unless otherwise stated, received as seeds.

119709 to 119720. *ALLIUM CEPA* L. *Liliaceae*. *Onion*.119709. No. 4538. *Colorado de Madeira*.119710. No. 4539. *Oignon Jaune de Danvers*.119711. No. 4540. *Blanca Chata de la Costa*.119712. No. 4541. *Amarilla de Trebana*.119713. No. 4542. *Amarilla Valenciana*.119714. No. 4543. *Blanca Chata de Nápole*.

## 119709 to 119804—Continued.

119715. No. 4544. *Colorada de la Costa*.  
 119716. No. 4545. *Colorada Viva de Agosto*.  
 119717. No. 4546. *Amarilla Chata de Vertus*.  
 119718. No. 4499. *Amarilla Aglobada de la Costa*.  
 119719. No. 4500. *Colorada Chata de la Costa*.  
 119720. No. 4501. *Amarilla Chata Inversa*.  
 119721 and 119722. BRASSICA OLERACEA CAPITATA L. Brassicaceae. Cabbage.  
 119721. No. 4507. *Repollo Crespo Grueso San Juan Temprano*.  
 119722. No. 4505. *Col Negro Romano*. Native seed.  
 119723. TARA SPINOSA (Molina) Britton and Rose (*Caesalpinia pectinata* Cav.). Caesalpinaceae.  
 No. 4559. *Tara*. A tall upright spiny shrub or small tree, often used as a hedge in Peru. The foliage is deep green with the leaflets smooth and polished on the upper surface. The greenish-yellow flowers, in cylindrical open spikes, are not very conspicuous, but the pods are produced in large clusters and the exposed surfaces show bright scarlet for a long time before maturing. The pods contain a high percentage of tannin.  
 For previous introduction see 64915.  
 119724. CICER ARIETINUM L. Fabaceae. Chickpea.  
 No. 4479. *Garbanzo*.  
 119725. CICHORIUM INTYBUS L. Cichoriaceae. Chicory.  
 No. 4508. *Radichota Fina do Cortar*. Native seed.  
 119726 to 119735. CITRULLUS VULGARIS Schrad. Cucurbitaceae. Watermelon.  
 119726. No. 4494. *Florida Favorita*.  
 119727. No. 4495. *Colorada de la Costa*.  
 119728. No. 4509. *Colorada Delicia*.  
 119729. No. 4510. *Colorada de la Costa*. Native seed.  
 119730. No. 4523. *Colosal*.  
 119731. No. 4524. A mixed sample of native varieties.  
 119732. No. 4531. *De Cremona*.  
 119733. No. 4532. *Larga de Valencia*.  
 119734. No. 4533. *Colorada Redonda*.  
 119735. No. 4564.  
 119736 to 119753. CUCUMIS MELO L. Cucurbitaceae. Muskmelon.  
 119736. No. 4491. *Cantaloup de Argel*.  
 119737. No. 4492. *Campeón del Mercado*.  
 119738. No. 4493. *Azucarado de Tours*.  
 119739. No. 4514. A mixed sample.  
 119740. No. 4515. *Cantaloup Nantais*.  
 119741. No. 4516. *Cantaloup Azucarado*.  
 119742. No. 4517. *Valenciano largo, Carne Amarillo*.

## 119709 to 119804—Continued.

119743. No. 4518. *Malta de Invierno, Carne Colorado*.  
 119744. No. 4519. *Mediano Redondo*. Native seed.  
 119745. No. 4520. *Brodi Bola de Oro, Carne Verde*.  
 119746. No. 4521. *Redondo Escrito*.  
 119747. No. 4522. *Vaucluse é Cavaillon*.  
 119748. No. 4534. *Cantaloup de Argel*.  
 119749. No. 4535. *Campeón del Mercado*.  
 119750. No. 4536. *Azucarado de Tours*.  
 119751. No. 4537. *Amarillo de Valencia*.  
 119752. No. 4562. A cultivated melon.  
 119753. No. 4563. A cultivated melon.  
 119754 and 119755. CUCUMIS SATIVA L. Cucurbitaceae. Cucumber.  
 119754. No. 4496-A. *Largo Verde*.  
 119755. No. 4497. *Chico de Rusta*.  
 119756 to 119768. CUCURBITA spp. Cucurbitaceae.  
 119756 to 119761. CUCURBITA MAXIMA Duchesne. Squash.  
 119756. No. 4496. *Zapallito Redondo de Tronco*. A variety common in the market; it is filled with meats, etc., for roasting.  
 119757. No. 4502. *Redondo Criollo*. Native seed.  
 119758. No. 4503. *Español Chato*.  
 119759. No. 4504. *Zapallito Redondo de Tronco*. The same as No. 4496 (P. I. 119756).  
 119760. No. 4527. *Courge Sucrière de Brésil*.  
 119761. No. 4529. *Zapallo Criollo Grueso*.  
 119762 to 119764. CUCURBITA MOSCHATA Duchesne. Cuslaw.  
 119762. No. 4566. From the Province of Salta.  
 119763. No. 4565. A form with curved fruits.  
 119764. No. 4483. A cultivated pumpkin.  
 119765 to 119768. CUCURBITA PEPO L. Pumpkin.  
 119765. No. 4526. *Courge a la Moelle*.  
 119766. No. 4528. *Zapallito Largo del Tronco Temprano Genoves*.  
 119767. No. 4530. *Zapallo Angola*.  
 119768. No. 4556. *Boliviana*. Cultivated by the Indians of the Province of Salta. The fruits keep a long time.  
 119769. DOLICHOS LABLAB L. Fabaceae. Hyacinth-bean.  
 No. 4465. An ornamental vine; seeds sometimes eaten.  
 119770. FRAGARIA VESCA L. Rosaceae. Strawberry.  
 No. 4462. A cultivated strawberry with small fruits of good flavor.  
 119771. HELIANTHUS ANNUUS L. Asteraceae. Common sunflower.

## 119709 to 119804—Continued.

- No. 4481. A cultivated sunflower.
119772. *HIPPEASTRUM* sp. *Amoryllidaceae*.
- No. 4555. Bulbs; native in Corrientes, Argentina.
119773. *LACTUCA SATIVA* L. *Cichoriaceae*.  
Garden lettuce.
- No. 4464. Cultivated lettuce; native seed.
119774. *LATHYRUS SATIVUS* L. *Fabaceae*.  
Bittervetch.
- No. 4474. A cultivated pea.
119775. *LUPINUS* sp. *Fabaceae*.
- No. 4558.
- 119776 to 119778. *LYCOPERSICON ESCULENTUM* Mill. *Solanaceae*. Tomato.
119776. No. 4511. *Liso Colorado Argentino*. Native seed.
119777. No. 4512. *Grueso Liso Chemin*.
119778. No. 4513. *Colorado Grueso*.
- 119779 to 119782. *MEDICAGO* spp. *Fabaceae*.
119779. *MEDICAGO LUPULINA* L.  
Black medick.
- No. 4570. A prostrate variety with yellow flowers.
- 119780 to 119782. *MEDICAGO SATIVA* L.  
Alfalfa.
119780. No. 4484.
119781. No. 4463. Native seed.
119782. No. 4525. *Alfalfa de la Pampa*. Native seed.
119783. *OCIMUM BASILICUM* L. *Mentaceae*.  
Common basil.
- No. 4506. *Albahaca a Hoja Ancha*. Native seed.
- For previous introduction see 118393.
119784. *ORYZA SATIVA* L. *Poaceae*. Rice.
- No. 4561. A cultivated rice.
- 119785 to 119792. *PHASEOLUS* spp. *Fabaceae*. Bean.
- 119785 and 119786. *PHASEOLUS COCCINEUS* L.  
Scarlet runner bean.
119785. No. 4468. 119786. No. 4471.
119787. *PHASEOLUS LUNATUS* L.  
Lima bean.
- No. 4472. A cultivated butter bean.
- 119788 to 119792. *PHASEOLUS VULGARIS* L.  
Common bean.
119788. No. 4466. *Chauca*. Used as food, also as stock feed.
119789. No. 4467. 119791. No. 4470.
119790. No. 4469. 119792. No. 4480.
- 119793 to 119796. *PISUM SATIVUM* L. *Fabaceae*.  
Pea.
119793. No. 4475. 119795. No. 4477.
119794. No. 4476. 119796. No. 4478.
119797. *PRUNUS ARMENIACA* L. *Amygdalaceae*.  
Apricot.
- No. 4599. *Damasco*. Fruit small, about 1 inch in diameter.

## 119709 to 119804—Continued.

119798. *VIGNA SINENSIS* (Torner) Savi.  
*Fabaceae*. Cowpea.
- No. 4473. A cultivated black-eyed pea.
- 119799 to 119802. *ZEA MAYS* L. *Poaceae*.  
Corn.
119799. No. 4561—A. *Maiz Arco Iris*.
119800. No. 4482. Cultivated popcorn.
119801. No. 4498. *Maiz Dulce Para Choclo*. Native seed.
119802. No. 4560. *Maiz Vestido*.
119803. *ZEPHYRANTHES* sp. *Amoryllidaceae*.
- No. 4553. Bulbs from Iguazu, Argentina.
119804. *ZEPHYRANTHES* sp.
- No. 4554. Bulbs, native to Puerto Bertoni, Argentina. A variety with yellow flowers.
- 119805 to 119809. *XANTHOSOMA* spp.  
*Araceae*. Malanga.
- From Puerto Rico. Tubers presented by Atherton Lee, Puerto Rico Federal Experiment Station, Mayaguez. Received January 27, 1937.
119805. *XANTHOSOMA ATROVIRENS* Koch and Bouché.
119806. *XANTHOSOMA CARACU* Koch and Bouché.  
Yautia.
- A yautia remarkable for the large and uniform size of its tubers.
- For previous introduction see 98519.
119807. *XANTHOSOMA SAGITTAEFOLIUM* (L.) Schott.  
Yautia.
- A white-fleshed yautia of very good quality.
- For previous introduction see 51388.
119808. *XANTHOSOMA* sp.
119809. *XANTHOSOMA* sp.
- 119810 to 119823.
- From Argentina and Brazil. Collected by W. A. Archer, Bureau of Plant Industry. Received January 13, 1937.
- Unless otherwise mentioned, the material was received as seeds.
- 119810 to 119815. *ARACHIS HYPOGAEA* L.  
*Fabaceae*. Peanut.
- Nos. 119810 to 119813 were from Posadas, Argentina, December 5, 1936. Cultivated peanuts.
119810. No. 4600. 119812. No. 4602.
119811. No. 4601. 119813. No. 4603.
- Nos. 119814 and 119815 were from Santa Anna, Argentina, December 10, 1936.
119814. No. 4622. *Negro*.
119815. No. 4623. *Rojo*.
- 119816 and 119817. *CUCUMIS MELO* L. *Cucurbitaceae*.  
Muskmelon.
- Cultivated melons from Posadas, Argentina, December 5, 1936.
119816. No. 4605. 119817. No. 4606.

## 119810 to 119823—Continued.

119818. *PHALOCALLIS HERBERTII* (Herbert) Kuntze. Iridaceae.

No. 4435-A. From Santa Anna, Brazil, November 13, 1936. A plant commonly found in this region growing in muck or in moist sand. Flower stalk 2 to 3 feet long, with bulbous base, bearing 5 or 6 flowers. Petals orange-red with green markings at base.

119819. *LUFFA CYLINDRICA* (L.) Roemer. Cucurbitaceae. Suakwa towelgourd.

No. 4604. *Espanja enredadera*. From a shop in Posadas, Argentina, December 5, 1936.

119820. *MOMORDICA CHARANTIA* L. Cucurbitaceae. Balsam-pear.

No. 4607. *Calabasita*. From a shop in Posadas, Argentina, December 5, 1936. A cultivated vine with edible fruits.

119821 and 119822. *NICOTIANA TABACUM* L. Solanaceae. Common tobacco.

From Bonpland, Argentina, December 8, 1936.

119821. No. 4616. *Chileno guazú*. Native to Misiones.

119822. No. 4617. *Amarelinha*. Seed imported from Rio Grande do Sul, Brazil.

119823. *PASSIFLORA CAERULEA* L. Passifloraceae. Bluecrown passionflower.

No. 4614. On the road between Posadas and Bonpland, Misiones, Argentina, December 8, 1936. A slender, strong-growing vine, native to Brazil, with leaves divided into 5 to 7 lanceolate segments and fragrant greenish-white flowers 4 inches across. The rays of the crown are blue at the tip, white in the middle, and purple at the base, while the styles are light purple. The orange-colored fruits are 2 inches long and 1½ inches in diameter. The edible pulp is red.

For previous introduction see 79178.

## 119824 to 119834.

From India. Seeds collected by Walter Koelz, Bureau of Plant Industry. Received January 15, 1937.

119824 and 119825. *CITRULLUS VULGARIS* Schrad. Cucurbitaceae. Watermelon.

From Lahore, Punjab, November 26 and 28, 1936, but said to have come from Quetta.

119824. No. 1797. *Tarbuza*. Fruit globose, 1 foot long, pale to dark green; if pale, finely reticulated with dark green; rind rough; flesh thin, very sweet and very seedy; an excellent keeper.

119825. No. 1802. *Tarbuza*. A globose melon which weighs 15 pounds; medium green, blotched with darker green; flesh very sweet.

119826. *COCCINIA* sp. Cucurbitaceae.

No. 1830. From Saharanpur, United Provinces, December 2, 1936. The *Coccinias* are perennial tropical vines, usually with tuberous roots. This form has insipid scarlet fruits 2 inches long.

119827. *CUCUMIS MELO* L. Cucurbitaceae. Muskmelon.

No. 1792. *Sarda*. Purchased at Pathankot, Punjab, November 23, 1936; said

## 119824 to 119834—Continued.

to have come from Baluchistan. Fruit oval, 1 foot long, golden yellow, well netted, no cavity, seeds embedded in flesh. Flesh salmon, thick, fragrant.

119828. *DIOSPYROS MONTANA* Roxb. Diospyraceae. Mountain persimmon.

No. 1817. Presented by the Government Gardens, Saharanpur, United Provinces, December 1, 1936. An evergreen tree 1 foot in diameter, laden with globular orange fruits, 1 to 1½ inches in diameter.

For previous introduction see 52287.

119829. *EUONYMUS* sp. Celastraceae.

No. 1825. From Saharanpur, United Provinces.

119830. *IXORA COCCINEA* L. Rubiaceae. Scarlet ixora.

No. 1827. From the Government Gardens, Saharanpur, United Provinces, December 1, 1936. An attractive evergreen shrub 4 feet high, with heads of lovely scarlet flowers, followed by crimson berries.

119831. *KIGELIA PINNATA* (Jacq.) DC. Bignoniaceae.

No. 1831. The "sausage tree" of eastern tropical Africa; becomes 30 to 50 feet high, with rough ternate leaves made up of 7 to 9 elliptic-oblong leaflets and large claret-colored flowers in long spikes, followed by sausage-like fruits 12 to 18 inches long.

For previous introduction see 106507.

119832. *MALUS* sp. Malaceae.

No. 1832. *Sarak*. From Lahore, Punjab, November 29, 1936. Fruits 1½ to 2 inches in diameter, red and yellow; flesh sweet, nonastringent, of agreeable flavor.

119833. *SARACA INDICA* L. Caesalpinaceae. Common saraca.

From Saharanpur, United Provinces. A medium-sized Indian tree with pinnately compound leaves of 6 to 12 oblong leathery leaflets 6 to 12 inches long and fragrant orange-red flowers in compact panicles.

For previous introduction see 98093.

119834. *TABERNAEMONTANA CORONARIA* R. Br. Apocynaceae.

No. 1823. From the Government Gardens, Saharanpur, United Provinces, December 1, 1936. An evergreen shrub up to 8 feet tall, with white flowers and fruits which split and show the crimson seeds.

## 119835 to 119866.

From the Union of Soviet Socialist Republics. Plants presented by Dr. N. I. Sharapov, Institute of Plant Industry, Leningrad. Received January 25, 1937.

Originally from Turkistan, unless otherwise stated.

119835 to 119846. *AMYGDALUS* spp. Amygdalaceae.

119835. *AMYGDALUS DAVIDIANA* (Carr.) Zabel. Chinese wild peach.

No. 1674.

119836 to 119840. *AMYGDALUS PERSICA* L. Peach.

119836. No. 224. *Khidistavsky*.

## 119835 to 119866—Continued.

119837. No. 349—T. *Sarfi Oilar*.119838. No. 0647. *Shaptaly*.119839. No. 1281—T. *Shirim-Danak*.

119840. No. 0195. Turnip-shaped.

119841 to 119843. *AMYGDALUS PERSICA* L.  
Peach.Variety *Ferganensis*.

119841. No. 849. A white-fleshed form.

119842. No. 0439. An early yellow form.

119843. No. 02288. A yellow form.

119844. *AMYGDALUS PERSICA* NECTARINA  
Ait. Nectarine.

No. 0932. A flat red nectarine.

119845 and 119846. *AMYGDALUS PERSICA*  
*PLATYCARPA* (Decaisne) Ricker.  
Flat peach.

119845. No. 240. An early peach.

119846. No. 1383—T.

119847 to 119866. *PRUNUS* spp. *Amygdalaceae*.119847 to 119857. *PRUNUS ARMENIACA* L.  
Apricot.

119847. No. 210—T.

119848. No. 1070. *Shirpatwan*.119849. No. ———. *Krurmai*.119850. No. 1820—T. *Spitak*. Originally from Transcaucasia.119851. No. 1770. *Uimautsky*.119852. No. 0416. *Tadji-Eai*.119853. No. 321. *Badam-Tsfarak*.119854. No. 1163. *Shirassky*. From Transcaucasia.119855. No. 0466. *Golden Dust*.119856. No. 0234. *Kandsk*.119857. No. 1189. *Mirsandjhal*.119858. *PRUNUS MANDSHURICA* (Maxim.)  
Koehne.

No. 1720. A small Manchurian tree up to 15 feet high, with spreading branches, ovate acuminate leaves, solitary pinkish flowers an inch or more across, and yellow subglobose fruits an inch in diameter.

For previous introduction see 76743.

119859 to 119863. *PRUNUS ARMENIACA* L.  
Apricot.119859. No. 1431—T. *Arsami*.119860. No. 0247. *Mulla Gadat*.119861. No. 0487. *Daravshak*.119862. No. 665—T. *Bonhara*.119863. No. 429. *Salgirshy*. Originally from the Crimea.119864 to 119866.  $\times$  *PRUNUS DASYCARPA*  
Ehrh. Plum-apricot.

For previous introduction see 117678.

119864. No. 01276. A natural hybrid.

119865. No. 03484. *Flor-Tsiran*. Originally from Armenia.

119866. No. 0347.

200597—42—2

119867. *SOLANUM* sp. *Solanaceae*.

From Paraguay. Tubers collected by W. A. Archer, Bureau of Plant Industry. Received January 27, 1937.

No. 4662. *Papa silvestre*. From San Miguel Curuzú, 3 km. north of Villa Encarnación, December 14, 1936.119868 to 119874. *NICOTIANA TABACUM* L. *Solanaceae*. Common tobacco.

From Peru. Seeds presented by Luis Aspíllaga A., Hacienda Cayalti, Eten, through Raymond Stadelman, Bureau of Plant Industry. Received January 25, 1937.

119868. *Adcock*.119869. *Cold leaf Orinoco*.119870. *Connecticut Habana*.119871. *Judi Pride Buriel*.119872. *Madole tabaco*.119873. *Maryland broadleaf*.119874. *Rustico Peruano*, originally from the Hacienda Chumbenique.

## 119875 to 119889.

From Paraguay. Seeds and plants collected by W. A. Archer, Bureau of Plant Industry. Received January 27, 1937.

119875. *ANANAS COMOSUS* (L.) Merr. *Bromeliaceae*. Pineapple.No. 4771. *Abacachi del pais*. Plants from San Lorenzo, December 24, 1936. Said to have originated in Brazil, but cultivated in Paraguay for over a century. Fruit small, about 6 inches in diameter, and 8 to 9 inches long; flesh white, very sweet and juicy; core very small, eyes do not extend into meat. The fruit here is eaten with a spoon, by merely cutting off one end.119876 to 119881. *ARACHIS* spp. *Fabaceae*. Peanut.119876 and 119877. *ARACHIS HYPOGAEA* L.

From the Villa Encarnación, December 14, 1936.

119876. No. 4638. *Colorado*. A cultivated peanut.119877. No. 4639. *Abá*. A cultivated peanut.119878. *ARACHIS MARGINATA* Gardn.

No. 4655. From San Miguel Curuzú, 3 km. north of Villa Encarnación, December 14, 1936. A perennial species, native to Brazil.

119879 to 119881. *ARACHIS HYPOGAEA* L.

Mixed varieties of cultivated peanuts; integuments, white, red, and black. Purchased in the market at Villa Rica, December 17, 1936.

119879. No. 4705.

119880. No. 4706.

119881. No. 4707.

119882 to 119889. *NICOTIANA TABACUM* L. *Solanaceae*. Common tobacco.119882. No. 4649. *Tobaco parrá; pet'hú*. A large leaf, black when cured. From the Villa Encarnación, December 14, 1936.

## 119875 to 119889—Continued.

Nos. 119883 and 119884. From Játati, 8 km. north of Villa Rica, December 16, 1936.

119883. No. 4685. *Canela*.

119884. No. 4686. *Via Pagar Mi Cuenta*. A heavy producer, leaves taper-pointed.

Nos. 119885 to 119889. From San Lorenzo, December 25, 1936. Cultivated tobacco.

119885. No. 4762. *Pety canela-i*.

119886. No. 4763. *Pety-chai*, meaning wrinkled leaf.

119887. No. 4764. *Para pagar su cuenta*.

119888. No. 4765. Mixed varieties; probably includes one that has anise odor.

119889. No. 4766. *Romero*.

## 119890 to 119910.

From India. Seeds collected by Walter Koelz, Bureau of Plant Industry. Received January 8, 1937.

119890. *ACACIA NILOTICA* (L.) Willd. *Mimosaceae*.

No. 1805. *Kikas*. From Lahore, Punjab, November 28, 1936. A handsome tree, found in both dry and wet situations, which provides a dense shade.

119891. *ALLIUM CEPA* L. *Liliaceae*. Onion.

No. 1804. *Piyaz*. From Lahore, Punjab. A rather flattened red onion from Karachi; keeps well.

119892. *BETA VULGARIS* L. *Chenopodiaceae*. Common beet.

No. 1808. *Palag*. From Lahore, Punjab, November 28, 1936. A potherb.

119893. *BRASSICA OLERACEA* BOTRYTIS L. *Brassicaceae*. Cauliflower.

No. 1822. *Phulgob*. Purchased in Saharanpur, United Provinces, December 1, 1936. Said to be *Walcheren*, a German variety that thrives here, producing large white heads.

119894 and 119895. *CAPSIDUM ANNUUM* L. *Solanaceae*. Common redpepper.

*Mirch*. From Saharanpur, United Provinces, December 1, 1936.

119894. No. 1818. Very pungent orange fruit  $2\frac{1}{2}$  inches wide and  $1\frac{1}{2}$  inches long. Said to have come from Patrala.

119895. No. 1819. Moderately pungent, red, top-shaped fruit,  $1\frac{1}{2}$  inches high. Said to have come from the Punjab.

119896. *CITRULLUS VULGARIS* Schrad. *Cucurbitaceae*. Watermelon.

No. 1800. *Tarbuz*. From Lahore, Punjab, November 28, 1936, said to have come from Quetta. Fruit elongate, 1 foot long, very pale green with blotched strip of darker green. The light part is apt to have pale-green tubercles. Rind hard; flesh very sweet and of good quality. Apparently a good keeper.

119897. *ERIANTHUS RAVENNAE* (L.) Beauv. *Poaceae*. Ravenna grass.

No. 1798. *Sarkanda*, *kamma*. From Pathankot, Punjab, November 25, 1936. An ornamental grass 15 feet high, found growing in clumps; used here for thatching.

For previous introduction see 109496.

## 119890 to 119910—Continued.

119898. *MALUS* sp. *Malaceae*.

No. 1803. *Sarak*. From Lahore, Punjab, November 28, 1936. A sweet yellow crab, with a red cheek,  $1\frac{1}{2}$  inches in diameter.

119899. *MEDICAGO SATIVA* L. *Fabaceae*. Alfalfa.

No. 1806. *Senje*; *Clara*. From Lahore, Punjab, November 28, 1936. Said to be a variety that grows from 8 to 10 years.

119900 to 119905. *ORYZA SATIVA* L. *Poaceae*. Rice.

Nos. 119900 to 119902 were from Lahore, Punjab, November 28 and 29, 1936.

119900. No. 1807. *Bansmati*. One of the best of the local rices.

119901. No. 1810. *Seon*. Said to be a short season rice (90 days), a heavy yielder, 2,800 pounds per acre, and a poor quality table rice.

119902. No. 1811. *Begami*. A second-class table rice which yields 1,600 to 2,000 pounds per acre. Said to mature in 110 to 120 days.

Nos. 119903 to 119905 were from Kala Shah Kaku, Punjab, November 29, 1936.

119903. No. 1812. *Basmati*. This form originated in Gujaranvala District in 1927. Superior to local *basmati*. Matures in 110 to 112 days; yields 2,000 to 2,240 pounds per acre. Considered the best table rice in Punjab; remarkably white and fragrant.

119904. No. 1813. *Mushkan 41*. A strain, developed by the Government rice specialists, that matures in 100 to 107 days, and yields 2,000 to 2,200 pounds per acre. Grain fine, white, fragrant. Used as an adulterant for *basmati*, a superior rice.

119905. No. 1814. *Palman sufed 246*. A strain, developed by the Government rice specialists, that matures in 90 to 95 days, yielding 2,240 to 2,560 pounds per acre. Used to adulterate *basmati*, a superior rice.

119906. *PUNICA GRANATUM* L. *Punicaceae*. Pomegranate.

No. 1796. *Anan*. From Lahore, Punjab, November 28, 1936, but said to have come from Afghanistan. A deep-crimson fruit the size of a large orange with an abundance of very agreeable crimson juice.

119907. *SALIX* sp. *Salicaceae*.

No. 1826. From Saharanpur, United Provinces, December 1, 1936. An attractive sturdy tree with shiny elliptical leaves  $3\frac{1}{2}$  to 4 inches long; found growing along canal banks; blooms in the fall.

119908 and 119909. *SPINACIA OLERACEA* L. *Chenopodiaceae*. Common spinach.

119908. No. 1811—A. *Palag*. From Lahore, Punjab, November 28, 1936.

119909. No. 1828. Purchased at Saharanpur, United Provinces, December 1, 1936. Said to be from seed imported from France and to be a large round-leaved type with prickly leaves.

119910. *TECTONA GRANDIS* L. f. *Verbenaceae*. Teak.

No. 1820. From the Government Gardens at Saharanpur, United Provinces, De-

## 119890 to 119910—Continued.

ember 1, 1936. A large tree 3 feet in diameter, with large nearly evergreen leaves; attractive as a roadside tree.

## 119911 to 119917.

From Argentina. Seeds collected by W. A. Archer, Bureau of Plant Industry. Received January 15, 1937.

119911. *ARACHIS HYPOGAEA* L. Fabaceae.  
Peanut.

No. 4634. From Posadas, Misiones, December 12, 1936. A cultivated peanut.

119912. *AXONOPUS COMPRESSUS* (Swartz) Beauv. Poaceae. Carpet grass.

No. 4618. *Periquita, Grama Paraguaya*. From near Bonpland, Misiones, December 9, 1936. A good pasture grass, used as erosion control by farmers in this region; resists freezing.

119913. *CUCUMIS MELO* L. Cucurbitaceae.  
Muskmelon.

No. 4635. A cultivated melon from Posadas, Misiones, December 12, 1936.

119914. *CUCUMIS* sp. Cucurbitaceae.

No. 4621. *Pepino*. From near Bonpland, Misiones, December 9, 1936. Flowers yellow; fruit faintly striped. Fruit is eaten raw or as pickles and has the odor of cucumbers.

119915. *NICOTIANA TABACUM* L. Solanaceae.  
Common tobacco.

No. 4608. From the streets of Posadas, Misiones, December 7, 1936. Plants 2 to 3 feet high, producing a basal rosette of leaves in young stage; flowers pale greenish outside, white within or sometimes lavender tinged.

119916. *VERBENA LACINIATA* (L.) Briq. Verbenaceae.

No. 4609. From Posadas, Misiones, December 7, 1936. A prostrate herb with purple flowers.

119917. *VERBENA PLATENSIS* Spreng. Verbenaceae.

No. 4625. Along the road between Posadas and Candelaria, Misiones, December 10, 1936. A shrubby verberna with lax spikes of fragrant crimson flowers.

119918 and 119919. *HORDEUM VULGARE* L. Poaceae. Barley.

From India. Seeds presented by the Imperial Institute of Agricultural Research, Botanical Sub-Station, Pusa. Received January 22, 1937.

## 119920 to 119931.

From Paraguay. Seeds and tubers collected by W. A. Archer, Bureau of Plant Industry. Received January 29, 1937.

Nos. 119920 to 119927 were from Asunción, purchased in the market and in shops.

119920 to 119924. *ARACHIS HYPOGAEA* L. Fabaceae. Peanut.

119920. No. 4793. 119923. No. 4796.

119921. No. 4794. 119924. No. 4797.

119922. No. 4795.

119925. *HORDEUM VULGARE* L. Poaceae. Barley.

No. 4790. *Cebada Paraguaya*. Seed used for beverages.

## 119920 to 119931—Continued.

119926 and 119927. *SOLANUM TUBEROSUM* L. Solanaceae. Potato.

119926. No. 4791. Tubers.

119927. No. 4792. Tubers.

119928. *SORGHUM VULGARE* Pers. Poaceae. Sorghum.

No. 4772. *Sorgo azucarado*. Seed secured from Carandaity, Chaco, and presented by the Jardín Botánico, Santísima Trinidad, near Asunción, December 24, 1936.

119929 and 119930. *ZEA MAYS* L. Poaceae. Corn.

Purchased in the market at Villa Rica, December 17, 1936.

119929. No. 4708.

119930. No. 4709.

119931. *ZEPHYRANTHES* sp. Amaryllidaceae.

No. 4756. Bulbs of a native Paraguayan plant with white flowers.

## 119932 to 119935.

From Colombia. Seeds presented by Eduardo Hernandez, Pijás, Caldas. Received January 29, 1937.

119932 to 119934. *BOMAREA CALDASII* (H. B. K.) Herbert. Amaryllidaceae.

Twining, ornamental plants, native to the Andes as far south as Peru. The thin spreading leaves are 3 to 6 inches long, and the orange-red to red flowers, about an inch long, are borne in many-flowered, pendulous clusters.

For previous introduction see 101216.

119935. *CROTALARIA* sp. Fabaceae.

## 119936 to 119938.

From Cuba. Seeds presented by F. G. Walsingham, Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos. Received February 1, 1937.

119936. *ARISTOLOCHIA GIGANTEA* Mart. and Zucc. Aristolochiaceae.

From the Botanic Garden, Rio de Janeiro, Brazil. A tropical climber with very large flowers, purple blotched and veined. The tube of the flower is bent so that it resembles a bird's neck, while the limb is much like the head drawn back against the neck as a swan or pelican rests.

119937. *BAUHINIA MACRANTHA* Oliver. Caesalpinziaceae.

From the Horticultural Section, Ministry of Agriculture, Cairo, Egypt. A pubescent shrub 4 to 5 feet high, with thin leathery compound leaves and very large flowers, 2 or 3 together, on short terminal peduncles; the obovate petals are over 2 inches long, pinnately veined from a prominent deliquescent midrib. Native to tropical Africa.

For previous introduction see 48236.

119938. *COCHLOSPERMUM ORINOCENSE* (H. B. K.) Steud. Cochlospermaceae.

From the Botanic Garden, Rio de Janeiro, Brazil. A tree about 50 feet high, with digitate leaves and large showy yellow flowers. Native to Brazil.

## 119939 to 120029.

From Turkey. Seeds collected by H. L. Westover and F. L. Wellman, Bureau of Plant Industry. Received January 9, 1937.

This material was all collected in the spring and summer of 1936.

119939. *LATHYRUS GORGONI* Parl. Fabaceae.

No. 1341. From Adana, June 10.

119940 to 119947. *VICIA* spp. Fabaceae. Vetch.

119940. *VICIA LATHYROIDES* L.

No. 698. From east of Milas in open pine forest, May 27. An annual vetch, native to Europe.

119941. *VICIA MONANTHOS* (L.) Desf.

No. 699. From open pine woods east of Milas, May 27.

119942. *VICIA LATHYROIDES* L.

No. 701. From 30 km. east of Milas, May 27.

119943. *VICIA SATIVA* L. Common vetch.

No. 705. From 35 km. east of Milas, May 27.

119944. *VICIA DASycARPA* Ten.

No. 736. From 45 km. southeast of Mugla, May 28.

119945. *VICIA SERRATIFOLIA INTEGRIFOLIA* Beck.

No. 781. From 40 km. west of Isparta, June 2.

119946. *VICIA DASycARPA* Ten.

No. 802. From Bujak, June 3.

119947. *VICIA PEREGRINA* L.

No. 824. From along the road between Isparta and Antalya, June 3.

119948. *LATHYRUS* sp. Fabaceae.

No. 826. From Ephesus, May 24.

119949. *VICIA PEREGRINA* L. Fabaceae. Vetch.

No. 1062. From 20 km. west of Soma, June 10.

119950. *VICIA DASycARPA* Ten. Fabaceae. Vetch.

No. 1085. From 15 km. east of Bergama, June 10.

119951. *LATHYRUS* sp. Fabaceae.

No. 1086. From a wheat field 40 km. northwest of Izmir, June 10.

119952. *LATHYRUS ANNUUS* Hoejer. Fabaceae. Pea.

No. 1099. From 2 km. south of Kirkagach, June 11.

119953 to 119955. *VICIA* spp. Fabaceae. Vetch.

119953. *VICIA SERRATIFOLIA INTEGRIFOLIA* Beck.

No. 1125. From 2 km. south of Kirkagach, June 11.

119954. *VICIA MONANTHOS* (L.) Desf.

No. 1197. From 30 km. west of Balikesir, June 16.

## 119939 to 120029—Continued.

119955. *VICIA LATHYROIDES* L.

No. 1307-A. From 20 km. east of Bursa.

119956. *LATHYRUS ANNUUS* Hoejer. Fabaceae. Pea.

No. 1331. From Adana, June 10. A form with yellow flowers.

119957. *VICIA HYBRIDA* L. Fabaceae. Vetch.

No. 1332. From Adana, June 10. A form with attractive white and yellow flowers.

119958. *LATHYRUS* sp. Fabaceae. Pea.

No. 1351. From Adana, June 10.

119959. *LATHYRUS* sp. Fabaceae. Pea.

No. 1427. From 37 km. north of Gaziantep, July 2.

119960. *VICIA SERIOCARPA MICROPHYLLA* Boiss. Fabaceae. Vetch.

No. 1440. From 37 km. north of Gaziantep, July 2.

119961. *VICIA PEREGRINA* L. Fabaceae. Vetch.

No. 1442. From 20 km. north of Gaziantep, July 2.

119962. *LATHYRUS* sp. Fabaceae. Pea.

No. 1446. From 37 km. north of Gaziantep, July 2.

119963. *VICIA HYBRIDA* L. Fabaceae. Vetch.

No. 1463. From 30 km. southeast of Marash, July 2.

119964. *LATHYRUS ERECTUS* Lag. Fabaceae. Pea.

No. 1473. From 37 km. north of Gaziantep, July 3.

119965. *LATHYRUS* sp. Fabaceae. Pea.

No. 1474. From 37 km. north of Gaziantep, July 3.

119966. *VICIA SERIOCARPA MICROPHYLLA* Boiss. Fabaceae. Vetch.

No. 1476. From 37 km. north of Gaziantep, July 3.

119967 to 119969. *LATHYRUS* spp. Fabaceae. Pea.

119967. *LATHYRUS* sp.

No. 1593. From 35 km. west of Diyarbekir, July 7.

119968. *LATHYRUS* sp.

No. 1594. From 50 km. west of Diyarbekir, July 7.

119969. *LATHYRUS ERECTUS* Lag.

No. 1790. From 35 km. southwest of Elaziz, July 14.

119970. *VICIA LATHYROIDES* L. Fabaceae. Vetch.

No. 1952. From Birejik, July 22.

119971. *VICIA PEREGRINA* L. Fabaceae. Vetch.

No. 1976. From Birejik, July 24.

119972 to 119974. *LATHYRUS* spp. Fabaceae. Pea.



## 119939 to 120029—Continued.

119972. *LATHYRUS GORGONI* Parl.  
No. 1978. From Birejik, July 24.
119973. *LATHYRUS* sp.  
No. 2068. From Alma Dag, 25 km. southeast of Ankara, August 1.
119974. *LATHYRUS ERECTUS* Lag.  
No. 2081. From Alma Dag, 25 km. southeast of Ankara, August 1.
119975. *VICIA SATIVA* L. Fabaceae.  
Common vetch.  
No. 2858. From Yalova Kaplijalari, September 12.
119976. *LATHYRUS* sp. Fabaceae. Pea.  
No. 3342. From the Bergama ruins, June 10.
119977. *VICIA PEREGRINA* L. Fabaceae.  
Vetch.  
No. 3393. From 3 km. west of Ankara, June 25.
119978. *LENS ESCULENTA* Moench. Fabaceae.  
Lentil.  
No. 1497. From 10 km. southeast of Gaziantep, July 4.
119979. *VICIA LATHYROIDES* L. Fabaceae.  
No. 1307. From 20 km. east of Bursa, June 19.
119980. *ONONIS* sp. Fabaceae.  
No. 1129. From Bergama, June 10.
- 119981 to 120026. *VICIA* spp. Fabaceae.  
Vetch.
119981. *VICIA DASYPARPA* Ten.  
No. 655. From 5 km. southwest of Selchuk, May 25.
119982. *VICIA VILLOSA* Roth.  
Hairy vetch.  
No. 654. From 2 km. west of Aydin, May 25.
119983. *VICIA LUTEA HIRTA* (Balb.) Loisel.  
No. 715. From an old lake bottom, 50 km. southeast of Mugla, May 28.
119984. *VICIA LUTEA HIRTA* (Balb.) Loisel.  
No. 747. From 2 km. north of Denizli, May 30.
119985. *VICIA VILLOSA* Roth.  
No. 785. From the vicinity of Isparta, June 2.
119986. *VICIA* sp.  
No. 799. From 25 km. south of Burdur, June 3.
119987. *VICIA* sp.  
No. 821. From near Mugla, June 27.
119988. *VICIA SATIVA* L. Common vetch.  
No. 1087. From 40 km. northwest of Izmir, June 10.
119989. *VICIA DASYPARPA* Ten.  
No. 1118. From 2 km. south of Kirkagach, June 11.
119990. *VICIA* sp.  
No. 1134. From ruins around Ephesus, June 12.

## 119939 to 120029—Continued.

119991. *VICIA TETRASPHERMA* (L.) Moench.  
No. 1198. From 70 km. west of Balikesir, June 16.
119992. *VICIA SERRATIFOLIA INTEGRIFOLIA* Beck.  
No. 1204. From 30 km. west of Balikesir, June 16.
119993. *VICIA HIRSUTA* (L.) S. F. Gray.  
No. 1308. From 40 km. east of Bursa, June 19.
119994. *VICIA SATIVA* L. Common vetch.  
No. 1325. From Adana, June 10. A variety with crimson flowers.
119995. *VICIA SERRATIFOLIA INTEGRIFOLIA* Beck.  
No. 1340. From Adana, June 10.
119996. *VICIA SATIVA* L. Common vetch.  
No. 1346. From Adana, June 10.
119997. *VICIA* sp.  
No. 1404. From Gaziantep, July 2.
119998. *VICIA* sp.  
No. 1422. From 37 km. north of Gaziantep, July 2.
119999. *VICIA* sp.  
No. 1457. From 30 km. southeast of Marash, July 2.
120000. *VICIA* sp.  
No. 1570. From 35 km. west of Diyarbekir, July 7.
120001. *VICIA* sp.  
No. 1578. From 35 km. west of Diyarbekir, July 7.
120002. *VICIA FABA* L. Broadbean.  
No. 1685. From the Elaziz bazar, July 13.
120003. *VICIA SERRATIFOLIA INTEGRIFOLIA* Beck.  
No. 1938. From Birejik, July 22.
120004. *VICIA SATIVA* L. Common vetch.  
No. 1977. From Birejik, July 24.
120005. *VICIA SATIVA* L. Common vetch.  
No. 1982. From Birejik, July 24.
120006. *VICIA* sp.  
No. 1997. From Ulukishla, July 25.
120007. *VICIA* sp.  
No. 2014. From 20 km. north of Nigde, July 26.
120008. *VICIA* sp.  
No. 2070. From Alma Dag, 25 km. southeast of Ankara, August 1.
120009. *VICIA* sp.  
No. 2107. From 84 km. east of Sivas, August 5.
120010. *VICIA* sp.  
No. 2109. From 84 km. east of Sivas, August 5.
120011. *VICIA* sp.  
No. 2169. From 100 km. northeast of Sivas, August 1.

## 119939 to 120029—Continued.

120012. *VICIA SERRATIFOLIA INTEGRIFOLIA* Beck.  
No. 2171. From 100 km. northeast of Sivas, August 6.
120013. *VICIA FABA* L. Broadbean.  
No. 2241. From the Erzincan bazar, August 8.
120014. *VICIA* sp.  
No. 2268. From 136 km. east of Erzincan, August 9.
120015. *VICIA* sp.  
No. 2283. From 114 km. east of Erzincan, August 9.
120016. *VICIA FABA* L. Broadbean.  
No. 2342. From the Trabzon bazar, August 11.
120017. *VICIA* sp.  
No. 2383. From 35 km. north of Gemushane on wooded mountain slopes, August 10.
120018. *VICIA* sp.  
No. 2388. From 16 km. east of Trabzon, August 12.
120019. *VICIA* sp.  
No. 2432. From 10 km. east of Ordu, August 19.
120020. *VICIA* sp.  
No. 2493. From 8 km. southwest of Shebinkarahisar, August 18.
120021. *VICIA ANGUSTIFOLIA* Grufberg.  
No. 2572. From 7 km. west of Terme, August 22.
120022. *VICIA* sp.  
No. 2585. From 20 km. west of Samsun, August 23.
120023. *VICIA SERRATIFOLIA INTEGRIFOLIA* Beck.  
No. 2585-A. From 20 km. west of Samsun, August 23.
120024. *VICIA VILLOSA* Roth. Hairy vetch.  
No. 2611. From a barley field 20 km. west of Samsun, August 23.
120025. *VICIA SERRATIFOLIA INTEGRIFOLIA* Beck.  
No. 2675. From 10 km. south of Tokat, August 26.
120026. *VICIA* sp.  
No. 3345. From Ephesus, June 12.
120027. *LENS ESCULENTA* Moench. Fabaceae. Lentil.  
No. 3421. From dry rocky soil 3 km. northeast of Ankara, June 26.
120028. *VICIA* sp. Fabaceae.  
No. 3426. From Alma Dag, 25 km. southeast of Ankara, June 28.
120029. *VICIA SATIVA* L. Fabaceae. Common vetch.  
No. 3482. From the Sivas bazar, August 5.

120030. *MYRICA* sp. Myricaceae.

From Paraguay. Plant collected by W. A. Archer, Bureau of Plant Industry. Received February 13, 1937.

No. 4920. From the Jardín Botánico, Santísima, Trinidad, January 6, 1937. Received under the specific name "candida," for which a place of publication has not been found.

## 120031 and 120032.

From the Canal Zone. Seeds presented by W. R. Lindsay, Canal Zone Experiment Gardens, Summit. Received February 8, 1937.

120031. *LECYTHIS ELLIPTICA* Kunth. Lecythidaceae.

A spreading shrub or tree up to 40 feet high, with thick elliptic leaves about 6 inches long and racemes of large reddish flowers. Native to Colombia.

120032. *PHYLLANTHUS EMBLICA* L. Euphorbiaceae. Nellii.

A dense spreading tree with linear leaves about half an inch long; the globose fruits, when green, are rich in tannin; when ripe they are cooked to make an acid sauce. Native to tropical Asia.

For previous introduction see 116531.

## 120033 to 120250.

From Turkey. Seeds collected by H. L. Westover and F. L. Wellman, Bureau of Plant Industry. Received January 7, 1937.

This material was all collected in the spring and autumn of 1936.

120033. *ARTEDIA SQUAMATA* L. Apiaceae.

No. 1347. From Adana, June 10.

120034 to 120045. *MEDICAGO* spp. Fabaceae. Medick.120034. *MEDICAGO HISPIDA* Gaertn.

No. 1133. From the mountains between Manisa and Izmir, June 11.

120035. *MEDICAGO TUBERCULATA* (Retz.) Willd.

No. 1326. From Adana, June 10.

120036 to 120042. *MEDICAGO HISPIDA* Gaertn.

120036. No. 1333. From Adana, June 10.

120037. No. 1339. From Adana, June 10.

120038. No. 1601. From 2 km. east of Siverek, July 7.

120039. No. 1669. From 16 km. east of Diyarbakir, July 10.

120040. No. 1794. From 35 km. southwest of Elaziz, July 14.

120041. No. 1904. From 44 km. north of Malatya, July 17.

120042. No. 1916. From 16 km. east of Diyarbakir, July 10.

120043 and 120044. *MEDICAGO SCUTELLATA* (L.) Mill. Snail medick.

120043. No. 761. From Denizli, June 31.

120044. No. 1323. From Adana, June 10.

120045. *MEDICAGO* sp.

No. 1355. From Adana, June 10.

## 120033 to 120250—Continued.

120046 to 120062. *MELILOTUS* spp. Fabaceae. Sweetclover.

120046 to 120048. *MELILOTUS ALBA* Desr. White sweetclover.

120046. No. 2266. From 73 km. east of Erzinjan, August 9.

120047. No. 2584. From 28 km. west of Samsun, August 23.

120048. No. 2860. From Yalova Kap-lıjalari, September 12.

120049 to 120055. *MELILOTUS INDICA* (L.) All.

120049. No. 740. From 10 km. south of Denizli, May 30.

120050. No. 773. From 2 km. north of Denizli, May 31.

120051. No. 683. From near Aydin, May 26.

120052. No. 1337. From Adana, June 10.

120053. No. 3392. From Ankara, June 25. A form with pale-blue flowers.

120054. No. 1114. From Kirkagach, June 11.

120055. No. 1088. From 40 km. north-west of Izmir, June 10.

120056 to 120059. *MELILOTUS OFFICINALIS* (L.) Lam.

120056. No. 2094. From Alma Dag, 25 km. southeast of Ankara, August 1.

120057. No. 2515. From Samsun, August 21.

120058. No. 3396. From near Ankara, June 25.

120059. No. 1853. From 23 km. west of Malatya, July 16.

120060. *MELILOTUS* sp.

No. 767. From 2 km. north of Denizli, May 31.

120061. *MELILOTUS* sp.

No. 1164. From 30 km. west of Balıkesir, June 16.

120062. *MELILOTUS* sp.

No. 1165. From 30 km. west of Balıkesir, June 16.

120063 to 120250. *TRIFOLIUM* spp. Fabaceae. Clover.

120063 to 120074. *TRIFOLIUM AGRARIUM* L.

For previous introduction see 109173.

120063. No. 1189. From 30 km. west of Balıkesir, June 16. A clover with large purplish flowers.

120064. No. 1212. From 30 km. west of Balıkesir, June 16. A small clover.

120065. No. 1328. From Adana, June 10.

120066. No. 1423. From 40 km. north of Gaziantep, July 2.

120067. No. 680. From near Çine, May 26.

120068. No. 2423. From 75 km. south of Giresun, August 17.

## 120033 to 120250—Continued.

120069. No. 1934. From Birejik, July 22.

120070. No. 2912. From 50 km. east of Çanak Kale, September 19.

120071. No. 1517. From 25 km. northwest of Urfa, July 5.

120072. No. 1494. From 10 km. south-east of Gaziantep, July 4.

120073. No. 700. From 30 km. east of Milas, May 27; a yellow-flowered clover.

120074. No. 1127. From 40 km. west of Izmir, June 10.

120075 to 120079. *TRIFOLIUM ARVENSE* L.

120075. No. 1180. "Rabbit foot" No. 2, from 30 km. west of Balıkesir, June 16.

120076. No. 1193. "Rabbit foot" No. 1, from 30 km. west of Balıkesir, June 16. This clover grows abundantly on dry plains and hills of western Turkey.

120077. No. 1597. From 2 km. east of Siverek, July 7.

120078. No. 1109. From Izmir, June 11. This clover is very abundant over dry plains in southwest Turkey.

120079. No. 2829. From Yalova Kap-lıjalari, September 11.

120080 and 120081. *TRIFOLIUM HYBRIDUM* L. Alsike clover.

120080. No. 2679. From 46 km. south of Tokat, August 26.

120081. No. 2770. A pink-flowered clover from Ulu Dag, 6,500 feet altitude, 35 km. south of Bursa, September 8.

120082 to 120099. *TRIFOLIUM PRATENSE* L. Red clover.

120082. No. 1356. From near Ankara, June 24.

120083. No. 1651. From 70 km. south of Diyarbakir, July 9.

120084. No. 1760. From 30 km. south-east of Elaziz, July 13.

120085. No. 1845. From 27 km. west of Malatya, July 16.

120086. No. 1854. From 11 km. west of Malatya, July 16.

120087. No. 1946. From Birejik, July 22.

120088. No. 2120. From 84 km. east of Sivas, August 5.

120089. No. 2205. From 100 km. southeast of Susheri, August 7.

120090. No. 2282. From 94 km. east of Erzinjan, August 9.

120091. No. 2324. From 35 km. north of Gemushane, August 10.

120092. No. 2332. A white-flowered form common in the mountains between Gemushane and Trabzon, August 10.

120093. No. 2381. A form with white flowers from 35 km. north of Gemushane, August 10.

120094. No. 2489. From 66 km. south of Giresun, August 17.

## 120033 to 120250—Continued.

120095. No. 2556. From 51 km. east of Samsun, August 22.
120096. No. 2598. From 31 km. west of Samsun, August 23.
120097. No. 2837. From Yalova Kap-lıjaları, September 11.
120098. No. 2859. From Yalova Kap-lıjaları, September 12.
120099. No. 2426. From 75 km. south of Giresun.
- 120100 to 120119. *TRIFOLIUM REPENS* L.  
White clover.
120100. No. 727. From near Denizli, May 31.
120101. No. 1357. A form with pink flowers, from Ankara, June 24.
120102. No. 1411. From 50 km. north of Gaziantep, July 2.
120103. No. 1576. A variety with small white flowers from between Siverek and Diyarbekir, July 7.
120104. No. 1640. From 70 km. south of Diyarbekir, July 9.
120105. No. 1757. From 30 km. southeast of Elaziz, July 13.
120106. No. 1856. From 23 km. west of Malatya, July 16.
120107. No. 1862. From 11 km. west of Malatya, July 16.
120108. No. 2092. A pink-flowered strain from Alma Dag, 25 km. southeast of Ankara, August 1.
120109. No. 2121. From 100 km. east of Sivas at 6,000 feet altitude, August 5.
120110. No. 2321. From 35 km. north of Gemushane, August 10.
120111. No. 2340. From meadows 70 km. south of Trabzon, August 10.
120112. No. 2341. A very large type found 60 km. south of Trabzon, August 10.
120113. No. 2428. From 86 km. south of Giresun, August 17.
120114. No. 2593. From 31 km. west of Samsun, August 23.
120115. No. 2772. A strain with large white flowers, from Ulu Dag at 6,500 feet altitude, 35 km. south of Bursa, August 8.
120116. No. 2810. From Yalova Kap-lıjaları, August 11.
120117. No. 3391. A strain with very small pink flowers from Ankara, June 25.
120118. No. 3428. From Alma Dag, 25 km. southeast of Ankara, June 28.
120119. No. 798. From Dinar, 25 km. north of Antalya, June 3. A small-flowered type, very abundant in the wet meadows in this region.
120120. *TRIFOLIUM* sp.  
No. 816. From 25 km. east of Antalya, June 4. A small-flowered white clover, found in wet places. The main stems are coarse and 3 feet long.

## 120033 to 120250—Continued.

120121. *TRIFOLIUM* sp.  
No. 626. From Ephesus, May 24.
120122. *TRIFOLIUM* sp.  
No. 629. From Ephesus, May 24.
120123. *TRIFOLIUM LAPPACEUM* L.  
No. 636. From 23 km. southwest of Izmir, May 25.
- 120124 to 120126. *TRIFOLIUM HIRTUM* All.  
120124. No. 672. From south of Chine, May 26.
120125. No. 692. From 30 km. east of Milas, May 27.
120126. No. 693. From 3 km. north of Mugla, May 27.  
Nos. 120127 to 120134. Collected between 30 and 40 km. east of Milas, May 27.
120127. *TRIFOLIUM* sp.  
No. 694.
120128. *TRIFOLIUM* sp.  
No. 697. A very small strain.
120129. *TRIFOLIUM LAPPACEUM* L.  
No. 702. From between Kulluk and Milas.
120130. *TRIFOLIUM HIRTUM* All.  
No. 704.
120131. *TRIFOLIUM* sp.  
No. 712.
120132. *TRIFOLIUM* sp.  
No. 713. From open pine wood.
120133. *TRIFOLIUM* sp.  
No. 707. A strain with small flowers.
120134. *TRIFOLIUM* sp.  
No. 710.
120135. *TRIFOLIUM* sp.  
No. 731. From the mountains 30 km. southeast of Mugla, May 28.
- 120136 to 120138. *TRIFOLIUM HIRTUM* All.  
120136. No. 746. From 10 km. south of Denizli, May 30.
120137. No. 794. From 25 km. north of Antalya, June 3.
120138. No. 807. From 46 km. north of Antalya, June 3.
120139. *TRIFOLIUM* sp.  
No. 818. Found on dry gravelly soil, 20 km. east of Antalya, June 4.
120140. *TRIFOLIUM LAPPACEUM* L.  
No. 1063. From 40 km. northwest of Izmir, June 10.  
Nos. 120141 and 120142 were from Ephesus, June 12.
120141. *TRIFOLIUM* sp.  
No. 1136.
120142. *TRIFOLIUM* sp.  
No. 1139.  
Nos. 120143 to 120147. Collected between 30 and 65 km. west of Balıkesir, June 16.

## 120033 to 120250—Continued.

120143. *TRIFOLIUM* sp.  
No. 1174.
120144. *TRIFOLIUM HIRTUM* All.  
No. 1177. A wild red clover.
120145. *TRIFOLIUM* sp.  
No. 1178.
120146. *TRIFOLIUM HIRTUM* All.  
No. 1192.
120147. *TRIFOLIUM* sp.  
No. 1211. A form with white flowers.
120148. *TRIFOLIUM* sp.  
No. 1299. From 50 km. west of Bursa, June 18.
120149. *TRIFOLIUM* sp.  
No. 1303. From 20 km. east of Bursa, June 19. A form with bright-pink flowers.
120150. *TRIFOLIUM PRATENSE* L.  
Red clover.  
No. 1304. From 20 km. west of Megol, June 19. A form with large white flowers.
120151. *TRIFOLIUM PURPUREUM* Lois.  
No. 1306. Found abundantly between Izmir, Bergama, and Soma, June 10.  
Nos. 120152 to 120155 were from Adana, June 10.
120152. *TRIFOLIUM* sp.  
No. 1322. A white clover.
120153. *TRIFOLIUM* sp.  
No. 1338.
120154. *TRIFOLIUM* sp.  
No. 1343.
120155. *TRIFOLIUM* sp.  
No. 1349.  
Nos. 120156 to 120173. Collected between 30 and 40 km. north of Gaziantep, July 2.
120156. *TRIFOLIUM HIRTUM* All.  
No. 1409.
120157. *TRIFOLIUM* sp.  
No. 1410.
120158. *TRIFOLIUM PURPUREUM* Lois.  
No. 1412.
120159. *TRIFOLIUM* sp.  
No. 1416. A Persian clover found in a valley.
120160. *TRIFOLIUM* sp.  
No. 1417. Persian clover.
120161. *TRIFOLIUM* sp.  
No. 1419.
120162. *TRIFOLIUM* sp.  
No. 1421.
120163. *TRIFOLIUM* sp.  
No. 1424.

## 120033 to 120250—Continued.

120164. *TRIFOLIUM* sp.  
No. 1428.
120165. *TRIFOLIUM* sp.  
No. 1429.
120166. *TRIFOLIUM* sp.  
No. 1432.
120167. *TRIFOLIUM* sp.  
No. 1433.
120168. *TRIFOLIUM* sp.  
No. 1436.
120169. *TRIFOLIUM* sp.  
No. 1435.
120170. *TRIFOLIUM* sp.  
No. 1437.
120171. *TRIFOLIUM* sp.  
No. 1438.
120172. *TRIFOLIUM* sp.  
No. 1448. A form with purplish flowers.
120173. *TRIFOLIUM* sp.  
No. 1449.  
Nos. 120174 to 120177. Collected 30 km. southeast of Marash, July 2.
120174. *TRIFOLIUM* sp.  
No. 1455.
120175. *TRIFOLIUM* sp.  
No. 1458.
120176. *TRIFOLIUM* sp.  
No. 1459.
120177. *TRIFOLIUM PURPUREUM* Loisel.  
No. 1462.  
Nos. 120178 to 120180. Collected 37 km. north of Gaziantep, July 3.
120178. *TRIFOLIUM* sp.  
No. 1477.
120179. *TRIFOLIUM PURPUREUM* Loisel.  
No. 1481.
120180. *TRIFOLIUM* sp.  
No. 1483.
120181. *TRIFOLIUM* sp.  
No. 1515. From 5 km. east of Birejik, July 5.
120182. *TRIFOLIUM* sp.  
No. 1598. From 5 km. east of Hilvan, July 7.
120183. *TRIFOLIUM* sp.  
No. 1602. From 30 km. west of Diyarbekir, July 7.
120184. *TRIFOLIUM* sp.  
No. 1607. From 3 km. northeast of Siverek, July 7.
120185. *TRIFOLIUM* sp.  
No. 1608. From 18 km. northeast of Siverek, July 7. Found growing abundantly on basalt formation.  
Nos. 120186 to 120190. Collected around Diyarbekir, from July 7 to 9.

## 120033 to 120250—Continued.

120186. *TRIFOLIUM PURPUREUM* Loisel.  
No. 1611. From 30 km. west of the town.
120187. *TRIFOLIUM PURPUREUM* Loisel.  
No. 1642. From 26 km. south of the town.
120188. *TRIFOLIUM* sp.  
No. 1643. From 25 km. south of the town.
120189. *TRIFOLIUM LAPPACEUM* L.  
No. 1650. From 25 km. south of the town.
120190. *TRIFOLIUM* sp.  
No. 1672. From 52 km. east of the town.
120191. *TRIFOLIUM* sp.  
No. 1719. From 25 km. southeast of Elaziz Mountains, July 13.
120192. *TRIFOLIUM HIRTUM* All.  
No. 1754. From 40 km. southeast of Elaziz, July 13.
- Nos. 120193 and 120194. Collected 44 km. north of Malatya, July 17.
120193. *TRIFOLIUM* sp.  
No. 1878.
120194. *TRIFOLIUM* sp.  
No. 1899. An annual clover, found on dry rocky soil.
120195. *TRIFOLIUM PRATENSE* L.  
Red clover.  
No. 1923. From Birejik, July 21.
120196. *TRIFOLIUM* sp.  
No. 1984. From Birejik, July 24.
- Nos. 120197 to 120204. Collected 25 km. southeast of Ankara, August 1.
120197. *TRIFOLIUM* sp.  
No. 2054.
120198. *TRIFOLIUM HIRTUM* All.  
No. 2056.
120199. *TRIFOLIUM* sp.  
No. 2063.
120200. *TRIFOLIUM* sp.  
No. 2069.
120201. *TRIFOLIUM* sp.  
No. 2082.
120202. *TRIFOLIUM* sp.  
No. 2084.
120203. *TRIFOLIUM* sp.  
No. 2090.
120204. *TRIFOLIUM* sp.  
No. 2091.
- Nos. 120205 and 120206. Collected 84 km. east of Sivas, August 5.
120205. *TRIFOLIUM* sp.  
No. 2105.
120206. *TRIFOLIUM* sp.  
No. 2119.

## 120033 to 120250—Continued.

- Nos. 120207 and 120208. Collected between 50 and 95 km. east of Erzinjan, August 9.
120207. *TRIFOLIUM* sp.  
No. 2264.
120208. *TRIFOLIUM* sp.  
No. 2269.
- Nos. 120209 to 120212. Collected 35 to 40 km. north of Gemushane, August 10.
120209. *TRIFOLIUM* sp.  
No. 2295.
120210. *TRIFOLIUM* sp.  
No. 2297.
120211. *TRIFOLIUM REPENS* L.  
No. 2305.
120212. *TRIFOLIUM* sp.  
No. 2315.
120213. *TRIFOLIUM ANGUSTIFOLIUM* L.  
No. 2420. From the hills near Trabzon, August 14.
- Nos. 120214 and 120215. Collected between 86 and 106 km. south of Giresun, August 17.
120214. *TRIFOLIUM LAPPACEUM* L.  
No. 2421.
120215. *TRIFOLIUM* sp.  
No. 2424.
- Nos. 120216 and 120217. Collected between 20 and 40 km. east of Samsun, August 22.
120216. *TRIFOLIUM* sp.  
No. 2562.
120217. *TRIFOLIUM PRATENSE* L.  
No. 2564.
120218. *TRIFOLIUM* sp.  
No. 2577. From 7 km. west of Terme, August 22.
120219. *TRIFOLIUM* sp.  
No. 2600. From 31 km. west of Samsun, August 23.
- Nos. 120220 and 120221. Collected between 10 and 40 km. south of Tokat, August 26.
120220. *TRIFOLIUM* sp.  
No. 2672.
120221. *TRIFOLIUM* sp.  
No. 2674.
- Nos. 120222 and 120223. From Yalova Kaplijalari, September 9 and 11.
120222. *TRIFOLIUM* sp.  
No. 2732.
120223. *TRIFOLIUM* sp.  
No. 2808.
120224. *TRIFOLIUM* sp.  
No. 2259. From Erzinjan, August 9.
120225. *TRIFOLIUM* sp.  
No. 2260. From Erzerum, August 9.

## 120033 to 120250—Continued.

120226. *TRIFOLIUM LAPPACEUM* L.

No. 2599. From 5 km. west of Samsun, August 23.

120227. *TRIFOLIUM PRATENSE* L.

No. 2638. From 50 km. southeast of Amasya, August 25.

120228. *TRIFOLIUM* sp.

No. 2688. From 46 km. south of Tokat, August 26.

120229. *TRIFOLIUM* sp.

No. 2750. From Ulu Dag, September 7.

Nos. 120230 to 120238. From Yalova Kaplijalari, September 11 and 12.

120230. *TRIFOLIUM* sp.

No. 2814.

120231. *TRIFOLIUM HIRTUM* All.

No. 2818.

120232. *TRIFOLIUM HIRTUM* All.

No. 2824.

120233. *TRIFOLIUM* sp.

No. 2828.

120234. *TRIFOLIUM PURPUREUM* Loisel.

No. 2836.

120235. *TRIFOLIUM LAPPACEUM* L.

No. 2839.

120236. *TRIFOLIUM* sp.

No. 2853.

120237. *TRIFOLIUM* sp.

No. 2816.

120238. *TRIFOLIUM LAPPACEUM* L.

No. 2856.

120239. *TRIFOLIUM PURPUREUM* Loisel.

No. 2901. From the ruins of the old city of Troy, August 18.

120240. *TRIFOLIUM PURPUREUM* Loisel.

No. 3303. From 25 km. south of Gaziantep, June 1.

120241. *TRIFOLIUM ANGUSTIFOLIUM* L.

No. 3328. From the Agricultural Institute, Ankara, June 20.

120242. *TRIFOLIUM* sp.

No. 3332. From 10 km. south of Denizli, May 30.

120243. *TRIFOLIUM* sp.

No. 3347. From near Izmir, June 14.

120244. *TRIFOLIUM* sp.

No. 3349. From 30 km. west of Balıkesir, June 16.

120245. *TRIFOLIUM* sp.

No. 3361. A strain with dark-red flowers; from the slopes of Mount Olympus, Ulu Dag, 10 km. south of Bursa, June 19.

Nos. 120246 to 120248. Collected on the dry rocky slopes of Alma Dag, from 3 to 25 km. southeast of Ankara, June 26 to 28.

## 120033 to 120250—Continued.

120246. *TRIFOLIUM* sp.

No. 3427.

120247. *TRIFOLIUM HIRTUM* All.

No. 3410.

120248. *TRIFOLIUM* sp.

No. 3429.

120249. *TRIFOLIUM* sp.

No. 1600. From 35 km. west of Diyarbakir, July 7.

120250. *TRIFOLIUM* sp.

No. 2334. From mountain meadows 70 km. south of Trabzon, August 10.

120251. *BETA VULGARIS* L. *Chenopodiaceae*.

From Italy. Seeds presented by the R. Stazione Sperimentale di Bieticoltura, Rovigo. Received February 1, 1937.

*Cesena*, a sugar beet.

120252. *ALLIUM AMPELOPERASUM* L. *Liliaceae*.

From Algeria. Bulbs presented by Dr. René Maire, Directeur Service Botanique, Université d'Alger, Algiers. Received February 11, 1937.

A wild onion, about 2 feet high, with purple flowers. Native to southern Europe. Received under the varietal name "combazianum," for which a place of publication has not been found.

120253 to 120278. *LYCOPERSICON ESCULENTUM* Mill. *Solanaceae*. *Tomato*.

From Turkey. Seeds collected by H. L. Westover and F. L. Wellman, Bureau of Plant Industry. Received January 14, 1937.

This material was collected in the spring and summer of 1936.

120253. No. 526. From the Mugla bazar, May 28.

120254. No. 588. From the Izmir bazar, May 23.

120255. No. 1234. From the Bursa bazar, June 16.

120256. No. 1543. From the Urfa bazar, July 6.

120257. No. 1689. From the Elaziz bazar, July 13.

120258. No. 1836. From the Malatya bazar, July 16.

120259. No. 2027. From the Nigde bazar, July 27.

120260. No. 2133. From the Sivas bazar, August 5.

120261. No. 2221. From the Erzinjan bazar, August 8.

120262. No. 2255. From the Erzinjan bazar, August 8.

120263. No. 2374. From the Trabzon bazar, August 11.

120264. No. 2532. From the Samsun bazar, August 21.

120265. No. 2595. From 36 km. west of Samsun, August 23.

A very small wild tomato.

## 120253 to 120278—Continued.

120266. No. 2718. From the Amasya bazar, August 25.

120267. No. 2740. From 6 km. west of Yalova Kaplıcaları, September 6.

120268. No. 2743. From 1 km. south of Gemlik, September 6.

Small fruits found growing in an uncultivated olive orchard.

120269. No. 2888. From the Chanak Kale bazar, September 18.

120270. No. 2906. From 75 km. southwest of Chanak Kale, September 18. A red-plum type, sweet with tough skin, from the ruins of the old city of Troy.

120271. No. 3003. From the Kutahya bazar, September 26.

120272. No. 3053. From the Amasya bazar, October 6.

120273. No. 3083. From the Yozgat bazar, October 9.

120274. No. 3133. From the Inebolu bazar, October 13.

120275. No. 3172. From the Kastamonu bazar, October 14.

120276. No. 3211. From the Chankiri bazar, October 15.

120277. No. 3254. From the Adapazari bazar, October 20.

120278. No. 3283. From the Edirne bazar, October 22.

## 120279 to 120281.

From British Honduras. Seeds purchased from William A. Schipp, botanical collector, Corozal. Received February 8, 1937.

120279. *ACANTHORHIZA ACULEATA* (Liebm.) Wendl. Phoenicaceae. Rootspine palm.

120280. *CHAMAEDOREA* sp. Phoenicaceae. Palm.

120281. *THRINAX* sp. Phoenicaceae. Palm.

A magnificent fan-leaved palm, found only in the northern part of the colony, in calcareous soils.

## 120282 to 120490.

From Turkey. Seeds collected by H. L. Westover and F. L. Wellman, Bureau of Plant Industry. Received January 13, 1937.

This material was all collected in 1936.

120282. *BETA VULGARIS* L. Chenopodiaceae. Common beet.

No. 2220. From the Erzinjan bazar, August 8.

120283. *CAPSICUM ANNUUM* L. Solanaceae. Common redpepper.

No. 3153. From the Kastamonu bazar, October 14.

120284 to 120332. *CITRULLUS VULGARIS* Schrad. Cucurbitaceae. Watermelon.

120284. No. 556. From the Isparta bazar, June 2.

120285. No. 579. From the Antalya bazar, June 4.

Nos. 120286 and 120287. From the Izmir bazar, May 23.

## 120282 to 120490—Continued.

120286. No. 607. A sweet melon of good quality.

120287. No. 611. A melon with large black seeds.

120288. No. 1153. From the Balıkesir bazar, June 16.

120289. No. 1160. From the Balıkesir bazar, June 17.

120290. No. 1250. From the Bursa bazar, June 16.

120291. No. 1370. From the Marash bazar, July 2.

Nos. 120292 to 120294. From the Urfa bazar, July 6.

120292. No. 1541. 120294. No. 1554.

120293. No. 1550.

Nos. 120295 to 120297. From the Diyarbekir bazar, July 8 and 10.

120295. No. 1612. Fruit small, round; skin dark green with green markings; flesh red, of fair quality; early ripening; from Tarsus.

120296. No. 1654. Fruit small, round, early; flesh red; seeds black; said to be grown in the Mersin district.

120297. No. 1668. A famous variety; in 1935, one fruit is reported to have weighed about 160 pounds.

120298. No. 1822. From the Malatya bazar, July 16.

120299. No. 1903. From the Malatya bazar, July 17, but grown on dry hills along the Euphrates River. Fruit round, a foot in diameter, early; flesh red and of good quality; skin tough, grass green with darker markings.

120300. No. 2033. From the Nigde bazar, July 27.

120301. No. 2128. From the Sivas bazar, August 5.

Nos. 120302 and 120303. From the Erzinjan bazar, August 8.

120302. No. 2226.

120303. No. 2257. Fruit 6 inches in diameter; skin very thin, dark green; flesh light salmon color, fair to medium sweet.

120304. No. 2370. From the Trabzon bazar, August 11.

120305. No. 2404. From 55 km. east of Trabzon, August 13. Fruit medium small; skin dark green; rind thin; flesh pink with salmon streaks, of good quality.

120306. No. 2435. From Adana, July 21.

120307. No. 2520. From the Samsun bazar, August 21.

120308. No. 2787. Originally from Bursa, September 8. Flesh creamy white, of fair quality; seeds few, large and white.

120309. No. 2504. From Ordu, August 18. Fruit long and slender, like a cucumber; skin green, netted; flesh red, of fair quality.

120310. No. 2786. Originally from Bursa, September 8. Fruit with pink flesh and small light-colored seeds.



## 120282 to 120490—Continued.

120311. No. 2878. From the Yalova bazar, September 12. Fruit small, 4 inches in diameter; flesh red, of good quality.

Nos. 120312 to 120318. From the Turgutlu bazar, September 23.

120312. No. 2958. Fruit small, round, of fair quality, with cloudy yellowish splotches on a green background.

120313. No. 2959. Fruit small, round, dark green; rind tough; quality fair.

120314. No. 2960. Fruit elliptical with reticulated green markings; quality poor.

120315. No. 2961. Fruit elliptical with green reticulations, medium sized; quality fair; rind very tough.

120316. No. 2962. Fruit long; flesh of poor quality; skin dark green, tough, marked with lighter green reticulations.

120317. No. 2963. Fruit dark green, elongated; flesh yellow, of poor quality.

120318. No. 2964. Fruit elongated, mottled green; quality, very poor.

120319. No. 3015. From the Kutahya bazar, September 28.

120320. No. 3057. From the Amasya bazar, October 6.

120321. No. 3087. From the Yozgat bazar, October 9.

Nos. 120322 and 120323. From the Inebolu bazar, October 13.

120322. No. 3137. Istanbul variety.

120323. No. 3138.

Nos. 120324 and 120325. From the Kastamonu bazar, October 14.

120324. No. 3156. 120325. No. 3171.

120326. No. 3189. From the Chankiri bazar, October 15.

120327. No. 3382. From the Istanbul bazar, June 22. A very small and early fruit with slightly pink flesh.

Nos. 120328 to 120332. From the Balikesir bazar, June 16.

120328. No. 1152. 120331. No. 1152-C.

120329. No. 1152-A. 120332. No. 1152-D.

120330. No. 1152-B.

120333 to 120396. CUCUMIS MELO L. Cucurbitaceae. Muskmelon.

120333. No. 2256. From Erzinjan, August 8. Fruit small, about 5 inches in diameter; skin smooth, yellow with slight markings; flesh creamy to white, of good quality and very fragrant.

120334. No. 2631. From a village between Samsun and Merzifon, August 23. Fruit long; skin cream colored with slight netting; flesh solid, medium sweet, of good flavor.

120335. No. 2632. From a village between Samsun and Merzifon, August 24. Fruit oval; skin yellow; flesh sweet and of good quality.

Nos. 120336 and 120337. From the Amasya bazar, August 25.

## 120282 to 120490—Continued.

120336. No. 2716. A fruit with wrinkled green skin.

120337. No. 2717. Fruit round; skin yellow, netted; quality good.

120338. No. 2721. From the Kasperi bazar, August 28. Skin wrinkled, green with yellow mottling; flesh greenish with salmon color near the seeds, sweet, excellent flavor.

120339. No. 2877. *Kish Kahoon*. From the Yalova bazar, September 12. A winter melon, hung from ceiling until after other fresh vegetables are gone. Skin yellow, with green dashes and dots. At this season the flavor is insipid.

120340. No. 2879. From Istanbul, September 15. Casaba type. Skin dark green; flesh orange yellow, thick and of good quality.

Nos. 120341 to 120343. From the Chanak Kale bazar, September 19.

120341. No. 2913. Fruit Casaba type, elliptical; skin wrinkled and spotted, quality fair.

120342. No. 2914. Casaba type.

120343. No. 2915. Fruit large; skin smooth with distinct sections; flesh not very sweet but keeps well.

Nos. 120344 and 120345. From the Balikesir bazar, September 20.

120344. No. 2916. Fruit Casaba type; skin white, wrinkled; flesh deep, sweet, of good texture, very good quality; rind thick enough for shipment.

120345. No. 2917. Casaba type, but evidently a cross of some sort. Skin smooth, brown with stippled markings; flesh not sweet.

Nos. 120346 and 120347. From Soke, September 21. Casaba type.

120346. No. 2918. Fruit medium size; skin green, wrinkled; quality good.

120347. No. 2919. Fruit large; skin green, wrinkled, quality good.

Nos. 120348 to 120355. From the Turgutlu (Casaba) bazar, September 23.

120348. No. 2950. Casaba type. Fruit medium size; skin wrinkled, green.

120349. No. 2951. Casaba type. Fruit medium size; skin wrinkled, green; quality good.

120350. No. 2952. Casaba type. Fruit large; skin smooth with prominent sectors, green and speckled; quality fair.

120351. No. 2953. Casaba type. Fruit large; skin yellow, warty with green blotches; quality good.

120352. No. 2954. Casaba type. Fruit large; skin green, semi-smooth; quality medium.

120353. No. 2955. Casaba type. Fruit large; skin green, semi-smooth; quality good.

120354. No. 2956. Casaba type. Fruit medium size; skin smooth, light green with handsome dark green mottling; quality good.

## 120282 to 120490—Continued.

120355. No. 2957. Casaba type. Fruit large, skin yellow, wrinkled; quality poor.
120356. No. 2965. Casaba type. From the Izmir (Smyrna) bazar, September 23. Fruit large; skin green, wrinkled; quality good.
120357. No. 2976. Casaba type. From Marusa, September 24. Skin green, wrinkled; quality good.
120358. No. 2983. Casab type. From Kirkagach, September 26. Fruit large; skin yellow, wrinkled, with handsome green spotting; flesh of very good quality, flavor, and texture.
- Nos. 120359 and 120360. From the Eskishehir bazar, September 29.
120359. No. 3023. Grown in the Sakarya Valley. Fruit elliptical, 9 by 5 inches; skin smooth, shiny, yellow-brown, tough; flesh greenish, not sweet.
120360. No. 3024. Fruit pumpkin-shaped; skin smooth, yellow with a few green stripes, medium tough; flesh green, slightly sweet, of poor quality.
120361. No. 3076. From the Turhal bazar, October 7. Fruit elongated, netted; flesh green, quality fair.
- Nos. 120362 to 120364. From the Ankara market, September 2.
120362. No. 3459. Casaba type. A round melon.
120363. No. 3460. Casaba type. An elongated melon of excellent quality.
120364. No. 3461. Casaba type. A large round melon of excellent quality.
120365. No. 548. From the Isparta bazar, June 2.
- Nos. 120366 and 120367. From the Antalya bazar, June 3.
120366. No. 574. 120367. No. 575.
120368. No. 604. From the Izmir bazar, May 23.
120369. No. 1146. From the Balikesir bazar, June 16. A Casaba type of melon which had been kept all winter.
120370. No. 1152-E. From Balikesir.
- Nos. 120371 and 120372. From the Bursa bazar, June 18.
120371. No. 1216. 120372. No. 1220.
120373. No. 1395. From the Marash bazar, July 2.
120374. No. 1535. From the Urfa bazar, July 6.
- Nos. 120375 and 120376. From the Elaziz bazar, July 18.
120375. No. 1693. *Diyazbekir* melon.
120376. No. 1703. A very sweet melon.
120377. No. 1824. From the Malatya bazar, July 16.
120378. No. 2057. From the Nigde bazar, July 27.
120379. No. 2138. From the Sivas bazar, August 5.
- Nos. 120380 to 120382. From the Erzinjan bazar, August 8.

## 120282 to 120490—Continued.

120380. No. 2213. 120382. No. 2217.
120381. No. 2216.
120383. No. 2377. From the Trabzon bazar, August 11.
120384. No. 2403. From 45 km. east of Trabzon, August 12. Fruit long, oval; skin yellow, slightly netted; flesh deep greenish, pink near the seeds; quality fairly good, becoming mealy with age.
- Nos. 120385 to 120387. From the Samsun bazar, August 21.
120385. No. 2523.
120386. No. 2551. Fruit about 4 inches in diameter; skin smooth, tan with brown stripes. A very attractive and fragrant fruit.
120387. No. 2552.
120388. No. 3004. From the Kutahya bazar, September 28.
120389. No. 3054. From the Amasya bazar, October 6.
120390. No. 3085. From the Yozgat bazar, October 9.
120391. No. 3048. From the Amasya bazar, October 6.
120392. No. 3136. From the Inebolu bazar, October 13.
120393. No. 3159. From the Kastamonu bazar, October 14.
120394. No. 3191. From the Chankiri bazar, October 15.
- Nos. 120395 and 120396. From the Adapazari bazar, October 20.
120395. No. 3272. Fruit pumpkin-shaped; skin canary yellow.
120396. No. 3273. Fruit pumpkin-shaped; skin orange yellow with green spots.
- 120397 to 120435. *CUCUMIS SATIVUS* L. Cucurbitaceae. Cucumber.
120397. No. 535. From the Mugla bazar, May 28.
120398. No. 557. From the Isparta bazar, June 2.
- Nos. 120399 and 120400. From the Antalya bazar, June 4.
120399. No. 586. 120400. No. 593.
120401. No. 615. From the Izmir bazar, May 23.
120402. No. 1394. From the Marash bazar, July 2. A small cucumber.
120403. No. 537. From the Mugla bazar, May 28.
120404. No. 562. From Isparta, June 2.
- Nos. 120405 to 120407. From the Izmir bazar, May 23.
120405. No. 575. 120407. No. 621.
120406. No. 603.
120408. No. 1248. From the Bursa bazar, June 18.
- Nos. 120409 and 120410. From the Marash bazar, July 2.
120409. No. 1371.

## 120282 to 120490—Continued.

120410. No. 1385. A striped, ridged cucumber.

Nos. 120411 and 120412. From the Urfa bazar, July 6.

120411. No. 1544.

120412. No. 1548. Fruit long, slender, striped.

Nos. 120413 to 120415. From the Diyarbekir bazar, July 10.

120413. No. 1653.

120414. No. 1658. Fruit long, whitish.

120415. No. 1661.

120416. No. 1699. From the Elaziz bazar, July 12.

120417. No. 1821. From the Malatya bazar, July 16.

Nos. 120418 and 120419. From the Nigde bazar, July 27.

120418. No. 2040. 120419. No. 2048.

120420. No. 2235. From the Erzinjan bazar, August 8.

120421. No. 2137. From the Sivas bazar, August 5.

120422. No. 2240. From the Erzinjan bazar, August 8.

120423. No. 2541. From the Samsun bazar, August 21.

Nos. 120424 and 120425. From the Trabzon bazar, August 11.

120424. No. 2346. A climbing type.

120425. No. 2372.

120426. No. 2890. From the Çanak Kale bazar, September 18.

120427. No. 2998. From the Kutahya bazar, September 26.

120428. No. 3043. From the Amasya bazar, October 6.

120429. No. 3086. From the Yozgat bazar, October 9.

120430. No. 3131. From the Inebolu bazar, October 13.

Nos. 120431 and 120432. From the Kastamonu bazar, October 14.

120431. No. 3169. 120432. No. 3182.

120433. No. 3204. From the Çankiri bazar, October 15.

Nos. 120434 and 120435. From the Adapazari bazar, October 20.

120434. No. 3234. A large cucumber.

120435. No. 3256. A small cucumber.

120436 to 120445. CUCURBITA MAXIMA Duchesne. Cucurbitaceae. Squash.

120436. No. 1230. From the Bursa bazar, June 18.

120437. No. 1542. From the Urfa bazar, July 6. A large squash.

120438. No. 2345. Chestnut squash. From the Trabzon bazar, August 11.

120439. No. 3205. From the Çankiri bazar, October 15.

120440. No. 3249. From the Adapazari bazar, October 20.

## 120282 to 120490—Continued.

120441. No. 3298. From the Edirne bazar, October 22.

120442. No. 570. From the Izmir bazar, May 23.

120443. No. 580. From the Antalya bazar, June 4.

120444. No. 2705. From the Burasga bazar, August 25.

120445. No. 3180. From the Kasta-  
monu bazar, October 14.

120446 to 120453. CUCURBITA MOSCHATA Duchesne. Cucurbitaceae. Cushman.

Nos. 120446 and 120447. From the Mugla bazar, May 28.

120446. No. 533. 120447. No. 542.

120448. No. 610. From the Izmir bazar, May 23.

120449. No. 1214. From the Bursa bazar, June 18.

120450. No. 2251. From the Erzinjan bazar, August 8.

120451. No. 2348. A large squash from the Trabzon bazar, August 11.

120452. No. 3143. From the Inebolu bazar, October 13. A very small fruit whose flesh smells like pumpkins.

120453. No. 3250. From the Adapazari bazar, October 20.

120454 to 120485. CUCURBITA PEPO L. Cucurbitaceae. Pumpkin.

120454. No. 539. From the Mugla bazar, May 28.

120455. No. 567. From the Isparta bazar, June 2. A small pumpkin.

Nos. 120456 and 120457. From the Antalya bazar, June 4.

120456. No. 581. 120457. No. 584.

120458. No. 1151. From the Balıkesir bazar, June 16. A small winter pumpkin.

Nos. 120459 and 120460. From the Bursa bazar, June 18.

120459. No. 1215. 120460. No. 1218.

Nos. 120461 and 120462. From the Marash bazar, July 2.

120461. No. 1377. 120462. No. 1380.

Nos. 120463 and 120464. From the Urfa bazar, July 6.

120463. No. 1533. 120464. No. 1537.

Nos. 120465 and 120466. From the Diyarbekir bazar, July 10.

120465. No. 1655. 120466. No. 1663.

120467. No. 1700. From the Elaziz bazar, July 14.

120468. No. 1827. From the Malatya bazar, July 16. A small pumpkin.

120469. No. 2046. From the Nigde bazar, July 27.

120470. No. 2145. From the Sivas bazar, August 5.

Nos. 120471 and 120472. From the Erzinjan bazar, August 8.

120471. No. 2227. 120472. No. 2237.

120473. No. 2361. From the Trabzon bazar, August 11.

## 120282 to 120490—Continued.

120474. No. 2900. From the Chanak Kale bazar, August 18.

Nos. 120475 and 120476. From the Kutahya bazar, August 28.

120475. No. 2995. A white pumpkin.

120476. No. 3007. A black pumpkin.

120477. No. 3052. From the Amasya bazar, October 6.

120478. No. 3129. From the Inebolu bazar, October 12.

Nos. 120479 to 120481. From the Kastamonu bazar, October 14.

120479. No. 3181. 120481. No. 3177.

120480. No. 3154.

120482. No. 3196. From the Chankiri bazar, October 15.

120483. No. 3262. From the Adapazari bazar, October 20. A pumpkin used for stuffing.

120484. No. 3292. From the Edirne bazar, October 22.

120485. No. 1709. From the Elaziz bazar, July 13.

120486. *CUCURBITA* sp. Cucurbitaceae.

No. 1365. From the Marash bazar, July 2.

120487 and 120488. *LAGENARIA LEUCANTHA* (Duchesne) Rusby. Cucurbitaceae. Calabash gourd.

120487. No. 2052. From the Nigde bazar, July 27.

120488. No. 3263. From the Adapazari bazar, October 20.

120489 and 120490. *LUFFA ACUTANGULA* (L.) Roxb. Cucurbitaceae. Singkwa towelgourd.

120489. No. 1238. From the Bursa bazar, June 18.

120490. No. 1367. From the Marash bazar, July 2. Dishrag gourd.

120491 to 120495. *VITIS* spp. Vitaceae. Grape.

From France. Vines purchased from the Richter Nurseries, Montpellier. Received February 12, 1937.

120491. *Cabernet Franc* on *Riparia* × *Rupestris* No. 3309.

120492. *Chasselas Musque* on *Riparia* × *Rupestris* No. 3309.

120493. *Muscat Blanc de Frontignan* on *Riparia* × *Rupestris* No. 3309.

120494. *Pinot Blanc Chardonnay* on *Riparia* × *Rupestris* No. 3309.

120495. *Pinot Noir* on *Riparia* × *Rupestris* No. 3309.

## 120496 to 120521.

From Turkey. Seeds collected by H. L. Westover and F. L. Wellman, Bureau of Plant Industry. Received January 12, 1937.

120496 to 120499. *CANNABIS SATIVA* L. Hemp.

120496. No. 3241. From the Adapazari bazar, October 20.

120497. No. 3179. From the Kastamonu bazar, October 14.

## 120496 to 120521—Continued.

120498. No. 1391. From the Marash bazar, July 2.

120499. No. 2136. From the Sivas bazar, August 4.

120500 and 120501. *LINUM USITATISSIMUM* L. Linaceae. Flax.

120500. No. 564. From the Isparta bazar, June 2.

120501. No. 606. From the Izmir bazar, May 23.

120502. *URTICA* sp. Urticaceae.

No. 622. From the Izmir bazar, May 23.

120503 to 120511. *LINUM USITATISSIMUM* L. Linaceae. Flax.

120503. No. 711. From a field between Milas and Kulluk, May 27.

120504. No. 1243. From the Bursa bazar, June 18.

120505. No. 1279. From a field near Karacabey, June 18.

120506. No. 2410. From 32 km. west of Rize, August 13.

120507. No. 2581. From 20 km. west of Samsun, August 23.

120508. No. 3008. From Kutahya bazar, August 28.

120509. No. 3060. From the Amasya bazar, October 6.

120510. No. 3225. From the Adapazari bazar, October 10.

120511. No. 3279. From the Edirne bazar, October 22.

120512 to 120521. *NICOTIANA TABACUM* L. Solanaceae. Common tobacco.

120512. No. 1217. From the Bursa bazar, June 18.

120513. No. 2464. From a field near Trabzon, August 15.

120514. No. 2553. From 4 km. east of Samsun, August 22.

120515. No. 2613. From a field near Basra, August 23.

120516. No. 2663. From Tokat, August 26.

120517. No. 2734. From 5 km. west of Yalova, September 6.

Nos. 120518 and 120519. From Biga, September 19.

120518. No. 2908. A tall tobacco.

120519. No. 2909. A short type of tobacco.

120520. No. 2926. From near Chesme, Smyrna region, September 12.

120521. No. 2981. From Ephesus, September 25.

120522 to 120524. *CITRUS* spp. Rutaceae.

From Egypt. Seeds presented by Thomas W. Brown, Horticultural Section of the Ministry of Agriculture, Giza. Received February 11, 1937.

120522. *CITRUS AURANTIFOLIA* (Christm.) Swingle. Lime.

*Beledy*, a Persian lime.

## 120522 to 120524—Continued.

120523. *CITRUS NOBILIS DELICIOSA* (Ten.) Swingle. Mandarin orange.

*Beledy mandarine.*

120524. *CITRUS SINENSIS* (L.) Osbeck. Orange.

*Sokkary*, a sugar orange.

120525. *KETELEERIA DAVIDIANA* (Bert- rand) Beissner. Pinaceae.

From France. Seeds presented by A. Gerard, La Fosse, par Montroire-sur-Loir, Loir-et-Cher. Received February 11, 1937.

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 111742.

120526. *CAMPOMANESIA FENZLIANA* (Berg.) Glaziou. Myrtaceae. Guabirola.

From Brazil. Seeds presented by Graham Bell Fairchild, Anapolis, Goyaz. Received February 5, 1937.

A low bush 1 to 2 feet high. The fruit is very good, juicy, and very sweet. The skin is tough, leathery, and bitter, but this is no drawback, as the seeds and pulp pop out when squeezed. It grows in the open scrubby plains of central Brazil and is called *guivira* in Matto Grosso.

For previous introduction see 44784.

120527 to 120529. *GLADIOLUS* spp. Iridaceae.

From the Union of South Africa. Seeds presented by A. Cheverton Buller, Dwaarsriviers Hoek, District of Stellenbosch, Cape Province. Received February 9, 1937.

120527. *GLADIOLUS CALLISTUS* Bolus f.

A tall plant, 30 to 40 inches high, with 4 to 7 narrow, sword-shaped leaves 1 to 2 feet long, and 2 stem leaves. The flowers, white suffused with lavender pink and 9 to 12 in number, are produced in 1 to 3 branches. Native to South Africa.

120528. *GLADIOLUS GRACILIS* Jacq.

A plant with about 3 rigid, subterete leaves a foot long and very slender stems up to 2 feet high, bearing 2 to 6 pale-lilac scentless flowers in a lax secund spike. Native to South Africa.

For previous introduction see 113570.

120529. *GLADIOLUS VILLOSUS* Ker.

The simple stems of this gladiolus are up to 2 feet long, and the sheaths are very hairy, the lowest without any leaf blade. The upper sheaths enclose linear, thick, rigid leaves up to 12 inches long. The bright-red or lilac flowers are in a lax secund spike. Native to South Africa.

For previous introduction see 105297.

## 120530 to 120640.

From Turkey. Seeds collected by H. L. Westover and F. L. Wellman, Bureau of Plant Industry. Received February 9, 1937.

120530 and 120531. *DOLICHOS LABLAB* L. Fabaceae. Hyacinth-bean.

120530. No. 3031. From the Amasya bazar, October 9.

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## 120530 to 120640—Continued.

120531. No. 598. From the Izmir bazar, May 23.

120532 to 120537. *LENS ESCULENTA* Moench. Fabaceae. Lentil.

120532. No. 566. From the Isparta bazar, June 2.

120533. No. 1615. From the Diyarbekir bazar, July 8.

120534. No. 1717. From the Elaziz bazar, July 13.

120535. No. 1839. From the Malatya bazar, July 16.

120536. No. 2678. From 10 km. south of Tokat, August 26.

120537. No. 2881. From the Chanak Kale bazar, September 18.

120538 to 120616. *PHASEOLUS* spp. Fabaceae. Bean.

120538 to 120542. *PHASEOLUS COCCINEUS* L. Fabaceae. Scarlet-runner bean.

120538. No. 3151. From the Kastamonu bazar, October 14.

120539. No. 1158. From the Balikesir bazar, June 17.

120540. No. 1242. From the Bursa bazar, June 18.

120541. No. 1536. From the Urfa bazar, July 6.

120542. No. 2214. From the Erzinjan bazar, August 9.

120543 to 120613. *PHASEOLUS VULGARIS* L. Common bean.

120543. No. 547. From the Mugla bazar, May 28.

Nos. 120544 to 120548. From the Isparta bazar, June 2.

120544. No. 551. 120547. No. 559.

120545. No. 552. 120548. No. 563.

120546. No. 554.

120549. No. 600. From the Antalya bazar, June 4.

Nos. 120550 to 120554. From the Izmir bazar, May 23.

120550. No. 605. 120553. No. 620.

120551. No. 608. 120554. No. 624.

120552. No. 618.

Nos. 120555 and 120556. From the Balikesir bazar, June 17.

120555. No. 1155. 120556. No. 1156.

Nos. 120557 to 120563. From the Bursa bazar, June 18.

120557. No. 1223. 120561. No. 1236.

120558. No. 1225. 120562. No. 1237.

120559. No. 1226. 120563. No. 1240.

120560. No. 1229.

120564. No. 1553. From the Urfa bazar, July 6.

Nos. 120565 to 120567. From the Marash bazar, July 7.

120565. No. 1363. 120567. No. 1382.

120566. No. 1366.

## 120530 to 120640—Continued.

120568. No. 1540. From the Urfa bazar, July 6.

Nos. 120569 and 120570. From the Diyarbekir bazar, July 9 and 10.

120569. No. 1614. 120570. No. 1662.

Nos. 120571 to 120574. From the Elaziz bazar, July 13.

120571. No. 1692.

120572. No. 1701. A long bean.

120573. No. 1707. A yellow bean.

120574. No. 1711.

Nos. 120575 to 120577. From the Malatya bazar, July 16.

120575. No. 1813. A late bean.

120576. No. 1809.

120577. No. 1837.

Nos. 120578 to 120580. From the Nigde bazar, July 27.

120578. No. 2024. 120580. No. 2053.

120579. No. 2028.

120581. No. 2135. From the Sivas bazar, August 5.

120582. No. 2056. From the Nigde bazar, July 27.

Nos. 120583 and 120584. From the Sivas bazar, August 5.

120583. No. 2141. 120584. No. 2148.

Nos. 120585 to 120587. From the Erzincan bazar, August 8.

120585. No. 2224. 120587. No. 2236.

120586. No. 2234.

Nos. 120588 to 120591. From the Trabzon bazar, August 11.

120588. No. 2352. A pole bean.

120589. No. 2355.

120590. No. 2364.

120591. No. 2371.

Nos. 120592 to 120594. From the Samsun bazar, August 21.

120592. No. 2524. 120594. No. 2540.

120593. No. 2535.

120595. No. 2622. From a small patch growing among corn, 63 km. southwest of Samsun, August 24.

120596. No. 2547. From the Samsun bazar, August 21.

120597. No. 2624. Found growing among brush 54 km. southwest of Samsun, August 24.

120598. No. 2701. From the Amasya bazar, August 26.

120599. No. 2883. From the Chanak Kale bazar, August 18.

Nos. 120600 and 120601. From the Amasya bazar, October 6.

120600. No. 3070. 120601. No. 3072.

Nos. 120602 to 120604. From the Inebolu bazar, October 13.

120602. No. 3118. 120603. No. 3119.

120604. No. 3120. A stringless bean.

## 120530 to 120640—Continued.

120605. No. 3232. *Dag so gami*. From the Adapazari bazar, October 20.

Nos. 120606 and 120607. From the Chankiri bazar, October 15.

120606. No. 3198. 120607. No. 3200.

Nos. 120608 to 120613. From the Edirne bazar, October 22.

120608. No. 3289. 120611. No. 3300.

120609. No. 3296. 120612. No. 3301.

120610. No. 3299. 120613. No. 3302.

Nos. 120614 to 120616. From the Inebolu bazar, October 12. A collection of late varieties.

120614. *PHASEOLUS* sp.

No. 3121.

120615. *PHASEOLUS* sp.

No. 3121-A.

120616. *PHASEOLUS* sp.

No. 3121-B.

120617 to 120632. *PISUM* spp. *Fabaceae*. *Pea*.

120617 to 120622. *PISUM ELATIUS* Bleb.

For previous introduction see 117261.

120617. No. 738. From 19 km. south of Denizli, on a plateau, May 30.

120618. No. 823. From between Isparta and Antalya, June 3.

120619. No. 3346. From Ephesus, June 12. A wild edible pea with 6 to 8 peas in a pod.

120620. No. 1962. From Birejik, July 22. A variety with 4 to 9 peas in a pod; found growing on very poor soil.

120621. No. 825. From Ephesus, May 24. A wild pea.

120622. No. 3344. From 2 km. south of Kirkagach, June 11.

120623 to 120628. *PISUM SATIVUM* L.

120623. No. 545. From Mugla bazar, June 28.

120624. No. 1258. From the Bursa bazar, June 18.

Nos. 120625 and 120626. From the Amasya bazar.

120625. No. 2708. Collected August 25.

120626. No. 3071. Collected October 6.

120627. No. 3123. From the Inebolu bazar, October 13.

120628. No. 3229. From the Adapazari bazar, October 20.

120629. *PISUM ELATIUS* Bleb.

No. 1317. From the hills near Mudanya, June 21.

120630. *PISUM SATIVUM* L.

No. 3257. From the Adapazari bazar, October 20.

120631. *PISUM* sp.

No. 1468. From 45 km. north of Gaziantep, July 3.

## 120530 to 120640—Continued.

120632. *PISUM* sp.

No. 1162. From 2 km. west of Balikesir, June 16.

120633. *SOLANUM MELONGENA* L. Solanaceae. Eggplant.

No. 576. From the Antalya bazar, June 4.

120634 to 120638. *VIGNA* spp. Fabaceae.120634 and 120635. *VIGNA SINENSIS* (Tornier) Savi. Cowpea.

120634. No. 555. From the Isparta bazar, June 2.

120635. No. 1383. From the Marash bazar, July 2. A black-eyed bean.

120636 and 120637. *VIGNA CYLINDRICA* (Stickm.) Skeels. Catjang.

120636. No. 1684. From the Elaziz bazar, July 13.

120637. No. 553. From the Isparta bazar, June 2. Black-eyed peas.

120638. *VIGNA SINENSIS* (Tornier) Savi. Cowpea.

No. 546. From the Mugla bazar, May 28.

120639. *PISUM* sp. Fabaceae.

No. 1968. From Birejik, July 22. A species with small pods.

120640. *PISUM* sp. Fabaceae.

No. 667. An edible wild pea from the hills near Milas, June 26.

## 120641 to 120645.

From Algeria, Africa. Seeds presented by Dr. René Maire, University of Algiers, Algiers. Received February 11, 1937.

120641. *ACACIA RADDIANA* Savi. Mimosa-ceae.

A tropical African tree, somewhat spiny, with bipinnate leaves and linear-oblong leaflets which are obtuse and one-fourth of an inch long.

For previous introduction see 106613.

120642. *ARISTIDA PUNGENS* Desf. Poaceae.

A tall vigorous grass.

For previous introduction see 84278.

120643. *CALLIGONUM AZEL* Maire. Polygonaceae.

A small desert tree related to *Calligonum comosum*. Native to northern Africa.

120644. *CALLIGONUM COMOSUM* L'Her. Polygonaceae.

A densely branched shrub 10 to 15 feet high, with minute subulate leaves and small ovate, densely spiny, nutlike fruits. Native to the eastern Mediterranean region.

For previous introduction see 112046.

120645. *GENISTA RAETEM* Forsk. Fabaceae. Retem.

A bushy shrub, up to 10 feet high, with simple leaves about 5 mm. long. The sessile white flowers, in small clusters, are about 1 cm. long; the pods are inflated and abruptly beaked. It is native to northern Africa, where it grows on sand dunes.

## 120646 to 120658.

From China. Seeds purchased from R. C. Ching, Keeper of the Garden, Lu-Shan Arboretum, Kiukiang. Received February 17, 1937.

120646. *CASTANEA HENRYI* (Skan) Rehd. and Wils. Fagaceae. Chestnut.

For previous introduction see 116862.

120647. *CASTANEA SEGUINII* Dode. Fagaceae. Chestnut.120648. *CASTANOPSIS CAUDATA* Franch. Fagaceae.

A large evergreen shrub or small tree with shining entire ovate leaves. Native to central China.

120649. *CASTANOPSIS SCLEROPHYLLA* (Lindl.) Schottky. Fagaceae.

For previous introduction see 116123.

120650. *LITHOCARPUS GLABRA* (Thunb.) Rehder. Fagaceae.

An evergreen tree with oblong entire leaves 3 to 6 inches long and small nuts in spikes. Native to Japan.

For previous introduction see 116140.

120651. *LITHOCARPUS HENRYI* (Seemen) Rehd. and Wils. Fagaceae.

An evergreen tree, sometimes 60 feet high, with oblong-lanceolate leaves 3 to 7 inches long. Native to central China.

120652. *QUERCUS ACUTISSIMA* Carruthers. Fagaceae. Brittletooth oak.

A narrow-leaved oak with attractive bright-green leaves.

120653. *QUERCUS CHENII* Nakai. Fagaceae. Oak.

An oak which becomes 90 feet high, with lanceolate leaves about 5 inches long. It is allied to *Quercus glandulifera*. Native to Chekiang Province, China.

120654. *QUERCUS FABRI* Hance. Fagaceae. Oak.

A small evergreen oak of the *Prinus* section, up to 45 feet high, with obovate to oblong leaves about 6 inches long, sinuate and shallow lobed. Native to China.

For previous introduction see 116148.

120655. *QUERCUS GLAUCA* Thunb. Fagaceae. Blue Japanese oak.120656. *QUERCUS MYRSINAEFOLIA* Blume. Fagaceae.

From Chia-hua-shan, Anhwei Province.

120657. *QUERCUS GLANDULIFERA* Blume (*Q. serrata* Thunb.). Fagaceae. Oak.

A white oak up to 70 feet high, native to Japan, Chosen, and China. The oblong-ovate leaves are lustrous bright green and hold their color until late in the autumn. It is usually shrubby under cultivation.

For previous introduction see 103774.

120658. *QUERCUS VARIABILIS* Blume. Fagaceae. Oriental oak.

A large oak up to 80 feet high, forming pure stands between 2,000 and 5,000 feet altitude in central and eastern China. The bark is pale yellowish gray and deeply furrowed; the dark-green, crenately serrate leaves with bristlelike teeth are oblong to oblong-lanceolate; the roundish acorns are almost sessile.

For previous introduction see 89606.

**120659. RUBUS sp. Rosaceae.**

From England. Plants purchased from Laxton Bros. Nurseries, Bedford. Received February 19, 1937.

Bedford Giant blackberry.

**120660 to 120820.**

From Turkey. Seeds and bulbs collected by H. L. Westover and F. L. Wellman, Bureau of Plant Industry. Received January 9, 1937.

This material was all collected in 1936 and, unless otherwise stated, was received as seeds.

120660 and 120661. *ABELMOSCHUS ESCULENTUS* (L.) Moench. Malvaceae. Okra.

120660. No. 536. From the Mugla bazar, May 28.

120661. No. 1708. From the Elaziz bazar, July 13.

120662 to 120681. *ALLIUM CEPA* L. Liliaceae. Onion.

120662. No. 565. From the Isparta bazar, June 2.

120663. No. 623. From the Izmir bazar, May 23.

Nos. 120664 and 120665. From the Balikesir bazar, June 17.

120664. No. 1145. 120665. No. 1159.

120666. No. 1213. From the Bursa bazar, June 18.

120667. No. 1376. From the Marash bazar, July 2.

120668. No. 1538. From the Urfa bazar, July 6.

120669. No. 1826. From the Malatya bazar, July 16.

120670. No. 2025. From the Nigde bazar, July 27.

120671. No. 2140. From the Sivas bazar, August 5.

120672. No. 2211. From the Erzinjan bazar, August 8.

120673. No. 2546. From the Samsun bazar, August 21.

120674. No. 2724. From the Mission garden at Talas, August 29. A cultivated multiplier type.

120675. No. 3089. From the Yozgat bazar, October 9.

120676. No. 2993. From the Kutahya bazar, October 28.

120677. No. 3126. From the Inebolu bazar, October 13.

120678. No. 3162. From the Kastamonu bazar, October 14.

120679. No. 3212. From the Chankiri bazar, October 15.

120680. No. 3259. From the Adapazari bazar, October 20.

120681. No. 3457. From Elaziz, August 30.

120682 to 120685. *ALLIUM SATIVUM* L. Liliaceae. Garlic.

120682. No. 1534. Bulblets from the Urfa bazar, July 6.

120683. No. 3078. Bulblets from the Yozgat bazar, October 9.

**120660 to 120620—Continued.**

120684. No. 3433. Bulblets from Alma Dag, June 28.

120685. No. 3474. From the Inebolu bazar, October 15.

120686. *ANETHUM GRAVEOLENS* L. Apiaceae. Dill.

No. 1624. From the Diyarbekir bazar, July 9.

120687. *APIUM GRAVEOLENS* L. Apiaceae. Celery.

No. 534. From the Mugla bazar, May 28.

120688 to 120707. *BETA VULGARIS* L. Chenopodiaceae. Common beet.

120688. No. 578. From the Antalya bazar, June 4.

Nos. 120689 and 120690. From the Bursa bazar, June 18.

120689. No. 1219. 120690. No. 1239.

120691. No. 1379. From the Marash bazar, July 2.

120692. No. 1539. From the Urfa bazar, July 6.

120693. No. 1656. From the Diyarbekir bazar, July 10.

120694. No. 1714. From the Elaziz bazar, July 13.

120695. No. 1814. From the Malatya bazar, July 16.

120696. No. 2124. From the Sivas bazar, August 5.

120697. No. 2358. From the Trabzon bazar, August 11.

120698. No. 2529. A yellow beet from the Samsun bazar, August 21.

120699. No. 2709. From the Amasya bazar, August 25.

120700. No. 2899. From the Chanak Kale bazar, September 18.

120701. No. 2992. From the Kutahya bazar, September 28.

120702. No. 3021. From gardens in Eskişehir, September 29. The sugar-beet type.

120703. No. 3094. From the Yozgat bazar, October 9.

120704. No. 3170. From the Kastamonu bazar, October 10.

120705. No. 3208. From the Chankiri bazar, October 15.

Nos. 120706 and 120707. From the Adapazari bazar, October 20.

120706. No. 3238. 120707. No. 3264.

120708 to 120714. *BETA VULGARIS* L. Chenopodiaceae. Chard.

120708. No. 614. From the Izmir bazar, May 23.

120709. No. 2378. From the Trabzon bazar, August 11.

120710. No. 2531. From the Samsun bazar, August 21.

Nos. 120711 and 120712. From the Adapazari bazar, October 20.

120711. No. 3243. 120712. No. 3270.

120713. No. 1393. From the Marash bazar, July 2.



## 120660 to 120820—Continued.

120714. No. 3124. From the Inebolu bazar, October 13.
- 120715 to 120752. *CAPSICUM ANNUUM* L. Solanaceae. Common redpepper.
120715. No. 530. From the Mugla bazar, May 28.
- Nos. 120716 to 120718. From the Izmir bazar, May 23.
120716. No. 572. A bell-shaped pepper.
120717. No. 589. A small slender pepper.
120718. No. 594. A hot pepper.
120719. No. 1253. From the Bursa bazar, June 18.
120720. No. 1372. A mild pepper from the Marash bazar, July 2.
- Nos. 120721 to 120723. From the Urfa bazar, July 6.
120721. No. 1558. An elongated pepper.
120722. No. 1560.
120723. No. 1559. A cylindrical pepper.
120724. No. 1666. From the Diyarbekir bazar, July 10.
- Nos. 120725 and 120726. From the Elaziz bazar, July 13.
120725. No. 1690. 120726. No. 1691.
- Nos. 120727 and 120728. From the Nigde bazar, July 27.
120727. No. 2047. 120728. No. 2049.
120729. No. 1815. From the Malatya bazar, July 16.
120730. No. 2163. From the Sivas bazar, August 5.
- Nos. 120731 to 120733. From the Erzincan bazar, May 8.
120731. No. 2229. A cylindrical pepper.
120732. No. 2230. An elongated pepper.
120733. No. 2242. An elongated pepper.
- Nos. 120734 and 120735. From the Trabzon bazar, August 11.
120734. No. 2359. A bell-shaped pepper.
120735. No. 2366.
120736. No. 2417. From Rize, August 13. A sweet pepper; fruits round, about the size of a cherry, brilliant tomato-red; brought in from nearby Russian gardens; eaten both raw and cooked.
- Nos. 120737 and 120738. From the Samsun bazar, August 21.
120737. No. 2525. An elongated pepper.
120738. No. 2539. A large pepper.
120739. No. 2893. From the Chanak Kale bazar, September 18.
120740. No. 2985. From the Kutahya bazar, September 28.
- Nos. 120741 and 120742. From the Amasya bazar, October 6.
120741. No. 3044.
120742. No. 3051. An elongated pepper.
- Nos. 120743 and 120744. From the Chankiri bazar, October 15.

## 120660 to 120820—Continued.

120743. No. 3194. 120744. No. 3209.
- Nos. 120745 to 120747. From the Adapazari bazar, October 20.
120745. No. 3261. A small red pepper.
120746. No. 3265. A large pepper.
120747. No. 3267. A large hot pepper.
- Nos. 120748 and 120749. From the Edirne bazar, October 22.
120748. No. 3285. A hot pepper.
120749. No. 3287. A bell-shaped pepper.
- Nos. 120750 and 120751. From the Balikesir bazar, June 17.
120750. No. 3351. A small pepper.
120751. No. 3352. A medium-sized pepper.
120752. No. 3360. From the Bursa bazar, June 18.
120753. *CICER ARIETINUM* L. Fabaceae. Chickpea.
- No. 1227. *Garbanzos*. From the Bursa bazar, June 18.
- 120754 to 120774. *DAUCUS CAROTA* L. Apiaceae. Carrot.
120754. No. 573. From the Isparta bazar, June 2.
120755. No. 592. From the Izmir bazar, June 23.
120756. No. 1244. From the Bursa bazar, June 13.
120757. No. 1384. From the Marash bazar, July 2.
120758. No. 1561. From the Urfa bazar, July 6.
120759. No. 1705. From the Elaziz bazar, July 13.
120760. No. 1832. From the Malatya bazar, July 16.
- Nos. 120761 and 120762. From the Nigde bazar, July 27.
120761. No. 2041. 120762. No. 2055.
120763. No. 2134. From the Sivas bazar, August 5.
120764. No. 2231. From the Erzincan bazar, August 8.
120765. No. 2542. From the Samsun bazar, August 21.
120766. No. 2714. From the Amasya bazar, August 25.
120767. No. 2898. From the Chanak Kale bazar, September 18.
120768. No. 3002. From the Kutahya bazar, September 28.
120769. No. 3020. From the Eskishehir bazar, September 29.
120770. No. 3081. From the Yozgat bazar, October 9.
- Nos. 120771 and 120772. From the Inebolu bazar, October 13.
120771. No. 3125. 120772. No. 3135.
120773. No. 3178. From the Kastamonu bazar, October 14.
120774. No. 3258. From the Adapazari bazar, October 20.

## 120660 to 120820—Continued.

120775 to 120799. *SOLANUM MELONGENA* L.  
Solanaceae. Eggplant.

120775. No. 607. *Maltas*. From the Antalya bazar, June 4.

120776. No. 544. From the Mugla bazar, May 28.

120777. No. 591. From the Antalya bazar, June 3.

120778. No. 591-A. From the Izmir bazar, May 23.

120779. No. 1255. From the Bursa bazar, June 18.

120780. No. 1378. From the Marash bazar, July 2.

Nos. 120781 and 120782. From the Urfa bazar, July 6.

120781. No. 1532. A white eggplant.

120782. No. 1549.

120783. No. 1687. From the Diyarbekir bazar, July 10.

120784. No. 1681. From the Elaziz bazar, July 13.

120785. No. 1820. From the Malatya bazar, July 16.

120786. No. 2034. From the Nigde bazar, July 27.

120787. No. 2223. From the Erzinjan bazar, August 8.

120788. No. 2526. From the Samsun bazar, August 21.

120789. No. 2700. From the Amasya bazar, August 25.

120790. No. 2892. From the Chanak Kale bazar, September 18.

120791. No. 3013. From the Kutahya bazar, September 28.

Nos. 120792 and 120793. From the Amasya bazar, October 6.

120792. No. 3035. 120793. No. 3042.

120794. No. 3088. From the Yozgat bazar, October 9.

120795. No. 3155. From the Kastamonu bazar, October 14.

120796. No. 3210. From the Chankir bazar, October 15.

120797. No. 3236. From the Adapazari bazar, October 20.

Nos. 120798 and 120799. From the Edirne bazar, October 22.

120798. No. 3291. 120799. No. 3293.

120800 to 120820. *SPINACIA OLERACEA* L.  
Chenopodiaceae. Common spinach.

120800. No. 528. From the Mugla bazar, May 28.

Nos. 120801 and 120802. From the Izmir bazar, May 23.

120801. No. 612. 120802. No. 617.

120803. No. 1368. From the Marash bazar, July 2.

Nos. 120804 and 120805. From the Elaziz bazar, July 13.

120804. No. 1683. 120805. No. 1687.

120806. No. 1829. From the Malatya bazar, July 16.

## 120660 to 120820—Continued.

Nos. 120807 and 120808. From the Nigde bazar, July 27.

120807. No. 2037. 120808. No. 2043.

Nos. 120809 and 120810. From the Erzinjan bazar, August 8.

120809. No. 2232. 120810. No. 2244.

120811. No. 2368. From the Trabzon bazar, August 11.

Nos. 120812 and 120813. From the Samsun bazar, August 21.

120812. No. 2534. 120813. No. 2537.

120814. No. 2884. From the Chanak Kale bazar, September 18.

120815. No. 2988. From the Kutahya bazar, September 28.

120816. No. 3128. From the Inebolu bazar, October 13.

Nos. 120817 and 120818. From the Kastamonu bazar, October 14.

120817. No. 3150. 120818. No. 3152.

120819. No. 3202. From the Chankiri bazar, October 15.

120820. No. 3235. From the Adapazari bazar, October 20.

## 120821 to 120823.

From Ecuador. Seeds collected by Mrs. Ynes Mexia, Bureau of Plant Industry. Received January 28, 1937.

120821. *TEPHROSIA TOXICARIA* (Swartz)  
Pers. Fabaceae.

No. 8486-A. December 23, 1936. *Barbasco*. From Playa Rica, Provincia Esmeraldas, Parroquia Concepción, at 350 feet altitude, where it rains throughout the year, with the temperature ranging from 70° to 90° F.

For previous introduction see 116245.

120822. *OCHROMA GRANDIFLORA* Rowlee.  
Bombacaceae.

No. 8487-A. *Balsa*. From Guayaquil, December, 1936. Found growing in a back yard. A tree with soft, very light wood used for rafts and grown for export.

120823. (Undetermined.)

No. 8460. December 16, 1936. From Playa Rica, Provincia Esmeraldas, Parroquia Concepción, at 350 feet altitude. An ornamental vine, with cream-white flowers, which climbs to the tops of forest trees. The climate is rainy throughout the year and the temperature ranges from 70° to 90° F.

120824. *CITRUS LIMONIA* Osbeck. *Ruta-*  
ceae. Lemon.

From India. Seeds collected by Walter Koelz, Bureau of Plant Industry. Received February 5, 1937.

No. 1650. *Gulgul, gombu*. From Bandrole, Kulu, Punjab, November 14, 1936, at 5,000 feet altitude. A citrus tree which stands 18' F. with little apparent injury; in some sections snow covers it for a month. The tree is a moderately rapid grower, bears fairly early, and the fruit is of good flavor and has excellent keeping quality.

## 120825 to 121052.

From Turkey. Seeds collected by H. L. Westover and F. L. Wellman, Bureau of Plant Industry. Received January 18, 1937.

This material was all collected in the summer and autumn of 1936.

120825 to 120841. *ABELMOSCHUS ESCULENTA* (L.) Moench. Malvaceae. Okra.

120825. No. 1231. From the Bursa bazar, June 18.

120826. No. 1381. From the Marash bazar, July 2.

120827. No. 1555. From the Urfa bazar, July 6.

120828. No. 1659. From the Diyarbekir bazar, July 10.

120829. No. 1816. From the Malatya bazar, July 16.

120830. No. 2038. From the Nigde bazar, July 27.

120831. No. 2126. From the Sivas bazar, August 5.

120832. No. 2247. From the Erzincan bazar, August 8.

120833. No. 2375. From the Trabzon bazar, August 11.

120834. No. 2543. From the Samsun bazar, August 21.

120835. No. 2710. From the Amasya bazar, June 25.

120836. No. 2880. From the Chanak Kale bazar, August 18.

120837. No. 3016. From the Kutahya bazar, September 28.

120838. No. 3049. From the Amasya bazar, October 9.

120839. No. 3082. From the Yozgat bazar, October 9.

120840. No. 3206. From the Chankiri bazar, October 15.

120841. No. 3253. From the Adapazari bazar, October 20.

120842. *NIGELLA SATIVA* L. Liliaceae. Black cumin.

No. 549. From the Isparta bazar, June 2.

120843 to 120854. *ALLIUM PORRUM* L. Liliaceae. Leek.

120843. No. 1702. From the Elaziz bazar, July 13.

120844. No. 1811. From the Malatya bazar, July 16.

120845. No. 2050. From the Nigde bazar, July 27.

120846. No. 2530. From the Samsun bazar, August 21.

120847. No. 2706. From the Amasya bazar, August 25.

Nos. 120848 and 120849. From the Amasya bazar, October 6.

120848. No. 3038. 120849. No. 3056.

120850. No. 3084. From the Yozgat bazar, October 9.

120851. No. 3158. From the Kastamonu bazar, October 14.

120852. No. 3207. From the Chankiri bazar, October 15.

## 120825 to 121052—Continued.

120853. No. 3251. From the Adapazari bazar, October 20.

120854. No. 3294. From the Edirne bazar, October 22.

120855. *ALLIUM* sp. Liliaceae.

No. 2895. From the Chanak Kale bazar, August 18.

120856 to 120870. *ANETHUM GRAVEOLENS* L. Apiaceae. Dill.

120856. No. 578. From the Izmir bazar, May 23.

120857. No. 599. From the Antalya bazar, June 4.

120858. No. 1235. From the Bursa bazar, June 18.

120859. No. 1715. From the Elaziz bazar, July 13.

120860. No. 1833. From the Malatya bazar, July 16.

120861. No. 2054. From the Nigde bazar, July 27.

120862. No. 2243. From the Erzincan bazar, August 8.

120863. No. 2360. From the Trabzon bazar, August 11.

120864. No. 2538. From the Samsun bazar, August 21.

Nos. 120865 and 120866. From the Amasya bazar.

120865. No. 2699. August 25.

120866. No. 3045. October 6.

Nos. 120867 and 120868. From the Kastamonu bazar, October 14.

120867. No. 3157. 120868. No. 3161.

120869. No. 3242. From the Adapazari bazar, October 20.

120870. No. 1147. From the Balikesir bazar, June 16.

120871 to 120881. *APIUM GRAVEOLENS* L. Apiaceae. Celery.

Nos. 120871 and 120872. From the Izmir bazar, May 23.

120871. No. 576. 120872. No. 585.

120873. No. 594. From the Antalya bazar, June 3.

120874. No. 2362. From the Trabzon bazar, August 11.

120875. No. 2521. From the Samsun bazar, August 21.

120876. No. 2885. From the Chanak Kale bazar, September 18.

120877. No. 2986. From the Kutahya bazar, September 28.

120878. No. 3037. From the Amasya bazar, October 6.

120879. No. 3139. From the Inebolu bazar, October 13.

120880. No. 3184. From the Kastamonu bazar, October 14.

120881. No. 3245. From the Adapazari bazar, October 20.

120882 to 120884. *BRASSICA OLERACEA* BO-TRYTIS L. Brassicaceae. Cauliflower.

120882. No. 2891. From the Chanak Kale bazar, September 18.

## 120825 to 121052—Continued.

120883. No. 3130. From the Inebolu bazar, October 13.

120884. No. 582. From the Izmir bazar, May 23.

120885 to 120926. *BRASSICA* spp. *BRASSICACEAE*.

120885 to 120905. *BRASSICA OLERACEA CAPITATA* L. Cabbage.

120885. No. 573. From the Izmir bazar, May 23.

120886. No. 1660. From the Diyarbekir bazar, July 10. A form with glaucous leaves. It is not grown for the heads, but is used to wrap meats.

120887. No. 1819. From the Malatya bazar, July 16.

120888. No. 2030. From the Nigde bazar, July 27.

120889. No. 2158. From the Sivas bazar, August 5.

120890. No. 2238. From the Erzinjan bazar, August 8.

Nos. 120891 and 120892. From the Trabzon bazar, August 11.

120891. No. 2356. Leaf type.

120892. No. 2363. Head type.

Nos. 120893 and 120894. From the Samsun bazar, August 21.

120893. No. 2518. 120894. No. 2519.

120895. No. 2704. From the Amasya bazar, August 25.

120896. No. 3011. From the Kutahya bazar, September 28.

Nos. 120897 and 120898. From the Amasya bazar, October 6.

120897. No. 3039. 120898. No. 3064.

Nos. 120899 and 120900. From the Kastamonu bazar, October 14.

120899. No. 3174. 120900. No. 3176.

120901. No. 3197. From the Chankiri bazar, October 15.

Nos. 120902 and 120903. From the Adapazari bazar, October 20.

120902. No. 3247. 120903. No. 3260.

120904. No. 3295. From the Edirne bazar, October 22.

120905. No. 3458. From Elaziz, August 30.

120906 to 120919. *BRASSICA RAPA* L. Turnip.

120906. No. 1154. From the Balikesir bazar, June 17.

120907. No. 1221. From the Bursa bazar, June 18.

120908. No. 1361. From the Marash bazar, July 2.

Nos. 120909 and 120910. From the Elaziz bazar, July 13.

120909. No. 1694. 120910. No. 1697.

120911. No. 1825. From the Malatya bazar, July 16.

120912. No. 2035. From the Nigde bazar, July 27.

## 120825 to 121052—Continued.

120913. No. 2159. From the Sivas bazar, August 5.

120914. No. 2218. From the Erzinjan bazar, August 8.

120915. No. 2354. From the Trabzon bazar, August 11.

120916. No. 2517. From the Samsun bazar, August 21.

120917. No. 3034. From the Amasya bazar, October 6.

120918. No. 3164. From the Kastamonu bazar, October 14.

120919. No. 3255. From the Adapazari bazar, October 20.

120920. *BRASSICA* sp.

No. 529. Mustard from the Mugla bazar, June 28.

120921. *BRASSICA CAMPESTRIS* L. Rutabaga.

No. 569. From the Isparta bazar, June 2.

120922. *BRASSICA* sp.

No. 583. Mustard from the Antalya bazar, June 4.

120923. *BRASSICA* sp.

No. 590. Mustard from the Izmir bazar, May 23.

120924. *BRASSICA* sp.

No. 1140. Mustard from Ephesus, June 12.

120925. *BRASSICA* sp.

No. 2286. Mustard from 110 km. east of Erzinjan, August 9.

120926. *BRASSICA* sp.

No. 2376. Mustard from the Trabzon bazar, August 18.

120927. *ERUCA SATIVA* Mill.

No. 584. Salad mustard from the Izmir bazar, May 23.

120928. *BRASSICA* sp.

No. 3269. From the Adapazari bazar, October 20.

120929. *CITRULLUS VULGARIS* Schrad. Cucurbitaceae. Watermelon.

No. 3136-A. From the Inebolu bazar, October 13.

120930. *CUCURBITA MAXIMA* Duchesne. Cucurbitaceae. Squash.

No. 1380-A. From the Marash bazar, July 2.

120931. *CUCURBITA PEPO* L. Cucurbitaceae. Pumpkin.

No. 3144. From the Inebolu bazar, October 13.

120932 to 120966. *LACTUCA SATIVA* L. Cichoriaceae. Garden lettuce.

120932. No. 531. From the Mugla bazar, May 28.

120933. No. 571. From the Isparta bazar, June 2.

120934. No. 586. From the Izmir bazar, May 23.

120935. No. 590. From the Antalya bazar, June 3.

## 120825 to 121052—Continued.

120936. No. 593. From the Izmir bazar, May 23.
120937. No. 1251. From the Bursa bazar, June 18.
120938. No. 1626. From the Diyarbekir bazar, July 9.
120939. No. 1706. From the Elaziz bazar, July 13.
120940. No. 1810. From the Malatya bazar, July 16.
120941. No. 2039. Head lettuce from the Nigde bazar, July 27.
- Nos. 120942 and 120943. From the Sivas bazar, August 5.
120942. No. 2139. 120943. No. 2150.
120944. No. 2246. A mixed sample from the Erzinjan bazar, August 8.
- Nos. 120945 and 120946. From the Trabzon bazar, August 11.
120945. No. 2343. 120946. No. 2369.
- Nos. 120947 and 120948. From the Samsun bazar, June 21.
120947. No. 2527.
120948. No. 2533. Head type.
120949. No. 2703. From the Amasya bazar, August 25.
- Nos. 120950 and 120951. From Yalova Kaplıcaları, September 12.
120950. No. 2854. Wild lettuce.
120951. No. 2857. Wild lettuce.
- 120952 and 120953. From the Chanak Kale bazar, September 18.
120952. No. 2856. Head lettuce.
120953. No. 2889. Leaf lettuce.
120954. No. 2990. From the Kutahya bazar, September 28.
120955. No. 3036. From the Amasya bazar, October 6.
120956. No. 3090. From the Yozgat bazar, October 9.
- 120957 and 120958. From the Inebolu bazar, October 13.
120957. No. 3127. Leaf lettuce.
120958. No. 3134. Head lettuce.
- Nos. 120959 to 120961. From the Kastamonu bazar, October 14.
120959. No. 3163. Leaf lettuce.
120960. No. 3166. Head lettuce.
120961. No. 3167.
- Nos. 120962 and 120963. From the Chankiri bazar, October 15.
120962. No. 3192. 120963. No. 3195.
120964. No. 3244. From the Adapazari bazar, October 20.
120965. No. 3284. From the Edirne bazar, October 22.
120966. No. 577. Romaine lettuce from the Izmir bazar, May 23.
- 120967 to 120969. *LAGENARIA LEUCANTHA* (Duchesne) Rusby. Cucurbitaceae. Calabash gourd.
120967. No. 1390. From the Marash bazar, July 2.

## 120825 to 121052—Continued.

120968. No. 1818. From the Malatya bazar, July 18. A gourd with a neck.
120969. No. 1224. From the Bursa bazar, June 18.
- 120970 to 120980. *LEPIDIUM SATIVUM* L. Brassicaceae. Garden cress.
120970. No. 1256. From the Bursa bazar, June 18.
120971. No. 1686. From the Elaziz bazar, July 17.
120972. No. 2045. From the Nigde bazar, July 27.
120973. No. 2245. From the Erzinjan bazar, August 8.
120974. No. 2357. From the Trabzon bazar, August 11.
120975. No. 2516. From the Samsun bazar, August 21.
120976. No. 2712. From the Amasya bazar, August 25.
120977. No. 3001. From the Kutahya bazar, September 28.
120978. No. 3040. From the Amasya bazar, October 6.
120979. From 3079. From the Yozgat bazar, October 9.
120980. No. 3239. From the Adapazari bazar, October 20.
120981. *LEPIDIUM* sp. Brassicaceae.
- No. 801. From Burdur, June 3. A perennial with a musky odor.
- 120982 to 121006. *PETROSELINUM CRISPUM* (Mill.) Nym. Apiaceae. Parsley.
120982. No. 571. From the Izmir bazar, June 23.
120983. No. 572. From the Isparta bazar, June 2.
120984. No. 1149. From the Balıkesir bazar, June 16.
120985. No. 1252. From the Bursa bazar, June 18.
- Nos. 120986 and 120987. From the Marash bazar, July 2.
120986. No. 1373. 120987. No. 1392.
120988. No. 1546. From the Urfa bazar, July 6.
- Nos. 120989 and 120990. From the Diyarbekir bazar.
120989. No. 1620. July 9.
120990. No. 1657. July 10.
120991. No. 1710. From the Elaziz bazar, July 13.
120992. No. 1965. From Birejik, July 22. Plants growing near an abandoned house.
120993. No. 2029. From the Nigde bazar, July 27.
120994. No. 2212. From the Erzinjan bazar, August 8.
120995. No. 2144. From the Sivas bazar, August 5.
120996. No. 2350. From the Trabzon bazar, August 17.
120997. No. 2536. From the Samsun bazar, August 21.

## 120825 to 121052—Continued.

120998. No. 2711. From the Amasya bazar, August 25.
120999. No. 2894. From the Chanak Kale bazar, August 18.
121000. No. 2994. From the Kutahya bazar, September 28.
121001. No. 3041. From the Amasya bazar, October 6.
121002. No. 3077. From the Yozgat bazar, October 9.
121003. No. 3160. From the Kastamonu bazar, October 14.
121004. No. 3190. From the Chankiri bazar, October 15.
121005. No. 3252. From the Adapazari bazar, October 20.
121006. No. 3297. From the Edirne bazar, October 22.
- 121007 to 121051. *RAPHANUS* spp. Brassicaceae. Radish.
- 121007 to 121047. *RAPHANUS SATIVUS* L.
121007. No. 543. From the Mugla bazar, May 28.
121008. No. 568. From the Isparta bazar, June 2. A large radish.
121009. No. 574. From the Izmir bazar, May 23. A black radish.
121010. No. 582. A white radish from the Antalya bazar, June 4.
- Nos. 121011 and 121012. From the Izmir bazar, May 23.
121011. No. 583. A long radish.
121012. No. 587. A small round radish.
121013. No. 592. From the Antalya bazar, June 2.
121014. No. 1254. From the Bursa bazar, June 18.
- Nos. 121015 and 121016. From the Marash bazar, July 2.
121015. No. 1362. A small radish.
121016. No. 1374. A large radish.
121017. No. 1545. From the Urfa bazar, July 6.
121018. No. 1664. From the Diyarbakir bazar, July 10. A large radish.
- Nos. 121019 and 121020. From the Malatya bazar, July 16.
121019. No. 1812. A small red radish.
121020. No. 1830. A large radish.
- Nos. 121021 to 121023. From the Nigde bazar, July 27.
121021. No. 2032. A long red radish.
121022. No. 2042. A white radish.
121023. No. 2051. A long white radish.
121024. No. 2129. From the Sivas bazar, August 5. A large round radish.
- Nos. 121025 and 121026. From the Erzincan bazar, August 8.
121025. No. 2219.

## 120825 to 121052—Continued.

121026. No. 2248. A small red radish.
- Nos. 121027 and 121028. From the Trabzon bazar, August 11.
121027. No. 2344.
121028. No. 2347. A small red radish.
- Nos. 121029 and 121030. From the Samsun bazar, August 21.
121029. No. 2528.
121030. No. 2545. A white radish.
- Nos. 121031 and 121032. From the Amasya bazar, August 25.
121031. No. 2802. A long red radish.
121032. No. 2713. A small radish.
121033. No. 2755. From 11 km. south of Bursa, September 9.
121034. No. 2887. From Chanak Kale bazar, September 18.
121035. No. 2825. From Yalova Kapiljalari, September 11. A wild radish.
- Nos. 121036 and 121037. From the Kutahya bazar, September 28.
121036. No. 3010. A white radish.
121037. No. 3014. A red radish.
121038. No. 3047. From the Amasya bazar, October 6. A red radish.
121039. No. 3091. From the Yozgat bazar, October 9.
- Nos. 121040 and 121041. From the Kastamonu bazar, October 14.
121040. No. 3183. A red radish.
121041. No. 3175.
121042. No. 3141. From the Inebolu bazar, October 13.
121043. No. 3203. From the Chankiri bazar, October 15.
- Nos. 121044 to 121046. From the Adapazari bazar, October 20.
121044. No. 3237. A red radish.
121045. No. 3246. A white radish.
121046. No. 3248. A black radish.
121047. No. 3288. From the Edirne bazar, October 22. A large radish.
121048. *RAPHANUS* sp.
- No. 2514. From Samsun, August 21.
121049. *RAPHANUS* sp.
- No. 2325. From 75 km. north of Gemushane, August 10.
121050. *RAPHANUS* sp.
- No. 3375. From Yenisehir, June 19.
121051. *RAPHANUS* sp.
- No. 2400. From the sea coast between Trabzon and Rize, August 12.
121052. *SOLANUM* sp. Solanaceae.
- No. 2805. From the Bursa bazar, September 10. A fruit used as a vegetable, quartered and boiled with meat; ripens in the fall, which is unusual.

## 121053 to 121077.

From Paraguay and Argentina. Collected by W. A. Archer, Bureau of Plant Industry. Received February 16, 1937.

Unless otherwise stated the material was received as seeds.

121053. *ANANAS COMOSUS* (L.) Mer. Bromeliaceae. Pineapple.

No. 4906. Var. *Typica*. From the Jardín Botánico, Santísima, Trinidad, Paraguay, January 6, 1937. Suckers of a semi-wild, very sweet pineapple.

121054 to 121071. *ARACHIS HYPOGAEA* L. Fabaceae. Peanut.

Nos. 121054 to 121070 are pure-strain selections of cultivated peanuts, presented by Sr. Clos of the Ministerio de Agricultura, Buenos Aires, Argentina, January 22, 1937.

121054. No. 4985. *Negro*. Strain A. H. 198-2. From the Facultad de Agronomía y Veterinaria de Buenos Aires.

121055. No. 4986. *Colorado*. Strain A. H. 901-1. From Tucumán.

121056. No. 4987. *Rastrero*. Strain A. H. 833-2. From China.

121057. No. 4988. Strain A. H. 1,000-1. From the market, Jujuy.

121058. No. 4989. *Negro*. Strain A. H. 1002-1. From Loreto, Misiones.

121059. No. 4990. *Colorado*. Strain A. H. 1039-1. From Córdoba.

121060. No. 4991. *Rastrero*. Strain A. H. 1042-1. From Mancopas, Tucumán.

121061. No. 4992. *Negro*. Strain A. H. 1048-A. From Corrientes.

121062. No. 4993. Strain A. H. 1051-1. From Santa Fé, Reconquista.

121063. No. 4994. Strain A. H. 1053-B. From Santa Fé, Monte Caseros.

121064. No. 4995. *Colorado*. Strain A. H. 1066-1. From Córdoba.

121065. No. 4996. Strain A. H. 1068-1. From Colonia Yeraú, Entre Ríos.

121066. No. 4997. *Blanco*. Strain A. H. 1070-1. From Córdoba.

121067. No. 4998. *Indio*. Strain A. H. 1119-A. From Misiones.

121068. No. 4999. *Imperial*. Strain A. H. 1120-A. From the Tucumán Experiment Station.

121069. No. 5000. Strain A. H. 1122-1. From Corcordia, Entre Ríos.

121070. No. 5001. Strain A. H. 1131-1. From Chajarí, Entre Ríos.

121071. No. 4951. *Tucuru*. A cultivated peanut from Bonpland, Misiones, Argentina, December 1936.

121072 to 121074. *NICOTIANA TABACUM* L. Solanaceae. Common tobacco.

121072. No. 4879. A mixed sample from Cabaña, Paraguay.

Nos. 121073 and 121074. Cultivated tobacco from Bonpland, Misiones, Argentina, December 1936.

121073. No. 4950. *Chileno grande colorado*.

## 121053 to 121077—Continued.

121074. No. 4949. *Chileno grande amarillo*.

121075. *ZEA MAYS* L. Poaceae. Corn.

No. 4922. From the Jardín Botánico, Santísima, Trinidad, Paraguay, January 6, 1937. A soft corn, cultivated and grown especially for a certain type of bread; also for roasting ears.

121076. *ZEPHYRANTHES* sp. Amaryllidaceae.

No. 4944. From the Jardín Botánico, Santísima, Trinidad, Paraguay, January 9, 1937. Bulbs of a cultivated species thought to be native.

121077. *NOTHOSCORDUM* sp. Liliaceae.

No. 4945. From the Jardín Botánico, Santísima, Trinidad, Paraguay, January 9, 1937. Bulbs of a native species.

## 121078 to 121085.

From New Zealand. Seeds presented by the Plant Research Bureau, Grasslands Division, Department of Scientific and Industrial Research, Palmerston North. Received February 11, 1937.

121078. *AGROSTIS TENUIS* Sibth. Poaceae.

*Brown top*. No. Bt. 657.

For previous introduction see 111986.

121079. *DACTYLIS GLOMERATA* L. Poaceae. Orchard grass.

*Cocksfoot*. No. Bc. 286.

121080. *LOLIUM MULTIFLORUM* Lam. Poaceae. Italian ryegrass.

No. Bb. 229.

121081 and 121082. *LOLIUM PERENNE* L. Poaceae. Perennial ryegrass.

121081. No. Ba. 6310.

121082. No. Ba. 6256.

121083. *TRIFOLIUM PRATENSE* L. Fabaceae. Red clover.

*Montgomery Extra Late Flowering*. No. Aa. 415.

121084 and 121085. *TRIFOLIUM REPENS* L. Fabaceae. White clover.

121084. No. Ac. 2377.

121085. No. Ac. 2297.

## 121086 to 121290.

From Turkey. Seeds collected by H. L. Westover and F. L. Wellman, Bureau of Plant Industry. Received January 9, 1937.

This material was collected in the summer and autumn of 1936.

121086. *ANTHYLLIS VULNERARIA* L. Fabaceae. Kidneyvetch.

No. 2455. From Alma Dag, 25 km. southeast of Ankara, August 1.

For previous introduction see 93068.

121087. *ANTHYLLIS* sp. Fabaceae.

No. 1763. From 32 km. southeast of Elaziz, July 13.

121088. *ANTHYLLIS VULNERARIA* L. Fabaceae. Kidneyvetch.

No. 709. From 30 km. east of Milas, June 27.

## 121086 to 121290—Continued.

## 121089. ARGYROLOBIUM sp. Fabaceae.

No. 2666. From 46 km. south of Tokat, August 26.

## 121090 to 121106. ASTRAGALUS spp. Fabaceae. Milkvetch.

## 121090. ASTRAGALUS sp.

No. 739. From 10 km. north of Tavas, May 30.

## 121091. ASTRAGALUS sp.

No. 808. From 35 km. north of Antalya, June 3.

## 121092. ASTRAGALUS sp.

No. 1083. From the ruins at Bergama, June 10. A shrub with large yellow flowers.

## 121093. ASTRAGALUS sp.

No. 1749. From 30 km. southeast of Elaziz, July 13.

## 121094. ASTRAGALUS sp.

No. 1873. From 50 km. north of Malatya, July 17.

## 121095. ASTRAGALUS sp.

No. 2117. From 84 km. east of Sivas, August 5.

## 121096. ASTRAGALUS sp.

No. 2408. From 29 km. west of Rize, August 13.

## 121097. ASTRAGALUS sp.

No. 2456. From Alma Dag, 25 km. southeast of Ankara, August 1.

## 121098. ASTRAGALUS sp.

No. 3398. From dry plains around Ankara, June 25.

## 121099. ASTRAGALUS sp.

No. 3418. From a dry rocky slope 3 km. northeast of Ankara, June 26.

## 121100. ASTRAGALUS sp.

No. 3452. From 10 km. southeast of Ankara, June 28.

## 121101. ASTRAGALUS sp.

No. 1447. From 20 km. north of Gaziantep, July 2.

## 121102. ASTRAGALUS sp.

No. 2768. From Ulu Dag, 35 km. north of Bursa, September 8.

## 121103. ASTRAGALUS sp.

No. 1883. From 50 km. north of Malatya, July 17.

## 121104. ASTRAGALUS sp.

No. 3394. From 3 km. southwest of Ankara, June 25.

## 121105. ASTRAGALUS sp.

No. 3311. From Gaziantep, June 3.

## 121106. ASTRAGALUS sp.

No. 1633. From 20 km. south of Diyarbakir, July 9.

## 121107 to 121112. CICER spp. Fabaceae.

## 121107. CICER sp.

No. 1914. From 20 km. west of Diyarbakir, July 9.

## 121086 to 121290—Continued.

## 121108. CICER sp.

No. 1596. From 30 km. west of Diyarbakir, July 7.

## 121109. CICER sp.

No. 1791. From 10 km. southwest of Elaziz, July 14.

## 121110 to 121112. CICER ARIETINUM L. Chickpea.

121110. No. 1752. From 39 km. southeast of Elaziz, July 13.

121111. No. 1623. *Garbanzo*. From the Diyarbakir bazar, July 8.

121112. No. 3193. *Garbanzo*. From the Chankiri bazar, October 15.

## 121113. COLUTEA sp. Fabaceae.

No. 3416. From 3 km. northeast of Ankara, June 26. A shrub with large yellow flowers and papery pods.

## 121114 to 121119. CORONILLA spp. Fabaceae.

## 121114. CORONILLA VARIA L. Crownvetch.

No. 1802. From 42 km. southwest of Elaziz, July 14. A legume with leaves like the common vetch.

## 121115. CORONILLA sp.

No. 1944. From Birejik, July 22.

## 121116. CORONILLA sp.

No. 2491. From 66 km. south of Giresun, August 17.

## 121117. CORONILLA sp.

No. 2719. From Alma Dag, August 27.

## 121118. CORONILLA sp.

No. 772. From 2 km. north of Denizli, June 31.

## 121119. CORONILLA sp.

No. 797. From 25 km. north of Antalya, June 3.

## 121120. CYTISUS sp. Fabaceae.

No. 2766. From Ulu Dag, 35 km. south of Bursa, September 8.

## 121121. CYTISUS sp. Fabaceae.

No. 2812. A shrub from Yalova Kapli-jalari, September 11.

## 121122 to 121128. GENISTA spp. Fabaceae.

## 121122. GENISTA sp.

No. 2389. From 50 km. east of Trabzon, August 12.

## 121123. GENISTA sp.

No. 2430. From 12 km. east of Ordu, August 19.

## 121124. GENISTA sp.

No. 2555. From 9 km. east of Samsun, August 22.

## 121125. GENISTA sp.

No. 2696. A shrub with yellow flowers from 106 km. south of Samsun, August 25.

## 121126. GENISTA sp.

No. 2819. A spiny leafless shrub from Yalova Kapli-jalari, September 11.



## 121086 to 121290—Continued.

121127. *GENISTA* sp.  
No. 2744. A shrub from near Gemlik, September 6.
121128. *GENISTA* sp.  
No. 2821. A leafless shrub from Yalova Kaplijalari, September 11.
- 121129 to 121131. *HEDYSARUM* spp. Fabaceae.
121129. *HEDYSARUM* sp.  
No. 2001. From Ulukishla, July 25.
121130. *HEDYSARUM* sp.  
No. 2162. From 59 km. east of Sivas, August 6.
121131. *HEDYSARUM* sp.  
No. 3451. From 10 km. southeast of Ankara, June 28.
121132. *INDIGOFERA* sp. Fabaceae.  
No. 1130. From 75 km. northwest of Izmir, June 10.
- 121133 to 121135. *LATHYRUS* spp. Fabaceae. **Pea.**
121133. *LATHYRUS APHACA* L.  
No. 618. From Ephesus, May 24.
121134. *LATHYRUS ERECTUS* Lag.  
No. 804. From Bujak, June 3.
121135. *LATHYRUS* sp.  
No. 1106. From the mountains between Manisa and Izmir, June 11.
121136. *VICIA LATHYROIDES* L. Fabaceae. **Vetch.**  
No. 1108. From the mountains between Manisa and Izmir, June 11.
- 121137 to 121143. *LATHYRUS* spp. Fabaceae.
121137. *LATHYRUS ERECTUS* Lag.  
No. 1113. From 2 km. south of Kirkagach, June 11.
121138. *LATHYRUS ERECTUS* Lag.  
No. 1181. From 30 km. west of Balikesir, June 16.
121139. *LATHYRUS* sp.  
No. 1195. From 30 km. west of Balikesir, June 16.
121140. *LATHYRUS APHACA* L.  
No. 1342. From Adana, June 10.
121141. *LATHYRUS SATIVUS* L. **Bittervetch.**  
No. 1354. From Adana, June 10.
121142. *LATHYRUS* sp.  
No. 1461. From 30 km. southeast of Marash, July 2.
121143. *LATHYRUS* sp.  
No. 1603. From 20 km. east of Sive-rek, July 7.
121144. *VICIA ERVILIA* (L.) Willd. Fabaceae. **Vetch.**  
No. 1793. From 35 km. southwest of Elaziz, July 14.
121145. *LATHYRUS ERECTUS* Lag. Fabaceae.  
No. 1880. From 44 km. north of Malatya, July 17.

## 121086 to 121290—Continued.

- 121146 to 121148. *VICIA* spp. Fabaceae. **Vetch.**
121146. *VICIA PEREGRINA* L.  
No. 1940. From Birejik, July 22.
121147. *VICIA SERIOCARPA MICROPHYLLA* Boiss.  
No. 1949. From Birejik, July 22.
121148. *VICIA LATHYROIDES* L.  
No. 2058. From Alma Dag, 25 km. southeast of Ankara, August 1.
121149. *LATHYRUS APHACA* L. Fabaceae.  
No. 2494. From 8 km. southwest of Shebinkarahisar, August 18.
121150. *LATHYRUS* sp. Fabaceae.  
No. 2574. From 7 km. west of Terme, August 22.
121151. *VICIA HYBRIDA* L. Fabaceae. **Vetch.**  
No. 2587. From 8 km. west of Samsun, August 23.
- 121152 to 121154. *LATHYRUS GORGONI* Parl. Fabaceae.
121152. No. 3304. From 25 km. south of Gaziantep, June 1.
121153. No. 3305. From 10 km. west of Gaziantep, June 1.
121154. No. 3403. From 3 km. west of Ankara, June 25.
121155. *VICIA LATHYROIDES* L. Fabaceae. **Vetch.**  
No. 3423. From a dry rocky slope 3 km. northeast of Ankara, June 26.
121156. *PISUM ELATIUS* Bleb. Fabaceae. **Pea.**  
No. 644. From near Aydin, June 25. A wild pea.
- 121157 to 121160. *LATHYRUS* spp. Fabaceae. **Pea.**
121157. *LATHYRUS APHACA* L.  
[No number.] From 86 km. southeast of Susheri, August 7.
121158. *LATHYRUS* sp.  
No. 649. From near Söke, June 25.
121159. *LATHYRUS APHACA* L.  
No. 727. From a lake bottom 50 km. southeast of Mugla, May 28.
121160. *LATHYRUS GORGONI* Parl.  
No. 749. From 10 km. north of Tavas, May 30.
121161. *VICIA SATIVA* L. Fabaceae. **Common vetch.**  
No. 753. From 8 km. north of Tavas, May 30.
- 121162 to 121181. *LATHYRUS* spp. Fabaceae. **Pea.**
121162. *LATHYRUS SETIFOLIUS* L.  
No. 754. From 10 km. south of Denizli, May 30.
121163. *LATHYRUS GORGONI* Parl.  
No. 800. From 25 km. south of Burdur, June 3.

## 121086 to 121290—Continued.

## 121164. LATHYRUS APHACA L.

No. 1074. From 40 km. northwest of Izmir, June 10. A small pea found in a wheat field.

## 121165. LATHYRUS ANNUUS Hoejer.

No. 1095. From 2 km. south of Kir-kagach, June 11.

## 121166. LATHYRUS GORGONI Parl.

No. 1097. From 2 km. south of Kir-kagach, June 11.

## 121167. LATHYRUS CASSIUS Boiss.

No. 1439. From 37 km. north of Gaziantep, July 2.

## 121168. LATHYRUS sp.

No. 1472. From 37 km. north of Gaziantep, July 3.

## 121169. LATHYRUS CASSIUS Boiss.

No. 1478. From 30 km. southeast of Marash, July 3.

## 121170. LATHYRUS ANNUUS Hoejer.

No. 1480. From 30 km. southeast of Marash, July 3.

## 121171. LATHYRUS APHACA L.

No. 1609. From 30 km. west of Diyarbakir, July 7.

## 121172. LATHYRUS GORGONI Parl.

No. 1648. From 20 km. south of Diyarbakir, July 9.

## 121173. LATHYRUS ODORATUS L.

Sweet pea.

No. 1741. From 25 km. southeast of Elaziz, September 13. A form with large yellow flowers.

## 121174. LATHYRUS ERECTUS Lag.

No. 1750. From 40 km. southeast of Elaziz, July 13.

## 121175. LATHYRUS ERECTUS Lag.

No. 1769. From 30 km. southeast of Elaziz, July 13.

## 121176. LATHYRUS APHACA L.

No. 1792. From 35 km. southwest of Elaziz, July 14.

## 121177. LATHYRUS ERECTUS Lag.

No. 2061. From Alma Dag, 25 km. southeast of Ankara, August 1.

## 121178. LATHYRUS HIRSUTUS L.

No. 2113. From 106 km. east of Sivas, August 5.

## 121179. LATHYRUS ERECTUS Lag.

No. 2114. From 84 km. east of Sivas, August 5.

## 121180. LATHYRUS sp.

No. 2170. From 84 km. northeast of Sivas, August 6.

## 121181. LATHYRUS HIRSUTUS L.

No. 2391. From 60 km. east of Trabzon, August 17.

121182. VICIA SATIVA L. Fabaceae.  
Common vetch.

No. 2427. From 50 km. south of Giresun, August 17.

## 121086 to 121290—Continued.

## 121183. LATHYRUS sp.

No. 2510. From 30 km. east of Ordu, August 18.

## 121184. LATHYRUS GORGONI Parl.

No. 3454. From 30 km. southeast of Ankara on Alma Dag, June 28.

## 121185. LATHYRUS sp.

No. 2073. From Alma Dag, 25 km. southeast of Ankara, August 1.

## 121186 to 121199. LOTUS spp. Fabaceae.

## 121186. LOTUS sp.

No. 792. En route from Isparta to Antalya, June 3.

## 121187. LOTUS sp.

No. 1082. From the Bergama ruins, June 10.

## 121188. LOTUS sp.

No. 1319. From the hills near Mudanya, June 21.

## 121189. LOTUS sp.

No. 1353. From Adana, June 10.

## 121190. LOTUS sp.

No. 2089. An ornamental rock plant from Alma Dag, 25 km. southeast of Ankara, August 1.

## 121191. LOTUS sp.

No. 2390. From 50 km. east of Trabzon, August 12.

## 121192. LOTUS sp.

No. 2822. From Yalova Kaplijalari, August 11.

## 121193. LOTUS sp.

No. 3388. From 3 km. west of Ankara, June 25.

## 121194. LOTUS sp.

No. 1209. From 50 km. west of Balikesir, June 16.

## 121195. LOTUS sp.

No. 1882. From 18 km. north of Malatya, July 17.

## 121196. LOTUS sp.

No. 2104. From 106 km. east of Sivas, October 5.

## 121197. LOTUS sp.

No. 2454. From Alma Dag, 25 km. southeast of Ankara, August 1.

## 121198. LOTUS sp.

No. 2677. From 46 km. south of Tokat, August 28.

## 121199. LOTUS sp.

No. 3300. From 3 km. west of Ankara, June 25.

## 121200. LUPINUS sp. Fabaceae.

No. 2809. From Yalova Kaplijalari, September 11.

## 121201. LUPINUS sp.

No. 1069. From 60 km. northwest of Izmir, June 10.

121202 to 121205. MEDICAGO spp. Fabaceae.  
Medick.

## 121086 to 121290—Continued.

121202. *MEDICAGO RADIATA* L.

No. 1759. From 40 km. southeast of Elaziz, July 13.

121203. *MEDICAGO* sp.

No. 2306. From 40 km. north of Gemushane, August 10.

121204. *MEDICAGO SATIVA* L. Alfalfa.

No. 2634—A. From 15 km. from Amasya.

121205. *MEDICAGO* sp.

No. 1806. From 20 km. west of Diyarbekir, July 7.

121206. *MELILOTUS* sp. Fabaceae.

No. 1126. From the mountains between Manisa and Izmir, June 11.

121207. *MELILOTUS* sp. Fabaceae.

No. 3309. From 10 km. west of Gaziantep, June 1.

121208 to 121217. *ONOBRYCHIS* spp. Fabaceae.121208. *ONOBRYCHIS ORNATA* (Willd.) Desv.

No. 1662. From 20 km. east of Diyarbekir, July 10. An erect perennial over 6 inches high, native to Asia Minor.

121209. *ONOBRYCHIS AURANTIACA* Boiss.

No. 1663. From 20 km. east of Diyarbekir, July 10. A perennial with thick ascending stems about 18 inches long, native to Asia Minor.

121210. *ONOBRYCHIS ORNATA* (Willd.) Desv.

No. 3453. From 10 km. southeast of Ankara, June 28.

For previous introduction and description see 121208.

121211. *ONOBRYCHIS CAPUT-GALLI* (L.) Lam.

No. 625. From Ephesus, June 24.

121212. *ONOBRYCHIS AEQUIDENTATA* (Sibth. and Smith) D'Urv.

No. 751. From 16 km. south of Denizli, June 30. An annual with ascending or erect stems about a foot high, native to southern Europe.

121213. *ONOBRYCHIS* sp.

No. 1460. From 30 km. southeast of Marash, July 2.

121214. *ONOBRYCHIS* sp.

No. 1470. From 45 km. north of Gaziantep, July 3.

121215. *ONOBRYCHIS TOURNEFORTII* (Willd.) Desv.

No. 1906. From 45 km. north of Gaziantep, July 3. A hardy herbaceous perennial, native to Asia Minor.

For previous introduction see 72811.

121216. *ONOBRYCHIS* sp.

No. 1970. From Birejik, July 23.

121217. *ONOBRYCHIS TOURNEFORTII* (Willd.) Desv.

No. 1991. From Ulukishla, July 25.

For previous introduction and description see 121215.

## 121086 to 121290—Continued.

121218. *ONONIS* sp. Fabaceae.

No. 1296. From 40 km. east of Bursa, June 19.

121219. *ONOBRYCHIS CAPUT-GALLI* (L.) Lam. Fabaceae.

No. 1313. From 25 km. north of Bursa, June 20.

121220. *ONONIS* sp. Fabaceae.

No. 1315. From 25 km. north of Bursa, June 20.

121221. *ONONIS* sp. Fabaceae.

No. 1320. From the hills near Mudanya, June 21.

121222. *ONONIS* sp. Fabaceae.

No. 1933. From Birejik, July 22.

121223. *ORNITHOPUS COMPRESSUS* L. Fabaceae.

No. 695. From open pine forest east of Milas, May 27. A slender spreading annual with pinnate leaves and very small yellow flowers.

For previous introduction see 65028.

121224. *PSORALEA BITUMINOSA* L. Fabaceae. Scurf-pea.

No. 1075. From 50 km. northwest of Izmir, June 10.

For previous introduction see 88594.

121225 to 121229. *SECURIGERA SECURIDACA* (L.) Deg. and Doerfl. Fabaceae.

121225. No. 664. From 5 km. west of Tireh, June 25.

121226. No. 682. From 30 km. southwest of Izmir, June 25.

121227. No. 1112. From 2 km. south of Kirkagach, June 11.

121228. No. 1345. From Adana, June 10.

121229. No. 1456. From 30 km. southeast of Marash, July 2.

121230. *SOPHORA* sp. Fabaceae.

No. 817. From 25 km. southeast of Izmir, May 25.

121231. *THERMOPSIS* sp. Fabaceae.

No. 1061. From 3 km. east of Antalya, June 4.

121232 to 121250. *TRIFOLIUM* spp. Fabaceae. Clover.121232. *TRIFOLIUM* sp.

No. 1073. From 50 km. northwest of Izmir, June 10.

121233. *TRIFOLIUM* sp.

No. 1324. From Adana, June 19.

121234. *TRIFOLIUM* sp.

No. 1352. From Adana, June 19.

121235. *TRIFOLIUM PURPUREUM* Loisel.

No. 1475. From 37 km. north of Gaziantep, July 3.

121236. *TRIFOLIUM* sp.

No. 1479. From 25 km. northwest of Gaziantep, July 3.

## 121086 to 121290—Continued.

121237. *TRIFOLIUM* sp.

No. 1520. From 25 km. northwest of Urfa, July 5.

121238. *TRIFOLIUM* sp.

No. 1604. From 3 km. east of Siverek, July 7.

121239. *TRIFOLIUM* sp.

No. 1605. From 3 km. northeast of Siverek, July 7.

121240. *TRIFOLIUM* sp.

No. 1748. From 35 km. southeast of Elaziz, July 13.

121241. *TRIFOLIUM* sp.

No. 1803. From 35 km. southwest of Elaziz, July 14.

121242. *TRIFOLIUM* sp.

No. 1857. From 15 km. west of Malatya, July 16.

121243. *TRIFOLIUM* sp.

No. 1922. From Birejik, July 21.

121244. *TRIFOLIUM* sp.

No. 1943. From Birejik, July 22.

121245. *TRIFOLIUM* sp.

No. 1988. From Ulukishla, July 25.

121246. *TRIFOLIUM* sp.

No. 2021. From 45 km. north of Nigde, July 26.

121247. *TRIFOLIUM* sp.

No. 2116. From 84 km. east of Sivas, August 5.

121248. *TRIFOLIUM* sp.

No. 2210. From 60 km. southeast of Susheri, August 7.

121249. *TRIFOLIUM* sp.

No. 2615. From 20 km. southwest of Samsun, August 24.

121250. *TRIFOLIUM* sp.

No. 3400. From dry plains around Ankara, June 25.

121251 to 121262. *TRIGONELLA* spp. Fabaceae.121251 to 121253. *TRIGONELLA FOENUM-GRÆCUM* L. Fenugreek.

121251. No. 768. From about 4 km. north of Denizli, May 31.

121252. No. 1334. From Adana, June 19.

121253. No. 2125. From the Sivas bazar, August 5.

121254. *TRIGONELLA* sp.

No. 1518. From 25 km. northwest of Urfa, July 5.

121255. *TRIGONELLA* sp.

No. 1767. From 35 km. southeast of Elaziz, July 13.

121256. *TRIGONELLA* sp.

No. 1789. From 10 km. southeast of Elaziz, July 14.

121257. *TRIGONELLA* sp.

No. 1927. From 40 km. southwest of Elaziz, July 13.

## 121086 to 121290—Continued.

121258. *TRIGONELLA* sp.

No. 2565. From 51 km. east of Samsun, August 22.

121259. *TRIGONELLA* sp.

No. 2733. From Yalova Kaplıjalari, September 6.

121260. *TRIGONELLA* sp.

No. 2876. From 1 km. west of Yalova Kaplıjalari, September 12.

121261. *TRIGONELLA* sp.

No. 3411. A mixed sample, from dry gravelly soil 3 km. northeast of Ankara, June 26.

121262. *TRIGONELLA* sp.

No. 3417. From 3 km. northeast of Ankara, June 26.

121263 to 121276. *VICIA* spp. Fabaceae. Vetch.121263. *VICIA FABA* L. Broadbean.

No. 3068. From the Amasya bazar, October 6.

121264. *VICIA ERVILIA* (L.) Willd.

No. 3490-F. From Eskishehir, November 2.

For previous introduction see 107594.

121265. *VICIA ANGUSTIFOLIA* Grufberg.

No. 665. From near Söke, May 25.

121266. *VICIA* sp.

No. 1120. From the mountains between Manisa and Izmir, June 11.

121267. *VICIA SATIVA* L. Common vetch.

No. 1124. From the mountains between Manisa and Izmir, June 11.

121268. *VICIA HIRSUTA* (L.) S. F. Gray.

No. 1166. From 30 km. west of Balıkesir, June 16.

121269. *VICIA SATIVA* L. Common vetch.

No. 1188. From 30 km. west of Balıkesir, June 16.

121270. *VICIA* sp.

No. 1207. From 30 km. west of Balıkesir, June 16.

Nos. 121271 to 121275. From Adana, June 19.

121271. *VICIA ANGUSTIFOLIA* Grufberg.

No. 1327.

121272. *VICIA* sp.

No. 1330.

121273. *VICIA* sp.

No. 1335. *Dream flowers.*

121274. *VICIA LUTEA HIRTA* (Balb.) Loisel.

No. 1336.

121275. *VICIA ANGUSTIFOLIA* Grufberg.

No. 1344.

121276. *VICIA* sp.

No. 1876. From 44 km. north of Malatya, July 17.

## 121086 to 121290—Continued.

121277. *LATHYRUS APHACA* L. Fabaceae.  
Pea.

No. 1889. From 44 km. north of Malatya, July 17.

121278. *VICIA* sp. Fabaceae.

No. 1915. From 25 km. west of Diyarbakir, July 9.

121279. *VICIA SERRATIFOLIA INTEGRIFOLIA* Beck. Fabaceae.

No. 2204. From a wheat field, 86 km. southeast of Susheri, August 7.

121280. *LATHYRUS APHACA* L. Fabaceae.  
Pea.

No. 2204-A. From 86 km. southeast of Sivas, August 7.

121281 to 121283. *VICIA* spp. Fabaceae.  
Vetch.

121281. *VICIA TETRASPERMA* (L.) Moench.

No. 2576. From 7 km. west of Terme, August 22.

121282. *VICIA* sp.

No. 2942-A. From the Izmir bazar, September 22.

121283. *VICIA* sp.

No. 2727. From Yalova Kaplijalari, September 6.

121284. *LATHYRUS GORGONI* Parl. Fabaceae.

No. 2339. From 50 km. south of Trabzon, August 10.

121285. *VICIA ERVILIA* (L.) Willd. Fabaceae.  
Vetch.

No. 3422. A small vetch from a dry rocky slope 3 km. northeast of Ankara, June 26.

121286. *VICIA SERRATIFOLIA INTEGRIFOLIA* Beck. Fabaceae.  
Vetch.

No. 3490-E. From Eskishehir, November 2.

121287. *VICIA FABA* L. Fabaceae.  
Broadbean.

No. 3122. From the Inebolu bazar, October 13.

121288. *LATHYRUS OCHRUS* (L.) DC. Fabaceae.  
Pea.

No. 609. From the Izmir bazar, May 23.

121289. *VICIA* sp. Fabaceae.

No. 1247. From the Bursa bazar, June 18.

121290. *VICIA* sp. Fabaceae.

No. 2629. From 54 km. southwest of Samsun, August 24.

## 121291 to 121366.

From India. Seeds collected by Walter Koelz, Bureau of Plant Industry. Received February 1, 1937.

Unless otherwise mentioned, this material was all collected in the United Provinces in the autumn of 1936.

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## 121291 to 121366—Continued.

121291. *ABELMOSCHUS ESCULENTUS* (L.) Moench. Malvaceae. Okra.

No. 1850. *Bhindi*. From Lucknow, December 10. A long green native okra of good quality.

121292 to 121295. *ALLIUM CEPA* L. Liliaceae. Onion.

121292. No. 1838. *Peyaz*. From Lucknow, December 8. A native red onion.

121293. No. 1856. *Peyaz*. From Lucknow, December 11. A native flat red onion.

121294. No. 1880. *Peyaz*. From Benares, December 15. A native yellow onion.

121295. No. 1881. *Peyaz*. From Benares, December 15. A native white onion.

121296. *BETA VULGARIS* L. Chenopodiaceae. Common beet.

No. 1835. *Palag*. From Lucknow, December 8.

121297. *BETA VULGARIS* L. Chenopodiaceae. Common beet.

No. 1905. *Palag*. From Benares, December 16.

121298 to 121304. *BRASSICA* spp. Brassicaceae.

121298 to 121303. *BRASSICA OLERACEA BOTRYTIS* L. Cauliflower.

*Phulgobi*. From Lucknow, December 10 to 13.

121298. No. 1844. An early variety.

121299. No. 1845. A very early Patna variety.

121300. No. 1860. A short-stemmed, small-leaved, variety of uniform shape and size. Sown in August.

121301. No. 1864. A large late sort with a very large white head. Sown in September.

121302. No. 1873. The earliest native cauliflower; of good quality.

121303. No. 1875. A very early cauliflower, of good quality; planted here in June and July, and will, therefore, tolerate heat and rain.

121304. *BRASSICA OLERACEA CAPITATA* L. Cabbage.

No. 1859. *Gobi*. From Lucknow, December 11. A short-stemmed winter cabbage with round heads of 6 to 8 pounds weight.

121305. *CANAVALIA GLADIATA* (Jacq.) DC. Fabaceae. Swordbean.

No. 1904. From Benares, December 16. A vigorous vine giving an abundance of broad pods, 18 inches long, very good to eat when tender.

121306 and 121307. *CAPSICUM ANNUUM* L. Solanaceae. Common redpepper.

121306. No. 1866. *Mirch*. From Lucknow, December 12. A long mild redpepper.

121307. No. 1882. *Mirch*. From Benares, December 15. A large mild redpepper, used for pickles.

## 121291 to 121366—Continued.

121308. CASUARINA EQUISETIFOLIA Stickm.  
Casuarinaceae. **Horsetail-tree.**

No. 1824. From the Saharanpur Government Gardens, December 1.

For previous introduction see 67683.

121309 to 121314. CITRULLUS VULGARIS  
Schrud. Cucurbitaceae. **Watermelon.**

121309. No. 1858. *Delfasand* or *Tinda*.  
From Lucknow, December 11.

121310. No. 1799. *Tarbuza*. From Lahore, Punjab, November 27, but said to have come from Quetta. Fruit globose, pale to dark green, marked with darker green; flesh stringy like a pumpkin, but sweet and not tough.

121311. No. 1839. *Tarbuza*. From Lucknow, December 8. Originally from Shahjehanpur.

121312. No. 1840. From Lucknow, December 8. Originally from Farukhabad.

121313. No. 1877. *Tarbuza*. From Benares, December 15. An extra fine native melon.

121314. No. 1883. *Tarbuza*. From Benares, December 15. An extra good native melon.

121315. CLANTHUS DAMPIERI A. Cunn.  
Fabaceae.

No. 1878. From Benares, December 15. A half-trailing shrub with branches 2 to 4 feet long, white hairy throughout, with pinnate leaves and large crimson flowers in a drooping raceme. Native to Australia.

121316 to 121331. CUCUMIS spp. Cucurbitaceae.

121316 to 121320. CUCUMIS MELO L.  
**Muskmelon.**

121316. No. 1837. *Poot*. From Lucknow, December 8. A rainy season melon said to be 18 inches in diameter, splitting when ripe. Flavor not strong, but ripens after the hot season varieties are finished.

121317. No. 1843. *Kharbuza*. From Lucknow, December 8. A variety for which Lucknow is famous. A smooth yellow oval melon that ripens in the hottest season. The flavor is sweet, but unlike that of any American melon.

121318. No. 1854. *Kharbuza*. From Lucknow, December 11. A good local variety.

121319. No. 1855. *Kharbuza*. From Lucknow, December 11. A very sweet local variety.

121320. No. 1876. *Kharbuza*. From Benares, December 15. A Jampur variety.

121321 to 121331. CUCUMIS SATIVUS L.  
**Cucumber.**

Nos. 121321 to 121329. *Kakri*. From Lucknow, December 10 to 13.

121321. No. 1846. A winter form, 1 foot long.

121322. No. 1847. A special Lucknow sort, very tender and sweet.

121323. No. 1848. *Bareilly Kakri*. A very large cucumber grown at Bareilly.

## 121291 to 121366—Continued.

121324. No. 1849. *Balam Khiri*. Said to be 1 foot long and to endure the greatest heat.

121325. No. 1861. A long green cucumber, grown in the hot season.

121326. No. 1863. *Khiri*. A rainy season form.

121327. No. 1867. A round cucumber of good quality, grown in the rainy season.

121328. No. 1868. *Khiri*. An early winter variety.

121329. No. 1871. *Khari*. An early local variety of good quality.

121330. No. 1893. *Kakri*. From Benares, December 16. A native variety.

121331. No. 1894. *Kakri*. From Benares, December 16. A long green cucumber from Lucknow.

121332 to 121334. CUCURBITA MOSCHATA  
Duchesne. **Cushaw.**

Nos. 121332 and 121333. *Kaddu*. From Lucknow, December 8 and 13.

121332. No. 1836. Fruit oval, 18 inches long, deeply ribbed, green, spotted and blotched with buff.

121333. No. 1872. A round melon grown in the rainy hot season.

121334. No. 1898. *Kumsa*. From Benares, December 16. Grown in the hot season.

121335 to 121337. DAUCUS CAROTA L. Apiaceae. **Carrot.**

Nos. 121335 and 121336. *Gajas*, Lucknow, December 8.

121335. No. 1833. A native orange carrot.

121336. No. 1834. A native purple carrot, short, stubby, with thick, purple rind, not sweet, fairly tender.

121337. No. 1887. *Gajas*. From Benares, December 15. The native purple-red sort; stubby, tender, hardy, but not sweet.

121338 to 121340. DOLICHOS LABLAB L.  
Fabaceae. **Hyacinth-bean.**

*Sem*. From Benares, December 15. It occurs in many varieties and most are sold as green "string beans." They are tender but stringy, and have a stronger flavor than our green beans. They have the advantage of being heavy and long-season producers.

121338. No. 1888.

121339. No. 1889.

121340. No. 1890. A form with round pods.

121341 and 121342. LAGENARIA LEUCANTHA  
(Duchesne) Rusby. Cucurbitaceae. **Calabash gourd.**

From Benares, December 16.

121341. No. 1900. *Kaddu*. A round form.

121342. No. 1901. *Lauki*. A long form of particularly good quality.

## 121291 to 121366—Continued.

121343. *LUFFA ACUTANGULA* (L.) Roxb.  
Cucurbitaceae. Singwa towelgourd.

No. 1841. *Satfuta*. From Lucknow, December 8. A small variety that bears its fruits in clusters.

121344. *LUFFA CYLINDRICA* (L.) Roemer.  
Cucurbitaceae. Suakwa towelgourd.

No. 1895. *Nenua*. From Benares, December 16. A hot season vegetable.

121345. *LYCOPERSICON ESCULENTUM* Mill.  
Solanaceae. Tomato.

No. 1865. *Termater*. From Lucknow, December 12. A native variety.

121346. *MOMORDICA CHARANTIA* L. Cucurbitaceae. Balsam-pear.

No. 1902. *Karela*. From Benares, December 16. A particularly good kind.

121347. *NELUMBO NUCIFERA* Gaertn. Nymphaeaceae. Hindu lotus.

No. 1892. *Kamal*. From Benares, December 16. A mixture of native varieties.

121348. *OROXYLON INDICUM* (L.) Vent.  
Bignoniaceae. East Indian trumpetflower.

No. 1816. *Tsompaka*. From the Government Gardens, Saharanpur, November 30. A small tree with long flat pods; grows at 3,000 feet altitude in the Kangra Valley.

121349. *ORYZA SATIVA* L. Poaceae. Rice.

No. 1809. *Bansmat*. From Lahore, Punjab, November 29. The best rice grown here. Planted the last of summer and requires about 120 days to mature; yields from 1,600 to 2,000 pounds per acre.

121350. *ORYZA SATIVA* L. Poaceae. Rice.

No. 1815. *Sathra 278*. From Kala Shah Kaku, Punjab, November 29. A strain from the Government Rice Farm, maturing in 60 to 70 days and yielding about 2,400 pounds per acre. The grain is coarse and not valued as a table rice, but it will grow in nearly any kind of soil.

121351. *PHASEOLUS VULGARIS* L. Fabaceae.  
Common bean.

No. 1851. *Sem*. From Lucknow, December 10.

121352. *PISUM SATIVUM* L. Fabaceae. Pea.

No. 1891. From Benares, December 15.

121353 to 121362. *SOLANUM MELONGENA* L.  
Solanaceae. Eggplant.

Nos. 121353 to 121356. *Bengan*; collected at Lucknow, from December 8 to 13.

121353. No. 1842. A mixture of local varieties.

121354. No. 1862. A long green round fruit which weighs 4 to 5 pounds.

121355. No. 1870. An early purple fruit, 1 foot long.

121356. No. 1874. A round purple fruit, weighing 2 pounds.

Nos. 121357 to 121362. *Bengan*; from Benares, December 15 and 16.

121357. No. 1879. A purple variety, 1 foot long, with tender skin; quality good.

## 121291 to 121366—Continued.

121358. No. 1884. Fruit large, round, green, up to 5 pounds in weight; skin thin, seeds few, flavor excellent; bush 3½ feet high, and bears well.

121359. No. 1885. A large green fruit of fine quality. Said to be the same as No. 1884 (P. I. 121358).

121360. No. 1886. A round, deep-purple fruit, weight about 1 pound, quality good.

121361. No. 1896. A round white native variety.

121362. No. 1897. A long green native variety.

121363. *SPINACIA OLERACEA* L. Chenopodiaceae. Common spinach.

No. 1899. *Palag*. From Benares, December 16. A vigorous growing spinach which makes plants 2 feet across.

121364. *TAGETES* sp. Asteraceae. Marigold.

No. 1903. From Benares, December 16. An interesting quilled yellow form is seen here in the gardens, and this may be the form here represented.

121365. *VICIA FABA* L. Fabaceae. Broadbean.

No. 1852. *Bagla*. From Lucknow, December 10.

121366. *STIZOLOBIUM* sp. Fabaceae.

No. 1853. From Lucknow, December 10. A native bean.

121367 to 121369. *VITIS VINIFERA* L.  
Vitaceae. European grape.

From Austria. Plants presented by Prof. Andre Teleki, Vienna. Received February 23, 1937.

121367. *Ezerfo*.

121368. *Kiknyeli*.

121369. *Leányka*.

## 121370 to 121400.

From Turkey. Seeds and bulbs collected by H. L. Westover and F. L. Wellman. Received January 18, 1937.

Unless otherwise stated, this material was all collected in 1936 and was received as seeds.

121370. *NIGELLA SATIVA* L. Liliaceae.  
Black cummin.

No. 2897. *Chörikutu*. From the Chanak Kale bazar, September 18.

121371 to 121395. *ALLIUM* spp. Liliaceae.

121371. *ALLIUM* sp.

No. 3271. From the Adapazari bazar, October 20.

121372. *ALLIUM* sp.

No. 2031. From the Nigde bazar, July 27.

121373. *ALLIUM* sp.

No. 1557. From the Urfa bazar, July 6. Used for flavoring bread.

121374. *ALLIUM* sp.

No. 2544. *Cherogote*. From the Samsun bazar, August 2.

## 121370 to 121400—Continued.

121375. *ALLIUM* sp.

No. 3009. From the Kutahya bazar, September 28. Used for flavoring bread.

121376. *ALLIUM* sp.

No. 3132. *Cherogote*. From the Inebolu bazar, October 13. Used for flavoring bread.

121377. *ALLIUM* sp.

No. 538. From the Mugla bazar, May 28.

121378. *ALLIUM* sp.

No. 1431. Bulbs of a white-flowered allium from 31 km. north of Gaziantep, July 2.

121379. *ALLIUM* sp.

No. 1525. Bulbs from the mountains near Urfa, July 6.

121380. *ALLIUM* sp.

No. 1566. From 5 km. east of Sivek, July 7.

121381. *ALLIUM* sp.

No. 1571. Bulbs from 41 km. south-east of Diyarbekir, July 7.

121382. *ALLIUM* sp.

No. 1589. Bulbs from 54 km. north of Urfa, July 7.

121383. *ALLIUM* sp.

No. 1851. From 26 km. west of Malatya, July 16.

121384. *ALLIUM* sp.

No. 1927. From Birejik, July 21.

121385. *ALLIUM* sp.

No. 2691. From 46 km. south of Tokat, August 26.

121386. *ALLIUM* sp.

No. 2725. From Talas, August 29.

Nos. 121387 and 121388. From Yalova Kaplıcaları, September 11.

121387. *ALLIUM* sp.

No. 2827. Bulbs.

121388. *ALLIUM* sp.

No. 2827-A.

121389. *ALLIUM* sp.

No. 2872. From the sea beach 1 km. west of Yalova, September 12.

121390. *ALLIUM* sp.

No. 3406. Bulbs from the dry plain 4 km. southwest of Ankara, June 25.

Nos. 121391 to 121393. From a rocky cliff, 3 km. northeast of Ankara, June 26.

121391. *ALLIUM* sp.

No. 3408.

121392. *ALLIUM* sp.

No. 3408-A. Bulbs.

121393. *ALLIUM* sp.

No. 3413.

121394. *ALLIUM* sp.

No. 3473. Bulbs from 39 km. north of Kastamonu, October 13.

## 121370 to 121400—Continued.

121395. *ALLIUM* sp.

No. 3413-A. From 3 km. northeast of Ankara, June 26.

121396 to 121398. *BETA* spp. *Chenopodiaceae*.121396. *BETA VULGARIS* *CICLA* L. Chard.

No. 541. From the Mugla bazar, May 28.

121397. *BETA VULGARIS* L. Common beet.

No. 561. From the Isparta bazar, June 2.

121398. *BETA VULGARIS* L. Common beet.

No. 577. From the Antalya bazar, June 4.

121399. *LEPIDIUM* sp. *Brassicaceae*.

No. 3490-A. From Eskişehir, November 2.

121400. *PHASEOLUS VULGARIS* L. *Fabaceae*. Common bean.

No. 2146. From the Sivas bazar, August 5.

## 121401 to 121435.

From Paraguay. Seeds collected by W. A. Archer, Bureau of Plant Industry. Received January 27, 1937.

This material was all collected in 1936.

121401. *CAMPOMANESIA OBVERSA* (Miquel) Berg. *Myrtaceae*.

No. 4703. *Guabirama*. From Villa Rica, December 17. A shrub about 8 feet high; fruits round, about 2 cm. in diameter; skin green with minute pale-brown specks; pulp sweet, grapelike, with 5 seeds.

For previous introduction see 37064.

121402 to 121405. *CITRULLUS VULGARIS* Schrad. *Cucurbitaceae*. Watermelon.

Nos. 121402 and 121403. From Villa Encarnación, December 14.

121402. No. 4650. *Sandia amarilla*. Fruit with yellow flesh.

## 121403. No. 4651. A cultivated melon.

Nos. 121404 and 121405. From San Miguel Curuzú, 3 km. north of Villa Encarnación, December 14. Cultivated melons.

## 121404. No. 4659. 121405. No. 4660.

121406. *CITRUS* sp. *Rutaceae*.

No. 4704. *Apebo*. From the market at Villa Rica, December 17. Fruits 5 to 7 cm. in diameter, slightly flattened at the poles; skin fragile, puffy inside, bright orange. The pulp has the flavor of grapefruit, but looks like that of an orange. From the leaves of this plant is obtained the commercial "petit grain." Fruits are used locally for a bottled soft drink and for wine. The tree is large and occurs in a wild state in Paraguay.

121407 and 121408. *CUCUMIS MELO* L. *Cucurbitaceae*. Muskmelon.

121407. No. 4652. From the Villa Encarnación, December 14. A cultivated melon.

121408. No. 4698. From the Villa Rica, December 17. A cultivated melon.



## 121401 to 121435—Continued.

121409. *CUCURBITA MOSCHATA* Duchesne.  
Cucurbitaceae. Cushaw.

No. 4653. *Zapallo duro*. From the Villa Encarnación, December 14. Fruit flattened at the poles, about 6 inches in diameter. It keeps well if a portion of the stem is left on.

121410 and 121411. *CUCURBITA PEPO* L.  
Cucurbitaceae. Pumpkin.

121410. No. 4654. *Zapallo guachio*. From the Villa Encarnación, December 14. A cultivated pumpkin.

121411. No. 4701. *Zapallo duro*. From the market at Villa Rica, December 17. Fruit 7 to 10 by 4 to 5 cm. in size; rind whitish green, very hard; keeps from one year to the next.

121412. *EUGENIA* sp. Myrtaceae.

No. 4699. *Uvaíjá*. From the market at Villa Rica, December 17. A large shrub or small tree about 15 feet high. Fruits roundish, slightly flattened at the poles, calyx persistent, skin dark reddish purple. Flesh has the consistency of grape, slightly sweet; seeds green, 1 to 3 in a fruit. In general, the fruits look like large blueberries and are used to make a refreshing drink.

121413. *HIPPEASTRUM* sp. Amaryllidaceae.

No. 4661. From San Miguel Curuzú, 3 km. north of Villa Encarnación, December 14. Flowers said to be white.

121414. *LAGENARIA LEUCANTHA* (Duchesne) Rusby. Cucurbitaceae. Calabash gourd.

No. 4684. From Jatatú, 8 km. north of Villa Rica, December 16. Fruit spindle-shaped, used for maté containers.

121415. *PASPALUM NOTATUM* Fluegge. Poaceae. Bahia grass.

No. 4721. *Kasptipe* (means: horse grass). From Jardín Botánico, Santísima Trinidad, December 21. A perennial tropical American grass, good for forage and for erosion control.

For previous introduction see 118464.

121416 to 121421. *PHASEOLUS VULGARIS* L. Fabaceae. Common bean.

Nos. 121416 to 121419 were from Villa Encarnación, December 14.

121416. No. 4640. *Avilla de 6 meses*.

121417. No. 4643. *Avilla há*.

121418. No. 4645. *Soperín*. Produces the year round.

121419. No. 4647. *Poroto blanco arroz*.

121420. No. 4694. *Avilla*. From Villa Rica.

121421. No. 4697. *Poroto de manteca*. From the market at Villa Rica, December 17.

121422. *PISUM SATIVUM* L. Fabaceae. Pea.

No. 4648. *Arveja*. From Villa Encarnación, December 14.

121423. *RHEEDIA BRASILIENSIS* (Mart.) Planch. and Triana. Clusiaceae.

No. 4702. *Pacuri*. From the market at Villa Rica, December 17. A large tree with bright-yellow, round fruits 3 to 4 cm. in diameter, which contain 2 or 3 large seeds that nearly fill the cavity. The

## 121401 to 121435—Continued.

lemon-flavored pulp, which surrounds the seeds, is used to make a refreshing beverage.

For previous introduction see 41150.

121424. *RHYNCHOSIA HAGENBECKII* Harms. Fabaceae.

No. 4712. From the Jardín Botánico, Santísima Trinidad, December 21. A shrubby perennial with long racemes of many small yellow flowers. Native to Brazil.

121425. *SALACIA ELLIPTICA* (Mart.) G. Don. Hippocrateaceae.

No. 4714. From the Jardín Botánico, Santísima Trinidad, December 21. A semi-climbing evergreen shrub or small tree, with laurellike leaves and axillary clusters of small yellowish-green flowers, followed by edible fruits. Native to Brazil.

121426. *SORGHUM VULGARE* Pers. Poaceae. Sorghum.

No. 4767. *Sorgo perenne*. From San Lorenzo, December 24. A perennial lasting 10 years. Seed obtained in the Chaco and said to have come originally from Matto Grosso, Brazil.

121427. *STEVIA REBAUDIANA* Bertonl. Asteraceae.

No. 4773. *Kad-hee*. From Asuncion, December 24. The leaves contain a sweet glucoside used locally, on a small scale, as a sugar substitute for diabetics.

121428. *GALACTIA JUSSIEAANA* Kunth. Fabaceae.

No. 4713. From the Jardín Botánico, Santísima Trinidad, December 21. A woody climber with ternate leaves; the leaflets elliptic rounded, sticky on the upper surface and hairy beneath, and small pink flowers. Native to Venezuela.

For previous introduction see 108259.

121429. *VICIA FABA* L. Fabaceae. Broadbean.

No. 4642. *Haba*. From Villa Encarnación, December 14. The young fruit and dry seeds are eaten.

121430 to 121433. *VIGNA SINENSIS* (Torneo) Savi. Fabaceae. Cowpea.

Nos. 121430 to 121432. From Villa Encarnación, December 14.

121430. No. 4641. *Poroto todo el año*. A vine with curved pods 8 to 9 cm. long which are eaten green.

121431. No. 4644. *Cumandá*.

121432. No. 4646. *Poroto cuarenta*. Bears in 40 days after planting.

121433. No. 4696. A cultivated bean from the market at Villa Rica, December 17.

121434. *VITIS* sp. Vitaceae.

No. 4636. From Villa Encarnación, December 14. Cultivated for shade and ornament in many places. Fruits small, purple with dusty bloom, sweet but insipid, about 1 cm. in diameter with 1 to 3 seeds in each. The vine is a heavy bearer.

121435. *ZEA MAYS* L. Poaceae. Corn.

No. 4693. *Mafa dura*. From the market at Villa Rica, December 17. A cultivated corn.

**121436 to 121438. LYCOPERSICON ESCULENTUM Mill. Solanaceae. Tomato.**

From India. Seeds collected by Walter Koelz, Bureau of Plant Industry. Received February 15, 1937.

**121436.** No. 2115. From Calcutta, January 4, 1937. A red fruit, 3 inches across; possibly disease resistant.

**121437.** No. 1918. From Darjeeling, Bengal, December 22, 1936, at 7,000 feet altitude. Fruit red, globose, 2 inches in diameter.

**121438.** No. 1148. From Skardo, Baltistan Province, Kashmir, August 14, 1936, at 6,500 feet altitude. Fruit red, globose, 1½ to 2 inches in diameter.

**121439 to 121491.**

From Turkey. Seeds collected by H. L. Westover and F. L. Wellman, Bureau of Plant Industry. Received January 16, 1937.

The material was all collected in 1936.

**121439. AMYGDALUS sp. Amygdalaceae.**

No. 2258. From 50 km. east of Erzinjan, August 9. Seed from a wild tree.

**121440 to 121444. CORYLUS AVELLANA L. Betulaceae. Filbert.**

**121440.** No. 2511. From between Ordu and Giresun, August 19.

**121441.** No. 2384. Along the road between Trabzon and Rize, August 12.

**121442.** No. 2419. From a pile of drying filberts at Trabzon, August 14.

**121443.** No. 2923. From Giresun, August 20.

**121444.** No. 2550. From the Samsun bazar, August 21.

**121445. CEPHALARIA sp. Dipsacaceae.**

No. 2154. *Kangir*. From the Sivas bazar, August 5. Fruits eaten green or stewed.

**121446 to 121450. FRAGARIA spp. Rosaceae. Strawberry.**

**121446. FRAGARIA sp.**

No. 827. From the market at Izmir, June 8.

**121447. FRAGARIA VESCA L.**

No. 2307. A wild strawberry from 62 km. north of Gemushane, August 10.

**121448. FRAGARIA sp.**

No. 2476. From 49 km. south of Giresun, August 17.

**121449. FRAGARIA sp.**

No. 3314. From the Istanbul bazar, June 16. A common variety of excellent flavor.

**121450. FRAGARIA sp.**

No. 3327. From the Ankara bazar, June 20. A variety with white flesh.

**121451. MALUS SYLVESTRIS Mill. Malaceae. Apple.**

No. 3050. From the Amasya bazar, October 6.

**121452. MORUS ALBA L. Moraceae. White mulberry.**

No. 3046. From the Amasya bazar, October 6.

**121453 to 121491—Continued.**

**121453. MORUS NIGRA L. Moraceae. Black mulberry.**

No. 2503. From 30 km. northwest of Susheri, August 18. A delicious mulberry, very sour when green, but sweet and juicy when mature.

**121454 to 121486. PRUNUS spp. Amygdalaceae.**

**121454 to 121469. PRUNUS ARMENIACA L. Apricot.**

Nos. 121454 to 121457 were from the Elaziz bazar, July 11 to 13.

**121454.** No. 1680. Large, yellow-fleshed fruit.

**121455.** No. 1718. Medium-sized fruit of good quality with reddish skin.

**121456.** No. 1732. Medium-sized fruit of poor quality.

**121457.** No. 1808. Unusually large fruit but very poor quality.

**121458.** No. 1865. From the Malatya bazar, July 16. The famous "Malatya apricot" which has the highest sugar content and is the best for drying.

**121459.** No. 2452. From Develu Karahissan, July 27.

**121460.** No. 3331. From the Mugla bazar, June 30. Small fruits with yellow flesh.

**121461.** No. 3334. From the Antalya bazar, June 3. A yellow-fleshed apricot.

**121462.** No. 3336. From the Antalya bazar, June 3. A yellow-fleshed apricot.

**121463.** No. 3338. *Sugar money*. From a Mediterranean boat, June 4.

**121464.** No. 3339. From the Izmir bazar, June 8. A large sweet apricot.

Nos. 121465 to 121469 were received at Gaziantep, June 16, from M. N. Isely.

**121465.** No. 3362. A large pulpy, not juicy, freestone variety.

**121466.** No. 3363. A small sweet freestone variety.

**121467.** No. 3364. A large freestone variety.

**121468.** No. 3366. *Sweet*.

**121469.** No. 3367. *Sugar money*.

**121470. PRUNUS sp.**

No. 1806. From the Elaziz bazar July 14. A small red freestone plum of good quality.

**121471. PRUNUS sp.**

No. 1911. From the Malatya bazar, July 16. A large round yellow plum with crisp sweet flesh and tough skin.

**121472. PRUNUS sp.**

No. 2184. A wild plum from 50 km. southeast of Susheri, August 7.

**121473. PRUNUS sp.**

No. 2380. From the Trabzon bazar, August 11. A blue plum of medium size, and a freestone; somewhat tart when not completely ripe.

## 121439 to 121491—Continued.

## 121474. PRUNUS sp.

No. 2470. A wild plum from 99 km. south of Giresun, August 17.

## 121475. PRUNUS sp.

No. 2554. From 16 km. east of Sam-sun, August 22. A yellow wild plum of medium size and fairly good quality.

## 121476. PRUNUS sp.

No. 2609. From 38 km. west of Sam-sun, August 23. A small wild blue plum with good sharp flavor.

## 121477. PRUNUS sp.

No. 3100. From the Yozgat bazar, October 9. A late-fruited, oblong plum with pinkish tan skin.

## 121478. PRUNUS sp.

No. 3104. From the Ankara bazar, October 10. A purplish medium-sized, late plum with solid flesh of fair quality.

## 121479. PRUNUS sp.

No. 3340. A red plum from the Izmir bazar, June 8.

## 121480. PRUNUS sp.

No. 3341. From the Izmir bazar, June 8. A light-red plum with watery flesh, picked and eaten green in Turkey.

## 121481. PRUNUS sp.

No. 3378. A dark-red plum from the Bursa bazar, June 20.

## 121482. PRUNUS sp.

No. 3414. A wild plum from a dry rocky slope 3 km. northeast of Ankara, June 26.

## 121483. PRUNUS sp.

No. 3480. A round purple late plum from the Kastamonu bazar, October 14.

## 121484. PRUNUS sp.

No. 2469. From Giresun, August 16. A small-fruited evergreen tree with broad shining dark-green leaves; fruit eaten both fresh and dried.

## 121485. PRUNUS sp.

No. 2468. From Giresun, August 16. A large-fruited evergreen tree with broad, shining, dark-green leaves; fruit eaten both fresh and dried.

## 121486. PRUNUS sp.

No. 733. From the Mugla bazar, May 28. Fruit eaten green.

121487. PIMPINELLA ANISUM L. Apiaceae.  
Anise.

No. 1246. From the Bursa bazar, June 18.

## 121488. RUMEX sp. Polygonaceae.

No. 1758. From 25 km. southeast of Elaziz, July 13. So-called "spinak" used as a salad and cooked as greens.

## 121489. PYRUS sp. Malaceae.

No. 3472. A wild pear from near Inebolu, October 13.

121490 and 121491. SORBUS DOMESTICA L. Malaceae.  
Service tree.

For previous introduction see 62586.

## 121439 to 121491—Continued.

121490. No. 3481. *Oves*. From the Kastamonu bazar, October 14.

121491. No. 3075. From the Amasya bazar, October 7.

## 121492 to 121507.

From Paraguay. Collected by W. A. Archer, Bureau of Plant Industry. Received February 10, 1937.

Unless otherwise mentioned, the material was collected as seeds.

121492. PSEUDANANAS MACRODONTES (E. Morr.) Harms (*Ananas macrodontes* E. Morr.) Bromeliaceae.

No. 4907. *Abacacachy Tupi*. From the Jardín Botánica, Santísima Trinidad, January 5, 1937. A semiwild form which produces the year round. The fruits are used for making wine and vinegar.

121493. ARACHIS HYPOGAEA L. Fabaceae.  
Peanut.

No. 4881. A cultivated peanut from Tobatý, January 2, 1937.

121494. ARACHIS MARGINATA Gardn. Fabaceae.

No. 4758. From San Lorenzo, December 24, 1936.

For previous introduction and description see 119878.

121495. CITRULLUS VULGARIS Schrad. Cucurbitaceae.  
Watermelon.

No. 4878. From Caacupé, January 1, 1937. Fruit with yellow flesh.

121496. CUCUMIS MELO L. Cucurbitaceae.  
Muskmelon.

No. 4884. From Tobatý, January 2, 1937. Fruit oval, brown and yellow striped, about 2 inches long, very aromatic but insipid flavor.

121497. HIPPEASTRUM sp. Amaryllidaceae.

No. 4914. From near Tobatý, January 2, 1937. Said to be a native species. The long-tubed, fragrant flowers are white with two pink stripes on each segment; there are 4 to 6 flowers in each umbel.

121498. MIMOSA sp. Mimosaceae.

No. 4820. From the Arroyo Tobatý, near Tobatý, January 1, 1937. A shrub about 10 feet high, with rose-colored flowers.

121499 to 121502. NICOTIANA TABACUM L. Solanaceae.  
Common tobacco.

121499. No. 4880. *Carapé guazú*. From near Tobatý, January 2, 1937.

Nos. 121500 to 121502. Purchased from Banco Agrícola, Asunción, January 4, 1937, and are varieties distributed to farmers.

121500. No. 4915. *Chileno guazú*.

121501. No. 4916. *Carapé*.

121502. No. 4917. *Santa Elena*.

121503. PHASEOLUS LUNATUS L. Fabaceae.  
Lima bean.

No. 4874. From Caacupé, January 1, 1937.

## 121492 to 121507—Continued.

121504. *SOLANUM CHACOENSE* Bitter. Solanaceae. Nightshade.

No. 4909. Tubers from the Jardín Botánico, Santísima Trinidad, January 5, 1937.

For previous introduction see 47972.

121505. *VERBENA BONARIENSIS* L. Verbenaceae.

No. 4821. From the Arroyo Tobatý, near Tobatý, January 1, 1937. A stiff, erect shrub 1 to 3 feet high, with purple-blue flowers.

For previous introduction see 97712.

121506 and 121507. *ZEA MAYS* L. Poaceae. Corn.

121506. No. 4876. From Caacupé, January 1, 1937. Cultivated corn.

121507. No. 4882. *Mais blanco*. From Tobatý, January 3. Cultivated especially for flour.

## 121508 to 121517.

From India. Bulbs and tubers collected by Walter Koelz, Bureau of Plant Industry. Received February 25, 1937.

121508 to 121512. *ALLIUM SATIVUM* L. Liliaceae. Garlic.

Nos. 121508 and 121509. *Lassan*. Bulbs from Benares, United Provinces, December 16, 1936.

121508. No. 1911.

121509. No. 1912. This is the first time I have seen this single bulb garlic here.

121510. No. 1923. Bulbs from Darjeeling, Bengal, December 23, 1936.

Nos. 121511 and 121512. Bulbs from Calcutta, January 4, 1937.

121511. No. 2117. Said to have come from Singapore.

121512. No. 2119. A local variety.

121513 and 121514. *IPOMOEA BATATAS* (L.) Lam. Convolvulaceae. Sweetpotato.

*Shaker Kandi*. Tubers from Calcutta, January 7, 1937. The sugar content is much less than in our species, and by some is preferred on that account.

121513. No. 2142. 121514. No. 2143.

121515 to 121517. *SOLANUM TUBEROSUM* L. Solanaceae. Potato.

Nos. 121515 and 121516. Tubers of *Alu*, from Benares, United Provinces, December 16, 1936. White potatoes which may be stored all through the summer heat. Best seed comes from the mountains.

121515. No. 1909. 121516. No. 1910.

121517. No. 2141. Tubers of *Alu* from Calcutta, January 7, 1937. Grown nearby at Behar.

## 121518 to 121541.

From Uruguay and Argentina. Seeds collected by W. A. Archer, Bureau of Plant Industry. Received February 25, 1937.

121518 to 121521. *ARACHIS HYPOGAEA* L. Fabaceae. Peanut.

121518. No. 4952. From Real de San Carlos, 7 km. north of Puerto Colonia, Uruguay, January 17, 1937.

## 121518 to 121541—Continued.

121519 to 121521. Presented by the Ministerio de Agricultura, Buenos Aires, Argentina, January 22, 1937. All three strains are fairly pure selections.

121519. No. 5002. *Colorado*. From Río Cuarto, Córdoba.

121520. No. 5003. *Colorado*. From Santo Tomé, Santa Fé.

121521. No. 5004. *Acetoso* or *Mant blanco*. From Santo Tomé, Santa Fé. A white-skinned type, considered the most important for oil extraction.

121522 to 121541. *NICOTIANA TABACUM* L. Solanaceae. Common tobacco.

121522. No. 4971. From along the steep eroded river banks at Puerto-Colonia, Uruguay, January 19, 1937.

Nos. 121523 to 121541 were presented by the Ministerio de Agricultura, Buenos Aires, Argentina, January 22, 1937.

121523 and 121524. *Criollo Salteño*.

121523. No. 5006. 121524. No. 5007.

121525 and 121526. *Chileno Colorado Hoja*.

121525. No. 5008. 121526. No. 5009.

121527 and 121528. *Chileno colorado gigante Santa Cruz*.

121527. No. 5010. 121528. No. 5011.

121529. No. 5012. *Lampazo*.

121530 and 121531. *Hoja Parada*.

121530. No. 5013. 121531. No. 5014.

121532 to 121535. *Criollo Colorado*.

121532. No. 5015. 121534. No. 5017.

121533. No. 5016. 121535. No. 5018.

121536 and 121537. *Chileno Grande Colorado*.

121536. No. 5019. 121537. No. 5020.

121538 and 121539. *Chileno Grande amarillo*.

121538. No. 5021. 121539. No. 5022.

121540 and 121541. *Chileno correntino*.

121540. No. 5023. 121541. No. 5024.

121542 to 121555. *ORYZA SATIVA* L. Poaceae. Rice.

From India. Seeds collected by Walter Koelz, Bureau of Plant Industry. Received February 25, 1937.

A collection of rice from the Dacca Agricultural Farm, Dacca, Bengal, January 13, 1937.

121542. No. 2146. *Jhingasail*. A fine rice which, when transplanted in July, ripens in December. Said to have short awns and weak straw, hence liable to lodge; of superior quality and a good yielder.

121543. No. 2147. *Hatisail*. A fine, late, medium-yielding, scented, white rice; transplanted in July and August and ripening in December.

121544. No. 2148. An early rice of superior quality and a good yielder.

121545. No. 2149. *Latisail*. A small, coarse, heavy-yielding, medium-early rice with short straw; adapted to several types of soil.

## 121542 to 121555—Continued.

121546. No. 2150. *Chinsura*. A fine late medium-yielding scented white transplanted rice.
121547. No. 2151. *Dandkhant*. Described as a fine scented, late, medium-yielding, white, transplanted rice.
121548. No. 2152. *Bhasamaink*. A transplanted rice of medium quality and high yield.
121549. No. 2153. *Dudshar*. A transplanted rice of medium quality and high yield, ripening in about 170 days.
121550. No. 2154. *Black Kachari*. A coarse, heavy-yielding transplanted rice.
121551. No. 2155. *India sail* (Aman type). A medium-late, good yielding, transplanted rice.
121552. No. 2156. *Kalai Aman*. A transplanted rice of which there are many forms that grow in the lowlands where the floods raise the water to a depth of 8 feet or more.

Nos. 121553 to 121555 are Aus types, sown on upland and watered well. The life period of this group ranged from about 90 to 125 days.

121553. No. 2157. An early scented rice, suited to rich light soils.
121554. No. 2160. *Dhātral*. A coarse, very heavy-yielding, highland, red rice.
121555. No. 2162. *Kumari*. A medium fine rice of good quality, and a heavy yielder; a broadcast, highland type.
121556. *AGONANDRA BRASILIENSIS* Benth. and Hook. f. Opiliaceae.

From Brazil. Seeds collected by Mr. Barlow at Maranhão, and presented through G. S. Jamieson, Bureau of Chemistry and Engineering. Received February 26, 1937.

A small tree with pendulous branches, thin elliptical leaves, and racemes of inconspicuous flowers. The drupaceous fruits, over an inch long, enclose seeds rich in oil. This oil, however, does not yet have any known use. Native to tropical Brazil.

## 121557 to 121577.

From Morocco. Plants presented by H. Brayard, Directeur, Service de l'Agriculture, Station Experimentale de Marrakech. Received February 27, 1937.

- 121557 to 121559. *MALUS SYLVESTRIS* Mill. Malaceae. Apple.
121557. *Delice d'Avril*.
121558. *Dubusson*.
121559. *Reinette Descadre*.
- 121560 to 121577. *PRUNUS* spp. Amygdalaceae.
- 121560 to 121568. *PRUNUS ARMENIACA* L. Apricot.
121560. *Amor Leuch*.
121561. *Bedri*.
121562. *Blanc*.
121563. *Jacques*.
121564. *Nouveau de Versailles*.
121565. *Pourret*.
121566. *Saint Ambroise*.
121567. *Souvenir de Roberteau*.

## 121557 to 121577—Continued.

121568. *Triomphe de Brussières*.
- 121569 and 121570. *PRUNUS AVIUM* L. Sweet cherry.
121569. *Bigarreau Abel*.
121570. *Marmotte*.
- 121571 to 121574. *PRUNUS DOMESTICA* L. Common plum.
121571. *Bleu de Belgique*.
121572. *Early Laxton*.
121573. *Georges Lafèvre*.
121574. *Madeleine Nomblot*.
121575. *PRUNUS INSITITIA* L. *Mirabelle precoce*.
- 121576 and 121577. *PRUNUS DOMESTICA* L. Common plum.
121576. *Royale*.
121577. *Saint Jean*.

## 121578 to 121649.

From India. Seeds collected by Walter Koelz, Bureau of Plant Industry. Received February 15, 1937.

This material was collected in the summer and autumn of 1936, unless otherwise mentioned.

- 121578 and 121579. *ALLIUM CEPA* L. Liliaceae. Onion.
- Pujaz*. From Calcutta, January 3 and 4.
121578. No. 2106. A native red onion.
121579. No. 2111. Originally from Bombay.
- 121580 to 121582. *BRASSICA* spp. Brassicaceae.
- 121580 and 121581. *BRASSICA CAMPESTRIS* L. Rutabaga.
121580. No. 1913. *Phulgabi*. From Benares, United Provinces, December 16. An early native variety which will tolerate great heat.
121581. No. 1940. *Raisag*. From Darjeeling, Bengal, December 24, at 7,000 feet altitude. Grown in India as a potherb. The leaves, about 2 feet long, are tender and resemble chard in appearance.
121582. *BRASSICA* sp.
- No. 2109. *Raisag*. From Calcutta, January 3. May be the same as that from Darjeeling under the same name.
- 121583 to 121588. *CAPSICUM ANNUUM* L. Solanaceae. Common redpepper.
121583. No. 1955. From Sukua, Bengal, December 23. Plants 4 to 5 feet high, found in rain forest; fruits red, very pungent.
121584. No. 1907. *Mirch*. From Benares, United Provinces, December 16. Fruit elongated, three-fourths of an inch by 3 inches and hot, turning almost black then red.
121585. No. 1927. From Darjeeling, Bengal, December 23, at 7,000 feet altitude. Fruit red, pointed, 3 inches long, 1 inch across at base; some types sweet except for strong seeds, others with pungent flesh.

## 121578 to 121649—Continued.

121586. No. 2077. *Mirch*. From Calcutta, January 1. Fruit 3 to 4 inches long by  $1\frac{1}{2}$  to 2 inches wide, moderately hot.
121587. No. 2078. *Mirch*. From Calcutta, January 1. Fruit red,  $2\frac{1}{2}$  inches to 3 inches long by three-fourths to 1 inch wide; pungent.
121588. No. 2110. *Mirch*. From Calcutta, January 4. A large red wild pepper.
- 121589 to 121592. *CITRULLUS VULGARIS* Schrad. Cucurbitaceae. Watermelon.  
Nos. 121589 and 121590. *Matira*. From Calcutta, January 1.
121589. No. 2082. 121590. No. 2083.
121591. No. 2084. *Tarbutz Gulenda*. From Calcutta, January 1. From the market.
121592. No. 2113. *Tarbutz Amta*. From Calcutta, January 4.
121593. *CORYLUS FEROX* Wall. Betulaceae. Hazelnut.  
No. 1966. From Darjeeling, December 25; said to have come from Yatung (Sikkim), at 13,000 feet altitude.  
For previous introduction see 93190.
- 121594 to 121601. *CUCUMIS SATIVUS* L. Cucurbitaceae. Cucumber.  
121594. No. 2072. *Kakri*. From Sili-guri, Bengal, December 28.  
Nos. 121595 to 121597. From Calcutta, January 2.
121595. No. 2095. *Khira*. A small black fruit.
121596. No. 2096. *Khira*. A large cucumber.
121597. No. 2097. *Kakri*. Possibly the long snaky form that is eaten when very small and is then a fine salad vegetable.
121598. No. 2112. *Patna Kakri*. From Calcutta, January 4.
121599. No. 1939. *Kankra*. From Darjeeling, Bengal, December 24, at 7,000 feet altitude. Fruit 2 feet long and weighing 6 to 7 pounds, tender, few-seeded, and of fine flavor. Appears to grow only in the mountains and is said to be of Sikkimese origin.
121600. No. 2116. *Khira*. From Calcutta, January 4.
121601. No. 2098. From Calcutta, January 2.
- 121602 to 121604. *CUCURBITA MAXIMA* Duchesne. Cucurbitaceae. Squash.  
From Darjeeling, Bengal, December 22 to 24, at 7,000 feet altitude.
121602. No. 1916. Fruit elongate, 2 feet long with widely spaced ribs; gray-green blotched with orange.
121603. No. 1917. Fruit pale green blotched with paler green, 20 inches long and ribbed.
121604. No. 1932. From the bazar.
- 121605 to 121612. *CUCURBITA MOSCHATA* Duchesne. Cucurbitaceae. Cushaw.  
Nos. 121605 to 121607. From Darjeeling, Bengal, December 2, at 7,000 feet altitude.

## 121578 to 121649—Continued.

121605. No. 1934. From the market; fruit said to be huge.
121606. No. 1914. Fruit 18 inches in diameter, ribs conspicuous, buff with a bloom, half flattened.
121607. No. 1915. Fruit buff with bloom, oval; 18 inches long and irregularly ribbed.
121608. No. 2073. *Kadu*. From Sevok, Bengal, December 29.  
Nos. 121609 to 121611. From Calcutta, January 3.
121609. No. 2104. *Kadu*. Fruit brown, oval.
121610. No. 2105. *Kadu*. Fruit round, flattened, brown.
121611. No. 2114. *Lalkadu*. A red pumpkin.
121612. No. 1933. From Darjeeling, Bengal, December 24. From the bazar; fruit said to be large.
121613. *DOLICHOS LABLAB* L. Fabaceae. Hyacinth-bean.  
No. 2079. *Sem*. From Calcutta, January 1. Used as green pods, mostly.
121614. *LACTUCA DUBIAYA* C. B. Clarke. Cichoriaceae.  
No. 2002. From Darjeeling, December 25, but said to have come from Sikkim at 3,000 feet altitude.
- 121615 to 121617. *LUFFA* spp. Cucurbitaceae.  
121615. *LUFFA ACUTANGULA* (L.) Roxb. Singkwa towelgourd.  
No. 2102. *Tori*. From Calcutta, January 3. Used as a vegetable when young.
- 121616 and 121617. *LUFFA CYLINDRICA* (L.) Roemer. Suakwa towelgourd.
121618. No. 1947. From Darjeeling, Bengal, at 2,000 feet altitude, December 24. A wild annual with spongy fruits 6 by 3 inches.
121617. No. 2103. *Tori*. From Calcutta, January 3. Esteemed as a vegetable when young.
121618. *MELOTHRIA* sp. Cucurbitaceae.  
No. 1938. From the Rangit River, Darjeeling District, Bengal, at 2,000 feet altitude. An annual with small globose brown-red fruits.
121619. *MELOTHRIA* sp. Cucurbitaceae.  
No. 1943. From the Rangit River, Darjeeling District, Bengal, at 2,000 feet altitude. An annual with small globose, madder-red fruits.
121620. *MELOTHRIA* sp. Cucurbitaceae.  
No. 2075. From Sili-guri, Bengal, December 30. An annual with pealike globose red fruits.
- 121621 to 121624. *PHASEOLUS VULGARIS* L. Fabaceae. Common bean.  
Nos. 121621 to 121623. From Darjeeling, Bengal, at 7,000 feet altitude, December 23 and 24.
121621. No. 1924.
121622. No. 1935. Bought in the market.
121623. No. 1944. Used as green and also as dried beans.

## 121578 to 121649—Continued.

121624. No. 2099. From Calcutta, January 3. Used chiefly as green beans.

121625. *PYRUS* sp. Malaceae.

No. 1789. *Shegal*. From Kangra, Kangra, Punjab, November 22, at 2,500 feet altitude. A vigorous tree attaining a diameter of 12 to 18 inches. The flowers are usually white, but sometimes pink. An ornamental tree, but used chiefly as a stock for pears in warm regions.

121626. *RHEUM ACUMINATUM* Hook. f. and Thoms. Polygonaceae. Rhubarb.

No. 2012. Obtained at Darjeeling, December 25; said to have come from 14,000 feet altitude in Tibet.

For previous introduction see 114652.

121627. *RHEUM NOBILE* Hook. f. and Thoms. Polygonaceae. Rhubarb.

No. 2011. Obtained at Darjeeling, December 25; said to have come from a high altitude in Tibet. A handsome herbaceous plant with a stem 3 to 4 feet high and as thick as the wrist at the base. It is found in the inner ranges of the Sikkim Himalayas at altitudes between 13,000 and 15,000 feet. The root resembles that of the common rhubarb, but is spongy and inert. The acid stems are eaten both boiled and raw, and the dried leaves afford a substitute for tobacco.

For previous introduction see 115985.

121628. *RIBES GRIFFITHII* Hook. f. and Thoms. Grossulariaceae.

No. 2000. From Darjeeling, Bengal, December 25; said to have come from a nearby locality at 9,000 feet altitude.

121629 to 121635. *RUBUS* spp. Rosaceae.

121629. *RUBUS ALPESTRIS* Blume.

No. 2029. Obtained at Darjeeling, Bengal, December 25; said to have come from a nearby locality at 9,000 feet altitude.

121630. *RUBUS ELLIPTICUS* J. E. Smith. Yellow Himalayan raspberry.

No. 2027. Obtained at Darjeeling, December 25; grows at 7,000 feet altitude; fruit edible.

121631. *RUBUS LINEATUS* Reinw.

No. 1925. From Darjeeling, Bengal, December 23, at 8,500 feet altitude. A stout shrub 10 feet high, with palmate leaves and small red fruits.

For previous introduction see 115006.

121632. *RUBUS NIVUS* Thunb.

No. 2028. Obtained at Darjeeling, Bengal, December 25; said to have come from 12,000 feet altitude in Sikkim.

For previous introduction see 115012.

121633. *RUBUS* sp.

No. 1989. From Darjeeling, Bengal, December 25, at 7,000 feet altitude. A stout climbing shrub with long cordate leaves.

121634. *RUBUS* sp.

No. 1942. From Tiger Hill, Darjeeling District, Bengal, December 23, at 9,000 feet altitude. A climbing shrub 12 feet high with trifoliate leaves and small red fruits.

## 121578 to 121649—Continued.

121635. *RUBUS* sp.

No. 1945. From Tiger Hill, Darjeeling District, Bengal, at 8,000 feet altitude, December 23. An attractive shrub 6 feet high, with large maplelike leaves and red fruits.

121636. *SOJA MAX* (L.) Piper. Fabaceae. Soybean.

No. 1936. From Darjeeling, Bengal, at 7,000 feet altitude, December 23.

121637 to 121646. *SOLANUM MELONGENA* L. Solanaceae. Eggplant.

From Calcutta, January 1 to 3.

121637. No. 2081. Fruit long, purple.

121638. No. 2087. *Aushey*. A late variety.

121639. No. 2088. *Singa*. A variety with long fruits.

121640. No. 2089. *Bengan Makra*.

121641. No. 2090. *Bengan Kuli*. A prolific variety.

121642. No. 2091. *Bengan Sufed*. A large white variety.

121643. No. 2092. *Bengan Mukaskeshi*. A large sweet variety.

121644. No. 2093. *Bengan Baramusi*. An everbearing variety.

121645. No. 2094. *Bengan*. A mixed sample.

121646. No. 2101. *Bengan*. A round purple variety.

121647. *STIZOLOBIUM* sp. Fabaceae.

No. 2107. From Calcutta, January 5. Used as green beans.

121648. *TITHONIA DIVERSIFOLIA* (Hemsl.) A. Gray. Asteraceae.

121649. *VIGNA CYLINDRICA* (Stickm.) Skeels. Catjang.

No. 2080. From Calcutta, January 1. Used as green beans.

121650 to 121659. *PRUNUS* spp. Amygdalaceae.

From the United States Plant Introduction Garden, Chico, Calif. Seedlings grown at the garden; numbered in March 1937.

121650 to 121657. *PRUNUS ARMENIACA* L. Apricot.

Nos. 121650 to 121653 were grown from P. I. No. 82672.

121650. Row 74, tree no. 40.

121651. Row 74, tree no. 42.

121652. Row 74, tree no. 44.

121653. Row 74, tree no. 46.

Nos. 121654 to 121657 were grown from P. I. No. 82677.

121654. Row 74, tree no. 27.

121655. Row 74, tree no. 28.

121656. Row 74, tree no. 33.

121657. Row 74, tree no. 36.

121658 and 121659. *PRUNUS CERASUS* L. Sour cherry.

Grown from P. I. No. 82678.

## 121650 to 121659—Continued.

121658. Row 70, tree no. 34.

121659. Row 74, tree no. 35.

## 121660 and 121661.

From the Union of Soviet Socialist Republics. Seeds presented by the Director, Botanical Institute, Tiflis, Georgia. Received February 20, 1937.

121660. *CYCLAMEN* sp. Primulaceae.

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

121661. *HEDERA COLCHICA* Koch. Araliaceae. Colchis ivy.

A high-climbing vine with the young growth covered by golden-yellow scales, broadly cordate, almost entire, very large, bright-green leaves of firm texture, and small umbels of greenish-yellow flowers in paniculate clusters, followed by black fruits. Native to the Caucasus region.

For previous introduction see 115641.

121662 to 121667. *LYCOPERSICON ESCULENTUM* Mill. Solanaceae. Tomato.

From Canada. Seeds presented by T. F. Ritchie, Chief-Assistant, Dominion Horticulturist, Central Experimental Farm, Ottawa. Received March 2, 1937.

121662. *Abel*. 121665. *Globonnie*.121663. *Alacritiy*. 121666. *Herald*.121664. *Bestal*. 121667. *Pink*.121668 to 121775. *PRUNUS ARMENIACA* L. Amygdalaceae. Apricot.

From Kashmir, India. Seeds collected by Walter Koelz, Bureau of Plant Industry. Received March 2, 1937.

Nos. 121668 to 121745. Collected in Skardo, Baltistan Province, August 16 and 17, 1936, at 6,000 feet altitude.

121668. No. 1166. *Hangol*. Fruit golden yellow, 1 3/4 inches in diameter, sweet and firm; one of the best grown there.121669. No. 1167. *Blochuli*. Fruit yellow, 1 1/4 inches in diameter; ripens in the fall, of fair quality.121670. No. 1168. *Kapyuka*. Fruit almond-shaped, 1 1/2 inches high, yellow with traces of a red cheek; quality fair.121671. No. 1169. *Badam Chuli*. Fruit sweet, yellow, 1 1/2 inches in diameter.121672. No. 1170. *Shaganda*. Fruit round; flesh salmon colored, firm, fairly sweet.121673. No. 1171. *Kustarpa*. Fruit golden yellow, sweet, almond-shaped; flesh firm.121674. No. 1173. *Karpo Shagunda*. Fruit yellow with pale-red cheek; flesh white, sweet; for eating fresh.121675. No. 1174. *Margholand*. Fruit 2 1/2 inches in diameter, somewhat flattened, yellow with pale-red cheek. Flesh yellow; said to be excellent when eaten fresh.121676. No. 1175. *Bagdus*. Fruit 2 inches in diameter; flesh firm, sweet, yellow.121677. No. 1176. *Kakas*. Fruit somewhat flattened, yellow with red cheek, sweet; seed usually split.

## 121668 to 121775—Continued.

121678. No. 1177. *Badam Chuli*. Fruit yellow with red cheek, fairly sweet; seed often split in fruit.121679. No. 1178. *Wapuli*. Fruit golden yellow, red cheeked; flesh very sweet, firm; one of the best for drying.121680. No. 1178-A. *Wapuli*. Fruit golden yellow with red cheek; flesh very sweet, firm.121681. No. 1179. *Odomas*. Fruit yellow with purple red cheek, very sweet, one of the best.121682. No. 1180. *Ribu Chuli*. Fruit round, golden yellow with red cheek; flesh firm and good.121683. No. 1181. *Marposhagunda*. Fruit round, 2 inches in diameter, golden yellow with red cheek; sweet, firm.121684. No. 1182. *Karpoblo*. Fruit pale yellow with white flesh; seed sweet.121685. No. 1183. *Blo*. Fruit yellow with red cheek, 1 1/2 inches in diameter.121686. No. 1184. *Oston*. Fruit almond-shaped, green with pale cheek; flesh white; a late variety.121687. No. 1185. *Ribu Chuli*. Fruit round, yellow firm.121688. No. 1186. *Starin*. Fruit round, golden yellow, firm, sweet, midseason.121689. No. 1187. *Shogun*. Fruit said to be early.121690. No. 1188. *Gurdalu Chuli*. An early variety.121691. No. 1189. *Sobkur*. An early variety.121692. No. 1190. *Azguak*. Fruit very large, seed bitter; said to be good.121693. No. 1191. *Kachha Chuli*. An early variety.121694. No. 1192. *Yakkar Chuli*. An early variety.121695. No. 1193. *Khustar*. An early variety.121696. No. 1194. *Ribu Chuli*. Fruit round, golden yellow with red cheek; flesh firm and good, like No. 1180 (P. I. 121682).121697. No. 1195. *Kardaksha*. An early variety.121698. No. 1196. *Apu*. An early sweet variety.121699. No. 1197. *Wapuli*. An early variety.121700. No. 1198. *Jimbata*. An early variety.121701. No. 1199. *Arghonfa*. An early variety.121702. No. 1200. *Halman*. A variety of No. 1272 (P. I. 121758). One of the types used for drying.121703. No. 1201. *Margholam*. Fruit pale yellow, 2 inches in diameter; not used for drying, eaten fresh.121704. No. 1202. *Khohalman*. Like the well-known *Halman*, but with bitter seeds.121705. No. 1203. *Muldung*. An early variety.



## 121668 to 121775—Continued.

121706. No. 1204. *Khablo*. An early variety, said to have bitter seeds.
121707. No. 1205. *Shara Karpo*. An early variety.
121708. No. 1206. *Margholam*. One of the best varieties.
121709. No. 1207. *Lumur*. Fruits very poor; cultivated for the kernels.
121710. No. 1208. (No name.) An early variety with sweet seeds.
121711. No. 1210. *Yakkar*. An early variety.
121712. No. 1211. *Makpura*. An early variety.
121713. No. 1213. *Dosopa*. No two trees of this variety have exactly the same sort of fruit.
121714. No. 1214. *Khoban*. An early variety.
121715. No. 1215. *Sharakopo*. Said to be very good.
121716. No. 1216. *Ribu Khustar*. An early variety.
121717. No. 1217. *Khustar*. An early variety.
121718. No. 1218. *Yakkar*. Said to be like No. 1210 (P. I. 121711), but with bitter seeds.
121719. No. 1219. *Khustarchakhanda*. An early variety.
121720. No. 1220. *Rambyun Margholam*. An early variety.
121721. No. 1221. *Stalarumi*. An early variety.
121722. No. 1222. *Omachkpa*. An early variety.
121723. No. 1223. *Karia Margholam*. An early variety with bitter seeds.
121724. No. 1224. *Ribu Wapali*. An early variety.
121725. No. 1225. *Badam Chuli*. An earlier sort of *Badam Chuli* than No. 1177 (P. I. 121678).
121726. No. 1226. *Karpo Chuli*. A good variety to be eaten fresh.
121727. No. 1227. *Khothalman*. A bitter-seeded form of the standard variety *Halman*.
121728. No. 1228. *Yakkir*. An early variety.
121729. No. 1229. *Dosopa*. An early variety.
121730. No. 1230. (No name.)
121731. No. 1231. *Blomargholam*. Fruit yellow with pink cheek. A late variety.
121732. No. 1232. *Blo*. Fruit round, deep yellow,  $1\frac{1}{2}$  inches in diameter, and sweet.
121733. No. 1233. Said to be a good early variety.
121734. No. 1245. *Galbat*. Fruit golden yellow, 2 inches in diameter, slightly compressed; used fresh.
121735. No. 1246. *Kakas*. An early variety.
121736. No. 1247. *Biru*. Said to be one of the best.

## 121668 to 121775—Continued.

121737. No. 1248. *Chuli Karpo*. Fruit oval, 2 inches in diameter, yellow with a faint cheek, sweet and one of the best to be eaten fresh.
121738. No. 1249. *Arghon*.
121739. No. 1250. *Karing Karpo*. Fruit not seen, but name indicates white flesh.
121740. No. 1251. *Miting*. An early variety.
121741. No. 1254. *Hagulapa*. An early variety.
121742. No. 1255. *Stonkhoban*. Fruit quince-shaped, 2 inches in diameter, yellow, firm, good.
121743. No. 1256. *Shakanda*. Fruit  $1\frac{1}{2}$  inches in diameter, golden yellow with a red cheek, sweet; used as dried fruit.
121744. No. 1257. *Kappuk*. Fruit  $1\frac{1}{2}$  inches in diameter, golden yellow with trace of cheek color; flesh firm and good.
121745. No. 1258. *Karpo Shaganda*. Fruit pale yellow, compressed and 2 inches high; slightly bitter, not sweet.
- Nos. 121746 to 121760 were collected at Shigar, Baltistan Province, from August 18 to 20, 1936, at 6,500 feet altitude.
121746. No. 1259. *Marshronpa*. Fruit  $1\frac{1}{2}$  inches in diameter, golden yellow with red cheek; flesh firm and sweet.
121747. No. 1261. *Astakhai*. Fruit 2 inches in diameter, yellow with faint pink cheek; flesh watery, not dried, but good for eating fresh.
121748. No. 1262. *Ba*. Fruit golden yellow with red cheek; flesh firm and sweet.
121749. No. 1263. *Siabaz*. Fruit  $1\frac{1}{2}$  inches in diameter, golden yellow with red base; flesh sweet and not too dry.
121750. No. 1264. *Hangor*. Fruit orange color, 2 inches in diameter; flesh firm and sweet.
121751. No. 1265. *Jan*. Fruit  $1\frac{1}{2}$  inches in diameter, golden yellow, used fresh.
121752. No. 1266. *Ghulabi Chuli*. Fruit  $1\frac{1}{2}$  inches in diameter, orange with red cheek, sweet, used fresh only.
121753. No. 1267. *Bek*. Fruit 2 inches in diameter, compressed; flesh yellow, watery, bitter, and never used dried.
121754. No. 1268. *Khaban*. Fruit  $1\frac{1}{2}$  inches in diameter, orange, with firm sweet flesh.
121755. No. 1269. *Gurdalu*. Fruit kidney-shaped, 2 inches in diameter, bright yellow with pink cheek; used fresh.
121756. No. 1270. *Pacha Kalwa*. Fruit flattened,  $1\frac{1}{2}$  inches wide, golden yellow; used fresh.
121757. No. 1271. *Karpo Shaganda*. Fruit pale yellow with red cheek; flesh of fine texture with delicate flavor.
121758. No. 1272. *Halman*. Fruit 2 inches in diameter, orange with red cheek; flesh sweet and firm; one of the best.
121759. No. 1273. *Sonkaban*. Fruit 2 inches in diameter, quince-shaped, golden yellow with red base.
121760. No. 1274. Fruit 2 inches in diameter, white with red cheek; flesh sweet, not firm.

## 121668 to 121775—Continued.

121761. No. 1373. From Kampuk, Baltistan Province, at 9,000 feet altitude, September 8, 1936. Said to have edible seed. From a colder climate than the seeds collected in Shardo and Shigar (P. I. 121668 to 121760).

Nos. 121762 to 121769. Collected at Shigar, Baltistan Province, August 20, 1936, at 6,500 feet altitude.

121762. No. 1275. *Ghon*. Fruit 2 inches in diameter, golden yellow, eaten fresh.

121763. No. 1276. *Atik*. Fruit elliptical, 1½ inches high, golden yellow with red cheek; flesh sweet, used fresh.

121764. No. 1277. *Dut*. Fruit ripens in the fall; flowers said to be pink.

121765. No. 1278. *Biru*. Fruit 1 inch in diameter, orange with red cheek; flesh firm and sweet.

121766. No. 1279. *Minn*. Fruit top-shaped, 2 inches high, orange colored flesh good to eat fresh.

121767. No. 1288. Fruit 2 inches in diameter, orange colored with sweet firm flesh.

121768. No. 1294. *Andiar*. An early variety.

121769. No. 1295.

Nos. 121770 to 121772 were collected in the region around Kapalu, Baltistan Province, between 6,000 and 7,000 feet altitude, August 26, 1936.

121770. No. 1315. Fruit 1½ inches in diameter, quince-shaped, yellow with trace of red cheek; flesh sweet and firm.

121771. No. 1315-A. Fruit 1½ inches in diameter, globose, yellow with trace of pink cheek; flesh sweet and firm. No Baltistan apricots have the woody veins that characterize many of the imported varieties grown in the Himalayas.

121772. No. 1317. *Chull*. Fruit 2 inches in diameter, globose, golden yellow with red cheek; flesh firm, but not very sweet.

Nos. 121773 and 121774 were collected at Kampuk, Baltistan Province, at 9,000 feet altitude, September 9, 1936.

121773. No. 1371. *Chull*. Said to have sweet seeds.

121774. No. 1372. *Chull*. Said to have sweet seeds.

121775. No. 1172. *Biru*. From Skardo, Baltistan Province, August 26, 1936. Fruit 1½ inches in diameter, yellow and very sweet.

121776. *PISTACIA VERA* L. *Anacardiaceae*. *Pistachio*.

From the United States Plant Introduction Garden, Chico, Calif. Seedlings grown at the garden; numbered in March 1937.

Row 11, Tree no. 20, Orchard "O." A seedling of P. I. 86372.

121777 to 121783. *ARACHIS* spp. *Fabaceae*. *Peanut*.

From South America. Material collected by W. A. Archer, Bureau of Plant Industry. Numbered in March 1937.

## 121777 to 121783—Continued.

121777. *ARACHIS GLABRATA* Benth. *Fabaceae*.

No. 3990-A. Plants from Campo Grande, Matto Grosso, Brazil, September 9, 1936. Found in rich black earth in the streets of the town. A dwarf perennial with a glabrous ascending stem, oblong-elliptic leaflets about one-half inch long, and small yellow flowers. Native to Brazil.

For previous introduction of seeds, see 118457.

121778. *ARACHIS* sp. *Fabaceae*.

No. 3965. Roots from Campo Grande, eastern Matto Grosso, September 2, 1936. From the streets of the town.

121779. *ARACHIS MARGINATA* Gardn.

No. 4429. Plants from the Posto Zootecnico, Tupacretan, Rio Grande do Sul, Brazil, November 11, 1936.

121780. *ARACHIS MARGINATA* Gardn.

No. 4439. Plants from along the road 12 km. north of Santa Anna, Rio Grande do Sul, Brazil, November 13, 1936. Common in sandy soil.

121781. *ARACHIS* sp.

No. 4624. Plants from along the road between Posados and Candelaria, Misiones, Argentina, December 10, 1936. Found in hard red earth, often in stony soil; in cultivated ground the plants are larger. They produce numerous underground rhizomes.

121782. *ARACHIS* sp.

No. 4664. *Mandubi*. From the streets of Villa Rica, Paraguay, December 16, 1936.

121783. *ARACHIS* sp.

No. 4851. Along the road between Caacupé and Tobatá, Paraguay, January 2, 1937. Found in white sandy soil.

## 121784 to 121798.

From the Union of Soviet Socialist Republics. Seeds presented by B. A. Vakar, Cytological Laboratory, Siberian Agricultural Institute, Omsk. Received March 3, 1937.

121784 to 121793. *AGROPYRON* spp. *Poaceae*.

121784. *AGROPYRON TRICHOPOHORUM* (Link) Richt.

No. 149.

For previous introduction see 116253.

121785. *AGROPYRON* sp.

No. 2. Received as "altaicum," for which a place of publication has not been found.

121786 and 121787. *AGROPYRON CRISTATUM* (L.) Gaertn. Crested wheatgrass.

121786. No. 245. 121787. No. 3.

121788. *AGROPYRON ELONGATUM* (Host) Beauv.

No. 564.

121789 and 121790. *AGROPYRON INTERMEDIUM* (Host) Beauv.

121789. 121790. No. 7.

121791. *AGROPYRON* sp.

No. 16.

## 121784 to 121798—Continued.

121792. *AGROPYRON* sp.

No. 513.

121793. *AGROPYRON* sp.

No. 8.

121794 to 121798. *TRITICUM* spp. Poaceae.  
Wheat.121794. *TRITICUM SPELTA* × *AGROPYRON*  
GLAUCUM.121795. *TRITICUM DICOCCUM FARRUM* ×  
*AGROPYRON* GLAUCUM.121796. *TRITICUM HORDEIFORME* × *AGRO*  
*PYRON* GLAUCUM.121797. *TRITICUM DURUM* × *AGROPYRON*  
GLAUCUM.121798. *TRITICUM AESTIVUM FERRUGINEUM*  
× *AGROPYRON* GLAUCUM.121799. *FRAGARIA CHILOENSIS* (L.) Du-  
chesne. Rosaceae.

Chiloe strawberry.

From Chile. Seeds presented through the  
American consul at Valparaiso. Received  
March 8, 1937.Wild strawberries from the island of Juan  
Fernandez.

For previous introduction see 62679.

## 121800 to 121819.

From India. Material collected by Walter  
Koelz, Bureau of Plant Industry. Received  
February 27, 1937.This material was collected in 1936 and,  
unless otherwise stated, was received as  
seeds.121800. *IRIS* sp. Iridaceae.No. 1794. Root from Shalimar, Bagh,  
Kashmir, November 25, 1936. Said to be  
a tall wild species.121801 to 121812. *ORYZA SATIVA* L. Poa-  
ceae. Rice.Nos. 121801 to 121805 were from the  
Kulu District, Punjab Province.121801. No. 1548. *Jhatu*. From Jagat-  
suk, October 22, at 6,000 feet altitude.  
A coarse red rice.121802. No. 1637. *Jhatu*. From Samsi,  
November 2. A good red, irrigated  
rice with low heat requirements.121803. No. 1638. *Mangoi*. From Samsi,  
November 2. A white irrigated rice  
with low heat requirements.121804. No. 1639. *Jatr*. From Samsi,  
November 22. A white rice growing  
on dry ground.121805. No. 1672. *Bansmatti*. From  
Buntar, November 14. A fine-grained  
white wet rice. Said to be a local  
development of the first class *bans-*  
*matti* from Dehra Dun.Nos. 121806 to 121810 were obtained  
from the Director of Agriculture, Kash-  
tore, Kashmir Province.121806. No. 1687. *Paddy Moshkabudji*.  
(K. D. 15.)121807. No. 1688. *Paddy Lolansan*.  
(K. W. 48.)121808. No. 1689. *Paddy Badzag*. (K.  
A. 78B.)

## 121800 to 121819—Continued.

121809. No. 1690. *Paddy Shirmal*. (K.  
S. 17.)121810. No. 1691. *Paddy Babar*. Se-  
lection No. 19.Nos. 121811 and 121812 were from  
Lag. Kulu District, Punjab Province,  
at 6,000 feet altitude.121811. No. 1747. *Kala Mori*. Novem-  
ber 8. A dry grown rice of low heat  
requirement.121812. No. 1748. *Mota Golgol*. No-  
vember 15. A type of rice with low  
heat requirement, broadcast on dry  
soil.121813 to 121818. *TRITICUM AESTIVUM* L.  
Poaceae. Common wheat.Nos. 121813 to 121815 were from Leh,  
Ladak District, Kashmir Province, Sep-  
tember 15 and 17, at 10,500 feet altitude.121813. No. 1407. *Dromar*. A bearded,  
red, spring wheat.121814. No. 1408. *Droral*. A spring  
wheat.121815. No. 1409. *Drochen*. A good  
strain of spring wheat.121816. No. 1442. *Drokar*. From Miru,  
Ladak District, at 14,000 feet altitude,  
September 25, 1936. A strain of white  
spring wheat grown near the cultiva-  
tion limit.Nos. 121817 and 121818 were from  
Kolung, Lahul District, at 12,000 feet  
altitude, October 10, 1936.121817. No. 1556. *Drokar*. A bearded  
white spring wheat.121818. No. 1557. *Dromar*. A bearded  
red spring wheat.121819. *ZEA MAYS* L. Poaceae. Corn.No. 1750. *Chelli*. From Kulu, Kulu  
District, Punjab Province, November 16,  
1936, at 4,000 feet altitude. Native corn  
of the Kulu Valley. A monsoon crop.121820. *PYRUS COMMUNIS* L. Malaceae.  
Common pear.From Pennsylvania. Scions presented by the  
Pennsylvania State College, State College.  
Received March 5, 1937.

Scions of a blight-resistant pear.

121821. *MANGIFERA INDICA* L. Anacar-  
diaceae. Mango.From the United States Plant Introduction  
Garden, Coconut Grove, Fla. Seedlings  
of P. I. 11645. Numbered March 10, 1937.Tree 4, Row 1, Avocado Circle. The par-  
ent of 121821 is in turn a seedling of P. I.  
11645, a mango introduced from Cochín China  
under the name *Mangifera cambodiana*, later  
re-identified as *Mangifera indica*.121822. *ERICA FERVIDA* L. Bolus. Erica-  
ceae. Heather.From England. Seeds presented by Sir Lio-  
nel de Rothschild, London. Received  
March 15, 1937.An erect heath up to 2 feet high, with small  
linear acute leaves and small, intensely red  
flowers about one fourth of an inch long.  
Native to Cape of Good Hope Province, South  
Africa.

**121823. DACTYLIS GLOMERATA L. Poaceae. Orchard grass.**

From Sweden. Seeds presented by the Swedish Seed Co., Svalöf, through Dr. Hernfrid Witte, Director, the Swedish State Seed Testing Station, Stockholm. Received March 9, 1937.

**121824. BETULA CYLINDROSTACHYA Wall. Betulaceae. Birch.**

From India. Seeds presented by the Range Officer, Takdah, Darjeeling District, North Bengal, at the request of Walter Koelz, Bureau of Plant Industry. Received March 10, 1937.

A Himalayan birch, 50 to 60 feet high, which grows at altitudes of 5,000 to 10,000 feet along the northeastern border of India. The young branches are bright reddish brown and the ovate, acuminate leaves, dull dark green above and bright green beneath, are  $2\frac{1}{2}$  to 5 inches long. The wood is red, hard, and heavy and seasons well.

For previous introduction see 60640.

**121825 to 121998.**

From India. Seed collected by Walter Koelz, Bureau of Plant Industry. Received February 18, 1937.

This material was all collected in 1936.

**121825. ABELMOSCHUS ESCULENTUS (L.) Moench. Malvaceae. Okra.**

No. 1695. *Hara Blindi*. Presented by the Director of Agriculture, Kashmir Province. A variety which grows 8 feet high, with pods 7 to 9 inches long.

**121826 to 121837. ALLIUM spp. Liliaceae.**

**121826 to 121831. ALLIUM CEPA L. Onion.**

121826. No. 1331. *Tsong*. From Kapalu, Baltistan, Kashmir, August 26. A white, thin-skinned globe onion.

121827. No. 1370. *Tsong*. From Kampuk, Baltistan, Kashmir, September 9, at 9,000 feet altitude. A white thin-skinned globe onion of mild flavor, which is not injured by freezing.

121828. No. 1430. *Tsong*. From Leh, Ladak, Kashmir, September 16, at 10,500 feet altitude. A red onion.

121829. No. 1668. *Piyaz*. From Kulu, Kulu, Punjab, November 14, at 4,000 feet altitude. A mild red globe onion that is very pleasant to eat until mid-June, when it becomes strong; poor keeper.

121830. No. 1353. From Biokdang, Baltistan, Kashmir, at 9,500 feet altitude, September 3. An onion with fine round leaves 1 foot high, growing in clumps on a dry slope.

121831. No. 1413. Purchased at Leh, Ladak, Kashmir, September 16; originally from Yarkand. A strong onion, used to flavor soups.

**121832. ALLIUM sp.**

No. 1438. Purchased near Leh, Ladak, Kashmir, September 17, from a Yarkandi. An edible onion near Yarkand.

**121833. ALLIUM sp.**

No. 1545. *Tsong*. From Kolung, Lahul, Punjab, August 16 at 11,500 feet altitude. An almost leafless species with

**121825 to 121998—Continued.**

an inflated flower stalk and small head of white flowers. Bulb small, foliage used for flavoring.

**121834. ALLIUM sp.**

No. 1612. *Kotze*. From Pukar, Lahul, Punjab, in August, at 12,000 feet altitude. An onion with fine, rounded leaves and rose-purple flowers of possible ornamental use.

**121835. ALLIUM sp.**

No. 1729. Presented by the Director of Agriculture of Kashmir.

**121836. ALLIUM sp.**

No. 1613. *Ritsong*. From Kolung, Lahul, Punjab, in August. An onion with flat leaves 5 mm. wide and large heads of rose-purple flowers. Used for flavoring, also as an ornamental.

**121837. ALLIUM THOMSONI Baker.**

No. 1356. From Sdongpa, Baltistan, Kashmir, at 15,000 feet altitude, September 4. A Himalayan allium up to 2 feet high, with 4 to 5 fleshy linear leaves sheathing the lower third of a stout scape which bears a head, about an inch in diameter, of rose-purple flowers. Found growing in clumps on a dry slope.

**121838. BETA VULGARIS L. Brassicaceae. Common beet.**

No. 2100. *Palag*. From Calcutta, January 3. A potheb.

**121839 to 121854. BRASSICA spp. Brassicaceae.**

**121839 and 121840. BRASSICA CAMPESTRIS L. Rutabaga.**

121839. No. 1535. *Samson*. From Koti, Kulu, Punjab, October 27. A variety planted for its oil-bearing seeds. The tough pungent roots are dried and used as food.

121840. No. 1700. *Zanundoz*. Presented by the Director of Agriculture, Kashmir. A large form.

**121841 and 121842. BRASSICA OLERACEA GONGYLODES L. Kohlrabi.**

Presented by the Director of Agriculture, Kashmir.

121841. No. 1699. A native variety with a very large white root.

121842. No. 1704. *Gandgobi*. A good purple variety.

**121843 to 121847. BRASSICA RAPA L. Turnip.**

121843. No. 1237. *Mulu*. From Skardo, Baltistan, Kashmir, August 16.

121844. No. 1304. *Mulu*. From Kapalu, Baltistan, Kashmir, August 25, a white, top-shaped root with purple top.

121845. No. 1398. *Nyungma*. From Leh, Ladak, Kashmir, at 10,500 feet altitude, September 16. A white turnip from Baltistan.

121846. No. 1401. From Leh, Ladak, Kashmir, at 10,500 feet altitude. An early purple variety.

121847. No. 1707. *Japanese Shogin*. From the Director of Agriculture,

## 121825 to 121998—Continued.

Kashmir. A large white winter variety with tender edible tops.

Nos. 121848 to 121852 were from Leh, Ladak, Kashmir, at 10,500 feet altitude, September 16 and 17.

121848. *BRASSICA* sp.

No. 1414. *Tram.* A good potherb.

121849. *BRASSICA CAMPESTRIS* L.  
Rutabaga.

No. 1420. *Yarkandi Salat.* Originally from Yarkand. A bushy annual whose leaves are picked and used as a potherb.

121850. *BRASSICA* sp.

No. 1421. *Yarkandi Salat.* Like No. 1420 (P. I. 121849), but from plants matured at Leh.

121851. *BRASSICA CAMPESTRIS* L.  
Rutabaga.

No. 1436. *Salat.* An interesting potherb that grows after the fashion of Swiss chard.

121852. *BRASSICA* sp.

No. 1441. *Yarkandi Tram.* A good potherb.

121853. *BRASSICA* sp.

No. 1621. *Tramyung.* From Kolung, Lahul, Punjab, at 12,000 feet altitude, in October. A large top-shaped, orange-yellow root.

121854. *BRASSICA* sp.

No. 1696. *Karm Sag.* Presented by the Director of Agriculture, Kashmir. An excellent potherb which grows like brussels sprouts, without the sprouts. The leaves are picked and new ones formed as the plant continues to grow taller.

121855 to 121859. *CAPSICUM ANNUM* L.  
Solanaceae. Common redpepper.

121855. No. 1336. *Nirma.* From Surmo, Baltistan, Kashmir, at 6,000 feet altitude, August 28. A very pungent fruit, 1 inch across at base and 2 inches long.

121856. No. 1697. *Mirch.* Presented by the Director of Agriculture, Kashmir. A native variety, long and very hot.

121857. No. 1706. *Cayenne Red.* Presented by the Director of Agriculture, Kashmir. A variety which produces well and is a good color.

121858. No. 1773. *Mirch.* From Kulu, Punjab, at 4,500 feet altitude, November 12. A red pungent variety with fruits 2 to 3 inches long.

121859. No. 1787. *Pipli.* From Mandi, Mandi, Punjab, November 21. Fruit red, 1½ inches long, and considered one of the most pungent varieties when grown in Mandi; planted in Kulu, it is said to lose much of this quality.

Nos. 121860 to 121911 were collected in Baltistan Province, Kashmir, from August 16 to 26.

121860 to 121876. *CITRULLUS VULGARIS* Schrad. Cucurbitaceae. Watermelon.

Nos. 121860 to 121863. *Bwar.* From Skardo, at 6,500 feet altitude, August 16.

## 121825 to 121998—Continued.

121860. No. 1142. Fruit globose, up to 10 inches in diameter, medium green, finely veined with darker green; rind very hard; flesh with no large air spaces, but with fine air spaces that give a crisp, firm, very agreeable character; flesh yellow and sweet, but very seedy.

121861. No. 1152. Fruit 11 inches long, pale green, finely netted with darker green; flesh pink, creamy with a delicate flavor; seeds large, otherwise a good novelty.

121862. No. 1162. Fruit globose, 1 foot in diameter, pale green with heavy blotched stripes of darker green; flesh red.

121863. No. 1163. Fruit globose, 11 inches in diameter, medium green mottled and faintly ribbed with darker green; rind thick; flesh coarse, red and sweet.

121864. No. 1164. *Bwar.* From Keris, at 6,500 feet altitude. Fruit globose, 1 foot in diameter, pale green veined with darker green; flesh yellow, sweet and very seedy.

121865 and 121866. *Bwar.* From Dagoni at 6,000 feet altitude. Fruit glabrous, 6 inches in diameter, green with blotched stripes of darker green; flesh white and insipid.

121865. No. 1305.

121866. No. 1305-A.

Nos. 121867 to 121869. *Bwar.* From Kapalu, at 6,000 feet altitude, August 26.

121867. No. 1308. Fruit globose, 6 inches in diameter, light green with blotched stripes of darker green; flesh white, faintly sweet, firm and crisp.

121868. No. 1313. Fruit globose, 6 inches in diameter, pale green with traces of fine veining; flesh white, crisp, fair.

121869. No. 1314. Fruit globose, 6 inches in diameter, dark green, unmarked; flesh red, insipid.

121870. No. 1339. *Bwar.* From Surmo at 6,000 feet altitude. Fruit globose, 10 inches in diameter, dark green, faintly blotched with paler green. Flesh red and sweet.

121871. No. 1341. Like 1339 (P. I. 121870) in appearance and quality, but with black seeds.

Nos. 121872 and 121873 were from Kapalu at 6,000 feet altitude.

121872. No. 1343. *Bwar.* A variety with red flesh.

121873. No. 1332. *Usse Bwar*; "mulberry watermelon."

Nos. 121874 and 121875 were from Leh, Ladak, September 16 and 17, at 10,500 feet altitude.

121874. No. 1419. Fruit globose, 10 inches in diameter, pale green, netted and striped with darker green; flesh red, low in sugar content.

121875. No. 1424. Fruit not seen.

121876. No. 1439. *Bwar.* From Kapalu, August 27 at 6,000 feet altitude.

## 121825 to 121998—Continued.

121877 to 121909. *CUCUMIS* spp. Cucurbitaceae.

121877 to 121905. *CUCUMIS* MELO L.  
Muskmelon.

121877. No. 1323. *Ghon*. From the Raja's garden in Kapalu at 6,000 feet altitude. Flesh white, coarse, and sweet; said to be from Yarkandi seed.

Nos. 121878 to 121888 were from Skardo at 6,500 feet altitude.

121878. No. 1137. *Ber Ghon*. Fruits oval, 16 to 18 inches long, smooth with orange stripes and broken markings of dark green; flesh orange, but sometimes pale yellow; ripens early.

121879. No. 1138. *Ghon*. Fruit globose, 8 to 10 inches in diameter, smooth, unribbed, orange, marked with broken stripes and blotches of green; flesh thick, orange, sweet and pleasant.

121880. No. 1139. *Bwar*. Fruit globose to 10 inches in diameter, smooth, orange with more or less raised blotches of green; flesh thick, firm, and fragrant; no air space in cavity.

121881. No. 1145. Fruit oval up to 1 foot long, smooth, unribbed, pale yellow with lines of green; flesh thick, pale yellow, very sweet and agreeable; said to keep well; a casaba type.

121882. No. 1149. *Ston Ghon*. Fruit oval, elongate, pale yellow, usually unmarked; flesh orange, a bit fibrous, but fragrant and well flavored.

121883. No. 1150. *Naktrak*. Fruit subglobose, dark green, 1 foot long, heavily netted; flesh thick, orange with very good flavor; Persian melon type.

121884. No. 1151. Fruit oval, 1 foot long, blotched dark-green and orange, with traces of heavy veining; flesh orange, very good.

121885. No. 1157. Fruit oval, 1 foot long, furrowed, yellow; flesh green; casaba type, said to keep well.

121886. No. 1159. *Sarda*. Fruit very large, 18 inches long, heavily ribbed, smooth, green, mottled with orange.

121887. No. 1160. *Ston Ghon*. Fruit oval, 1 foot long, smooth but slightly furrowed, yellow; flesh green, not highly scented but sweet.

121888. No. 1161. *Shesgnun*. Fruit elongate, 1 foot long, faintly netted, green mottled with orange; flesh half green, half orange, very good.

121889. No. 1240. *Ghon*. From Sarafanga. Fruit 6 inches in diameter, slightly flattened, netted green and orange; flesh salmon or green, sweet.

121890. No. 1292. *Ghon*. From Shigar. Fruit elongate, 1 foot long, smooth, yellow; flesh white and sweet.

121891. No. 1293. *Ghon*. From Shigar. Fruit 8 inches in diameter, glabrous, faintly veined, mottled

## 121825 to 121998—Continued.

orange and green; flesh orange, sweet, no cavity.

Nos. 121892 to 121898 were from Kapalu, August 26 and 27 at 6,000 feet altitude. *Ghon*.

121892. No. 1307. Fruit globose, 3 inches in diameter, yellow, smooth, solid; flesh yellow to orange, sweet, not musky like the melons of southern India.

121893. No. 1309. Fruit elongate, 1 foot long, smooth, netted, orange yellow, faintly ribbed; flesh white, sweet, not musky.

121894. No. 1321. Fruit round, 4 inches in diameter, mottled orange and green, faintly netted; flesh thin, yellow, sweet.

121895. No. 1322. Fruit elliptical, 10 inches long, netted and ribbed, orange; flesh orange, sweet, good.

121896. No. 1324. Flesh orange, sweet; entire fruit not seen.

121897. No. 1325. Fruit oval, 14 inches long, green blotched with orange, faintly netted; flesh green, thick, sweet, very poor.

121898. No. 1330. Fruit smooth, unribbed, oval, 1 foot long, green flecked with orange; flesh orange or green, sweet, very good.

121899. No. 1335. *Ghon*. From Surmo at 6,000 feet altitude. Fruit globular, 10 inches in diameter, smooth, netted, green and orange; flesh thin, sweet, green.

121900. No. 1340. *Ghon*. From Surmo at 6,000 feet altitude. Fruit elongate, 1 foot long, green blotched orange, with trace of netting; flesh thick, salmon color, sweet and very fragrant.

121901. No. 1344. *Ghon*. Purchased at Kapalu August 28 at 6,000 feet altitude.

121902. No. 1345. *Ghon*. Purchased at Kapalu August 28 at 6,000 feet altitude. Said to be good.

Nos. 121903 to 121905 were presented by the Director of Agriculture, Kashmir.

121903. No. 1682. *Punjabī Sarda*. A sweet native melon of medium size.

121904. No. 1705. *Shalabagh*. A melon of fine flavor which is a good keeper.

121905. No. 1719. A native Kashmir melon of good quality; weight from 4 to 6 pounds.

121906 to 121909. *CUCUMIS* SATIVUS L.  
Cucumber.

121906. No. 1016. From Sofor at 5,000 feet altitude; found as a weed in fields; fruits green with blotch stripes of darker green.

121907. No. 1289. *Laru*. From Shigar, August 20. Fruit 10 by 3 inches.

121908. No. 1346. Bought at Kapalu, at 6,000 feet altitude.

## 121825 to 121998—Continued.

121909. No. 1692. *Tar*. Presented by the Director of Agriculture, Kashmir. Described as from 2 to 3 feet long, of good quality.

## 121910 to 121930. CUCURBITA spp. Cucurbitaceae.

121910 to 121916. CUCURBITA MAXIMA Duchesne. Squash.

121910. No. 1680. *Etampes pumpkin*. From the Director of Agriculture, Kashmir. Said to be popular and sometimes to weigh 100 pounds.

121911. No. 1328. From Kapalu, at 6,000 feet altitude. Fruit 10 inches high, 18 inches across, ribbed, orange colored; flesh yellow, very good.

121912. No. 1629. *Kadu*. From Manali, Kulu, Punjab, October 28. Fruit pale gray, of Hubbard squash form; flesh not sweet like our squash; weight 10 to 15 pounds.

121913. No. 1631. *Kadu*. From Kulu, Kulu, Punjab, October 29. Fruit weighs 40 pounds, Hubbard squash form, orange-red with pale deep ribs; flesh not sweet, but the best of the Kulu squashes to eat.

121914. No. 1630. *Kadu*. From Manali, Kulu, Punjab, October 27. Fruit red-orange like our Hubbard squash, but not sweet; up to 15 pounds in weight.

121915. No. 1633. From Kulu, Kulu, Punjab, October 29. Fruit white, smooth, elongate, pointed at both ends or more or less rounded. Flesh not sweet and 2 inches thick; weight up to 60 pounds.

121916. No. 1628. From Kotli, Kulu, Punjab, October 27. A good vegetable.

## 121917 to 121920. CUCURBITA MOSCHATA Duchesne. Cushaw.

121917. No. 1788. *Kadu*. From Jagendernaga, Mandi, Punjab, at 4,000 feet altitude, November 22. Fruit oval, 18 inches long, ribbed, green, veined and spotted with creamy buff; flesh sweet.

Nos. 121918 and 121919 were from Kulu, Kulu, Punjab, October 29 and November 10, between 4,000 and 4,500 feet altitude.

121918. No. 1634. *Kadu*. Fruit to 16 inches wide, flattened by nearly half, creamy buff with conspicuous ribs; flesh very sweet.

121919. No. 1775. *Kadu*. Seed purchased and said to represent a type so far not collected on this trip.

121920. No. 1636. *Kadu*. From Kastrain, Kulu, Punjab, October 31. A large fruit that looks like an *Etampes* pumpkin, smooth orange-red, 2 feet wide and 18 inches high, weighs up to 60 pounds.

## 121921 to 121929. CUCURBITA PEPO L. Pumpkin.

Nos. 121921 to 121926. From the Baltistan Province, Kashmir, between 6,000 and 6,500 feet altitude, from August 14 to 27.

## 121825 to 121998—Continued.

121921. No. 1147. From Skardo. Fruit elongate to compressed, pale yellow; flesh not sweet; no fiber.

121922. No. 1284. *Kadu*. From Shigar. Fruit flattened, 7 inches across and 5 inches high, green and yellow mottled; flesh not sweet.

Nos. 121923 to 121926. From Kapalu.

121923. No. 1310. *Wan*. Fruit elongate, 16 inches long, pale yellow, unribbed, and said to keep all winter when ripe; flesh not sweet, but a good vegetable.

121924. No. 1311. *Wan*. Fruit elongate, 16 inches long, orange yellow, veined more or less with green. This is the *Gangeri* of the lower Himalayas and resembles our summer squash.

121925. No. 1312. *Wan*. Fruit elongate, 18 inches long, green black, finely mottled with paler green, much like Nos. 1310 and 1311 (P. I. 121923 and 121924.)

121926. No. 1327. *Wan*. Fruit elongate, 16 inches long, blue green, finely veined darker. A variant of *Gangeri*, like Nos. 1310 to 1312 (P. I. 121923-121925).

121927. No. 1534. *Gangeri*. From Kotli, Kulu, Punjab, October 27. Fruit elongate, 18 inches long, green and gray green. Eaten stewed, but is not so sweet as our squash or pumpkins.

121928. No. 1536. *Gangeri*. From Kyelang, Lahul, Punjab, at 10,500 feet altitude, October 19. A pale-yellow variety like No. 1534 (P. I. 121927), but ripens earlier.

121929. No. 1632. *Kadu*. From Kulu, Kulu, Punjab, at 5,000 feet altitude, October 29. Fruit salmon pink, Hubbard squash form, weighs 4 pounds; flesh pink, 2 inches thick, not sweet.

## 121930. CUCURBITA sp.

No. 1347. *Bwan*. A mixed sample bought at Kapalu, Baltistan, Kashmir, at 6,000 feet altitude, August 28.

## 121931 to 121933. DAUCUS CAROTA L. Apiaceae. Carrot.

121931. No. 1429. *Sarakurtmang*. From Leh, Ladak, Kashmir, September 16, at 10,500 feet altitude. A white-rooted form.

121932. No. 1244. From Shigar, Baltistan, Kashmir, August 18. A plant 3 feet high, found growing wild.

121933. No. 1252. From Safaranga, Baltistan, Kashmir. A cultivated vegetable with a large coarse white root.

## 121934. DOLICHOS LABLAB L. Fabaceae. Hyacinth-bean.

No. 1683. *Lalsem*. Presented by the Director of Agriculture, Kashmir. A climber, sometimes 10 feet high, with tender fleshy pods, some of which have a fine flavor.

## 121935 to 121947. LACTUCA spp. Cichoriaceae.

121935 to 121940. LACTUCA SATIVA L. Garden lettuce.

## 121825 to 121998—Continued.

121935. No. 1318. *Dums*. From Kapalu, Baltistan, Kashmir, August 26.

121936. No. 1397. *Dums*. From Kam-puk, Baltistan, Kashmir. A cultivated variety.

121937. No. 1415. *Dums*. From Leh, Ladak, Kashmir, at 10,500 feet altitude, September 16. A variety which grows 7 feet high.

121938. No. 1425. *Dums*. From Leh, Ladak, Kashmir, at 10,500 feet altitude, September 16. A variety which grows 8 feet high.

121939. No. 1440. *Dums*. From Petuk, Ladak, Kashmir, September 19, at 10,000 feet altitude. A cultivated variety which grows between 6 and 7 feet tall.

121940. No. 1717. *Cos French White*. Presented by the Director of Agriculture, Kashmir. An early French variety with upright leaves of good quality.

121941. *LACTUCA* sp.

No. 1299. From Morungkor, Baltistan, Kashmir, at 9,000 feet altitude, August 23. A plant 3 feet high, with purple flowers, used as a field border.

Nos. 121942 and 121943. From Bordes, Baltistan, Kashmir, at 8,000 feet altitude, August 24.

121942. *LACTUCA* sp.

No. 1301. A plant 4 feet high, with purple flowers. Found on a dry slope.

121943. *LACTUCA* sp.

No. 1302. A plant 3 feet high, with yellow flowers. Found on a dry slope.

121944. *LACTUCA* sp.

No. 1503. *Katakmar*. From Kolung, Lahul, Punjab, at 11,000 feet altitude, in October. An annual up to 6 feet high, used as a potherb when young.

121945. *LACTUCA* sp.

No. 1540. From Rahla, Kulu, Punjab, at 9,000 feet altitude, October 27. An annual 4 feet tall, found at the edge of a stream in the fir forest.

121946. *LACTUCA* sp.

No. 1529. From the Rotang Pass, Kulu, Punjab, at 13,000 feet altitude, October 29. Found growing in clumps 12 to 18 inches high, on wet cliffs. The flower heads are large and purplish blue.

121947. *LACTUCA* sp.

No. 1350. From Banu, Baltistan, Kashmir, at 3,000 feet altitude, September 1. A bushy plant 18 inches high, with small yellow flower heads. Found on dry slopes.

121948 to 121953. *LAGENARIA LEUCANTHA* (Duchesne) Rusby. Cucurbitaceae. Calabash gourd.

121948. No. 1286. From Shigar, Baltistan, Kashmir, August 25, at 6,500 feet altitude. Cultivated sparingly in the Shyok Valley to at least 9,000 feet altitude.

121949. No. 1489. Purchased at Kapalu, Baltistan, Kashmir, August 28, at 6,000 feet altitude. Cultivated sparingly in the Shyok Valley.

## 121825 to 121998—Continued.

121950. No. 1669. *Ghia*. From Bajaura, Kulu, Punjab, November 14, at 3,500 feet altitude. A smooth green and white gourd, sometimes over 2 feet long, with the neck somewhat bent at the tip. Eaten while immature.

121951. No. 1681. *Lamba Ghia*. Presented by the Director of Agriculture, Kashmir. A gourd 3 to 4 feet long, which weighs 6 to 8 pounds. Used as food while immature.

121952. No. 1685. *Gol Ghia*. Presented by the Director of Agriculture, Kashmir. A globular variety which weighs between 4 and 6 pounds; of good flavor.

121953. No. 1774. *Tumba*. From Kulu, Kulu, Punjab, November 10, at 4,500 feet altitude. A long-necked variety used for dippers.

121954. *LENS ESCULENTA* Moench. Fabaceae. Lentil.

No. 1780. *Kolt*. From Kulu, Kulu, Punjab, November 10, at 4,500 feet altitude. The seeds are used as food.

121955 to 121957. *LUFFA* spp. Cucurbitaceae. Towelgourd.

Presented by the Director of Agriculture, Kashmir.

121955. *LUFFA ACUTANGULA* (L.) Roxb. Singkwa towelgourd.

No. 1702. A good strain adapted to cool climates, esteemed as a vegetable.

121956 and 121957. *LUFFA CYLINDRICA* (L.) Roemer. Suakwa towelgourd.

121956. No. 1708. A fine vegetable.

121957. No. 1698. A whitish vegetable of fine flavor.

121958 to 121972. *PHASEOLUS VULGARIS* L. Fabaceae. Common bean.

Cultivated beans.

121958. No. 1163-A. From Skardo, Baltistan, Kashmir, August 16. A collection of garden beans; all are sown together.

121959. No. 1578. *Rong*. From Tinu, Lahul, Kashmir, in September, at 11,500 feet altitude. Probably of Indian origin.

Nos. 121960 to 121974. *Rong*. From Kulu Province, Punjab, from November 1 to 10, between 4,500 and 9,000 feet altitude.

121960. No. 1640. From Koti.

121961. No. 1641. From Koti.

121962. No. 1642. From Katrain. One of the commonest types in India.

121963. No. 1643. From Katrain.

121964. No. 1768. From Kulu.

121965. No. 1769. From Kulu.

Nos. 121966 to 121972. Types grown by one man.

121966. No. 1770. A mixed sample.

121967. No. 1770-A.

121968. No. 1770-B.

121969. No. 1770-C.

121970. No. 1770-D.



## 121825 to 121998—Continued.

121971. No. 1770-E.  
 121972. No. 1770-F.  
 121973. *VIGNA SINENSIS* (Torner) Savi.  
 Fabaceae. Cowpea.

No. 1779. *Burt*. From Kulu, Kulu, Punjab, November 10, at 4,500 feet altitude. Roasted and eaten like peanuts.

121974. *PHASEOLUS VULGARIS* L. Fabaceae.  
 Common bean.

No. 1772. *Rong*. From Kulu, Kulu, Punjab, November 10, at 4,500 feet altitude.

121975. *PICEA SMITHIANA* (Wall.) Boiss.  
 Pinaceae. Spruce.

No. 1660. *Rai*. From above Bandrole, Kulu, Punjab, November 14, at 8,000 feet altitude. An adaptable spruce, commonly growing to a diameter of more than 6 feet.

For previous introduction see 116605.

- 121976 to 121979. *PISUM SATIVUM* L. Fabaceae.  
 Pea.

121978. No. 1411. *Shandil*. From Leh, Ladak, Kashmir, September 17, at 10,500 feet altitude. Seeds used both green or dried.

121977. No. 1165. *Mata*. From Benares, United Provinces, December 16. A winter crop with purple-madder flowers.

121978. No. 1566. *Shrakkar*. From Kolung, Lahul, Punjab, October 11, at 12,000 feet altitude. Used as food both fresh and dried.

121979. No. 1554. *Srangnak*. From Kolung, Lahul, Punjab, October 10, at 12,000 feet altitude. Planted for the seeds which are eaten like lentils.

- 121980 to 121985. *RAPHANUS SATIVUS* L.  
 Brassicaceae. Radish.

121980. No. 1423. *Marpo Labuk*. From Leh, Ladak, Kashmir, September 16. A red radish, originally from Yarkand.

121981. No. 1432. *Labuk Karpo*. From Leh, Ladak, Kashmir, September 16, at 10,500 feet altitude. A native white radish.

121982. No. 1620. *Labuk*. From Kolung, Lahul, Punjab, in October, at 12,000 feet altitude. A long white radish.

Nos. 121983 to 121985. Presented by the Director of Agriculture, Kashmir.

121983. No. 1703. *Muzapparabad*. A long white radish with a small top.

121984. No. 1711. A native black radish, 9 inches long and 5 inches in circumference, grown for winter use.

121985. No. 1714. *Muli*. A native winter radish, round, white, and turnip-like.

- 121986 to 121989. *RHEUM* spp. Polygonaceae.  
 Rhubarb.

121986. *RHEUM AUSTRALE* Don.

No. 1731. From the Director of Agriculture, Kashmir.

121987. *RHEUM* sp.

No. 1363. From Brokdang Nulla, Baltistan, Kashmir, September 5, at

## 121825 to 121998—Continued.

12,000 feet altitude. Plant dry, stalk 3 feet high; found at the edge of a dry watercourse.

121988. *RHEUM* sp.

No. 1444. *Artzo*. From below Taklung Pass, Ladak, Kashmir, September 26, at 15,000 feet altitude. A low, cold-tolerant and drought-tolerant form with leaves not more than 1 foot long; will stand freezing every day all summer.

121989. *RHEUM* sp.

No. 1518. From Kolung, Lahul, Punjab, August 15, at 11,000 feet altitude. A vigorous plant with edible petioles that under good conditions grow as large as those of our common rhubarb.

- 121990 to 121993. *SOLANUM MELONGENA* L.  
 Solanaceae. Eggplant.

Nos. 121990 to 121992 were presented by the Director of Agriculture, Kashmir.

121990. No. 1709. *Bengan*. A round, black, native eggplant, growing to 3 pounds weight and maturing 8 weeks after planting. The flesh is crisp with few seeds.

121991. No. 1712. *Bengan*. A native variety, purple, 9 inches long and of excellent flavor, which matures in 7½ weeks.

121992. No. 1744. *Bengan*. A good purple variety, 12 inches long, which matures in 11 weeks.

121993. No. 1776. *Shigotri*. From Kulu, Kulu, Punjab, November 10, at 4,500 feet altitude. A red-purple, elongate sort, to about 4 inches long; grown in the rainy season.

121994. *SPINACIA OLERACEA* L. Chenopodiaceae.  
 Common spinach.

No. 1710. Presented by the Director of Agriculture, Kashmir. An early variety; slow to go to seed.

- 121995 to 121997. *VICIA FABA* L. Fabaceae.  
 Broadbean.

Varieties cultivated for the seed which is used as food.

121995. No. 1285. *Makshrang*. From Shigar, Baltistan, Kashmir, August 20.

121996. No. 1434. *Shrangnak*. From Marsalong, Ladak, Kashmir, September 24, at 11,500 feet altitude.

121997. No. 1771. *Bak*. From Kulu, Kulu, Punjab, November 10, at 4,500 feet altitude.

121998. *VIGNA SINENSIS* (Torner) Savi.  
 Fabaceae. Cowpea.

No. 1786. *Rong*. From Mandi, Mandi, Punjab, November 21. Pods eaten green and beans stewed.

121999. *SEMECARPUS* sp. Anacardiaceae.

From New Caledonia. Seeds presented by Charles Jacques, secretary, Chamber of Agriculture, Noumea, through E. W. Brandes, Bureau of Plant Industry. Received February 25, 1937.

A genus of tropical trees, closely related to *Anacardium*.

**122000. AOACIA CYANOPHYLLA Lindl.**  
Mimosaceae. Blueleaf acacia.

From South Australia. Seeds presented by J. Howard Johnson, St. Peters. Received February 26, 1937.

For previous introduction see 48040.

**122001 to 122033.**

From India. Seeds collected by Walter Koelz, Bureau of Plant Industry. Received February 27, 1937.

This material was all collected in 1936.

**122001 to 122003. ASTRAGALUS spp. Fabaceae.**

**122001. ASTRAGALUS sp.**

No. 1584. From Tinu, Lahul, Punjab, October 15, at 11,000 feet altitude. A perennial up to 5 feet in height, with attractive rose-purple flowers.

**122002. ASTRAGALUS sp.**

No. 1602. *Rangzu Guram Kyelang*. From Pukar, Lahul, Punjab, in August, at 2,000 feet altitude. *Wanie*, or "horse sugarcane." This name is applied to several species of *Astragalus* which grow 3 feet tall. They are more or less attractive ornamentals, and are all relished by horses.

**122003. ASTRAGALUS sp.**

No. 1446. *Tartagaon*. From Zingbar, Lahul, Punjab, October 8, at 13,000 feet altitude. A perennial about 1 foot high, with woolly leaves and a large inflated pod.

**122004 to 122009. FAGOPYRUM ESCULENTUM Moench. Polygonaceae. Buckwheat.**

**122004. No. 1542. *Gangri*.** From Bikri, Kulu, Punjab, October 31, at 6,000 feet altitude. Superior to the common Lahul races and a good yielder.

**122005. No. 1547. *Banbrau*.** From Kasar, at 11,000 feet altitude. A form of buckwheat that is raised chiefly in this locality; as it shatters easily it must be harvested before it is fully ripe.

**122006. No. 1560. *Mita bres*.** From Jalma, Lahul, Punjab, October 10, at 9,000 feet altitude. This is considered the best of the four kinds of Lahul buckwheat, but it is the poorest yielder, perhaps because there are no honeybees.

**122007. No. 1568. *Drau*.** From Kolung, Lahul, Punjab, October 10, at 12,000 feet altitude. A bitter variety, but the best yielder of all the Lahul buckwheats.

**122008. No. 1570. *Bostor*.** From Jalma, Lahul, Punjab, October 17, at 9,000 feet altitude. The earliest of the buckwheats, maturing in 90 days, but of poor quality, with a heavy husk.

**122009. No. 1627. *Kattu*.** From Koti, Kulu, Punjab, October 27. A buckwheat 4 feet tall, much like the Lahul *drau* (P. I. 122007), but not quite so good.

**122010 to 122021. HORDEUM VULGARE L. Poaceae. Barley.**

**122010. No. 1355. *Nemas*.** From Sdongpa, Baltistan, Kashmir, September 5, at 15,000 feet altitude. An early barley, 3½ feet high, with large heads, growing near the limit of cultivation.

**122001 to 122033—Continued**

**122011. No. 1379. *Afangma*.** From Karzong, Baltistan, Kashmir, September 13, at 15,000 feet altitude. Barley grown at the limit of cultivation.

**122012. No. 1391. *Yangama*.** From Leh, Ladak, Kashmir, September 15, at 10,500 feet altitude. The earliest variety, maturing in about 90 days.

**122013. No. 1405. *Shirok Kapo*.** From Leh, Ladak, Kashmir, September 16, at 10,500 feet altitude. A barley sown in the spring and harvested in September.

**122014. No. 1406. *Soshirok*.** From Tikse, Ladak, Kashmir, September 13, at 11,000 feet altitude. An early barley and the only husk barley grown in the vicinity.

**122015. No. 1410. *Yangnak*.** Probably the same as No. 1391 (P. I. 122012). An early-maturing variety.

**122016. No. 1433. *Shirok*.** From Upshi, Ladak, Kashmir, September 24, at 13,000 feet altitude. A strain of barley grown near the cultivation limit.

**122017. No. 1443. *Shirok*.** From Gya, Ladak, Kashmir, September 25, at 15,000 feet altitude. A strain of spring huskless barley grown at the world's cultivation limit.

**122018. No. 1549. *Salzot*.** From Kolung, Lahul, Punjab, October 16, at 12,000 feet altitude. A huskless barley, of good yield; considered the best in the valley.

**122019. No. 1551. *Sermo Ringruo*.** From Kolung, Lahul, Punjab, October 12, at 12,000 feet altitude. One of the best barleys for yield and quality. Sown in May, harvested in September.

**122020. No. 1555. *Tangzot*.** From Jalma, Lahul, Punjab, October 20, at 9,000 feet altitude. An early barley, but a poor yielder.

**122021. No. 1559. *Sermo Tuqun*.** From Kolung, Lahul, Punjab, October 11, at 12,000 feet altitude. One of the best yielding barleys; sown in May, harvested in September.

**122022. LOTUS sp. Fabaceae.**

No. 1623. *Tuljima*. From Kolung, Lahul, Punjab, August, at 12,000 feet altitude. A low plant with fragrant yellow flowers and leaves.

**122023 to 122029. MEDICAGO SATIVA L. Fabaceae. Alfalfa.**

**122023. No. 1283. *Buksup*.** From Shigar, Baltistan, Kashmir, August 20; a cultivated variety.

**122024. No. 1283-A. *Buksup*.** From Shigar, Baltistan, Kashmir, August 16; a cultivated variety.

**122025. No. 1303. *Buksup*.** From Kapalu, Baltistan, Kashmir, August 25. A variety which grows between 4 and 5 feet high and gives two cuttings a season. The flowers are white, yellow, and purple.

**122026. No. 1392. *Yarkandi Buksup*.** From Leh, Ladak, Kashmir, September 17, at 10,500 feet altitude. A variety that grows 8 feet high, originally from Yarkand.

## 122001 to 122033—Continued

122027. No. 1393. *Buksup*. From Kam-puk, Baltistan, Kashmir, at 9,000 feet, September 9. A cultivated alfalfa.

122028. No. 1394. *Buksup*. From Kam-puk, Baltistan, Kashmir, September 9, at 9,000 feet altitude. A cultivated alfalfa.

122029. No. 1418. *Buksup*. From Leh, Ladak, Kashmir, September 16, at 10,500 feet altitude. An alfalfa that grows 8 feet high.

122030. *MELILOTUS* sp. Fabaceae.

No. 1561. From Kvelang, Lahul, Punjab, August 14, at 10,500 feet altitude.

122031. *MEDICAGO SATIVA* L. Fabaceae.  
Alfalfa.

No. 1565. *Lahuli Buksup*. From Kye-lang, Lahul, Punjab, August 18, at 10,500 feet altitude. A yellow-flowered form about 3 feet high; excellent as hay.

122032. *MELILOTUS OFFICINALIS* (L.) Lam. Fabaceae. Sweet clover.

No. 1596. From Pukar, Lahul, Punjab, August, at 12,000 feet altitude.

122033. *NICOTIANA TABACUM* L. Solanaceae. Common tobacco.

No. 1287. *Kara tsotma*. From Shigar, Baltistan, Kashmir. Tobacco is grown to 1,000 feet altitude in Lahul.

## 122034 to 122047.

From Argentina and Paraguay. Seeds and bulbs collected by W. A. Archer, Bureau of Plant Industry. Received February 17, 1937.

Unless otherwise mentioned, the material was received as seeds.

122034. *ADESMIA BICOLOR* (Poir.) DC. Fabaceae.

No. 4568. From the Jardín Botánico de la Facultad de Agronomía, Buenos Aires, Argentina, November 27, 1936. An erect or prostrate legume with yellow flowers. Native to South America, where it is used as a forage plant.

122035. *ARISTOLOCHIA ELEGANS* Masters. Aristolochiaceae. Cauliflower.

No. 4946. From the Jardín Botánico, Santísima Trinidad, Paraguay, January 9, 1937.

For previous introduction see 114861.

122036. *HORDEUM* sp. Poaceae.

No. 4790. *Cebada Paraguay*. From Asunción, Paraguay, December 27, 1936. Seed used in making beverages.

122037. *CHODANTHUS SPLENDENS* (Bur. and Schum.) Hassler. Bignoniaceae.

No. 4923. From the Jardín Botánico, Santísima Trinidad, Paraguay, January 6, 1937. An ornamental evergreen woody climber with decussate, leathery leaves and racemes of 6 to 8 erect campanulate, more or less 2-lipped, yellow flowers. Native to southern Brazil.

122038. *Cocos* sp. Phoenicaceae.

No. 4919. From the Jardín Botánico, Santísima Trinidad, Paraguay, January 6, 1937.

122039. *CYPELLA CORIIFOLIA* Baker. Iridaceae.

No. 4921. *Ruiberbo*. From the Jardín Botánico, Santísima Trinidad, Paraguay,

## 122034 to 122047—Continued

January 6, 1937. Bulb of a herbaceous perennial up to 3 feet high, with fleshy linear leaves and fugitive yellow flowers. Native to Paraguay.

122040. *DIOCLEA PARAGUARIENSIS* Hassler. Fabaceae.

No. 4912. *Curuguay*. From the Jardín Botánico, Santísima Trinidad, Paraguay, January 5, 1937. A shrubby twiner up to 60 feet long, with trifoliate leaves and dense umbels of beautiful violet flowers. Native to Paraguay where the natives burnish pottery by rubbing it with the seeds.

122041. *HYMENAEA STIGONOCARPA* Mart. Caesalpiniaceae.

No. 4947. *Yataibá*. From the Jardín Botánico, Santísima Trinidad, Paraguay, January 7, 1937. A tall evergreen tree with paired oblong leaflets 3 to 6 inches long and dense terminal clusters of white flowers. Native to Brazil.

For previous introduction see 19178.

122042. *MELOTHRIA* sp. Cucurbitaceae.

No. 4896. Along the road between Caacupé and Tobatý, Paraguay, January 2, 1937. A slender herbaceous climber about 6 feet long, with ovate-cordate leaves 2 to 3 inches long and small yellow flowers, solitary in the leaf axis. Native to Brazil.

122043. *PANICUM PANTRICHUM* Hack. Poaceae.

No. 4886. From Sierra de Tobatý, Paraguay, January 2, 1937. A slender, branching, spreading, perennial grass. Native to shady places in northern South America; said to resist some freezing.

122044. *PASSIFLORA CARRULEA* L. Passifloraceae. Bluecrown passionflower.

No. 4942. From Campo Grande near Jardín Botánico, Santísima Trinidad, Paraguay, January 9, 1937.

For previous introduction and description see 119823.

122045. *PASSIFLORA MISERA* H. B. K. Passifloraceae.

No. 4850. Along the road between Caacupé and Tobatý, Paraguay, January 2, 1937. A woody climber with cordate trilobed leaves about 1 foot long and solitary violet flowers about 1 inch across. Native to Colombia.

122046. *SCOPARIA DULCIS* L. Scrophulariaceae.

No. 4924. *Typychá Carátá*. Purchased in the market at Asunción, Paraguay, January 8, 1937. A glabrous annual 1 to 3 feet high.

For previous introduction see 110194.

122047. *ZEA MAYS* L. Poaceae. Corn.

No. 4877. From Caacupé, Paraguay, January 1, 1937. Cultivated corn.

## 122048 to 122152.

From India. Seeds collected by Walter Koels, Bureau of Plant Industry. Received February 16, 1937.

This material was all obtained at Darjeeling, December 23 to 25, 1936, unless otherwise mentioned.

## 122048 to 122152—Continued

122048. *TSUGA DUMOSA* (D. Don) Eichler.  
Pinaceae. Hemlock.

No. 2017. A fine ornamental forest tree sometimes 120 feet high with gracefully drooping branches, native to northwestern India between 8,000 and 10,000 feet altitude.

For previous introduction see 108303.

122049. *ABIES SPETABILIS* Lambert (A. *cebbiana* Lindl.). Pinaceae.  
Himalayan fir.

No. 2018. A tree sometimes 150 feet high, native to the Himalayas at altitudes between 7,000 and 13,000 feet. The dark-green leaves are arranged in two opposite series so as to leave a V-shaped opening along the top; the individual leaves are 1 to 2 inches long. The cones, about 5 inches long, are violet purple at first, later becoming brown.

For previous introduction see 102816.

122050 to 122053. *ACER* spp. Aceraceae.  
Maple.

122050. *ACER CAMPBELLII* Hook. f. and Thoms.

No. 2052. Said to have come from nearby at 8,000 feet altitude.

122051 to 122053. *ACER CAUDATUM* Wall.

A large tree with dark-gray bark and 5-lobed, red-stemmed leaves from 2 to 5 inches long. The shiny, compact, moderately hard wood is white with a faint pink tinge. This maple is found in the temperate Himalayas between 7,000 and 11,000 feet altitude.

For previous introduction see 99709.

122051. No. 1969.

122052. No. 2004.

122053. No. 2044.

122054 to 122057. *ACONITUM* spp. Ranunculaceae.  
Monkshood.

122054. *ACONITUM FEROX* Wall.

No. 2055. A plant with an erect stem 3 to 6 feet high, rounded, palmately trifid leaves cut into irregularly indented lobes. The large pale-blue flowers are in a dense terminal raceme. The root of this plant is used medicinally.

For previous introduction see 51744.

122055. *ACONITUM LURIDUM* Hook. f. and Thoms.

No. 1961. A perennial herb with simple erect stems 2 to 3 feet high, native to the alpine slopes of the Himalayas in India. The palmately 5-lobed leaves, 2 to 3 inches across, have coarsely crenate margins, and the dull-red flowers, borne in a simple raceme, have a long straight beak and a broad domelike dorsal prominence.

For previous introduction see 99713.

122056. *ACONITUM SPICATUM* (Brühl) Stapf.

No. 2054. A herbaceous perennial up to 6 feet high, with terminal racemes of many large pale-blue flowers. Native to the Himalayan region.

122057. *ACONITUM* sp.

No. 2056. An ornamental perennial, said to have come from Sikkim at high altitudes.

## 122048 to 122152—Continued

122058. *ALLIUM VICTORIALIS* L. Liliaceae.  
Onion.

No. 1964. Obtained at Darjeeling, but grown in adjacent highlands at 14,000 feet altitude. One of the most distinctive European alliums, with stems about 2 feet high, leaves resembling those of the lily-of-the-valley, and white to greenish-white flowers.

For previous introduction see 110648.

122059. *ALLIUM WALLICHIANUM* Steud. Liliaceae.  
Onion.

No. 1987. Grown near Darjeeling at 12,000 feet altitude. A tall eastern onion, native to Asia, with narrow flat leaves about 3 feet long and purple flower heads.

For previous introduction see 99715.

122060 and 122061. *ANEMONE* spp. Ranunculaceae.

Obtained at Darjeeling, but grown in the nearby highlands from 12,000 to 14,000 feet altitude.

122060. *ANEMONE POLYANTHES* D. Don.

No. 1990. An alpine anemone with stems 2 feet high, reniform or cordate leaves 2 to 4 inches across, and numerous white umbellate flowers about 1 inch in diameter. Native to the Himalayas at altitudes of 10,000 to 12,000 feet.

122061. *ANEMONE RIVULARIS* Buch.-Ham.

No. 1980. A silky pubescent ornamental from 1 to 3 feet high, with 3-parted basal leaves up to 6 inches in diameter and white or bluish flowers, over 1 inch long, in compound cymes.

For previous introduction see 102310.

122062. *ARENARIA CILIATA* L. Silenaceae.

No. 2035. Grown in Tibet at 14,000 feet altitude.

122063. *AMORPHOPHALLUS BULBIFER* Blume Araceae.

No. 1953. A long-flowered species which may prove useful as an ornamental. From the Rangit River District, Darjeeling District, December 24, 1936, at 2,000 feet altitude.

122064. *ARISAEMA* sp. Araceae.

No. 1954. Obtained at Darjeeling, but grown along the Rangit River at 2,000 feet altitude, in a thicket. A plant with large scarlet seeds, on a stalk 6 inches high.

122065 to 122067. *ASTER* spp. Asteraceae.

Ornamentals grown in the nearby highlands from 12,000 to 14,000 feet altitude.

122065. *ASTER DIPLOSTEPHIOIDES* (DC.) Benth.

No. 2036. A perennial 2 to 3 feet high, native to the alpine slopes of the Indian Himalayas up to 16,000 feet altitude. The entire lanceolate leaves are 2 to 3 inches long, and the solitary blue to blue-purple flower heads are 1 to 3 inches across.

For previous introduction see 99719.

122066. *ASTER STRACHEYI* Hook. f.

No. 2003. A dwarf, nearly stemless aster with radical obovate-spatulate leaves about 1 inch long and pale lilac-blue solitary flower heads about three-

## 122048 to 122152—Continued

fourths of an inch in diameter. Native to the western Himalayas at altitudes of 12,000 to 16,500 feet.

122067. *ASTER TRICEPHALUS* Clarke.

No. 1968. A small vigorous subtropical herbaceous perennial, with reddish flower heads. Native to Sikkim, India.

For previous introduction see 99653.

122068. *ASTILBE RIVULARIS* Buch.-Ham. Saxifragaceae.

No. 2006. Obtained at Darjeeling, but grown in Sikkim at 9,000 feet altitude.

For previous introduction see 46581.

122069. *BETULA* sp. Betulaceae. Birch.

No. 2042. Grown in Tibet at 13,000 feet altitude. An ornamental birch received under the name "balsamifera," for which a place of publication has not been found.

122070. *BERBERIS UMBELLATA* Wall. Berberidaceae.

No. 1994. A hardy, half-evergreen shrub, native to the Himalayas, about 3 feet high, with reddish-brown grooved branchlets, obovate leaves an inch long, and umbellike racemes of yellow flowers which are followed by red berries.

For previous introduction see 80077.

122071. *BERBERIS* sp. Berberidaceae.

No. 1995.

122072. *CALCEOLARIA GRACILIS* H. B. K. Scrophulariaceae.

No. 1946. An annual calceolaria about 18 inches high, with pinnate leaves and attractive yellow flowers about one-half inch long. Native to Ecuador.

122073. *CASTANOPSIS INDICA* (Roxb.) A. DC. Fagaceae.

No. 2043. An evergreen tree with thin, leathery, oblong or obovate-oblong leaves 5 to 8 inches long. Native to the temperate Himalayan region and Assam.

122074. *CLINTONIA ALPINA* (Royle) Kunth. Convallariaceae.

No. 2047. Grown in Tibet at 13,000 feet altitude. A low perennial, native to the temperate slopes of the Himalayas in India. The lanceolate leaves are 4 to 9 inches long, and the small white funnel-shaped flowers are borne in a loose raceme on a scape 1 to 2 feet high.

For previous introduction see 99658.

122075. *CODONOPSIS THALICTRIFOLIA* Roxb. Campanulaceae.

No. 1956. Grown at 10,000 feet altitude in the hills of Sikkim or Tibet. An herbaceous perennial with flexuose stems ascending to sub-scandent, small ovate or reniform leaves, and solitary flowers about 1 inch long. Native to Nepal.

122076. *COIX LACRYMA-JOBI* L. Poaceae. Jobs-tears.

No. 1930. Plants 6 feet high, found along a stream at 7,000 feet altitude near Darjeeling, Bengal.

122077 to 122080. *COTONEASTER* spp. Malaceae.122077. *COTONEASTER* sp.

No. 2013. Grown in Tibet at 13,000 feet altitude.

## 122048 to 122152—Continued

122078. *COTONEASTER* sp.

No. 2014. Grown at high altitudes in Sikkim.

122079. *COTONEASTER* sp.

No. 1921. A tree much like an apple tree in size and form, covered with large red berries; from 7,000 feet altitude.

122080. *COTONEASTER* sp.

No. 2057. A cultivated tree.

122081. *CRAWFURDIA* sp. Gentianaceae.

No. 1929. A herbaceous twiner with large axillary, bell-shaped, blue-purple flowers and attractive maroon capsules, grown at 7,000 feet altitude.

122082. *CREPIS DEPRESSA* Hook. f. and Thoms. Cichoriaceae.

No. 1963. Grown at 12,000 feet altitude.

122083. *CYNANCHUM VINETOXICUM* (L.) Pers. Asclepiadaceae.

No. 2026. A white-flowered perennial 2 to 3 feet high, grown at 12,000 feet altitude in Sikkim.

122084. *CYNOGLOSSUM DENTICULATUM* A. DC. Boraginaceae.

No. 2038. Grown at 9,000 feet altitude in Sikkim. A hardy perennial with small blue flowers in long open one-sided spikes and stems 1½ to 2 feet high. Native to India.

122085. *DATURA ARBOREA* L. Solanaceae. Floripondio.

No. 1937. A shrub or small tree, with ovate-lanceolate leaves and large trumpet-shaped, greenish-white, fragrant flowers. Native to Peru and Chile.

For previous introduction see 110925.

122086. *DELPHINIUM VESTITUM* Wall. Ranunculaceae. Larkspur.

No. 1960. Grown at nearly 12,000 feet altitude. An alpine perennial with a hispid stem 1 to 3 feet high, palmately 5- to 7-lobed leaves sometimes a foot across, on long stems, and blue flowers in long dense racemes. Native to the temperate Himalayas from 8,000 to 12,000 feet altitude.

For previous introduction see 104368.

122087. *DEUTZIA CORYMBOSA* R. Br. Hydrangeaceae.

No. 1996. A deutzia with pure-white flowers.

For previous introduction see 53696.

122088. *ERIGERON* sp. Asteraceae.

No. 2022. Grown at high altitudes in Sikkim.

122089. *EUONYMUS* sp. Celastraceae.

No. 1825. From the Government gardens, Saharanpur, United Provinces.

122090. *FRITILLARIA STRACHETI* Hook. f. Liliaceae.

No. 1999. A bulbous plant with narrow linear leaves 4 to 6 inches long on slender stems up to a foot in length and solitary pale-purple flowers 1½ to 2 inches long. Native to the Himalayan region at altitudes of 9,000 to 13,000 feet.

## 122048 to 122152—Continued

122091. *GENTIANA TIBETICA* King. Gentianaceae. Himalayan gentian.

No. 1997. An erect perennial 18 inches high, with oblong-ovate leaves 5 to 7 inches long and small dull yellowish-white axillary flowers an inch long. Native to Tibet.

For previous introduction see 80285.

122092. *GENTIANA SIKKIMENSIS* C. B. Clarke. Gentianaceae. Gentian.

No. 1998. A decumbent perennial, native to the Sikkim Himalayas at altitudes between 10,000 and 14,000 feet. The radical leaves are orbicular and those of the stem are elliptic to oblong, and 1 inch long. The tubular, funnel-shaped blue flowers, about 1 inch long, are in headlike clusters.

For previous introduction see 102315.

122093. *HYDRANGEA ANOMALA* D. Don (*H. altissima* Wall.). Hydrangeaceae.

No. 2039. A climbing shrub up to 15 feet high, with ovate leaves 3 to 6 inches long and large corymbs of white flowers. Native to Nepal at 4,000 to 10,000 feet altitude.

For previous introduction see 114753.

122094. *HYPERICUM* sp. Hypericaceae.

No. 2020.

122095. *ILEX INSIGNIS* Hook. f. Aquifoliaceae. Holly.

No. 1919. An evergreen holly, native to the Sikkim Himalayas, where it grows at 7,000 feet altitude. It forms a small tree or shrub with thick grooved branches which are purplish when young. The dark-green, leathery leaves, 5 to 9 inches long, are armed at the margins with small spine-tipped teeth. The bright-red, oval berries are nearly one-half inch long.

For previous introduction see 102906.

122096. *Ilex* sp. Aquifoliaceae. Holly.

No. 1920. A tree much like the American holly.

122097. *IMPATIENS* sp. Impatiensaceae.

No. 2009. From high altitudes in the Sikkim mountains.

122098. *IPOMOEA* sp. Convolvulaceae.

No. 1948. A woody vine, with large cordate leaves, bearing an abundance of orange capsules 1 inch in diameter.

122099. *IRIS CLARKEI* Baker. Iridaceae.

No. 2025. From the Sikkim Himalayas.

122100. *LACTUCA* sp. Cichoriaceae.

No. 2045. Grown in the Sikkim highlands at 13,000 feet altitude.

122101. *LACTUCA MACRANTHA* Clarke. Cichoriaceae.

No. 2046. A stout perennial lettuce up to 2 feet high, with large pinnatifid leaves and loosely panicked heads of blue flowers. Native to the Sikkim Himalayas at altitudes of 10,000 to 14,000 feet.

For previous introduction see 116593.

122102. *LIGULARIA* sp. Asteraceae.

No. 1957.

122103. *LIGUSTRUM CONFUSUM* Decaisne. Oleaceae.

No. 1962. A small tree up to 40 feet high, which is one of the tropical relatives

## 122048 to 122152—Continued

of the California privet (*Ligustrum ovalifolium*). The obtuse leathery leaves are about 9 inches long, and the small white flowers are in panicles 1 to 5 inches long.

For previous introduction see 116594.

122104. *LILIUM* sp. Liliaceae. Lily.

No. 2021.

122105. *LOBELIA* sp. Campanulaceae.

No. 2048. From 12,000 feet altitude in the Sikkim Highlands. Received as *Lobelia erecta*, an invalid name.

122106. *LONICERA TOMENTELLA* Hook. f. and Thoms. Caprifoliaceae. Honeysuckle.

No. 2040. Grown at 12,000 feet altitude in the Sikkim Highlands.

122107 to 122109. *MECONOPSIS* spp. Papaveraceae.

Native to the Sikkim Himalayas between 10,000 and 12,000 feet altitude.

122107. *MECONOPSIS SINUATA* Prain.

No. 2031. An annual 1 to 2 feet high, with irregularly lobed, sparsely prickly leaves and blue flowers 2 to 3 inches in diameter.

122108. *MECONOPSIS PANICULATA* (Don) Prain.

No. 2032. A tall perennial, soft-hairy throughout, with yellow flowers in lax cymes, found on the slopes of the Himalayas of western India and Tibet.

For previous introduction see 111065.

122109. *MECONOPSIS SIMPLICIFOLIA* (Don) Hook. f. and Thoms.

No. 2030. A stemless annual or biennial, native to temperate regions of northern India. The ovate-lanceolate, toothed or entire leaves, 2 to 3 inches long, are in a tufted rosette from which rise the deflexed hairy scapes, 12 to 18 inches high, bearing solitary, poppylike, clear-blue flowers 3 inches across.

For previous introduction see 102320.

122110. *DESMODIUM FLORIBUNDUM* (D. Don) G. Don. Fabaceae.

No. 1967. A woody, thickly pubescent, Himalayan plant with very copious axillary and terminal racemes of pale pink or lavender flowers.

For previous introduction see 116598.

122111. *MICHELIA EXCELSA* Blume. Magnoliaceae.

No. 1971. A tall tree, native to the temperate Himalayas of northeastern India between 5,000 and 6,000 feet altitude. The long narrow leaves are silky, brown beneath, and the handsome white flowers are from 4 to 5 inches across.

For previous introduction see 116602.

122112. *MOMORDICA CHARANTIA* L. Cucurbitaceae.

No. 2085. *Karela*. From Calcutta, January 1, 1937.

122113. *OSBECKIA NEPALENSIS* Hook. Melastomaceae.

No. 2051. An evergreen shrub, native to the Himalayas, with a rough erect stem 18 inches high, opposite, lanceolate, rigid leaves, and large purplish-rose flowers in terminal and axillary panicles or corymbs.

For previous introduction see 47744.

## 122048 to 122152—Continued

122114 and 122115. *MELASTOMA MALABATH-  
RICUM* L. Melastomaceae.

An attractive spreading shrub up to 6 feet high, with broad-lanceolate leaves about 4 inches long and showy purple flowers about 2 inches across and 1 to 5 in a cluster. Native to the East Indies.

122114. No. 2041.

122115. No. 2074. From Siliguri, Bengal, December 29, 1936.

122116. *PHILADELPHUS* sp. Hydrangeaceae.

No. 2007. Grown in the Sikkim Himalayas at 9,000 feet altitude.

122117. *PIPTANTHUS NEPALENSIS* (Hook.) Sweet. Fabaceae.

No. 1981. A shrub 2 to 11 feet high, with palmately trifoliolate leaves made up of lanceolate leaflets 2 to 4 inches long; the yellow pea-shaped flowers, 1 inch long, are borne in dense racemes resembling bunches of grapes.

For previous introduction see 103464.

122118. *POLYGONUM CAMPANULATUM* Hook. f. Polygonaceae. Fleeceflower.

No. 2008. A hardy perennial of compact bushy habit with handsome foliage; during the summer and autumn it produces dense racemes of charming bell-shaped, fragrant rosy-white flowers. Native to the Sikkim Himalayas up to 10,000 feet altitude.

For previous introduction see 60252.

122119. *POLYGONUM MOLLE* D. Don. Polygonaceae. Fleeceflower.

No. 2015. Grown in the Sikkim Himalayas at 12,000 feet altitude. A shrubby perennial 2 to 3 feet high, with white flowers in large thyrse-like terminal panicles. Allied to *Polygonum polystachyum*. Native to Nepal.

For previous introduction see 116608.

122120 to 122123. *PRIMULA* spp. Primulaceae. Primrose.

122120. *PRIMULA ELWESIANA* King.

No. 2066. A Himalayan primrose with ovate-lanceolate leathery leaves about 4 inches long and solitary violet flowers on scapes up to 6 inches high.

122121. *PRIMULA KINGII* Watt.

No. 2067. A glabrous perennial native to high altitudes in the Sikkim Himalayas. The elliptic-lanceolate, crenulate leaves, 2 to 3 inches long, are in a crowded rosette, and the slender scapes, 6 to 10 inches high, bear 4 or 5 claret-colored, funnel-shaped flowers nearly an inch across.

For previous introduction see 108996.

122122. *PRIMULA STUARTII* Wall.

No. 2068. A mealy or quite glabrous perennial herb, native throughout the alpine and subalpine Himalayas of India and Tibet at altitudes between 12,000 and 16,000 feet. The coriaceous oblanceolate leaves, with entire or crenulate margins, are 4 to 10 inches long, and the scapes, 12 to 18 inches high, bear loose umbels of light-yellow, drooping flowers.

For previous introduction see 115984

122123. *PRIMULA* sp.

No. 2069. Native to the Sikkim Himalayas at high altitudes.

## 122048 to 122152—Continued

122124. *PRUNUS ACUMINATA* (Wall.) Hook. f. (*Lawrocercus acuminata* (Wall.) Roemer). Amygdalaceae. Laurel cherry.

No. 1984. A slender-branched tree 30 to 40 feet high, with narrow leaves up to 7 inches long and many-flowered racemes of yellowish-white flowers. The fruit is a small oval drupe. The tree is found in central and eastern Himalayas at altitudes between 5,000 and 7,000 feet.

For previous introduction see 62811.

122125. *PRUNUS CERASOIDES* D. Don (*P. puddum* Roxb.). Amygdalaceae. Sikkim cherry.

No. 1974. An Indian cherry, native to the temperate slopes of the Himalayas, with sharply serrate, lanceolate leaves 3 to 5 inches long, umbels of pendulous, campanulate, rosy-red to white flowers, and red fruits half an inch long with scanty red or yellowish acid flesh.

For previous introduction see 77594.

122126. *RHAMNUS* sp. Rhamnaceae.

No. 2023.

122127 to 122131. *RHODODENDRON* spp. Ericaceae.

122127. *RHODODENDRON ARBOREUM* J. E. Smith. Tree rhododendron.

No. 2060. A bushy tree.

For previous introduction see 105903.

122128. *RHODODENDRON DALHOUSIANUM* Hook. f.

No. 2062. A large epiphytic evergreen shrub, native to the Sikkim Himalayas at altitudes of 6,000 to 8,000 feet. The oblanceolate to obovate, obtuse leaves, 2 to 6 inches long, are scaly and papillose beneath. The funnel-shaped, fragrant, white flowers, tinged with rose outside, are 3 to 4 inches long with five broad lobes.

For previous introduction see 102778.

122129. *RHODODENDRON MADDENI* Hook. f.

No. 2063. A shrub 6 to 8 feet high, with red-stemmed, dark-green leaves. The large, delicately fragrant flowers, tinged with rose, are produced in threes at the ends of the branches. Native to the Himalayas.

For previous introduction see 103139.

122130. *RHODODENDRON* sp.

No. 2059. Received under the name "umbellatum," for which a place of publication has not been found.

122131. *RHODODENDRON* sp.

No. 2064.

122132. *ROSA MACROPHYLLA* Lindl. Rosaceae. Bigleaf rose.

No. 1975. A large nearly thornless bush, native to the temperate Himalayas up to 10,000 feet altitude. The compound leaves have 9 to 11 oblong to ovate leaflets 1 to 2 inches long, pubescent beneath, and the red flowers, 2 inches across, in clusters of 1 to 3, are followed by oblong-ovoid red fruits which are sometimes 2 inches long.

For previous introduction see 115986.

## 122048 to 122152—Continued

122133. *ROSA* sp.

No. 1976. From 12,000 feet altitude in nearby highlands.

122134. *SAMBUCUS EBULUS* L. Caprifoliaceae.

No. 1973. Received under the name "odorata." for which a place of publication has not been found.

122135. *SAUSSUREA* sp. Asteraceae.

No. 2037. Grown at 10,000 feet altitude in the Sikkim Himalayas.

122136. *SAXIFRAGA HOOKERI* Engl. and Immscher. Saxifragaceae.

No. 1991.

122137. *SAXIFRAGA DIVERSIFOLIA* Wall. Saxifragaceae.

No. 1992.

122138. *SENECIO SCANDENS* Buch-Ham. Asteraceae. Climbing groundsel.

No. 1993. An attractive autumn-flowering composite from the Himalayas, with a woody stem and climbing habit. The yellow flower heads are in few-flowered, loose, paniclike clusters.

For previous introduction see 111089.

122139. *SENECIO* sp. Asteraceae.

No. 1970.

122140. *SMILAX FEROX* Wall. Smilacaceae.

No. 1941. 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.

For previous introduction see 111090.

122141. *SPIRAEA* sp. Rosaceae.

No. 1965. Grown at 12,000 feet altitude in nearby highlands.

122142. *STYRAX HOOKERI* C. B. Clarke. Styracaceae. Snowbell.

No. 1979. A tree often 40 feet high, native to Sikkim and Bhutan at altitudes between 6,000 and 7,000 feet. The white flowers, 1 inch long, are tomentose outside, and the young branches are stellate-pubescent. The wood is white, close grained, and moderately hard.

For previous introduction see 90754.

122143. *SWERTIA HOOKERI* C. B. Clarke. Gentianaceae.

No. 1978. Grown at 12,000 feet altitude in nearby highlands. A perennial herb with a thick hollow stem 2 to 4 feet high, native to the Sikkim Himalayas between 12,000 and 13,000 feet altitude. The elliptic, long-petioled leaves are lanceolate; the nodding purple flowers with blue nerves, on pedicels 2 inches long, are borne in dense axillary cymes.

For previous introduction see 102330.

122144. *TALAUMA HODGSONI* Hook. f. and Thoms. Magnoliaceae.

No. 2050. A tall evergreen tree, related to Magnolia, with obovate-oblong leaves 8 to 20 inches long and large fragrant flowers with white petals and purple calyx. Native to the Sikkim Himalayas between 4,000 and 5,000 feet altitude.

For previous introduction see 39139.

## 122048 to 122152—Continued

122145. *THALICTRUM CHELIDONI* DC. Ranunculaceae. Meadowrue.

No. 2001. A handsome perennial 15 inches high, with pale-green foliage, pubescent beneath. The delicate silvery lavender flowers, over 1 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 111097.

122146. *THALICTRUM FOLIOLOSUM* DC. Ranunculaceae. Meadowrue.

No. 2005. A stiff erect perennial 4 to 8 feet high, native to the temperate slopes of the Himalayas at altitudes of 5,000 to 8,000 feet. The pinnately compound leaves are made up of orbicular leaflets less than 1 inch across, and the white, pale-green, or dull-purple flowers are in much-branched panicles.

For previous introduction see 102332.

122147. *TRACHYSPERMUM* sp. Apiaceae.

No. 2076. A handsome evergreen climber with an abundance of fragrant white flowers.

122148. *TRACHYCARPUS MARTIANUS* (Wall.) Wendl. Phoenicaceae. Martius palm.

No. 2065. A slender-trunked, fan-leaved palm from the temperate regions of the Himalayas, where it grows to a height of 20 to 50 feet. The unarmed trunk bears at its summit a crown of rigid leathery roundish leaves 4 to 5 feet in diameter, which are cut about half way down into narrow 2-lobed segments. The yellow flowers, followed by blue fruits, are borne on a nodding spadix about a foot long.

For previous introduction see 99758.

122149. *TRICHOSANTHES* sp. Cucurbitaceae.

No. 1922. An attractive vine with orange to madder-red globose fruits, 6 inches in diameter.

122150. *VIBURNUM STELLULATUM* Wall. Caprifoliaceae.

No. 2016. A large evergreen shrub with elliptic-lanceolate leaves about 3 inches long and small red berries. Native to the Sikkim Himalayas.

For previous introduction see 116620.

122151. *VIBURNUM NERVOSUM* D. Don. Caprifoliaceae.

No. 2024. A large shrub or small tree with elliptic-oblong, shiny green leaves about 3 inches long and cymes of few small rose-colored flowers followed by purple-black drupes. Native to the Himalayas at altitudes of 10,000 to 13,000 feet.

For previous introduction see 119657.

## 122152. (Undetermined.)

No. 2071. A scandent perennial up to 25 feet high, covered in the fall with small red fruits.

## 122153 to 122156.

From Argentina and Uruguay. Seeds collected by W. A. Archer, Bureau of Plant Industry. Received February 25, 1937.

122153. *CUCURBITA ANDREANA* Naud. Cucurbitaceae.

No. 5005. From Córdoba, Argentina. Presented by Dr. L. R. Parodi, of the Fac-



## 122153 to 122156—Continued

ultad de Agronomía, Buenos Aires, in December 1936. A cucurbit related to the cushaw (*Cucurbita moschata*). The obovoid fruits, about 8 inches long, are marked with white and yellow. Native to Uruguay.

**122154. MEDICAGO DISCIFORMIS DC.** Fabaceae. **Medick.**

No. 4957. From Puerto Colonia, Uruguay, January 18, 1937.

For previous introduction see 90014.

**122155. PASPALUM PLICATULUM ARENARIUM** Arechav. Poaceae.

No. 4953. From Puerto Colonia, Uruguay, January 17, 1937. A perennial grass, native to South America, used as a binder on sand dunes.

**122156. SPARTIUM JUNCEUM L.** Fabaceae. **Spanish broom.**

No. 4969. From Puerto Colonia, Uruguay, January 18, 1937. A large round bush when grown in the open and is covered with light-yellow flowers.

For previous introduction see 110151.

## 122157 to 122206.

From India. Seeds collected by Walter Koelz, Bureau of Plant Industry. Received February 26, 1937.

This material was all collected in 1936, unless otherwise mentioned.

**122157. ALLIUM sp.** Liliaceae. **Onion.**

No. 1348. From Pranu, Baltistan, Kashmir, September 1, at 8,000 feet altitude. Found growing in a field; an onion with rather fragrant white flowers one-half inch across.

**122158 to 122165. AMYGDALUS spp.** Amygdalaceae.

**122158. AMYGDALUS COMMUNIS L.** **Almond.**

No. 1238. *Badam*. From Skardo, Baltistan, Kashmir, August 17. The best variety grown in this district.

**122159 to 122165. AMYGDALUS PERSICA L.** **Peach.**

**122159. No. 1249. Tabushu.** From Skardo, Baltistan, Kashmir, August 16. A small tree said to live about 10 years. Fruit deep yellow with pink cheek, freestone, 2 inches in diameter; flesh white, rather watery.

**122160. No. 1316.** From Kapalu, Baltistan, Kashmir, August 26, at 6,000 feet altitude. Fruit greenish yellow with faint pink cheek, quince-shaped, freestone; flesh white, sweet, and of good flavor.

**122161. No. 1319.** From Kapalu, Baltistan, Kashmir, August 26, at 6,000 feet altitude. Fruit greenish yellow, freestone; flesh greenish yellow, coarse.

**122162. No. 1329.** From Kapalu, Baltistan, Kashmir, August 26, at 6,000 feet altitude. Fruit greenish yellow with trace of pink on cheek, 2½ inches in diameter, freestone; flesh yellow, very good flavor.

**122163. No. 1342.** From Marcha, Baltistan, Kashmir, August 29, at 6,000 feet altitude. Fruit yellowish green,

## 122157 to 122206—Continued

freestone, 2 inches in diameter; flesh yellow, sweet, of good flavor. Tree said to reach great age and size.

**122164 and 122165.** From Bandrole, Kulu, Punjab, November 14, at 6,000 feet altitude. Fruit small, white, and not of much account, but the large attractive tree is used as stock.

**122164. No. 1657.**

**122165. No. 1658. Aru.**

**122166. BENINCASA HISPIDA (Thunb.) Cogn.** Cucurbitaceae. **Waxgourd.**

No. 1928. *Kubendi*. From Darjeeling, Bengal, December 23. Fruit elongate, 14 by 8 inches. Used for confections and also as a vegetable.

**122167. CAPSICUM ANNUUM L.** Solanaceae. **Common redpepper.**

No. 1908. From Benares, United Provinces, December 24.

**122168. CORYLUS COLURNA L.** Betulaceae. **Tree hazelnut.**

No. 1644. Collected by the Seraj Forest Department in the Seraj Forest, Kulu, Punjab, between 7,000 and 8,000 feet altitude. Trees up to about 4 feet in diameter, well formed and attractive.

**122169. CORYLUS COLURNA L.** Betulaceae. **Tree hazelnut.**

No. 1778. *Shirori*. Seeds collected by the Forest Department of Kulu Division, Punjab. A large tree growing from 7,000 to 9,000 feet altitude.

**122170. CUCURBITA PEPO L.** Cucurbitaceae. **Pumpkin.**

No. 1399. *Rghon*. From Leh, Ladak, Kashmir, September 16, at 10,500 feet altitude. A mixed sample.

**122171. FRAGARIA sp.** Rosaceae.

No. 934. From Koti, Kulu, Punjab, June 4, at 8,000 feet altitude. Fruits one-half inch in diameter, crimson, well-flavored, but a shy bearer.

**122172. JUGLANS REGIA L.** Juglandaceae. **Persian walnut.**

No. 1659. *Akhrot*. From Rupl, Kulu, Punjab, November 14, at 6,000 feet altitude. A good thin-shelled walnut, of which there are many types in the Kulu Valley.

**122173. JUGLANS REGIA L.** Juglandaceae. **Persian walnut.**

No. 1626. *Akrot*. From Rahla, Kulu, Punjab, at 10,000 feet altitude. A large forest tree, with a trunk up to 6 feet or more in circumference.

**122174. LAGENARIA LEUCANTHA (Duchesne)** Rusby. Cucurbitaceae. **Calabash gourd.**

No. 2108. *Lauki*. From Calcutta, January 3, 1937. A long sweet gourd.

**122175. PISUM SATIVUM L.** Fabaceae. **Pea.**

No. 1931. Darjeeling, Bengal, December 24, at 7,000 feet altitude. Purchased in the market.

**122176 to 122182. MORUS spp.** Moraceae. **Mulberry.**

**122176 to 122180. MORUS ALBA L.** **White mulberry.**

From Skardo, Baltistan, Kashmir, August 16, at 6,500 feet altitude.

## 122157 to 122206—Continued

122176. No. 1167—A. *Karpo osse*. A sweet early variety.

122177. No. 1168—A. *Longrifino*.

122178. No. 1169—A. *Shantut*. A sweet lavender variety.

122179. No. 1170—A. *Narzin osse*.

122180. No. 1171—A. *Gang osse*.

122181. *MORUS NIGRA* L. Black mulberry.

No. 1166—A. A delicious mulberry, sweet and juicy when mature.

For previous introduction and description see 121453.

122182. *MORUS* sp.

No. 1158. Fruit 1 inch long, sweet, late, very good.

122183. *PHOENIX SYLVESTRIS* (L.) Roxb. *Phoenixaceae*. India date palm.

No. 2123. Presented by the Calcutta Botanic Garden, Calcutta, January 6, 1937.

122184. *POTENTILLA ATROSANGUINEA* Lodd. *Rosaceae*.

No. 1513. *Romentok*. From Tinu, Lahul, Punjab, September 16. An ascending or erect perennial, 2 to 3 feet high, growing in clumps and branching from the roots, with silvery digitate leaves and dark crimson, mahogany, or orange flowers three-fourths to over an inch in diameter. Native to the temperate Himalayas at altitudes of 6,000 to 12,000 feet.

122185 to 122195. *PRUNUS* spp. *Amygdalaceae*.

122185 and 122186. *PRUNUS ARMENIACA* L. *Aprioot*.

From Shigar, Baltistan, Kashmir, August 16 and 20.

122185. No. 1291. Fruit round, reddish,  $1\frac{1}{4}$  inches in diameter; flesh sweet, liquid.

122186. No. 1260. Fruit round, greenish yellow,  $1\frac{1}{4}$  inches in diameter; flesh sweet, liquid.

122187. *PRUNUS CERASUS* L. Sour cherry.

No. 1435. From Shigar, Baltistan, Kashmir, August 19. A cherry much like our Montmorency in size, appearance, and taste, but the tree is less bushy.

122188 and 122189. *PRUNUS CORNUTA* (Wall.) Steud. Himalayan bird cherry.

A deciduous tree 50 to 60 feet high, native to the Himalayan region up to 10,000 feet altitude. The cylindrical racemes of small white flowers are followed by round red fruits, one-third of an inch in diameter, which become dark purple. Closely allied to *Prunus padus*.

For previous introduction see 119232.

122188. No. 1564. *Krunn*. From Gunde, Lahul, Punjab, September 1, at 10,500 feet altitude.

122189. No. 1739. *Jamnoo*. From above Bandrole, Kulu, Punjab, November 14, at 10,000 feet altitude. A form of the Lahul *Krunn* and probably less hardy.

122190. *PRUNUS DOMESTICA* L. Common plum.

No. 1290. From Shigar, Baltistan, Kashmir, August 20. Fruit shaped like the German plum, 2 inches long.

## 122157 to 122206—Continued

122191 to 122194. *PRUNUS TOMENTOSA* Thunb. Manohu cherry.

122191. No. 1280. *Shogun*. From Shigar, Baltistan, Kashmir, August 20. An attractive small tree with curling bark; fruit very pale pink, hairy, not so good to eat as the red variety.

122192. No. 1281. *Shogun*. From Shigar, Baltistan, Kashmir, August 20, at 6,500 feet altitude. An attractive tree with curly bark; fruits red, hairy, one-half inch in diameter, pleasant to eat.

122193. No. 1320. *Shogun*. From Kapalu, Baltistan, Kashmir, August 26, at 6,000 feet altitude. An attractive tree with curly bark on trunk and branches; fruit hairy, red, three-fourths of an inch in diameter, pleasant flavor.

122194. No. 1326. *Shogun*. From Kapalu, Baltistan, Kashmir, August 26, at 6,000 feet altitude. Tree small, attractive with curly bark on trunk and branches; fruit very pale pink, edible.

122195. *PRUNUS* sp.

No. 1512. From Tinu, Lahul, Punjab, October 10, at 11,000 feet altitude. A low shrub to 2 feet high, with small red fruits. Found in dry situations; fruits sparingly.

122196 to 122201. *RIBES* spp. *Grossulariaceae*.

122196. *RIBES ORIENTALE* Desf.

No. 1457. *Nyanka*. From the upper Bhaga Valley, Lahul, Punjab, October 8, at 11,000 feet altitude. A well-formed dense shrub up to 5 feet high, found on dry slopes; fruit yellow to orange yellow, sweet, less than half an inch in diameter.

For previous introduction see 58639.

122197. *RIBES RECLINATUM* L. European gooseberry.

No. 1465. *Piltse*. From Kolung, Lahul, Punjab, October 10 at 12,000 feet altitude. Bush dense, well formed, up to 6 feet high; fruit orange, hirsute, pleasantly but strongly acid, much like a gooseberry. Used here as we use lemons or oranges.

122198 and 122199. *RIBES RUBRUM* L. Currant.

*Rasta*. A shrub, found usually in damp situations, up to 4 feet tall, fruits one-half inch in diameter, black with purple-red juice, acid.

For previous introduction see 40478.

122198. No. 1458. From the Upper Bhaga Valley, Lahul, Punjab, at 12,000 feet altitude.

122199. No. 1609. From Pukar, Lahul, Punjab, at 12,000 feet altitude.

122200. *RIBES* sp.

No. 1114. From above Sodpur, Baltistan, Kashmir, August 10, at 12,500 feet altitude. Bush spreading, up to 4 feet high; fruit one-half inch in diameter, reddish black, fragrant; flavor pleasant, but slightly acid; seeds small.

## 122157 to 122206—Continued

122201. *RIBES* sp.

No. 1563. *Rupshu*. From Tinu, Lahul, Punjab, October 16, at 10,500 feet altitude. Bush low, to 3½ feet high, found in damp situations; fruit about one-half inch in diameter, greenish; flavor subacid; seeds small.

122202 to 122204. *RUBUS* spp. Rosaceae.122202. *RUBUS NIVEUS* Thunb.

No. 1746. *Sura chianch*. Purchased from the Director of Agriculture, Kashmir.

122203. *RUBUS PURPUREUS* Bunge.

No. 1517. *Kantakari*. From Pukar, Lahul, Punjab, September 1, at 12,000 feet altitude. A raspberry about 3 feet high, with usually trifoliate leaves 2 to 4 inches long and red fruits with a pleasant flavor. Native to eastern Asia.

122204. *RUBUS* sp.

No. 1647. From Jangl, Rampur-Bashahr, July 18 at 9,000 feet altitude.

122205. *VITIS VINIFERA* L. Vitaceae.  
European grape.

No. 1369. From Surmo, Baltistan, Kashmir, August 28, at 9,000 feet altitude. Fruits blackish, elliptical, about 1 inch long, bunches large, 1 foot long; seed coats in most fruits so thin as to give the impression of the fruits being seedless.

122206. *VITIS* sp. Vitaceae. Grape.

## 122207 to 122413.

From Turkey. Seeds collected by H. L. Westover and F. L. Wellman, Bureau of Plant Industry. Received January 21, 1937.

This material was all collected in the summer and autumn of 1936.

122207. *ACANTHUS* sp. Acanthaceae.

No. 3437. From Alma Dag, June 28.

122208. *ADONIS* sp. Ranunculaceae.

No. 3317. A wild plant from near Ankara, May 18.

122209. *ADONIS* sp. Ranunculaceae.

No. 3401. From Ankara, June 25. A plant with red, pink, and yellow flowers.

122210. *ANCHUSA AZUREA* Mill. Boraginaceae.

No. 3397. From Ankara, June 25. Flowers light blue with white center.

122211 to 122214. *ALLIUM* spp. Liliaceae.122211. *ALLIUM* sp.

No. 1568. From 40 km. southeast of Diyarbekir, July 7. Low plants with pink to lavender flowers.

122212. *ALLIUM* sp.

No. 1584. From 40 km. southeast of Diyarbekir, July 7. Tall plants with large heads of white flowers.

122213. *ALLIUM* sp.

No. 2984. From the Kutahya bazar, September 28. Grown for the extra large purplish flower heads.

122214. *ALLIUM* sp.

No. 1249. *Oheragate*. From the Bursa bazar, June 18.

## 122207 to 122413—Continued

122215. *AMARANTHUS* sp. Amaranthaceae.

No. 2867. From the sea beach, 1 km. west of Yalova, September 12.

122216. *ANCHUSA* sp. Boraginaceae.

No. 2265. From 25 km. east of Erzinjan, August 9.

122217. *ANTHEMIS* sp. Asteraceae.

No. 2803. From south of Dyke, at the summit of Ulu Dag, August 9. A small perennial with white flowers.

122218. *ANTHEMIS* sp. Asteraceae.

No. 2773. From Ulu Dag, 39 km. east of Bursa. A low perennial found growing in clumps. The white flowers appear early.

122219 to 122224. *ANTIRRHINUM* spp. Scrophulariaceae. Snapdragon.122219. *ANTIRRHINUM* sp.

No. 2193. From 95 km. southeast of Susheri, August 7.

122220. *ANTIRRHINUM* sp.

No. 2628. From 34 km. southwest of Samsun, August 24.

122221. *ANTIRRHINUM* sp.

No. 595. From the Antalya bazar, June 4.

122222. *ANTIRRHINUM* sp.

No. 819. From the ruins of Ephesus, May 24. A perennial abundant on the rock walls of the ruins. Flowers deep and light pink, a mixed sample.

122223. *ANTIRRHINUM* sp.

No. 1135. From the ruins of Ephesus, June 12. A perennial with deep-pink flowers.

122224. *ANTIRRHINUM* sp.

No. 1137. From the ruins of Ephesus, June 12. A perennial with pale-pink flowers.

122225. *AQUILEGIA* sp. Ranunculaceae.

No. 611. From the Antalya bazar, June 4.

122226. *ARBUTUS ANDRACHNE* L. Ericaceae.

No. 3488. From between Haydarpasha and Shile, October 25. An evergreen shrub with large glossy-green leaves and abundant clusters of white or pale-pink flowers in October; fruits bright red, three-fourths to 1 inch in diameter, maturing the following fall. A very attractive shrub, common in the hills and mountains of western Turkey.

For previous introduction see 109035.

122227. *ASPARAGUS* sp. Convallariaceae.

No. 2656. From 66 km. southeast of Merzifon, August 25. A wild, semi-climbing asparagus with long coarse leaves.

122228. *ASPARAGUS* sp. Convallariaceae.

No. 2826. From Yalova Kaplijalari, August 11. A prickly, woody variety.

122229. *ASTRAGALUS* sp. Fabaceae.

No. 1512. From 25 km. east of Gaziantep, July 5.

## 122207 to 122413—Continued

122230. *BEGONIA SEMPERFLORENS* Link and Otto. Begoniaceae.

No. 1275. From the Bursa bazar, June 18. A low bushy succulent begonia with ovate leaves and few-flowered axillary clusters of white or rose-colored flowers. Native to Brazil.

122231. *BEGONIA TUBEROSA* Lam. Begoniaceae.

No. 1263. From the Bursa bazar, June 18. A herbaceous perennial about 6 inches high, with white flowers. Native to the East Indies.

122232. *BERBERIS* sp. Berberidaceae. Barberry.

No. 2316. From 24 km. north of Gemushane, August 10. A large shrub with red fruits.

122233. *BERBERIS* sp. Berberidaceae. Barberry.

No. 2414. From 29 km. west of Rize, August 13. A barberry with small red berries in clusters.

122234 to 122236. *BETA VULGARIS* L. Chenopodiaceae. Common beet.

122234. No. 2379. From the Trabzon bazar, August 11. Sugar beets.

122235. No. 3240. From the Adapazari bazar, October 20. Sugar beets.

122236. No. 3168. Sugar beets from the Kastamonu bazar, October 14.

122237 to 122247. *CAMPANULA* spp. Campanulaceae.

122237. *CAMPANULA* sp.

No. 1302. Tall bluebells from the hills 30 km. east of Bursa, June 19.

122238. *CAMPANULA* sp.

No. 1755. Bluebells from 30 km. southeast of Elaziz, July 13.

122239. *CAMPANULA* sp.

No. 1078. From Bergama, June 10.

122240. *CAMPANULA* sp.

No. 1117. From near Kirkagach, June 11.

122241. *CAMPANULA* sp.

No. 1141. From walls in the ruins of Ephesus, June 12.

122242. *CAMPANULA* sp.

No. 1269. From the Bursa bazar, June 18.

122243. *CAMPANULA* sp.

No. 2331. From 60 km. south of Trabzon, August 10.

122244. *CAMPANULA* sp.

No. 2382. From 60 km. south of Trabzon, August 10. A variety with very large clusters of beautiful blue flowers.

122245. *CAMPANULA* sp.

No. 2457. From 60 km. south of Trabzon, August 10. A variety with white flowers.

122246. *CAMPANULA* sp.

No. 2473. From 75 km. south of Giresun, August 17. A variety with large clusters of blue flowers.

## 122207 to 122413—Continued

122247. *CAMPANULA* sp.

No. 2486. From 40 km. south of Giresun, August 18. A large plant with light and dark-blue flowers in clusters.

122248. *MENTHA PULEGIUM* L. Menthaceae.

No. 2815. From Yalova Kaplijalari, September 11. A prostrate, much-branched mint with small oval leaves and dense axillary whorls of small bluish-lilac flowers. Native to Europe and Asia.

122249. *CAMPANULA* sp. Campanulaceae.

No. 2979. From the ruined walls of Ephesus, September 25. A perennial with large pale-blue flowers.

122250. *CENTAUREA* sp. Asteraceae.

No. 3313. From Kechlören, Ankara, May 13.

122251. *CENTAUREA* sp. Asteraceae.

No. 770. From near Denizli, May 31.

122252. *CHENOPodium* sp. Chenopodiaceae.

No. 2850. From Yalova Kaplijalari, September 12.

122253. *COCHLEARIA* sp. Brassicaceae.

No. 2443. From the Cilician Gates, July 24.

122254. *CHRYSANTHEMUM CORONARIUM* L. Asteraceae. Crowndaisy.

No. 634. From near Koshadasi, May 25. An edible chrysanthemum, the leaves of which are used as a garnish, as flavoring, and also cooked as greens.

For previous introduction see 113325.

122255. *CHRYSANTHEMUM SEGETUM* L. Asteraceae. Corn-marigold.

No. 725. From the mountains 30 km. southeast of Mug'a, June 28. A wild chrysanthemum with yellow flower heads.

122256. *ANTHEMIS* sp. Asteraceae.

No. 2792. From Ulu Dag at 7,000 feet altitude, September 9. An alpine daisy.

122257 to 122262. *CLEMATIS* spp. Ranunculaceae.

122257. *CLEMATIS* sp.

No. 1185. From the hills 35 km. west of Balikesir, June 16. A variety with purple flowers.

122258. *CLEMATIS* sp.

No. 1297. From 43 km. east of Bursa, June 19.

122259. *CLEMATIS* sp.

No. 1298. From 40 km. east of Bursa, June 19.

122260. *CLEMATIS* sp.

No. 2319. From 76 km. north of Gemushane, August 10.

122261. *CLEMATIS* sp.

No. 2509. From 35 km. east of Ordu, August 19. A blue and purple variety.

122262. *CLEMATIS* sp.

No. 2723. From Urgup, August 28. A variety with yellow flowers.

122263. *CLEOME* sp. Capparidaceae.

No. 2270. From 24 km. east of Erzinjan, August 9.

## 122207 to 122413—Continued

122264 to 122266. CONVULVULUS spp. Convolvulaceae.

122264. CONVULVULUS sp.

No. 1509. From 25 km. east of Gasi-antep, July 5. Pink flowers, growing in clumps.

122265. CONVULVULUS HIRSUTUS Stev.

No. 1579. From 5 km. east of Siverek, July 7. A perennial decumbent or climbing bindweed, about 3 feet long, with pinkish or creamy white flowers. Native to Asia Minor.

122266. CONVULVULUS sp.

No. 2298. From 68 km. north of Gemushane, August 10. A herbaceous perennial vine with large white flowers.

122267. CORCHORUS sp. Tiliaceae.

No. 3108. From the Chankiri bazar, October 12.

122268. CORNUS sp. Cornaceae.

No. 2833. From Yalova Kaplijalari, September 11.

122269. CORNUS sp. Cornaceae.

No. 2313. From 75 km. north of Gemushane, August 10.

122270. CRATAEGUS sp. Malaceae.

No. 2472. From 106 km. south of Giresun, August 17.

122271 to 122273. DATURA spp. Solanaceae.

122271. DATURA sp.

No. 532. From the Mugla bazar, May 28.

122272. DATURA sp.

No. 600. From the Izmir bazar, May 23.

122273. DATURA METEL FASTUOSA (L.) Safford.

No. 612. From the Antalya bazar, June 4. An ornamental herbaceous annual, common throughout India and the East Indies, which varies in height from 2 to 6 feet. It has entire or deeply-toothed leaves about 4 inches long, and flowers, 7 or more inches in length, varying in color from white to lavender or rose.

For previous introduction see 110187.

122274 to 122279. DELPHINIUM spp. Ranunculaceae. Larkspur.

122274. DELPHINIUM sp.

No. 1743. From the mountains south-east of Elaziz, July 13.

122275. DELPHINIUM sp.

No. 1778. From 35 km. southwest of Elaziz, July 14. Low-growing plants with flowers not borne in spikes.

122276. DELPHINIUM sp.

No. 2005. From 7 km. west of Chiftebane, July 25.

122277. DELPHINIUM sp.

No. 2336. A tall perennial from 50 km. south of Trabzon, August 10.

## 122207 to 122413—Continued

122278. DELPHINIUM sp.

No. 2450. From 45 km. north of Nigde, July 26.

122279. DELPHINIUM sp.

No. 2693. From 21 km. south of Tokat, August 28.

122280 to 122321. DIANTHUS spp. Silenaceae.

122280. DIANTHUS BARBATUS L.

Sweet-william.

No. 3032. From the Amasya bazar, October 6.

122281. DIANTHUS sp.

No. 580. From the Izmir bazar, May 23.

122282. DIANTHUS sp.

No. 719. From the Lulum river bed, May 28. A species with white lace petals.

122283. DIANTHUS sp.

No. 769. From Denizli, May 31.

122284. DIANTHUS CARTHUSIANORUM L.

No. 1066. From Bergama, June 10.

122285. DIANTHUS sp.

No. 1084. A small plant from the ruins of Bergama, June 10.

122286. DIANTHUS sp.

No. 1091. From dry slopes 65 km. northwest of Izmir, June 10.

122287. DIANTHUS sp.

No. 1092. From a dry slope 80 km. northwest of Izmir, June 10.

122288. DIANTHUS sp.

No. 1093. A small plant from the ruins at Bergama, June 10.

122289. DIANTHUS sp.

No. 1107. From limestone hills south of Kirkagach, June 11.

122290. DIANTHUS CARTHUSIANORUM L.

No. 1179. From 10 km. west of Balikesir, June 16.

122291. DIANTHUS sp.

No. 1200. From 50 km. west of Balikesir, June 16, on a dry rocky area.

122292. DIANTHUS CARTHUSIANORUM L.

No. 1300. From 17 km. east of Bursa, June 19.

122293. DIANTHUS sp.

No. 1314. From Gemlik Bay, June 20.

122294. DIANTHUS sp.

No. 1452. From 6 km. north of Gaziantep, July 2. A plant with cream-colored, lacy petals.

122295. DIANTHUS sp.

No. 1453. From 31 km. north of Gaziantep, July 2. A species with pink flowers.

122296. DIANTHUS sp.

No. 1635. From 47 km. south of Diyarbekir, July 9.

## 122207 to 122413—Continued

122297. *DIANTHUS* sp.  
No. 1574. From 41 km. southeast of Diyarbekir, July 7.
122298. *DIANTHUS* sp.  
No. 1675. From 25 km. east of Diyarbekir, July 10.
122299. *DIANTHUS* sp.  
No. 1724. From 32 km. east of Elaziz, July 13.
122300. *DIANTHUS CARTHUSIANORUM* L.  
No. 1740. From 28 km. southeast of Elaziz, September 13.
122301. *DIANTHUS* sp.  
No. 1963. From Birejik, July 22. A plant with dark-pink flowers.
122302. *DIANTHUS CARTHUSIANORUM* L.  
No. 2064. From Alma Dag, 25 km. southeast of Ankara, August 1.
122303. *DIANTHUS* sp.  
No. 2097. From Alma Dag, 25 km. southeast of Ankara, August 1.
122304. *DIANTHUS* sp.  
No. 2202. From 95 km. southeast of Susheri, August 7.
122305. *DIANTHUS* sp.  
No. 2279. From 55 km. east of Erzinjan, August 9. Flowers white, unusually long and graceful, petals deeply fringed.
122306. *DIANTHUS* sp.  
No. 2288. From 203 km. east of Erzinjan, August 9. Flowers shell pink with slightly fringed petals.
122307. *DIANTHUS* sp.  
No. 2294. From 203 km. east of Erzinjan, August 9. Flowers white, petals slightly fringed.
122308. *DIANTHUS* sp.  
No. 2329. From 35 km. north of Gemushane, Aug. 9. Flowers red, borne in clusters.
122309. *DIANTHUS HAEMATOCALYX* Boiss. and Heldr.  
No. 2474. From 106 km. south of Giresun, August 17.
122310. *DIANTHUS* sp.  
No. 2483. From 97 km. south of Giresun, August 17.
122311. *DIANTHUS* sp.  
No. 2492. From 75 km. south of Giresun, August 17.
122312. *DIANTHUS* sp.  
No. 2602. From 4 km. west of Sam-sun, August 23.
122313. *DIANTHUS* sp.  
No. 2637. From 50 km. southeast of Amasya, August 25.
122314. *DIANTHUS CARTHUSIANORUM* L.  
No. 2670. From 16 km. south of Tokat, August 26. Flowers red.
122315. *DIANTHUS CARTHUSIANORUM* L.  
No. 2671. From 41 km. south of Tokat, August 26.

## 122207 to 122413—Continued

122316. *DIANTHUS* sp.  
No. 2692. From 21 km. south of Tokat, August 26.
122317. *DIANTHUS* sp.  
No. 2747. From Ulu Dag, 35 km. south of Bursa, September 7.
122318. *DIANTHUS CARTHUSIANORUM* L.  
No. 2823. From Yalova Kaplijalari, September 11.
122319. *DIANTHUS* sp.  
No. 2801. From the summit of Ulu Dag, September 8.
122320. *DIANTHUS CARTHUSIANORUM* L.  
No. 2831. From Yalova Kaplijalari, September 11.
122321. *DIANTHUS* sp.  
No. 3355. From 35 km. east of Bandirma, June 18.
- 122322 to 122324. *ECHIU*M spp. Boraginaceae.
122322. *ECHIU*M sp.  
No. 810. From 25 km. north of Antalya, June 3, on a limestone plateau. Flowers light blue.
122323. *ECHIU*M PLANTAGINEUM L.  
No. 679. From near Koshadasi, May 26.
122324. *ECHIU*M sp.  
No. 668. From near Chine, May 26. Flowers pink.
122325. *ERICA* sp. Ericaceae.  
No. 2756. From Ulu Dag, 35 km. south of Bursa, September 7. A heather found growing by springs.
122326. *ERICA* sp. Ericaceae.  
No. 2387. From 16 km. east of Trabzon, August 12.
122327. *FUCHSIA* sp. Onagraceae.  
No. 3033-A. From the Amasya bazar.
- 122328 to 122331. *GENTIANA* spp. Gentianaceae. Gentian.  
122328. *GENTIANA* sp.  
No. 3146. From 25 km. north of Kastamonu, October 13.
122329. *GENTIANA* sp.  
No. 2673. From the mountains, 46 km. south of Tokat, August 26.
122330. *GENTIANA* sp.  
No. 2487. From 92 km. south of Giresun, August 17. Flowers blue, borne next to ground; found in mountain meadows.
122331. *GENTIANA* sp.  
No. 2471. From 50 km. south of Giresun, August 17.
122332. *GLADIOLUS* sp. Iridaceae.  
No. 1950. From Birejik, July 22.
- 122333 to 122335. *GYPHOPHILA* spp. Silenaceae.  
122333. *GYPHOPHILA* sp.  
No. 1870. From 50 km. north of Malatya, July 17.

## 122307 to 122413—Continued

122334. *Gypsophila* sp.

No. 1430. *Babysbreath*. From 17 km. north of Gaziantep, July 2.

122335. *Gypsophila* sp.

No. 2163. *Dwarf babysbreath*. From 49 km. east of Sivas, August 6.

122336. *INULA* sp. Asteraceae.

No. 2847. From Yalova Kaplılari, September 11. A freely branching yellow-flowered perennial which blooms in the autumn.

122337. *INULA CONYZA* DC. Asteraceae.

No. 2864. From Yalova Kaplılari, September 12. A tall herb with yellow flowers in umbellike clusters.

122338 to 122346. *IRIS* spp. Iridaceae.122338. *IRIS GATESII* Foster.

No. 3376. From the Mission garden, Gaziantep, June 19. Seed from hand-pollinated, isolated plants. An iris native to Asia Minor with 1-flowered stems about 19 inches high. The outer flower segments, 3 to 5 inches across, are creamy white, covered with fine veins, producing a light-gray effect; the inner segments are larger, pale purple or yellow.

122339. *IRIS LUPINA* Foster.

No. 3365. *Wolf's ear* or *Duluk*. From the Mission garden, Gaziantep, June 19. An *Oncocyclus* iris with a fleshy, creeping rhizome and about 6 erect narrow leaves 9 inches or more high. The stem, 6 inches high, bears a single flower with falls and standards greenish yellow marked with brownish-red veins. Native to Asia Minor.

For previous introduction see 106024.

122340. *IRIS* sp.

No. 627. Found on moist land near Ephesus, May 24. Flowers white.

122341. *IRIS* sp.

No. 734. From 50 km. southeast of Mugla, May 28, in moist soil. Flowers bright yellow.

122342. *IRIS* sp.

No. 1142. From a hillside near Ephesus, June 12.

122343. *IRIS* sp.

No. 2267. From 50 km. east of Erzinjan, August 9.

122344. *IRIS* sp.

No. 2407. From 29 km. west of Rize, August 13.

122345. *IRIS* sp.

No. 2431. From 25 km. east of Ordu, August 19.

122346. *IRIS* sp.

No. 3105. From 15 km. north of Kalejik, October 12.

122347. *LEPIDIUM SATIVUM* L. Brassicaceae. Garden cress.

No. 585. From the Antalya bazar, June 4.

122348. *LIMONIUM* sp. Plumbaginaceae.

No. 2980. From Ephesus, September 25. Flowers blue.

## 122307 to 122413—Continued

122349. *LINUM* sp. Linaceae.

No. 635. From near Koshadasi, May 25. Wild flax.

122350. *FUMANA* sp. Cistaceae.

No. 641. From 25 km. southeast of Izmir, May 25. A perennial flaxlike rock plant related to *Hellianthemum*, with yellow flowers.

122351 to 122360. *LINUM* spp. Linaceae. Flax.122351. *LINUM* sp.

No. 647. Wild flax from the roadside 20 km. south of Izmir, May 25.

122352. *LINUM* sp.

No. 728. Wild flax from 60 km. southeast of Mugla, June 28.

122353. *LINUM* sp.

No. 732. From the Lulum Valley, May 28.

122354. *LINUM* sp.

No. 1098. Wild flax from Kirkagach, June 11.

122355. *LINUM* sp.

No. 1111. Wild flax from the road 20 km. east of Kirkagach, June 11.

122356. *LINUM* sp.

No. 1191. Wild flax from 85 km. west of Balikesir, June 16.

122357. *LINUM* sp.

No. 1203. Wild flax from 10 km. west of Balikesir, June 16.

122358. *LINUM PUBESCENS* Russ.

No. 1414. From bottom land, 48 km. north of Gaziantep, July 2. An annual flax 1 to 1½ feet high with oblong or oblong lanceolate leaves and pink flowers in cymes with spikelike branches. The handsome fragrant blossoms do not drop during the day. Native to Asia Minor.

122359. *LINUM* sp.

No. 1418. A perennial flax with yellow flowers, from dry lands 6 km. north of Gaziantep, July 2.

122360. *LINUM* sp.

No. 1674. A perennial flax with blue flowers, from 25 km. east of Diyarbekir, July 10.

122361. *LITHOSPERMUM* sp. Boraginaceae.

No. 1501. From 5 km. southeast of Gaziantep, July 4. A dry-land plant with gray foliage, found among limestone rocks.

122362 to 122365. *LINUM* spp. Linaceae. Flax.122362. *LINUM* sp.

No. 2412. From 32 km. west of Rize, August 13. A flax with yellow miniature flowers.

122363. *LINUM PERENNE* L.

No. 2582. Wild flax from 20 km. west of Samsun, August 23.

122364. *LINUM* sp.

No. 2589. From 4 km. west of Samsun, August 23. A flax with yellow flowers, very attractive but very small.

## 122207 to 122413—Continued

## 122365. LINUM sp.

No. 2655. From 24 km. southeast of Merzifon, August 25.

## 122366. LITHOSPERMUM sp. Boraginaceae.

No. 1753. From 25 km. southeast of Elaziz, July 13. An attractive rock plant with nodding inflorescence.

## 122367. LYCHNIS sp. Silenaceae.

No. 3407. From a dry rocky slope, 3 km. northeast of Ankara, June 26.

## 122368. MIMOSA PUDICA L. Mimosaceae. Sensitiveplant.

No. 1276. *Kusev*. From the Bursa bazar, June 18.

## 122369. MUSCARI sp. Liliaceae. Grape-hyacinth.

No. 1132. From Kirkagach, June 11.

## 122370. NERIUM OLEANDER L. Apocynaceae. Oleander.

No. 2726. From Talas, but the seed was originally collected in the Taurus Mountains back of Antalya. A mixed sample from trees with red and white flowers.

For previous introduction see 109529.

## 122371. NERIUM OLEANDER L. Apocynaceae. Oleander.

No. 2947. From 5 km. north of Kemal Pasha, September 23.

## 122372. PICEA sp. Pinaceae. Spruce.

No. 2422. From 70 km. south of Giresun, August 17.

## 122373 to 122375. RHAMNUS PETIOLARIS Boiss. Rhamnaceae.

A spreading shrub or small tree 6 to 12 feet high, with fruits used as a yellow dye. Native to Asia Minor.

122373. No. 2921. From Gaziantep, but collected at the Izmir Fair, September 22.

122374. No. 2920. From Marash, but collected at the Izmir Fair, September 22.

122375. No. 1260. From the Bursa bazar, June 18.

## 122376. RHODODENDRON sp. Ericaceae.

No. 2616. From 30 km. southwest of Samsun, August 24.

## 122377. RUMEX sp. Polygonaceae.

No. 681. Found in pine woods on the road to Milas, June 26.

## 122378. RUMEX sp. Polygonaceae.

No. 1652. From 70 km. south of Diyarbekir, July 9; seeds boiled and the extract used as a dye.

## 122379. SALVIA sp. Menthaceae. Mint.

No. 3490-B. From Eskishehir.

## 122380. SALVIA sp. Menthaceae. Mint.

No. 1103. From Kirkagach, June 9.

## 122381. SCABIOSA sp. Dipsacaceae.

No. 3385. From Ankara, June 25. Occurs as a weed in all parts of Turkey.

## 122382. SECALE CEREALE L. Poaceae. Rye.

No. 2882. From Chanak Kale bazar, September 18.

## 122207 to 122413—Continued

## 122383 to 122390. SILENE spp. Silenaceae.

## 122383. SILENE LATIFOLIA (Mill.) Britten and Rendle.

No. 677. *Campion*. On the road to Milas, June 26.

## 122384. SILENE sp.

No. 1673. *Campion*. From 16 km. east of Diyarbekir, July 10.

## 122385. SILENE sp.

No. 2868. *Campion*. From the sea beach 1 km. west of Yalova, September 12.

## 122386. SILENE sp.

No. 1274. *Kayakurogi*. From the Bursa bazar, June 18.

## 122387. SILENE sp.

No. 1469. From 45 km. north of Gaziantep, July 3.

## 122388. SILENE ARMERIA L.

No. 2406. From 50 km. east of Trabzon, August 13.

## 122389. SILENE ARMERIA L.

No. 3348. From limestone cliffs 65 km. west of Balikesir, June 16. Flowers deep red, in large clusters.

## 122390. SILENE sp.

No. 1183. From hills 10 km. west of Balikesir, June 16.

## 122391. LYCHNIS ALBA Mill. Silenaceae.

No. 1301. From 43 km. east of Bursa, June 19. Flowers yellow.

## 122392 to 122394. SILENE spp. Silenaceae.

## 122392. SILENE sp.

No. 1756. From 39 km. southeast of Elaziz, July 13.

## 122393. SILENE SEDOIDES Poir.

No. 1783. From 52 km. southwest of Elaziz, July 14. A branching annual about 1 foot high, with fleshy oblong to oblong-spatulate leaves and reddish flowers in racemes. Native to the Mediterranean region.

## 122394. SILENE sp.

No. 1788. From 35 km. southwest of Elaziz, July 14. A low-growing plant with purplish flowers.

## 122395 to 122400. SORGHUM VULGARE Pers. Poaceae. Sorghum.

122395. No. 2941. *Urfa m'lo*. From the Izmir Fair, September 22.

122396. No. 540. From the Mugla bazar, May 28.

122397. No. 3017. From the Kutahya bazar, September 28.

122398. No. 2612. From 5 km. west of Samsun, August 23, where it is planted along the borders of corn fields.

122399. No. 3165. From the Kastamonu bazar, October 14.

122400. No. 1622. *Durra*. From the Diyarbekir bazar, July 8.



## 122207 to 122413—Continued

122401. *SPARTIUM JUNCIFOLIUM* L. Fabaceae.  
Spanish broom.

No. 2558. *Scotch broom*. From 4 km. east of Samsun, August 22.

122402. *SWERTIA* sp. Gentianaceae.

No. 2789. From Ulu Dag, 35 km. south of Bursa, September 9. A low plant found near springs on the mountain slope.

122403. *ANCHUSA* sp. Boraginaceae.

No. 3442. From Alma Dag, June 28.

122404 and 122405. *TRIGONOCARYUM INVOLUCRATUM* (Stev.) Johnst. Boraginaceae.

A low annual related to the forget-me-not, with white or blue flowers. Native to the Caucasus region at altitudes of 4,000 to 9,000 feet.

122404. No. 615. From Ephesus, May 28. Flowers deep blue with white center.

122405. No. 3320. From Ankara, May 20. Flowers deep blue with white center.

122406. *TRIGONELLA FOENUM-GRÆCUM* L. Fabaceae. Fenugreek.

No. 3173. From the Kastamonu bazar, October 14. Used for flavoring meat.

122407. *VERBASCUM LYCHNITIS* L. Scrophulariaceae. Mullein.

No. 2290. From 143 km. east of Erzinjan, August 9. A tomentose biennial with oblong-elliptic, crenate leaves and panicles of small yellow flowers.

For previous introduction see 106534.

122408 to 122412. *VIOLA* spp. Violaceae. Violet.

122408. No. 2736. From near the old baths, 14 km. west of Yalova, September 6. A plant with a climbing habit.

122409. No. 743. From the mountains 11 km. south of Denizli, May 30.

122410. No. 745. From the mountains 11 km. south of Denizli, May 30.

122411. No. 1309. From 25 km. north-east of Bursa, June 19.

122412. No. 2781. From Ulu Dag, 36 km. south of Bursa, September 8.

122413. (Undetermined.)

No. 1369. *Camion*. From the Marash bazar, July 2. Used to flavor meat.

122414 and 122415. *PHASEOLUS VULGARIS* L. Fabaceae. Common bean.

From Australia. Seeds from the Hawkesbury Agricultural College, presented through Dr. H. Wenholz, Director of Plant Breeding, Department of Agriculture, Sydney, New South Wales. Received March 11, 1937.

122414. *Canadian Wonder*, Burnley selection.

122415. *Pale Dun*.

## 122416 to 122418.

From the Union of South Africa. Bulbs purchased from the Winton Nurseries, Bonnie Vale, Cape Province. Received March 19, 1937.

122416. *ACIDANTHERA CAPENSIS* (Ker.) Benth. and Hook. Iridaceae.

## 122416 to 122418—Continued

A South African bulbous plant resembling *gladiolus*, with numerous linear sword-shaped leaves about 1 foot long and spikes of pinkish-blue flowers on stems about 18 inches high.

122417. *BUPHANE CILIARIS* (L.) Herbert. Amaryllidaceae.

The creamy yellow flower stalks of this remarkable plant appear before the leaves and bear 50 to 100 flowers, chocolate purple with a pinkish flush, in a spherical umbel. The thick broad, strap-shaped leaves appear later. Native to South Africa.

For previous introduction see 61246.

122418. *GLADIOLUS ALATUS* L. Iridaceae.

For previous introduction and description see 119274.

## 122419 to 122427.

From England. Plants purchased from Laxton Bros. Bedford Ltd., Bedford. Received March 19, 1937.

122419 to 122421. *FRAGARIA* spp. Rosaceae. Strawberry.

122419. *King George V* (Laxton).

122420. *Oberschlesien*.

122421. *Royal Sovereign* (Laxton).

122422 to 122427. *RUBUS* spp. Rosaceae.

122422. *Bedford Giant*, a new blackberry.

122423. *Bountiful*. A raspberry.

122424. *Renown*, a new raspberry.

122425. *Reward*, a new raspberry.

122426. *Red cross* raspberry.

122427. *Pyne's Royal* raspberry.

122428 to 122440. *SACCHARUM*. Poaceae. Sugarcane.

From India. Cuttings presented by the Department of Agriculture, Bangalore, Mysore. Received March 20, 1937.

122428. No. H. M. 14.

122429. No. H. M. 320.

122430. No. H. M. 487.

122431. No. H. M. 544.

122432. No. H. M. 603.

122433. No. H. M. 606.

122434. No. H. M. 607.

122435. No. H. M. 608.

122436. No. H. M. 613.

122437. No. H. M. 619.

122438. No. H. M. 627.

122439. No. H. M. 629.

122440. *Ashy Mauritius*.

## 122441 to 122583.

From Turkey. Seeds collected by H. L. Westover and F. L. Wellman, Bureau of Plant Industry. Received January 22, 1937.

This material was all collected in the summer and autumn of 1936.

122441. *ACANTHUS* sp. Acanthaceae.

No. 2085. From Alma Dag, August 1.

## 122441 to 122583—Continued

122442 to 122454. *ALTHAEA* spp. Malvaceae.

122442 and 122443. *ALTHAEA OFFICINALIS* L. Marshmallow.

122442. No. 716. From the mountains 25 km. southeast of Mugla, May 28.

122443. No. 722. From near Lake Gülgüas, May 28.

122444 to 122454. *ALTHAEA ROSEA* (L.) Cav. Hollyhock.

122444. No. 562. From the Izmir bazar, May 23.

122445. No. 601. From the Antalya bazar, June 4.

122446. No. 609. From the Antalya bazar, June 4.

122447. No. 631. From Ephesus, May 24.

122448. No. 1064. From the Bergama ruins, June 30.

122449. No. 1505. From 22 km. southeast of Gaziantep, July 4. Flowers blue.

122450. No. 1773. From 9 km. southwest of Elaziz, July 14. Flowers white.

122451. No. 1415. From 15 km. south of Marash, July 2. Flowers white.

122452. No. 1866. From 22 km. west of Malatya, July 16. A hollyhock of recumbent habit with very deeply lobed leaves; flowers white.

122453. No. 1919. From Birejik, July 22. Plant 11 to 13 feet high; flowers pink.

122454. No. 1735. From the mountains 25 km. southeast of Elaziz, July 13. Plant recumbent; flowers white.

122455. *MALVA* sp. Malvaceae.

No. 813. From Antalya, June 4. Growing on rocks.

122456 to 122458. *CISTUS* spp. Cistaceae.

122456. *CISTUS* sp.

No. 718. From 10 km. southeast of Mugla, May 28. A shrub with white flowers, common on dry rocky soil.

122457. *CISTUS VILLOsus* CORSICUS (Loisel.) Grosser.

No. 2841. From Yalova Kaplıjalari, September 11.

122458. *CISTUS* sp.

No. 2863. From Yalova Kaplıjalari, September 12. A perennial with pink flowers; occurs in many of the mountainous parts of Turkey.

122459 to 122475. *DELPHINIUM* spp. Ranunculaceae.

122459. *DELPHINIUM AJACIS* L.

No. 1138. From Ephesus, June 12. Flowers light blue.

122460. *DELPHINIUM* sp.

No. 1408. From 20 km. north of Gaziantep, July 2.

122461. *DELPHINIUM* sp.

No. 1426. From 20 km. north of Gaziantep, July 2.

## 122441 to 122583—Continued

122462. *DELPHINIUM* sp.

No. 1805. From 52 km. southwest of Elaziz, July 14. Flowers small, dark blue.

122463. *DELPHINIUM* sp.

No. 1849. From 15 km. west of Malatya, July 16.

122464. *DELPHINIUM AJACIS* L.

No. 1972. From Birejik, July 23. Common annual; flowers pink.

122465. *DELPHINIUM* sp.

No. 1971. From Birejik, July 23. Flowers bronze, not a common type.

122466. *DELPHINIUM AJACIS* L.

No. 1995. From Ulukishla, July 25.

122467. *DELPHINIUM* sp.

No. 2072. From Alma Dag, June 29. Flowers purple.

122468. *DELPHINIUM* sp.

No. 2167. From 49 km. east of Sivas, August 6.

122469. *DELPHINIUM* sp.

No. 2190. From 30 km. northwest of Erzinjan, August 7.

122470. *DELPHINIUM AJACIS* L.

No. 2449. From Ulukishla, July 25.

122471. *DELPHINIUM* sp.

No. 2644. From 94 km. southeast of Merzifon, August 25.

122472. *DELPHINIUM* sp.

No. 3316. From near Ankara, May 18; flowers dark purple.

122473. *DELPHINIUM* sp.

No. 3337. From 80 km. north of Antalya, June 6. An annual larkspur.

122474. *DELPHINIUM* sp.

No. 3389. From 2 km. southwest of Ankara, June 25; flowers deep purple.

122475. *DELPHINIUM* sp.

No. 3395. From 3 km. southwest of Ankara, June 24; flowers blue.

122476. *GERANIUM* sp. Geraniaceae.

No. 2314. From 64 km. north of Gemushane, August 10; plants tall; flowers large, brilliant dark red, cup-shaped with black centers.

122477 to 122491. *GLAUCIUM* spp. Papaveraceae. Hornpoppy.

122477. *GLAUCIUM* sp.

No. 766. From near Isparta, June 2; flowers orange colored; pods long and slim.

122478. *GLAUCIUM* sp.

No. 815. From rocks near Antalya, June 4; flowers flame colored; pods long, slender, smooth.

122479. *GLAUCIUM* sp.

No. 1067. From 10 km. west of Soma, June 10; flowers orange; pods long and slender.

## 122441 to 122583—Continued

122480. *GLAUCIUM* sp.

No. 1119. From Akhisar, June 11; flowers orange and yellow; pods long and smooth.

122481. *GLAUCIUM* sp.

No. 1163. From near Edremit, June 16. Flowers light yellow.

122482. *GLAUCIUM* sp.

No. 1291. From 45 km. east of Bandirma, June 18; flowers flame colored with dark centers.

122483. *GLAUCIUM* sp.

No. 1508. From 20 km. east of Gaziantep, July 5.

122484. *GLAUCIUM* sp.

No. 1983. From Birejik, July 24.

122485. *GLAUCIUM* sp.

No. 1985. From Birejik, July 24.

122486. *GLAUCIUM CORNICULATUM* (L.) Curt.

No. 2000. From 25 km. southeast of Ulukishia, July 25. A hardy annual about 2 feet high, with pinnatifid leaves and medium large, scarlet flowers. Native to the Mediterranean region.

122487. *GLAUCIUM* sp.

No. 2017. From 9 to 25 km. north of Nigde, July 26; flowers orange.

122488. *GLAUCIUM* sp.

No. 2164. From 59 km. east of Sivas, August 6.

122489. *GLAUCIUM* sp.

No. 2874. From 1 km. west of Yalova on the sea beach, September 12; a perennial, flowers yellow.

122490. *GLAUCIUM* sp.

No. 3319. From near Ankara, May 18.

122491. *GLAUCIUM* sp.

No. 3402. From Ankara, June 25. Flowers orange yellow, pods long and slender.

122492 to 122504. *HYPERICUM* spp. Hypericaceae. St. Johnswort.122492. *HYPERICUM* sp.

No. 1466. From 45 km. north of Gaziantep, July 3.

122493. *HYPERICUM* sp.

No. 1572. From 30 km. northeast of Urfa, July 7.

122494. *HYPERICUM* sp.

No. 1725. From 32 km. east of Elaziz; plant of medium height; flowers in umbellike clusters.

122495. *HYPERICUM* sp.

No. 1941. From Birejik, July 12.

122496. *HYPERICUM* sp.

No. 2285. From 55 km. east of Erzinjan, August 9.

122497. *HYPERICUM* sp.

No. 2737. From near the old baths, 14 km. west of Yalova, September 6.

## 122441 to 122583—Continued

122498. *HYPERICUM* sp.

No. 2763. From Ulu Dag, 11 km. south of Bursa, September 7. Flowers large, yellow; seed capsule long.

122499. *HYPERICUM CALYCINUM* L.

No. 2729. From Yalova Kaplijalari, September 6.

122500. *HYPERICUM CALYCINUM* L.

No. 2764. From Ulu Dag, 16 km. south of Bursa, September 7. Large yellow flowers, borne singly.

122501. *HYPERICUM* sp.

No. 2774. From Ulu Dag, 35 km. south of Bursa, September 8.

122502. *HYPERICUM* sp.

No. 2904. From the ruins of Blagden's site of Troy, September 18. Plants 12 to 18 inches high; flowers medium size.

122503. *HYPERICUM* sp.

No. 2905. From the ruins of the old city of Troy, September 18. Plant about 4 inches high, spreading; flowers small.

122504. *HYPERICUM CALYCINUM* L.

No. 2806. From Ulu Dag, 35 km. south of Bursa, September 10; an ornamental shrub.

122505 to 122507. *IPOMOEA* spp. Convolvulaceae.122505. *IPOMOEA* sp.

No. 602. From the Antalya bazar, June 4.

122506. *IPOMOEA* sp.

No. 2548. From the Samsun bazar, August 25.

122507. *IPOMOEA* sp.

No. 3268. From the Adapazari bazar, October 20.

122508. *AGROSTEMMA GITHAGO* L. Silenaceae.

No. 1282. From 70 km. west of Bursa, June 18.

122509. *LYCHNIS* sp. Silenaceae.

No. 1785. From 35 km. southwest of Elaziz, July 14. An ornamental.

122510. *MALOPE* sp. Malvaceae. Mallow.

No. 642. From near Aydin, May 25.

122511. *MALOPE* sp. Malvaceae. Mallow.

No. 1289. From 25 km. east of Bandirma, June 18. An annual mallow.

122512. *LAVATERA THURINGIACA* L. Malvaceae. Treemallow.

No. 2566. From 9 km. east of Samsun, August 22. A herbaceous perennial or winter annual about 4 feet high, with magenta flowers. Native to southern Europe.

122513. *MALOPE* sp. Malvaceae. Mallow.

No. 669. From the road between Aydin and Milas, May 26. Flowers large, deep pink.

122514. *MALVA SYLVESTRIS* L. Malvaceae. Mallow.

No. 622. From Ephesus, May 24.

## 122441 to 122583—Continued

122515 and 122516. *ALTHAEA HIRSUTA* L. Malvaceae.

A hardy annual about 1 foot high, with obliquely lobed to palmatifid leaves and solitary white flowers. Native to the Mediterranean region.

122515. No. 650. From 20 km. south of Izmir, May 25.

122516. No. 676. On the road to Milas, May 26.

122517. *MALVA* sp. Malvaceae. Mallow.

No. 2653. From 123 km. southeast of Merzifon, August 25.

122518. *MALVA SYLVESTRIS INCANESCENS* Griseb. Malvaceae. Mallow.

No. 2353. From the Trabzon bazar, August 11.

122519. *MECONOPSIS* sp. Papaveraceae.

No. 2276. From 55 km. east of Erzinjan, August 9. A low, profusely branching plant with orange flowers.

122520. *MYOSOTIS* sp. Boraginaceae. Forget-me-not.

No. 788. From 25 km. west of Isparta, June 2.

122521. *MYOSOTIS* sp. Boraginaceae. Forget-me-not.

No. 703. On the road between Milas and Mugla, May 27.

122522 to 122526. *NIGELLA* spp. Ranunculaceae. Love-in-a-mist.

122522. *NIGELLA* sp.

No. 1801. From 45 km. southwest of Elaziz, July 14.

122523. *NIGELLA* sp.

No. 1867. From 16 km. west of Malatya, July 16. Flowers whitish and cream colored.

122524. *NIGELLA* sp.

No. 1868. From 16 km. west of Malatya, July 16.

122525. *NIGELLA* sp.

No. 1996. From Ulukishala, July 25; flowers yellow.

122526. *NIGELLA* sp.

No. 2650. From 25 km. southeast of Merzifon, August 25.

122527 to 122530. *PAEONIA* spp. Ranunculaceae. Peony.

122527. *PAEONIA* sp.

No. 1918. From a mountain slope near Birejik, July 21. A wild peony.

122528. *PAEONIA* sp.

No. 2327. From 46 km. north of Gemushane, August 10.

122529. *PAEONIA* sp.

No. 2559. From 16 km. east of Sam-sun, August 22. A wild peony.

122530. *PAEONIA* sp.

No. 2588. From 30 km. west of Sam-sun, August 23.

## 122441 to 122583—Continued

122531 to 122542. *PAPAVER* spp. Papaveraceae. Poppy.

122531. *PAPAVER MACROSTOMUM* Boiss. and Huet.

No. 648. From 20 km. south of Izmir, May 25.

122532. *PAPAVER RHOEAS* L.

No. 619. From Ephesus, May 24. Flowers red.

122533. *PAPAVER* sp.

No. 758. From 15 km. south of Denizli, May 20. Flowers orange colored.

122534. *PAPAVER* sp.

No. 782. From 17 km. west of Isparta, June 2. Flowers purple.

122535. *PAPAVER* sp.

No. 786. From 15 km. west of Isparta, June 2. Flowers pink and black.

122536. *PAPAVER* sp.

No. 803. En route from Isparta to Antalya, June 3. Flowers pink.

122537. *PAPAVER* sp.

No. 1846. From 12 km. west of Malatya, July 16.

122538. *PAPAVER* sp.

No. 1925. From Birejik, July 21.

122539. *PAPAVER* sp.

No. 2194. From 102 km. southeast of Susheri, August 7. A profusely branching perennial; flowers small, red.

122540. *PAPAVER SOMNIFERUM* L.

No. 3325. From Ankara, May 20. Flowers small, red.

122541. *PAPAVER* sp.

No. 3226. From Ankara, May 20. Flowers black.

122542. *PAPAVER* sp.

No. 3435. From Alma Dag, June 28.

122543. *POINSETTIA* sp. Euphorbiaceae.

No. 2968. From near Izmir, September 24; leaves orange and green.

122544. *PORTULACA* sp. Portulacaceae.

No. 602. From the Izmir bazar, May 23.

122545. *PRIMULA* sp. Primulaceae. Primrose.

No. 2311. From 53 km. north of Gemushane, August 19.

122546 to 122574. *ROSA* spp. Rosaceae. Rose.

122546. *ROSA* sp.

No. 1464. From 30 km. northwest of Gaziantep, July 3; flowers yellow, a wild rose.

122547. *ROSA* sp.

No. 729. A wild rose from near Mugla, May 28.

122548. *ROSA* sp.

No. 1407. A wild rose from 15 km. north of Gaziantep, July 2.

## 122441 to 122583—Continued

122549. *Rosa* sp.

No. 1909. From mountains 35 km. southeast of Elaziz; July 13.

122550. *Rosa* sp.

No. 1913. A wild yellow rose from 60 km. north of Malatya, July 17.

122551. *Rosa* sp.

No. 1967. A dwarf wild rose from Birejik, July 22.

122552. *Rosa* sp.

No. 2209. From 100 km. southeast of Susheri, August 7.

122553. *Rosa* sp.

No. 2175. A wild rose from 84 km. east of Sivas, August 6.

122554. *Rosa* sp.

No. 2173. From 84 km. east of Sivas, August 6.

122555. *Rosa* sp.

No. 2174. From 59 km. east of Sivas, August 6.

122556. *Rosa* sp.

No. 2263. From 70 km. east of Erzincan, August 9. A wild rose with large red fruits.

122557. *Rosa* sp.

No. 2458—A. From 34 km. east of Trabzon, August 12.

122558. *Rosa* sp.

No. 2459—B. From 34 km. east of Trabzon, August 12.

122559. *Rosa* sp.

No. 2461. From 34 km. east of Trabzon, August 12.

122560. *Rosa* sp.

No. 2462. From 29 km. west of Rize, August 13.

122561. *Rosa* sp.

No. 2463. From 29 km. west of Rize, August 13.

122562. *Rosa* sp.

No. 2563. From 5 km. east of Samsun, August 22.

122563. *Rosa* sp.

No. 2659. From 66 km. southeast of Merzifon, August 25.

122564. *Rosa* sp.

No. 2749. From Ulu Dag, 35 km. south of Bursa, September 7. Large deep-red fruits, somewhat spiny.

122565. *Rosa* sp.

No. 2765. From Ulu Dag, 16 km. south of Bursa, September 7.

122566. *Rosa* sp.

No. 2778. From Ulu Dag, 35 km. south of Bursa, September 8.

122567. *Rosa* sp.

No. 2785. From Ulu Dag, 37 km. south of Bursa, September 8.

## 122441 to 122583—Continued

122568. *Rosa* sp.

No. 2790. From Ulu Dag at 6,500 feet altitude, 35 km. south of Bursa, September 9.

122569. *Rosa* sp.

No. 2844. From Yalova Kaplijalari, September 11.

122570. *Rosa* sp.

No. 2845. From Yalova Kaplijalari, September 11; growing in partial shade.

122571. *Rosa* sp.

No. 2862. From Yalova Kaplijalari, September 12; growing in an exposed area.

122572. *Rosa* sp.

No. 3469. From 25 km. north of Chankiri, October 12.

122573. *Rosa* sp.

No. 3470. From 25 km. north of Chankiri, October 12.

122574. *Rosa* sp.

No. 3478. From 10 km. south of Inebolu, October 14.

122575 to 122578. *RUMEX* spp. Polygonaceae.122575. *RUMEX* sp.

No. 2161. From 84 km. east of Sivas, August 6.

122576. *RUMEX* sp.

No. 2191. From 115 km. southeast of Susheri, August 7. Apparently an annual with a single short fruiting stalk.

122577. *RUMEX* sp.

No. 2142. From the Sivas bazar, August 5; used for medicine.

122578. *RUMEX* sp.

No. 2207. From 95 km. southeast of Susheri, August 7. An edible plant, also used as medicine.

122579. *TARGETES* sp. Asteraceae. Marigold.

No. 2222. From the Erzincan bazar, August 8.

122580 to 122583. *TEUCRIMUM* spp. Mentha-ceae. Germander.122580. *TEUCRIMUM* sp.

No. 2168. From 84 km. east of Sivas, August 6. A perennial; flowers light blue with white streaks.

122581. *TEUCRIMUM* sp.

No. 2500. From 128 km. southwest of Shebinkarahisar, August 18. A perennial with blue flowers.

122582. *TEUCRIMUM* sp.

No. 1586. From 30 km. northeast of Urfa, July 7.

122583. *TEUCRIMUM* sp.

No. 2010. From 9 km. north of Nigde, July 26. A perennial.

**122584 and 122585. RUBUS spp. Rosaceae.**

From England. Plants purchased from George Pyne, Denver Nurseries, Topsham, Devon. Received March 22, 1937.

**122584. RUBUS sp.**

*Pyne's Imperial Raspberry*, No. 22297.

**122585. RUBUS sp.**

*Shirley Prolifto Blackberry*.

**122586 to 122595.**

From China. Seeds presented by Dr. Albert N. Steward, Department of Botany, College of Agriculture and Forestry, Nanking University, Nanking. Received February 24, 1937.

Seeds and fruits collected at Men Shan, Shantung Province, during the season of 1936.

**122586. ARONIA sp. Malaceae.**

No. 85. A shrub 5 feet high covered with red fruits. Used medicinally.

**122587. CRATAEGUS sp. Malaceae.**

No. 96.

**122588. EUONYMUS sp. Celastraceae.**

No. 100.

**122589. GLEDITSIA MACRACANTHA Desf. Caesalpiniaceae. Honeylocust.**

No. 94. A tree with large spines, closely related to *Gleditsia sinensis*.

For previous introduction see 33165.

**122590. PINUS MASSONIANA Lambert. Pinaceae.**

No. 88. A tall tree up to 80 feet high, with spreading branches and yellowish-brown branchlets. The thin slender light-green leaves, in pairs, are 5 to 8 inches long, and the dull-brown, ovate cones are 3 to 5 inches long. Native to southeast China, and closely related to *Pinus densiflora*.

For previous introduction see 91790.

**122591. PYRUS sp. Malaceae.**

No. 95.

**122592. RUBUS sp. Rosaceae.**

No. 3. A vine with sweet edible red fruits.

**122593. VITIS sp. Vitaceae.**

No. 2. A woody vine with dark-purple edible fruits.

**122594. ZANTHOXYLUM sp. Rutaceae.**

No. 1. A shrub, cultivated at the hill-foot for the seed coat which is used as a stimulant.

**122595. ZIZIPHUS sp. Rhamnaceae.**

No. 98.

**122596 to 122607.**

From France. Plants and scions purchased from Paul Lecoller, La Celle, St. Cloud. Received March 25, 1937.

**122596. AMYGDALUS PERSICA L. Amygdalaceae. Peach.**

*Malta*. Received as plants.

**122596 to 122607—Continued****122597 to 122605. MALUS SYLVESTRIS Mill. Malaceae. Apple.**

Received as scions.

**122597. Belle Fille.****122598. Binet Blanc.****122599. Binet Rouge.****122600. Bramtot.****122601. Gendreville.****122602. Court Pendu Rouge.****122603. Cramoie de Gascogne.****122604. Grise Dieppoise.****122605. Reinette Franche.****122606 and 122607. PYRUS COMMUNIS L. Malaceae. Common pear.**

Received as plants.

**122606. Beurre Dumont.****122607. Louis Pasteur.****122608 to 122614.**

From India. Bulbs collected by Walter Koelz, Bureau of Plant Industry. Received March 25, 1937.

**122608 to 122613. ALLIUM spp. Liliaceae.****122608. ALLIUM CEPA L. Onion.**

No. 2304. From Bangalore, Mysore, February 9, 1937. A common type of onion grown in the south of India. Considered of better flavor than the large ones.

**122609 to 122613. ALLIUM SATIVUM L. Garlic.**

Nos. 122609 to 122611. *Lassan*. From Madras, February 6, 1937.

**122609. No. 2234.****122610. No. 2235.****122611. No. 2236.**

**122612. No. 2249. Tellagada.** From Bangalore, Mysore, February 8, 1937. Locally grown.

**122613. No. 2233. Lassan.** From Madras, February 6, 1937. Said to have been introduced from Italy.

**122614. SOLANUM TUBEROSUM L. Solanaceae.**

No. 2312. *Ricket* potato. From Bangalore, Mysore, February 9, 1937. Said to be a descendant of potatoes introduced into India about 50 years ago.

**122615 to 122629.**

From France. Plants purchased from F. Delaunay, Angers, Maine et Loire. Received March 25, 1937.

**122615 to 122621. MALUS SYLVESTRIS Mill. Malaceae. Apple.****122615. Calville D'aout.****122616. Doux-amer.****122617. Fertile de Doué.****122618. Gros Bois de Doudeville.****122619. Pomme D'or.****122620. Pres. Descours-Desaoues.****122621. Souvenir du Marais.**

## 122615 to 122629—Continued

- 122622 to 122628. *PYRUS COMMUNIS* L.  
Malaceae. Common pear.
122622. *Beau Present d'Artots.*
122623. *Beurré des Enfants Nantais.*
122624. *Bon Chrétien Antoine Lorimer.*
122625. *Duo de Bordeaux.*
122626. *Francois Coppée.*
122627. *Prof. Lemoine.*
122628. *Williams d'Angers.*
122629. *RIBES* sp. Grossulariaceae.  
*Prolifique du Grand Jardin.*

## 122630 to 122742.

From Turkey. Seeds collected by H. L. Westover and F. L. Wellman, Bureau of Plant Industry. Received January 25, 1937.

This material was all collected in the summer and autumn of 1936.

122630. *ABIES* sp. Pinaceae. Fir.  
No. 2925. From Ulu Dag, September 7.
122631. *ATRIPLEX HORTENSIS* L. Chenopodiaceae. Garden orach.  
No. 613. From the Izmir bazar, May 23.

For previous introduction see 105936.

122632. *ATRIPLEX* sp. Chenopodiaceae.  
No. 3102. From a garden in Yozgat, October 9.
122633. *BORRAGA ORIENTALIS* Jaub. and Spach. Brassicaceae.  
No. 3386. From dry plains, 4 km. southwest of Ankara, June 25. An annual herb about 1 foot high, with small oblong leaves and pale-yellow flowers. Native to Asia Minor.
122634. *CEPHALARIA* sp. Dipsacaceae.  
No. 2059. From Alma Dag, 26 km. southeast of Ankara, August 1.
- 122635 to 122638. *COIX LACRYMA-JOBI* L. Poaceae. Jobs-tears.
122635. No. 2982. From a village near Balikesir, September 26.
122636. No. 3025. From Bursa, October 1.
122637. No. 2930. From the prison at Balikesir, October 19.
122638. No. 3226. From Adapazari, October 20.

122639. *CORCHORUS* sp. Tilliaceae.  
No. 1513. From the hotel garden at Urfa, July 5. A plant with small greenish flowers.
- 122640 to 122644. *CORIANDRUM SATIVUM* L. Apiaceae.
122640. No. 3266. From the Adapazari bazar, October 20.
122641. No. 2132. From the Sivas bazar, August 5.
122642. No. 2225. From the Erzinjan bazar, August 8.
122643. No. 2373. From the Trabzon bazar, August 11.
122644. No. 2522. From the Samsun bazar, August 21.

## 122630 to 122742—Continued

122645. *CORONILLA SCORPIOIDES* (L.) Koch. Fabaceae.

No. 1080. From near Soma, June 10. An erect yellow-flowered herbaceous perennial about 8 inches high, native to the Mediterranean countries.

For previous introduction see 104931.

122646. *CORONILLA* sp. Fabaceae.  
No. 1201. From 60 km. west of Balikesir, June 16.
122647. *CREPIS* sp. Cichoriaceae.  
No. 2791. From Ulu Dag, 35 km. south of Bursa, September 9.
122648. *CUMINUM CYMINUM* L. Apiaceae. Cumin.

No. 570. From the Isparta bazar, June 2.

122649. *CYNANCHUM* sp. Asclepiadaceae.  
No. 3456. From 5 km. west of Samsun, August 23. A perennial vine, growing in sands on the Black Sea beach.

122650. *PERIPLOCA GRAECA* L. Asclepiadaceae.  
No. 3464. From 10 km. north of Selchuk, September 25. A tall woody vine with ovate-lanceolate leaves and wheel-shaped brownish-green flowers 1 inch across in loose, terminal cymes. Native to Asia Minor and southern Europe.

122651. *DIANTHUS* sp. Silenaceae.  
No. 597. From the Antalya bazar, June 4.

122652. *DICENTRA* sp. Papaveraceae.  
No. 3432. From Alma Dag, June 28.
- 122653 to 122656. *EREMURUS* sp. Liliaceae.

122653. *EREMURUS* sp.  
No. 820. From Ephesus, June 24.
122654. *EREMURUS* sp.  
No. 637. From 2 km. west of Aydin, May 28.
122655. *EREMURUS* sp.  
No. 1400. From 20 km. north of Gaziantep, July 2.
122656. *EREMURUS* sp.  
No. 1852. From 11 km. west of Malatya, July 16.

122657. *ERYTHRINA* sp. Fabaceae.  
No. 2944. From near Izmir, September 23. An ornamental tree with enormous clusters of brilliant red flowers.

122658. *EUCALYPTUS* sp. Myrtaceae.  
No. 1348. From Adana, June. A species said to have a bright-red trunk and branches, with reddish leaves.

- 122659 to 122670. *HELIANTHUS ANNUUS* L. Asteraceae. Common sunflower.

For previous introduction see 119771.

122659. No. 3080. From the Yozgat bazar, October 9.
122660. No. 3149. From the Kastamonu bazar, October 14.
122661. No. 3213. From Chankiri, October 15.

## 122630 to 122742—Continued

122662. No. 3227. From the Adapazari bazar, October 20.
122663. No. 3277. From Edirne, October 22.
122664. No. 614. From the Izmir bazar, May 23.
122665. No. 1148. From the Balikesir bazar, June 16. A form with white seeds.
122666. No. 1375. From the Marash bazar, July 2.
122667. No. 1665. From the Diyarbekir bazar, July 10.
122668. No. 2026. From the Nigde bazar, July 27.
122669. No. 3012. From the Kutahya bazar, September 28.
122670. No. 2152. From the Sivas bazar, August 5.
122671. *HYPERICUM* sp. Hypericaceae.  
No. 1499. From 5 km. south of Gaziantep, July 4.
122672. *HYPERICUM* sp. Hypericaceae.  
No. 3438. From Alma Dag, June 28.
122673. *ILEX* sp. Aquifoliaceae. Holly.  
No. 2401. From 23 km. east of Trabzon, August 12.
122674. *ISATIS* sp. Brassicaceae.  
No. 1902. From 50 km. north of Malatya, July 17. A plant with narrow succulent, cabbage-like leaves and a flower stalk 2 to 3½ feet high, bearing a large broad panicle of numerous bright-yellow flowers about one-half inch across.
- 122675 to 122682. *JUNIPERUS* spp. Pinaceae. Juniper.
122675. *JUNIPERUS DRUPACEA* Labill.  
No. 1917. From Birejik, July 21. A juniper up to 60 feet high, of pyramidal habit, in the wild state, but usually columnar, in cultivation. Native to Asia Minor.
122676. *JUNIPERUS* sp.  
No. 742. A dwarf juniper from 20 km. south of Denizli, May 30.
122677. *JUNIPERUS* sp.  
No. 1931. A tall tree from Birejik, July 21.
122678. *JUNIPERUS* sp.  
No. 1932. From Birejik, July 21. A scrubby tree.
122679. *JUNIPERUS* sp.  
No. 2304. From 10 km. north of Gemushane, August 10.
122680. *JUNIPERUS* sp.  
No. 2648. From 61 km. southeast of Merzifon, August 25.
122681. *JUNIPERUS* sp.  
No. 2658. From 61 km. southeast of Merzifon, August 25.
122682. *JUNIPERUS* sp.  
No. 2664. From the mountains 46 km. south of Tokat, August 26. A dwarf juniper.

## 122630 to 122742—Continued

122683. *LATHYRUS ANNUUS* Hoejer. Fabaceae.  
No. 1081. From 40 km. northwest of Izmir, June 10.
122684. *LIGUSTRUM* sp. Oleaceae. Privet.  
No. 3145. From 25 km. north of Kastamonu, October 13.
- 122685 to 122687. *LONICERA* spp. Caprifoliaceae. Honeysuckle.
122685. *LONICERA* sp.  
No. 2335. From 60 km. south of Trabzon, August 10. A shrub 10 feet high with deep-red berries.
122686. *LONICERA* sp.  
No. 2787. From Ulu Dag, 35 km. south of Bursa, September 8. A low shrub with large black fruits.
122687. *LONICERA* sp.  
No. 2945. From Kemal Pasha, September 23.
122688. *LUPINUS* sp. Fabaceae.  
No. 735. From 25 km. southeast of Mugla, May 28.
122689. *LYCHNIS* sp. Silenaceae.  
No. 690. From near Milas, May 26. A species with deep-pink flowers.
122690. *PANICUM MILIACEUM* L. Poaceae. Broomcorn millet.  
No. 1228. From the Bursa bazar, June 18.
122691. *PHASEOLUS CARACALLA* L. Fabaceae. Snail bean.  
No. 561. From the Izmir bazar, May 23.
- 122692 to 122697. *PINUS* spp. Pinaceae.
122692. *PINUS* sp.  
No. 1482. From 5 km. southeast of Marash, July 3.
122693. *PINUS* sp.  
No. 2922. From the mountains between Sivas and Susheri, August 6.
122694. *PINUS* sp.  
No. 3350. From 30 km. west of Balikesir, July 18.
122695. *PINUS* sp.  
No. 3333. From 30 km. north of Koycegiz, May 31.
122696. *PINUS* sp.  
No. 3468. From 55 km. north of Chankiri, October 12.
122697. *PINUS* sp.  
No. 3475. From 5 km. north of Kastamonu, October 13.
- 122698 to 122708. *PORTULACA OLERACEA* L. Portulacaceae. Common purslane.  
The fleshy leaves are sometimes used in salads, but more frequently boiled and served like spinach.
- For previous introduction see 34510.
122698. No. 3000. From the Kutahya bazar, September 28.
122699. No. 3055. From the Amasya bazar, October 6.



## 122630 to 122742—Continued

122700. No. 3286. From the Edirne bazar, October 22.
122701. No. 3140. From the Inebolu bazar, October 12.
122702. No. 2367. From the Trabzon bazar, August 11.
122703. No. 2707. From the Amasya bazar, August 25.
122704. No. 3233. From the Adapazari bazar, October 20.
122705. No. 3199. From the Chankiri bazar, October 15.
122706. No. 2896. *Semizote*. From the Chanak Kale bazar, September 18.
122707. No. 527. From the Mugla bazar, May 28.
122708. No. 3445. From Alma Dag, June 28.
122709. RHODODENDRON sp. Ericaceae.  
No. 2460. From between Trabzon and Rize, August 12.
122710. RHUS sp. Anacardiaceae. Sumac.  
No. 2861. From Yalova Kaplijalari, September 12.
122711. RHUS sp. Anacardiaceae. Sumac.  
No. 1507. From Gaziantep, July 5. Grown commercially for tannin.
122712. RUBIA TINCTORUM L. Rubiaceae.  
Madder.  
No. 3466. *Kökboja* (village dye). From gardens along the river near Amasya, October 7.  
For previous introduction see 43037.
122713. RUMEX sp. Polygonaceae.  
No. 1488. A shrub found on dry rocky hills 25 km. northwest of Gaziantep, July 3.
122714. SAMBUCUS sp. Caprifoliaceae.  
No. 2439. From Birejik, July 22.
122715. SAPONARIA OFFICINALIS L. Silenaceae.  
Bouncing-bet.  
No. 2625. From 85 km. southwest of Samsun, August 24.  
For previous introduction see 4758.
- 122716 to 122720. SCABIOSA spp. Dipsacaceae.
122716. SCABIOSA ATROPURPUREA L.  
No. 1286. From 31 km. northeast of Bandirma, June 18. An annual about 2 feet high, with pinnately-parted stem leaves and white to dark-purple flowers in large peduncled heads. Native to southern Europe.
122717. SCABIOSA sp.  
No. 1316. From 21 km. north of Bursa, June 20.
122718. SCABIOSA sp.  
No. 2738. From 2 km. west of Yalova, September 6. A form with lavender flowers.
- 122719 and 122720. SCABIOSA PALAESTINA L.  
*Bird's eye*. An annual with branching stems 2 feet high, linear to oblong, entire or lyrate-pinnatifid leaves and

## 122630 to 122742—Continued

- cream-colored to bluish flowers. Common everywhere in Turkey and native to Asia Minor.
122719. No. 1747. From 26 km. west of Diyarbekir, July 9.
122720. No. 1484. From 44 km. north of Gaziantep, July 3.
122721. SCORZONERA sp. Cichoriaceae.  
No. 1969. From Birejik, July 23.
122722. SCORZONERA sp. Cichoriaceae.  
No. 3425. From Alma Dag, 25 km. southeast of Ankara, June 28.
122723. SESAMUM ORIENTALE L. Pedaliaceae. Sesame.  
No. 2928. From Chanak Kale, September 19.
122724. SESAMUM ORIENTALE L. Pedaliaceae. Sesame.  
No. 1547. From the Urfa bazar, July 6.
122725. SETARIA ITALICA (L.) Beauv. Poaceae. Millet.  
No. 1834. *Proso*. From the Malatya bazar, July 16.
122726. SETARIA ITALICA (L.) Beauv. Poaceae. Millet.  
No. 1682. From the Elaziz bazar, July 13.
- 122727 to 122737. SILENE spp. Silenaceae.
122727. SILENE sp.  
No. 1879. From 50 km. north of Malatya, July 17.
122728. SILENE sp.  
No. 1770. From 35 km. southeast of Elaziz, July 13. A small compact plant with red flowers.
122729. SILENE sp.  
No. 1989. From Ulukishla, July 25 and 26.
122730. SILENE sp.  
No. 3404. From Ankara, June 25. An early spring wild ornamental.
122731. SILENE sp.  
No. 3420. A form with pink flowers from dry hills, 3 km. north of Ankara, June 26.
122732. SILENE sp.  
No. 643. From southwest of Izmir, May 25.
122733. SILENE sp.  
No. 662. Small pale flowers from near Aydin, May 25.
122734. SILENE sp.  
No. 759. From 30 km. south of Denizli, May 30. A compact dwarf rock plant with very attractive bright-red flowers.
122735. SILENE sp.  
No. 1445. From 20 km. north of Gaziantep, July 2.
122736. SILENE sp.  
No. 1764. From 39 km. southeast of Elaziz, September 13. A form with large pink flowers.

## 122630 to 122742—Continued

122737. *SILENE NOCTIFLORA* L.

No. 1954. From Birejik, July 22. A tall plant.

122738. *SCORZONERA* sp. Cichoriaceae.

No. 3312. From 20 km. south of Narle, May 4.

122739. *VERBASCUM SPECIOSUM* Schrad. Scrophulariaceae. Mullein.

No. 2293. From 34 km. east of Erzincan, August 9. A tall biennial mullein with pale-green, oblong-lanceolate leaves more than a foot long at the base of the stem, becoming much smaller toward the top. The yellow flowers are in a large panicle raceme. Native to eastern Europe.

For previous introduction see 108778.

122740. *VERBASCUM* sp. Scrophulariaceae. Mullein.

No. 1637. From 47 km. south of Diyarbakir, July 9. Not the common mullein, flowers more handsome.

122741. *VICIA VILLOSA* Roth. Fabaceae. Hairy vetch.

No. 3496. From the ruins of Philippi, Greece, November 11.

122742. *VITEX* sp. Verbenaceae.

No. 2931. From Ephesus, September 25.

122743. *SOLANUM TUBEROSUM* L. Solanaceae. Potato.

From Canada. Tubers presented by M. B. Davis, Central Experiment Farm, Ottawa. Received March 26, 1937.

Early St. George.

122744 to 122752. *VITIS* spp. Vitaceae. Grape.

From Austria. Cuttings presented by Prof. Andre Teleki, Vienna. Received March 26, 1937.

122744. *Chasselas Tompa*.122745. *Ezerevesand*.122746. *Madam Johanna Mathias*.122747. *Memory of Queen Elizabeth*.122748. *Neuberger*.122749. *Reine des Vignes*.122750. *Riesling of the Rhine*.122751. *Veltliner* (red).122752. *Veltliner* (red and white).122753 to 122757. *FIGUS* spp. Moraceae. Fig.

From Japan. Cuttings presented by Dr. T. Tanikawa, Acting Director, Imperial Horticultural Experiment Station, Okitsu. Received March 27, 1937.

122753. No. 9. *Hative d'argenteuil* × (*H. d'arg.* × *Roeding* No. 2).122754. No. 32. *Hative d'argenteuil* × (*H. d'arg.* × *Roeding* No. 2).122755. No. 45. *Hative d'argenteuil* × (*H. d'arg.* × *Roeding* No. 2).122756. *Horaigaki*. A fig, native to Japan.122757. No. 60. *Violet Dauphine* × *Roeding* No. 2.122758 and 122759. *ERICA* spp. Ericaceae. Heath.

From England. Seeds presented by Sir Lionel de Rothschild, St. Swithin's Lane, London. Received March 18, 1937.

122758. *ERICA* sp.

Received under the name "mimosa," for which a place of publication has not been found. Described as a red heather.

122759. *ERICA PILLANSII* Bolus.

An evergreen shrub with ascending branches, small imbricate linear leaves, and scarlet flowers about one-half inch long. It is related to *Erica mertensiana*. Native to South Africa.

122760. *INDIGOFEA TINCTORIA* L. Fabaceae. True indigo.

From France. Seeds presented by Vilmorin-Andrieux & Cie., Paris. Received March 18, 1937.

French-grown seed.

122761 and 122762. *LYCOPERSICON ESCULENTUM* Mill. Solanaceae. Tomato.

From Peru. Seeds presented by A. Martin Lynch, Chief, Estación Agronómica de Lambayeque. Received March 19, 1937.

## 122761. No. 1. Wild tomato.

## 122762. No. 2. Wild tomato.

122763. *MEDICAGO SATIVA* L. Fabaceae. Alfalfa.

From the Netherlands. Seeds presented by Zwaan & Van Der Molen, Plant Breeding & Seed Growing Co., Voorburg. Received March 22, 1937.

*Giant alfalfa*. A strain said to produce 20 percent more than any other European stock.

122764 and 122765. *PRUNUS* spp. Amygdalaceae.

From New Zealand. Seeds presented by W. Meikle & Sons, New Lynn Nurseries, Auckland. Received March 30, 1937.

122764. *PRUNUS* sp.

*George Wilson*. A blood plum which has no bitterness or sourness near the seed. It will keep 6 to 8 weeks after picking, and if kept long enough will dry like a prune, but will not rot. The tree is immune to brown rot.

122765. *PRUNUS* sp.

*Victory* plum. A freestone with dark red skin and orange flesh which will keep from 6 to 8 weeks after picking.

## 122766 to 122984.

From India. Seeds collected by Walter Koelz, Bureau of Plant Industry. Received March 1, 1937.

122766. *ABIES PINDROW* Spach. Pinaceae. Fir.

No. 1666. *Tos*. From above Bandrole, Kulu, Punjab, at 8,000 feet altitude, November 14, 1936. A tall fir with short branches forming a narrow pyramid and lustrous, dark-green, slender leaves 1 to 2 inches long. Native to the Himalayan region.

## 122766 to 122984—Continued

## 122767. ACACIA sp. Mimosaceae.

No. 2138. From Calcutta, January 7, 1937. A shrub 8 feet high.

## 122768. ACACIA sp. Mimosaceae.

No. 933. From Bandrole, Kulu, Punjab, June 2, 1936, at 5,000 feet altitude. A bushy tree of medium size, growing in semiarid situations. For 2 weeks in the spring it is covered with fragrant yellow flowers.

## 122769. ACONITUM HETEROPHYLLUM Wall. Ranunculaceae. Monkshood.

No. 1527. *Patish*. From Kolung, Lahul, Punjab, August 20, 1936, at 12,000 feet altitude. A common plant in the meadows, growing 3 feet tall.

## 122770. ACONITUM sp. Ranunculaceae.

No. 1380. *Ladora*. From Karzong Pass, Ladak, Kashmir, at 15,000 feet altitude, September 14, 1936. An attractive perennial 18 inches high, growing in clumps, with large tomentose, blue-purple flowers which have a strong musky odor.

## 122771. ADONIS CHERYSOCATEUS Hook. f. and Thoms. Ranunculaceae.

No. 1721. From the Department of Agriculture, Kashmir. A tufted perennial with stems about 1 foot high, much divided leaves 3 to 6 inches long, and golden-yellow flowers 2 inches or more across. Native to the alpine Himalayan region.

## 122772. ALLIUM sp. Liliaceae.

No. 1354. From La Dang, Baltistan, Kashmir, September 4, 1936, at 15,000 feet altitude. Plants 18 inches high, growing in clumps on a dry slope.

## 122773. ALNUS sp. Betulaceae.

No. 1649. *Chag*. From Chitkul, Rampur-Bushahr, August 20, 1936.

## 122774. AMARANTHUS sp. Amaranthaceae.

No. 1693. *Bhaji sag*. From the Director of Agriculture, Kashmir. A good pot herb with red leaves.

## 122775. ANAPHALIS sp. Asteraceae.

No. 1495. From Rotang Pass, Kulu, Punjab, October 26, 1936, at 13,000 feet altitude. Clumps 1 foot high, with corymbs of small whitish flowers; found on a dry rock.

## 122776. ANAPHALIS sp. Asteraceae.

No. 1543. From Rotang Pass, Kulu, Punjab, October 26, 1936, at 13,000 feet altitude. A small-flowered species that grows on damp cliffs.

## 122777 to 122780. ANEMONE spp. Ranunculaceae.

## 122777. ANEMONE TETRASEPALA Royle.

No. 1678. Presented by the Director of Agriculture, Kashmir. A large robust anemone with leathery, 5-lobed leaves and white flowers. Native to the Himalayan region from 8,000 to 11,000 feet altitude.

## 122778. ANEMONE sp.

No. 1586. *Guantsimento*. From Pukar, Lahul, Punjab, July 31, 1936, at 12,000 feet altitude. A plant up to 2½ feet high, found in clumps in meadows. The attractive white flowers, more or less fragrant, are in clusters.

## 122766 to 122984—Continued

## 122779. ANEMONE sp.

No. 1588. *Taitaka*. From Pukar, Lahul, Punjab, at 12,000 feet altitude, August 1936. A form 2 feet high, with few small flowers; found in meadows.

## 122780. ANEMONE sp.

No. 1498. *Japshren*. From Kyelang, Lahul, Punjab, October 23, 1936, at 10,000 feet altitude.

## 122781. ANETHUM GRAVEOLENS L. Apiaceae.

No. 1426. *Badien*. From Leh, Ladak, Kashmir, September 16, 1936, at 10,500 feet altitude.

## 122782. ANGELICA sp. Apiaceae.

No. 1577. *Bodunger*. From Pukar, Lahul, Punjab, September 15, 1936, at 12,000 feet altitude. An umbellifer 6 feet tall with a fragrant celeriaclike root which is used along with garlic to flavor meat.

## 122783. ANTHEMIS sp. Asteraceae.

No. 1607. *Durchit*. From Dillburg, Lahul, Punjab, August 1936, at 13,000 feet altitude. A stemless perennial with a fragrant root; used in India as incense.

## 122784 to 122787. AQUILEGIA spp. Ranunculaceae. Columbine.

## 122784. AQUILEGIA sp.

No. 1357. From La Dang, Baltistan, Kashmir, September 4, 1936, at 15,000 feet altitude. Plants 2 feet high, growing in a colony on a dry rocky slope; flowers not seen.

## 122785. AQUILEGIA sp.

No. 1374. From Hundar, Baltistan, Kashmir, September 10, 1936. Plants 3 feet high, growing in clumps along a stream. Flowers not seen.

## 122786. AQUILEGIA sp.

No. 1589. *Gerrimenbok*. From Pukar, Lahul, Punjab, August 1936, at 12,000 feet altitude. Attractive plants, 2 feet high; the large, very fragrant flowers, 1½ inches in diameter, have yellowish bells and pale blue-purple spurs.

## 122787. AQUILEGIA sp.

No. 1648. From Chitkul, Rampur-Bushahr, August 19, 1936.

## 122788. ARENARIA sp. Silenaceae.

No. 1520. *Autong makpo*. From Kolung, Lahul, Punjab, August 16, 1936, at 11,000 feet altitude. A low plant with an abundance of white flowers; found growing in mats on dry slopes.

## 122789. ARENGA PINNATA (Wurmb.) Merr. Phoenicaceae.

No. 2125. From the Royal Botanical Gardens, Calcutta, January 6, 1937. A handsome palm 20 to 40 feet high, with about 25 immense pinnate leaves and enormous bunches of fruit; the individual fruits are the size of an apple. A rich-flavored palm sugar is made from the sap which flows from the bruised fruitstalk.

## 122790. ARTABOTRYS UNCINATUS (Lam.) Merr. Annonaceae. Fragrant tailgrape.

No. 2130. Presented by the Royal Botanic Gardens, Calcutta, January 6, 1937. A half-scandent shrub with long slender drooping branches and greenish flowers. The inedible fruits are ovoid with a

## 122766 to 122984—Continued

pointed, slightly curved apex and are yellowish when ripe. The plant is very highly esteemed by the Chinese because of the rich fragrance of the flowers and fruits, and it is commonly planted in their monasteries.

For previous introduction see 95085.

122791. *ARTEMISIA* sp. Asteraceae.

No. 1492. *Karkatrang*. From the Upper Bhaga Valley, Lahul, Punjab, October 4, 1936, at 12,000 feet altitude. Plants 2 feet high, growing abundantly in clumps on dry slopes. It is eaten by horses, sheep, and goats when it is tender in the spring and also when dry in late fall and winter.

122792. *ARTEMISIA MARITIMA* L. Asteraceae.

No. 1544. *Burtsi*. From Kolung, Lahul, Punjab, October 17, 1936. A low straggly undershrub, up to 18 inches high, growing abundantly on dry slopes; grazed by all the domestic animals.

For previous introduction see 78477.

122793. *ASTER* sp. Asteraceae.

No. 1499. *Lukmik*. From Kolung, Lahul, Punjab, October 9, 1936, at 11,000 feet altitude. Found growing in clumps 18 inches high in both dry and damp situations. The lavender flower heads are very attractive.

122794. *ASTRAGALUS* sp. Fabaceae.

No. 1624. From Pukar, Lahul, Punjab, August 1936, at 12,000 feet altitude. Plants 12 to 18 inches high, found in damp places.

122795. *PELTOPHORUM INERME* (Roxb.) Llanos (*P. ferrugineum* Benth.). Caesalpiniaceae.

No. 2163. From Dacca, Bengal, January 14, 1937. A large handsome leguminous tree bearing large terminal spikes of bright yellow flowers. A good shade tree, used for roadside planting.

122796. *BENINCASA HISPIDA* (Thunb.) Cogn. Cucurbitaceae. Waxgourd.

No. 1684. *Petha*. Presented by the Director of Agriculture, Kashmir. A form with large fruits, weighing from 20 to 30 pounds, whose flesh is used principally for candying.

122797 to 122802. *BERBERIS* spp. Berberidaceae. Barberry.122797. *BERBERIS* sp.

No. 1298. From Shigar Nulla, Baltistan, Kashmir, August 21, 1936. A very attractive cespitose shrub 4 feet high, with abundant foliage and fruits. The flowers are clear yellow; found on dry slopes.

122798. *BERBERIS* sp.

No. 1404. From Karzong, Baltistan, Kashmir, September 13, 1936. An attractive cespitose shrub up to 3 feet high, mostly unbranched, with an abundance of small leaves and glaucous berries. As it stands drought and cold, it should be useful as a low hedge plant.

122799. *BERBERIS ARISTATA* DC.

No. 1662. From 8,000 feet altitude, above Bandrole, Kulu, Punjab, November 14, 1936. A handsome shrub of elegant spreading habit, becoming at times 10 feet high. The spine-tipped leaves are

## 122766 to 122984—Continued

often whitish beneath, and the numerous flowers are bright golden yellow. The spindle-shaped berries, about half an inch in length, are red covered with a blue-white bloom. This is said to be one of the most vigorous of the Himalayan barberries.

For previous introduction see 66542.

122800. *BERBERIS* sp.

No. 1663. From 8,000 feet altitude, above Bandrole, Kulu, Punjab, November 14, 1936. A bush up to 6 feet high, with an abundance of red fruits; seems to prefer cooler locations than No. 1662 (P. I. 122799).

122801. *BERBERIS* sp.

No. 1785. *Kerpa*. From Labuk-trang, Lahul, Punjab, at 11,000 feet altitude, November 1, 1936. A shrub 3 to 5 feet high, with handsome red berries.

122802. *BERBERIS ARISTATA* DC.

No. 1713. *Kawadach*. Purchased from the Director of Agriculture, Kashmir.

For previous introduction and description see 122799.

122803. *BETULA* sp. Betulaceae. Birch.

No. 1541. *Krosh*. A quick-growing tree found usually in river bottoms from 3,000 to 6,000 feet altitude. The trunks are commonly over 6 feet in diameter.

122804. *BETULA UTILIS* D. Don. Betulaceae. Birch.

No. 1480. *Takpa*. From Pukar, Lahul, Punjab, October 15, 1936, at 12,000 feet altitude. A tree 40 to 60 feet high, with a creamy-white trunk and branches, the bark peeling off in papery flakes. The oval, coarsely-toothed, sharp-pointed leaves, 3 inches long, are dark-green above and paler beneath. In winter the orange-chocolate color of the twigs is very striking.

For previous introduction see 99654.

122805. *BRASSICA* sp. Brassicaceae.

No. 1777. *Rai*. From Kulu, Kulu, Punjab, November 10, 1936, at 4,500 feet altitude. Seeds used for flavoring.

122806. *BRASSICA* sp. Brassicaceae.

No. 1431. *Asur*. From Leh, Ladak, Kashmir, September 17, 1936. Seeds and leaves used as spices.

122807. *BUXUS WALLICHIANA* Baill. Buxaceae.

No. 1652. From Bandrole, Kulu, Punjab, November 14, 1936. An attractive evergreen shrub of good habit, up to 18 inches in diameter; the linear-lanceolate leaves are from 2 to 4 inches long.

For previous introduction see 79521.

122808. *CALAMAGROSTIS PSEUDOPHRAGMITES* (Hall. f.) Koel. Poaceae.

No. 1569. From Lahul, Punjab, October 20, 1936. A conspicuous grass found on dry, rather inaccessible isolated slopes.

For previous introduction see 113088.

122809. *CAMPANULA COLORATA* Wall. Campanulaceae.

No. 1525. From Gundla, Lahul, Punjab, October 23, 1936, on dry rock at 10,000 feet

## 122766 to 122984—Continued

altitude. A small perennial usually found growing in crevices in dry cliff faces. The pale, bluish-purple, campanulate flowers are 6 inches in diameter and very attractive.

For previous introduction see 42615.

122810. *CAMPANULA* sp. Campanulaceae.

No. 1594. From Tinu, Lahul, Punjab, August 1936, at 12,000 feet altitude. A rare plant, 5 feet tall, with large flowers 2 inches across, white tinged with red inside.

122811. *CANAVALLIA* sp. Fabaceae.

No. 2166. From Dacca, Bengal, January 15, 1937. The tender pods of this vine are used as a vegetable.

122812. *CARAGANA* sp. Fabaceae.

No. 1448. *Drama*. From the Taklung Pass, Ladak, Kashmir, September 27, 1936, at 15,000 feet altitude. A low shrub found in dense clumps 3 to 4 feet across and 12 to 18 inches high; found on dry slopes and plains where it is browsed by sheep and goats when other forage is scarce.

122813. *CAREX* sp. Cyperaceae.

No. 1496. *Longams*. From Tsokar, Rupshu, October 1, 1936, at 15,000 feet altitude. A stout sedge with heavy stiff leaves 1 foot long; growing in masses in both wet and dry situations and forming one of the most important grazing associations of the Tibetan plateau.

122814 to 122816. *CARUM CARVI* L. Apiaceae. Caraway.

For previous introduction see 86309.

122814. No. 1591. From Pukar, Lahul, Punjab, August 1936, at 10,000 feet altitude. Found in dry isolated places.

122815. No. 1595. *Gonyot*. From Pukar, Lahul, Punjab, August 1936, at 12,000 feet altitude. A pink-flowered species that grows 2 feet high in hayfields; the seeds are used as spice.

122816. No. 1614. *Gonyot*. Said to have come from Zaskar, Punjab, a high province adjoining Lahul. Used as spice and considered better than the Lahul sort.

122817. *CARUM COPTICUM* (L.) Benth. and Hook. Apiaceae.

No. 1235. *Shuts; sheneid*. From Skardo, Baltistan, Kashmir, where it is used medicinally.

122818. *CARYOTA MITIS* Lour. Phoenicaceae. Fishtail palm.

No. 2124. Presented by the Royal Botanic Gardens, Calcutta, January 6, 1937. A palm, native to the Malay Peninsula, about 20 feet high, with a straight cylindrical spineless ringed trunk 4 inches or more in diameter and bipinnate leaves 4 to 9 feet in length. The purple fruits are about the size of cherries.

For previous introduction see 81584.

122819. *CARYOTA URENS* L. Phoenicaceae. Toddy palm.

No. 2126. Presented by the Royal Botanic Gardens, Calcutta, January 6, 1937. A fishtail palm up to 80 feet high and 18 inches in diameter, with bipinnate leaves 20 feet long by 12 feet wide, with curved and drooping segments. Native to the Malay Archipelago.

For previous introduction see 103160.

## 122766 to 122984—Continued

122820. *CASSIA* sp. Caesalpiniaceae.

No. 2127. From Calcutta, January 7, 1937. Said to be an ornamental shrub 8 feet high, with orange and red flowers.

122821. *CEDRUS DEODARA* (Lamb.) Loud. Pinaceae. Deodar cedar.

No. 1751. *Keoru*. From above Kulu, Kulu, Punjab, November 16, 1936, at 5,000 feet altitude.

122822. *CEDRUS LIBANI* Loud. Pinaceae. Cedar of Lebanon.

No. 2010. Presented by the Botanical Gardens at Darjeeling, December 25, 1936.

122823. *CENTAUREA* sp. Asteraceae.

No. 1241. From Safaranga, Baltistan, Kashmir, August 18, 1936, at 6,500 feet altitude. Found growing in clumps a foot high on rock faces; flowers small, rose-purple and thistlelike.

122824. *CHAEROPHYLLUM* sp. Apiaceae.

No. 1581. *Shakara*. From Pukar, Lahul, Punjab, August 1936, at 12,000 feet altitude. A biennial 3 feet high, with a white, carrotlike root, and umbels of white flowers.

122825 to 122827. *CHENOPODIUM* spp. Chenopodiaceae.122825. *CHENOPODIUM BOTRYS* L.

No. 1493. *Sokann*. From Kolung, Lahul, Punjab, at 12,000 feet altitude, October 15, 1936. A wild plant 1 foot high whose leaves are used for flavoring.

122826. *CHENOPODIUM* sp.

No. 1400. *Ostahak*. From Leh, Ladak, Kashmir, September 16, 1936, at 10,500 feet altitude. A plant about 6 feet high, used as a potherb.

122827. *CHENOPODIUM* sp.

No. 1715. *Ostahak*. Presented by the Director of Agriculture, Kashmir. A delicious native potherb; sown in the fall and available early in the spring.

122828. *CIRSIIUM* sp. Asteraceae.

No. 1519. *Tultsoak*. From Pukar, Lahul, Punjab, August 1936, at 12,000 feet altitude. A thistle 18 to 24 inches high, with attractive rose-purple flowers. Found on dry slopes and eaten by horses and donkeys when green.

122829 to 122832. *CLEMATIS* spp. Ranunculaceae.122829. *CLEMATIS ORIENTALIS* L. Oriental clematis.

No. 1677. Presented by the Director, Department of Agriculture, Kashmir. An ornamental vine with finely cut leaves and erect, green-tinted yellow flowers, 1½ inches across. The seeds are borne in terminal clusters, each seed having a fluffy or feathery appendage. Native to Iran (Persia).

For previous introduction see 115071.

122830. *CLEMATIS* sp.

No. 1526. *Emong*. From Gundla, Lahul, Punjab, October 16, 1936, at 10,500 feet altitude. A creeping vine with gold-sprinkled brown flowers 1 inch in diameter.

## 122766 to 122984—Continued

## 122831. CLEMATIS sp.

No. 1364. *Emong*. From the Shyok Valley, Tarkalung, Baltistan, Kashmir, at 10,000 feet altitude, September 6, 1936. An ornamental vine which covers bushes to a height of 8 feet. The small golden-yellow flowers are sprinkled with brown. The fruits are also attractive.

## 122832. CLEMATIS sp.

No. 1296. From Shigar Nulla, Baltistan, Kashmir, at 9,000 feet altitude, August 21, 1936. An ornamental vine found on a dry slope; the flowers, bell-shaped, are golden, sprinkled with brown and 1 inch across.

## 122833. CODONOPSIS FOETENS Hook. f. and Thoms. Campanulaceae.

No. 1530. *Ludut*. From Kolung, Lahul, Punjab, August 18, 1936, at 12,000 feet altitude. A tufted perennial 2 feet high, with large, pale blue-purple flowers which have an unpleasant odor. It is closely related to *Codonopsis thalictroides*.

## 122834. CORYDALIS sp. Papaveraceae.

No. 1445. *Tongzil*. From the Taklung Pass, Ladak, Kashmir, September 26, 1936, at 15,000 feet altitude. An ornamental yellow-flowered species about 18 inches high.

## 122835. CORYDALIS sp. Papaveraceae.

No. 1724. Purchased from the Director of the Department of Agriculture, Kashmir. Received as *Corydalis rumex*, for which a place of publication has not been found.

## 122836. CORTUSA MATTHIOLI L. Primulaceae.

No. 1738. Purchased from the Director of the Department of Agriculture, Kashmir. A herbaceous perennial about 6 inches high, with long-stalked, cordate leaves having 7 to 9 lobes, and an umbel of about 7 small, rosy-purple, drooping flowers. Native to the Alps.

## 122837 to 122839. CORYPHA spp. Phoenixiaceae. Palm.

## 122837. CORYPHA ELATA Roxb.

No. 2128. Presented by the Royal Botanic Gardens, Calcutta, January 6, 1937. A tall palm up to 60 feet high, with a spirally ridged trunk and lunate, fan-shaped leaves 8 to 10 feet across, made up of 80 to 100 sword-shaped segments. Native to Burma and Bengal.

For previous introduction see 105349.

## 122838. CORYPHA TALLIERA Roxb.

No. 2131. Presented by the Royal Botanic Gardens, Calcutta, January 6, 1937. A stout unarmed fan palm up to about 30 feet high, with subrotund leaves 6 feet long and 15 feet broad.

## 122839. CORYPHA UMBRACULIFERA L. Talipot palm.

No. 2132. Presented by the Royal Botanic Gardens, Calcutta, January 6, 1937. A large palm up to 80 feet high. The leaves, 12 feet long and 16 feet broad, are made up of lobed segments, and the creamy white flowers are in terminal panicles 20 feet long. It is native to Ceylon.

## 122766 to 122984—Continued

For previous introduction see 101386.

## 122840 to 122844. COTONEASTER spp. Malvaceae.

## 122840. COTONEASTER sp.

No. 1597. *Landepilitsi*. From Tinu, Lahul, Punjab, October 11, 1936, at 11,000 feet altitude. A slender attractive tree with long-stalked pink flowers. The fruits are bright crimson.

## 122841. COTONEASTER sp.

No. 1567. *Roktrolo*. From Kyelang, Lahul, Punjab, October 18, 1936, at 11,000 feet altitude. A low dense bush up to 5 feet high, with small leaves and black berries. Found on a dry slope.

## 122842. COTONEASTER sp.

No. 1753. From Chamba, Punjab, August 1936.

## 122843. COTONEASTER sp.

No. 1671. From above Bandrole, Kulu, Punjab, November 12, 1936, at 10,000 feet altitude. A small tree with handsome crimson fruits.

## 122844. COTONEASTER sp.

No. 1619. From Pukar, Lahul, Punjab, September 1936, at 12,000 feet altitude. An attractive small tree with red fruits.

## 122845. CRATAEGUS sp. Malaceae.

No. 1349. From Pranu, Baltistan, Kashmir, September 1, 1936, at 8,000 feet altitude. A small, well-formed tree with beautiful crimson fruits.

## 122846. CRATAEGUS sp. Malaceae.

No. 1130. From Skardo, Baltistan, Kashmir, August 12, 1936, at 6,500 feet altitude. A small ornamental tree with the usual *Crataegus* features. The red fruits are one-half inch in diameter.

## 122847. CUCUMIS SATIVUS L. Cucurbitaceae. Cucumber.

No. 2214. From Ellou, Madras Presidency.

## 122848. CYCLANTHERA sp. Cucurbitaceae.

No. 1599. *Serimentok*. A climbing annual with yellow flowers.

## 122849. DIANTHUS sp. Silenaceae.

No. 1531. From Kyelang, Lahul, Punjab, August 20, 1936, at 11,000 feet altitude. A small-flowered pink with glaucous leaves, growing in clumps on dry ground. The pink flowers are about one-half inch across.

## 122850. DELPHINIUM sp. Ranunculaceae.

No. 1582. *Jar Kang*. From Tinu, Lahul, Punjab, October 1, 1936, at 11,000 feet altitude. A species with large flowers clear cobalt blue to white, and 2 inches across.

## 122851. DIPSACUS INERMIS Wall. Dipsacaceae.

No. 1716. *Dapalhak*. Presented by the Department of Agriculture, Kashmir. A stout erect shrub whose leaves are used as a potherb. The stems are 4 to 10 feet high, the leaves large, lanceolate to pinatifid, and the many small white flowers are in round dense heads about 1 inch in diameter. Native to the Himalayas from 6,000 to 10,000 feet altitude.

## 122766 to 122964—Continued

122852. *DRACEPHALUM MOLDAVICA* L. Menthaceae.

No. 1338. *Tsemnik*. From Kapalu, Baltistan, Kashmir, August 28, 1936, at 6,000 feet altitude. Seed used as a condiment. An annual with lanceolate, crenate leaves and loose clusters of small blue or white flowers. Native to Europe.

122853. *EPHEDRA PACHYCLADA* Boiss. Gnetaceae.

No. 1358. *Tsepat*. From Tarkalung, Baltistan, Kashmir, September 5, 1936, at 9,000 feet altitude, in both dry and damp situations. An attractive shrub growing in large rounded clumps 3 to 4 feet high, loaded with red berrylike fruits. Native to central Asia.

122854. *FRAXINUS XANTHOXYLOIDES* (G. Don) Wall. Oleaceae.

No. 1466. *Fungmaniguk*. From Tiro, Lahul, Punjab, October 22, 1936, at 9,000 feet altitude. A shrub or small tree found on dry slopes. The branches are spreading, and the leaves have 5 to 9 oval to oblong leaflets. Native to the western Himalayan region.

122855. *FRITILLARIA* sp. Liliaceae.

No. 1745. Presented by the Director, Department of Agriculture, Kashmir.

122856. *FRITILLARIA ROYLEI* Hook. Liliaceae.

No. 1679. Presented by the Director, Department of Agriculture, Kashmir. A fritillaria with whorled or opposite linear-lanceolate leaves, 2 to 4 inches long; and solitary or few nodding flowers on stems 1 to 2 feet high. The flowers are  $1\frac{1}{2}$  to 2 inches long, campanulate, yellow-green, tessellated with dull purple. Native to the Himalayan region at altitudes of 8,000 to 10,000 feet.

122857. *GALIUM VERUM* L. Rubiaceae.  
Yellow bedstraw.

No. 1552. From Kyelang, Lahul, Punjab, October 10, 1936, at 10,500 feet altitude. An attractive perennial found in dry places, growing in mats about 1 foot high, with very small, fragrant yellow flowers.

122858 to 122861. *GENTIANA* spp. Gentianaceae.

Nos. 122858 to 122860. *Tikta*. From Pukar, Lahul, Punjab, September 1936, from 12,000 to 13,000 feet altitude.

122858. *GENTIANA* sp.

No. 1611.

122859. *GENTIANA* sp.

No. 1603.

122860. *GENTIANA* sp.

No. 1605.

122861. *GENTIANA* sp.

No. 1500. *Tikta*. From Gundla, Lahul, Punjab, October 23, 1936, at 11,000 feet altitude. A biennial or perennial, growing 18 inches high in rather dry soil. The large blue-purple flowers are three-fourths of an inch across.

122862 to 122865. *IMPATIENS* spp. Impatiensaceae.

122862. *IMPATIENS* sp.

No. 1539. From Manali, Kulu, Punjab, October 27, 1936, at 6,500 feet alti-

## 122766 to 122984—Continued

tude, in shady places. A tall plant up to 10 feet high, with large pink flowers.

122863. *IMPATIENS* sp.

No. 1592. *Mardonn*. From Pukar, Lahul, Punjab, August 1936, at 12,000 feet altitude. An attractive annual  $2\frac{1}{2}$  to 3 feet high, growing in hayfields. The flowers, about 1 inch long, are rose-purple with yellow in the throat.

122864. *IMPATIENS* sp.

No. 1593. *Fidonn*. A coarse annual growing to 10 feet high, in and along water. Flowers rose purple and 1 inch long.

122865. *IMPATIENS* sp.

No. 1782. A collection of seeds brought from Lahul by a native.

122866. *INDIGOFERA LEPTOSTACHYA* DC. Fabaceae.

No. 1524. From Koti, Kulu, Punjab, at 9,000 feet altitude. A well-formed graceful slender-branched shrub up to 8 feet high, producing an abundance of very attractive small, rose-purple flowers. Native to the Himalayan region.

122867. *DESMODIUM TILIAEFOLIUM* (D. Don) G. Don. Fabaceae.

No. 1532. From Koti, Kulu, Punjab, October 26, 1936, at 9,000 feet altitude. An attractive deciduous shrub with loose slender branches, thick green trifoliate leaves about 4 inches long, and rose to pink flowers in lax racemes often a foot long. The plant grows on dry isolated slopes and will stand freezing.

For previous introduction see 116800.

122868. *INULA ROYLEANA* DC. Asteraceae.  
Blackbud inula.

No. 1487. *Manruta*. From Kolung, Lahul, Punjab, October 14, 1936, at 12,000 feet altitude. A cultivated plant with large ovate, hairy leaves and orange-yellow flower heads 2 to 3 inches across, borne on a stem up to 5 feet high.

For previous introduction see 51037.

122869 to 122875. *IRIS* spp. Iridaceae.

122869 and 122870. *IRIS KUMAONENSIS* Wall.

A dwarf iris of the *Pseudevensia* section, 2 to 12 inches high, native to the western Himalayas from Kashmir to Kumaon between 9,000 and 12,000 feet altitude. The flaccid linear leaves are 12 to 14 inches long, and the solitary flowers have a perianth tube 2 to 3 inches long. The bright lilac falls, 1 to 2 inches long, are blotched with darker lilac, and the claw has a beard of yellow-tipped hairs on a white crest. The erect standards are  $1\frac{1}{2}$  inches broad.

For previous introduction see 110098.

122869. No. 1571. *Prangalch*. From Kolung, Lahul, Punjab, August 15, 1936, at 12,000 feet altitude.

122870. No. 1730. Presented by the Director, Department of Agriculture, Kashmir.

122871. *IRIS* sp.

No. 1646. From Chitkul, Rampur-Bushahr, August 26, 1936. A plant 2 feet high, with nearly stemless bloom and leaves 5 mm. wide.

## 122766 to 122984—Continued

122872. *IRIS* sp.

No. 1523. From Naggar, Kulu, Punjab, October 28, 1936. A tall species growing in dry pine forest or along streams. Flowers  $2\frac{1}{2}$  inches across; falls wine, blotched darker, standards with bluish tinge.

122873. *IRIS* sp.

No. 1155. *Tisma*. From Skardo, Baltistan, Kashmir, August 15, 1936, at 6,500 feet altitude, common along water-courses and roads. Plants 3 feet high; leaves three-eighths of an inch wide; flowers said to be blue.

122874. *IRIS* sp.

No. 1377. From Deskit, Nubra, Shyok Valley, Kashmir, September 11, 1936, at 9,000 feet altitude. Found growing in clumps along the borders of fields. The plant is about 2 feet high and of the *Iris ensata* type.

122875. *IRIS* sp.

No. 1402. From Leh, Ladak, Kashmir, September 16, 1936, at 10,500 feet altitude. An iris  $2\frac{1}{2}$  feet high, found in field borders; leaves 2 inches wide, flowers bluish.

122876. *JAESCHKEA CANALICULATA* (Royle) Knobl. (*J. latsepala* C. B. Clarke). Gentianaceae.

No. 1736. Presented by the Director, Department of Agriculture, Kashmir. An erect-stemmed annual about 2 feet high, with oblong leaves about  $1\frac{1}{2}$  inches long and small blue flowers in cymes. Native to the Himalayan region at altitudes of 9,000 to 13,000 feet.

122877 to 122879. *JUNIPERUS* spp. Pinaceae. Juniper.122877. *JUNIPERUS COMMUNIS* L.

Common juniper.

No. 1562. *Pama*. From Kolung, Lahul, Punjab, October 10, 1936, at 12,000 feet altitude.

For previous introduction see 109093.

122878. *JUNIPERUS MACROPODA* Boiss.

No. 1455. *Shukpas*. From Kolung, Lahul, Punjab, October 10, 1936, at 11,000 feet altitude. A tree up to 50 feet high, with a trunk 33 feet in girth and light-green foliage. Native to the Himalayan region and westward between 5,000 and 14,000 feet altitude.

122879. *JUNIPERUS* sp.

No. 1111. From above Sodpur, Baltistan, Kashmir, August 10, 1936, at 2,000 feet altitude. The tree has a diameter of over 5 feet, is most attractively gnarled, and has an abundance of large fruits over one-fourth of an inch in diameter.

122880. *LAVATERA THURINGIACA* L. Malvaceae. Treemallow.

No. 1282. From Shigar, Baltistan, Kashmir, August 20, 1936, at 6,500 feet altitude. A cultivated perennial, 4 feet high, with rose-colored flowers 2 inches across.

122881. *LIGUSTRUM* sp. Oleaceae.

No. 1972. From Darjeeling, December 25, 1936, at 6,000 feet altitude. An ornamental shrub.

## 122766 to 122984—Continued

122882 to 122889. *LONICERA* spp. Caprifoliaceae. Honeysuckle.122882. *LONICERA* sp.

No. 1297. From Shigar Nulla, Baltistan, Kashmir, August 22, 1936, at 9,000 feet altitude. A bush 5 feet high, growing along a river on a dry slope. The crimson fruits turn black as they ripen.

122883. *LONICERA* sp.

No. 1383. *Chenchen*. From Karzong, Baltistan, Kashmir, September 13, 1936. A low dense shrub about 3 feet high with small narrow leaves and large rose-pink flowers which are exceedingly fragrant.

122884. *LONICERA* sp.

No. 1447. *Chenchen*. From Rachogba, Rupshu, October 5, 1936, at 13,000 feet altitude. A low dense shrub up to 3 feet high, with large fragrant pink flowers. Like No. 1383 (P. I. 122883).

122885. *LONICERA OBOVATA* Royle.

No. 1461. *Peltsishing*. From Pukar, Lahul, Punjab, October 16, 1936, at 12,000 feet altitude. A low bushy shrub 1 to  $1\frac{1}{2}$  feet high with slender branches and small leaves, growing usually in damp places. The flowers are yellowish and the fruit has a bluish bloom.

For previous introduction see 76264.

122886. *LONICERA* sp.

No. 1476. *Sett*. From Kyelang, Lahul, Punjab, October 21, 1936, at 10,500 feet altitude. A large shrub 10 to 12 feet high; very attractive when loaded with large currantlike translucent persistent white berries in which can be seen the black seeds.

122887. *LONICERA* sp.

No. 1494. *Sett*. From Kolung, Lahul, Punjab, October 19, 1936, at 11,000 feet altitude. A well-formed shrub 6 feet high; very attractive in the autumn when covered with bright-red translucent berries.

122888. *LONICERA* sp.

No. 1583. *Sett*. From Pukar, Lahul, Punjab, September 20, 1936, at 12,000 feet altitude. A low bushy honeysuckle up to 5 feet high, with black fruits.

122889. *LONICERA* sp.

No. 1782-H. Presented by a native.

122890. *LUDWIGIA* sp. Onagraceae.

No. 1793. From Dal Lake, Kashmir, November 23, 1936. A very attractive woody perennial growing in the water to a height of about 5 feet. The rosy-pink flowers are borne in long spikes and last for weeks.

122891. *LYCHNIS CASHEMERIANA* Royle. Silenaceae.

No. 1585. *Chambozi*. From Kolung, Lahul, Punjab, September 1, 1936, at 12,000 feet altitude. An erect rigid perennial  $2\frac{1}{2}$  feet high, related to *Lychnis indica*, with erect or nodding white flowers in contracted cymes. Native to Kashmir.

122892 to 122894. *MALVA* spp. Malvaceae. Mallow.



## 122766 to 122984—Continued

122892. *MALVA SYLVESTRIS* L.

No. 1417. *Graichampa*. From Leh, Ladak, Punjab, September 16, 1936, at 10,500 feet altitude. A cultivated winter annual 4 feet tall with dark-magenta flowers  $1\frac{1}{4}$  inches across, borne over a long season.

For previous introduction see 122518.

122893. *MALVA VERTICILLATA* L.

No. 1610. *Nikantsi*. From Pukar, Lahul, Punjab, August 1936, at 12,000 feet altitude.

122894. *MALVA PARVIFLORA* L.

No. 1782-I. Seeds presented by a native.

122895. *MECONOPSIS ACULEATA* Royle. Papaveraceae.

No. 1766. Presented by the Director, Department of Agriculture, Kashmir. A biennial Himalayan plant with hairy stems and rosettes of blunt pointed leaves. The flowers, bright blue with golden yellow throats, are borne in spikelike racemes, the flowers opening from the top of the raceme downward.

For previous introduction see P. I. 55300.

122896. *MECONOPSIS* sp.

No. 1782-D. Seeds presented by a native.

122897. *MELIA* sp. Meliaceae.

No. 1505. From Kulu, Kulu, Punjab, November 12, 1936, at 4,500 feet altitude. An attractive tree with long trusses of large purple flowers.

122898. *MELOTHRIA* sp. Cucurbitaceae.

No. 1508. From Lahul, Punjab, November 1936.

122899. *MELOTHRIA* sp. Cucurbitaceae.

No. 2165. From Dacca, Bengal, January 14, 1936. An annual climber, hairy throughout, with small red fruits.

122900. *MOMORDICA CHARANTIA* L. Cucurbitaceae. Balsam-pear.

No. 1676. *Karela*. Presented by the Director, Department of Agriculture, Kashmir. A form with large fruits, less bitter than usual.

122901. *MORINA* sp. Dipsacaceae.

No. 1300. *Dohila*. From Morungkor, Baltistan, Kashmir, August 2, 1936. Found on a dry slope. The snowy white flowers, 3 inches across, have a strong Madonna-lily scent.

122902. *MYRICARIA* sp. Tamaricaceae.

No. 1360. *Ombu*. From Tarkalung, Baltistan, Kashmir, September 6, 1936, at 9,000 feet altitude. An attractive well-formed bush 3 feet high, with small leaves and long terminal spikes of small rose-colored flowers.

122903. *NEPETA* sp. Menthaceae.

No. 1546. From Koti, Kulu, Punjab, October 27, 1936, at 9,000 feet altitude. A tall perennial mint 3 feet high, with pale, bluish-purple flower heads  $1\frac{1}{2}$  inches long. Found growing along the edges of fields.

122904. *PAEONIA EMODI* Wall. Ranunculaceae.

No. 1722. Presented by the Director, Department of Agriculture, Kashmir. A

## 122766 to 122984—Continued

peony up to 2 feet high, with ternatisect leaves 6 to 12 inches long and white flowers. Native to the temperate Himalayas.

122905. *PASTINACA* sp. Apiaceae.

No. 1601. *Shuass*. From Pukar, Lahul, Punjab, August 1936, at 12,000 feet altitude. An umbellifer 4 feet tall, found growing in meadows.

122906 to 122912. *PEDICULARIS* spp. Scrophulariaceae.

Nos. 122906 to 122908 were purchased from the Director, Department of Agriculture, Kashmir.

122906. *PEDICULARIS BICORNUTA* Klotzsch.

No. 1765.

122907. *PEDICULARIS PECTINATA* Wall.

No. 1764.

122908. *PEDICULARIS SIPHONANTHA* D. Don.

No. 1767.

122909. *PEDICULARIS SIPHONANTHA* D. Don.

No. 1522. *Hunamentok*. From Kolung, Lahul, Punjab, October 1, 1936, at 12,000 feet altitude. An attractive perennial 1 foot high; flowers large, old rose, with a large white eye. Found growing in sod, watered well by springs.

122910. *PEDICULARIS* sp.

No. 1572-A. From Pukar, Lahul, Punjab, August 20, 1936, at 12,000 feet altitude. An attractive pink-flowered species.

122911. *PEDICULARIS* sp.

No. 1576. *Lugruserpo*. From Pukar, Lahul, Punjab, August 15, 1936, at 12,000 feet altitude. A showy species 1 foot high with large yellow flowers.

122912. *PEDICULARIS* sp.

No. 1361. From Chalunka Nulla, Baltistan, Kashmir, September 5, 1936, at 10,000 feet altitude. A pedicularis about 8 inches high, with white flowers, the beaks tipped with rose.

122913. *PHLOMIS SPECTABILIS* Falc. Menthaceae.

No. 1723. Purchased from the Director, Department of Agriculture, Kashmir. A tall herbaceous perennial about 6 feet high, with large ovate-cordate basal leaves, the stem leaves smaller upwards, and whorls of rather large rose-purple flowers. Native to the Himalayas from 3,000 to 8,000 feet altitude.

122914. *PHLOMIS* sp. Menthaceae.

No. 1782-A. Seeds presented by a native.

122915. *PICORRHIZA KURROA* Benth. Scrophulariaceae.

No. 1725. Purchased from the Director, Department of Agriculture, Kashmir.

122916. *PINUS ROXBURGHII* Sargent (*P. longifolia* Roxb.). Pinaceae.

No. 1673. *Kail*. From above Kulu, Kulu, Punjab, November 15, 1936, at 5,000 feet altitude. A tree, native to the lower Himalayas at altitudes of 1,500 to 7,500 feet, often over 100 feet high, with a round symmetrical head, but sometimes stunted and gnarled. The light green pendulous

## 122766 to 122984—Continued

leaves, in clusters of 3, are 9 to 12 inches long, and persist for 3 or 4 years. The ovoid-conical cones are 4 to 7 inches long. When young, this pine is attractive for its long drooping pale-green foliage.

For previous introduction see 102771.

122917. *PLANTAGO TIBETICA* Hook. f. and Thoms. Plantaginaceae.

No. 1606. *Naram*. From Pukar, Lahul, Punjab, August 1936, at 12,000 feet altitude. A dooryard perennial weed, also a potheb under certain conditions. Native to the Himalayan region.

122918. *PLEUROSPERMUM* sp. Apiaceae.

No. 1625. *Hurgatt*. From Pukar, Lahul, Punjab, August 1936, at 12,000 feet altitude. A stout perennial up to 2 feet high; root used as a condiment.

122919. *PODOPHYLLUM EMODI* Wall. Berberidaceae. Himalayan mayapple.

No. 1528. *Mukutumtsi*. From Pukar, Lahul, Punjab, October 6, 1936, at 10,000 feet altitude.

122920. *PODOPHYLLUM EMODI* Wall. Berberidaceae. Himalayan mayapple.

No. 1732. Presented by the Director, Department of Agriculture, Kashmir.

122921. *POLYGONATUM* sp. Convallariaceae.

No. 1575. *Birshaka*. From Pukar, Lahul, Punjab, August 20, 1936, at 12,000 feet altitude. The root is used to wash woollens.

122922. *POLYGONATUM* sp. Convallariaceae.

No. 1782-G. Seeds presented by a native.

122923 to 122927. *POLYGONUM* spp. Polygonaceae.

122923. *POLYGONUM ALPINUM* All.

No. 1734. Presented by the Director, Department of Agriculture, Kashmir. A hardy herbaceous perennial with very small white flowers. Native to Europe and Asia.

122924. *POLYGONUM POLYSTACHYUM* Wall. Fleecflower.

No. 1490. *Mushutsi*. From the Upper Bhaga Valley, Lahul, Punjab, October 1936, at 12,000 feet altitude. An attractive perennial sometimes 6 feet tall, with large dense panicles of creamy flowers. The stems, when young, may be stewed as rhubarb.

For previous introduction see 48340.

122925. *POLYGONUM* sp.

No. 1491. From Rahla, Kulu, Punjab, October 26, 1936, at 9,000 feet altitude. An attractive perennial 3 feet high, with sagittate leaves 6 inches long and spikes 4 inches long, of lovely crimson flowers.

122926. *POLYGONUM* sp.

No. 1449. *Nielo*. From Zingzingbar, Lahul, Punjab, October 9, 1936, at 13,000 feet altitude. A bushy perennial about 1 foot high, with small heads of cream-colored flowers. The plant is very ornamental in the fall when the leaves turn orange and red.

122927. *POLYGONUM* sp.

No. 1574. Presented by a collector.

## 122766 to 122984—Continued

122928. *POTENTILLA ARGYROPHYLLA* Wall. Rosaceae.

No. 1737. Purchased from the Director, Department of Agriculture, Kashmir. A perennial herb up to 3 feet high, with digitate leaves and many showy yellow flowers about 1 inch across, in panicles. Native to the Himalayan region from 8,000 to 13,000 feet altitude.

122929. *POTENTILLA NEPALENSIS* Hook. Rosaceae.

No. 1514. From Rahla, Kulu, Punjab, October 26, 1936, at 9,000 feet altitude. An erect or ascending perennial with stout stems about 2 feet high and showy purple flowers about 1 inch across. Native to the Himalayas between 5,000 and 9,000 feet altitude.

122930. *GERANIUM NEPALENSE* Sweet. Geraniaceae.

No. 1645. From Chitkul, Rampur-Bushahr, August 1936. Found growing in clumps 2 feet high, near springs in pine-forest. A perennial, sometimes procumbent, with cordate deeply five-lobed leaves with bright pink or red flowers. Native to Nepal.

For previous introduction see 115981.

122931. *PRIMULA* sp. Primulaceae.

No. 1333. From Talela, Baltistan, Kashmir, August 24, 1936, at 14,000 feet altitude. Plants 1 foot high; flowers rose-purple with a white eye.

122932. *PRIMULA* sp. Primulaceae.

No. 1385. From Karzong Pass, Ladak, Kashmir, September 14, 1936, at 15,000 feet altitude. Plants 18 inches high; flowers not seen.

122933. *RAPHANUS SATIVUS* L. Brassicaceae. Radish.

No. 1622. From Leh, Ladak, Kashmir, September 17, 1936, at 10,500 feet altitude.

122934. *RHAMNUS* sp. Rhamnaceae.

No. 1653. From above Bandrole, Kulu, Punjab, November 14, 1936, at 8,000 feet altitude. A spreading bush about 8 feet high; covered in spring with small fragrant green flowers and later with black fruits.

122935. *RHAMNUS* sp. Rhamnaceae.

No. 1579. *Tsado*. From Kolung, Lahul, Punjab, August 31, 1936, at 12,000 feet altitude. A low, gnarled dense bush growing at high altitudes.

122936. *RHODODENDRON* sp. Ericaceae.

No. 1558. *Balu*. From Diliburg, Lahul, Punjab, October 20, 1936, at 12,000 feet altitude. A low evergreen shrub 18 inches high with pale-yellow flowers 1 inch across.

122937. *RHODODENDRON CAMPANULATUM* Don. Ericaceae.

No. 1600. *Raduk*. Below Kukti Pass, Chamba, Punjab, July 1936, at 12,000 feet altitude. An evergreen 6 inches high, growing in masses; flowers large, purple-lavender and fragrant.

122938 to 122947. *ROSA* spp. Rosaceae. Rose.

122938. *ROSA EGLANTERIA* L. Sweetbrier.

No. 1456. *Seasepo*. From Kyelang, Lahul, Punjab, October 14, 1936, at 10,-

## 122766 to 122954—Continued

500 feet altitude. An ornamental shrub 5 to 6 feet high, covered in July with golden-yellow double flowers over 2 inches across.

122939 to 122942.—*ROSA MACROPHYLLA* Lindl. Bigleaf rose.

122939. No. 1362. From Biokdang Nulla, Baltistan, Kashmir, September 8, 1936, at 10,000 feet altitude along a stream. A large shrub, 8 feet high, loaded with large globose red fruits one-half inch in diameter, crowned by persistent sepals.

122940. No. 1481. *Seamapo*. From the Upper Bhaga Valley, Lahul, Punjab, October 1936, at 12,000 feet altitude. A dense shrub 6 to 8 feet high, covered in the spring with very fragrant single flowers, over 2 inches across; some orange red and others three shades of pink, followed by large red hips. It grows well in dry situations.

122941. No. 1553. *Seamapo*. From Tsokang, Lahul, Punjab, October 21, 1936, at 9,000 feet altitude. Like No. 1481 (P. I. 122940), but collected at a lower altitude.

122942. No. 1482. Like No. 1481 (P. I. 122940), but this plant sent long thin shoots 20 feet up the tree among the branches of a juniper; fruited abundantly.

122943. *ROSA MOSCHATA* Mill. Musk rose.

No. 1635. *Kudzi*. From above Bandrole, Kulu, Punjab, October 20, 1936, at 8,000 feet altitude. A climber 20 feet high, filled in June with intensely fragrant, single white flowers over an inch across.

For previous introduction see 105910.

122944. *ROSA* sp.

No. 1366. From Hundi, Baltistan, Kashmir, September 7, 1936, at 9,000 feet altitude. A dense bush 20 feet high, filled with hips.

122945. *ROSA* sp.

No. 1375. From Hundar, Baltistan, Kashmir, September 10, 1936, at 9,000 feet altitude. Like No. 1376 (P. I. 122946), but with larger fruit.

122946. *ROSA* sp.

No. 1376. From Hundar, Baltistan, Kashmir, September 10, 1936, at 9,000 feet altitude. A large bush, 20 feet high, with a large crop of hips.

122947. *ROSA* sp.

No. 2145. From Parachinar, North West Frontier Province, December 1936. Presented by Ibrahim Shah, of the Department of Agriculture. A yellow rose with single flowers as big as a dime, borne profusely. The bush is about 5 feet high.

122948. *RUBUS SAXATILIS* L. Rosaceae.

No. 1516. *Sholshol*. From Pukar, Lahul, Punjab, September 1, 1936, at 13,000 feet altitude. A low unarmed woody perennial with trifoliate leaves about 6 inches long, found in a birch forest. The few fruits are scarlet, rather acid, but pleasant.

For previous introduction see 92301.

## 122766 to 122984—Continued

122949. *RUMEX* sp. Polygonaceae.

No. 1604. *Chumtsan*. From Pukar, Lahul, Punjab, August 1936, at 12,000 feet altitude. Found along streams.

122950. *SALVIA HIANIS* Royle. Menthaceae.

No. 1728. Presented by the Director, Department of Agriculture, Kashmir. A viscid-hairy perennial herb 2 to 3 feet high, with cordate toothed leaves, 4 to 7 inches long, on petioles often 10 inches long. The blue flowers, 1 to 2 inches long with inflated throats, are borne in large spreading panicles.

For previous introduction see 103326.

122951. *SALVIA* sp. Menthaceae.

No. 1618. *Zluptsi*. From Pukar, Lahul, Punjab, August 1936, at 12,000 feet altitude. An attractive mint, up to 2 feet high, found growing in field borders. The blue-purple flowers are in long heads.

122952. *SAPINDUS MUKOROSI* Gaertn. Sapindaceae. Chinese soapberry.

No. 1784. *Ritha*. From Kulu, Kulu, Punjab, November 20, 1936, at 4,500 feet altitude. A Chinese tree about 35 feet high, with alternate, pinnate leaves and round yellow fruits an inch in diameter. The flesh of the fruit is used as a soap to wash woollens.

For previous introduction see 105633.

122953 to 122955. *SAUSSUREA* spp. Astera-ceae.122953. *SAUSSUREA* sp.

No. 1381. *Pangtsi*. From Karzong Pass, Ladak, Kashmir, September 14, 1936, at 15,000 feet altitude. The plant consists of a head of large flowers, 2 inches in diameter, with blue-purple stamens and a few basal leaves. Received under the name "minor," for which a place of publication has not been found.

122954. *SAUSSUREA* sp.

No. 1573. *Romentok*. From Tinu, Lahul, Punjab, September 16, 1936. A very attractive species, growing in clumps up to 2 feet high. The leaves are silvery and the flowers are a delicate mahogany brown.

122955. *SAUSSUREA* sp.

No. 1616. *Dafa*. From above Tinu, Lahul, Punjab, September 1936, at 11,000 feet altitude. A perennial, over 3 feet tall, growing on dry slopes. The small rose-purple flowers are borne in clusters.

122956. *SAXIFRAGA* sp. Saxifragaceae.

No. 1580. *Shabora*. From Tinu, Lahul, Punjab, October 16, 1936. A species 10 inches high, with greenish flowers, but its chief attraction consists in the large oval leaves which turn red in the fall.

122957. *SCABIOSA* sp. Dipsacaceae.

No. 1521. From Gundla, Lahul, Punjab, October 23, 1936. A perennial growing on dry slopes, with attractive rose-purple flowers 2 inches across.

122958. *SCROPHULARIA SCOPOLII* Hoppe. Scrophulariaceae.

No. 1735. Presented by the Director, Department of Agriculture, Kashmir. A variable biennial with stout stems 2 to 3

## 122766 to 122984—Continued

feet high, ovate-oblong to cordate leaves 1 to 3 inches long, and large panicles of small greenish-purple flowers. Native to eastern Europe and western Asia.

122959. *SEDUM* sp. Crassulaceae.

No. 1384. *Srollu*. From Karzong Pass, Ladak, Kashmir, September 14, 1936, at 15,000 feet altitude. Found growing in clumps 18 inches high, with corymbs, 1 inch across, of yellow flowers which turn red with age.

122960. *SENECIO* sp. Asteraceae.

No. 1587. *Zerjung*. From Pukar, Lahul, Punjab, August 1936, at 12,000 feet altitude. A perennial about 2 feet high, with corymbs of yellow flowers less than one-half inch across.

122961. *SENECIO* sp. Asteraceae.

No. 1752. From Tandil, Lahul, Punjab, October 26, 1936, at 10,000 feet altitude. A small perennial 1 foot high, growing in clumps in dry situations. The yellow flower heads are 1 inch across.

122962. *SIUM* *SISARUM* L. Apiaceae.

Skirret.

No. 1763. *Zirra*. From Kyelang, Lahul, Punjab, October 1936, at 10,500 feet altitude. A popular Indian spice.

122963. *SOLANUM* sp. Solanaceae.

No. 1242. From Shigar, Baltistan, Kashmir, August 18, 1936. A xerophytic shrub 4 feet high, with much flattened black berries; found on the sand plain of a river.

122964. *SPIRAEA* *CANESCENS* D. Don. Rosaceae.

No. 1515. *Katishing*. From Koti, Kulu, Punjab, at 9,000 feet altitude. A shrub from 6 to 12 feet high, with long slender arching branches, small broad-oval to ovate leaves, and rather small white flowers in dense corymbs 2 to 3 inches across. Native to the Himalayan region.

122965. *SORBARIA* *SORBIFOLIA* (L.) A. Br. Rosaceae.

No. 1473. *Kahan*. From Tiro, Lahul, Punjab, October 22, 1936, at 9,000 feet altitude. A shrub about 6 feet high, of spreading habit, with large compound leaves which turn red in the fall, and huge panicles of creamy white flowers in the spring. Found in dry open places.

122966. *SORBARIA* *SORBIFOLIA* (L.) A. Br. Rosaceae.

No. 1474. From Naggar, Kulu, Punjab, October 27, 1936, at 6,000 feet altitude. Much like No. 1473 (P. I. 122965), but will stand only light frost.

122967. *PTERYGOTA* *ALATA* (Roxb.) R. Br. Sterculiaceae.

No. 2139. From Calcutta, January 7, 1937. A large tree, native to India, with ash-colored bark and yellow-tomentose branchlets. The large, heart-shaped leaves, 10 inches long by 7 inches wide, are clustered at the ends of the branches. The panicles of small tomentose flowers, without petals, are shorter than the leaves.

For previous introduction see 116789.

122968. *STERCULIA* sp. Sterculiaceae.

No. 2144. *Peshawari Badam* (Peshawari almonds). From Calcutta, January 7, 1937; said to have come from Peshawar.

## 122766 to 122984—Continued

A handsome shade tree; the seeds are eaten.

122969. *SYRINGA* *EMODI* Wall. Oleaceae. Himalayan lilac.

No. 1462. From Kyelang, Lahul, Punjab, October 14, 1936, at 10,500 feet altitude. A shrub up to 8 feet high, inclined to be scraggly but nevertheless attractive with its large trusses of creamy fragrant flowers. This strain is the hardiest and most attractive of any found in the Himalayas.

122970. *SPINACIA* *OLERACEA* L. Chenopodiaceae. Spinach.

No. 1412. *Palag*. From Leh, Ladak, Kashmir, September 16, 1936, at 10,500 feet altitude. A potherb, perhaps not different from the ones sent from lower altitudes.

122971. *TOONA* *CILIATA* Roemer. Meliaceae. Toon tree.

No. 1781. From Kulu, Kulu, Punjab, November 17, 1936, at 4,500 feet altitude. A roadside tree, growing to a diameter of about 2 feet. The small whitish flowers are in long clusters, but the chief value of the tree is that the leaves stay green late in the fall.

122972. *TRAGOPOGON* sp. Cichoriaceae.

No. 1617. *To*. From Pukar, Lahul, Punjab, August 1936, at 12,000 feet altitude. A form with yellow flowers, found on dry slopes.

122973. *TRAGOPOGON* sp. Cichoriaceae.

No. 1754. From Pukar, Lahul, Punjab, September 1936, at 12,000 feet altitude.

122974 to 122977. *TRICHOSANTHES* spp. Cucurbitaceae.122974 and 122975. *TRICHOSANTHES* *ANGUINA* L. Snakegourd.

Presented by the Director, Department of Agriculture, Kashmir.

122974. No. 1686. *Chichenda*. A white gourd about 3 feet long.

122975. No. 1694. *Hara Chichenda*. A green fruit about 3 feet long.

122976. *TRICHOSANTHES* *BRACTEATA* (Lam.) Voigt.

No. 1655. From Naggar, Kulu, Punjab, November 14, 1936, at 6,000 feet altitude. A vigorous vine, about 20 feet long, bearing an abundance of orange-red fruits the size and shape of duck eggs.

122977. *TRICHOSANTHES* sp.

No. 1791. From Kangra, Kangra, Punjab, November 23, 1936, at 2,500 feet altitude. An annual with an abundance of globose fruits three-fourths of an inch in diameter, brick-red with long blotches of white.

122978 to 122980. *TRIGONELLA* *FOENUM GRAECUM* L. Fabaceae. Fenugreek.

122978. No. 1701. *Methi*. Presented by the Director, Department of Agriculture, Kashmir.

122979. No. 1164. *Methi*. From Skardo, Baltistan, Kashmir, August 16, 1936. A potherb.

122980. No. 1422. *Shamilitik*. From Leh, Ladak, Kashmir, September 17, 1936, at 10,500 feet altitude. A potherb.

## 122766 to 177984—Continued

122981. VERBASCUM sp. Scrophulariaceae.

No. 1573. *Kut*. From Kyelang, Lahul, Punjab, October 1, 1936, at 10,500 feet altitude. Cultivated for the roots, used in native medicine. The yield is heavy; one root may weigh 4 pounds when dried.

122982. VERBASCUM sp. Scrophulariaceae.

No. 1615. *Kolonasta*. From Pukar, Lahul, Punjab, August 1936, at 12,000 feet altitude.

122983. VIBURNUM NERVOSUM D. Don. Caprifoliaceae.

No. 1733. Presented by the Director, Department of Agriculture, Kashmir.

122984. VICIA FABA L. Fabaceae. Broadbean.

No. 1172. [Received without notes.]

122985. TRITICUM AESTIVUM L. Poaceae. Common wheat.

From Canada. Seeds presented by M. S. J. McMurachy, McConnell, Manitoba. Received March 22, 1937.

122986. GOSSYPIUM sp. Malvaceae.

From the Canal Zone. Seeds presented by S. P. Williams, Balboa Heights. Received January 12, 1937.

A tree cotton, native to the Canal Zone and to the Republic of Panama. It is not cultivated, but grows wild and becomes a small tree about 10 feet high.

122987 and 122988.

From the Straits Settlements. Seeds presented by the Botanic Gardens. Received March 22, 1937.

122987. FICUS VARIEGATA Blume. Moraceae. Fig.

The "Gondang" tree of Java and Sumatra. A large forest tree with enormous numbers of long pedicelled fruits an inch or more across; when ripe, these are red marked with white streaks and dots.

For previous introduction see 67588.

122988. ORYZA LATIFOLIA Desv. Poaceae. Rice.

A perennial wild rice distributed through parts of tropical Asia, Africa, and America. The tufted stems become 6 to 8 feet high, and the plant is said to flower and produce seeds throughout the year. The smooth leaves are 1 to 2 feet long and about an inch wide, and the erect spike is up to 4 inches long.

For previous introduction see 97259.

122989. ALNUS NEPALENSIS D. Don. Betulaceae.

From India. Seeds presented by the Range Officer, Ghum-Simana, Sukhlapokhri, Bengal, at the request of Walter Koelz, Bureau of Plant Industry. Received March 24, 1937.

A tree up to 70 feet high, with a trunk 3 to 4 feet in diameter, found between 4,000 and 7,000 feet altitude. It is a rapid grower, used chiefly for firewood.

For previous introduction see 116579.

## 122990 to 123002.

From the Union of Soviet Socialist Republics. Seeds purchased; received March 25, 1937.

122990 to 122996. IRIS spp. Iridaceae.

122990. IRIS KOROLKOWI Regel. Redvein iris.

No. 53.

For previous introduction see 112798.

122991. IRIS ORCHIOIDES Carr.

No. 54. A Juno iris from the mountains of Turkistan, with about 6 lanceolate leaves up to 9 inches long and a 3- to 6-headed stem, often a foot high. The bright-yellow falls have purple blotches on each side of the crest.

For previous introduction see 115077.

122992. IRIS HALOPHILA SOGLIANA (Bunge) Skeels.

No. 55. Leaves pale green, 1 to 1½ feet long; the stout terete stem, up to 2 feet high, often bears one or two spicate clusters of pale gray-lilac flowers below the end one. Native to Asia from Asia Minor eastward to Kashmir and Mongolia.

For previous introduction see 115078.

122993. IRIS SONGARICA Schrank.

No. 60. A densely tufted Apogon iris about 1 foot high, with narrow-linear, strongly ribbed leaves up to a foot in length and 2 or 3 lilac-colored flowers over an inch long. Native to central Asia.

For previous introduction see 113873.

122994. IRIS STOLONIFERA Maxim.

No. 59.

For previous introduction see 112802.

122995. IRIS VICARIA Vved.

No. 57. A Juno iris with about 6 lanceolate leaves 6 to 9 inches long, stems about twice as long, and lilac flowers with a bright yellow blotch in the center of the fall. Native to Turkistan.

122996. IRIS WARLEYENSIS Foster.

No. 58.

122997 to 123002. TULIPA spp. Liliaceae. Tulip.

122997. TULIPA FERGANICA Vved.

No. 108.

122998. TULIPA FOSTERIANA Hoog.

No. 101.

For previous introduction see 109796.

122999. TULIPA INGENS Hoog.

No. 102.

123000. TULIPA PRAESTANS Hoog.

No. 104.

For previous introduction see 108413.

123001. TULIPA KUSCHKENSIS B. Fedtsch.

No. 113.

For previous introduction see 109800.

123002. TULIPA TUBERGENIANA Hoog.

No. 106.

**123003. EVODIA MELIAEFOLIA (Hance)**  
Benth. Rutaceae.

From Cuba. Seeds presented by the Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos, through F. G. Walsingham. Received March 3, 1937.

Originally from the Forest Research Institute, Dehra Dun, India. A small, much-branched tree, native to India. The pinnately compound leaves are made up of 3 to 5 pairs of obliquely lanceolate leaflets 3 to 4 inches long, and the small white flowers are in cymes 8 inches across.

For previous introduction see 99671.

**123004 to 123138.**

From Turkey. Seeds collected by H. L. Westover and F. L. Wellman, Bureau of Plant Industry. Received January 28, 1937.

**123004. AGRIMONIA EUPATORIA L. Rosa-ceae.**

No. 2398. From 16 km. east of Trabzon, August 12, 1936. An ornamental plant with attractive spikes of delicate yellow flowers.

**123005. AJUGA sp. Menthaceae.**

No. 1122. From between Akhisar and Manisa, June 11, 1936. A low-growing perennial with yellow flowers, found on dry rocky slopes.

**123006. AJUGA sp. Menthaceae.**

No. 1441. From 20 km. north of Gaziantep, July 2, 1936. An ornamental rock plant.

**123007. AJUGA sp. Menthaceae.**

No. 3323. From Ankara, June 20, 1936. A short, hairy rock plant with yellow flowers.

**123008. NIGELLA SATIVA L. Ranunculaceae.**  
Black cumin.

No. 1386. From the Marash bazar, July 2, 1936. Used as a flavoring for bread and other foods.

For previous introduction see 73490.

**123009. ALLIUM sp. Liliaceae.**

No. 1630. From 26 km. south of Diyarbakir, July 9, 1936.

**123010. ALLIUM sp. Liliaceae.**

No. 1150. *Charekotu*. From the Balikesir bazar, June 16, 1936. Used as flavoring for bread and other foods.

**123011. ALLIUM sp. Liliaceae.**

No. 1797. From 52 km. southwest of Elaziz, July 14, 1936.

**123012. ALSINE sp. Silenaceae.**

No. 2086. An ornamental rock plant from 25 km. southeast of Ankara on Alma Dag, August 1, 1936.

**123013. ALYSSUM sp. Brassicaceae.**

No. 566. From the Izmir bazar, June 23, 1935.

**123014. ALYSSUM sp. Brassicaceae.**

No. 1262. From the Bursa bazar, June 18, 1936.

**123015. ANETHUM GRAVEOLENS L. Apiaceae.**  
Dill.

No. 525. From the Mugla bazar, June 28, 1936.

**123004 to 123138—Continued****123016. ANTHEMIS sp. Asteraceae.**

No. 791. From dry hills 46 km. north of Antalya, June 3, 1936.

**123017. AQUILEGIA. Ranunculaceae.**

No. 596. From the Izmir bazar, June 23, 1936. Garden hybrids.

**123018. AQUILEGIA sp. Ranunculaceae.**

No. 1273. *Hasake Kupe*. From the Bursa bazar, June 18, 1936.

**123019 to 123022. ARENARIA spp. Silenaceae.****123019. ARENARIA sp.**

No. 2200. A rock plant from 102 km. southeast of Susheri, August 7, 1936.

**123020. ARENARIA sp.**

No. 2780. A rock plant from 35 km. south of Bursa, August 8, 1936.

**123021. ARENARIA sp.**

No. 2177. An ornamental rock plant from 100 km. southeast of Susheri, August 7, 1936.

**123022. ARENARIA sp.**

No. 721. A plant with small blue flowers, found in pine lands 5 km. south of Mugla, May 28, 1936.

**123023. ASPARAGUS sp. Convallariaceae.**

No. 1861. A wild asparagus from 26 km. west of Malatya, July 16, 1936.

**123024. ATRIPLEX sp. Chenopodiaceae.**

No. 3103. From the police station at Yozgat, October 9, 1936.

**123025. BOREAVA sp. Brassicaceae.**

No. 783. From a valley near Isparta, June 2, 1936.

**123026. BRASSICA sp. Brassicaceae.**

No. 2590. From 14 km. west of Sam-sun, August 23, 1936.

**123027. BUPLEURUM sp. Apiaceae.**

No. 726. From 2 km. south of Mugla, May 28, 1936.

**123028. CAMPANULA sp. Campanulaceae.**

No. 2761-A. A campanula with small blue bell-shaped flowers from Bursa.

**123029. CENTAUREA sp. Asteraceae.**

No. 1403. From 20 km. north of Gaziantep, July 2, 1936.

**123030. CENTAUREA sp. Asteraceae.**

No. 1490. A yellow composite from 42 km. north of Gaziantep, July 3, 1936.

**123031. CEPHALARIA sp. Dipsacaceae.**

No. 1487. From 44 km. north of Gaziantep, July 3, 1936.

**123032. CERINTHE ASPERA Roth. Boraginaceae.**

No. 638. From near Koshadasi, May 25, 1936. An annual with oval, auricled, often-spotted leaves, terminal clusters of rather large yellow flowers with dark crimson rings at the base, and the upper bracts often beautifully colored. Native to Europe.

**123033. CHRYSANTHEMUM sp. Asteraceae.**

No. 2333. From 60 km. south of Trabzon, August 10, 1936.

## 123004 to 123138—Continued

123034. *CISTUS* sp. Cistaceae.

No. 1186. *Second rose*. A pink-flowered shrub from 75 km. west of Balıkesir, June 16, 1936. Found well distributed in Turkey.

123035. *CISTUS* sp. Cistaceae.

No. 2752. An ornamental shrub from Ulu Dag, 10 km. south of Bursa, September 7, 1936.

123036. *CONIUM* sp. Apiaceae.

No. 1631. From 70 km. south of Diyarbekir; found by a desert spring.

123037. *CORIANDRUM SATIVUM* L. Apiaceae.  
Coriander.

No. 2646. From 24 km. southeast of Merzifon, August 25, 1936.

123038. *CORNUS* sp. Cornaceae.

No. 2409. A shrub from 32 km. west of Rize, August 13, 1936.

123039. *COTONEASTER* sp. Malaceae.

No. 2639. From 66 km. southeast of Merzifon, August 25, 1936. A small tree with quantities of small, single-seeded red fruits.

123040. *COTONEASTER* sp. Malaceae.

No. 2754. An ornamental shrub from Ulu Dag at 3,000 feet altitude, September 7, 1936.

123041. *CUMINUM CYMINUM* L. Apiaceae.  
Cumin.

No. 1222. From the Bursa bazar, June 18, 1936. Used as a flavoring for meats.

123042 to 123044. *DELPHINIUM* spp. Ranunculaceae.123042. *DELPHINIUM* sp.

No. 1664. From 44 km. east of Diyarbekir, July 10, 1936. A tall plant with blue-spurred flowers.

123043. *DELPHINIUM* sp.

No. 1667. From 25 km. east of Diyarbekir, July 10, 1936. A low plant with blue-spurred flowers.

123044. *DELPHINIUM* sp.

No. 1776. From 35 km. southwest of Elaziz, July 14, 1936.

123045. *VELEZIA RIGIDA* L. Silenaceae.

No. 1728. From 39 km. southeast of Elaziz, July 13, 1936. A rock plant with pink flowers.

123046 to 123048. *DIANTHUS* sp. Silenaceae.123046. *DIANTHUS* sp.

No. 596. From the Antalya bazar, June 4, 1936.

123047. *DIANTHUS* sp.

No. 1788. From 9 km. southwest of Elaziz, July 14, 1936.

123048. *DIANTHUS* sp.

No. 2396. From 47 km. east of Trabzon, August 12, 1936. A small plant with attractive small flowers.

123049. *DRACOCEPHALUM* sp. Menthaceae.

No. 1721. From 39 km. east of Elaziz, July 13, 1936.

## 123004 to 123138—Continued

123050. *LALLEMANTIA PELTATA* (L.) Fisch. and Mey. Menthaceae.

No. 1860. From 11 km. west of Malatya, July 16, 1936.

123051. *EUONYMUS* sp. Celastraceae.

No. 2505. From 35 km. east of Ordu, August 19, 1936.

123052. *FERULA* sp. Apiaceae.

No. 613. From Ephesus, May 24, 1936.

123053. *FIBIGIA CLYPEATA* (L.) Medic. Brassicaceae.

No. 1739. From 30 km. southeast of Elaziz, July 13, 1936. A low herbaceous perennial 18 inches high, with small yellow flowers. Native to Europe.

123054. *FOENICULUM VULGARE* Hill. Apiaceae.  
Fennel.

No. 1397. From the Marash bazar, July 2, 1936. Used for flavoring.

123055. *FUMANA* sp. Cistaceae.

No. 1311. From 20 km. north of Bursa, June 20, 1936. A perennial with yellow flowers, found in the hills among rocks.

123056. *HELIANTHEMUM* sp. Cistaceae.

No. 787. On the road to Dinar, west of Isparta, June 2, 1936. An annual with small yellow flowers.

123057. *HIPPOPHAE RHAMNOIDES* L. Elaeagnaceae.  
Common sea-buckthorn.

No. 2397. From 68 km. east of Trabzon, August 12, 1936. A tree, growing near the seashore.

For previous introduction see 115076.

123058. *HYOSCYAMUS* sp. Solanaceae.

No. 814. From Antalya, June 4, 1936.

123059. *HYPERICUM* sp. Hypericaceae.

No. 1519. From 25 km. east of Gaziantep, July 5, 1936. A species with beautiful brown flowers.

123060. *INULA* sp. Asteraceae.

No. 2970. From 17 km. northeast of Izmir, September 24, 1936. A rock plant with handsome white, feltlike foliage.

123061. *LATHYRUS ODORATUS* L. Fabaceae.  
Sweet pea.

No. 563. From the Izmir bazar, May 23, 1936.

123062. *LYCHNIS* sp. Silenaceae.

No. 2793. From Ulu Dag, at 8,000 feet altitude, September 9, 1936. A rock plant.

123063. *AGROSTEMMA GITHAGO* L. Silenaceae.

No. 640. On the road to Milas, May 26, 1936. A form of this species with beautiful large purple flowers  $2\frac{1}{2}$  inches across, borne profusely. Plant slender and much branched.

123064. *LYCHNIS* sp. Silenaceae.

No. 1503. From 5 km. southeast of Gaziantep, July 4, 1936.

123065. *LYTHRUM* sp. Lythraceae.

No. 2292. From 45 km. east of Erzinjan, August 9, 1936.

## 123004 to 123138—Continued

123066. *MATTHIOLA* sp. Brassicaceae.

No. 1567. From 30 km. north of Urfa, July 7, 1936. A plant with crumpled lavender flowers, common in dry waste places in Anatolia; it makes a good cover crop in the spring.

123067. *ERYSIMUM* sp. Brassicaceae.

No. 1798. From 9 km. southwest of Elaziz, July 14, 1936.

123068. *MIMOSA PUDICA* L. Mimosaceae.  
Sensitive plant.

No. 598. From the Antalya bazar, June 4, 1936.

For previous introduction see 88157.

123069. *MUSCARI* sp. Liliaceae.

No. 1529. From 22 km. southeast of Urfa, July 6, 1936.

123070. *NICOTIANA* sp. Solanaceae.

No. 2399. From 68 km. east of Trabzon, August 12, 1936. A species with yellow flowers.

123071. *PAPAVER* sp. Papaveraceae.

No. 1729. From 42 km. southeast of Elaziz, July 13, 1936.

123072. *PASTINACA* sp. Apiaceae.

No. 2413. From 32 km. west of Rize, August 3, 1936. A fragrant umbellifer with leaves like the parsnip.

123073. *RANUNCULUS* sp. Ranunculaceae.

No. 2303. From 76 km. north of Gemushane, August 10, 1936. A species with double yellow flowers.

123074. *RANUNCULUS* sp. Ranunculaceae.

No. 1591. From 32 km. east of Siverek, July 7, 1936. Plants growing near a spring in the desert.

123075. *RAPISTRUM* sp. Brassicaceae.

No. 771. From ruins near Denizli, May 31, 1936.

123076 to 123078. *RHAMNUS* sp. Rhamnaceae.123076. *RHAMNUS* sp.

No. 2310. A shrub found on dry rocks 10 km. north of Gemushane, August 10, 1936.

123077. *RHAMNUS* sp.

No. 2405. A large bush or small tree; from 45 km. east of Trabzon, August 13, 1936.

123078. *RHAMNUS* sp.

No. 2576. A shrub from 7 km. west of Terme, August 27, 1936.

123079. *RHUS* sp. Anacardiaceae.

No. 3415. From a dry rocky slope, 3 km. northeast of Ankara, June 26, 1936.

123080. *RINDERIA* sp. Boraginaceae.

No. 1420. From 17 km. north of Gaziantep, July 2, 1936.

123081. *RUTA GRAVEOLENS* L. Rutaceae.

No. 1451. From 17 km. north of Gaziantep, July 2, 1936.

123082 to 123095. *SALVIA* spp. Menthaceae.  
Sage.

## 123004 to 123138—Continued

123082. *SALVIA* sp.

No. 1444. From 37 km. north of Gaziantep, July 2, 1936.

123083. *SALVIA* sp.

No. 714. From 2 km. south of Mugla, May 28, 1936. A mint with white flowers.

123084. *SALVIA TRILOBA* L.

No. 1100. Along the road between Manisa and Izmir, June 11, 1936.

123085. *SALVIA* sp.

No. 1101. From near Kirkagach, June 11, 1936. A mint with light-blue flowers.

123086. *SALVIA* sp.

No. 1210. From 40 km. west of Balikesir, June 16, 1936.

123087. *SALVIA NAPIFOLIA* Jacq.

No. 1280. From 25 km. east of Bandirma, June 18, 1936. A perennial sage similar to *Salvia verticillata*, with stems about 2 feet high, the lower leaves lyrate, the upper ones ovate-subcordate, and dark-blue flowers. Native to the Mediterranean region.

123088. *SALVIA* sp.

No. 1670. From 16 km. east of Diyarbekir, July 10, 1936.

123089. *SALVIA* sp.

No. 1781. From 52 km. southwest of Elaziz, July 14, 1936.

123090. *SALVIA* sp.

No. 1787. From 9 km. southwest of Elaziz, July 14, 1936.

123091. *SALVIA* sp.

No. 1921. From Birejik, July 21, 1936.

123092. *SALVIA* sp.

No. 1955. From Birejik, July 22, 1936.

123093. *SALVIA* sp.

No. 2002. From 7 km. west of Chiftebane, July 25, 1936. A mint with white sickle-shaped flowers, spaced far apart.

123094. *SALVIA* sp.

No. 2166. From 84 km. east of Sivas, August 6, 1936.

123095. *SALVIA FORSKAHLII* L.

No. 2330. From 50 km. south of Trabzon, August 10, 1936. A hardy perennial sage up to 18 inches high, with broad ovate leaves and violet flowers in long racemes. Native to Asia Minor.

123096. *MELISSA OFFICINALIS* L. Menthaceae.  
Common balm.

No. 2392. From 16 km. east of Trabzon, August 12, 1936.

For previous introduction see 73488.

123097 to 123100. *SALVIA* spp. Menthaceae.123097. *SALVIA* sp.

No. 2501. From 125 km. southwest of Shebinkarahisar, August 18, 1936. A species with the leaves covered with long silky hairs.



## 123004 to 123138—Continued

123098. *SALVIA* sp.  
No. 3357. From 65 km. west of Bursa, June 18, 1936. A species with white flowers.
123099. *SALVIA* sp.  
No. 3436. From Alın Dag, June 28, 1936.
123100. *SALVIA* sp.  
No. 1096. A pungent herb from 15 km. northwest of Izmir, June 11, 1936.
123101. *SCABIOSA* sp. Dipsacaceae.  
No. 1730. A low, white-flowered rock plant from the mountains 32 km. southeast of Elaziz, July 13, 1936.
123102. *SCABIOSA* sp. Dipsacaceae.  
No. 3106. From 40 km. north of Kalecik, October 12, 1936. A spiny compact rock plant, very attractive when in bloom.
123103. *PTEROCEPHALUS PLUMOSUS* (L.) Coult. Dipsacaceae.  
No. 628. From Ephesus, May 24, 1936. An ornamental plant with lavender flowers.
- 123104 to 123106. *SCABIOSA* spp. Dipsacaceae.
123104. *SCABIOSA SICULA* L.  
No. 1310. From 20 km. north of Bursa, June 20, 1936. A low annual with red flowers. Native to the Mediterranean region.
123105. *SCABIOSA* sp.  
No. 1312. From 20 km. north of Bursa, June 20, 1936. An ornamental plant with white flowers.
123106. *SCABIOSA* sp.  
No. 3321. *Bird's eye*. From Ankara, May 20, 1936. An ornamental found both wild and cultivated.
123107. *SCORZONERA* sp. Cichoriaceae.  
No. 752. From the mountains between Denizli and Tavas, May 30, 1936.
123108. *SCUTELLARIA* sp. Menthaceae.  
No. 1746. From 39 km. east of Elaziz, July 13, 1936.
- 123109 to 123112. *SEDUM* spp. Crassulaceae.
123109. *SEDUM GRACILE* C. A. Mey.  
No. 2301. From 53 km. north of Gemüşane, August 10, 1936. A low succulent with white flowers borne next to the ground.
123110. *SEDUM HISPANICUM* L.  
No. 2328. From 35 km. north of Gemüşane, August 10, 1936. A succulent with pink flowers.
123111. *SEDUM ALBUM* L.  
No. 2481. From 97 km. south of Giresun, August 17, 1936.
123112. *SEDUM* sp.  
No. 2684. From the mountains 46 km. south of Tokat, August 26, 1936. A succulent with brilliant red flowers and leaves.
123113. *SENECIO NEBRODENSIS* L. Astera-ceae.  
No. 2176. From 84 km. east of Sivas, August 6, 1936. An annual or, under some

## 123004 to 123138—Continued

- conditions, a perennial, with tall erect stems, pinnatisect leaves, and attractive yellow flower heads. Native to southern Europe.
123114. *SERRATULA* sp. Asteraceae.  
No. 687. On the road to Milas, June 26, 1936, in dry pine woods. A purple-flowered, thistlelike composite.
123115. *SETARIA ITALICA* (L.) Beauv. Poaceae.  
No. 1898. From 50 km. north of Malatya, in dry rocky soil. July 17, 1936.
- 123116 to 123124. *SILENE* spp. Silenaceae.
123116. *SILENE* sp.  
No. 2761. From south of Bursa, September 7, 1936.
123117. *SILENE* sp.  
No. 2799. A rock plant from Uludağ, September 9, 1936.
123118. *SILENE* sp.  
No. 706. From 15 km. west of Muğla, May 27, 1936.
123119. *SILENE* sp.  
No. 1184. From 10 km. west of Balıkesir, June 16, 1936, on a dry slope.
123120. *SILENE* sp.  
No. 1585. From 5 km. east of Siverek, July 7, 1936.
123121. *SILENE* sp.  
No. 1777. From 52 km. southwest of Elaziz, July 14, 1936.
123122. *SILENE* sp.  
No. 1671. From 44 km. east of Diyarbakır, July 10, 1936.
123123. *SILENE* sp.  
No. 2411. From 29 km. west of Rize, August 13, 1936. An ornamental with pink flowers.
123124. *SILENE GALLICA* L.  
No. 2630. From 43 km. southwest of Samsun, August 24, 1936.
123125. *STAPHYLEA PINNATA* L. Staphyleaceae. European bladdernut.  
No. 2385. In the woods between Trabzon and Rize, August 12, 1936. A tree-like shrub with deciduous leaves and terminal clusters of small white flowers and much inflated membranous podlike fruits.
- For previous introduction see 109162.
- 123126 to 123128. *TEUCRIMUM* spp. Menthaceae.
123126. *TEUCRIMUM* sp.  
No. 1569. From 30 km. north of Urfa, July 7, 1936.
123127. *TEUCRIMUM* sp.  
No. 1761. From the mountains 25 km. southeast of Elaziz, July 13, 1936. A fragrant, low-growing plant.
123128. *TEUCRIMUM* sp.  
No. 2093. A rock plant from Alın Dag, 25 km. southeast of Ankara, August 1, 1936.

## 123004 to 123138—Continued

123129 to 123131. *THYMUS* spp. *Mentha-*  
*ceae*.

123129. *THYMUS* sp.

No. 2308. From 53 km. north of Gemushane, August 10, 1936. Flowers borne in cloverlike heads.

123130. *THYMUS* sp.

No. 2099. From Alma Dag, 25 km. southeast of Ankara, August 1, 1936. A low compact shrub, covered with very fragrant flowers.

123131. *THYMUS SERPYLLUM* L.

No. 3447. From Alma Dag, June 28, 1936. A plant with fragrant leaves, found growing in cushionlike clumps among rocks.

123132. *TRIFOLIUM REPENS* L. *Fabaceae*.  
White clover.

No. 1295. A large-flowered white clover, found 40 km. east of Bursa, June 16, 1936.

123133. *TUNICA PROLIFERA* (L.) Scop.  
*Silenaceae*.

No. 646. From Tire, May 25, 1936.

123134. *TUNICA* sp. *Silenaceae*.

No. 1079. From dry slopes 80 km. northwest of Izmir, June 10, 1936.

123135. *VERONICA* sp. *Scrophulariaceae*.

No. 2484. From 40 km. south of Giresun, August 17, 1936.

123136. *VIBURNUM* sp. *Caprifoliaceae*.

No. 2326. A shrub from 46 km. north of Gemushane, August 10, 1936.

123137. *VICIA TETRASPERMA* (L.) Moench.  
*Fabaceae*. Vetch.

No. 1350. From Adana, June 10, 1936.

123138. *VIOLA* sp. *Violaceae*.

No. 1257. From the Bursa bazar, June 18, 1936.

123139 to 123143. *ORYZA SATIVA* L.  
*Poaceae*. Rice.

From China. Seeds presented by the Rice and Wheat Imperial Institute, Nanking. Received March 3, 1937.

123139. No. 28785. A pure line selection.

123140. No. 28865. Var. *Red chaff*.

123141. *Moh Tse Oza*.

123142. *Fee Lah Fow*.

123143. No. 30305. A pure line rice.

## 123144 to 123270.

From India. Seeds collected by Walter Koelz, Bureau of Plant Industry. Received March 23, 1937.

123144. *ABIES PINDROW* Spach. *Pinaceae*.  
Fir.

No. 2300. *Tos*. Presented by the Kulu Forest Service, Kulu, Punjab, February 10, 1937.

For previous introduction see 122766.

123145. *ACACIA CONCINNA* (Willd.) DC.  
*Mimosaceae*.

No. 2225. *Sikaka*. From Madras, February 4, 1937. A large and very prickly woody climber with bipinnate leaves of

## 123144 to 123270—Continued

12 to 6 pinnae, 2 to 3 inches long, and small cream-colored to pink flowers in panicled globose heads. Native to southeastern Asia.

123146. *ALBIZZIA FALCATA* (L.) Backer.  
*Mimosaceae*.

No. 2259. From Bangalore, Mysore, February 9, 1937. A rapid-growing tropical Asiatic tree with large feathery leaves and small globular flower heads. It is used for shade in coffee plantations.

For previous introduction see 81406.

123147. *ALBIZZIA ODORATISSIMA* (L. f.) Benth. *Mimosaceae*.

No. 2261. From Bangalore, Mysore, February 9, 1937. A tall erect unarmed tree, with bipinnate leaves and very numerous small heads of fragrant white flowers. Native to the central Himalayas.

For previous introduction see 66648.

123148. *ALLIUM CEPA* L. *Liliaceae*. Onion.

No. 2271. From Bangalore, Mysore, February 9, 1937. A red globe onion; said to be native.

123149. *AMARANTHUS* sp. *Amaranthaceae*.

No. 2290. *Harive*. From Bangalore, Mysore, February 9, 1937. An all-season potherb.

123150. *AMARANTHUS* sp. *Amaranthaceae*.

No. 2291. *Chukarive*. From Bangalore, Mysore, February 9, 1936. An all-season potherb.

123151. *ANETHUM GRAVEOLENS* L. *Apiaceae*.  
Dill.

No. 2292. *Sabakshi*. Bangalore, Mysore, February 9, 1936. A common potherb in the hot parts of India.

123152. *ARGYREIA* sp. *Convolvulaceae*.

No. 2185. From Mahendra, Madras Presidency, January 23, 1937, at 4,000 feet altitude. A vigorous evergreen woody climber with large heart-shaped leaves nearly a foot long.

123153. *PELTOPHORUM INERME* (Roxb.) Llanos (*P. ferrugineum* Benth.). *Caesalpiniaceae*.

No. 2228. From Madras. A large unarmed tree used for street planting, with finely pinnate leaves and showy terminal racemes of small yellow fragrant flowers, followed by short flattened pods.

123154 to 123157. *BAUHINIA* spp. *Caesalpiniaceae*.

123154. *BAUHINIA VAHLII* Wight and Arn. *Malu-creeper*.

No. 2181. From Mahendra, Madras Presidency, January 22, 1937, at 4,000 feet altitude. A vigorous woody climber up to 40 feet high, with large velvety coriaceous leaves a foot long and terminal dense racemes of flowers. The large flat velvety brown pods are gathered by the natives of India, roasted, and the seeds eaten.

For previous introduction see 103489.

123155. *BAUHINIA ACUMINATA* L.

No. 2137. From Calcutta, January 7, 1937. A small ornamental shrub 5 feet high.

## 123144 to 123270—Continued

123156. *BAUHINIA* sp.

No. 2229. From Madras, Madras Presidency, February 6, 1937. A shrub about 6 feet high, bearing unscented white, starlike flowers about 1 inch across.

123157. *BAUHINIA* sp.

No. 2303. From Bangalore, Mysore, February 9, 1937.

123158 and 123159. *BRASSICA OLERACEA* BO-TRYTIS L. Brassicaceae. Cauliflower.

123158. No. 2133. *Phulgobi*. From Calcutta, January 6, 1937. Said to be a Patna variety.

123159. No. 2248. *Snowball*. From Bangalore, Mysore, February 7, 1937. A native variety, said to produce good heads throughout the year.

123160. *BUTEA MONOSPERMA* (Lam.) Taub. Fabaceae.

No. 2250. From Bangalore, Mysore, February 9, 1937. A small erect tree with large trifoliate leaves 4 to 8 inches long and large orange-red flowers 1 inch across in axillary and terminal racemes. Native to the Himalayas up to 4,000 feet altitude.

For previous introduction see 32792.

123161. *DICHOSTACHYS NUTANS* (Pers.) Benth. Mimosaceae.

No. 2190. From Mahendra, Madras Presidency, January 25, 1937, at 2,000 feet altitude. A spiny scraggly shrub about 8 feet high, native to central Africa, with rose-colored flowers in dense axillary spikes. The bipinnate leaves are composed of 5 to 10 pairs of pinnae, each with 10 to 20 pairs of leaflets.

For previous introduction see 50152.

123162. *CAJANUS INDICUS* Spreng. Fabaceae. Pigeon pea.

No. 2197. *Barda Kandals*. From Bengasai, Madras Presidency, January 26, 1937.

123163. *CANAVALIA VIROSA* (Roxb.) Wight and Arn. Fabaceae.

No. 2203. From Rati, Madras Presidency, January 29, 1937. An ornamental perennial climber which grows 10 feet long in thickets. The large fragrant flowers are deep rose color; the pods are not edible.

123164 to 123167. *CAPSICUM ANNUUM* L. Solanaceae. Common redpepper.

123164. No. 2171. *Mirchi*. From Islampur, Bengal, January 15, 1937. Fruit red, about 2 inches long by three-fourths of an inch wide; flesh slightly pungent; seeds hot.

123165. No. 2212. *Mupokai*. From Ellore, Madras Presidency, February 1, 1937. A hot, red, elongate pepper, 3 to 4 inches long and 1 inch wide at the base.

123166. No. 2230. From Madras, Madras Presidency, February 6, 1937. A hot redpepper about 2 inches long by five-eighths of an inch wide.

123167. No. 2177. From Bengasai, Madras Presidency, January 22, 1937. Fruit scarlet, very hot, 3 inches long and pointed, wrinkled and furrowed, quite different from the usually grown strains.

## 123144 to 123270—Continued

123168 to 123170. *CASSIA* spp. Caesalpinaceae.123168. *CASSIA JAVANICA* L.

No. 2247. From Bangalore, Mysore, February 7, 1937. A small tree with gorgeous pink flowers over 2 inches across, borne in large clusters during the spring and early summer. It is deciduous in the dry season.

For previous introduction see 97954.

123169. *CASSIA NODOSA* Buch.-Ham.

No. 2288. From Bangalore, Mysore, February 9, 1937.

For previous introduction see 116778.

123170. *CASSIA RENIGERA* Wall.

No. 2278. From Bangalore, Mysore, February 9, 1937. A tropical tree with compound leaves a foot long; the 30 to 40 obtuse leaflets, 1½ inches long, are leathery and finely hairy beneath. The small reddish flowers are in short dense racemes, and the cylindrical pod is a foot in length. Native to northern Burma.

For previous introduction see 103835.

123171. *CEDRUS DEODARA* (Lamb.) Loud. Pinaceae. Deodar cedar.

No. 2302. *Kelo*. Presented by the Kulu Forest Service, Punjab, February 10, 1937.

For previous introduction see 122821.

123172. *CENTROLOBIUM PARAENSE* Tul. Fabaceae.

No. 2286. *Porcupine tree*. From Bangalore, Mysore, February 9, 1937. A medium-sized, attractive Brazilian tree, with compound leaves and large clusters of orange-yellow flowers, followed by curious fruits like gigantic maple keys with wings 6 inches long which whirl with a circular motion as they fall. The egg-shaped basal portion, as large as a pullet's egg, is covered with spines like a sea-urchin.

For previous introduction see 97977.

123173. *CHENOPODIUM* sp. Chenopodiaceae.

No. 2289. *Chakavathe*. From Bangalore, Mysore, February 9, 1937. An all-season potherb.

123174 to 123181. *CITRULLUS* spp. Cucurbitaceae.123174. *CITRULLUS COLOCYNTHIS* (L.) Schrad. Colocynth.

No. 2226. From Madras, Madras Presidency, February 5, 1937. A perennial herbaceous vine, allied to the watermelon. The small globose fruits, less than 3 inches in diameter, are mottled green and brown.

For previous introduction see 91528.

123175 to 123181. *CITRULLUS VULGARIS* Schrad. Watermelon.

123175. No. 2118. *Matira*. From Calcutta, January 4, 1937. Fruit subglobose, mottled, about 1 foot long.

123176. No. 2120. *Matira*. From Calcutta, January 4, 1937. An unmarked, dark-green, subglobose fruit 1 foot long.

123177. No. 2121. *Matira*. From Calcutta, January 4, 1937. A deep-green, unmarked, subglobose fruit 1 foot long.

## 123144 to 123270—Continued

123178. No. 2209. From Ellore, Madras Presidency, February 1, 1937. Fruit much attenuated, about 16 inches long by 6 inches in diameter; rind medium green with irregular blotched lines of lighter green, very tough; flesh red, firm, of fair quality.

123179. No. 2220. *Tarbuз*. From Madras, Madras Presidency, February 4, 1937. Seeds used as medicine.

123180. No. 2282. *Tarbuз*. From Bangalore, Mysore, February 9, 1937. Said to be a native variety.

123181. No. 2178. From Bengasai, Madras Presidency, January 22, 1937. An ornamental form with globose fruit 4 inches across, of a lovely maroon color.

123182. COIX LACRYMA-JOBI L. Poaceae.  
Jobs-tears.

No. 1790. From Jagdernnaga, Mandi State, November 22, 1936, at 3,500 feet altitude.

123183. COLVILLEA RACEMOSA Boj. Caesalpiniaceae.

No. 2273. From Bangalore, Mysore, February 9, 1937. An evergreen tree 30 to 40 feet high, with pinnate leaves 3 feet long and brilliant scarlet, curiously shaped flowers with 10 protruding stamens, borne in drooping racemes more than a foot long. Native to Madagascar.

For previous introduction see 103476.

123184. CROTALARIA sp. Fabaceae.

No. 2188. From Mahendra, Madras Presidency, January 24, 1937, at 4,000 feet altitude. An attractive perennial about 3 feet high, bearing spikes of large yellow flowers followed by large inflated pods.

123185 to 123189. CUCUMIS MELO L. Cucurbitaceae. Muskmelon.

123185. No. 2134. *Kumriya*. From Calcutta, January 6, 1937; a Lucknow variety.

123186. No. 2135. *Kumriya*. From Calcutta, January 7, 1937; a Patna variety.

123187. No. 2281. *Kharbuza*. From Bangalore, Mysore, February 9, 1937. A native variety.

123188. No. 2297. From Montgomery, Punjab, February 10, 1937. Presented by the Deputy Director of Agriculture. An excellent native melon which will tolerate much heat.

123189. No. 2223. From Madras, February 4, 1937. A mixed sample.

123190 to 123193. CUCUMIS SATIVUS L. Cucurbitaceae. Cucumber.

123190. No. 2198. From Mahendra, Madras Presidency, January 25, 1937, at 2,000 feet altitude. Fruit 2 inches long; skin yellow green, tough, flesh bitter. Probably keeps for months.

123191. No. 2221. *Vidreveli*. From Madras, February 4, 1937.

123192. No. 2214. *Doskai*. From Ellore, Madras Presidency, February 1, 1937. Fruit ovoid, to 6 inches long; rind yellow, more or less marked with brown blotches; pulp sour; used fried; a good keeper.

## 123144 to 123270—Continued

123193. No. 2246. *Sandakai*. From Bangalore, Mysore, February 7, 1937. Possibly a mixture of green and white varieties.

123194 to 123198. CUCURBITA MOSCHATA Duchesne. Cucurbitaceae. Cushaw.

123194. No. 2122. *Kadu*. From Calcutta, January 4, 1937. Fruit oval, 18 inches long, orange brown mottled sparingly with green, moderately sweet.

123195. No. 2175. From Behrampur, Orissa, January 21, 1937. A smooth, cream-colored, pumpkin-shaped fruit with faint ribs, weighing about 10 pounds.

123196. No. 2176. From Behrampur, Orissa, January 21, 1937. A cream-colored, pumpkin-shaped fruit, mottled with green and spotted with darker green. Possibly the same as No. 2175 (P. I. 123195); it weighs 15 pounds.

123197. No. 2210. *Kumsa*. From Ellore, Madras Presidency, February 1, 1937. Fruits small, flattened, 1 by 6 inches, sometimes nearly globose and larger, smooth, ribbed, and orange buff. The flesh, orange yellow, is sweet and about 2 inches thick.

123198. No. 2232. *Kumsa*. From Madras, February 6, 1937.

123199. DALBERGIA sp. Fabaceae.

No. 2254. From Bangalore, Mysore, February 6, 1937. A medium-sized tree used as roadside shade.

123200. DERRIS SCANDENS (Roxb.) Benth. Fabaceae.

No. 2173. From Dacca, Bengal, January 16, 1937. A woody climber with compound leaves 3 to 6 inches long, composed of 9 to 19 leathery oblong leaflets, 1 to 2 inches in length. The pale-rose flowers are in dense axillary racemes. Native to the East Indies.

For previous introduction see 116744.

123201. DOLICHOS LABLAB L. Fabaceae.  
Hyacinth-bean.

No. 2222. *Machukuti*. From Madras, February 4, 1937. Used both green and as dried beans.

123202. DOLICHOS LABLAB L. Fabaceae.  
Hyacinth-bean.

No. 2242. *Awara*. From Bangalore, Mysore, February 7, 1937. A drought-resistant field crop, usually planted with *Eleusine indica*, and allowed to creep over the field.

123203. DUABANGA SONNERATIOIDES Buch.-Ham. Lythraceae.

No. 2280. From Bangalore, Mysore, February 9, 1937. A handsome tree with shining evergreen leaves and white flowers, from the subtropical regions of north-eastern India. The light-brown bark peels off in thin flakes, and the gray, soft-yellow-streaked wood is used extensively in Bengal and Assam for making tea boxes, as it seasons well, takes a good polish, and does not warp.

For previous introduction see 61602.

## 123144 to 123270—Continued

123204. *ELAEOCARPUS SPHAERICUS* (Gaertn.) Schum. Elaeocarpaceae.

No. 2255. From Bangalore, Mysore, February 9, 1937. A medium-sized tree which bears small blue fruits about the size of a plum; the curious seeds are rough and attractive and are often used as ornaments.

For previous introduction see 66264.

123205. *ELYMUS SIBIRICUS* L. Poaceae.  
Grass.

No. 1386. From Karzong Pass, Ladak, Kashmir, September 15, 1936, at 13,000 feet altitude. A grass growing in very dry places where it forms clumps 18 inches tall.

123206. *ERYTHRINA VARIEGATA* Stickm.  
Coraltree.

No. 2204. From Rati, Madras Presidency, January 29, 1937. A tree 20 to 30 feet high, native throughout India, with clusters of large bright-red flowers which appear before the leaves. The pods are 4 to 8 inches long and contain dark carmine seeds.

For previous introduction see 116038.

123207. *ERYTHRINA VARIEGATA ORIENTALIS* (L.) Merr. Fabaceae.  
Coraltree.

No. 2257. From Bangalore, Mysore, February 9, 1937. A moderate-sized spineless tree native to the East Indies. It is of very rapid growth, with trifoliate leaves and red flowers. In Ceylon the tree is used to shade crop plants; also the foliage is lopped for use as green manure.

For previous introduction see 94188.

123208. *EUPATORIUM ODORATUM* L. Astera-  
ceae.

No. 2169. From Dacca, Bengal, January 15, 1937. An erect or semiscandent shrubby perennial often seen in thickets where it is covered with ageratumlike lavender flowers.

For previous introduction see 110189.

123209 to 123211. *FICUS* spp. Moraceae.  
Fig.

123209. *FICUS RUBIGINOSA* Desf.  
Rusty fig.

No. 2309. From Bangalore, Mysore, February 9, 1937. An evergreen tree 60 to 80 feet high, with wide-spreading branches, throwing out aerial roots like the banyan tree. The elliptical coriaceous leaves, 3 to 4 inches long, are smooth above and covered with attractive rusty tomentum beneath. Native to Australia.

For previous introduction see 101333.

123210. *FICUS BENJAMINA* L.  
Benjamin fig.

No. 2307. From Bangalore, Mysore, February 9, 1937.

For previous introduction see 92948.

123211. *FICUS KRISHNAE* C. DC.

No. 2308. From Bangalore, Mysore, February 9, 1937. A very distinct small tree with large cup-shaped leaves. The yellow fruits are axillary, sessile, and about one-half inch in diameter. It has been considered a horticultural variety of *Ficus benghalensis*.

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## 123144 to 123270—Continued

123212. *GARCINIA* sp. Clusiaceae.

No. 2189. *Olakuli*. From Mahendra, Madras Presidency, January 20, 1937, at 4,000 feet altitude. A beautiful tree with horizontal branches and handsome elliptical leaves nearly 1 foot long. The yellow fruits, 2 to 3 inches across, are shaped like tomatoes and are delightfully acid.

123213. *LIMNANTHEMUM CRISTATUM* (Roxb.) Griseb. Menyanthaceae.

No. 2206. From Mandassa, Madras Presidency, January 30, 1937. An aquatic herb with an abundance of small fragrant white flowers, borne over a long period, at the base of the nymphaealike leaf.

123214. *GLIRICIDIA SEPIUM* (Jacq.) Kunth.  
Fabaceae.

No. 2258. From Bangalore, Mysore, February 9, 1937.

For previous introduction see 110930.

123215 to 123218. *IPOMOEA* spp. Convol-  
vulaceae.

123215. *IPOMOEA* sp.

No. 2184. From Mahendra, Madras Presidency, January 22, 1937, at 3,000 feet altitude. A herbaceous climber 20 feet long, found in thickets. The yellow flowers are about 3 inches across.

123216. *IPOMOEA* sp.

No. 2237. From Madras, February 6, 1937. A plant with large-toothed palmate leaves and yellow blossoms about 2 inches across with a wine-madder spot in the throat.

123217. *IPOMOEA* sp.

No. 2216. From Ellore, Madras Presidency, February 2, 1937. A convolvulus with flowers over 2 inches across, wine colored with a deep throat, remaining open all day. Found growing on the edge of mudholes; the long runners float on the water and bear an abundance of beautiful flowers.

123218. *IPOMOEA* sp.

No. 2208. From Rati, Madras Presidency, January 20, 1937. A small morning-glory with small linear leaves and whitish flowers about one-half inch across, with a magenta spot in the throat.

123219. *JACARANDA MIMOSIFOLIA* Don. Big-  
oniaceae. Green-ebony.

No. 2253. From Bangalore, Mysore, February 9, 1937.

For previous introduction see 116043.

123220. *JOANNESIA PRINCEPS* Vell. Euphor-  
biaceae.

No. 2306. From Bangalore, Mysore, February 9, 1937. A large tropical American tree with handsome evergreen 3- to 7-foliate leaves about 4 inches long and coconutlike fruits about 5 inches in diameter with 4 large oily seeds. It is related to the tung-oil tree (*Aleurites fordii*).

For previous introduction see 102624.

123221. *LUFFA ACUTANGULA* (L.) Roxb.  
Cucurbitaceae. Singkwa towelgourd.

No. 2136. *Gina tori*. From Calcutta, January 7, 1937. A small variety, used as a vegetable when young.

For previous introduction see 121955.

## 123144 to 123270—Continued

123222. *MEDICAGO* sp. Fabaceae.

No. 2283. From Bangalore, Mysore, February 9, 1937. Purchased from the Government Seed Farm; said to be Mysore naturalized seed and the best grown in this region.

123223. *MEDICAGO* sp. Fabaceae.

No. 2284. From Bangalore, Mysore, February 9, 1937. Purchased in the market.

123224. *MILLETTIA OVALIFOLIA* (Wight and Arn.) Kurz. Fabaceae.

No. 2129. From Calcutta, January 6, 1937. Presented by the Royal Botanical Gardens. A medium-sized tree with odd-pinnate leaves from 4 to 18 inches long and slender axillary racemes of small blue fragrant flowers.

For previous introduction see 116049.

123225. *MOMORDICA CHARANTIA* L. Cucurbitaceae. Balsam-pear.

No. 2086. *Uckhey*. From Calcutta, January 1, 1937. Fruits smaller and less bitter than the usual sorts.

123226. *MOMORDICA CHARANTIA* L. Cucurbitaceae. Balsam-pear.

No. 2211. From Ellore, Madras Presidency, February 1, 1937. Fruit pale green to whitish, about 1 foot long, thin and tapering; less bitter than most.

123227. *NYCTANTHES ARBOR-TRISTIS* L. Oleaceae. Nightjasmine.

No. 2256. From Bangalore, Mysore, February 9, 1937. A large evergreen shrub or small tree with ovate leaves about 4 inches long and small, very fragrant white night-blooming flowers in sessile heads. The flowers yield a yellow dye. Cultivated generally in India between 1,000 and 3,000 feet altitude.

For previous introduction see 33577.

123228. *NYMPHAEA* sp. Nymphaeaceae.

No. 2207. From Mandassa, Madras Presidency, January 30, 1937. A water-lily which grows in shallow ponds. The fragrant single, blue-violet flowers are on a stem 2 inches above the water and close at night.

123229. *NYMPHAEA* sp. Nymphaeaceae.

No. 2215. From Kula Lake, Madras Presidency, February 2, 1937. A plant which grows in about 3 feet of water; the elongate leaves, about 1 foot long, are conspicuously toothed; and the white flowers, 6 inches across, are closed in the daytime.

123230 to 123233. *ORYZA SATIVA* L. Poaceae. Rice.

123230. No. 2158. *Kataktara*. From the Government Rice Farm, Dacca, Bengal, January 14, 1937. A medium-fine, highland rice, sown broadcast; high yielding and maturing in 4 months.

123231. No. 2159. *Surpamukhi*. From the Government Rice Farm, Dacca, Bengal, January 14, 1937. A medium-fine highland rice, sown broadcast.

123232. No. 2161. *Charnok*. From the Government Rice Farm, Dacca, Bengal, January 14, 1937. A very fine highland rice suited to lighter soils. A medium-ripening variety, recommended for quality and yield.

## 123144 to 123270—Continued

123233. No. 2201. *Oryabim*. From Mandassa, Madras Presidency, January 27, 1937. One of the most popular of the locally grown varieties.

123234. *PARKIA BIGLANDULOSA* Wight and Arn. Mimosaceae.

No. 2268. From Bangalore, Mysore, February 9, 1937. A large, handsome, quick-growing tree with feathery leaves 12 to 20 inches long and dense heads of small creamy flowers on a long peduncle. Native to the Malayan region.

123235. *PARMENTIERA CEREIFERA* Seem. Bignoniaceae. Candletree.

No. 2311. From Bangalore, Mysore, February 9, 1937. A tropical tree, native to Panama, which grows 30 to 40 feet high and produces from its stem and old branches a profusion of almost sessile, white flowers. These are followed by yellowish, cylindrical, smooth fruits 1 to 4 feet long and about 1 inch in diameter, resembling wax candles.

For previous introduction see 41722.

123236 to 123242. *PHASEOLUS* spp. Fabaceae.123236 and 123237. *PHASEOLUS LUNATUS* L. Lima beans.

123236. No. 2251. From Bangalore, Mysore, February 9, 1937. Sold in the market as green beans.

123237. No. 2196. From Bengasai, Madras Presidency, January 26, 1937. From the hill people who say they gather the beans in the forest.

123238 to 123242. *PHASEOLUS VULGARIS* L. Common bean.

123238. No. 2272. From Bangalore, Mysore, February 9, 1937.

123239. No. 2244. *Hurulikia*. From Bangalore, Mysore, February 7, 1937. Said to be disease resistant. Used both as green beans and as dry beans.

123240 to 123242. From Bengasai, Madras Presidency, January 26, 1937. From the hill people who say they gather the beans in the forest.

123240. No. 2196-A.

123241. No. 2196-B.

123242. No. 2196-C.

123243. *PHRAGMITES COMMUNIS* Trin. Poaceae. Grass.

No. 1378. From Deskit, Baltistan, Kashmir, September 9, 1936, at 9,000 feet altitude. A grass up to 18 inches high found on sand dunes; said to be eaten by cattle.

123244. *PICEA SMITHIANA* (Wall.) Boiss. Pinaceae. Himalayan spruce.

No. 2299. *Rai*. Presented by the Kulu Forest Service, Kulu, Punjab, February 10, 1937. A lofty tree, native to the mountains of northwestern India at altitudes of 7,000 to 11,000 feet; the terminal, drooping, pale-green cones are 4 to 6 inches long. The stiff, sharp, spirally arranged green leaves are crowded on pendulous, taillike twigs.

For previous introduction see 116605.

## 123144 to 123270—Continued

123245. *PINUS GRIFFITHII* McClelland (*P. excelsa* Wall.). Pinaceae.

No. 2301. *Kall.* Presented by the Kulu Forest Service, Kulu, Punjab, February 10, 1937. A pine, 50 to 100 feet high, growing between 5,000 and 11,000 feet altitude in the Himalayan region. The slender gray-green leaves, in fives, are 5 to 8 inches long, and the pale-brown, cylindrical cones are 6 to 12 inches long.

123246. *PISUM SATIVUM* L. Fabaceae. Pea.

No. 2224. *Patani.* From Madras, Madras Presidency, February 4, 1937. Said to be mildew resistant.

123247. *PISUM SATIVUM* L. Fabaceae. Pea.

No. 2243. *Batani.* From Bangalore, Mysore, February 7, 1937. Said to be a hardy, disease-resistant pea.

123248. *SEMECARPUS ANACARDIUM* L. f. Anacardiaceae.

No. 2194. *Baliakuli.* From Bengasai, Madras Presidency, January 26, 1937, at 5,000 feet altitude. An attractive tree with large oval leaves and an abundance of yellow fruits that lose their astringency when fully ripe, and are eaten after roasting.

123249 to 123251. *SOJA MAX* (L.) Piper. Fabaceae. Soybean.

From the Government Gardens, Bangalore, Mysore, February 7, 1937. Said to have come from Java.

123249. No. 2240.

123250. No. 2238.

123251. No. 2239.

123252 to 123259. *SOLANUM* spp. Solanaceae.

123252 to 123256. *SOLANUM MELONGENA* L. Eggplant.

123252. No. 2170. *Pegan.* From Islampur, Bengal, January 15, 1937. Fruit pale green, about 10 inches long and 2 inches in diameter.

123253. No. 2172. *Pegan.* From Islampur, Bengal, January 15, 1937. Fruit greenish purple, elongate, 1 foot long and about 5 inches wide.

123254. No. 2205. From Islampur, Bengal, January 16, 1937. Fruit greenish purple, globose, weighs about 3 pounds. Of good flavor; the plant is a good bearer and is one of India's best eggplants.

123255. No. 2218. *Wangkai.* From Ellore, Madras Presidency, February 3, 1937.

123256. No. 2245. *Badanskai.* From Bangalore, Mysore, February 7, 1937. A mixture of long purple and long green eggplants which grow 8 or 9 inches long, but are usually used when much smaller. The purple form is said to be alkali tolerant.

123257. No. 2260. From Bangalore, Mysore, February 9, 1937. A strong bushy shrub about 4 feet high, said to be peculiar to Mysore. The fruit is green, finally about 9 inches long, but cut when about 5 inches long.

123258. No. 2287. From Bangalore, Mysore, February 9, 1937. Fruit globose, about 3 inches across, green

## 123144 to 123270—Continued

streaked with pink purple. A common type here.

123259. *SOLANUM* sp.

No. 2285. From Bangalore, Mysore, February 9, 1937. A wild plant 4 feet high, with purplish flowers followed by red-orange berries about one-half inch in diameter.

123260 and 123261. *STIPA SPLENDENS* Trin. Poaceae. Feathergrass.

*Silika.* Found in clumps 8 feet high, with large loose tops; stems used for making baskets, brooms, etc. The grass is found in dry, well-isolated places and is quite ornamental.

123260. No. 1437. From Leh, Ladak, Kashmir, September 17, 1936.

123261. No. 1367. From Hundi, Baltistan, Kashmir, September 17, 1936, at 9,000 feet altitude.

123262. *TARGETES* sp. Asteraceae.

No. 2179. From Mahendra, Madras Presidency, January 22, 1937, at 2,000 feet altitude. Flowers orange, consisting mostly of conspicuous tubular disk flowers with only a row of small reflexed rays. Said to have been grown in the hills from earliest times.

123263. *TERMINALIA CHEBULA* Retz. Combretaceae.

No. 2187. *Harar.* From Mahendra, Madras Presidency, January 24, 1937, at 4,000 feet altitude. An ornamental tree with oval-elliptic leaves and terminal racemes of small white flowers. The fresh fruit is rich in tannin, and the dried fruit yields a black or yellow dye.

For previous introduction see 114456.

123264. *THYSANOLAENA MAXIMA* (Roxb.) Kuntze. Poaceae. Grass.

No. 2186. From Mahendra, Madras Presidency, January 22, 1937, at 4,000 feet altitude. A forest grass growing also in half shade, up to 6 feet high, with broad leaves and light airy heads which are often used as ornaments.

123265 and 123266. *TRICHOSANTHES ANGUINA* L. Cucurbitaceae. Snakegourd.

Fruits from 3 to 10 feet long. Used as a vegetable when young.

For previous introduction see 116761.

123265. No. 2219. *Potalokai.* From Ellore, Madras Presidency, February 3, 1937.

123266. No. 2241. From Bangalore, Mysore, February 7, 1937.

123267. *VIGNA CYLINDRICA* (Stickm.) Skeels. Fabaceae. Catjang.

No. 2227. *Kharannuli.* From Madras, Madras Presidency, February 5, 1937. Used as food both as green beans cooked in the pods and as dried beans.

123268. *VIGNA SINENSIS* (Torner) Savi. Fabaceae. Cowpea.

No. 2231. *Kharamuni.* From Madras, February 6, 1937. Used as dried beans.

123269. *VITIS* sp. Vitaceae.

No. 2294. From Bangalore, Mysore, February 9, 1937. A naturalized Asiatic grape, the only sort grown here. Vine

## 123144 to 123270—Continued

resembles our *Concord* in habit and appearance; bunches 5 inches long, compact; berries blue-black, ovoid, three-fourths of an inch long, sweet, keep well. Vines give two crops a year here.

123270. *ALSTONIA VENENATA* R. Br. Apocynaceae.

No. 2193. From Mahendra, Madras Presidency, January 26, 1937, at 1,000 feet altitude. A low shrub 5 feet high, said to bear an abundance of attractive white flowers.

For previous introduction see 65248.

123271. *Gossypium* sp. Malvaceae.  
Cotton.

From Cuba. Seeds presented by Thomas R. Towns, Holguin. Received February 25, 1937.

## 123272 to 123341.

From Turkey. Seeds collected by H. L. Westover and F. L. Wellman, Bureau of Plant Industry. Received February 1, 1937.

123272. *AJUGA* sp. Menthaceae.

No. 3419. An attractive mint from 3 km. northeast of Ankara, June 26, 1936.

123273. *MATTHIOLA* sp. Brassicaceae.

No. 3030. From the Amasya bazar, October 6, 1936.

123274. *ANTHEMIS TINCTORIA DISCOIDEA* (All.) Vahl. Asteraceae.

No. 2735. From 5 km. west of Yalova.

123275. *ASCLEPIAS* sp. Asclepiadaceae.

No. 1926. From Birejik, July 21, 1936.

123276. *ASPHODELUS FISTULOSUS* L. Liliaceae.

No. 603. From Antalya, June 4, 1936.

123277. *BRASSICA* sp. Brassicaceae.

No. 2143. From the Sivas bazar, August 5, 1936.

123278. *CAESALPINIA* sp. Caesalpinaceae.

No. 1270. *Gül Abershim*. From the Bursa bazar, June 18, 1936.

123279. *CEPHALARIA SYRIACA* (L.) Schrad. Dipsacaceae.

No. 2254. From the Erzincan bazar, August 8, 1936. Seeds mixed with wheat flour to add flavor to bread.

123280. *CERINTHE* sp. Boraginaceae.

No. 3439. From Alma Dag, June 28, 1936.

123281. *CORONILLA* sp. Fabaceae.

No. 1947. From Birejik, July 22, 1936.

123282. *CUMINUM CYMINUM* L. Apiaceae.  
Cumin.

No. 2149. From the Sivas bazar, August 5, 1936.

123283. *DAPHNE* sp. Thymelaeaceae.

No. 3147. From 25 km. north of Kastamonu, October 10, 1936. A shrub with handsome foliage and insignificant greenish flowers.

123284. *DAPHNE* sp. Thymelaeaceae.

No. 2794. From Ulu Dag, September 9, 1936, at 7,000 feet altitude. A low orna-

## 123272 to 123341—Continued

mental shrub with bright salmon-colored berries. Found growing on rocks.

123285. *DAUCUS* sp. Apiaceae.

No. 2287. From 55 km. east of Erzincan, August 9, 1936.

123286. *DAUCUS* sp. Apiaceae.

No. 2606. A plant with pink flowers, from 30 km. west of Samsun, August 23, 1936.

123287. *DELPHINIUM* sp. Ranunculaceae.  
Larkspur.

No. 1973. From Birejik, July 23, 1936.

123288. *DIGITALIS* sp. Scrophulariaceae.  
Foxtail.

No. 2482. From 97 km. south of Giresun, August 17, 1936.

123289. *DIOTIS MARITIMA* (L.) Smith. Asteraceae.

No. 2873. From the sea beach, 1 km. west of Yalova, September 12, 1936. An erect or ascending herbaceous perennial about 1 foot high, with alternate oblong leaves and dense terminal clusters of small yellow flower heads. The plant is covered with white cottony down. Native to Asia Minor.

123290. *HELICHRYSUM* sp. Asteraceae.

No. 2686. From 16 km. south of Tokat, August 26, 1936. A yellow-flowered composite.

123291. *EREMOSTACHYS* sp. Menthaceae.

No. 2870. From 1 km. west of Yalova, September 12, 1936. A compact mint found on the sea beach.

123292. *ERODIUM* sp. Geraniaceae.

No. 757. From 11 km. south of Denizli, May 30, 1936.

123293. *ERUCA* sp. Brassicaceae.

No. 1986. From Ulukishla, July 25, 1936.

123294. *EUONYMUS* sp. Celastraceae.

No. 2697. From 15 km. south of Samsun, August 24, 1936.

123295. *EUPATORIUM* sp. Asteraceae.

No. 2687. From 41 km. south of Tokat, August 26, 1936.

123296. *FERULA* sp. Apiaceae.

No. 2022. From gardens in Nigde, July 27, 1936.

123297. *FERULA* sp. Apiaceae.

No. 2023. From gardens in Nigde, July 27, 1936.

123298. *GYPSOPHILA* sp. Silenaceae.

No. 1885. From 50 km. north of Malatya, July 17, 1936.

123299. *CONRINGIA ORIENTALIS* (L.) Dum. Brassicaceae.

No. 1994. From Ulukishla, July 25, 1936.

123300. *CONRINGIA ORIENTALIS* (L.) Dum. Brassicaceae.

No. 3387. From dry plains 4 km. southwest of Ankara, June 25, 1936.

123301 to 123303. *HYOSCYAMUS* spp. Solanaceae.



## 123272 to 123341—Continued

123301. *HYOSCYAMUS* sp.  
No. 1990. From Ulukishla, July 25, 1936.
123302. *HYOSCYAMUS* sp.  
No. 2480. From 34 km. south of Giresun, August 17, 1936.
123303. *HYOSCYAMUS* sp.  
No. 3324. From Ankara, June 20, 1936.
123304. *INULA* sp. Asteraceae.  
No. 2098. From Alma Dag, 25 km. southeast of Ankara, August 1, 1936.
123305. *INULA* sp. Asteraceae.  
No. 2668. From 46 km. south of Tokat, August 26, 1936. A composite with narrow yellow ray flowers.
123306. to 123308. *JASMINUM* spp. Oleaceae.
123306. *JASMINUM* sp.  
No. 1065. A shrub from the ruins at Bergama, June 10, 1936.
123307. *JASMINUM* sp.  
No. 2657. A shrub from 61 km. southeast of Merzifon, August 25, 1936.
123308. *JASMINUM FRUTICANS* L.  
No. 2731. A low ornamental shrub with black fruits, from woods near Yalova Kaplıcaları, September 6, 1936. A half-evergreen, shrubby jasmine with a mass of slender erect stems 3 to 5 feet high and smooth deep-green leaflets. The yellow flowers are produced in early summer, usually in threes or fives at the ends of short twigs, and the round shining-black fruits are the size of peas.
- For previous introduction see 62020.
123309. *LEPIDIDIUM* sp. Brassicaceae.  
No. 2160. From 84 km. east of Sivas, August 6, 1936.
123310. *LIGUSTRUM* sp. Oleaceae.  
No. 569. An ornamental border plant from the Izmir bazar, May 25, 1936.
123311. *LINUM* sp. Linaceae. Flax.  
No. 3383. From dry plains around Ankara, June 25, 1936.
123312. *LINUM* sp. Linaceae. Flax.  
No. 3399. A flax with yellow flowers, from dry hillsides near Ankara, June 25, 1936.
123313. *LITHOSPERMUM* sp. Boraginaceae.  
No. 1401. A rock plant from 20 km. north of Gaziantep, July 2, 1936.
123314. *LITHOSPERMUM* sp. Boraginaceae.  
No. 2654. From 94 km. southeast of Merzifon, August 25, 1936.
123315. *SILENE DENSIFLORA* D'Urv. Silenaceae.  
No. 1924. From Birejik, July 21, 1936. A perennial with tall stems and distant, dense whorls of many small pale yellow flowers. Allied to *Silene otites*. Native to the Crimean region.

## 123272 to 123341—Continued

123316. *LYCHNIS* sp. Silenaceae.  
No. 2720. From Talas, August 27, 1936.
123317. *LYSIMACHIA* sp. Primulaceae.  
No. 2946. From 20 km. west of Turgutlu, September 23, 1936.
123318. *ONONIS* sp. Fabaceae.  
No. 2498. From 8 km. south of Shebinkarahisar, August 18, 1936.
123319. *PEDICULARIS* sp. Scrophulariaceae.  
No. 2067. From Alma Dag, 25 km. southeast of Ankara, August 1, 1936.
123320. *PETROSELINUM CRISPUM* (MILL.) Nym. Apiaceae. Parsley.  
No. 1863. From 26 km. west of Malatya, July 16, 1936.
123321. *PHYTOLACCA* sp. Phytolaccaceae.  
No. 1945. From Birejik. July 22, 1936.
123322. *PHYTOLACCA AMERICANA* L. Phytolaccaceae. Pokeberry.  
No. 2418. From Trabzon, August 14, 1936.
123323. *POTENTILLA RECTA* L. Rosaceae.  
No. 1956. From Birejik, July 22, 1936.
123324. to 123326. *SALVIA* spp. Menthaceae.
123324. *SALVIA* sp.  
No. 1581. From 54 km. north of Urfa, July 7, 1936.
123325. *SALVIA* sp.  
No. 2075. From Alma Dag, 25 km. southeast of Ankara, August 1, 1936.
123326. *SALVIA* sp.  
No. 3310. From 25 km. south of Gaziantep, June 1, 1936.
123327. *SCUTELLARIA* sp. Menthaceae.  
No. 1495. A rock plant from 5 km. southeast of Gaziantep, July 4, 1936.
123328. *SCUTELLARIA* sp. Menthaceae.  
No. 1782. An attractive rock plant for dry areas, from 52 km. southwest of Elaziz, July 14, 1936.
123329. *SCORZONERA* sp. Cichoriaceae.  
No. 2800. From the summit of Ulu Dag, September 8, 1936.
123330. *SCROPHULARIA* sp. Scrophulariaceae.  
No. 1959. From Birejik, July 22, 1936.
123331. *SEDUM* sp. Crassulaceae.  
No. 2302. From 53 km. north of Gemushane, August 10, 1936.
123332. *SILENE* sp. Silenaceae.  
No. 1897. From 50 km. west of Malatya, July 16, 1936.
123333. *SILENE* sp. Silenaceae.  
No. 2065. From 25 km. southeast of Ankara, June 25, 1936.
123334. *SILENE* sp. Silenaceae.  
No. 2796. From the summit of Ulu Dag, September 8, 1936.

## 123272 to 123341—Continued

123335. *TEUCRUM* sp. Menthaceae.

No. 1875. From 50 km. north of Malatya, July 13, 1936.

123336. *TEUCRUM ARDUINI* L. Menthaceae.

No. 2849. From the Yalova Baths, Kaplıcaları, September 11, 1936. An erect or ascending herbaceous perennial over a foot high, with ovate leaves 1 to 2 inches long and dense spikes of yellow flowers. Native to Europe.

123337. *TRIGONELLA* sp. Fabaceae.

No. 1992. From Ulukishla, July 25, 1936.

123338. *TRIGONELLA* sp. Fabaceae.

No. 2652. From 24 km. southeast of Merzifon, September 25, 1936.

## 123272 to 123341—Continued

123339. *CELSIA ORIENTALIS* L. Scrophulariaceae.

No. 2488. From 58 km. west of Shebin-karahisar, August 18, 1936. An annual with simple or sparingly branched stems about a foot high, pinnatisect leaves, and small yellow flowers. Native to Asia Minor.

123340. *VERBASCUM* sp. Scrophulariaceae.

No. 3028. From the Amasya bazar, October 6, 1936.

123341. *ORIGANUM VULGARE* L. Menthaceae.

No. 2830. From the Yalova Baths, Kaplıcaları, September 12, 1936.

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