

# Plant Inventory No. 149

UNITED STATES DEPARTMENT OF AGRICULTURE

Washington, D. C. February 1951



PLANT MATERIAL INTRODUCED BY THE DIVISION OF PLANT EXPLORATION AND INTRODUCTION, BUREAU OF PLANT INDUSTRY,<sup>1</sup> OCTOBER 1 TO DECEMBER 31, 1941 (Nos. 142271 to 143681)

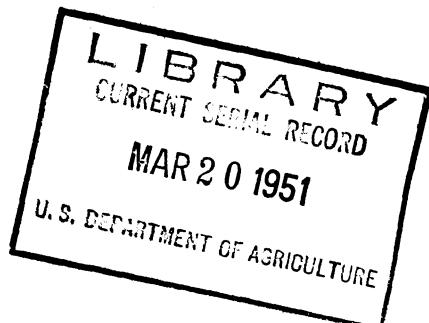
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This inventory, No. 149, lists the plant material (Nos. 142271 to 143681) received by the Division of Plant Exploration and Introduction during the period from October 1 to December 31, 1941. It is a historical record of plant material introduced for Department and other specialists, and is not to be considered as a list of plant material for distribution.

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*Plant Industry Station,  
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<sup>1</sup>Now Bureau of Plant Industry, Soils, and Agricultural Engineering, Agricultural Research Administration, United States Department of Agriculture.



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## I N V E N T O R Y

### **142271 and 142272. LYCOPERSICON ESCULENTUM Mill. Solanaceae.**

**Tomato.**

From Hawaii. Seeds presented by the Hawaiian Sugar Planters' Association, Honolulu. Received October 1, 1941.

142271. No. 309. Small wild tomato.

142272. No. 308. Local plum tomato.

### **142273 to 142276.**

From the United States. Seeds collected by Rogers McVaugh, Bureau of Plant Industry, United States Department of Agriculture. Received October 10, 1941.

142273. AMELANCHIER sp. Malaceae.

No. 5966. From Wilson's Ranch, Clark County, Nevada, July 18, 1941.

142274. AMELANCHIER sp.

No. 6409. From north of Wells, Elks County, Nevada, August 18, 1941.

142275. AMELANCHIER sp.

No. 6429. From east of Salt Lake City, Utah, August 19, 1941.

142276. MALUS FUSCA (Raf.) C. Schneid. Malaceae.

**Oregon crab.**

No. 6353. From east of Long Beach, Washington, August 12, 1941. A shrub or small tree, sometimes 30 to 40 feet tall, with ovate-lanceolate, sharply serrate leaves. The white flowers, 1 inch in diameter, are borne on slender pubescent pedicels and appear when the leaves are nearly or quite full grown. The fruit is oblong,  $\frac{3}{4}$  inch or less long, and yellowish or greenish in color. It is native from northern California to Alaska.

### **142277 to 142292.**

From the Union of South Africa. Seeds presented by General Jan Smuts, Pretoria, Transvaal. Received October 3, 1941.

142277. CYDONON sp. Poaceae.

**Grass.**

I. Star grass, Kozinga Channel strain. A good hay and pasture grass; does well as a soil binder.

142278. CYDONON sp.

II. Kivu River strain. Good for lawns and grazing.

142279. CYDONON sp.

III. Rietondale strain. Known as "kweek gras" (self-planting by runners).

142280. CYDONON sp.

IV. Star grass, Mount Moroto strain. A good pasture grass.

142281. CYDONON sp.

V. Lake Shirwa strain. In Nyasaland. Good for grazing.

142282. DIGITARIA sp. Poaceae.

**Grass.**

XV. Zomba Plateau strain. Nyasaland. Good for pasture and hay.

142283. DIGITARIA sp.

XVI. Thomson's Falls strain. A fingergrass from east Africa; does well with heavy rainfall, and makes good sheep pasture.

142284. PANICUM COLORATUM L. Poaceae.

**Grass.**

XIV. Buffalo grass. From the Great Makarikari Lake region. A very good hay grass, very soft and leafy, about  $3\frac{1}{2}$  feet high. Originally from the Kavirondo Gulf, eastern Africa.

For previous introduction see 142145.

**142285 to 142287.** *PANICUM MAXIMUM* Jacq. Poaceae. **Guinea grass.**

142285. XII. From northern Transvaal. Very good in ranching areas.

142286. XIII. From the South African coast area. Good hay and pasture grass.

142287. X. Collected at Lake Tanganyika by General Smuts in 1929. A giant buffalo grass, good for hay and ensilage.

**142288.** *UROCHLOA TRICHOPUS* (Hochst.) Stapf. Poaceae. **Grass.**

VIII. *Rietondale strain.* White buffalo grass. A good hay and pasture grass; very good in ranching areas.

**142289.** *PANICUM* sp. Poaceae. **Grass.**

XI. *Kavirondo Gulf strain.* Lake Victoria region. Very fine buffalo grass.

**142290.** *PANICUM* sp.

IX. *Lodwa strain.* From Turkana Desert, East Africa. A good hay and grazing grass.

**142291 and 142292.** *PENNISETUM CILIARE* (L.) Link (*P. cenchroides* Rich.). Poaceae. **Grass.**

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

142291. VI. *Lysamas strain.* Collected by General Smuts in the Turkana Desert in 1937. A good grass for dry areas.

142292. VII. *Blue buffalo grass.* Collected on the Equator. A good hay and grazing grass; will do well in dry areas.

For previous introduction see 139965.

**142293.** *LEUCOTHOE POPULIFOLIA* (Lam.) Dipp. Ericaceae.

From Maryland. Plants growing at the United States Plant Introduction Garden, Glenn Dale. Numbered October 15, 1941.

**142294.** *QUERCUS ACUTISSIMA* Carruthers (*Q. serrata* Sieb. and Zucc.). Fagaceae. **Oak.**

From Maryland. Trees growing at the United States Plant Introduction Garden, Glenn Dale. Numbered October 15, 1941.

**142295 and 142296.**

From Cuba. Seeds presented by Atkins Institution of the Arnold Arboretum, Cienfuegos. Received October 8, 1941.

**142295.** *ALBIZZIA PALCATA* (L.) Backer (*A. moluccana* Miquel). Mimosaceae.

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 123146.

**142296.** *PITHECELLOBIUM POLYCEPHALUM* Benth. Mimosaceae.

**142297.** *ALEURITIES FORDII* Hemsl. Euphorbiaceae. **Tung-oil tree.**  
From Brazil. Scions presented by the Secretaria da Agricultura, Industria e Comercio, Instituto Agronómico de São Paulo, Campinas. Received October 10, 1941.

From tree No. 96, Tatui Experimental Station.

For previous introduction see 105588.

**142298 to 142308.**

From Costa Rica. Plants collected by M. H. Langford, San José. Received October 21, 1941.

**142299.** *HEVEA* sp.

G. F-60.

**142305.** *HEVEA* sp.

G. F-71.

**142300.** HEVEA sp.

G. F-65.

**142301.** HEVEA sp.

G. F-67.

**142302.** HEVEA sp.

G. F-68.

**142303.** HEVEA sp.

G. F-69.

**142298.** HEVEA sp. Euphorbiaceae.

G. F-45.

**142306.** HEVEA sp.

G. F-74.

**142307.** HEVEA sp.

G. F-75.

**142308.** HEVEA sp.

G. F-76.

**142304.** HEVEA sp.

G. F-70.

### **142309 to 142311.**

From Australia. Seeds collected by C. T. White, Government Botanist, Botanic Gardens, Brisbane, Queensland. Received October 16, 1941.

**142309.** ALYSICARPUS VAGINALIS (L.) DC. Fabaceae.

From S. E. Stephens, Cairns. An annual legume from 3 to 6 feet high. Under favorable conditions it may be cut 2 or 3 times a season.

For previous introduction see 139972.

**142310.** ALYSICARPUS VAGINALIS var. NUMMULARIFOLIUS (L.) Baker.

From the Animal Health Station, Oonoomba. A low, creeping, annual legume, which forms a mat of stems and foliage not more than half an inch thick. It may prove a good legume to mix with lawn grass.

For previous introduction see 98057.

**142311.** ALYSICARPUS sp.

From the Animal Health Station, Oonoomba.

**142312.** HEVEA sp. Euphorbiaceae.

From Liberia. Seeds presented by the Firestone Plantation, Monrovia. Received October 23, 1941.

**142313.** MAGNOLIA ACUMINATA L. Magnoliaceae.

From Maryland. Plants growing at the United States Plant Introduction Garden, Glenn Dale. Numbered October 27, 1941.

A large shrub or small round-headed tree with leaves 6 to 10 inches long, elliptic to ovate or obovate. The canary-yellow flowers appear in early spring with the leaves, and usually are terminal or axillary on the upper parts of the stems. The red fruits are attractive in late summer.

Seeds originally collected in November 1940 by the Department of Botany, University of Kentucky, Lexington.

**142314.** IPOMOEA LEPTOPHYLLA Torr. Convolvulaceae.

From Maryland. Plants growing at the United States Plant Introduction Garden, Glenn Dale. Numbered October 27, 1941.

This is probably the hardiest tuberous-rooted ipomoea. The stems are herbaceous, much branched, reaching a height of 2 feet with an equal spread. The leaves are linear-oblong, about 2½ inches across, and the large, pinkish-purple flowers remain open until noon. These are usually borne in large quantities. The tubers reach an immense size in age. Good growth and flowering occur under conditions that permit few but desert plants to survive. Native to the western United States.

Seeds originally collected by G. R. Viehmeyer, Stapleton, Nebr.

**142315 to 142319. SACCHARUM. Poaceae.** **Sugarcane**

From Colombia. Seeds presented by Estación Agrícola Experimental, Palmira.  
Received October 27, 1941.

- 142315. *Común* × *E.P.C. 17-72.*
- 142316. *Común* × *E.P.C. 47-23.*
- 142317. *C.P. 36-158* × *E.P.C. 75-61.*
- 142318. *E.P.C. 14-760* × *C.P. 27-108.*
- 142319. *P.O.J. 27-25* × *C.P. 27-108.*

**142320 to 142331. JUGLANS REGIA L. Juglandaceae. Persian walnut.**

From California. Trees growing at the United States Plant Introduction Garden Chico. Numbered October 31, 1941.

- 142320. Selection (D-36-24) from P.I. 125196.
- 142321. Selection (D-36-25) from P.I. 125196.
- 142322. Selection (D-36-26) from P.I. 125196.
- 142323. Selection (D-36-27) from P.I. 125196.
- 142324. Selection (D-36-28) from P.I. 125196.
- 142325. Selection (D-36-29) from P.I. 125197.
- 142326. Selection (D-36-30) from P.I. 125197.
- 142327. Selection (D-36-31) from P.I. 125197.
- 142328. Selection (D-37-2) from P.I. 125197.
- 142329. Selection (D-37-3) from P.I. 125198.
- 142330. Selection (D-37-4) from P.I. 125198.
- 142331. Selection (D-37-5) from P.I. 125199.

**142332 to 142340. SACCHARUM. Poaceae.** **Sugarcane**

From Colombia. Seeds presented by the Estación Agrícola Experimental, Palmira.  
Received November 1, 1941.

- 142332. *Común* × *EPC 16-74.*
- 142333. *Común* × *D 74.*
- 142334. *EPC 47-18* × *33-29.*
- 142335. *Común* × *EPC 59-81.*
- 142336. *EPC 19-09* × *POJ 28-78.*
- 142337. *CP 36-158* × *EPC 14-745.*
- 142338. *CP 36-158* × *POJ 28-78.*
- 142339. *CP 36-158* × *P 33-29.*
- 142340. *CP 36-158* × *EPC 77-02.*

**142341. URGINEA MARITIMA (L.) Baker. Liliaceae.** **Sea-onion.**

From California. Seeds presented by Loftus H. Thackaberry, South Pasadena  
Received November 3, 1941.

Red variety.

For previous introduction see 141897.

**142342 and 142343. SACCHARUM. Poaceae.** **Sugarcane**

From the Canal Zone. Seeds presented by Dr. Julius Matz, Canal Zone Experimental Gardens, Pedro Miguel (Summit). Received November 3, 1941.

142342 P.O.J. 2878 X N.H. 1.

142343. N.C. 30 X *S. spontaneum* Kloet.

**142344 to 142349. Gossypium. Malvaceae. Cotton.**  
From Brazil. Seeds presented by Theodureto de Camargo, Instituto Agronómico do Estado de São Paulo, Campinas. Received November 4, 1941.

142344. 052.

142345. U 4.

142346. Early Maturity U 4.

142347. U 4/4.

142348. T 19. Punjab Golden.

142349. 955 R.

**142350. CENTELLA ASIATICA (L.) Urban (*Hydrocotyle asiatica* L.).**

Ariaceae.

From Ceylon. Seeds presented by the Department of Agriculture, Peradeniya. Received October 31, 1941.

For previous introduction see 142030.

**142351. HETEROPTERIS SYRINGAEFOLIA Griseb.** Malpighiaceae.

From Louisiana. Seeds presented by E. A. McIlhenny, Avery Island. Received November 4, 1941.

A rather hardy, erect, evergreen shrub, native to southern Brazil, with opposite ovate-obtuse leaves, 1 to 1 1/4 inches long, and clusters of showy, small yellow flowers. It flowers throughout the summer and often through autumn. The plant bears a resemblance to *Thryallis*, to which it is related, but differs strikingly in having fruits much larger and red-winged. It has withstood temperatures down to 10° F. in the Gulf region.

**142352 to 142355. SACCHARUM. Poaceae. Sugarcane.**

From Australia. Cuttings presented by the Bureau of Sugar Experiment Stations, Brisbane, Queensland. Received November 4, 1941.

142352. Q 10.

142354. Q 25.

142353. Q 20.

142355. Comus.

**142356 and 142357. SACCHARUM. Poaceae. Sugarcane.**

From Canal Zone. Seeds obtained from the Experiment Gardens, Summit. Received November 7, 1941.

142356. Casa Blanca X N.H. 1.

142357. POJ 2364 X N.H. 1.

**142358 to 142360.**

From Guatemala. Collected by Dr. David Fairchild, Coconut Grove, Florida. Received November 10, 1941.

142358. BAMBUA VULGARIS var. VITTATA A. Riviere. Poaceae. Bamboo.

A handsome yellow-striped form of the well-known *B. vulgaris*, grown throughout central Florida. It is more tender than *B. vulgaris* and should be grown in rather dry soil to develop the highest coloration.

For previous introduction see 70740.

142359. IPOMOEA BATATAS (L.) Lam. Convolvulaceae. Sweetpotato.

No. 1135. From the market, Antigua, October 22, 1941. This is a variety that has purple-red flesh throughout. When baked, the distinctive flavor is hard to describe. In Antigua it is not preferred to the white-fleshed varieties and is rarely seen on the market.

**142360. PERSEA SCHIEDEANA Nees. Lauraceae.** Coyo.

No. 1144. This plant, known as *Yas* in Costa Rica and *Coyo* in Guatemala, occurs from southern Mexico to Panama. In Costa Rica it is found abundantly on the slopes of Irazu at altitudes between 4,000 and 6,000 feet. The fruits greatly resemble avocados. The tree is of slow growth and probably does not bear until it is 8 or 10 years old.

For previous introduction see 93584.

**142361 to 142370. SACCHARUM. Poaceae.****Sugarcane.**

From Africa. Cuttings presented by the Experiment Station, South African Sugar Association, Mount Edgecombe, Natal. Received November 4, 1941.

142361. CO 312.

142366. CO 407.

142362. CO 313.

142367. CO 408.

142363. CO 331.

142368. CO 413.

142364. CO 355.

142369. CO 419.

142365. CO 385.

142370. M 1900.

**142371 to 142419. TRITICUM AESTIVUM L. Poaceae. Common wheat.**

From Australia. Seeds presented by A. H. E. McDonald, Chief, Division of Plant Introduction, Department of Agriculture, Sydney, New South Wales. Received November 5, 1941.

142371. 403-4 G 40. Early Blackhull  $\times$  Kenya  $\times$  Florence  $\times$  Dundee. G3-GO.

142372. 407-8 G 40. Early Blackhull  $\times$  Kenya  $\times$  Florence  $\times$  Dundee. G5-GO.

142373. 673-4 G 40. Early Blackhull  $\times$  Florence. Go-O-O-GO.

142374. 598-9 G 40. Early Blackhull  $\times$  Kenya  $\times$  Florence  $\times$  Dundee. F2-GO.

142375. 618-9 G 40. Early Blackhull  $\times$  Kenya  $\times$  Florence  $\times$  Dundee. Go-4-Go.

142376. 764 G 40. Early Blackhull  $\times$  Kenya  $\times$  Florence  $\times$  Dundee. Go-2-Go.

142377. 429-31 G 40. Early Blackhull  $\times$  Thew  $\times$  Kenya  $\times$  Florence  $\times$  Dundee, N4-Go.

142378. 434-5 G 40. Early Blackhull  $\times$  Thew  $\times$  Kenya  $\times$  Florence  $\times$  Dundee. N6-GO.

142379. 364-5 G 40. Kenya  $\times$  Florence  $\times$  Dundee  $\times$  Early Blackhull. N2-GO.

142380. 366-7 G 40. Kenya  $\times$  Florence  $\times$  Dundee  $\times$  Early Blackhull. N3-GO.

142381. 388-9 G 40. Kenya  $\times$  Florence  $\times$  Dundee  $\times$  Early Blackhull. E1-GO.

142382. 393-4 G 40. Kenya  $\times$  Florence  $\times$  Dundee  $\times$  Early Blackhull. E6-GO.

142383. 395-6 G 40. Kenya  $\times$  Florence  $\times$  Dundee  $\times$  Early Blackhull. E7-GO.

142384. 569-71 G 40. Kenya  $\times$  Florence  $\times$  Dundee  $\times$  Early Blackhull. GO-P12-GO.

142385. 5745 G 40. Kenya  $\times$  Florence  $\times$  Dundee  $\times$  Early Blackhull. GO-P15-GO.

142386. 576-7 G 40. Kenya  $\times$  Florence  $\times$  Dundee  $\times$  Early Blackhull. GO-P20-GO.

142387. 578-9 G 40. Kenya  $\times$  Florence  $\times$  Dundee  $\times$  Early Blackhull. GO-P24-GO.

142388. 585-6 G 40. Kenya  $\times$  Florence  $\times$  Dundee  $\times$  Early Blackhull. GO-P70-GO.

142389. 587-8 G 40. Kenya  $\times$  Florence  $\times$  Dundee  $\times$  Early Blackhull. GO-P71-GO.

142390. 589-91 G 40. Kenya  $\times$  Florence  $\times$  Dundee  $\times$  Early Blackhull. GO-P121-GO.

142391. 592-3 G 40. *Kenya* × *Florence* × *Dundee* × *Early Blackhull*. GO-P122-GO.
142392. 594-5 G 40. *Kenya* × *Florence* × *Dundee* × *Early Blackhull*. GO-P126-GO.
142393. 748 G 40. *Kenya* × *Florence* × *Dundee* × *Early Blackhull*. GO-P15-GO.
142394. 749 G 40. *Kenya* × *Florence* × *Dundee* × *Early Blackhull*. GO-P20-GO.
142395. 751 G 40. *Kenya* × *Florence* × *Dundee* × *Early Blackhull*. GO-P24-GO.
142396. 754 G 40. *Kenya* × *Florence* × *Dundee* × *Early Blackhull*. GO-P70-GO.
142397. 755 G 40. *Kenya* × *Florence* × *Dundee* × *Early Blackhull*. GO-P71-GO.
142398. 756-7 G 40. *Kenya* × *Florence* × *Dundee* × *Early Blackhull*. GO-P121-GO.
142399. 758 G 40. *Kenya* × *Florence* × *Dundee* × *Early Blackhull*. GO-P126-GO.
142400. 759 G 40. *Kenya* × *Florence* × *Dundee* × *Early Blackhull*. GO-P129-GO.
142401. 326-7 G 40. *Kenya* × *Florence* × *Dundee* × *Wandilla* × *Early Blackhull*. GO.
142402. 469-71 G 40. *Kenya* × *Pusa* 4 × *Nabawa* × *Early Blackhull*. NG-GO.
142403. 767 G 40. *Kenya* × *Pusa* × *Nabawa* × *Ghurka* × *Early Blackhull*. GO-DO-GO.
142404. 142-3-4 G 40. *Kenya* × *Pusa* × *Nabawa* × *Ghurka* × *Early Blackhull*. G3-KO.
142405. 145-6-7 G 40. *Kenya* × *Pusa* × *Nabawa* × *Ghurka* × *Early Blackhull*. G1-KO.
142406. 454-5 G 40. *Kenya* × *Pusa* × *Nabawa* × *Ghurka* × *Early Blackhull*. G1-GO.
142407. 456-7 G 40. *Kenya* × *Pusa* × *Nabawa* × *Ghurka* × *Early Blackhull*. G2-GO.
142408. 458-9 G 40. *Kenya* × *Pusa* 4 × *Nabawa* × *Ghurka* × *Early Blackhull*. N4-GO.
142409. 561-2 G 40. *Marquillo* × *Waratah* × *Ford* × *Early Blackhull*. GO-P 22-GO.
142410. 741 G 40. *Marquillo* × *Waratah* × *Ford* × *Early Blackhull*. GO-P21-GO.
142411. 744 G 40. *Marquillo* × *Waratah* × *Ford* × *Early Blackhull*. GO-P36-GO.
142412. 472-3 G 40. *Marquillo* × *Waratah* × *Ford* × *Early Blackhull*. G1-GO.
142413. 478-9 G 40. *Marquillo* × *Waratah* × *Ford* × *Early Blackhull*. G4-GO.
142414. 481-2 G 40. *Marquillo* × *Waratah* × *Ford* × *Early Blackhull*. E1-GO.
142415. 485-6 G 40. *Marquillo* × *Waratah* × *Ford* × *Early Blackhull*. E4-GO.
142416. 494-5 G 40. *Marquillo* × *Waratah* × *Ford* × *Early Blackhull*. N3-GO.
142417. 558-9 G 40. *Marquillo* × *Waratah* × *Ford* × *Early Blackhull*. GO-P21-GO.
142418. 565-6 G 40. *Marquillo* × *Waratah* × *Ford* × *Early Blackhull*. GO-P36-GO.
142419. 657-8 G 40. *Tenmarq* × *Dundee*. F6-GO.

**142420 to 142429. SACCHARUM. Poaceae. Sugarcane.**

From Colombia. Seeds obtained from the Estación Agrícola Experimental, Palmira.  
Received November 5, 1941.

142420. E.P.C. 37 (24) × E.P.C. 17-72. 103-104-105-106-107-108-109-110-111  
 142421. E.P.C. 37 (24) × E.P.C. 20-00. 103-104-105-106-107-108-109-110-111  
 142422. E.P.C. 37 (24) × E.P.C. 75-61. 103-104-105-106-107-108-109-110-111  
 142423. E.P.C. 37 (24) × P.O.J. 28-78. 103-104-105-106-107-108-109-110-111  
 142424. Común × C.P. 27-108. 103-104-105-106-107-108-109-110-111  
 142425. Común × C.P. 31-517. 103-104-105-106-107-108-109-110-111  
 142426. Común × U.S. 16-94. 103-104-105-106-107-108-109-110-111  
 142427. P.O.J. 27-14 × E.P.C. 38 (1). 103-104-105-106-107-108-109-110-111  
 142428. P.O.J. 27-14 × E.P.C. 38 (9). 103-104-105-106-107-108-109-110-111  
 142429. P.O.J. 27-14 × C.P. 29-103. 103-104-105-106-107-108-109-110-111

**142430 to 142435. SACCHARUM. Poaceae.** **Sugarcane.**

From the Canal Zone. Seeds obtained from the Experiment Station, Summit. Received November 10, 1941.

142430. Caña Blanca × CP 1165. 103-104-105-106-107-108-109-110-111  
 142431. Caña Blanca × 28 N.G. 289. 103-104-105-106-107-108-109-110-111  
 142432. Caña Blanca × S. spontaneum Klaot. 103-104-105-106-107-108-109-110-111  
 142433. Caña Blanca × S. spontaneum Tobano. 103-104-105-106-107-108-109-110-111  
 142434. Molakai 5099 × N.H. 1. 103-104-105-106-107-108-109-110-111  
 142435. POJ 2883 × N.H. 1. 103-104-105-106-107-108-109-110-111

**142436 to 142443.**

From Peru. Seeds presented by the Peruvian Legation, Washington, D. C. Received November 3, 1941.

- 142436 to 142440. PHASEOLUS VULGARIS L. Fabaceae. **Common bean.**  
 142436. No. 1. Caballero (white). 103-104-105-106-107-108-109-110-111  
 142437. No. 2. Negro. 103-104-105-106-107-108-109-110-111  
 142438. No. 3. Canario (white). 103-104-105-106-107-108-109-110-111  
 142439. No. 4. Bayo. 103-104-105-106-107-108-109-110-111  
 142440. No. 5. "Panamito." 103-104-105-106-107-108-109-110-111

- 142441 and 142442. PISUM SATIVUM L. Fabaceae. **Pea.**  
 142441. No. 6. Alberja verde. 103-104-105-106-107-108-109-110-111  
 142442. No. 7. Alberjon. 103-104-105-106-107-108-109-110-111  
 142443. VIGNA SINENSIS (Torner) Savi. Fabaceae. **Cowpea.**  
 No. 8. Frejolito Castilla. 103-104-105-106-107-108-109-110-111

**142444 and 142445.**

From Egypt. Seeds presented by Alfred Bircher, Middle Egypt Botanic Station, El Saff, through F. G. Walsingham, Atkins Institution of the Arnold Arboretum, Cienfuegos, Cuba. Received November 4, 1941.

142444. CROTALARIA AGATIFLORA Schweinf. Fabaceae.

A tropical African leguminous herb that has large yellow flowers about 2 inches long and 1 inch across, and sword-shaped pods about 3 inches long, containing 15 to 20 seeds.

For previous introduction see 99819.

142445. MILLETTIA DURA Dunn. Fabaceae.

**142446.** PRUNUS ARMENIACA L. Amygdalaceae. **Apricot.**  
From Maryland. Tree presented by the Bountiful Ridge Nurseries, Princess Anne.  
Received November 17, 1941.  
*Mohr's apricot.*

**142447 to 142451.**

From the Union of South Africa. Seeds presented by the McGregor Museum, Kimberley. Received November 6, 1941.

**142447.** CITRULLUS COLOCYNTHIS (L.) Schrad. Cucurbitaceae. **Colocynth.**  
*Mokate.* From J. D. Knohl, Molepolole. A small melon, about the size of the *Kgême*, which grows wild in or near native cultivated patches. It is not eaten by human beings, but by cattle. The subglobose fruits are 3½ inches across; sometimes dried and used as a purgative.

For previous introduction see 141598.

**142448.** CITRULLUS NAUDINIANUS Hook. Cucurbitaceae.

*Marotshe* or *Makatane*. A wild watermelon with a perennial root, trailing, pubescent stems, and leaves like those of *Citrullus colocynthis*. It is cultivated as a valuable crop, as it supplies much-needed water and is used also as a vegetable cooked with meat.

For previous introduction see 92191.

**142449 and 142450.** CITRULLUS VULGARIS Schrad. Cucurbitaceae. **Watermelon.**

From J. D. Knohl, Molepolole.

**142449.** *Kafir*, white flesh.

**142450.** *Kafir*, pink flesh.

**142451.** SORGHUM VERTICILLIFLORUM (Steud.) Stapf. Poaceae.

From the banks of the Vaal River, in the Kimberley Division.

**142452 and 142453.** SACCHARUM. Poaceae. **Sugarcane.**

From the Canal Zone. Seeds obtained from Julius Matz, Canal Zone Experiment Gardens, Summit. Received November 12, 1941.

**142452.** *Caña Blanca* × *NH 1*.**142453.** *P.O.J. 2364* × *NH 1*.**142454.** CENTAUREA JACEA L. Asteraceae. **1**

From Europe. Seeds presented by Martin Bilon, Glenn Dale, Md. Received October 11, 1937. Numbered November 14, 1941.

*Violet-Red cornflower.*

**142455 to 142477.**

From Canada. Trees purchased from E. D. Smith & Sons, Winona, Ontario. Received November 14, 1941.

**142455 to 142466.** MALUS SYLVESTRIS Mill. Malaceae. **Apple.**

**142455.** *Bishop's Pippin.*

**142461.** *Lobo.*

**142456.** *Cranberry Pippin.*

**142462.** *Macoun.*

**142457.** *Early Red McIntosh.*

**142463.** *Scarlet Pippin.*

**142458.** *Fameuse.*

**142464.** *St. Lawrence Fall.*

**142459.** *Hume.*

**142465.** *St. Lawrence Winter.*

**142460.** *LaSalle.*

**142466.** *Secor.*

**142467 to 142469.** PRUNUS ARMENIACA L. Amygdalaceae.

**Apricot.**

**142467.** *Horvath.*

**142468. Rittenhouse.**

**142469. Shense.**

**142470. PRUNUS DOMESTICA L.**

**Plum.**

*Eickmeie.*

**142471 and 142472. PRUNUS CERASUS L.**

**Sour cherry.**

**142471. Chase.**

**142472. Orel No. 24.**

**142473 to 142476. PRUNUS AVIUM L.**

**Sweet cherry.**

**142473. Pelham.**

**142475. Vernon.**

**142474. Velvet.**

**142476. Victor.**

**142477. PYRUS COMMUNIS L. Malaceae.**

**Common pear.**

*Sudduth.*

**142478 to 142486. SACCHARUM. Poaceae.**

**Sugarcane.**

From the Philippine Islands. Cuttings presented by the University of the Philippines, College of Agriculture, Laguna. Received November 18, 1941.

**142478. Alunan.**

**142483. CAC 117.**

**142479. Luzon White.**

**142484. PSA 7.**

**142480. Negros Purple.**

**142485. PSA 14.**

**142481. Pampanga Red.**

**142486. 247 B.**

**142482. CAC 87.**

**142487. EHRETIA DICKSONI Hance. Boraginaceae.**

From California. Seeds collected by I. J. Condit, Citrus Experiment Station, Riverside. Received November 7, 1941.

From the Bard Estate, Oxnard, California, October 30, 1941.

**142488. DIOSPYROS TUTCHERI Dunn. Diospyraceae.**

From China. Seeds presented by the Botanic Gardens, Hong Kong, through F. G. Walsingham, Atkins Institution of the Arnold Arboretum, Cienfuegos, Cuba. Received November 13, 1941.

A small tree with rough bark, smooth elliptic acuminate leaves about 4 inches long, and globose fruits about 1 inch in diameter. Native to Hong Kong.

For previous introduction see 101534.

**142489. MUSSAENDA sp. Rubiaceae.**

From Maryland. Plants growing at the United States Plant Introduction Garden, Glenn Dale. Numbered November 19, 1941.

Plants raised from seeds collected by the Yunnan, China, Expedition of the Fan Memorial Institute, and presented by the Atkins Institution of the Arnold Arboretum, Cienfuegos, Cuba.

**142490. CAPSICUM FRUTESCENS L. Solanaceae.**

**Redpepper.**

From Florida. Seeds presented by W. Paul Phillips, Orlando. Received November 14, 1941.

*Squash pepper.*

**142491. GLYCINE MAX (L.) Merrill. Fabaceae.**

**Soybean.**

From Manchuria. Seeds purchased from L. Ptitsin Harbin. Received November 14, 1941.

*Kroochul.*

**142492. ARUNDINARIA SIMONI (Carr.) A. & C. Riviere. Poaceae.****Bamboo.**

From Florida. Plants presented by Mrs. W. G. Peckham, St. Cloud, through Julian Nally, Gotha. Numbered November 21, 1941.

This bamboo, a native of China, grows in this more vigorous form to 25 feet or more high in rich and reasonably moist soils. The leaves are narrower than those of metake (*Pseudosasa japonica*) and sometimes are quite slender. The culms are characterized by nonprominent nodes and moderately thick walls. They are reported to make exceptionally strong and durable fishing poles, besides being well suited to other uses.

**142493 to 142495. SACCHARUM. Poaceae.****Sugarcane.**

From the Canal Zone. Seeds presented by the Canal Zone Experimental Gardens, Summit. Received November 24, 1941.

**142493. Caña Blanca X Hinds Special.**

**142494. Cayana 10 X N.C. 117, Imp. 909.**

**142495. P.O.J. 2725 X D 74.**

**142496 to 142501. SACCHARUM. Poaceae.****Sugarcane.**

From Colombia. Seeds presented by the Estación Agrícola Experimental, Palmira. Received November 24, 1941.

**142496. Comín X CP 29-137.**

**142499. EPC 7131 X CP 36-134.**

**142497. Comín X CP 1161.**

**142500. EPC 4754 X US 1694.**

**142498. EPC 4722 X P 33-29.**

**142501. Rayada X US 1694.**

**142502. CITRUS AURANTIFOLIA X FORTUNELLA sp. Rutaceae.****Limequat.**

From Maryland. Plants growing at the United States Plant Introduction Garden, Glenn Dale. Numbered November 25, 1941.

Var. *Eustis*. C.P.B. 48798.

**142503 to 142534.**

From Iran. Seeds collected by Dr. Walter Koelz, agent, Bureau of Plant Industry, United States Department of Agriculture. Received November 26, 1941.

Unless otherwise mentioned these seeds were from the province of Azerbaijan.

**142503 to 142523. TRITICUM AESTIVUM L. Poaceae.****Common wheat.**

**142503. No. 7379. Gandum.** From Tabriz, October 29, 1940. Said to be irrigated.

**142504. No. 7388. Gandumideimi.** From Tabriz, October 29, 1940. Said to be irrigated; fall-sown.

**142505. No. 7418. Gandumi Bahari.** From Namin, November 6, 1940. Said to be irrigated; spring-sown.

**142506. No. 7419. Gandum.** From Namin, November, 1940. Said to be unirrigated; fall-sown.

**142507. No. 7441. Gandum.** From Ardebil, November 7, 1940. Said to be unirrigated; fall-sown. In some parts of Iran it is cut in spring and winter and used for fodder. It is thickly sown, and from the new shoots a crop is gathered, which accounts for the runt grains.

**142508. No. 7453. Gandum.** From Ardebil, November 7, 1940. Said to be fall-sown and irrigated.

**142509. No. 7465. Gandumisufed.** From Sarab, November 8, 1940. Said to be fall-sown and irrigated.

**142510. No. 7389. Gandumiale.** From Tabriz, October 29, 1940. Said to be irrigated.

142511. No. 7505. *Gandumi Bahari*. From Livan, November 15, 1940. Said to be spring-sown and unirrigated.

142512. No. 7508. *Gandum*. From Livan, November 17, 1940. Said to be fall-sown and unirrigated.

142513. No. 7558. *Gandumi Yazloq*. From Maragha, November 29, 1940. Said to be fall-sown and unirrigated.

142514. No. 7561. *Gandum*. From Maraghe, November 30, 1940. Said to be fall-sown and unirrigated.

142515. No. 7560. *Gandum*. From Maraghe, November 29, 1940. Said to be fall-sown and unirrigated.

142516. No. 7588. *Gandum*. From Sarybulagh, December 4, 1940. Said to be fall-sown and irrigated.

142517. No. 7669. *Gandum*. From Rezaieh, December 9, 1940. Said to be fall-sown and unirrigated.

142518. No. 7673. *Gandumi Zard*. From Rezaieh, December 9, 1940. Said to be spring-sown and irrigated.

142519. No. 7740. *Gandumi Bahari*. From Khoi, December 12, 1940. Said to be fall-sown and unirrigated.

142520. No. 7810. *Gandum*. From Hamadan, Irak-ajemi, December 22, 1940. Said to be fall-sown and unirrigated.

142521. No. 7894. *Gandum*. From Qasrishirin, Kermanshah, December 28, 1940. Said to be fall-sown and unirrigated.

142522. No. 7941. *Gandum*. From Brujird, Luristan, January 21, 1941. Said to be irrigated and fall-sown.

142523. No. 7981. *Gandumi Paizi*. From Imarat, Bakhtiari, February 16, 1941. Said to be fall-sown and unirrigated.

142524 to 142534. *ZEA MAYS L.* Poaceae. Corn.

142524. No. 7421. *Zaurat*. From Namin, November 6, 1940.

142525. No. 7527. *Zaurat*. From Saujbulagh, November 26, 1940.

142526. No. 7670. *Zaurat; andaniasp.* From Rezaieh, December 9, 1940.

142527. No. 7676. *Menzaira Zaurat*. From Rezaieh, December 9, 1940.

142528. No. 7677. *Zaurati Tehrani*. From Rezaieh, December 9, 1940.

142529. No. 7678. *Zaurati Shiri*. From Rezaieh, December 9, 1940.

142530. No. 7679. *Zauratisterilitch*. From Rezaieh, December 9, 1940.

142531. No. 7680. *Zauratiliménitch*. From Rezaieh, December 9, 1940.

142532. No. 7681. *Zauratibumi*. From Rezaieh, December 9, 1940.

142533. No. 7682. *Zauratibumi*. From Rezaieh, December 9, 1940. Said to be early.

142534. No. 7753. *Zaurat*. From Tabriz, December 15, 1940. Commonly popped; large tender kernel without center.

142535 to 142545. *MANGIFERA INDICA L.* Anacardiaceae. Mango.

From the Straits Settlements. Seeds purchased from R. E. Holttum, Director of Botanic Gardens, Singapore. Received November 26, 1941.

142535. *Acheh*.

142541. *Seri Kaya*.

142536. *Ayer*.

142542. *Stam*.

142537. *Cheti*.

142543. *Sourabaya*.

142538. *Mangga Besar*.

142544. *Telor*.

142539. *Mangga Kechil*.

142545. *Timun*.

142540. *Pisang*.

**142546 and 142547. SECHIUM EDULE** (Jacq.) Sw. (*Chayota edulis* Jacq.)

Cucurbitaceae. **Chayote.**

From Guatemala. Fruits collected by Dr. David Fairchild, Coconut Grove, Florida.

Received November 27, 1941.

**142546.** Small, smooth, dark-green fruits.

**142547.** Small, smooth, ivory fruits.

**142548 to 142578.**

From tropical America and tropical Asia. Collected by Dr. David Fairchild. Numbered in November 1941.

Originally received as seeds unless otherwise specified.

**142548 to 142550. ANNONA CHERIMOLA** Mill. Annonaceae. **Cherimoya.**

**142548.** No. 1031. From the Quindio River above Solento, Colombia, at 6,000 feet altitude, July 10, 1941. Fruit very large, dark green, with firm flesh of delicious flavor.

**142549.** No. 1050. From market, Villavicencio, Colombia, July 28, 1941. Fruit small, dark green.

**142550.** No. 1080. From Guayata Villa, Colombia, August 1941. Fruit large, dark green.

**142551. ASTROCARYUM STANDLEYANUM** Bailey. Phoenicaceae.

No. 1003. From Barro Colorado Island, Canal Zone, June 30, 1941. A spiny-trunked pinnate-leaved palm, 50 feet tall, known locally as the "Black Palm." The dull-red fruits, with juicy sweet flesh, are in clusters 2 feet long.

For previous introduction see 104683.

**142552. ATALANTIA CITROIDES** Pierre. Rutaceae.

No. 1013. From Summit, Canal Zone, July 1, 1941.

**142553. CAPSICUM FRUTESCENS** L. Solanaceae. **Redpepper.**

Received without data, July 1941.

**142554. CARICA CANDAMARCENSIS** Hook. f. Papayaceae.

No. 1038. From Colombia, July 12, 1941. The mountain papaya of the Andes, with small fruits 4 inches long, filled with a watery pulp.

For previous introduction see 111444.

**142555. CEREUS VARIABILIS** Pfeiffer. Cactaceae.

No. 1030. From the market, Bogotá, Colombia, July 17, 1941. A Brazilian cactus up to 12 feet high, with slender stems and branches creeping over rocks or clambering into trees. The edible yellow fruits contain translucent juicy pulp with a delicious flavor.

**142556. COSTUS** sp. Zingiberaceae.

No. 1065. From Villavicencio, Colombia, August 2, 1941. A species with showy white flowers about 3 inches across. The plant grows 6 feet tall in the shady edge of the jungle.

**142557. CRINUM DARIENSE** Woodson. Amaryllidaceae.

No. 1015. From El Valle de Anton, Panama, July 2, 1941. A handsome pink-flowered species. (Offsets.)

**142558. DATURA SANGUINEA** Ruiz and Pav. Solanaceae. **Red floripondio.**

No. 1067. From Colombia, August 2, 1941. A tree 20 feet high, with masses of pendent flowers several inches long.

**142559. EЛАEOCARPUS SERRATUS** L. Elaeocarpaceae.

No. 1002. From Summit, Canal Zone, June 30, 1941.

**142560. FLACOURTIA INERMIS Roxb.** Flacourtiaceae.

No. 1001. From Summit, Canal Zone, June 29, 1941. The *Lovi-lovi* of Ceylon. The brilliant red fruits, the size of cherries, are produced in immense quantities. They are very sour and are said to make excellent jelly and preserves.

For previous introduction see 104225.

**142561. INGA sp.** Mimosaceae.

No. 1012. From market, Barranquilla, Colombia, June 27, 1941. *Guama*. A handsome tree with large pods 2 feet long.

**142562. JESSENLIA POLYCARPA Karst.** Phoenicaceae.

No. 1056. From Villavicencio, Colombia, August 2, 1941.

**142563. MAURITIA MINOR Burret.** Phoenicaceae.

No. 1052. From Los Cerritos, Llanos Orientales, Colombia, July 22, 1941. A handsome fan-leaved palm 40 to 50 feet tall, with rather short leaves and dull-red fruits 2 inches long, in large clusters.

**142564. MIMUSOPS sp.** Sapotaceae.

No. 1008. From Summit, Canal Zone, June 30, 1941. An attractive tree, with thick gray-green leaves and numerous round, yellowish-green edible fruits.

**142565. OENOCARPUS sp.** Phoenicaceae.

No. 1057. From near Villavicencio, Colombia, August 2, 1941. *Pusuy*. A shade-loving palm, with dark-green pinnatisect leaves, 8 to 10 feet long, and round black fruits 1 inch in diameter, in clusters 2½ feet long.

**142566. PASSIFLORA LIGULARIS Juss.** Passifloraceae.

**Sweet granadilla.**

No. 1088. From market, Villavicencio, Colombia, September, 1941. *Granadilla*. The reddish-brown fruits, 2 inches in diameter, are of excellent flavor; the smooth shell does not shrivel when fruit ripens.

For previous introduction see 132615.

**142567. PELLICIERA RHIZOPHORAE Pl. and Triana.** Theaceae.

No. 1018. From near Paitilla Point, Panama, July 5, 1941.

**142568. RAVENALA GUYANENSIS Steud.** Musaceae.

No. 1059. From Villavicencio, Colombia, August 2, 1941. There are only two species of this genus, one in Madagascar and the other in tropical South America. This species is not so large as the Madagascar one, but it rises to a height of 25 feet, making a fanlike head. Its enormous flower spike is 9 feet long and as much as a man can carry. Unlike the Madagascar species, the seeds of which have a deep-blue aril, the seeds of this have an orange aril.

For previous introduction see 101083.

**142569. RENEALMIA sp.** Zingiberaceae.

No. 1046. From Villavicencio, Colombia, July 24, 1941. A species with spiny leaves 2 feet long. The flower stalk has 18 to 20 stiff horizontal branches and several deep dull-red bracts 2 inches long.

**142570. SERJANIA sp.** Sapindaceae.

No. 1090. From Villavicencio, Colombia, August 22, 1941. A shrubby vine with attractive pink fruits.

**142571. SWINGLEA GLUTINOSA (Blanco) Merrill.** Rutaceae.

No. 1005. From Summit, Canal Zone, June 1941. A small spiny tree, native to the Philippine Islands, with trifoliolate leaves, small clusters of rather large white flowers, and oblong, hard-shelled fruits. It is used as a stock for commercial citrus varieties.

For previous introduction see 131248.

## 142572. CAESALPINIA SPINOSA (Molina) Kuntze. Caesalpiniaceae.

No. 1118. From road to Tunja, Colombia, September 21, 1941. *Tardio*. 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 141810.

## 142573. TERMINALIA EDULIS Blanco. Combretaceae.

No. 1011. From Summit, Canal Zone, July 1, 1941. A large spreading tree that bears an enormous crop of purple fruits of fair flavor.

For previous introduction see 81053.

## 142574. (Undetermined).

No. 3404. From Doembaya, Gorontola, Celebes, Dutch East Indies, March 8, 1940.

## 142575. (Undetermined).

No. 367. From Batjan Island, Moluccas, Dutch East Indies, May 24, 1940. A shade-loving tree, 10 feet high, with long leaves.

## 142576. (Undetermined).

No. 378. From the Dutch East Indies, May 1940.

## 142577. LICUALA SPINOSA Thunb. Phoenicaceae. Palm.

No. 434. *Balabasas*. From Puerto Princesa, Palawan, Philippine Islands, May 25, 1940. An erect palm with small fan-shaped leaves.

For previous introduction see 93411.

## 142578. ALLOPLECTUS sp. Gesneriaceae.

No. 1049. From Villavicencio, Colombia, July 28, 1941. A succulent shrub, growing in shade, with ovate-serrate leaves, up to 6 inches long, olive green above and purple red beneath. The wine-red flowers, 2 inches long, are in terminal clusters. The soft purple fruits are  $\frac{1}{2}$  inch long.

## 142579 to 142600.

From Alaska. Seeds purchased from Mrs. H. B. Looff, Alitak, Kodiak Island. Received November 14, 1941.

## 142579. ANDROMEDA POLYPOLEA L. Ericaceae.

## 142580. ANTEENNARIA MONOCEPHALA DC. Asteraceae.

## 142581. ARNICA CHAMISSONES Less. Asteraceae.

## 142582. ARNICA LATIFOLIA Bongard. Asteraceae.

## 142583. ARNICA LESSINGII Greene. Asteraceae.

## 142584. CERASTIUM REERINGIANUM var. GRANDIFLORUM (Fenzl) Hultén. Silenaceae.

## 142585. CORNUS SUECICA L. Cornaceae.

A dwarf dogwood resembling *Cornus canadensis*. The beautiful white bracts make it very attractive.

For previous introduction see 69355.

## 142586. EPILOBIUM BONGARDI Hausskn. Onagraceae.

## 142587. EPILOBIUM LATIFOLIUM L. Onagraceae.

## 142588. FRITILLARYA CAMSCHATCENSIS (L.) Ker. Liliaceae.

## 142589. GERANIUM OREGANUM Howell. Geraniaceae.

142590. HIERACIUM TRISTE Spreng. Cichoriaceae.
142591. IRIS SETOSA Link. Iridaceae.
- 142592 and 142593. LUPINUS NOOTKATENSIS Sims. Fabaceae.
142592. Blue.
142593. Pink.
142594. PARNASSIA sp. Saxifragaceae.
142595. POLEMONIUM sp. Polemoniaceae.
142596. RANUNCULUS HEDERACEUS L. Ranunculaceae.
142597. RHODODENDRON CAMTSCHATICUM Pall. Ericaceae.
142598. SPIRAEA LUCIDA Douglas. Rosaceae.

A low shrub found at low elevations in the mountains of the western United States. It reaches a height of about 24 inches, has small white flowers and coarsely serrate leaves.

For previous introduction see 43920.

142599. VIOLA LANGSDORFII Ging. Violaceae.

142600. VIOLA SIMULATA M. S. Baker. Violaceae.

#### 142601 to 142687.

From Guatemala. Seeds collected by Dr. F. Webster McBryde, University of California. Received November 28, 1941.

142601. CAJANUS CAJAN (L.) Druce. Fabaceae. **Pigeonpea.**  
No. (41) 9021. From Agua Blanca.
142602. CANAVALIA ENSIFORMIS (L.) DC. Fabaceae. **Jackbean.**  
No. (39) 8977. From Santiago Atitlan.
142603. CICER ARIETINUM L. Fabaceae. **Chickpea.**  
No. (54) 8826. From San Lorenzo.
- 142604 and 142605. PHASEOLUS CALCARATUS Roxb. Fabaceae. **Rice bean.**  
142604. No. (62) 8914. From Santa Lucia Cotz.
142605. No. (43) 8873. From Camotan.
142606. PHASEOLUS COCCINEUS L. Fabaceae. **Scarlet runner bean.**  
No. (32) 8906. From San Juan Ostuncalco. A large white variety.
- 142607 to 142622. PHASEOLUS LUNATUS L. Fabaceae. **Lima bean.**
142607. No. (59) 8997. *Pintilla*. From San Bernardino. Spotted tan, yellow, and black.
142608. No. (59) 8998. *Ixtapacál Bolonille*. From San Bernardino. Small, black.
142609. No. (59) 8996. *Ixtapacál*. From San Bernardino. Flat, black.
142610. No. (61) 8993-4. From San Sebastian. Small, red-spotted.
142611. No. (61) 8989-90. *Ixpangue*. From San Sebastian. Small, pink.
142612. No. (61) 8995. From San Sebastian. Small, white.
142613. No. (62) 9006-7. *Pilen Piloito*. From Santa Lucia Cotz. Small, round, red.
142614. No. (62) 9005, 9008. *Ixtapacál (Castapacal)*. From Santa Lucia Cotz. Black, flat.
142615. No. (57) 8986. *Pilen*. From Chicacao. Red and black.
142616. No. (17) 8985. From Santa Ana. Small, black.

142617. No. (20). *Ixtapacál*. From Rabinal. Small, black.
142618. No. (62) 9004. *Ixtapacál Pinta*. From Santa Lucia Cotzal. Large, red, flat.
142619. No. (45) 9014. *Furuna Negra*. From Cruz de Villeda. Small, black.
142620. No. (58) 9000-1. *Ixtapacál*. From San Antonio. Flat, black.
142621. No. (61) 8992. *Ixtapacál Pintilla*. From San Sebastian. Large, red, with black spots.
142622. No. (61) 9016-19. *Ixtapacál Grande Colorado*. From San Sebastian. Large, red, and black.

**142623 to 142683. PHASEOLUS VULGARIS L. Fabaceae. Common bean.**

142623. No. (4) 8967. From Huehuetenango. Black, dry season variety.
142624. No. (4) 8969. From Huehuetenango. Large, black.
142625. No. (5) 8838. From Jacaltenango. Black, milpa bean.
142626. No. (5) 8840. *Pascua*. From Jacaltenango. Black.
142627. No. (5) 8843. From Jacaltenango. Red, milpa bean.
142628. No. (5) 8844. From Jacaltenango. White, milpa bean.
142629. No. (5) 8846. *De los Santos*. From Jacaltenango. Red.
142630. No. (5) 8847. *Pascua, Cuilqueño*. From Jacaltenango. Black, milpa bean.
142631. No. (7) 8937. *Siete Caldos*. From Neuton. Small, black.
142632. No. (8) 8961. *Veraho*. From Petatan. Black.
142633. No. (1) 8835. From Aquacatan. White.
142634. No. (2) 8947. *Aluvia*. From Barillas. Tan.
142635. No. (3) 8829. From Chalchitan. Black bush bean.
142636. No. (9) 8953. *Pascua de Año*. From San Antonio Huista. Black.
142637. No. (12) 8958. From San Juan Ixcoy. Large, black.
142638. No. (16) 8949. From San Sebastian, Huehuetenango. Black bush bean.
142639. No. (17) 8934. *Pinto*. From Santa Ana Huista. Black and red-spotted bush bean.
142640. No. (17) 8919. From Santa Ana Huista. Black.
142641. No. (17) 8935. From Santa Ana Huista. Black pole bean of short-growing variety. Said to mature in one month.
142642. No. (17) 8936. From Santa Ana Huista. Black pole (milpa) bean.
142643. No. (20) 8933. From Rabinal. Black bush bean.
142644. No. (21) 8874. From San Juan Chamelco. Small, dull red.
142645. No. (24) 8945. From Santo Tomas Chichicastenango. Black-and-white.
142646. No. (27) 8869. From Cantel. Black milpa bean.
142647. No. (28). From Momostenango. Brown.
142648. No. (30) 8879. From San Cristobal. Bright red.
142649. No. (32) 8903. From San Juan. Black.
142650. No. (32) 8905. From San Juan. Round, red.
142651. No. (33) 8854. From San Martin Sacatepequez. Large, brown.
142652. No. (33) 8866. From Nahualtá. Black, milpa bean.
142653. No. (35) 8864. From Nahualtá. White.

142654. No. (35) 8865. From Náhuatlá. Large, red.
142655. No. (38) 8895. From Santa Lucía. Large, black.
142656. No. (40) 8886. *Bola*. From Sololá. Roundish, black.
142657. No. (41) 8964. From Huehuetenango. Black bush bean.
142658. No. (3) 8828. From Chalchitan. Large, black.
142659. No. (3) 8832. From Chalchitan. Black milpa bean.
142660. No. (3) 8833. From Chalchitan. Red pole bean.
142661. No. (40) 8887. From Sololá. White milpa bean.
142662. No. (41) 8981. From Agua Blanca. Black bush bean.
142663. No. (45) 8890. From Cruz de Villeda. White.
142664. No. (45) 8891. From Cruz de Villeda. Small, red.
142665. No. (47) 8983. From Zapotitlán. White.
142666. No. (45) 9015. *Furuna blanca*. From Cruz de Villeda. Small, white roundish.
142667. No. (48) 8856. From Antigua. Large, spotted.
142668. No. (50) 8827. From Pastores. Tan.
142669. No. (53) 8923. From San José, Poaquil. White.
142670. No. (56) 8871. From San Cruz Balanya. Black bush bean.
142671. No. (57) 8924. From Chicacao. Red.
142672. No. (57) 8925. From Chicacao. White.
142673. No. (57) 8926. From Chicacao. Black bush bean.
142674. No. (57) 8927. From Chicacao. Black.
142675. No. (58) 8907. From San Antonio. Black and mottled.
142676. No. (58) 9002. From San Antonio. Small, round, red.
142677. No. (59) 8909. From San Bernardino. Black pole bean.
142678. No. (59) 8911. From San Bernardino. Black pole bean.
142679. No. (59) 8999. *Izcumita*. From San Bernardino. Small, round, red and black.
142680. No. (61) 8920. From San Sebastián. Black pole bean.
142681. No. (62) 8913. From Santa Lucía Cotz. Yellow.
142682. No. (40) 8885. From Sololá (market). Long-kidney bean.
142683. No. (5) 8839. *De los Santos*. From Jacaltenango. Black.
- 142684 and 142685. *PÍSUM SATIVUM L.* Fabaceae. Pea.
142684. No. (52) 9093. Arveja. From San Juan.
142685. No. (40). From Sololá.
142686. *VIGNA SINENSIS* (Turner) Savi. Fabaceae. Cowpea.
- No. (62) 8915. From Santa Lucía Cotz. Brown-spotted.
142687. *VIGNA SESQUIPEDALIS* (L.) Fruwirth. Fabaceae. Asparagus bean.
- No. (59) 8910. *Frijol de Espana*. From San Bernardino. Black cowpea.

**142688 and 142689. SACCHARUM. Poaceae. Sugarcane.**

From the Canal Zone. Seeds presented by the Experimental Gardens, Summit. Received December 1, 1941.

142688. *Caña Blanca X 28 NG 218*.

142689. *Caña Blanca X Black Fiji*.

**142690. WITHANIA SOMNIFERA (L.) Dunal.** Solanaceae.

From Florida. Seeds presented by Miss Lisa von Borowsky, Brooksville. Received December 8, 1941.

An erect much-branched shrub with round stems 3 to 4 feet high, native to tropical Africa and India. The oblong to obovate slightly sinuate leaves are 2 to 3 inches long, and the small flowers, in auxillary clusters, are followed by globose berrylike fruits  $\frac{1}{4}$  inch in diameter, surrounded by the inflated calyx. In India the powdered fruit is used as a vegetable rennet.

For previous introduction see 100952.

**142691. ORYZA SATIVA L.** Poaceae. **Rice.**

From India. Seeds presented by J. W. Grant, Rice Research Officer, Rangoon, Burma. Received December 12, 1941.

*Paddy rice, D 29-166.*

**142692 to 142779.**

From Mexico. Seeds collected by Dr. F. Webster McBryde, Collaborator, Bureau of Plant Industry, United States Department of Agriculture. Received December 1, 1941.

**142692. BRASSICA OLERACEA var. CAPITATA L.** Brassicaceae. **Cabbage.**

*Curix or Col.* From San Antonio Ocotlán, Oaxaca.

**142693. VIGNA SINENSIS (Torner) Savi.** Fabaceae. **Cowpea.**

*Frijol.* From Ocotlán, Oaxaca. Small tan bean.

**142694. CANAVALIA ENSIFORMIS (L.) DC.** Fabaceae. **Jackbean.**

*Ayocote.* From Ocotlán, Oaxaca.

**142695 and 142696. CITRULLUS VULGARIS Schrad.** Cucurbitaceae. **Watermelon.**

From Ocotlán, Oaxaca.

**142697 to 142700. LYCOPERSICON ESCULENTUM Mill.** Solanaceae. **Tomato.**

142697. From Ocotlán, Oaxaca. Ripens in about  $3\frac{1}{2}$  months from seed.

142698. From Simatlán, Oaxaca.

142699. From Ocotlán, Oaxaca.

142700. From Telixtlahuaca, Oaxaca.

**142701 to 142703. PHASEOLUS COCCINEUS L.** Fabaceae. **Scarlet runner bean.**

142701. From the Valley of Mexico. Large purple bean.

142702. *Botil.* From Huixtan, Chiapas. Large purple bean.

142703. From Teneipa, Chiapas.

**142704. PHASEOLUS LUNATUS L.** Fabaceae. **Lima bean.**

From Tuxtla Gutierrez, Chiapas. Gray lima bean.

**142705 to 142772. PHASEOLUS VULGARIS L.** Fabaceae. **Common bean.**

142705. *Garbanzillo.* From Guadalajara. Small greenish bean.

142706. From Cuilapa, Guerrero. Giant gray bean.

142707. From Mexico City.

142708. *Flor de Mayo.* From Mexico City. Pink and tan.

142709. From Morelos. Tan bean.

142710. *Campuchino.* From Valley of Mexico. Tan spotted bean.

142711. *Piloy.* From Santo Tomas, Chichicastenango. Large red butter bean.

142712. *Frijol Bolino.* From Ocotlán. Round black milpa bean.

142713. *Canario.* From Queretaro, Guerrero. Small, round, tan bean.
142714. *Palacio.* From Queretaro. Large, buff.
142715. *Paraleña.* From Veracruz.
142716. From Agua de León, Chiapas. Large black kidney bean.
142717. *Botil.* From Chamula, Chiapas. Large purple bean.
142718. From Chiapa, Chiapas. Small, pink kidney bean.
142719. *Milpa.* From Huixtan, Chiapas. Black bean.
142720. *Frijol Bayo.* From Huixtan, Chiapas. Tan-spotted bean.
142721. From Huixtan, Chiapas. Round, white kidney bean.
142722. From Huixtan, Chiapas. Yellow kidney bean.
142723. From Huixtan, Chiapas. Black bush bean.
142724. *Botil.* From Ixtapa, Chiapas.
142725. From Miltontic, Chiapas. Black bush bean; short season; good as green bean.
142726. From Mitontic, Chiapas. Red bush bean; short season; good as green bean.
142727. *Botil.* From Mitontic, Chiapas. Large tan bean.
142728. *Botil.* From Miltontic, Chiapas. Large purple bean.
142729. *Rosadito.* From Morelos. Small, pink kidney bean.
142730. From San Pedro Chenalho, Chiapas. Small, black bush bean; good as green bean.
142731. From San Andrés, Chiapas. Small, red kidney bean.
142732. From San Cristóbal, Chiapas. Cat bean.
142733. *Botil.* From San Pedro Chenalho, Chiapas. Giant beans, "perennial" 6 to 7 years.
142734. *Frijol. Pinto.* From San Pedro Chenalho, Chiapas. Pole bean, brown and black-spotted.
142735. *Frijol bolito.* From Sinacantán, Chiapas.
142736. From Tenejapa, Chiapas. Mixed varieties.
142737. From Tenejapa, Chiapas. Tan beans.
142738. *Botil.* Giant purple kidney bean.
142739. From Tenejapa, Chiapas. Red bean.
142740. From Tenejapa, Chiapas. Black bean.
142741. From Teopisca, Chiapas. Small, pink kidney bean.
142742. From Tuxtla Gutierrez, Chiapas. Black bush bean.
142743. *Aluvia.* From Oaxaca. Large white bean.
142744. *Frijol Grueso.* From Cacolote (Mije), Oaxaca. Large, black and variegated kidney bean.
142745. *Cuarenteño.* From Capulalpan, Oaxaca. Tan bean especially good as a green bean.
142746. *Delgado.* From Etla, Oaxaca. Black bean.
142747. *Guisumil.* From Etla, Oaxaca.
142748. *Chato.* From Miahuatlan, Oaxaca.
142749. *Frijol de Monte.* From Mije, Oaxaca. Grows wild.
142750. *Delgado.* From Mitla, Oaxaca. Black bean.

142751. *Delgado*. From Ocotlán de Morelos, Oaxaca. Black bean.
142752. From Natividad, Oaxaca. Brown and red beans with red pod.
142753. *Frijol Cazumil*. From Natividad, Oaxaca. Pole-bean in mixed colors.
142754. From Natividad, Oaxaca. Tan-pink beans.
142755. From Nochistlán, Oaxaca. Black pole beans.
142756. *Delgado*. From Nochistlán, Oaxaca. Black bean.
142757. From Ocotlán de Morelos, Oaxaca. White bean.
142758. *Viságou*. From Ocotlán de Morelos, Oaxaca. Black bean in milpa, and eaten especially in purple pod.
142759. *Tempralero*. From Ocotlán de Morelos, Oaxaca. Early black bean.
142760. *Frijol Machete*. From Ocotlán de Morelos, Oaxaca.
142761. From Simatlán, Oaxaca. Giant gray bean.
142762. *Grueso*. From Simatlán, Oaxaca. Black bean.
142763. *Frijol Negro Delgado*. From Simatlán, Oaxaca. Black bean.
142764. From Totolapan, Oaxaca. Red bush bean.
142765. *Coyuch*. From La Cienaga, Oaxaca. Brown string bean, especially good as green bean.
142766. *Frijol Amarillo*. From Tlacolula, Oaxaca. Small, yellow kidney bean.
142767. *Delgado*. From Santa María Axumpa, Oaxaca. Black bean.
142768. *Frijol Blanco Delgado*. From San Miguel Minas. Small white bean.
142769. From Oaxaca. Giant gray bean.
142770. *Frijol Chibo*. From San Miguel Minas, Oaxaca. Black bean.
142771. From Oaxaca. Red bean with red pod.
142772. *Frijol Amarillo Grueso*. From San Miguel Minas. Yellow bean.

142773 to 142777. *PISUM SATIVUM* L. Fabaceae. Pea.

142773. From Tenejapa, Chiapas. Green pea.

142774. From San Pedro Chenalho, Chiapas.

142775. *Alberga*. From Ocotlán, Oaxaca. Green pea.

142776. From San Andrés, Chiapas. Green pea.

142777. From Nochistlán, Oaxaca. Green pea.

142778. *VICIA FABA* L. Fabaceae. Broadbean.

From Ocotlán, Oaxaca.

142779. *VIGNA SINENSIS* (Torner) Savi. Fabaceae. Cowpea.

*Cuarentana*. From Tuxtla Gutierrez, Chiapas. Brown-spotted cowpea requiring 40 days to mature.

### 142780 to 142932.

From Iran. Seeds collected by Dr. Walter Koelz, Tehran. Received December 3, 1941.

142780 to 142787. *ABELMOSCHUS ESCULENTUS* (L.) Moench. Malvaceae. Okra.

142780. *Bamia*. No. 7363. From Tabriz, Azerbaijan, October 28, 1940. Long fruits.

142781. *Bamia*. No. 7609. From Saugbulagh, Azerbaijan, December 4, 1940.

142782. *Bamia*. No. 7630. From Rezaieh, Azerbaijan, December 8, 1940.

142783. *Bamia*. No. 7725. From Khai, Azerbaijan, December 12, 1940.

142784. *Bamia*. No. 7794. From Hamadan, December 22, 1940.

142785. *Bamia*. No. 7841. From Kermanshah, December 24, 1940.

142786. *Bamia*. No. 7881. From Qasrishirin, Kermanshah, December 28, 1940. Common in gardens. Stalks are branched to 7 feet, with pods 6 inches long when ripe.

142787. *Bamia*. No. 7942. From Brujird, Luristan, January 21, 1941.

142788 to 142796. *ALLIUM CEPA* L. Liliaceae. Onion.

*Piyaz* is the vernacular name for onion in Iran.

142788. No. 7444. From Ardebil, Azerbaijan, November 7, 1940. Semiglobose, brown red, crisp, and not too pungent.

142789. No. 7544. From Maraghe, Azerbaijan, November 28, 1940. Sub-globose, brownish red and yellow; tender, but rather strong.

142790. No. 7619. From Rezaieh, Azerbaijan, December 7, 1940. Semiflat, wine-colored, tender, and rather strong.

142791. No. 7729. From Khai, Azerbaijan, December 12, 1940. Semiglobose, wine-colored, tender, and fairly hot.

142792. No. 7758. From Zenjan, Khamseh, December 18, 1940. Flat, yellow, pale red, up to 4 inches in diameter, and tender and mild. Said to grow in hot climates.

142793. No. 7797. From Hamadan, December 22, 1940. Small, subglobose, white, yellow, and red, and of ordinary quality.

142794. No. 7848. From Kermanshah, December 24, 1940. Semiflat, red, white, yellow, and of fair quality.

142795. No. 7893. From Qasrishirin, Kermanshah, December 28, 1940. Sub-globose, white, up to 2½ inches in diameter, has 2-leaved seedlings, and rather strong.

142796. No. 7951. From Brujird, Luristan, January 21, 1941. Flat, white and red; of ordinary quality.

142797 to 142807. *ALLIUM PORRUM* L. Liliaceae. Leek.

Nos. 142797 and 142798 were collected in Tabriz, Azerbaijan, October 28, 1940.

142797. No. 7354. *Gondona*.

142798. No. 7368. Flat and globose, brown red; tender but strong.

142799. No. 7450. *Tare*. From Ardebil, Azerbaijan, November 7, 1940.

142800. No. 7493. *Tare*. From Tabriz, Azerbaijan, November 12, 1940. Leaves cut green for flavoring. Eaten also as green onions.

142801. No. 7555. *Tare*. From Maraghe, Azerbaijan, December 29, 1940. Leaves used as a relish.

142802. No. 7616. *Tare*. From Rezaieh, Azerbaijan, December 7, 1940. Eaten raw as a relish.

142803. No. 7723. *Tare*. From Khai, Azerbaijan, December 12, 1940. Used as green onions.

142804. No. 7782. *Gondona*. From Hamadan, December 21, 1940. Leaves eaten green.

142805. No. 7843. *Tare*. From Kermanshah, December 24, 1940. Leaves eaten green as a relish.

142806. No. 7892. *Gondona*. From Qasrishirin, Kermanshah, December 28, 1940.

142807. No. 7955. *Tare*. From Brujird, Luristan, January 21, 1941.

**142808 to 142823. BETA VULGARIS L. Chenopodiaceae. Common beet.**

*Choghondar* is the vernacular name for the beet in Iran.

Nos. 142808 and 142809 were collected in Tabriz, Azerbaijan, October 28, 1940.

**142808.** No. 7352.

**142809.** No. 7356.

**142810.** No. 7416. From Namin, Azerbaijan, November 6, 1940. Globose, yellow, exceptionally sweet, and tender. Grows in warm rainy climate.

**142811.** No. 7428. From Ardebil, Azerbaijan, November 7, 1940. Flat, globose, yellow or red purple. Inside yellow to white, no fiber, and good sugar content and flavor.

**142812.** No. 7458. From Sarab, Azerbaijan, November 8, 1940. Flat, orange to carmine, handsome, white inside, sweet, and of good flavor.

**142813.** No. 7543. From Maraghe, Azerbaijan, November 28, 1940.

**142814.** No. 7565. From Saujbaulagh, Azerbaijan, November 26, 1940. Said to be garden beets.

**142815.** No. 7587. From Saujbaulagh, Azerbaijan, December 4, 1940. White, long-pointed sugar beets.

**142816.** No. 7640. From Rezaieh, Azerbaijan, December 8, 1940. Semiglobose, yellow and red purple, sweet, and no fiber.

**142817.** No. 7720. From Khai, Azerbaijan, December 12, 1940. White, elongated, sugar type.

**142818.** No. 7759. From Zenjan, Khamseh, December 18, 1940. Red purple and flat.

Nos. 142819 and 142820 were collected in Hamadan, December 21, 1940.

**142819.** No. 7785. Carrot-shaped, deep red, and said to be imported.

**142820.** No. 7787. Semiglobose, yellow to red purple.

**142821.** No. 7850. From Kermanshah, December 25, 1940. Subglobose, red purple and yellow.

**142822.** No. 7879. From Qasrishirin, Kermanshah, December 28, 1940.

**142823.** No. 7965. From Brujird, Luristan, January 21, 1941. One foot wide, flattened, red purple or yellow, inside white and sometimes red purple, tender, with fiber, and sweet.

**142824 to 142841. CAPSICUM FRUTESCENS L. Solanaceae. Redpepper.**

*Filfil* is the common vernacular name for the redpepper in Iran.

**142824.** No. 7331. From Tabriz, Azerbaijan, October 27, 1940. Bullnose, 3 inches long, scarlet, and sweet.

**142825.** No. 7362. *Fili farangi*. From Tabriz, Azerbaijan, October 28, 1940. Seeds hot; said to be introduced.

**142826.** No. 7400. From Tabriz, Azerbaijan, October 31, 1940. Fruit rounded,  $2\frac{1}{2}$  inches in diameter, scarlet, seeds sweet.

**142827.** No. 7401. From Tabriz, Azerbaijan, October 31, 1940. Fruit pointed, 4 by 2 inches at base, scarlet, sweet, and mildly pungent.

**142828.** No. 7413. From Ardebil, Azerbaijan, November 2, 1940. Fruit pointed, 1 by 3 inches at base, crimson, and hot.

**142829.** No. 7448. From Ardebil, Azerbaijan, November 7, 1940. Green, pointed, 2 inches long, and hot.

**142830.** No. 7512. From Tabriz, Azerbaijan, November 20, 1940. Fruit pointed, 2 inches long, scarlet, and hot.

**142831.** No. 7513. From Tabriz, Azerbaijan, November 20, 1940. Fruit bull-nosed, 4 inches long, crimson; sweet with hot seeds.

142832. No. 7546. From Maraghe, Azerbaijan, November 28, 1940. Fruit tapered, scarlet to crimson, sweet to mild flesh, and hot seeds.
142833. No. 7598. From Rezaieh, Azerbaijan, December 6, 1940. Fruits elongated, bullnosed, 6 by 3 inches at base, scarlet, sweet, tender flesh, and hot seeds.
142834. No. 7618. *Filifli Kai*. From Rezaieh, Azerbaijan, December 7, 1940. Large and red.
142835. No. 7620. From Rezaieh, Azerbaijan, December 7, 1940. Small, but not pungent.
142836. No. 7719. From Khai, Azerbaijan, December 11, 1940. Tapered, blunt-tipped, flesh sweet, and seeds pungent.
142837. No. 7728. From Khai, Azerbaijan, December 12, 1940.
142838. No. 7795. From Hamadan, December 22, 1940.
142839. No. 7839. From Kermanshah, December 24, 1940.
142840. No. 7847. From Kermanshah, December 24, 1940. Crimson, pungent.
142841. No. 7964. From Brujird, Luristan, January 21, 1941. Not pungent.

**142842 to 142845. CICER ARRIETINUM L. Fabaceae. Chickpea.**

*Nakhud* is the vernacular name for chickpea in Iran.

142842. No. 7326. From Tabriz, Azerbaijan, October 27, 1940. Food crop.

142843. No. 7435. From Ardebil, Azerbaijan, November 7, 1940. Unirrigated food crop.

142844. No. 7736. From Khai, Azerbaijan, December 12, 1940. Food crop.

142845. No. 7932. From Brujird, Luristan, January 20, 1940.

**142846 to 142861. DAUCUS CAROTA L. Apiaceae. Carrot.**

142846. No. 7355. *Zardakifaranga*. From Tabriz, Azerbaijan, October 28, 1940. Long, smooth, and yellow, orange, or purple black.

142847. No. 7374. *Zardakisija*. From Tabriz, Azerbaijan, October 29, 1940. Long, smooth, and purple black.

142848. No. 7396. *Zardakizard*. From Tabriz, Azerbaijan, October 30, 1940. Long, smooth, and yellow.

142849. No. 7442. *Zardak*. From Ardebil, Azerbaijan, November 7, 1940. Purple black, red purple, or pale yellow.

142850. No. 7461. *Gajar*. From Sarab, Azerbaijan, November 8, 1940. Long, smooth, black purple or pale yellow, of excellent quality.

142851. No. 7522. From Maraghe, Azerbaijan, November 26, 1940. Wild, growing in orchard.

142852. No. 7556. *Zardak*. From Maraghe, Azerbaijan, November 29, 1940. Long, smooth, yellow, red purple or purple black, and of good quality.

142853. No. 7607. *Havij*. From Saujbaulagh, Azerbaijan, December 4, 1940. Yellow or red purple, tender, and sweet.

142854. No. 7622. *Havij*. From Rezaieh, Azerbaijan, December 8, 1940. Long, red purple or yellow, tender, and fairly sweet.

142855. No. 7726. *Zardak*. No. 7726. From Khai, Azerbaijan, December 12, 1940. Very tender, even when 3 inches through at top, pale yellow, without fiber, and fairly sweet.

142856. No. 7784. *Gajon Farangi*. From Hamadan, December 21, 1940. Short and orange.

142857. No. 7805. *Zardak*. From Hamadan, December 22, 1940. Long, tapered, smooth, and yellow; texture hard, low in sugar.

142858. No. 7857. *Havij Buza*. From Kermanshah, December 25, 1940. Black, red purple, yellow, tender, and without fiber even when 2½ inches through; tapering and well-formed, with a low sugar content.

142859. No. 7858. *Havij Farangi*. From Kermanshah, December 25, 1940. Said to be introduced. Orange and tender, but of lower sugar content than native varieties.

142860. No. 7878. *Havij*. From Qasrishirin, Kermanshah, December 28, 1940.

142861. No. 7948. *Zardak*. From Brujird, Luristan, January 21, 1941. Yellow, red purple, black purple, tender; but lower than usual in sugar.

142862. DAUCUS sp.

No. 7318. From Tharibdash, Azerbaijan, October 25, 1940. An annual steppe plant growing on low mountains.

142863 to 142872. LACTUCA SATIVA L. Cichoriaceae.

Garden lettuce.

*Kahu* is the vernacular name for lettuce in Iran.

142863. No. 7333. From Tabriz, Azerbaijan, October 27, 1940.

142864. No. 7371. From Tabriz, Azerbaijan, October 29, 1940. Spring lettuce.

142865. No. 7446. From Ardebil, Azerbaijan, November 7, 1940.

142866. No. 7631. From Rezaieh, Azerbaijan, December 8, 1940.

142867. No. 7737. From Khai, Azerbaijan, December 12, 1940.

142868. No. 7780. From Hamadan, December 21, 1940.

142869. No. 7845. From Kermanshah, December 24, 1940. Loose and long-leaved.

142870. No. 7882. From Qasrishirin, Kermanshah, December 28, 1940.

142871. No. 7933. From Brujird, Luristan, January 20, 1941. Longleaved type.

142872. No. 7943. From Brujird, Luristan, January 21, 1941.

142873 to 142882. LYCOPERSICON ESCULENTUM Mill. Solanaceae.

Tomato.

*Gojefarangi* appears to be the vernacular name for the tomato in Iran.

142873. No. 7348. From Tabriz, Azerbaijan, October 28, 1940. Subglobose, very firm, with small seed pockets.

142874. No. 7358. From Tabriz, Azerbaijan, October 28, 1940. Red and flat, up to 3 inches in diameter.

142875. No. 7426. From Ardebil, Azerbaijan, November 7, 1940. Red, flat, up to 2 inches in diameter.

142876. No. 7550. From Maraghe, Azerbaijan, November 29, 1940. Red, flat, up to 3 inches in diameter.

142877. No. 7629. From Rezaieh, Azerbaijan, December 8, 1940. Flat, red, to 4 inches.

142878. No. 7724. From Khai, Azerbaijan, December 12, 1940. Yellow and red, flat to 2½ inches.

142879. No. 7789. From Hamadan, December 22, 1940. Mild summer.

142880. No. 7846. From Kermanshah, December 24, 1940.

142881. No. 7883. From Qasrishirin, Kermanshah, December 28, 1940. Flat, red, runty, but of fine flavor.

142882. No. 7962. From Brujird, Luristan, January 21, 1941. Mild summer.

142883 to 142904. PHASEOLUS VULGARIS L. Fabaceae.

Common bean.

*Loba* is the vernacular name for the common bean in Iran.

142883. No. 7377. *Lobiaesufed*. From Tabriz, Azerbaijan, October 29, 1940.

142884. No. 7382. From Tabriz, Azerbaijan, October 29, 1940.
142885. No. 7383. *Lobaesukh*. From Tabriz, Azerbaijan, October 29, 1940.
142886. No. 7500. From Tabriz, Azerbaijan, November 13, 1940.
142887. No. 7659. From Rezaieh, Azerbaijan, December 9, 1940. Presented by the local Department of Agriculture.
142888. No. 7660. From Rezaieh, Azerbaijan, December 9, 1940. Presented by the local Department of Agriculture.
142889. No. 7661. From Rezaieh, Azerbaijan, December 9, 1940. Presented by the local Department of Agriculture.
- Nos. 142890 to 142897 were collected in Rezaieh, Azerbaijan, December 9, 1940.
- |                   |                   |
|-------------------|-------------------|
| 142890. No. 7662. | 142894. No. 7683. |
| 142891. No. 7663. | 142895. No. 7684. |
| 142892. No. 7665. | 142896. No. 7685. |
| 142893. No. 7666. | 142897. No. 7712. |
- Nos. 142898 to 142900 were collected in Hamadan, December 22, 1940.
142898. No. 7812.
142899. No. 7813.
142900. No. 7817.
- Nos. 142901 to 142903 were collected in Brujird, Luristan, January 21, 1941.
142901. No. 7931.
142902. No. 7935.
142903. No. 7936.
142904. No. 7439. From Ardebil, Azerbaijan, December 7, 1940.
- 142905 to 142923. RAPHANUS SATIVUS L. Brassicaceae. Radish.**
142905. No. 7373. *Torbisurkh*. From Tabriz, Azerbaijan, October 29, 1940. Long and red.
- Nos. 142906 and 142907 were collected in Ardebil, Azerbaijan, November 7, 1940.
142906. No. 7454. *Torob*. Semiglobose, white, winter sorts, and red purple.
142907. No. 7455. *Torob*. Red purple, foreign, and winter variety.
142908. No. 7553. *Torob*. From Maraghe, Azerbaijan, November 29, 1940. Handsome, long, winter variety in white and purple.
- Nos. 142909 and 142910 were collected in Rezaieh, Azerbaijan, December 7, 1940.
142909. No. 7615. *Torobche*. Small spring radish.
142910. No. 7616. *Torbisufed*. White, banded-purple winter variety.
- Nos. 142911 and 142912 were collected in Khai, Azerbaijan, December 12, 1940.
142911. No. 7742. *Torob*. White winter variety.
142912. No. 7743. *Torobche*. Small, red, spring variety.
- Nos. 142913 to 142915 were collected in Hamadan, December 22, 1940.
142913. No. 7806. *Torobche*. Small, red, spring variety.
142914. No. 7807. *Torob*. Somewhat flattened, firm-textured, sweet, mild, and said to be black winter variety.
142915. No. 7814. *Torobidaraz*. Red purple, watery, and said to be 12 by 1½ inches long.

Nos. 142916 to 142918 were collected in Kermanshah, December 25, 1940.

**142916.** No. 7854. *Torobche.* Small, red purple, and spring variety.

**142917.** No. 7859. *Kalimfizl.* Red purple, watery, 12 by 1½ inches long.

**142918.** No. 7866. *Torob.* Subglobose, flattened, mild, black and white winter variety.

Nos. 142919 and 142920 were collected in Qasrishirin, Kermanshah, December 28, 1940.

**142919.** No. 7880. *Torobche.* Small, crimson, and globose.

**142920.** No. 7898. *Torob.* Globose, white to half crimson, or black.

Nos. 142921 and 142922 were collected in Brujird, Luristan, January 20, 1940.

**142921.** No. 7960. *Torobche.* Small, globose, red, watery, and mild.

**142922.** No. 7961. *Torob.*

**142923.** No. 7372. *Torob.* From Tabriz, Azerbaijan, October 28, 1940. Large, long, white, winter variety.

**142924 to 142932.** SPINACIA OLERACEA L. Chenopodiaceae. Common spinach.

*Isfanaj* is the vernacular name for spinach in Iran.

**142924.** No. 7350. From Tabriz, Azerbaijan, October 28, 1940.

**142925.** No. 7438. From Ardebil, Azerbaijan, November 7, 1940. Good flavor.

**142926.** No. 7551. From Maraghe, Azerbaijan, November 29, 1940.

**142927.** No. 7626. From Rezaieh, Azerbaijan, December 8, 1940.

**142928.** No. 7730. From Khai, Azerbaijan, December 12, 1940.

**142929.** No. 7783. From Hamadan, December 21, 1940.

**142930.** No. 7842. From Kermanshah, December 24, 1940.

**142931.** No. 7887. From Qasrishirin, Kermanshah, December 28, 1940.

**142932.** No. 7944. From Brujird, Luristan, January 20, 1941.

### 142933 to 142936.

From Uruguay. Seeds presented by Bernardo Rosengurit, Monzon Heber, Estación Juan Jackson. Received November 25, 1941.

**142933.** AXONOPUS AFFINIS Chase. Poaceae. Grass.

Grows on sandy soil on the savannas and near river banks; a good soil binder.

For previous introduction see 138974.

**142934.** PANICUM BERGII Arechav. Poaceae. Grass.

A rather densely cespitose grass 1 to 2 feet high, with bulbous rhizomes and very narrow leaves.

For previous introduction see 62045.

**142935.** PASPALUM URVILLEI Steud. Poaceae. Vasey grass.

A frost-resistant grass 5 or 6 feet in height, much relished by stock. A good grass for moist land; gives a heavy yearly yield. Native to Brazil.

For previous introduction see 139485.

**142936.** PHALARIS MINOR Retz. Poaceae. Grass.

An annual steppe grass about 3½ feet high.

For previous introduction see 141482.

### 142937 to 142972.

From Iran. Seeds collected by Dr. Walter Koelz, Tehran. Received November 27, 1941.

**142937. ALLIUM sp.** Liliaceae.

No. 7695. From Rezaieh, Azerbaijan, December 8, 1940. A wild plant growing on dry slopes.

**142938. ALLIUM sp.**

No. 7302. From Gazvin, October 23, 1940. A field weed 4 feet high, with flowers in dense heads 2 inches long.

**142939. ASTRAGALUS sp.** Fabaceae.

No. 7904. From Hamadan, December 29, 1940. A well-formed bush 2 to 2½ feet high; growing on edge of field.

**142940. COTONEASTER sp.** Malaceae.

No. 7510. From Livan, Azerbaijan, November 17, 1940. A low shrub growing among rocks on dry slopes.

**142941. COTONEASTER sp.**

No. 7979. From Ti, Bakhtiari, February 12, 1941. A bush, growing on dry slopes, with an open attractive habit; new branches erect, older ones drooping.

**142942. CRATAEGUS sp.** Malaceae.

No. 7311. From Zenjan, Khamseh, October 24, 1940. Fruit 5-angled in cross section, clear crimson, ½ inch in diameter, and attractive.

**142943. CRATAEGUS sp.**

No. 7521. From Maraghe, Azerbaijan, October 25, 1940. A thornless attractive bush 10 feet high, with crimson fruits ⅜ inch in diameter.

**142944. CRATAEGUS sp.**

No. 7311. From Zenjan, Khamseh, October 24, 1940. Fruit 5-angled in cross section, clear crimson, and attractive.

**142945. DIANTHUS sp.** Silenaceae.

No. 7406. From Bustanabad, Azerbaijan, November 1, 1940. A steppe perennial.

**142946. ECHINOPS sp.** Asteraceae.

No. 7564. From Maraghe, Azerbaijan, November 30, 1940. An annual 3 feet high, growing on dry slopes, with pale-blue flower heads 2½ inches in diameter.

**142947. IRIS sp.** Iridaceae.

No. 7468. From Ardebil, Azerbaijan, November 7, 1940. A clump iris 2 feet high, growing wild in meadows.

**142948. IRIS sp.**

No. 7691. From Khai, Azerbaijan, December 10, 1940. A small clump iris 2 feet high, growing in damp meadows.

**142949. IRIS sp.**

No. 7983. From Durud, Luristan, January 23, 1941. A clump species growing on slopes near a spring. The flower stalk is 3½ feet high, with large yellow flowers.

**142950. LATHYRUS SATIVUS L.** Fabaceae.

**Bittervetch.**

No. 7420. *Larji*. From Namin, Azerbaijan, November 6, 1940. Said to grow without irrigation.

**142951. MUSCARI sp.** Liliaceae.

No. 7303. From Qazvin, October 23, 1940. A field weed 18 feet high, with a dense spike.

**142952. NIGELLA SATIVA L.** Ranunculaceae.

**Black cumin.**

No. 7375. *Sujadana*. From Tabriz, Azerbaijan, October 29, 1940.

For previous introduction see 121370.

## 142953. PAPAVER sp. Papaveraceae.

No. 7509. From Livan, Azerbaijan, November 17, 1940. A free-flowering wild plant 18 inches high, growing on dry slopes, with brick-red flowers  $1\frac{1}{2}$  inches across.

## 142954. RHUS sp. Anacardiaceae.

No. 7304. From Qazvin, October 23, 1940. A leafy bush about 4 feet high, turning handsome red in the fall. It spreads from the roots and is suited for rather dry country. The fruit clusters are small, inconspicuously colored.

## 142955. RHUS sp.

No. 7525. *Sumak*. From Saujbulagh, Azerbaijan, November 26, 1940.

## 142956. ROSA sp. Rosaceae.

No. 7427. From Ardebil, Azerbaijan, November 6, 1940. A low wild bush 18 inches high, spreading from the roots and growing in unirrigated wheatfields.

## 142957. ROSA sp.

No. 7429. From Ardebil, Azerbaijan, November 6, 1940. A cultivated bush rose 6 feet high, of compact habit.

## 142958. ROSA sp.

No. 7484. From Sarab, Azerbaijan, November 8, 1940. A well-formed, dense, cultivated bush 8 feet high, with crimson hips  $\frac{1}{2}$  to  $\frac{3}{4}$  inch long.

## 142959. ROSA sp.

No. 7486. From Sarab, Azerbaijan, November 8, 1940. A low wild plant spreading from the roots, 20 inches to 2 feet high, with red hips  $\frac{1}{2}$  inch long.

## 142960. ROSA sp.

No. 7504. From Livan, Azerbaijan, November 15, 1940. A common shrub 3 feet high, spreading from the roots, and growing in orchards.

Nos. 142961 and 142962 were collected in Saujbulagh, Azerbaijan, November 26, 1940.

## 142961. ROSA sp.

No. 7523. An uncultivated bush rose 5 to 6 feet high, with crimson hips  $\frac{3}{4}$  inch long.

## 142962. ROSA sp.

No. 7524. A handsome bush, growing along the river, 6 feet high, with single yellow flowers.

Nos. 142963 and 142964 were collected in Maraghe, Azerbaijan, November 27, 1940.

## 142963. ROSA sp.

No. 7528. A bush 6 feet high, with drooping branches and crimson hips  $\frac{3}{4}$  inch long.

## 142964. ROSA sp.

No. 7529. A wild, free-flowering bush 4 feet high, with crimson hips  $\frac{1}{8}$  inch long.

Nos. 142965 and 142966 were collected in Avech, Khamseh, December 1940.

## 142965. ROSA sp.

No. 7754. A bush 5 feet high, with very small hips.

## 142966. ROSA sp.

No. 7755. A bush 6 feet high, growing along a watercourse.

Nos. 142967 and 142968 were collected in Hamadan, December 22, 1940.

## 142967. ROSA sp.

No. 7800. A bush 4 feet high, spreading from the roots, with crimson hips.

142968. *Rosa* sp.

No. 7821. A low-spreading shrub growing on mountain slopes, about 1 foot high; with very bristly fruits.

142969. *Rosa* sp.

No. 7823. From Kamjavar, Kermanshah, December 23, 1940. A cultivated bush 6 feet high.

142970. *Rosa* sp.

No. 7911. From Brujird, Luristan, January 20, 1941. A cultivated bush about 7 feet high, of unusual habit. About a dozen sturdy stalks rise from the root with small lateral stems. The flowers are borne at the summit, on rather heavy branches, and in clusters up to 5.

142971. *SESAMUM INDICUM* L. Pedaliaceae.

No. 7639. *Kunjel*. From Rezaieh, Azerbaijan, December 8, 1940.

142972. *TYPHA* sp. Typhaceae.

No. 7690. From Khai, Azerbaijan, December 10, 1940. A narrowleaved ( $\frac{1}{2}$  to  $\frac{3}{4}$  inch) plant, up to 5 or 6 feet high, with pale-brown fruiting spikes 10 inches long and 1 inch thick.

## 142973 to 142982.

From the Union of South Africa. Seeds presented by the Prinshof Grass Breeding Station, Pretoria, Transvaal. Received November 22, 1941.

142973. *ANDROPOGON GAYANUS* var. *SQUAMULATUS* (Hochst.) Stapf. Poaceae.

No. 885. From Southern Rhodesia.

142974. *BEAUCHIARIA BRIZANTHA* (Hochst.) Stapf. Poaceae.

No. 704. From Zululand. A tall, tropical African perennial grass up to 6 feet high, with a short stout rhizome, erect stems, and very narrow leaves up to 15 inches long. It is one of the most promising indigenous grasses for forage there.

For previous introduction see 77474.

142975. *BROMUS LEPTOCLADUS* Nees. Poaceae.

Grass.

No. 958. From Basutoland.

142976. *GLYCINE JAVANICA* L. Fabaceae.

No. 1448. A wide-climbing perennial vine native to Asia and Africa, where it is used as a cover crop. The slender stems are silky pubescent, the trifoliolate leaves have ovate leaflets 2 to 4 inches long, finely pubescent beneath, and the small bright-red flowers are in axillary racemes 3 to 6 inches long.

For previous introduction see 133088.

142977. *DIGITARIA* sp. Poaceae.

Grass.

No. 336. From Mlattele Location.

142978. *DIGITARIA* sp.

No. 5. Gomoti River, Ngamiland.

142979. *DIGITARIA* sp.

No. 375. From Malmaniesoog, Bechuanaland.

142980. *PANICUM MINUS* var. *PLANIFOLIUM* Stapf. Poaceae.

No. 84. From Cape Province.

For previous introduction see 28653.

142981. *PANICUM* sp. Poaceae.

No. 427. From Olifants River.

**142982.** *SETARIA FLABELLATA* Stapf. Poaceae.

No. 347. From Umfolosi River, Zululand.

**142983 to 142992.** *SACCHARUM*. Poaceae.

**Sugarcane.**

From the Canal Zone. Seeds presented by the Experimental Gardens, Summit.  
Received December 4, 1941.

**142983.** *21 N.G. 2 × C.P. 1165.*

**142984.** *E.K. 28 × C.P. 1165.*

**142985.** *La. Purple × C.P. 38-155.*

**142986.** *La. Striped × 28 N.G. 104.*

**142987.** *N.H. 2 × 28 N.G. 253.*

**142988.** *P.R. 807 × C.P. 1165.*

**142989.** *P.R. 900 × C.P. 1165.*

**142990.** *P.O.J. 2940 × D 74.*

**142991.** *P.O.J. 2878 × C.P. 31-511.*

**142992.** *Rayada × 28 N.G. 218.*

**142993 to 142999.**

From California. Seeds presented by Dr. T. H. Goodspeed, University of California Botanical Garden, Berkeley. Received December 4, 1941.

**142993.** *ALSTROEMERIA VIOLENCEA* Philippi. Amaryllidaceae.

No. 1615. Produced from seed originally from Chile.

For previous introduction see 139511.

**142994.** *BEGONIA MICRANTHERA* Griseb. Begoniaceae.

No. 484.

**142995.** *BEGONIA CLARKEI* Hook. f.

No. 488.

**142996.** *BEGONIA VEITCHII* Hook. f.

No. 481.

**142997.** *BEGONIA MICRANTHERA* var. *FIMBRIATA* Smith and Schub.

No. 480.

**142998.** *BEGONIA PLEIOPETALA* A. DC.

No. 489.

**142999.** *BEGONIA MICRANTHERA* var. *HIERONYMI* Smith and Schub.

No. 482.

**143000 to 143138.** *CITRULLUS VULGARIS* Schrad. Cucurbitaceae.

**Watermelon.**

From Iran. Seeds collected by Dr. Walter Koelz, Tehran. Received December 5, 1941.

*Hinduana* is the vernacular name for watermelon in Iran.

**143000.** No. 7294. From Tehran, October 18, 1940. Fruit sea green, 12 inches long and 6 inches in diameter; flesh pink.

Nos. 143001 to 143006 were collected in Sharifabad, Tehran, October 22, 1940.

**143001.** No. 7295. Fruit globose, grass green, with darker narrow stripes; rind  $\frac{1}{4}$  inch thick; flesh pink.

**143002.** No. 7296. Fruit globose, 9 inches in diameter, pea green with stripes of black green; flesh pink and good.

143003. No. 7298. Fruit globose, 9 inches in diameter; sea green, with stripes of darker green; rind  $\frac{1}{4}$  inch thick; flesh pink.
143004. No. 7299. Fruit globose, 9 inches in diameter, sea green, with darker stripes; rind  $\frac{1}{4}$  inch thick; flesh pink.
143005. No. 7300. Fruit globose, 8 inches in diameter, grass green, with black stripes; rind  $\frac{1}{6}$  inch thick; flesh orange pink.
143006. No. 7301. Fruit 12 inches long and 6 inches in diameter, grass green with darker stripes; rind  $\frac{1}{4}$  inch thick; flesh deep pink. Said to be of high quality. Unirrigated.
143007. No. 7308. From Qazvin, October 24, 1940. Fruit globose, 9 inches long, grass green with black-green stripes; rind  $\frac{1}{4}$  inch thick; flesh pink and sweet.
- Nos. 143008 and 143009 were collected in Zenjan, Khamseh, October 24, 1940.
143008. No. 7315. Fruit globose, 8 inches long, grass green, with narrow black stripes; rind  $\frac{1}{4}$  inch thick; flesh bright yellow.
143009. No. 7316. Fruit globose,  $7\frac{1}{2}$  inches long, and grass green, with white-green leopard spots; rind  $\frac{1}{4}$  inch thick; flesh deep rose.
- Nos. 143010 to 143016 were collected in Tabriz, Azerbaijan, October 26, 1940.
143010. No. 7323. Fruit 7 inches long and  $15\frac{1}{2}$  inches in diameter, sea green, with irregular chain stripes of grass green; rind  $\frac{1}{2}$  inch thick; flesh handsome, deep green.
143011. No. 7332. Fruit 15 inches long and 8 inches in diameter, green white, with chain stripes of grass green; rind  $\frac{1}{2}$  inch thick; flesh yellow, sweet.
143012. No. 7380.
143013. No. 7392. Fruit globose, 9 inches long, grass green with broad stripes of black green; rind  $\frac{1}{4}$  inch thick; flesh deep pink.
143014. No. 7394. Fruit globose, 11 inches long, and sea green, with large spots of darker green; rind  $\frac{1}{2}$  inch thick; flesh deep pink.
143015. No. 7398. Fruit globose, 7 inches long, and sea green, with narrow dark stripes; rind  $\frac{1}{8}$  inch thick; flesh rose.
143016. No. 7405. Fruit globose, 9 inches long, dark green, with irregular faintly blotched paler stripes; rind  $\frac{1}{8}$  inch thick; flesh yellow.
- Nos. 143017 and 143018 were collected in Sarab, Azerbaijan, October 1, 1940.
143017. No. 7407. Fruit, 12 inches long, and 7 inches in diameter, pea green with black-green stripes; rind  $\frac{1}{4}$  inch thick; flesh yellow.
143018. No. 7408. Fruit globose, 7 inches long, pea green, with darker stripes; rind  $1\frac{1}{3}$  inch thick; flesh pink.
143019. No. 7447. From Ardebil, Azerbaijan, November 7, 1940.
- Nos. 143020 to 143026 were collected in Sarab, Azerbaijan, November 8, 1940.
143020. No. 7466.
143021. No. 7472. Fruit 10 inches long and 7 inches in diameter, green white, with irregular blotches of grass green; rind  $\frac{1}{4}$  inch thick; flesh apricot yellow.
143022. No. 7474. Fruit small, globose, 5 inches in diameter, grass green, with numerous large and small stripes of green white; rind  $\frac{1}{4}$  inch thick; flesh yellow.
143023. No. 7476. Fruit 6 inches long and 4 inches in diameter, grass green with pea-green stripes; rind  $\frac{1}{4}$  inch thick; flesh yellow.
143024. No. 7477. Fruit globose, 7 inches in diameter, green white with irregular chain stripes of grass green; rind  $\frac{1}{4}$  inch thick; flesh rose.
143025. No. 7478. Fruit globose, 8 inches long, pea green, vermiculated darker; rind  $\frac{1}{4}$  inch thick; flesh rose.
143026. No. 7480. Fruit globose, 7 inches in diameter, pea green, faintly clouded darker; rind  $\frac{3}{8}$  inch thick; flesh yellow.

Nos. 143027 and 143028 were collected in Tabriz, Azerbaijan, November 12, 1940.

**143027.** No. 7494.

**143028.** No. 7516. Fruit 15 inches long and 8 inches in diameter, sea green, with handsome darker chain stripes; rind  $\frac{1}{2}$  inch thick; flesh pink.

Nos. 143029 to 143032 were collected in Maraghe, Azerbaijan, November 28, 1940.

**143029.** No. 7532. Fruit globose, 8 inches long, sea green; rind  $\frac{1}{2}$  thick; flesh pink.

**143030.** No. 7533. Fruit 11 inches long and 6 inches in diameter, dark green; rind  $\frac{1}{2}$  inch thick; flesh yellow; good texture and keeping qualities, but low-sugar.

**143031.** No. 7534. Fruit 10 inches long and 5 inches in diameter, grass green with darker vermiculations; rind  $\frac{3}{8}$  inch thick; flesh yellow.

**143032.** No. 7547.

**143033.** No. 7514. From Tabriz, Azerbaijan, November 22, 1940. Fruit globose, 8 inches long, sea green, reticulated darker; rind  $\frac{1}{4}$  inch thick; flesh pink.

Nos. 143034 to 143037 were collected in Maraghe, Azerbaijan, November 30, 1940.

**143034.** No. 7570. Fruit globose, 8 inches long, grass green, with narrow black stripes; rind  $\frac{1}{3}$  inch thick; flesh solid, apricot-tinted.

**143035.** No. 7571. Fruit globose, 8 inches long, sea green, with chain stripes of grass green; rind  $\frac{1}{4}$  inch thick; flesh solid, yellow; good keeper.

**143036.** No. 7572. Fruit 10 inches long and 5 inches in diameter, sea green with broad netting of grass green; rind  $\frac{3}{8}$  inch thick; flesh pink, very sweet.

**143037.** No. 7573. Fruit globose, 10 inches long, pea green with narrow grass-green stripes; rind  $\frac{1}{4}$  inch thick; flesh firm, yellow.

Nos. 143038 to 143040 were collected in Miyandab, Azerbaijan, December 2, 1940.

**143038.** No. 7574. Fruit 6 inches long, and 12 inches in diameter, grass green, reticulated darker; rind  $\frac{3}{8}$  inch thick; flesh yellow, sweet; good keeper.

**143039.** No. 7575. Fruit 6 inches long, and 12 inches in diameter, sea green, with broad irregular grass-green stripes; rind  $\frac{1}{2}$  inch thick; flesh pink, low in sugar.

**143040.** No. 7577. Fruit 12 inches long and 6 inches in diameter, grass green, with narrow dark stripes; rind  $\frac{1}{4}$  inch thick; flesh yellow; good keeper.

Nos. 143041 and 143042 were collected in Saujbulagh, Azerbaijan, December 5, 1940.

**143041.** No. 7592. Fruit globose, 10 inches long, sea green, with grass-green stripes; rind  $\frac{1}{4}$  inch thick; flesh bright pink; good keeper.

**143042.** No. 7593. Fruit 12 inches long, and 7 inches in diameter, black green; rind  $\frac{1}{4}$  inch thick; flesh yellow; good keeper.

Nos. 143043 to 143065 were collected in Rezaieh, Azerbaijan, December 1940.

**143043.** No. 7599. Fruit 11 inches long and 6 inches in diameter; grass green, vermiculated darker; rind  $\frac{3}{8}$  inch thick; flesh yellow, firm; good keeper.

**143044.** No. 7600. Fruit 12 inches long and 6 inches in diameter; sea green; rind  $\frac{1}{2}$  inch thick; flesh yellow; good keeper.

**143045.** No. 7601. Fruit globose, 8 inches long, pea green, vermiculated darker; rind  $\frac{1}{2}$  inch thick; flesh pink; good keeper.

**143046.** No. 7602. Fruit globose, 8 inches long, pea green, with grass-green stripes;  $\frac{3}{8}$  inch thick; flesh pink; good keeper.

**143047.** No. 7604. Fruit globose, 8 inches long, sea green, with grass-green stripes; rind  $\frac{1}{2}$  inch thick; flesh pink.

**143048.** No. 7605. Fruit 12 inches long and 6 inches in diameter, grass green, reticulated black; rind  $\frac{1}{2}$  inch thick; flesh yellow; good keeper.

143049. No. 7606. Fruit 10 inches long and 6 inches in diameter, grass green, with broadly and irregularly scalloped stripes of pea green; rind  $\frac{1}{4}$  inch thick; flesh yellow.
143050. No. 7614. Fruit 12 inches long and 7 inches in diameter, sea green; rind  $\frac{3}{4}$  inch thick; flesh pink changing to yellow at rind, firm and sweet.
143051. No. 7636. Said to be a winter variety.
143052. No. 7637. Said to be a summer variety.
143053. No. 7642. Fruit globose, 10 inches long, black green; rind  $\frac{1}{2}$  inch thick; flesh pink; good keeper.
143054. No. 7648. Fruit 12 inches long and 7 inches in diameter, sea green; rind  $\frac{1}{2}$  inch thick; flesh pink; good keeper.
143055. No. 7649. Fruit sea green, 11 inches long and 6 inches in diameter; rind  $\frac{1}{2}$  inch thick; flesh pink; good keeper.
143056. No. 7650. Fruit globose, 8 inches long, black green; rind  $\frac{1}{2}$  inch thick; flesh yellow; good keeper.
143057. No. 7651. Fruit globose, 9 inches long, black green, with pea-green stripes; rind  $\frac{1}{4}$  inch thick; flesh bright rose.
143058. No. 7652. Fruit globose, 7 inches long, grass green with black stripes; rind  $\frac{1}{2}$  inch thick; flesh yellow; good keeper.
143059. No. 7653. Fruit globose, 9 inches long, grass green, with irregularly spaced and much broken blotches of pea green; rind  $\frac{1}{2}$  inch thick; flesh pink; good keeper.
143060. No. 7654. Fruit globose, 6 inches long, and sea green; rind  $\frac{3}{8}$  inch thick; flesh yellow, fair quality; good keeper.
143061. No. 7655. Fruit 13 inches long and 7 inches in diameter, grass green, clouded paler; rind  $\frac{1}{2}$  inch thick; flesh bright yellow, fair quality; good keeper.
143062. No. 7658. Fruit 8 inches long and  $5\frac{1}{2}$  inches in diameter, grass green with stripes darker; rind  $\frac{1}{4}$  inch thick; flesh yellow, fair quality; good keeper.
143063. No. 7664. Fruit globose, 7 inches long; black green with pea-green stripes; rind  $\frac{3}{8}$  inch thick; flesh pink, good quality; good keeper.
143064. No. 7656. Fruit 10 inches long and  $6\frac{1}{2}$  inches in diameter, grass green, with narrow darker green stripes; rind  $\frac{3}{8}$  inch thick; flesh bright yellow, good quality; good keeper.
143065. No. 7674.
- Nos. 143066 to 143085 were collected in Khai, Azerbaijan, December 1940.
143066. No. 7692. Fruit globose, 8 inches long, grass green, vermiculated and narrowly striped black; rind  $\frac{3}{8}$  inch thick; flesh pink.
143067. No. 7698. Fruit globose, 8 inches long, grass green, vermiculated, and narrowly striped black; rind  $\frac{1}{6}$  inch thick; flesh bright yellow.
143068. No. 7699. Fruit 12 inches long and 6 inches in diameter, grass green, rind  $\frac{1}{4}$  inch thick; flesh yellow, fair quality.
143069. No. 7700. Fruit globose, 9 inches long, pea green, with darker rib lines; rind  $\frac{3}{8}$  inch thick; flesh yellow, good quality.
143070. No. 7701. Fruit globose, 8 inches long, sea green, with black specks; rind  $\frac{3}{8}$  inch thick; flesh cream, fair quality.
143071. No. 7703. Fruit globose, 8 inches long, grass green, with irregular spots of sea green; rind  $\frac{1}{4}$  inch thick; flesh pink, fair quality.
143072. No. 7704. Fruit subglobose, 6 inches long, grass green, spotted sea green; rind  $\frac{1}{4}$  inch thick; flesh rose, good quality.
143073. No. 7705. Fruit subglobose, 8 inches long, grass green, with pea-green spots; rind  $\frac{3}{8}$  inch thick; flesh deep pink, good quality.
143074. No. 7706. Fruit globose, 9 inches long, pea green, vermiculated darker, with irregular chain stripes of grass green; rind  $\frac{3}{8}$  inch thick; flesh apricot yellow, good quality.

143075. No. 7707. Fruit globose, 10 inches long, pea green, with narrow stripes of darker green; rind  $\frac{1}{4}$  inch thick; flesh pale apricot pink, good quality.
143076. No. 7708. Fruit globose, 10 inches long, black-green stripes and vermiculated grass green; rind  $\frac{1}{2}$  inch thick; flesh pale apricot, good quality.
143077. No. 7709. Fruit 13 inches long and 7 inches in diameter, black green with paler stripes; rind  $\frac{1}{2}$  inch thick; flesh bright yellow, good quality.
143078. No. 7710. Fruit globose, 10 inches long, grass green, vermiculated darker; rind  $\frac{3}{8}$  inch thick; flesh apricot yellow, good quality.
143079. No. 7711. Fruit 11 inches long and 8 inches in diameter, with broad irregular stripes of black green and cloudy pea green; rind  $\frac{1}{2}$  inch thick; flesh yellow, tinted apricot, fair quality.
143080. No. 7713. Fruit globose, 8 inches long, black green; rind  $\frac{1}{4}$  inch thick; flesh apricot pink, good quality.
143081. No. 7714. Fruit globose, 7 inches long, sea green, vermiculated darker; rind  $\frac{3}{8}$  inch thick; flesh pink, good quality.
143082. No. 7715. Fruit globose, grass green, vermiculated darker; rind  $\frac{1}{4}$  inch thick; flesh yellow, fair quality.
143083. No. 7716. Fruit globose, 9 inches long, alternating sea-green and grass-green stripes; rind  $\frac{1}{4}$  inch thick; flesh red.
143084. No. 7718. Fruit globose, 10 inches long, grass green vermiculated and narrowly striped darker; rind  $\frac{3}{8}$  inch thick; flesh cream, fair quality.
143085. No. 7745.
143086. No. 7746.
- Nos. 143087 to 143096 were collected in Hamadan, December 1940.
143087. No. 7756. Fruit globose, 11 inches long, sea green, with darker obscure stripes; rind  $\frac{1}{4}$  inch thick; flesh pink.
143088. No. 7757. Fruit subglobose, 10 inches long, sea green, with obscure darker stripes; rind  $\frac{3}{8}$  inch thick; flesh pink, good quality.
143089. No. 7761. Fruit 12 inches long and  $5\frac{1}{2}$  inches in diameter, pea green, vermiculated darker; rind  $\frac{3}{8}$  inch thick; flesh pink. Said to be unirrigated.
143090. No. 7762. Fruit 9 inches long and 6 inches in diameter, grass green, clouded darker; rind  $\frac{1}{2}$  inch thick; flesh apricot pink, good quality. Said to be unirrigated.
143091. No. 7763. Fruit 11 inches long and 6 inches in diameter, pea green obscurely striped and vermiculated darker; rind  $\frac{1}{2}$  inch thick; flesh pale pink, good quality. Said to be unirrigated.
143092. No. 7764. Fruit globose, 9 inches long, pea green reticulated darker, with rib lines of the same. Rind  $\frac{1}{2}$  inch thick; flesh pink, good quality.
143093. No. 7765. Fruit globose, 8 inches long, pea green, vermiculated darker, with scattered uneven incomplete darker ribs; rind  $\frac{3}{8}$  inch thick; flesh pink, good quality.
143094. No. 7766. Fruit globose, 9 inches long, sea green, with stripes of darker green; rind  $\frac{1}{4}$  inch thick; flesh pink, good quality.
143095. No. 7767. Fruit subglobose, 8 inches long, grass green, mottled paler; rind  $\frac{1}{4}$  inch thick; flesh rose, fair quality.
143096. No. 7769. Fruit globose, 10 inches long, pea green, vermiculated and irregularly striped darker. Rind  $\frac{3}{8}$  inch thick; flesh red.
143097. No. 7279. From Sharifabad, Tehran, October 22, 1940. Fruit globose, 9 inches long, pea green, reticulated darker; rind  $\frac{1}{4}$  inch thick; flesh deep pink, good quality.
- Nos. 143098 to 143103 were collected in Hamadan, December 1940.

143098. No. 7771. Fruit 13 inches long and  $6\frac{1}{2}$  inches in diameter; pea green, clouded darker; rind  $\frac{1}{2}$  inch thick; flesh pink, good quality.
143099. No. 7772. Fruit globose, 8 inches long, sea green, broadly, irregularly striped grass green; rind  $\frac{3}{8}$  inch thick; flesh pink, good quality.
143100. No. 7773. Fruit 12 inches long and 6 inches in diameter; grass green, marked paler; rind  $\frac{1}{2}$  inch thick; flesh pink, good quality. Said to be unirrigated.
143101. No. 7770. Fruit globose, 8 inches long, pea green, marbled darker, with a few large elongate splotches of grass green; rind  $\frac{3}{8}$  inch thick; flesh pink, good quality.
143102. No. 7778. Fruit globose, 8 inches long, sea green, with narrow stripes; rind  $\frac{1}{2}$  inch thick; flesh pink, good quality.
143103. No. 7818.
143104. No. 7819. Probably from Azerbaijan.
- Nos. 143105 to 143117 were collected in Kermanshah, December 24, 1940.
143105. No. 7825. Fruit 18 inches long and 10 inches in diameter, grass green, with broken black stripes; rind  $\frac{1}{4}$  inch thick; flesh pink.
143106. No. 7826. Fruit 11 inches long and  $4\frac{1}{2}$  inches in diameter, pea green reticulated darker; rind  $\frac{1}{4}$  inch thick; flesh pink, good quality.
143107. No. 7828. Fruit 12 inches long and 6 inches in diameter, pea green, vermiculated darker; rind  $\frac{1}{4}$  inch thick; flesh pink, very good quality.
143108. No. 7829. Fruit 12 inches long and 6 inches in diameter, pea green with darker blotches; rind  $\frac{3}{8}$  inch thick; flesh pink, sweet.
143109. No. 7832. Fruit 13 inches long and 7 inches in diameter, sea green, with darker stripes; rind  $\frac{1}{2}$  inch thick; flesh pink, good quality.
143110. No. 7833. Fruit  $13\frac{1}{2}$  inches long and  $6\frac{1}{2}$  inches in diameter, pea green, clouded darker; rind  $\frac{3}{8}$  inch thick; flesh pink, fair quality.
143111. No. 7835. Fruit 12 inches long and 8 inches in diameter, black green; rind  $\frac{3}{8}$  inch thick; flesh red.
143112. No. 7836. Fruit globose, 8 inches long, sea green, with narrow darker stripes; rind  $\frac{1}{8}$  inch thick; flesh apricot pink, good quality.
143113. No. 7837. Fruit globose, 9 inches long, pea-green and sea-green stripes, reticulated darker; rind  $\frac{1}{8}$  inch thick; flesh pink, good quality.
143114. No. 7838. Fruit 15 inches long and 8 inches in diameter, grass green; rind  $\frac{3}{8}$  inch thick; flesh rose, good quality.
143115. No. 7840. Fruit 13 inches long and  $6\frac{1}{2}$  inches in diameter, grass green, with irregular faint stripes; paler and reticulated darker; rind  $\frac{1}{4}$  inch thick; flesh handsome rose, good quality.
143116. No. 7864.
143117. No. 7865.
143118. No. 7875. Fruit subglobose, about  $2\frac{3}{4}$  inches long, smooth, and yellow; growing wild on the dry hills.
143119. No. 7885. From Qasrishirin, Kermanshah, December 28, 1940.
- Nos. 143120 to 143123 were collected in Davan, Luristan, January 20, 1941.
143120. No. 7905. Fruit subglobose, 8 inches long, grass green with narrow stripes of black; rind  $\frac{1}{4}$  inch thick, flesh yellow, fair quality. Good keeper. Said to be irrigated.
143121. No. 7906. Fruit globose, 8 inches long, pea green; rind  $\frac{3}{8}$  inch thick; flesh red.
143122. No. 7907. Fruit globose, 8 inches long, grass green, reticulated darker; rind  $\frac{1}{4}$  inch thick; flesh pink, fair quality. Good keeper. Said to be irrigate
143123. No. 7908. Fruit globose, pea green, vermiculated darker; rind  $\frac{3}{8}$  inch thick; flesh red. Said to be irrigated.

Nos. 143124 to 143138 were collected in Brujird, Luristan, January 20, 1941.

143124. No. 7913. Fruit 9 inches long and 5 inches in diameter, black green; rind  $\frac{1}{4}$  inch thick; flesh pink, fair quality. Good keeper.
143125. No. 7914. Fruit grass green, marbled black, 9 inches long, globose; rind  $\frac{1}{4}$  inch thick; flesh pink, fair quality. Good keeper.
143126. No. 7915. Fruit black green, with irregular, paler stripes, globose, 8 inches long; rind  $\frac{1}{4}$  inch thick; flesh yellow, tinted apricot, good quality. Good keeper.
143127. No. 7916. Fruit globose, 7 inches long, grass green, marbled black; rind  $\frac{1}{8}$  inch thick; flesh pink, fair quality. Good keeper.
143128. No. 7917. Fruit globose, 8 inches long, pea green, with broad stripes of grass green; rind  $\frac{3}{8}$  inch thick; flesh pink, good quality. Good keeper.
143129. No. 7921. Fruit globose, 8 inches long, sea green with cloudy stripes darker; rind  $\frac{1}{4}$  inch thick; flesh pink, fair quality. Good keeper.
143130. No. 7922. Fruit globose, 8 inches long, sea green; rind  $\frac{3}{8}$  inch thick; flesh apricot, fair quality. Good keeper.
143131. No. 7923. Fruit globose, 9 inches long, sea green, with narrow black stripes; rind  $\frac{1}{4}$  inch thick; flesh red.
143132. No. 7924. Fruit globose, 9 inches long, pea green with narrow grass-green stripes; rind  $\frac{3}{8}$  inch thick; flesh pink, fair quality. Good keeper.
143133. No. 7925. Fruit 11 inches long and 6 inches in diameter, grass green; rind  $\frac{3}{8}$  inch thick; flesh pink, fair quality. Good keeper.
143134. No. 7926. Fruit 10 inches long and 6 inches in diameter, pea green, vermiculated darker; rind  $\frac{1}{4}$  inch thick; flesh rose, fair quality. Good keeper.
143135. No. 7927. Fruit globose, 8 inches long, alternate stripes of black and pea green; rind  $\frac{3}{8}$  inch thick; flesh pink, good quality. Good keeper.
143136. No. 7930. Fruit globose, 9 inches long, sea green, with faint, narrow, irregular darker stripes; rind  $\frac{3}{8}$  inch thick; flesh pink, good quality. Good keeper.
143137. No. 7950.
143138. No. 7973. Fruit globose, 8 inches long, sea green, with narrow stripes of grass green; rind  $\frac{1}{4}$  inch thick; flesh pink, good quality. Good keeper.

**143139 to 143142. SACCHARUM. Poaceae. Sugarcane.**

From the Canal Zone. Seeds presented by Julius Matz, Experimental Gardens, Summit. Received December 12, 1941.

143139. *Barbados White Sport*  $\times$  28 N.G. 253.

143140. P.R. 900  $\times$  C.P. 36-159.

143141. P.R. 900  $\times$  C.P. 1161.

143142. *Gestraept Preanger*  $\times$  28 N.G. 104.

**143143. SOLANUM TUBEROSUM L. Solanaceae. Potato.**

From Peru. Tubers collected by B. Y. Morrison, Bureau of Plant Industry, United States Department of Agriculture. Received December 17, 1941.

Bought in market at Yurimaguas, Peru.

**143144. CANANGIUM ODORATUM (Lam.) Baill. Annonaceae. Ylang-ylang.**

From the Canal Zone. Seeds presented by the Experiment Gardens, Summit. Received December 12, 1941.

A large quick-growing tree, 60 to 80 feet high, native to the Philippines, Guam, and Java. The large greenish-yellow flowers are strongly scented and yield by distillation the popular perfume, ylang-ylang.

For previous introduction see 94183.

**143145. COPERNICIA sp. Phoenicaceae.****Sara palm.**

From Colombia. Seeds presented by M. J. Rivero, Agricultural Experiment Station, Palmira. Received December 18, 1941.

The name "sara" has been associated with *Copernicia sanctae-marthae*, described by Beccari from the Province of Santa Marta. This is apparently distinguished only by differences in flower structure from *C. tectorum*, of Venezuela, which is a palm growing to at least 25 or 30 feet high.

**143146 to 143149. SACCHARUM. Poaceae.****Sugarcane.**

From the Canal Zone. Seeds presented by Julius Matz, Experimental Gardens, Summit. Received December 16, 1941.

143146. *Badilla* × 28 N.G. 219.

143147. *La. Purple* × *Hinds Special*.

143148. *La. Purple* × *Tom Thumb corn*.

143149. *Simpson* × *N.G. 253*.

**143150 to 143169. ALEURITES MONTANA (Lour.) Wilson. Euphorbiaceae.****Mu-oil tree.**

From China. Seeds and fruits presented by H. C. Brownell, Lingnan University, Hong Kong. Received December 5, 1941.

A tree with oil-producing seeds, closely allied to the tung tree; for use in breeding experiments. Native to southern China.

143150. No. 1.

143160. No. 7.

143151. No. 2.

143161. No. 8.

143152. No. 3.

143162. No. 9.

143153. No. 4.

143163. No. 10.

143154. No. 1.

143164. No. 24.

143155. No. 2.

143165. No. 67.

143156. No. 3.

143166. No. 85.

143157. No. 4.

143167. No. 107.

143158. No. 5.

143168. No. 179.

143159. No. 6.

143169. No. 194.

For previous introduction see 136472.

**143170 to 143195.**

From Canada. Trees purchased from Stone & Wellington, Fonthill Nurseries, Toronto, Ontario. Received December 5, 1941.

143180. *Lobo*.

143192. *Titus*.

143181. *Lowland Raspberry*.

143193. *Windsor Chief*.

**143170 to 143193. MALUS SYLVESTRIS Mill. Malaceae.****Apple.**

143170. *Atlas*.

143182. *Macoun*.

143171. *Baxter*.

143183. *Macross*.

143172. *Cranberry Pippin*.

143184. *Milton*.

143173. *Crimson Beauty*.

143185. *Ontario*.

143174. *Crimson Gravenstein*.

143186. *Peerless*.

143175. *Donald*.

143187. *Peter*.

143176. *Early McIntosh*.

143188. *Red Gravenstein*.

143177. *Early Strawberry*.

143189. *Scarlet Pippin*.

143178. *Jersey Sweet.* 143190. *Sweet Bough.*  
 143179. *Keltooh.* 143191. *Tetofsky.*
143194. *PRUNUS ARMENIACA L.* Amygdalaceae. 143195. *Apricot*  
*Laithwaite.*
143195. *PRUNUS sp.* 143196 to 143265.
- Victor cherry.* From Iran. Seeds collected by Dr. Walter Koelz, Tehran. Received December 6, 1941.
- 143196 to 143249. *CUCUMIS MELO L.* Cucurbitaceae. **Muskmelon.**  
*Kharbuza* is the vernacular name for the muskmelon in Iran.
- Nos. 143196 and 143197 were collected in Qazvin, October 24, 1940.
143196. No. 7306. Fruit obovoid, 8 inches long, golden yellow, smooth; flesh cream white,  $1\frac{1}{2}$  inches thick, good quality.
143197. No. 7307. Fruit football-shaped, 8 inches long, yellow, coarsely netted; flesh  $1\frac{1}{2}$  inches thick, cream white, good quality. Good keeper.
- Nos. 143198 to 143203 were collected in Zenjan, Khamsheh, October 24, 1940.
143198. No. 7309. Fruit 12 inches long and 7 inches in diameter, heavily netted, yellow, firm; flesh  $2\frac{1}{4}$  inches thick, cream white, good quality.
143199. No. 7310. Fruit 14 inches long and 6 inches in diameter, heavily netted, yellow; flesh 2 inches thick, cream white, sweet, watery. Good keeper.
143200. No. 7312. Fruit obovoid, 9 inches long, yellow, coarsely netted; flesh  $1\frac{1}{4}$  inches thick, pale salmon, good quality. Good keeper.
143201. No. 7313. Fruit ovoid, 11 inches long, yellow, with elongate blotches of dark green, coarsely netted; flesh  $1\frac{1}{4}$  inches thick, greenish white, good quality. Good keeper.
143202. No. 7314. Fruit globose, 8 inches long, yellow, netted; flesh  $1\frac{1}{4}$  inches thick, white, rather soft, sweet, good quality. Good keeper.
143203. No. 7317. Fruit ovoid, 7 inches long, gold, furrowed, not netted; flesh  $1\frac{1}{4}$  inches thick, white, sweet. Good keeper.
- Nos. 143204 to 143215 were collected in Tabriz, Azerbaijan, October 1940.
143204. No. 7327. Fruit subglobose, 7 inches long, pale yellow, netted; flesh white, good quality,  $1\frac{1}{4}$  inches thick. Good keeper.
143205. No. 7328. Fruit subglobose, 7 inches long, deep yellow, netted; flesh white,  $1\frac{1}{2}$  inches thick, good quality. Good keeper.
143206. No. 7329. Fruit ovoid, 8 inches long, deep yellow, netted; flesh  $1\frac{1}{2}$  inches thick, white, good quality. Good keeper.
143207. No. 7335. Fruit ovoid, 7 inches long, heavily netted, green yellow, blotched darker, with broad, pale rib stripes; flesh  $1\frac{1}{4}$  inches thick, green, good quality. Good keeper.
143208. No. 7336. Fruit ovoid, 7 inches long, heavily netted, yellow, with green dots and dark-green blotches; flesh  $1\frac{1}{4}$  inches thick, cream, good quality. Good keeper.
143209. No. 7337. Fruit ovoid, 7 inches long, smooth, golden yellow; flesh  $1\frac{1}{4}$  inches thick, white, good quality. Good keeper.
143210. No. 7338. Fruit ovoid, 7 inches long, smooth, yellow, spotted green; flesh  $1\frac{1}{2}$  inches thick, white. Good keeper.
143211. No. 7339. Fruit subglobose, 6 inches long, golden brown, heavily netted, with broad indented ribs; flesh  $1\frac{1}{2}$  inches thick, white, good quality. Good keeper.

143212. No. 7340. Fruit flattened, 6 inches long and  $7\frac{1}{2}$  inches in diameter, heavily netted, golden yellow with green splotches; flesh  $1\frac{1}{4}$  inches thick, white. Good keeper.
143213. No. 7341. Fruit subglobose, 7 inches long, smooth, yellow with patches of green; flesh  $1\frac{1}{2}$  inches thick, green white, insipid. Good keeper.
143214. No. 7391.
143215. No. 7404. Said to be a large melon kept only for its perfume.
143216. No. 7449. From Ardebil, Azerbaijan, November 7, 1940.  
Nos. 143217 and 143218 were collected in Sarab, Azerbaijan, November 8, 1940.
143217. No. 7459.
143218. No. 7479. Fruit ovoid, 8 inches long, golden yellow, spotted green, coarsely netted; flesh green, 2 inches thick, good quality.  
Nos. 143219 to 143222 were collected in Tabriz, Azerbaijan, November 12, 1940.
143219. No. 7495. Said to be late.
143220. No. 7496. Said to be early.
143221. No. 7497. Said to be early.
143222. No. 7515. Fruit flattened, 8 inches long and 6 inches in diameter, coarsely netted, gold with broken bands of green; flesh  $1\frac{1}{2}$  inches thick. Good keeper.
143223. No. 7519. From Azarshah, Azerbaijan, November 24, 1940. Fruit ovoid, 8 inches long, gold, furrowed; flesh 1 inch long, pale salmon. Good keeper.  
Nos. 143224 to 143227 were collected in Maraghe, Azerbaijan, November 28, 1940.
143224. No. 7536. Fruit ovoid, 8 inches long, gold, heavily netted; flesh 2 inches thick, white, fair quality. Good keeper.
143225. No. 7537. Fruit globose, 7 inches long, gold, netted; flesh 2 inches thick, white, good quality. Good keeper.
143226. No. 7538. Fruit obovoid, 10 inches long, green with elongated blotches of yellow; flesh  $1\frac{1}{2}$  inches thick, white.
143227. No. 7541.
143228. No. 7580. From Saujbulagh, Azerbaijan, December 3, 1940. Fruit globose, 8 inches long, orange with deeply indented ribs, not netted; flesh pale orange,  $1\frac{3}{4}$  inches thick, good quality. Good keeper.  
Nos. 143229 to 143234 were collected in Rezaieh, Azerbaijan, December 7, 1940.
143229. No. 7611. Fruit globose, 5 inches long, gold, heavily indented ribs, not netted; flesh  $1\frac{1}{2}$  inches thick, green.
143230. No. 7632.
143231. No. 7641. Fruit obovoid, 12 inches long, gold, netted; flesh  $1\frac{1}{2}$  inches thick, cream. Good keeper.
143232. No. 7646. Fruit globose, 6 inches long, coarsely netted, yellow with irregularly spaced long blotches grass green; flesh white,  $1\frac{1}{2}$  inches thick.
143233. No. 7647. Said to be a summer variety.
143234. No. 7675.  
Nos. 143235 to 143238 were collected in Khai, Azerbaijan, December 10, 1940.
143235. No. 7693. Fruit subglobose, 12 inches long, heavily furrowed, irregularly ribbed; flesh salmon yellow, 2 inches thick.
143236. No. 7694. Fruit elongated, 14 inches long, coarsely netted, gold with dark-green blotches; flesh  $1\frac{3}{4}$  inches thick, salmon.

**143237.** No. 7696. Fruit ovoid, gold, not netted, 8 inches long; flesh  $1\frac{1}{4}$  inches thick, salmon.

**143238.** No. 7732. Said to be a summer variety.

**143239.** No. 7751. Fruit subglobose, 6 inches long, golden brown, with indented ribs of a paler shade, sparsely netted; flesh  $1\frac{1}{4}$  inches thick, good quality. Good keeper.

Nos. 143240 and 143241 were collected in Hamadan, December 22, 1940.

**143240.** No. 7796.

**143241.** No. 7801. Fruit 14 inches long and 7 inches in diameter, pale yellow, heavily netted; flesh 3 inches thick, cream, tender, sweet.

**143242.** No. 7849. From Kermanshah, December 25, 1940.

Nos. 143243 and 143244 were collected in Qasrishirin, Kermanshah, December 28, 1940.

**143243.** No. 7886.

**143244.** No. 7899. Said to be a small, sweet, early melon.

Nos. 143245 to 143249 were collected in Brujird, Luristan, January 20, 1941.

**143245.** No. 7912. Fruit subglobose, 7 inches long, smooth, golden yellow; flesh  $1\frac{1}{2}$  inches thick, white.

**143246.** No. 7919. Fruit elongated, 12 inches long, golden yellow, coarsely and sparsely netted; flesh  $1\frac{1}{2}$  inches thick, white, good quality. Good keeper.

**143247.** No. 7920. Fruit elongated, 11 inches long, smooth, golden yellow; flesh  $1\frac{1}{2}$  inches thick, white, good quality.

**143248.** No. 7945. Said to be round.

**143249.** No. 7947. Said to be long.

**143250 to 143265.** CUCUMIS SATIVUS L. Cucurbitaceae. **Cucumber**

**143250.** No. 7378. From Tabriz, Azerbaijan, October 29, 1940.

**143251.** No. 7431. From Ardebil, Azerbaijan, November 7, 1940.

Nos. 143252 and 143253 were collected in Tabriz, Azerbaijan, November 12, 1940.

**143252.** No. 7498.

**143253.** No. 7499.

**143254.** No. 7548. From Maraghe, Azerbaijan, November 28, 1940.

**143255.** No. 7608. From Saujbulagh, Azerbaijan, December 4, 1940.

**143256.** No. 7628. From Rezaieh, Azerbaijan, December 8, 1940.

**143257.** No. 7727. From Khai, Azerbaijan, December 12, 1940.

Nos. 143258 and 143259 were collected in Hamadan, December 22, 1940.

**143258.** No. 7788.

**143259.** No. 7799.

Nos. 143260 and 143261 were collected in Kermanshah, December 24, 1940.

**143260.** No. 7844.

**143261.** No. 7862.

Nos. 143262 and 143263 were collected in Qasrishirin, Kermanshah, December 28, 1940.

**143262.** No. 7889.

**143263.** No. 7890.

Nos. 143264 and 143265 were collected in Brujird, Luristan, January 21, 1941.

143264. No. 7939.

143265. No. 7940.

**143266 to 143271. SACCHARUM. Poaceae. Sugarcane.**

From the Canal Zone. Seeds presented by the Canal Zone Experiment Gardens, Pedro Miguel, Summit. Received December 9, 1941.

143266. *Caña Blanca* × *C.P. 36-142*.143267. *Gestreafit Preanger* × *Sac. Spon. Kloet*.143268. *28 N.G. 97* × *Toledo*.143269. *Imp. 853* × *D 74*.143270. *La. Purple* × *28 N.G. 218*.143271. *D 74* selfed.**143272 to 143331.**

From Iran. Seeds collected by Dr. Walter Koelz, Tehran. Received December 10, 1941.

**143272 to 143285. CUCURBITA MAXIMA Duchesne. Cucurbitaceae. Squash.**

*Kaduetambal* is the vernacular name for squash in Iran.

143272. No. 7402. From Tabriz, Azerbaijan, October 31, 1940. Fruit flattened, 11 inches long and 7 inches in diameter, deeply ribbed, orange red; flesh 5 inches thick, greenish yellow, firm, low in sugar.

143273. No. 7482. From Sarab, Azerbaijan, October 8, 1940. Fruit 19 inches long and 8 inches in diameter, green, marked gray, with narrow, gray-green irregular stripes; flesh pale orange, good sugar content.

143274. No. 7488. From Tabriz, Azerbaijan, October 11, 1940. Fruit 18 inches long and 9 inches in diameter, orange red, with faint irregular ribs; flesh 1½ inches thick, deep yellow, good quality.

Nos. 143275 and 143276 were collected in Saujbulagh, Azerbaijan, December 3, 1940.

143275. No. 7576. Fruit 9 inches long and 4½ inches in diameter, gray green with irregular thin stripes of white; flesh 2 inches thick, pale orange, insipid.

143276. No. 7578. Fruit flattened, 10 inches long and 5 inches in diameter, red; flesh 2½ inches thick, pale orange, insipid.

Nos. 143277 to 143282 were collected in Rezaieh, Azerbaijan, December 6, 1940.

143277. No. 7594. Fruit flattened, 12 inches long and 6 inches in diameter, brownish green with narrow rib stripes of green; flesh pale orange, insipid, 2 inches thick.

143278. No. 7595. Fruit subelliptical, 11 inches long, red; rind 2 inches thick, orange, insipid.

143279. No. 7597. Fruit 22 inches long and 8 inches in diameter, green obscurely striped paler; flesh orange yellow, 2 inches thick, insipid.

143280. No. 7643. Fruit globose, 14 inches long, with deep irregular ribs, salmon, mottled paler; flesh 2 to 4 inches thick, pale orange, insipid.

143281. No. 7644. Fruit globose, 12 inches long, pale salmon; flesh orange, 1½ to 2½ inches thick, insipid.

143282. No. 7645. Fruit 20 inches long and 10 inches in diameter, salmon; flesh 1½ inches thick, orange, insipid.

Nos. 143283 and 143284 were collected in Khai, Azerbaijan, December 10, 1940.

143283. No. 7702. Fruit 14 inches long, orange red, speckled paler; flesh 2 inches thick, orange yellow, rather insipid.

- 143284.** No. 7735. Cultivated for the seeds.
- 143285.** No. 7813. From Kermanshah, December 24, 1940. Fruit flattened, 8 inches long and 5 inches in diameter, red; flesh pale orange, insipid.
- 143286 to 143302.** *CUCURBITA MOSCHATA* Duchesne. **Cushaw.**
- Nos. 143286 to 143288 were collected in Tabriz, Azerbaijan, October 29, 1940.
- 143286.** No. 7384. Long-necked Japanese type.
- 143287.** No. 7385.
- 143288.** No. 7403. Fruit 13 inches long, buff, deeply ribbed; flesh 1½ inches thick, pale orange, rather low in sugar.
- 143289.** No. 7412. From Ardebil, Azerbaijan, November 2, 1940. Fruit pyriform, orange buff, spotted paler; flesh red orange, sweet.
- Nos. 143290 and 143291 were collected in Maraghe, Azerbaijan, November 28, 1940.
- 143290.** No. 7535. Fruit 1 foot long, orange yellow; flesh orange yellow, very tender, tasty when prepared as a vegetable.
- 143291.** No. 7552.
- 143292.** No. 7579. From Sawjbulagh, Azerbaijan, December 3, 1940. Fruit 22 inches long, orange yellow with green stripes; flesh orange, low in sugar.
- 143293.** No. 7596. From Rezaieh, Azerbaijan, December 6, 1940. Fruit buff orange, spotted paler; flesh orange, tender, low sugar.
- 143294.** No. 7781.
- 143295.** No. 7804. Fruit 13 inches long and 6½ inches in diameter, orange, very watery; flesh orange yellow, 1 to 2 inches thick, good quality.
- Nos. 143296 to 143298 were collected in Kermanshah, December 23, 1940.
- 143296.** No. 7824. Fruit 19 inches long; flesh pale orange yellow, tender, low in sugar.
- 143297.** No. 7827. Fruit pyriform, heavily and irregularly ribbed, 10 inches long and 10 inches in diameter, buff, spotted paler; flesh bright orange yellow, tender, low in sugar.
- 143298.** No. 7861.
- Nos. 143299 and 143300 were collected in Qasrishirin, December 27, 1940.
- 143299.** No. 7871. Fruit 14 inches long, irregularly ribbed buff; flesh orange red, tender, of good taste.
- 143300.** No. 7873. Fruit 20 inches long, deeply and irregularly ribbed orange buff; flesh orange.
- Nos. 143301 and 143302 were collected in Brujjird, Luristan, January 20, 1941.
- 143301.** No. 7910. Fruit dipper-shaped, 15 inches long, orange buff with narrow spot-stripes of paler color; flesh orange red, very tender, of good flavor.
- 143302.** No. 7968.
- 143303 to 143331.** *CUCURBITA PEPO* L. **Pumpkin.**
- 143303.** No. 7360. From Tabriz, Azerbaijan, October 28, 1940.
- Nos. 143304 to 143309 were collected in Ardebil, Azerbaijan, November 1, 1940.
- 143304.** No. 7409. Fruit yellow, 7 inches long and 17 inches in diameter, ridged; flesh yellow, 2 inches thick, insipid.
- 143305.** No. 7410. Fruit globose, 10 inches long, with raised ribs, orange to orange red; flesh pale orange, 1 to 1½ inches thick, low in sugar.
- 143306.** No. 7411. Fruit 10 inches long and 7 inches in diameter, heavily ridged, red netted green and orange; flesh 1½ inches thick, orange, rather sweet.

143307. No. 7414. Fruit 12 inches long and 10 inches in diameter; orange; flesh 2 inches thick, orange yellow, low in sugar.
143308. No. 7425. From the bazar.
143309. No. 7445. A mixture; grown for edible seeds.
- Nos. 143310 to 143314 were collected in Sarab, Azerbaijan, November 8, 1940.
143310. No. 7471. Fruit flattened, 9 inches long and 6 inches in diameter, yellow; flesh  $1\frac{1}{2}$  inches thick, orange yellow, insipid.
143311. No. 7473. Fruit  $4\frac{1}{2}$  inches long and 8 inches in diameter, flattened, grass green dotted paler, with broad stripes of orange yellow; flesh  $1\frac{1}{2}$  inches thick, orange, good sugar content.
143312. No. 7475. Fruit subglobose, 8 inches long, pale lemon with heavy warts; flesh pale orange,  $1\frac{1}{2}$  inches thick, low in sugar.
143313. No. 7481. Fruit 10 inches long and 13 inches in diameter, orange yellow, heavily and strongly warted; flesh orange yellow, low in sugar.
143314. No. 7483. Fruit flattened, 5 inches long and  $7\frac{1}{2}$  inches in diameter, orange yellow, spotted paler; flesh  $1\frac{1}{2}$  inches thick, orange, of fair sugar content.
143315. No. 7487. From Tabriz, Azerbaijan, November 11, 1940. Fruit 19 inches long and 6 inches in diameter, cream-colored.
143316. No. 7734. From Khai, December 12, 1940. Seeds sold for eating like peanuts.
- Nos. 143317 to 143319 were collected in Hamadan, December 21, 1940.
143317. No. 7775. Fruits subglobose,  $2\frac{1}{2}$  inches long, orange.
143318. No. 7791.
143319. No. 7792. Said to be eaten while green.
- Nos. 143320 to 143322 were collected in Kermanshah, December 24, 1940.
143320. No. 7830. Fruit  $4\frac{1}{2}$  inches in diameter, warty, yellow.
143321. No. 7860.
143322. No. 7863. A round variety.
143323. No. 7897. From Qasrishirin, Kermanshah, December 28, 1940.
- Nos. 143324 to 143327 were collected in Brujird, Luristan, January 20, 1941.
143324. No. 7909. Fruit 10 inches long and 6 inches in diameter, bright yellow; flesh orange yellow,  $1\frac{1}{4}$  inches thick.
143325. No. 7918. Fruit subglobose, 8 inches long, ribs strong at stem, heavily warted, orange yellow; flesh  $1\frac{1}{4}$  inches thick, orange yellow, low in sugar.
143326. No. 7928. Fruit somewhat flattened, 14 inches long and 12 inches in diameter, orange, heavily warted, irregularly and heavily ribbed; flesh 2 inches thick.
143327. No. 7967.
- Nos. 143328 to 143331 were collected in Durud, Luristan, January 27, 1941.
143328. No. 7974. Fruit somewhat flattened, 15 inches long, and 12 inches in diameter, strongly and irregularly ribbed, especially at stem end. Good keeper.
143329. No. 7975. Fruit flattened 9 inches long and 5 inches in diameter, orange yellow, splotched orange red; flesh  $1\frac{1}{4}$  inches thick, orange, firm, low in sugar. Good keeper.
143330. No. 7976. Fruit subglobose, 10 inches long, ridged at stem, orange red; flesh  $1\frac{1}{4}$  inches thick, orange, firm, low in sugar. Good keeper.
143331. No. 7977. Fruit 15 inches long and 12 inches in diameter, grass green, striped orange yellow, heavily ridged at stem; flesh  $1\frac{1}{2}$  inches thick, orange yellow, low in sugar. Good keeper.

**143332. CAPSICUM FRUTESCENS L.** Solanaceae. **Redpepper.**

From Brazil. Seeds presented through W. R. Schreiber, United States Department of Agriculture, Washington, D. C. Received December 12, 1941.

**143333 to 143336. SACCHARUM.** Poaceae. **Sugarcane.**

From the Canal Zone. Seeds presented by Julius Matz, Experimental Gardens, Summit. Received December 19, 1941.

**143333. Badilla X 28 N.G. 219.****143334. 28 N.G. 109 X Toledo.****143335. La. Purple X 28 N.G. 251.****143336. P.O.J. 2878 X Zea mays.****143337 to 143339.**

From the East Indies. Seeds presented by R. E. Holttum, Director, Botanic Gardens, Singapore, Straits Settlements. Received December 19, 1941.

**143337. MANGIFERA CAESIA Jack.** Anacardiaceae.

*Binjai.* From Perak. A large, stately tree, native to the Malay Archipelago with alternate wedge-shaped or elliptic leathery leaves 6 to 16 inches long; stout much-branched panicles of purplish flowers, and oblong or ovoid fruits, which are eaten by the natives but are said to be of poor quality.

For previous introduction see 44290.

**143338. MANGIFERA FOETIDA Lour.**

*Machang.* A large tree, 60 to 90 feet high, with elliptic-oblong, leathery leaves up to 1 foot long, pink or dark-red flowers  $\frac{1}{2}$  inch long in large spreading panicles, and green fruits with rather coarse yellow flesh of inferior flavor. Native to the Malay Peninsula.

For previous introduction see 35403.

**143339. MANGIFERA QUADRIFIDA Jack.** Anacardiaceae.

*Aetam Kumbang.*

**143340 and 143341. SACCHARUM.** Poaceae. **Sugarcane.**

From the Canal Zone. Seeds presented by the Experimental Gardens, Summit. Received December 23, 1941.

**143340. Duruku vico X C.P. 27-108.****143341. P.R.807 X C.P. 1161.****143342. URENA LOBATA L.** Malvaceae.

From Cuba. Seeds presented by José García Inerarity, Secretaría de la Junta Provincial de Agricultura, Santa Clara. Received December 22, 1941.

An erect undershrub, with cordate entire or lobed leaves 2 to 3 inches long, flowers an inch across, rose red at the base, and small fruits armed with hooked bristles. The stems furnish fiber, used for bags and twine. Native to tropical Asia.

For previous introduction see 114812.

**143343. PYRUS COMMUNIS L.** Malaceae.

**Common pear.**

From Manchuria. Scions presented by A. Woeikoff, Harbin. Received March 15, 1940. Numbered December 29, 1941.

*Bukazov.*

**143344. EUCALYPTUS FICIFOLIA F. Muell.** Myrtaceae. **Scarlet gum.**

From California. Seeds presented by William Hertrich, Huntington Botanic Garden, San Marino. Received February 20, 1941.

A handsome small tree up to 30 feet high, with scarlet flowers.

For previous introduction see 141745.

### 143345 to 143411.

From Iran. Seeds collected by Dr. Walter Koelz, Tehran. Received December 2, 1941.

**143345. AMYGDALUS PERSICA L.** Amygdalaceae. **Peach.**

No. 7888. *Shafatalu*. From Qasrishirin, Kermanshah, December 28, 1940. Spreading bush about 8 feet high.

**143346 and 143347. BRASSICA OLERACEA var. BOTRYTIS L.** Brassicaceae. **Cauliflower.**

**143346.** No. 7390. *Kalmigul*. From Tabriz, Azerbaijan, October 29, 1940. Head 10 inches in diameter, loose, mild flavor.

**143347.** No. 7815. *Kalmigul*. From Hamadan, December 22, 1940. Heads up to about 6 inches in diameter, self-bleaching, strong-flavored.

**143348 to 143358. BRASSICA OLERACEA var. CAPITATA L.** **Cabbage.**

*Kalmibarg* is the vernacular name for cabbage in Iran.

**143348.** No. 7364. From Tabriz, Azerbaijan, October 28, 1940. Heads flat, up to 15 inches in diameter, tender.

**143349.** No. 7415. From Namin, Azerbaijan, November 6, 1940. Heads flat, 12 inches in diameter, tender, with delicate flavor, loose at the heart.

**143350.** No. 7437. From Ardebil, Azerbaijan, November 7, 1940. Heads flat, 15 inches in diameter, firm, with large spaces between the leaves and heart, mild flavor, tender.

**143351.** No. 7462. From Sarab, Azerbaijan, November 8, 1940. Heads firm, 15 inches in diameter, loose at heart, tender, delicate flavor.

**143352.** No. 7542. From Maraghe, Azerbaijan, November 28, 1940. Heads flat to globbose, tender, sweet, leaves loose with wide spaces on the stem.

**143353.** No. 7586. From Sujbulagh, Azerbaijan, December 4, 1940. Heads 18 inches in diameter, flat, tender, sweet, loose at heart.

**143354.** No. 7621. From Rezaieh, Azerbaijan, December 7, 1940. Heads flat, 15 inches in diameter, good quality.

**143355.** No. 7747. From Khai, Azerbaijan, December 12, 1940. Heads sub-globose, 10 inches in diameter, firm, tender, sweet.

**143356.** No. 7803. From Hamadan, December 22, 1940. Heads subglobose, 10 inches in diameter, tender, loose.

**143357.** No. 7869. From Kermanshah, December 25, 1940. Heads subglobose, 15 inches in diameter, tender, sweet, firm.

**143358.** No. 7958. From Brujird, Luristan, January 21, 1941. Heads sub-globose, 9 inches in diameter, good quality, white and red.

**143359 to 143366. BRASSICA OLERACEA var. GONGYLODES L. (B. oleracea caulo-rapa DC.)** **Kohlrabi.**

*Kalmigomri* is the vernacular name for kohlrabi in Iran.

**143359.** No. 7623. From Rezaieh, Azerbaijan, December 8, 1940. Fruit sub-cylindrical, green; weight 11 pounds.

**143360.** No. 7366. From Tabriz, Azerbaijan, October 28, 1940. Fruit eaten green, 6 inches in diameter.

**143361.** No. 7434. From Ardebil, Azerbaijan, November 7, 1940. Fruit flattened, green, 8 inches in diameter, tender, sweet, edible.

**143362.** No. 7554. From Maraghe, Azerbaijan, November 29, 1940. Fruit globose, very leafy, green.

143363. No. 7463. From Sarab, Azerbaijan, November 8, 1940. Fruit green, flattened, 10 inches in diameter.

143364. No. 7802. From Hamadan, December 22, 1940. Fruit green, flattened, 8 inches in diameter, good quality.

143365. No. 7867. From Kermanshah, December 25, 1940. Fruit green, flattened subglobose to 6 inches in diameter, good quality.

143366. No. 7959. From Brujird, Luristan, January 21, 1941.

#### Turnip.

##### 143367 to 143372. BRASSICA RAPA L.

*Shelgham* is the vernacular name for turnip in Iran.

143367. No. 7624. From Rezaieh, Azerbaijan, December 8, 1940.

143368. No. 7744. From Khai, Azerbaijan, December 12, 1940.

143369. No. 7786. From Hamadan, December 21, 1940. Flat, purple, sweet, mild, tender.

143370. No. 7856. From Kermanshah, December 25, 1940. Flat, purple, sweet, good quality.

143371. No. 7891. From Qasrishirin, Kermanshah, December 28, 1940. Globose, flat, red purple, good quality.

143372. No. 7957. From Brujird, Luristan, January 21, 1941. Flattened, purple and white, good quality.

##### 143373. CORYLUS sp. Betulaceae.

No. 7809. From Hamadan, December 22, 1940. Bushes 10 feet high.

##### 143374. CORYLUS sp.

No. 7946. From Brujird, Luristan, January 21, 1941. Bushes 8 feet high, common in gardens.

##### 143375. ERUCA SATIVA L. Brassicaceae.

#### Salad-rocket.

No. 7376. *Khardil*. From Tabriz, Azerbaijan, October 29, 1940. A low-growing, hardy, somewhat fleshy annual from southern Europe, with leaves resembling those of the radish and turnip, and yellowish to purplish flower,  $\frac{1}{2}$  to  $\frac{3}{4}$  inch across, in rather large racemes. Used by the French as a spring and autumn salad and pot-herb. The flavor of the young and tender leaves bears a strong resemblance to that of horseradish.

For previous introduction see 138806.

*Anjir* is the vernacular name for the fig in Iran.

##### 143376. FICUS sp. Moraceae.

#### Fig.

No. 7280. From Gorgan, September 20, 1940. A wild forest tree 12 inches in diameter, with yellow fruits.

##### 143377. FICUS sp.

No. 7289. From Tehran, October 8, 1940. Fruits flat,  $2\frac{1}{4}$  inches in diameter, yellow green, low in sugar, of good flavor.

Nos. 143378 and 143379 were collected in Tabriz, Azerbaijan, October 28, 1940.

##### 143378. FICUS sp.

No. 7344. Fruit  $1\frac{1}{8}$  inches in diameter, sticky, sweet, of good flavor.

##### 143379. FICUS sp.

No. 7395. Fruit flattened, about  $1\frac{3}{4}$  inches in diameter, of good quality.

Nos. 143380 and 143381 were collected in Saujbulagh, Azerbaijan, December 4, 1940.

##### 143380. FICUS sp.

No. 7590. A wild bush spreading from the roots, 1 to 2 feet high, found in dry limestone.

143381. *Ficus* sp.

No. 7591. A wild bush spreading from the roots, 1 to 2 feet high, found in dry limestone.

143382. *Juglans regia* L. Juglandaceae.

**Persian walnut.**

No. 7808. From Hamadan, December 22, 1940. A densely branched variety.

143383. *Pistacia* sp. Anacardiaceae.

No. 7900. Bene. From Qasrishirin, Kermanshah, December 28, 1940.

143384 to 143387. *Prunus armeniaca* L. Amygdalaceae.

**Apricot.**

*Zandalu* is the vernacular name for apricot in Iran.

143384. No. 7324. From Tabriz, Azerbaijan, October 27, 1940. Fruit about  $1\frac{1}{2}$  inches in diameter, of sticky consistency, sweet; kernels edible.

143385. No. 7687. From Razaieh, Azerbaijan, December 9, 1940.

143386. No. 7901. From Qasrishirin, Kermanshah, December 28, 1940.

143387. No. 7985. From Rezaieh, Azerbaijan, August 1940, through J. Moose, American Consul at Tehran. Fruit ovoid, 2 inches in diameter, without fiber, golden yellow, of good flavor.

143388 to 143393. *Prunus cerasifera* Ehrh.

**Myrobalan plum.**

Nos. 143388 to 143390 were collected in Tabriz, Azerbaijan, October 26, 1940.

143388. No. 7321. Fruits globose, slightly flattened,  $1\frac{1}{4}$  inches in diameter, yellow, clouded crimson, sweet, of good quality; flesh tough, watery.

143389. No. 7325.

143390. No. 7566. Fruit subglobose,  $1\frac{1}{2}$  inches in diameter, crimson, of good flavor.

143391. No. 7689. From Rezaieh, Azerbaijan, December 9, 1940. Fruit black red,  $1\frac{1}{4}$  inches in diameter, sweet.

143392. No. 7750. From Marana, Azerbaijan, December 12, 1940. Fruit globose, scarlet,  $1\frac{1}{4}$  inches in diameter, good flavor, sweet.

143393. No. 7760. From Tabriz, Azerbaijan, December 17, 1940. Fruit sub-globose, somewhat flattened,  $1\frac{3}{8}$  inches in diameter, crimson, sweet, well flavored.

143394. *Prunus* sp.

No. 7342. From Tabriz, Azerbaijan, October 28, 1940. Fruit globose,  $1\frac{1}{4}$  inches in diameter, yellow, tough-skinned, sweet.

143395. *Prunus* sp.

No. 7393. From Tabriz, Azerbaijan, October 28, 1940. Fruit  $1\frac{1}{2}$  inches long, black, firm flesh.

143396 and 143397. *Punica granatum* L. Punicaceae.

**Pomegranate.**

*Anar* is the vernacular name for pomegranate in Iran.

143396. No. 7582. From Saujbulagh, Azerbaijan, December 4, 1940. Fruit 4 inches in diameter, crimson; juice deep pink.

143397. No. 7583. From Saujbulagh, December 4, 1940. Fruit 3 inches in diameter, crimson; juice deep pink.

143398. *Rubus* sp. Rosaceae.

**Blackberry.**

No. 7613. *Tamishk*. From Rezaieh, Azerbaijan, December 7, 1940. Bush 6 feet high, growing along watercourses; fruits freely all summer and until frost.

143399. *Rubus* sp.

No. 7870. *Tamishb*. From Kermanshah, December 26, 1940. Bush 5 feet high, everbearing type. Temperature said to descend to  $12^{\circ}$  F.

**143400 to 143411. SOLANUM MELOGENA L. Solanaceae.** Eggplant.

*Badenjan* is the vernacular name for eggplant in Iran.

**143400.** No. 7357. From Tabriz, Azerbaijan, October 28, 1940. Long, sub-globose, purple black.

**143401.** No. 7430. From Ardebil, Azerbaijan, November 7, 1940. Black purple, 6 inches long and 2 inches in diameter.

**143402.** No. 7545. From Maraghe, Azerbaijan, November 28, 1940.

**143403.** No. 7610. From Saujbulagh, Azerbaijan, December 4, 1940.

**143404.** No. 7635. From Rezaieh, Azerbaijan, December 8, 1940.

**143405.** No. 7722. From Khai, Azerbaijan, December 12, 1940.

**143406.** No. 7752. From Tabriz, Azerbaijan, December 14, 1940. Fruit sub-globose, 2 inches in diameter, white.

**143407.** No. 7779. From Hamadan, December 21, 1940.

**143408.** No. 7855. From Kermanshah, December 25, 1940.

Nos. 143409 and 143410 were collected in Qasrishirin, Kermanshah, December 28, 1940.

**143409.** No. 7884. Fruit ovoid, red purple, of good quality.

**143410.** No. 7903. Fruit pyriform, 8 inches in diameter, yellow, tender, well formed.

**143411.** No. 7956. From Brujird, Luristan, January 21, 1941.

**143412 to 143423. SACCHARUM. Poaceae.** Sugarcane.

From Colombia. Seeds presented by the Experimental Station, Palmira. Received December 20, 1941.

**143412.** Común × C.P. 36-156.

**143413.** E.P.C. 62-19 × C.P. 36-156.

**143414.** E.P.C. 62-59 × C.P. 36-137.

**143415.** P.O.J. 27-25 × C.P. 36-156.

**143416.** P.O.J. 27-25 × C.P. 36-134.

**143417.** P.O.J. 28-64 × E.K. 28.

**143418.** P.O.J. 27-25 × C.P. 36-145.

**143419.** Rayada × C.P. 36-156.

**143420.** Rayada × C.P. 29-137.

**143421.** Rayada × P. 33-29.

**143422.** Rayada × C.P. 29-103.

**143423.** Rayada × C.P. 11-61.

**143424 to 143436.**

From Iran. Seeds collected by Dr. Walter Koelz, Tehran. Received December 17, 1941.

**143424 to 143428. AMYGDALUS PERSICA L. Amygdalaceae.** Peach.

From Tabriz, Azerbaijan, October 26, 1940.

**143424.** No. 7319. *Hulu*. Fruit globose, 3 inches in diameter, pale yellow; flesh yellow white.

**143425.** No. 7347. *Shaftalu*. Fruit subglobose, 2 inches in diameter, green yellow, freestone; flesh white, good.

**143426.** No. 7320. *Hulu*. Fruit subglobose, faintly beaked,  $2\frac{3}{4}$  inches in diameter, faint slit, yellow, freestone; flesh white, juicy; kernel edible.

**143427.** No. 7322. Fruits subglobose,  $2\frac{1}{2}$  inches in diameter, cheek slit, beaked, gold, crimson-cheeked, clingstone; flesh gold, juicy, high in sugar.

**143428.** No. 7489. Fruit subglobose, 3 inches in diameter, deep yellow with red cheek, clingstone; flesh gold, firm, good flavor.

**143429.** *CORYLUS* sp. Betulaceae.

No. 7346. *Fandokh*. From Tabriz, Azerbaijan, October 28, 1940.

**143430.** *PRUNUS ARMENIACA* L.

Apricot.

No. 8056. From Durud, Luristan.

**143431 and 143432.** *PRUNUS DOMESTICA* L.

Common plum.

**143431.** No. 7292. *Alu*. From Tehran, October 12, 1940. Fruit elliptical, 2 inches in diameter, gold, good flavor, small.

**143432.** No. 7768. From Hamadan, December 20, 1940. Fruits apparently globose, dark blue with bloom,  $1\frac{1}{4}$  inches in diameter, sweet, good flavor.

Nos. 143433 to 143435 were collected in Durud, Luristan, June 25, 1941.

**143433.** *PRUNUS* sp.

No. 7987. A dense shrub about 3 feet high, growing on rocky slopes; flowers rose; fruit yellow.

**143434.** *PRUNUS* sp.

No. 8016. Dense bush, 3 feet high, growing on rocky slopes; flowers rose; fruit red black, edible.

**143435.** *PRUNUS* sp.

No. 8095-A.

**143436.** *PRUNUS* sp.

No. 7697. From Qasrishirin, Kermanshah, December 28, 1940. Tree 8 feet high.

**143437.** *CARICA PAPAYA* L. Papayaceae.

Papaya.

From Haiti. Seeds purchased from Francois Moens, Haitian Pineapple Co., Cape Haitian. Received December 17, 1941.

**143438 to 143515.**

From Iran. Seeds collected by Dr. Walter Koelz, Tehran. Received December 1, 1941.

**143438 to 143440.** *ANETHUM GRAVEOLENS* L. Apiaceae.

Dill.

143438. No. 7361. From Tabriz, Azerbaijan, October 28, 1940.

143439. No. 7733. From Khai, Azerbaijan, December 12, 1940.

143440. No. 7953. From Brujird, Luristan, January 21, 1941.

For previous introduction see 141561.

**143441.** *CARTHAMUS TINCTORIUS* L. Asteraceae.

Safflower.

No. 7972. From Brujird, Luristan, January 21, 1941.

For previous introduction see 138450.

**143442 and 143443.** *CORIANDRUM SATIVUM* L. Apiaceae.

Coriander.

*Garshniz* is the vernacular name for coriander in Iran.

143442. No. 7738. From Khai, Azerbaijan, December 12, 1940.

143443. No. 7952. From Brujird, Luristan, January 21, 1941.

For previous introduction see 141615.

**143444. DAUCUS sp.** Apiaceae.

No. 7562. From Maraghe, Azerbaijan, November 30, 1940. Plant 3 feet high, growing on dry slopes.

**143445. DRACOCEPHALUM MOLDAVICA L.** Menthaceae.

No. 7397. Badranj. From Tabriz, Azerbaijan, October 30, 1940. Plant used for flavoring.

For previous introduction see 141402.

**143446. DRACOCEPHALUM sp.**

No. 7748. Marze. From Khai, Azerbaijan, December 12, 1940. Plant used for flavoring.

Nos. 143447 to 143449 were collected in Tabriz, Azerbaijan, October 28, 1940.

*Jao* is the vernacular name for barley in Iran.

**143447. HORDEUM DISTICHON L.** Poaceae.

Barley.

No. 7345.

**143448. HORDEUM DISTICHON L.**

No. 7353.

**143449. HORDEUM DISTICHON L.**

No. 7387.

**143450. HORDEUM VULGARE L.**

No. 7417. From Namin, Azerbaijan, November 6, 1940. Said to be unirrigated.

Nos. 143451 and 143452 were collected in Ardebil, Azerbaijan, November 7, 1940.

**143451. HORDEUM VULGARE L.**

No. 7451. Barley said to be unirrigated.

**143452. HORDEUM VULGARE L.**

No. 7452. Said to be fall-sown, irrigated.

**143453. HORDEUM DISTICHON L.**

No. 7506. From Livan, Azerbaijan, November 18, 1940. Said to be winter-sown, not irrigated.

**143454. HORDEUM VULGARE L.**

No. 7526. From Saujbilagh, Azerbaijan, November 26, 1940. Said to be late-sown, not irrigated.

Nos. 143455 and 143456 were collected in Maraghe, Azerbaijan, November 29, 1940.

**143455. HORDEUM VULGARE L.**

No. 7557. Said to be winter-sown, not irrigated.

**143456. HORDEUM DISTICHON L.**

No. 7559. Said to be fall-sown, irrigated.

**143457. HORDEUM VULGARE L.**

No. 7589. From Saujbilagh, Azerbaijan, November 4, 1940. Said to be irrigated, spring-sown.

Nos. 143458 to 143460 were collected in Rezaieh, Azerbaijan, December 9, 1940.

**143458. HORDEUM VULGARE L.**

No. 7667. Said to be spring-sown, irrigated.

**143459. HORDEUM DISTICHON L.**

No. 7672. Said to be spring-sown, irrigated.

## 143460. HORDEUM VULGARE L.

No. 7668. Said to be fall-sown, irrigated.

## 143461. HORDEUM DISTICHON L.

No. 7741. From Khai, Azerbaijan, December 12, 1940. Said to be spring-sown, irrigated.

## 143462. HORDEUM VULGARE L.

No. 7816. From Hamadan, December 22, 1940. Said to be fall-sown, irrigated.

## 143463. HORDEUM DISTICHON L.

No. 7852. From Kermanshah, December 25, 1940. Said to be fall-sown, irrigated.

## 143464. HORDEUM DISTICHON L.

No. 7895. From Qasrishirin, Kermanshah, December 28, 1940. Said to be fall-sown, not irrigated.

## 143465. HORDEUM DISTICHON L.

No. 7937. From Brujird, Luristan, January 21, 1941. Said to be irrigated, spring-sown.

## 143466. HORDEUM DISTICHON L.

No. 7460. From Sarab, Azerbaijan, November 8, 1940. Said to be irrigated, fall-sown.

## 143467. LENS CULINARIS Medik. Fabaceae.

Lentil.

No. 7721. *Adas*. From Khai, Azerbaijan, December 12, 1940.

## 143468 and 143469. LEPIDUM SATIVUM L. Brassicaceae.

Garden cress.

143468. No. 7370. From Tabriz, Azerbaijan, October 29, 1940. Salad plant.

143469. No. 7971. From Brujird, Luristan, January 21, 1941.

## 143470 to 143475. MEDICAGO SATIVA L. Fabaceae.

Alfalfa.

143470. No. 7367. From Tabriz, Azerbaijan, October 28, 1940.

143471. No. 7456. From Ardebil, Azerbaijan, November 7, 1940.

143472. No. 7464. From Sarab, Azerbaijan, November 8, 1940. Weak, scandent or semiscandent form, growing wild in orchard.

143473. No. 7549. From Maraghe, Azerbaijan, November 29, 1940.

143474. No. 7777. From Hamadan, December 21, 1940.

143475. No. 7851. From Kermanshah, December 25, 1940.

## 143476. ONOBRYCHIS sp. Fabaceae.

No. 7422. *Khasha* (Turk). From Namin, Azerbaijan, November 6, 1940.

143477 to 143482. PETROSELINUM CRISPUM (Mill.) Nym. (*P. hortense* Hoffman). Apiales.

Parsley.

*Jafri* is the vernacular name for parsley in Iran.

143477. No. 7369. From Tabriz, Azerbaijan, October 29, 1940.

143478. No. 7443. From Ardebil, Azerbaijan, November 7, 1940.

143479. No. 7633. From Rezaieh, Azerbaijan, December 8, 1940.

143480. No. 7739. From Khai, Azerbaijan, December 12, 1940.

143481. No. 7798. From Hamadan, December 22, 1940.

143482. No. 7954. From Brujird, Luristan, January 21, 1941.

## 143483 to 143486. PISUM SATIVUM L. Fabaceae.

Pea.

*Nakhud Farangi* is the vernacular name for the pea in Iran.

143483. No. 7351. From Tabriz, Azerbaijan, October 28, 1940.

**143484.** No. 7440. From Ardebil, Azerbaijan, November 7, 1940.

**143485.** No. 7503. From Livan, Azerbaijan, November 15, 1940.

**143486.** No. 7790. From Hamadan, December 22, 1940.

**143487 to 143489.** SATUREJA HORTENSIS L. Menthaeae. **Summer savory.**

**143487.** No. 7381. From Tabriz, Azerbaijan, October 29, 1940.

**143488.** No. 7749. From Khai, Azerbaijan, December 12, 1940. Said to be used as flavoring.

**143489.** No. 7970. From Brujird, Luristan, January 21, 1941. Used as flavoring.

**143490 and 143491.** SECÁLE CEREALE L. Poaceae. **Rye.**

**143490.** No. 7419-A.

**143491.** No. 7507. From Livan, Azerbaijan, November 16, 1940. Said to be fall-sown, not irrigated.

**143492.** TRIFOLIUM sp. Fabaceae.

No. 7469. From Sarab, Azerbaijan, November 8, 1940. Flowers rose pink.

**143493 and 143494.** TRIFOLIUM PRATENSE L. **Red clover.**

**143493.** No. 7485. From Sarab, Azerbaijan, November 8, 1940. Wild, used as fodder.

**143494.** No. 7501. From Livan, Azerbaijan, November 14, 1940. Wild, growing in orchards, 2 feet high.

**143495.** TRIFOLIUM REPENS L. **White clover.**

No. 7502. From Livan, Azerbaijan, November 14, 1940. Semidecumbent plant, growing in orchards.

**143496 to 143500.** TRIFOLIUM RESUPINATUM L. **Persian clover.**

*Shaddar* is the vernacular name for Persian clover in Iran.

**143496.** No. 7349. From Tabriz, Azerbaijan, October 28, 1940.

**143497.** No. 7634. From Rezaieh, Azerbaijan, December 8, 1940.

**143498.** No. 7793. From Hamadan, December 22, 1940.

**143499.** No. 7853. From Kermanshah, December 25, 1940.

**143500.** No. 7949. From Brujird, Luristan, January 21, 1941.

**143501 to 143505.** TRIGONELLA FOENUM-GRAECUM L. Fabaceae. **Fenugreek.**

*Shamblike* is the vernacular name for fenugreek in Iran.

**143501.** No. 7365. From Tabriz, Azerbaijan, October 28, 1940.

**143502.** No. 7436. From Ardebil, Azerbaijan, November 7, 1940. Used as flavoring.

**143503.** No. 7625. From Rezaieh, Azerbaijan, December 8, 1940.

**143504.** No. 7776. From Hamadan, December 21, 1940. Used as flavoring.

**143505.** No. 7963. From Brujird, Luristan, January 21, 1941. Used as flavoring.

**143506.** Vicia ERVILIA (L.) Willd. Fabaceae. **Vetch.**

No. 7457-A. From Ardebil, Azerbaijan.

For previous introduction see 134282.

**143507 to 143510.** Vicia FABA L. **Broadbean.**

*Bagla* is the vernacular name for the broadbean in Iran.

**143507.** No. 7432. From Ardebil, Azerbaijan, November 7, 1940. Food crop.

**143508.** No. 7490. From Tabriz, Azerbaijan, November 12, 1940. Food crop.

143509. No. 7896. From Qasrishirin, Kermanshah, December 28, 1940.

143510. No. 7934. From Brujird, Luristan, January 21, 1941. Food crop.

143511. Vicia sativa L. Common vetch.

No. 7457. From Ardebil, Azerbaijan, November 7, 1940. Food crop.

143512 to 143515. VIGNA SINENSIS (Torner) Savi. Fabaceae. Cowpea.

*Lobia* is the vernacular name for the cowpea in Iran.

143512. No. 7686. From Rezaieh, Azerbaijan, December 9, 1940. Food crop.

143513. No. 7386. From Tabriz, Azerbaijan, October 29, 1940. Food crop.

143514. No. 7433. From Ardebil, Azerbaijan, November 7, 1940. Food crop.

143515. No. 7938. From Brujird, Luristan.

143516. SACCHARUM. Poaceae. Sugarcane.

From the Canal Zone. Seeds presented by Julius Matz, Experimental Gardens, Summit.

*Badilla* × 28 N.G. 251.

143517 to 143528.

From Peru. Seeds collected by B. Y. Morrison, Bureau of Plant Industry, United States Department of Agriculture. Received December 26, 1941.

143517. CAJANUS CAJAN (L.) Druce. Fabaceae. Pigeonpea.

*Frejol de Palo.*

143518. CARICA PAPAYA L. Papayaceae. Papaya.

From Arequipa.

143519. CARICA sp.

No. 1.

143520. CARICA sp.

No. 2.

143521. DOLICHOS LABLAB L. Fabaceae.

Hyacinth-bean.

*Bocón or Zarandaja.*

143522 and 143523. LYCOPERSICON ESCULENTUM Mill. Solanaceae. Tomato.

From Huanta, November 27, 1941. Bought in market.

143524 to 143527. LYCOPERSICON PIMPINELLIFOLIUM (Jusl.) Mill. Currant tomato.

143524. From Trujillo, October 8, 1941.

143525. From Catacaos, Piura, October 14, 1941.

143526. From Piura.

143527. From Sullano, October 13, 1941.

143528. MOMORDICA BALSAMINA L. Cucurbitaceae. Balsam-apple.

143529 to 143539. RICINUS COMMUNIS L. Euphoribaceae.

Castor-bean.

From Brazil. Seeds presented by A. B. Fagundes, Director, Instituto de Experimentação Agrícola, Ministerio da Agricultura, Rio de Janeiro. Received December 27, 1941.

Seeds from selfed plants.

Nos. 143529 to 143535 are from tall plants.

143530. V. 3.

143534. V. 33.

143531. V. 13.

143535. V. 35.

143532. V. 16.

143529. V. 2.

143533. V. 22.

Nos. 143536 to 143539 are from dwarf plants.

143536. V. 14.

143538. V. 38.

143537. V. 15.

143539. V. 45.

**143540 and 143541.**

From Szechwan Province, China. Plants presented by John Tee-Van, New York Zoological Society. Received December 27, 1941.

143540. *PHYLLOSTACHYS* sp. Poaceae.**Bamboo.**

A species brought from a distant place and grown at Chengtu for ornamental purposes. This bamboo, as well as the following, was readily eaten by the giant panda in captivity.

143541. *SINARUNDINARIA* sp. Poaceae.**Bamboo.**

Collected by Den Wei-han, Chengtu, Szechwan. This is the smaller of the two bamboos known to be eaten by the giant panda; it is said to grow about 10 feet high. The plant occurs at altitudes between 6,500 and 9,000 feet in western Szechwan.

**143542 to 143549. *LAGENARIA LEUCANTHA* (Duchesne) Rusby.**

Cucurbitaceae.

**Calabash gourd.**

From Iran. Seeds collected by Dr. Walter Koelz, Tehran. Received December 1, 1941.

143542. No. 7492. From Tabriz, Azerbaijan, November 12, 1940.

143543. No. 7540. From Maraghe, Azerbaijan, November 28, 1940.

143544. No. 7627. From Rezaieh, Azerbaijan, December 8, 1940.

143545. No. 7731. From Khai, Azerbaijan, December 12, 1940. Dipper-gourd.

143546. No. 7820. From Hamadan, December 22, 1940.

143547. No. 7834. From Kermanshah, December 24, 1940. Fruit 11 inches high, used as a storage utensil.

143548. No. 7874. From Qasrishirin, Kermanshah, December 27, 1940. Fruit 12 inches high, with unusual thick neck; used as storage utensil.

143549. No. 7966. From Brujird, Luristan, January 21, 1941.

**143550. *SACCHARUM*. Poaceae.****Sugarcane.**

From the Canal Zone. Seeds presented by the Experimental Gardens, Summit. Received December 30, 1941.

*P.O.J. 2878 × Zea mays.***143551 to 143647.**

From Iran. Seeds collected by Dr. Walter Koelz, Tehran. Received December 16, 1941.

Nos. 143551 to 143567 were collected in Durud, Luristan, June 1941.

**143551. *ALTHAEA* sp. Malvaceae.**

No. 8035. A perennial hollyhock 4 feet high, branching from root, with single white or rose-purple yellow-throated flowers 4 inches in diameter.

**143552. *ALTHAEA* sp.**

No. 8077. A xerophytic hollyhock up to 10 feet high, with single, white, yellow-centered, fragrant flowers 3 inches across and palmately cut leaves.

## 143553. ANEMONE sp. Ranunculaceae.

No. 7996. A handsome blood-red flower, single, about 2 inches in diameter; dry slopes.

## 143554. ARISTOLOCHIA sp. Aristolochiaceae.

No. 8025.

## 143555. ARISTOLOCHIA sp.

No. 8093. A low perennial, 1 foot high.

## 143556. ARUM sp. Araceae.

No. 8084. A plant handsome with madder-purple spathe, 18 inches high, borne with the leaf.

## 143557. ASTRAGALUS sp. Fabaceae.

No. 8086. A bush 3 feet high, in habit like *Juniperus communis*, small-leaved, with small very fragrant rose flowers. Grows on dry mountain tops where ground water is probably available. A source of gum tragacanth.

## 143558. ASTRAGALUS sp.

No. 8092. Similar to No. 8086, but growing at lower elevations and said to yield no gum.

## 143559. ASTRAGALUS sp.

No. 8086. A perennial growing in clumps up to 2 feet high, with two dense whorls of clear yellow flowers, 1 to  $\frac{1}{2}$  inch across.

## 143560. ASTRAGALUS sp.

No. 8069. A species similar to No. 144559, 18 inches high, with loose, more numerous whorls.

## 143561. ASTRAGALUS sp.

No. 8079.

143562. AVENA FATUA L. Poaceae. *Wild oats.*

No. 8000. Wild species 4 feet high, smut-free.

For previous introduction see 126259.

## 143563. COLCHICUM sp. Melanthiaceae.

No. 7993. A broadleaved colchicum 18 inches high, growing on dry slopes.

## 143564. COLCHICUM sp.

No. 7994. A strap-leaved plant, 6 inches high, found on dry slopes.

## 143565. COLCHICUM sp.

No. 8005. A narrowleaved species.

## 143566. COLCHICUM sp.

No. 8039. A species of the plain up to 2 feet high, with large, broad leaves.

## 143567. COLCHICUM sp.

No. 8046. A broadleaved species, 1 foot high.

## 143568. COTONEASTER sp. Malaceae.

No. 7657. From Rezaieh, Azerbaijan, December 8, 1940. A low bush 3 feet high, of attractive open habit, with very small elliptical leaves  $\frac{1}{4}$  inch long, and crimson fruits. Found in a dry gulch.

Nos. 143569 to 143599 were collected in Durud, Luristan, June 1941.

## 143569. CROCUS sp. Iridaceae.

No. 8013. A species with fragrant rose flowers, growing in marshes that dry up later.

**143570. DELphinium sp.** Ranunculaceae.

No. 8075. A much-branched annual xerophyte, 2 feet high. The small flowers, blooming in August, are violet with a yellow claw.

**143571. DELphinium sp.**

No. 8090. Perennial 3 feet high, with large deep cobalt-blue flowers.

**143572. DIANTHUS sp.** Silenaceae.

No. 8052. A plant 2 inches high, with small heads of pink flowers.

**143573. EREMURUS sp.** Liliaceae.

No. 8081. Plant 2 feet high; flowers whitish, ribbed green.

**143574. FRITILLARIA sp.** Liliaceae.

No. 8019. Plant 2 feet high; flowers green brown.

**143575. FRITILLARIA sp.**

No. 8024. Plant 8 inches high; flowers yellow.

**143576. FRITILLARIA sp.**

No. 8054. Plant 4 feet high; flowers showy, brick red.

**143577. FRITILLARIA sp.**

No. 8071. Plant 2 feet high; flowers green brown, small.

**143578. FRITILLARIA sp.**

No. 8088. Plant 6 inches high, single flower, much like *Fritillaria meleagris*.

**143579. GENTIANA sp.** Gentianaceae.

No. 8085. An annual 18 inches high, with large, blue, white-throated, fragrant showy flowers. It resembles *Gentiana moorcroftiana*, but grows on alkaline soil.

**143580. GLADIOLUS sp.** Iridaceae.

No. 8003. Flowers pale purple in a spike 2 feet high.

**143581. GLADIOLUS sp.**

No. 8009. A variety of the purple-flowered species, with a white throat.

**143582. GLADIOLUS sp.**

No. 8018. Probably purple-flowered.

**143583. GLADIOLUS sp.**

No. 8026. A marsh species that later withstands complete dessication; flowers wine-colored.

**143584. GLADIOLUS sp.**

No. 8031. A late-flowering species found in cultivated fields; flowers in a dense spike.

**143585. GLADIOLUS sp.**

No. 8034. A species, about 2 feet high, with purple flowers.

**143586. GLADIOLUS sp.**

No. 8036. A species growing on rocky slopes to 7,000 feet altitude; flowers cerise.

**143587. GLADIOLUS sp.**

No. 8041. Grows on dry slopes; flowers wine-colored.

**143588. GLADIOLUS sp.**

No. 8042. Early-flowering species of the wheatfields; flowers handsome, wine-colored.

**143589. GLADIOLUS sp.**

No. 8066. Flowers probably purple, white-throated.

**143590. GLAUCIUM sp. Papaveraceae.**

No. 8083. Bushy perennial, 18 feet high, bearing an abundance of large poppy-like flowers.

**143591. GUNDELIA TOURNEFORTII L. Asteraceae.**

No. 8012. *Kangar*. A thistly perennial plant of dry slopes; the leaf bases, eaten in early spring, make a delicious vegetable.

For previous introduction see 81000.

**143592. HEDYSARUM sp. Fabaceae.**

No. 8072. A plant forming clumps  $2\frac{1}{2}$  feet across. The large yellow flowers are in spikes 18 inches high.

**143593. HORDEUM SPONTANEUM L. Poaceae.**

**Barley.**

No. 7986. Narrow-headed, 2-rowed, wild barley.

**143594. HYACINTHUS sp. Liliaceae.**

No. 8006. Plant with large open spike of pale-blue flowers, growing in marshes that later dry up.

**143595. IRIS sp. Iridaceae.**

No. 7992. Bulbous, early-flowering, much like *Iris persica*, but with large flowers.

**143596. IRIS sp.**

No. 8048. Clump form, 3 feet high, with handsome yellow flowers 3 inches in diameter. Grows on damp ground.

**143597. IRIS sp.**

No. 8070. Plant 1 foot high; flowers 6 inches in diameter, heavily reticulated with madder purple, with dark spot in falls; very choice species.

**143598. IRIS sp.**

No. 8082. Plant forming clumps; flowers  $1\frac{1}{2}$  inches across, violet, chocolate-scented, borne over a long period.

**143599. IRIS sp.**

No. 8095. A clump species 4 feet high, growing along springs that dry up in summer; flowers 3 inches in diameter, yellow.

Nos. 143600 to 143602 were collected in Kebara, Luristan, June 17, 1941.

**143600 to 143602. LATHYRUS ANNUUS Hoejer. Fabaceae.**

**Pea.**

143600. No. 8007. Growing on edge of marsh; standard lemon, veined red brown; wings yellow; lip greenish yellow.

143601. No. 8022. Growing in fields; flowers small, few, rose purple.

143602. No. 8023. Growing in fields; flowers few, small, rose purple, pale on reverse, deeply veined; wings lavender; lip yellow.

Nos. 143603 to 143621 were collected in Durud, Luristan, June 1941.

**143603. LATHYRUS sp.**

No. 8080. Scandent, 6 feet high; growing along springs; flowers  $1\frac{1}{4}$  inches in diameter, lemon, standard with a spot veined red brown.

**143604. LATHYRUS sp.**

No. 8083. Erect perennial, growing in clumps 3 feet high; flowers  $1\frac{1}{2}$  inches across, rose purple.

**143605.** *LATHYRUS APHACA* L. Pea.

No. 8021. A semiprostrate or ascending yellow-flowered herb, native to Asia Minor.

For previous introduction see 123446.

**143606.** *LONICERA ARBOREA* var. *PERSICA* (Jaub. and Spach) Rehder. Caprifoliaceae.

No. 8076. A dense bush 6 feet high; flowers white, washed with rose purple; fruit milky white, translucent, eaten by birds; grows on dry slopes with ground-water probably available.

**143607.** *MERENDERIA* sp. Melanthiaceae.

No. 7999. Plant semirhizomatous, crocus-flowered; flowers rose, strap-leaved, blooming very early in wet places that later dry.

**143608.** *MUSCARI* sp. Liliaceae.

No. 7988. Plant 6 inches high; found at 8,000 feet altitude; flowers few, green, blue.

**143609.** *MUSCARI* sp.

No. 8004. Rare species; spike 2 feet high; buds purplish, opening greenish brown.

**143610.** *MUSCARI* sp.

No. 8008. Field species; spike 2 feet high; flowers greenish; bud purplish.

**143611.** *MUSCARI* sp.

No. 8014. Tall species 2 feet high; spike full, flowers purple buds opening greenish.

**143612.** *MUSCARI* sp.

No. 8027. Broadleaved species, similar to garden species cultivated in the United States, but with larger and fragrant flowers; requires much water.

**143613.** *MUSCARI* sp.

No. 8037. Early-flowering species; spike open; buds purple, opening greenish.

**143614.** *ORNITHOGALUM* sp. Liliaceae.

No. 7997. Large open corymb, 8 inches high, of white, green-ribbed flowers.

**143615.** *ORNITHOGALUM* sp.

No. 8020. Spike 3 feet high; flowers green-ribbed.

**143616.** *ORNITHOGALUM* sp.

No. 8091. Plant 4 feet high, with dense spike of cream flowers.

**143617.** *PAPAVER* sp. Papaveraceae.

No. 7998. An annual about 2 feet high, bearing large poppy-red black-centered flowers.

**143618.** *PAPAVER* sp.

No. 8032. An annual about 18 inches high, with attractive cerise flowers.

**143619.** *PAPAVER* sp.

No. 8040. A poppylike annual; flowers cerise.

**143620.** *PELTARIA ANGUSTIFOLIA* DC. Brassicaceae.

No. 8033. A perennial crucifer, with showy dense corymbs of small, white flowers.

**143621.** *PHLOMIS* sp. Menthaceae.

No. 8059. Clumps; 2 feet high; flowers large, beautiful pink, very attractive; perennial.

Nos. 143622 to 143624 were collected in Maraghe, Azerbaijan, November 28, 1940.

143622. *Rhus* sp. Anacardiaceae.

No. 7531. Bushes 8 feet high, spreading from the root; growing in cultivated fields; foliage red in fall; fruit inconspicuous, used for acid flavoring in cooking.

143623. *Rosa* sp. Rosaceae.

No. 7520. Plants 3 to 5 feet high, with red hips; spread from root.

143624. *Rosa* sp.

No. 7530. Bush 4 feet high, spreading freely from root; growing uncared for along watercourse; hips crimson,  $\frac{1}{2}$  inch in diameter.

143625. *Rosa* sp.

No. 7612. From Rezaieh, Azerbaijan, December 7, 1940. Bushes from 4 to 6 feet high, not spreading from root; growing along irrigation ditches.

143626. *Rosa* sp.

No. 7877. From Qasinshirin, Kermanshah, December 28, 1940. Well-formed bush 5 feet high, growing in an orchard, probably cultivated.

143627. *Rosa* sp.

No. 7929. From Brujird, Luristan, January 21, 1941. Bush 4 feet high, growing along river.

143628. *Rosa* sp.

No. 7978. From Ti, Bakhtiari, February 1, 1941. Bush 6 feet high, growing on edge of fields, not spreading from root; branches crimson in winter; hips orange red, small, bristly.

143629. *Rosa* sp.

No. 7980. From Imarat, Bakhtiari, February 15, 1941. Bush 4 feet high, growing along water; hips crimson, not hispid,  $\frac{3}{4}$  inch long.

143630. *Rosa* sp.

No. 7982. From Chamched, Luristan, February 22, 1941. Sturdy bush 6 feet high, laden with crimson hips, growing along stream.

143631. *Rosa* sp.

No. 7984. From Saujbulagh, Azerbaijan, December 4, 1940. Seeds collected from bushes 3 to 6 feet high, growing on field borders.

Nos. 143632 to 143635 were collected in Durud, Luristan, June 8, 1941.

143632. *Rosa* sp.

No. 7989. Well-formed bush 6 feet high, growing along streams, with large\* single pink flowers.

143633. *Rosa* sp.

No. 8063. A creeping plant with hirsute leaves, forming a dense bush about 2 feet high, growing on limestone cliffs; flowers single, 2 inches in diameter, pale pink.

143634. *Rosa* sp.

No. 8073. A spreading bush 4 feet high, small-leaved, heavily armed, growing on dry slopes; flowers single, pink,  $2\frac{1}{2}$  inches across.

143635. *Rosa* sp.

No. 8074. Bush 6 feet high, growing along streams; flowers single, 3 inches across, pale pink.

143636. *Rosa* sp.

No. 7822. From Kangavar, Kermanshah, December 23, 1940. Semirambler 8 feet high, growing in orchard.

143637. *Salvia* sp. Lamiaceae.

No. 9011. [No locality data.]

Nos. 143638 to 143647 were collected in Durud, Luristan, June 1941.

**143638.** *SCILLA* sp. Liliaceae.

No. 8001. Porcelain-blue flowers. About 6 inches high; small, bell-shaped flowers, blue, in a few-flowered raceme.

**143639.** *SCILLA* sp.

No. 8045. Plant with large violet flowers in a few-flowered raceme.

**143640.** *SECALE* sp. Poaceae.

No. 8030. Plant about 3 feet high.

**143641.** *TRITICUM MONOCOCUM* L. Poaceae.

No. 8028. Wild wheat 3½ feet high, often represented by black-husked form.

For previous introduction see 94747.

**143642.** *TULIPA* sp. Liliaceae.

No. 7990. Rose-colored with yellow center, fragrant.

**143643.** *TULIPA* sp.

No. 8015. Attractive red flower, segments with black base and edges of yellow.

**143644.** *TULIPA* sp.

No. 8017. Red-flowered species of low altitudes; flowers black-centered, open, 4 inches long; bulb goes to a depth of from 12 to 31 inches.

**143645.** *TULIPA* sp.

No. 8051. Plant 6 inches high; flowers small, white, yellow-throated, outside washed rose purple, fragrant.

**143646.** *VIOLA* sp. Violaceae.

No. 7991. Small-flowered annual pansy, much like *Viola tricolor* in habit, but often white-flowered; yellow-eyed.

**143647.** *PISUM SATIVUM* L. Fabaceae.

Pea.

No. 7995-A.

**143648 and 143649.** *CALYCANTHUS* sp. Myrsinaceae.

From the Dutch East Indies. Seeds collected by David Fairchild, Archbold-Fairchild Expedition. Numbered in December 1941.

**143648.** *CALYCANTHUS* sp. Verbenaceae.

No. 3425. From Koelawi, Celebes, March 30, 1940. An attractive small tree with oblong acuminate dark-green leaves, silvery gray beneath, about 7 inches long, and small, round lacquer-red fruits, ½ inch in diameter, borne in flat clusters.

**143649.** *ALLOPHYLLUS* sp. Sapindaceae.

No. 3452. From Tana Mea, Donggala, Celebes, May 6, 1940. An attractive scandent vine with trifoliolate leaves up to 12 inches long, with elliptical, acuminate, almost entire to crenate, glossy dark-green leaflets up to 6 by 3½ inches, and 20-inch racemes of brilliant-red globose fruits ¾ inch in diameter.

**143650 to 143677.**

From Iran. Seeds collected by Dr. Walter Koelz, Tehran. Received December 19, 1941.

Nos. 143650 to 143659 were collected in Durud, Luristan, June 1941.

**143650.** *ALLIUM* sp. Liliaceae.

No. 8029. Plant about 18 inches high; flower head rose purple, 2 inches in diameter.

**143651.** *ALLIUM* sp.

No. 8044. Damp-ground species about 4 feet high, with few-flowered heads of large handsome flowers, white, faintly marked with rose.

143652. *ALLIUM* sp.

No. 8053. Flower heads dense, 3 inches in diameter, rose purple; plant 4 feet high, growing on damp ground that dries in summer.

143653. *ALLIUM* sp.

No. 8055. Similar to 143652, but growing among dry rocks, plant 18 inches high.

143654. *ALLIUM* sp.

No. 8057. Plant 2 feet high; leaves linear; flower heads greenish white, 1 inch across.

143655. *ALLIUM* sp.

No. 8058. Leaves sublinear; flowers large, handsome, pink,  $2\frac{1}{2}$  inches in diameter.

143656. *ALLIUM* sp.

No. 8060. Plant 4 feet high; flowers white, green-ribbed, in heads  $1\frac{1}{4}$  inches in diameter.

143657. *ALLIUM* sp.

No. 8061. Plant 18 inches high; flowers green brown in loose heads.

143658. *ALLIUM* sp.

No. 8078. Plant 3 feet high; flowers maroon, in dense heads 2 inches in diameter.

143659. *ALLIUM* sp.

No. 8087. Similar to 8062, but with broad lanceolate leaves.

143660. *CITRULLUS VULGARIS* Schrad. Cucurbitaceae.

**Watermelon.**

No. 7470. From Sarab, Azerbaijan, November 8, 1940. Fruit 12 inches long and 6 inches in diameter, pea green with strong dark vermiculations; rind  $\frac{1}{4}$  inch thick; flesh yellow. Fair quality.

143661 to 143665. *CUCUMIS MELO L.* Cucurbitaceae.

**Muskmelon.**

Nos. 143661 to 143663 were collected in Tehran, October 12, 1940.

143661. No. 7290. Fruit flattened, 7 inches long and 5 inches in diameter, yellow, striped brown, smooth; flesh  $1\frac{1}{4}$  inches thick, white, good quality, fragrant.

143662. No. 7291. Fruit 6 inches long and 4 inches in diameter, netted, green, turning yellow; flesh  $1\frac{1}{4}$  inches thick, green white, good quality.

143663. No. 7292. Fruit ovoid, heavily and finely netted, green, 10 inches long; flesh  $1\frac{1}{2}$  inches in diameter, green, good quality. Good keeper.

143664 and 143665 were collected in Tabriz, Azerbaijan, October 27, 1940.

143664. No. 7330. Fruit obovoid, 7 inches long, deep yellow, with deeply indented ribs marked by heavy net, rest of surface sparsely netted; flesh  $1\frac{1}{2}$  inches in diameter, white, good quality. Good keeper.

143665. No. 7334. Fruit ovoid, 6 inches long, gold, not netted, furrowed; flesh  $1\frac{1}{4}$  inches in diameter, tinted salmon, good quality. Good keeper.

143666. *CUCURBITA MOSCHATA* Duchesne. Cucurbitaceae.

**Cushaw.**

No. 7774. From Hamadan, December 21, 1940. Fruit 15 inches long, 7 inches in diameter; neck heavily ribbed; flesh orange yellow, tender, sweet.

143667. *DAUCUS* sp. Apiaceae.

No. 8089. From Durud, Luristan, June 1941. Handsome plant 3 feet high, with showy white flowers.

143668. *FICUS* sp. Moraceae.

**Fig.**

No. 7343. From Tabriz, Azerbaijan, October 28, 1940. Dry fruits top-shaped, 1 inch in diameter, firm, sweet, of good flavor.

Nos. 143669 to 143670 were collected in Durud, Luristan, June 1941.

**143669.** *Ficus* sp.

No. 8064. Mixture.

**143670.** *Ficus* sp.

No. 8065. Mixture.

**143671.** *HELIANTHUS TUBEROSUS* L. Asteraceae. **Jerusalem-artichoke.**

No. 7568. From Maraghe, Azerbaijan, November 29, 1940. Plant 5 feet tall; tubers about 4 inches long.

For previous introduction see 107601.

Nos. 143672 and 143673 were collected in Durud, Luristan, June 1941.

**143672.** *LACTUCA* sp. Cichoriaceae.

No. 8050. Xerophytic species up to 6 feet high, in fruit resembling *Lactuca sativa*. Plant strongly bristly; leaves entire, subspatulate.

**143673.** *PISUM ELATIUS* Bieb. Fabaceae.

No. 7995. Growing on open slopes, also in marshy places; possibly mildew-resistant.

For previous introduction see 141891.

**143674.** *SOLANUM DULCAMARA* L. Solanaceae. **Bitter nightshade.**

No. 7671. From Rezaieh, Azerbaijan, December 9, 1940.

For previous introduction see 116886.

**143675.** *SOLANUM MELONGENA* L. **Eggplant.**

No. 7293. From Tehran, October 13, 1940. Fruit 5 inches long and 2 inches in diameter, white. A rare variety.

**143676.** *TRAGOPOGON PORRIFOLIUS* L. Cichoriaceae. **Vegetable-oyster.**

No. 8047. From Durud, Luristan, June 1941.

**143677.** *VICIA NARBONENSIS* L. Fabaceae.

No. 8043. Cultivated.

**143678.** *GARDENIA PHILASTREI* Pitard. Rubiaceae.

Plants growing at Coconut Grove, Florida. Received from Hawaii through Col. R. H. Montgomery, 1941. Numbered December 31, 1941.

An Indo-Chinese tree 15 to 20 feet high, with large, light-yellow, very fragrant flowers  $2\frac{1}{2}$  inches across and 4 inches long.

For previous introduction see 139499.

**143679 to 143681.** *LYCOPERSICON ESCULENTUM* Mill. Solanaceae.

**Tomato.**

From Ecuador. Seeds collected by W. R. Schreiber, Office of Foreign Agricultural Relations, United States Department of Agriculture. Received December 31, 1941.

Wild tomatoes from the Province of Manabi.

**143679.** No. 1. Cranberry size.

**143680.** No. 2. Cherry size.

**143681.** No. 3. Strawberry size.

1. Introduction  
2. The model and its validation  
3. The effect of the ocean on the atmospheric circulation  
4. The effect of the atmosphere on the ocean circulation  
5. Summary and conclusions

The first two sections are concerned with the validation of the coupled model, while the last three sections are concerned with the results of the coupled model.

In section 1, we present the coupled model and its validation. In section 2, we present the results of the coupled model. In section 3, we present the results of the coupled model. In section 4, we present the results of the coupled model. In section 5, we present the results of the coupled model.

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 Savory, summer. See *Satureja hortensis*.  
*Scilla* spp., 143638, 143639.  
 Sea-onion. See *Urginea maritima*.  
*Secale* sp., 143640.  
*cereale*, 143490, 143491.  
*Sechium edule*, 142546, 142547.  
*Serjania* sp., 142570.  
*Sesamum indicum*, 142971.  
*Setaria flabellata*, 142982.  
*Sinarundinaria* sp., 143541.  
*Solanum dulcamara*, 143674.  
*melongena*, 143400–143411, 143675.  
*tuberosum*, 143143.  
*Sorghum verticilliflorum*, 142451.  
 Soybean. See *Glycine max*.  
 Spinach, common. See *Spinacia oleracea*.  
*Spinacia oleracea*, 142924–142932.  
*Spiraea lucida*, 142598.  
 Squash. See *Cucurbita maxima*.  
 Sugarcane. See *Saccharum*.  
 Sweetpotato. See *Ipomoea batatas*.  
*Swinglea glutinosa*, 142571.

- Terminalia edulis*, 142573.  
 Tomato. See *Lycopersicon esculentum*.  
 currant. See *Lycopersicon pimpinellifolium*.  
*Tragopogon porrifolius*, 143676.  
 Tree, mu-oil. See *Aleurites montana*.  
 tung-oil. See *Aleurites fordii*.  
*Trifolium* sp., 143492.  
*pratense*, 143493, 143494.  
*repens*, 143495.  
*resupinatum*, 143496-143500.  
*Trigonella foenum-graecum*, 143501-143505.  
*Triticum aestivum*, 142371-142419, 142503-142523.  
*monococcum*, 143641.  
*Tulipa* spp., 143642-143645.  
 Tung-oil tree. See *Aleurities fordii*.  
 Turnip. See *Brassica rapa*.  
*Typha* sp., 142972.
- Undetermined, 142574, 142575, 142576.  
*Urena lobata*, 143342.  
*Urginea maritima*, 142341.  
*Urochloa trichopus*, 142288.
- Vegetable-oyster. See *Tragopogon porrifolius*.  
 Vetch. See *Vicia ervilia*.  
 bitter. See *Lathyrus sativus*.  
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*Vicia ervilia*, 143506.  
*faba*, 142778, 142507-143510.  
*narbonensis*, 143677.  
*sativa*, 143511.  
*Vigna sesquipedalis*, 142687.  
*sinensis*, 142443, 142686, 142693, 142779, 143512-143515.  
*Viola* sp., 143646.  
*langsdorffii*, 142599.  
*simulata*, 142600.
- Walnut, Persian. See *Juglans regia*.  
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 Wheat, common. See *Triticum aestivum*.  
*Withania somnifera*, 142690.
- Ylang-ylang. See *Canangium odoratum*
- Zea mays*, 142524-142534.