

# UNITED STATES DEPARTMENT OF AGRICULTURE



## INVENTORY No. 131



Washington, D. C.



Issued August, 1942

**PLANT MATERIAL INTRODUCED BY THE DIVISION OF PLANT EXPLORATION AND INTRODUCTION, BUREAU OF PLANT INDUSTRY, APRIL 1 TO JUNE 30, 1937 (Nos. 123342 to 124625)**

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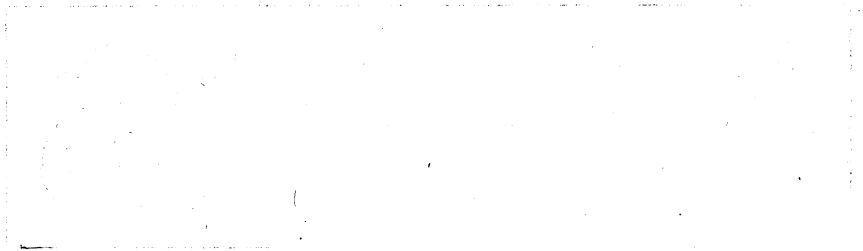
### INTRODUCTORY STATEMENT

This inventory, No. 131, records the plant material (Nos. 123342 to 124625) received by the Division of Plant Exploration and Introduction during the period from April 1 to June 30, 1937.

The botanical determinations of seeds introduced have been made and the nomenclature determined by Paul Russell, who has had general supervision of this inventory.

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

DIVISION OF PLANT EXPLORATION AND INTRODUCTION,  
*Washington, D. C., October 7, 1941.*



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## INVENTORY<sup>1</sup>

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

### 123342 to 123376. PUNICA GRANATUM L.

Punicaceae. **Pomegranate.**

From the Union of Soviet Socialist Republics. Cuttings presented by Dr. A. Strebkova, Azerbaijan Experiment Station, Mardakjany, Caucasus. Received April 29, 1937.

- 123342. No. 670. *Veles*.
- 123343. No. 672. *Kirmizi kabuch*.
- 123344. No. 668. *Kara-Bala-mursal*.
- 123345. No. 680. *Zebaida*.
- 123346. No. 678. *Han-nar*.
- 123347. No. 665. *Ohinei*.
- 123348. No. 673. *Schirin-nar*.
- 123349. No. 1. *Vir*. N. 1.
- 123350. No. 4430. N. 198.
- 123351. No. 4426. *Veles*.
- 123352. No. 4417. *Gulosha*.
- 123353. No. 4441. *Schirin-nar*.
- 123354. No. 4437. N. 463.
- 123355. No. 4508. N. 51.
- 123356. No. 4547. N. 22.
- 123357. No. 4416. N. 209.
- 123358. No. 4494. *Ferganski N. 32*.
- 123359. No. 4411. N. 450.
- 123360. No. 4422. N. 215.
- 123361. No. 4424. N. 217.

### 123362 to 123376—Continued.

- 123362. No. 4432. N. 201.
  - 123363. No. 4470. *Schirin-nar*.
  - 123364. No. 4447. N. 10.
  - 123365. No. 4414. *Ochik kurinski*.
  - 123366. No. 4541. *Surh pechak*.
  - 123367. No. 4468. *Tursch-nar*.
  - 123368. No. 4463. N. 491.
  - 123369. No. 6420. *Kat-nar*.
  - 123370. No. 6421. *Ochik-nar*.
  - 123371. No. 6423. [No varietal name.]
  - 123372. No. 6444. *Armad-schirin-nar*.
  - 123373. No. 6451. *Schoulanski N. 888*.
  - 123374. No. 6446. *Kirmizi schoulanski N. 871*.
  - 123375. No. 6443. *Balsi-mursal* (Kalinkabuk)
  - 123376. No. 6452. *Kirmizi Kabuch grandjinski*.
- 123377 and 123378. PERILLA NANKINENSIS**  
(Lour.) Decaisne. Menthaceae.
- From Japan. Seeds purchased from the Yokohama Nursery Co., Ltd., Yokohama. Received April 22, 1937.
- For previous introduction see 45264.
- 123377. A form with green leaves.
  - 123378. A form with red leaves.

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

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

## 123379 to 123389.

From Costa Rica. Seeds collected by H. F. Loomis, Bureau of Plant Industry, United States Department of Agriculture. Received April 21, 1937.

## 123379. ACANTHORIZA sp. Phoenicaceae. Palm.

*Palma de escoba.* A spiny-trunked, palmate-leaved palm about 15 feet high, found growing in dense woods.

## 123380. ASTROCARYUM ALATUM Loomis. Phoenicaceae. Palm.

A handsome tropical woodland palm, with a trunk 12 to 18 feet high and numerous moderately arching, dark-green pinnate leaves 18 to 20 feet long. The large spiny fruits are in dense terminal clusters. Native to the lowlands of Costa Rica.

## 123381 to 123383. BACTRIS spp. Phoenicaceae. Palm.

## 123381. BACTRIS sp.

*Viscoyol* or *Biscoyol.* A slender, spiny-trunked, caespitose palm 12 to 15 feet high. Inflorescence loose and with few seeds.

## 123382. BACTRIS sp.

*Biscoyol.* A different species from P. I. 123381, although given the same name. The denser inflorescence and the brighter fruits are smaller; the trunk is very spiny.

## 123383. BACTRIS sp.

*Pacaya de denta.* A small palm, less than 2 feet high. The small dense inflorescence bore 20 bright-red fruits in a single cluster which was very showy. A very desirable addition to patios and shaded locations.

## 123384. CALYPTROGYNE SARAPIQUENSIS H. Wendl. Phoenicaceae. Palm.

*Cola de gallo; Suita.* A Costa Rican pinnate-leaved palm, nearly stemless or with a short thick stem and numerous leaves 4 to 6 feet long. The young leaves are pinkish green and very handsome.

## 123385 to 123387. GEONOMA spp. Phoenicaceae. Palm.

## 123385. GEONOMA sp.

*Palmito dulce.* A slender, smooth, single-trunked palm found in the forest. The pinnate leaves are very graceful, and the relatively large inflorescence is pinkish, loose, with the small black fruits, less than a quarter of an inch in diameter, rather widely scattered on the branches.

## 123386. GEONOMA sp.

*Surtuba.* A slender, smooth-trunked palm, 12 to 15 feet high, which prefers moist locations in dense shade. The black fruits are rather sparsely placed

## 123379 to 123389—Continued.

on the thick branches of the rather pinkish inflorescence.

## 123387. GEONOMA sp.

This is a different species from *Surtuba* (P. I. 123386); the dull purplish-red inflorescence is somewhat larger, but the branches are much more slender and the fruits are about a quarter as large.

## 123388. HELICONIA sp. Musaceae.

*Platanillo.* The inflorescence is erect when young but drooping with age; bracts dark red; fruits bright china blue.

## 123389. (Undetermined.)

A bush or small slender tree, growing in dense woods. The mottled brown seeds, the size and shape of medium-sized olives, are covered by thin bright-red flesh and occur singly in a yellow fruit which splits into equal divisions at maturity, allowing the seed to drop.

## 123390 to 123398.

From India. Scions and seeds collected by Walter Koels, Bureau of Plant Industry, United States Department of Agriculture. Received May 1, 1937.

From the Fruit Research Station, Kodur, Madras Presidency, March 18, 1937.

## 123390 to 123392. CITRUS spp. Rutaceae.

## 123390. CITRUS sp.

No. 1516. Fruit 4 to 5 inches long, like a rough lemon in most characters, very warty with prominent protuberances, petiole more prominent than in rough lemons. Root system very strong.

## 123391. CITRUS sp.

No. 2517. A local bud sport. Fruit pale yellow, insipid. The tree is a vigorous grower and is used as stock.

## 123392. CITRUS sp.

No. 2518. *Kichli.* The so-called "country" orange of the Madras area, possibly related to the sour orange (*Citrus aurantium* L.). Introduced under the name "maderaspatana," not considered a valid name.

## 123393 to 123397. MANGIFERA INDICA L. Anacardiaceae. Mango.

123393. No. 2511. *Neelum.* A regular bearer giving two crops a year; fruits medium to small, stone medium small, flavor good.

123394. No. 2512. *Baneshan.* Fruit small to medium; skin thin and yellow. A good keeper and an important commercial variety of Cycars.

123395. No. 2513. *Alampur Baneshan.* A medium-sized fruit, long and tapering to the tip, blotched green and yellow; stone small, skin thin, fiberless; the best mango of the district.

## 123390 to 123398—Continued.

123396. No. 2514. *Mulgoa*. Fruit green, of good flavor and no fiber; skin thick; a good keeper.

123397. No. 2515. *Rumant*. A consistent and regular bearer, giving two crops a year over a longer period than *Neelum*. Fruit round and larger than *Neelum*, but not so good in flavor or so good a keeper; color green, inclined to yellow. One of the best commercial mangoes of the Presidency.

123398. *NYMPHAEA* sp. Nymphaeaceae.

No. 2519. Flowers white, 3 to 5 inches across, borne above the water.

## 123399 to 123401. PHASEOLUS VULGARIS

L. Fabaceae. Common bean.

From Australia. Seeds presented by S. Fish, Biological Branch, Plant Research Laboratory, Burnley Gardens, Burnley, Victoria. Received April 28, 1937.

123399. *Canadian Wonder* (Burnley Selection).

123400. *Pale Dun*.

123401. *Yarra*.

## 123402 to 123410.

From the Union of Soviet Socialist Republics. Seeds presented by the Director, Botanic Garden, Leningrad. Received April 26, 1937.

123402. *ALLIUM LEDEBOURIANUM* Schult. f. Liliaceae.

A stout-stemmed allium 1 to 2 feet high, native to the Altai region in Siberia. The linear leaves are terete, and the rosy-pink flowers are in dense hemispherical umbels about 1 inch in diameter.

For previous introduction see 104885.

123403. *ALLIUM* sp. Liliaceae.

Received as *Allium moly*, but the seeds are not of that species.

123404. *ALLIUM* sp. Liliaceae.

123405. *BERGENIA PACIFICA* Komarov. Saxifragaceae.

A woody perennial with elliptic leaves 2 to 6 inches long, hardly evergreen, and flowering stems over a foot high, with racemes of many showy red flowers. It may be a variety of *Bergenia crassifolia*. Native to northeastern Asia.

123406. *PARBOTIA PERSICA* (DC.) Meyer. Hamamelidaceae. Persian parrotia.

A shrub or small tree up to 15 feet high, with spreading branches and ovate-oblong, coarsely crenate leaves 3 to 4 inches long, which turn scarlet, yellow, and orange in the autumn and remain on the branches a long time. The flower heads, which appear in March before the leaves, are rather inconspicuous except for the pendent purple stamens; the ovoid

## 123402 to 123410—Continued.

fruits are half an inch long with recurved lobes. Native to Iran [Persia].

For previous introduction see 118361.

123407. *PHILADELPHUS TENUIFOLIUS* Rupr. Hydrangeaceae.

A shrub up to 8 feet high with slender spreading branches, thin ovate-oblong leaves 2 to 5 inches long, and greenish-white, slightly fragrant flowers 1 inch across, in small racemes. Native to Manchuria.

123408 to 123410. *ROSA* spp. Rosaceae.

Rose.

123408. *ROSA AMELYOTIS* Meyer.

A stout-branched shrub with purple stems, native to Siberia. The leaflets are usually 7, the pink flowers are solitary, and the fruits are about one-half inch long.

For previous introduction see 54172.

123409. *ROSA GLAUCA* Vill.

A European shrub closely related to *Rosa canina*, but having broadly ovate, bluish-green leaflets and purplish flowers.

For previous introduction see 54207.

123410. *ROSA TUSCHETICA* Botsk.

A low shrub, native to the Caucasus region, with small, firm ovate leaflets and solitary pink flowers.

For previous introduction see 54155.

## 123411 to 123416. TRIFOLIUM PRATENSE

L. Fabaceae. Red clover.

From the Union of Soviet Socialist Republics. Seeds presented by Prof. P. I. Lisitsyn, Plant Breeding Station, Moscow. Received April 28, 1937.

A collection of red clover strains with the corolla tube of shorter length than normal.

123411. No. 121.

123412. No. 304.

123413. No. 807.

123414. No. 817.

123415. No. 818.

123416. No. 819.

## 123417. VIOLA ALTAICA Ker. Violaceae.

From the Netherlands. Seeds presented by the Director, Botanic Garden, Leyden. Received April 26, 1937.

A hardy perennial violet with short stems, ovate, crenate leaves having long channeled petioles, and a single large pale-yellow flower on a stout scapellike peduncle. Native to the Altai region, Siberia.

123418. *RHODODENDRON ALBRECHTII* Maxim. Ericaceae.

From North Wales. Seeds presented by Lord Aberconway, Bodnant, Tal-y-Cafu. Received April 26, 1937.

## 123418—Continued.

A deciduous shrub 3 to 5 feet high, with obovate to oblanceolate membranous leaves which turn yellow in autumn. The rotate-campanulate, red-purple flowers, 2 inches across, in clusters of three to five, appear with the leaves. It is somewhat like *Rhododendron schkippenbachii* and is native to Japan.

For previous introduction see 117066.

123419. *HEDERA HELIX* L. Araliaceae.  
English ivy.

From the Netherlands. Seeds presented by the Director, Botanic Garden, Amsterdam. Received April 28, 1937.

Variety *Digitata*.

123420 and 123421. *ORYZA SATIVA* L.  
Poaceae. Rice.

From Italy. Seeds presented by Stazione Sperim, Risicoltura, Vercelli. Received April 28, 1937.

123420. *General Rossii*.

123421. *Gigante Vercelli*.

123422 and 123423. *ORYZA SATIVA* L.  
Poaceae. Rice.

From India. Seeds presented by the Botanical Laboratory, Titabar Farm, Titabar. Received May 6, 1937.

123422. *Bengali Jaha*. No. 226.

123423. *Jahari*. No. 240.

123424. *GOSSYPIUM PALMERII* Watt. Mal-  
vaceae. Cotton.

From Mexico. Seeds collected by George B. Hinton, in Pungarabato, and presented through the Division of Cotton and Other Fiber Crops and Diseases. Received May 6, 1937.

A much-branched shrub with leaves mostly linear, 1 to 3½ inches long, sometimes 3-lobed, and small pale-yellow flowers followed by small fruits with fuzzy seeds. Native to Mexico.

123425. *EPISCIA CUPREATA* (Hook.)  
Hanst. (*Achimenes cupreata* Hook.).  
Gesneriaceae.

From Puerto Rico. Plants presented by T. B. McClelland, Superintendent, Agricultural Experiment Station, Mayaguez. Received July 21, 1934. Numbered May 6, 1937.

A tender perennial a few inches high, suitable for warm house culture. Under favorable conditions it produces a mass of stolons extending several feet from the mother plant. The entire plant is covered with soft hairs, and the ovate crinkled leaves are copper tinged above; the small solitary flowers are scarlet red. Native to Colombia.

## 123426 to 123432.

From England. Plants presented by Sir Arthur W. Hill, Director, Royal Botanic Gardens, Kew, Surrey. Received May 7, 1937.

123426. *ARUNDINARIA ANCEPS* Mitf. Poa-  
ceae. Bamboo.

Because of the uncertainty of its origin, this *arundinaria* was named *anceps* (doubtful). It is now believed to be native to northern India. The culms are round and slender and are reported to grow 10 to 15 feet high in England. On small plants there are 2 or 3 branches at each node, with rather long branchlets having 8 to 10 linear-lanceolate leaves. The leaves are light green, over 2 inches long and three-eighths of an inch wide. The tessellation (cross venation) is minute and unusually regular.

123427. *CHIMONOBAMBUSA FALCATA* (Nees)  
Nakai (*Arundinaria falcata* Nees). Poa-  
ceae. Bamboo.

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

For previous introduction see 110335.

123428. *THAMNOCALAMUS FALCONERI* Hook.  
f. (*Arundinaria falconeri* (Van Houtte)  
A. and C. Riviere). Poaceae. Bamboo.

A bamboo with a cylindrical culm, which, when young, has 8 to 10 branches at each node; these branches vary in length, are exceedingly slender, often purplish in color, and have 4 to 7 leaves gathered near the tips. The leaves are lanceolate, 1½ to 4 inches long by ⅜ to ⅝ of an inch wide. The slenderness of the branches gives this bamboo a distinctive beauty.

For previous introduction see 114413.

123429. *CHIMONOBAMBUSA MARMOREA*  
(Mitf.) Makino (*Arundinaria mar-  
morea* (Mitf.) Makino). Poaceae.  
Bamboo.

A small bamboo growing 3 feet or more high. The internodes of the culm are very short, with 3 branches at each node, 2 short and 1 long. The bright-green, nearly sessile leaves are up to 4½ inches long by ⅝ to ⅞ of an inch wide, rough on both sides and with tessellated venations. The degree of hardness of the plant is not definitely known, though it is reported to have withstood a temperature of about 8° F. without injury in England.

For previous introduction see 116089.

## 123426 to 123432—Continued.

**123430. SINARUNDINARIA MURIELAE** (Gamble) Nakai (*Arundinaria murietae* Gamble). Poaceae. Bamboo.

A handsome bamboo, understood to grow to a height of 10 to 15 feet. It is reported to produce masses of culms, which is unusual for hardy bamboos. The culms turn to a rich yellow with age, and there are 1 to many branches at the nodes. On small plants a branch may bear 2 to 3 leaves up to 2½ inches long by ¼ of an inch wide. There are usually 3 pairs of secondary veins and the intermediates are 5 to 8. The tessellation is rather close.

For previous introduction see 90302.

**123431. THAMNOCALAMUS SPATHIFLORUS** (Trin.) Munro (*Arundinaria spathiflora* Trin.). Poaceae. Bamboo.

A rare bamboo, said to grow in clumps with slender culms up to 35 feet high and with branches tufted at the nodes; the narrow leaves, up to 6 inches long, are gathered 2 to 4 at the ends of the branchlets.

For previous introduction see 114413.

**123432. PHYLLOSTACHYS SULPHEURIA VIRIDIS** Young (*Phyllostachys mitis* A. and C. Riviere). Poaceae. Bamboo.

A Chinese bamboo up to 30 feet high, with yellow stems and brown-spotted sheaths.

**123433 to 123438. LYCOPERSICON ESCULENTUM** Mill. Solanaceae. Tomato.

From Morocco. Seeds presented by H. Brayard, Directeur, Station Experimentale de Marrakech. Received May 4, 1937.

**123433. Aurora.**

**123434. Hatif de Cologne.**

**123435. Gloria de Mordin.**

**123436. Reine de Reives.**

**123437. Potager de Viljoule.**

**123438. Sans Parcille.**

**123439 to 123441. SOJA MAX** (L.) Piper. Fabaceae. Soybean.

From Burma, India. Seeds presented by Rev. R. S. Buker, Kentung. Received May 10, 1937.

**123439. No. 1.** A small straw-yellow bean with brown hilum.

**123440. No. 2.** A medium-small, straw-yellow seed, slightly brown, cloudy, hilum dark brown.

**123441. No. 3.** A medium-sized, yellowish-green seed with light- to dark-brown hilum.

**123442 to 123450.**

From France. Seeds presented by R. Salgues, Director, Brignoles Botanic Garden. Received May 10, 1937.

## 123442 to 123450—Continued.

**123442. ASTRAGALUS GLYCYPHYLLOS** L. Fabaceae. Milkvetch.

A prostrate, spreading, herbaceous perennial, native to Asia Minor.

For previous introduction see 104560.

**123443. ASTRAGALUS HAMOSUS** L. Fabaceae. Milkvetch.

An annual, gray-green hairy plant, with prostrate or ascending stems 8 inches to 1 foot long. It is native to sunny places in the Mediterranean countries.

For previous introduction see 78765.

**123444. BRACHYPODIUM PHOENICOIDES** (L.) Roem. and Schult. Poaceae. Grass.

A perennial European grass 1 to 2 feet high, with narrowly linear leaves, slender stems, and narrow flower clusters having oblong spikelets sessile on the axis.

For previous introduction see 76759.

**123445. CUCUMIS MELO** L. Cucurbitaceae. Muskmelon.

**123446. LATHYRUS APHACA** L. Fabaceae. Pea.

A semiprostrate or ascending yellow-flowered leguminous herb, native to Asia Minor.

For previous introduction see 69856.

**123447. LAVATERA OLBIA** L. Malvaceae.

Treemallow.

A shrubby perennial, native to southern Europe, about 6 feet in height. The 3- or 5-lobed oblong leaves are softly hairy, and the solitary, reddish-purple flowers are sometimes over 2 inches across.

For previous introduction see 58650.

**123448. RUBIA PERGRINA** L. Rubiaceae.

A herbaceous perennial climber with whorled oblong or lanceolate leathery leaves. Native to the Mediterranean region.

**123449. STACHYS RECTA** L. Menthaceae.

A tall herbaceous perennial with erect or ascending stems about 2 feet high, crenate oblong-ovate or lanceolate leaves 1 to 1½ inches long, and distant whorls of about 10 yellowish-white flowers. Native to southern Europe.

**123450. VICIA MELANOPS** Sibth. and Smith. Fabaceae.

**123451 to 123576.**

From India. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received April 26, 1937.

Unless otherwise mentioned, this material was all collected in the Madras Presidency in February and March, 1937.

**123451 and 123452. ABELMOSCHUS ESCULENTUS** (L.) Moench. Okra.

## 123451 to 123576—Continued.

123451. No. 2429. *Bendikai*. From Mangalore, March 1. White fruit, 6 inches long, from a plant 5 feet high.

123452. No. 2444, *Bendikai*. From Kasargod.

123453. ACACIA sp. Mimosaceae.

No. 2334. From Ootacamund, Nilgiri Hills, February 16, at 7,000 feet altitude. A quick-growing tree with attractive foliage and an abundance of fragrant creamy flowers. Often planted in groves.

123454. ADINA CORDIFOLIA (Roxb.) Benth. and Hook. Rubiaceae.

No. 2450. From Nilambur, March 4. A large handsome deciduous tree found in the foothills of the Himalayas from Jumna eastward up to 3,000 feet altitude. The leaves are cordate, and the yellow flowers are borne in small heads.

For previous introduction see 116769.

123455 and 123456. AMARANTHUS spp. Amaranthaceae.

From Kasargod, March 3. Used as a potherb.

123455. AMARANTHUS sp.

No. 2442. *Chore Chira*.

123456. AMARANTHUS sp.

No. 2445. *Betta Chira*.

123457. ARTOCARPUS sp. Moraceae.

No. 2426. From Bangalore, February 28. An attractive tree with small deeply toothed leaves 6 inches long. The flavorless, papillose fruit is as large as a grape-fruit.

123458. BAUHINIA sp. Caesalpiniaceae.

No. 2453. From Nilambur, March 4. A medium-sized tree, found in teak forests with pods 18 by 1½ inches.

123459. BEGONIA sp. Begoniaceae.

No. 11039. From Ootacamund, Nilgiri Hills, February 16, at 7,000 feet altitude. A perennial with attractive cerise flowers, growing in moss on rock faces in the rain forest.

123460 to 123465. BENINCASA HISPIDA (Thunb.) Cogn. Cucurbitaceae.

Waxgourd.

Nos. 123460 and 123461 were presented by the Superintendent of the Rice Research Station at Petambli, February 22.

123460. No. 2384. *Kumbalanga*. A smooth elongate fruit 2 feet long, covered with bloom; a good keeper; used as a vegetable and for confections.

123461. No. 2388. *Vaidyam Kumbalanga*. A small fruit 6 inches long, used only in medicine.

123462. No. 2419. *Kumbalanga*. From Mangalore, February 27. Fruit elon-

## 123451 to 123576—Continued.

gate, 16 by 14 inches, pale green, no bloom, used as a vegetable.

123463. No. 2420. *Kumalakai*. From Mangalore, February 27. Fruit subglobose, 6 to 8 inches in diameter, covered with bloom, used as a vegetable.

123464. No. 2435. *Nareyan Kumbalanga*. From Kasargod, March 2. Said to be a large form covered with bloom.

123465. No. 2470. From Madura, March 7. Fruit elongate, 18 inches long by 12 inches across, covered with heavy bloom; used as a vegetable and for candying.

123466. BIGNONIA sp. Bignoniaceae.

No. 2495. From Bangalore, Mysore State, February 9. A vigorous climber, used on trellises.

123467. CALOPHYLLUM INOPHYLLUM L. Clusiaceae.

No. 2431. From Kasargod, March 2. A large tree with leaves like those of the magnolia, producing fruits about 1 inch in diameter. A bitter aromatic greenish oil is extracted from the seeds and used for illumination by the poorer classes. The strong durable reddish wood is used by cabinetmakers, also for masts and railway ties.

For previous introduction see 80684.

123468 to 123476. CAPSICUM ANNUUM L. Solanaceae. Common redpepper.

123468. No. 2383. From Shoranur, March 23. Fruit pointed, 1½ inches long, red, very hot.

123469. No. 2428. From Mangalore, March 1. Fruit top-shaped, 1 to 1½ inches high; red, very pungent.

123470. No. 2411. *Manesru*. From Kasargod, February 27. Fruit pointed, 2 to 3 inches long by 1 inch broad; red, hot.

123471. No. 2402. *Monji*. From Tellicherry, February 25. Strains No. 2400 to 2404 are much alike, but vary in length and width; said to be distinct.

123472. No. 2410. *Manesru*. From Kasargod, February 27. Fruit pointed, 4 inches long by ½ to ¾ of an inch wide; red, hot.

123473. No. 2404. *Morigi*. From Tellicherry, February 25.

123474. No. 2401. *Morigi*. From Tellicherry, February 25. Like No. 2400 (P. I. No. 123475), but shorter.

123475. No. 2400. *Morigi*. From Tellicherry, February 25. Fruit red, pointed, to 3 inches long; hot.

123476. No. 2403. *Morigi*. From Tellicherry, February 25.



## 123451 to 123576—Continued.

123477. *CASSIA ALATA* L. Caesalpinaceae.  
Ringworm cassia.

No. 2496. From Mangalore, March 1. A shrub up to 10 feet high, sometimes cultivated as an ornamental, with pinnate leaves 2 feet long and showy yellow flowers. Native to tropical America.

For previous introduction see 106487.

123478. *CASSIA* sp. Caesalpinaceae.

No. 2465. From Nilambur, March 6. A well-shaped thorny bush about 8 feet high, probably yellow flowered.

123479 to 123492. *CITRULLUS VULGARIS* Schrad. Cucurbitaceae. Watermelon.

123479. No. 1. *Mettupalaiyam*. From Mettupalaiyam, February 21. Fruit subglobose, 10 inches long, with fine venulations of darker green, distinctly and abundantly ribbed; flesh red; rind  $\frac{1}{4}$  of an inch thick, the thinnest rind observed on this expedition.

123480. No. 2. From Coimbatore, February 21. Fruit globose, 8 inches in diameter, green with fine irregular lines of darker green; flesh red, seedy; rind thin.

123481. No. 3. From Coimbatore, February 21. Fruit subglobose, 1 foot in diameter, green with broad blotched lines of darker green; flesh red; rind 1 inch thick.

123482. No. 4. From Coimbatore, February 21. Fruit subglobose, deep green with discernible blotched stripes of darker green; flesh red; texture good, blending into the half-inch green rind; seeds large.

123483. No. 2320. From Coimbatore, February 12. Fruit subglobose, 14 inches long, deep green, veined darker; flesh red; rind three-fourths of an inch thick.

Nos. 123484 to 123486 were presented by the Superintendent of the Rice Research Station, Petambal, February 22.

123484. No. 2390. *Kummati*. Described as like a small watermelon, but used as a curry vegetable.

123485. No. 2391. *Kummati*. Like No. 2390 (P. I. 123485), but of a different race.

123486. No. 2392. *Chakkaravellari*. Fruit globose, 6 to 10 inches in diameter, smooth, green mottled; flesh red and sweet.

123487. No. 2397. *Vataka*. From Tellicherry, February 24. Fruit globose, 6 to 8 inches in diameter, green, reticulated; flesh white and pink, crisp, low in sugar content; early.

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## 123451 to 123576—Continued.

123488. No. 2408. From Payyanur, February 26. Fruit globose, 8 inches in diameter, pale green with broad blotched ribs of darker green; flesh red, low sugar content.

123489. No. 2409. *Vataka*. From Kasargod, February 26. Fruit globose, 6 inches in diameter, pale green, reticulated; flesh red, insipid.

123490. No. 2417. From Mangalore, February 27, but the fruit is said to have come from Kundapur. Fruit subglobose, 1 foot in diameter; pale green, reticulated; flesh red.

123491. No. 2418. *Vataka*. From Mangalore, February 27, but said to have come from Kundapur. Fruit subglobose, 1 foot in diameter, deep green with rib lines darker green; rind thick, flesh red; few seeds.

123492. No. 2466. Purchased in Madura, March 7.

123493 to 123506. *CUCUMIS MELO* L. Cucurbitaceae. Muskmelon.

From Coimbatore, February 21.

123493. No. 1. Fruit small, gold brown with broad rib lines, often flattened, 6 by 8 inches; flesh mealy, sweetish, 2 inches thick, half green and half salmon-colored.

123494. No. 2. Fruit subglobose,  $4\frac{1}{2}$  inches in diameter, brownish yellow, mottled, traces of irregular ribs; flesh 1 inch thick, salmon-colored, juicy, acid.

123495. No. 3. Fruit banana-shaped, often nearly 18 inches long, smooth, golden yellow, more or less blotched with green; flesh mealy, white, neutral, inclined to be acid.

123496. No. 4. Fruit 6 by 4 inches, unribbed, lemon yellow, netted; flesh pale salmon, juicy, not acid, but of an interesting flavor.

123497. No. 5. Fruit subglobose, 5 inches in diameter, smooth, pink brown with broad green rib lines, flesh  $\frac{3}{4}$  of an inch thick, half green, half salmon-colored, juicy, neutral.

123498. No. 6. Fruit globose, 6 inches in diameter, yellow blotched green with deep green ribs; flesh  $1\frac{1}{4}$  inches thick, varying in color from salmon at center to half green near the rind; pleasantly acid.

123499. No. 7. Fruit subglobose, 4 by  $3\frac{1}{2}$  inches, red brown with conspicuous ribs of pale netting; flesh  $\frac{3}{4}$  of an inch thick, fragrant, acid.

## 123451 to 123576—Continued.

123500. No. 8. Fruit subglobose, 6 by 4 inches, orange and greenish black, flecked, netted; flesh salmon-colored. 1½ inches thick, mealy, acid.
123501. No. 9. Fruit elongate, 10 by 6 inches, yellow to orange with green shading and more or less green ribbing; flesh salmon-colored, 1½ inches thick, mealy, subacid.
123502. No. 10. Fruit oblong, 6 inches long, red brown, nearly smooth, with broad green ribs; flesh salmon-colored, 1½ inches thick with the seeds embedded, rather sweet, interesting, juicy.
123503. No. 11. Fruit subglobose, 10 by 5 inches, golden-brown, finely flecked with dark green, smooth, unribbed; flesh 1¾ inches thick, salmon-colored, mealy, fragrant and pleasantly acid.
123504. No. 12. Fruit globose, 6 inches in diameter, yellow, heavily netted, ribbed; flesh firm, pale salmon-colored, 1¾ inches thick with embedded seeds, sweetish. A good keeper.
123505. No. 13. Fruit subglobose, 5 inches in diameter, smooth, red brown, not ribbed; flesh yellow, rather juicy, neutral with delicate flavor.
123506. No. 14. Fruit 6 by 3 inches, yellow, blotched brown; rind firm; flesh white, sweetish with seeds embedded.
- 123507 to 123516. *CUCUMIS SATIVUS* L. Cucurbitaceae. Cucumber.
123507. No. 2389. *Kakri*. From Petamb. February 22. Presented by the Superintendent of the Rice Research Station. An elongate fruit with small spines and crisp flesh.
123508. No. 2439. *Kakerika*. From Kasargod, March 2.
123509. No. 2467. From Madura, March 7.
123510. No. 2468. From Madura, March 7.
123511. No. 2382. *Waterika*. From Petamb. February 22. Fruit about 16 inches long and 6 inches wide, inclined to taper toward the stem, yellow, netted or blotched with dark green; flesh firm; a good keeper.
123512. No. 2385. *Waterika*. Presented by the Superintendent of the Rice Research Station, Petamb. February 22. Probably a long cucumber; a good keeper.
123513. No. 2399. *Waterika*. From Tellicherry, February 25. Fruit egg-shaped, 6 inches long, green and yellow, variously marked; flesh good; keeps for months.

## 123451 to 123576—Continued.

123514. No. 2421. *Waterika*. From Mangalore, February 27. Fruit 14 by 6 inches, tapering at both ends but sharply so at the stem end, orange-colored, netted with deep green. This variety will not keep over 3 or 4 months.
123515. No. 2440. *Unda Kakri*. From Kasargod, March 2. Said to be 18 inches long.
123516. No. 2452. From Nilambur, March 14. Fruit ovoid, about 3 inches long, green, ribbed white, smooth; flesh bitter. A good keeper.
123517. *CUCUMIS* sp. Cucurbitaceae. No. 2398. From Tellicherry, February 24. Fruit oval, 1 foot long, orange yellow, more or less ribbed green, or the reverse; flesh firm, keeps for months. Attractive fruits and flesh of good quality; interesting novelty.
123518. *CUCUMIS* sp. Cucurbitaceae. No. 2441. From Kasargod, March 2.
- 123519 to 123523. *CUCURBITA MOSCHATA* Duchesne. Cucurbitaceae. Cushaw.
123519. No. 2305. From Bangalore, Mysore State, February 9. Fruit ovoid, buff brown, weighs about 30 pounds, flesh coarse and not very sweet; grown in the summer and will keep for 6 months.
123520. No. 2386. *Matabar*. Presented by the Superintendent of the Rice Research Station at Petamb. February 22. Fruit yellow, flattened, ridged, 1 to 2 feet in diameter; flesh slightly sweet. A good keeper.
123521. No. 2416. *Mattan*. From Kasargod, February 27. Fruit flattened, 18 by 12 inches, ribbed, smooth, buff pink. A good keeper.
123522. No. 2469. *Mattan*. From Madura, March 7. Fruit flattened, strongly ribbed, creamy buff to red buff, 18 by 12 inches. Keeps for several months.
123523. No. 2407. From Kasargod, February 26. Fruit cucumber-shaped, 14 by 5 or 6 inches, smooth orange-colored; said to be a good keeper; flesh rather insipid.
123524. *CARYOTA* sp. Phoenicaceae. Palm. No. 2432. From Kasargod, March 2. An attractive palm about 10 feet high.
123525. *DOLICHOS LABLAB* L. Fabaceae. Hyacinth-bean. No. 2456. From Madura, March 7. Used either as green or dry beans; tolerates dry conditions.

## 123451 to 123576—Continued.

123526. *DOLICHOS LABLAB* L. Fabaceae.  
Hyacinth-bean.

No. 2476. *Awara Kat*. From Kodai Kanal, Palni Hills, at 7,500 feet altitude, but said to have come from the plains below.

123527. *ELAEOCARPUS* sp. Elaeocarpaceae.

No. 2485. From Kodai Kanal, Palni Hills, at 7,500 feet altitude, March 13. A tree found in the rain forest; the fruit is apparently eaten by animals.

123528. *FICUS ASPERRIMA* Roxb. Moraceae.

No. 2381. From Petambi, February 22. A small clinging shrub 12 feet high, growing on the trunk of a tree; covered with attractive orange fruits.

123529. *FLACOURTIA MONTANA* J. Grah. Flacourtiaceae.

No. 2380. From Petambi, February 22. A large handsome evergreen tree with large shiny elliptical leaves and an abundance of attractive fruit of the size of small cherries with their taste and color.

123530. *FLACOURTIA* sp. Flacourtiaceae.

No. 2425. From Mangalore, February 28. A beautiful well-formed tree with elliptical, evergreen leaves and crimson fruits with an agreeable acid flavor.

123531. *FUCHSIA* sp. Onagraceae.

No. 2340. From Ootacamund, Nilgiri Hills, February 16, at 7,000 feet altitude. A scraggly shrub 8 feet tall, with long pendent racemes of large cerise flowers. Found growing in thickets.

123532. *GARCINIA* sp. Clusiaceae.

No. 2427. From Mangalore, March 1. Fruit tomato-shaped 2 inches long; skin purple red; pulp acid, not pleasant. Tree not seen.

123533. *LAGENARIA LEUCANTHA* (Duchesne) Rusby. Cucurbitaceae. Calabash gourd.

No. 2393. *Charanga*. Gift of the Superintendent, Rice Research Station, Petambi, February 22. A mixture of necked and round varieties, used as vegetables when young and tender and as dippers and containers when ripe.

123534. *LAGENARIA LEUCANTHA* (Duchesne) Rusby. Cucurbitaceae. Calabash gourd.

No. 2434. *Oharenga*. From Kasargod, March 2.

123535. *LAVANDULA* sp. Menthaceae.

No. 2493. From Kodai Kanal, Palni Hills, at 7,590 feet altitude, March 14. A perennial 4 feet high, found on open slopes. The fleshy, hairy leaves are arranged closely in fours, and the flowers are in dense spikes 3 to 4 inches long.

## 123451 to 123576—Continued.

123536. *LUFFA ACUTANGULA* (L.) Roxb. Cucurbitaceae. Singkwa towelgourd.

No. 2430. From Mangalore, March 1. Fruit 1 foot long and ridged.

123537. *LUFFA CYLINDRICA* (L.) Roemer. Cucurbitaceae. Suakwa towelgourd.

No. 2451. From Nilambur, March 4. Fruit smooth, elongate, 4 by 1½ inches. Of possible interest to breeders and gourd growers.

123538. *LYCOPERSICON ESCULENTUM* Mill. Solanaceae. Tomato.

No. 2396. From Sharanur, February 2. Fruit red, 2 inches long.

123539. *MOMORDICA CHARANTIA* L. Cucurbitaceae. Balsam-pear.

No. 2387. *Kaypakka*. Presented by the Superintendent, Rice Research Station, Petambi, February 22. Fruit 6 to 12 inches long, used as a tonic for stomach trouble.

123540. *CASTALIA PUBESCENS* (Willd.) Woodr. and Wood. Nymphaeaceae.

No. 2406. From Kasargod, February 26. A slightly fragrant, very attractive, day-blooming waterlily, 6 inches across with large purplish-green, toothed, reniform leaves, scabrous above, and purple-red flowers borne 6 inches above the water.

123541. *NYMPHAEA STELLATA* Willd. Nymphaeaceae.

No. 2423. From Tellicherry, February 25. The fragrant, day-blooming white flowers, about 3 inches across, are borne about 6 inches above the surface of the water of shallow ponds.

123542. *NYMPHAEA STELLATA* Willd. Nymphaeaceae.

No. 2424. *Putak*. From Mangalore, March 1. A lily growing in a pond 6 feet deep. The fragrant flowers, white flushed pink on the outer petals, are 4 inches across and bloom in the daytime; they are borne 6 inches above the surface of the water.

123543. *OSBOTHERA* sp. Onagraceae.

No. 2472. From Kodai Kanal, Palni Hills, at 7,500 feet altitude. A biennial up to 4 feet high, with large yellow flowers about 2 inches across.

123544. *OSBECKIA* sp. Melastomaceae.

No. 2341. From Kotagiri, Nilgiri Hills, February 18, at 6,000 feet altitude. A low shrub about 4 feet high, with large purple flowers; found growing on open slopes.

123545 to 123550. *ORYZA SATIVA* L. Poaceae. Rice.

From Coimbatore, February 21.

123545. No. 2344. 123547. No. 2356.

123546. No. 2355. 123548. No. 2359.

## 123451 to 123576—Continued.

123549. No. 2370. 123550. No. 2497.  
123551 to 123555. PHASEOLUS spp. Fabaceae. Bean.  
123551. PHASEOLUS LUNATUS L. Lima bean.  
No. 2415. *Walaawawara*. From Kasargod, February 27. Beans used both as green beans and dried.  
123552 to 123555. PHASEOLUS VULGARIS L. Common bean.  
Nos. 123552 and 123553 were from Kodai Kanal, Palni Hills, at 7,500 feet altitude, March 11. Used as green pods or dried beans.  
123552. No. 2477. 123554. No. 2481.  
123553. No. 2478.  
123555. No. 2443. *Avore*. From Kasargod, March 2. Green pods eaten.  
123556. PISUM SATIVUM L. Fabaceae. Pea.  
No. 2453. From Mangalore, March 2. Said to have come from Bombay.  
123557. PISUM SATIVUM L. Fabaceae. Pea.  
No. 2482. From Kodai Kanal, Palni Hills, March 11, at 7,500 feet altitude. Vines 3 feet high, free from disease, but the green peas are not sweet.  
123558. PONGAMIA PINNATA (L.) W. F. Wight. Fabaceae.  
No. 2200. From Mandassa, January 27. A large dense attractive tree, used for roadside planting.  
123559. RHODODENDRON ARBOREUM J. E. Smith. Ericaceae. Tree rhododendron.  
No. 2492. From Kodai Kanal, Palni Hills, March 14, at 7,500 feet altitude. A scrubby tree, often 2 feet in diameter and only 25 feet high, growing on most isolated slopes where no other trees grow. Flowers crimson, sometimes spotted with black.  
For previous introduction see 122127.  
123560. RUBUS sp. Rosaceae.  
No. 2332. From Ootacamund, Nilgiri Hills, February 15, at 7,000 feet altitude. A scandent shrub growing on the edge of the forest to a height of 30 feet and covered with sour, black-red fruits which are hard to separate from the calyx.  
123561. SALVIA COCCINEA Juss. Menthaceae.  
No. 2489. From Kodai Kanal, Palni Hills, February 13, at 7,500 feet altitude. A small herb up to 18 inches high, with spikes of rather large scarlet flowers, growing along a roadside.  
For previous introduction see 13688.  
123562. SAXIFRAGA sp. Saxifragaceae.

## 123451 to 123576—Continued.

- No. 2327. From Ootacamund, Nilgiri Hills, February 14, at 7,000 feet altitude on open isolated slopes. Growing in clumps with thick fleshy leaves on a stem 4 feet high which bears a corymb of large persistent yellow flowers.  
123563 to 123566. SOLANUM spp. Solanaceae.  
123563 and 123564. SOLANUM MELONGENA L. Eggplant.  
*Baden Kot* From Kasargod, February 27.  
123563. No. 2413. Fruit almost round, 5 to 6 inches across, green with darker green mantle.  
123564. No. 2414. Fruit ovoid, 5 inches long, pale green; few seeds.  
123565. SOLANUM sp.  
No. 2328. From Ootacamund, Nilgiri Hills, February 14, at 7,000 feet altitude. A thorny bushy perennial up to 3 feet high, with purplish flowers and orange-red fruits, growing along the roadside.  
123566. SOLANUM sp.  
No. 2500. From Kodai Kanal, Palni Hills, March 14, at 7,500 feet altitude. A shrub up to 6 feet high, growing at the edge of the forest; flowers white; fruits crimson.  
123567. STERCULIA sp. Sterculiaceae.  
No. 2455. From Nilambur, March 6. A handsome tree.  
123568. SWIERTENIA MACROPHYLLA King. Meliaceae. Mahogany.  
No. 2448. From Nilambur, March 4. A large attractive, well-formed tree, native to tropical America, with compound leaves made up of 3 to 5 pairs of elliptic-oblong leaflets 4 to 8 inches long and small flowers in panicles; the ovoid woody fruits are 6 inches long and contain winged seeds 3 to 5 inches long.  
For previous introduction see 94200.  
123569. TECTONA GRANDIS L. f. Verbenaceae. Teak.  
No. 2447. From Nilambur, March 4. A large tree with huge deciduous leaves. An attractive avenue tree.  
For previous introduction see 119910.  
123570. TERMINALIA TOMENTOSA (Roxb.) Wight and Arn. Combretaceae.  
No. 2395. From Nilambur, February 23. A tall timber tree of the deciduous (teak) forest.  
123571. LAGERSTROEMIA SPECIOSA (Muench.) Pers. Meliaceae.  
No. 2454. From Nilambur, March 5. A tall tree with smooth, light-colored bark.

## 123451 to 123574—Continued.

123478. *VIGNA SINENSIS* (Torner) Savi.  
Fabaceae. Cowpea.

No. 2438. *Bagada payaru*. From Kasargod, March 2. Used while tender or as dry beans.

123573 and 123574. *VIGNA SESQUIPEDALIS* (L.) Fruwirth. Fabaceae.

Asparagus-bean.

From Kasargod, March 2. Used while the pods are tender or as dried beans.

123573. No. 2436. *Attanda payaru*.

123574. No. 2437. *Ola payaru*.

123575. *VIOLA* sp. Violaceae.

No. 2484. From Kodal Kanal, Palni Hills, March 12, at 7,500 feet altitude. A small plant spreading by runners with white to old-rose flowers.

123576. (Undetermined.)

No. 2329. From Ootacamund, Nilgiri Hills, February 14, at 7,000 feet altitude. A dense bush about 8 feet high, growing on isolated slopes. Foliage attractive; flowers small, three-fourths of an inch in diameter, abundant, lavender-rose and very attractive; fruit edible but seedy.

123577 to 123603. *SOJA MAX* (L.) Piper.  
Fabaceae. Soybean.

From China. Seeds presented by Dr. Moses Swen, Hopei Provincial College of Agriculture, Paotingfu, Hopei. Received May 12, 1937.

123577. Hopei E-3. Medium size, straw-yellow seed with hilum varying from brown to black.

123578. Hopei E-4. Medium size, straw-yellow seed with brown hilum; badly mottled with brown and black.

123579. Hopei E-5. Medium size, straw-yellow seed with light-brown hilum.

123580. Hopei E-6. Medium size, straw-yellow seed with brown hilum, more or less mottled with brown.

123581. Hopei E-7. Medium large, straw-yellow seed with brown hilum, slightly mottled with brown.

123582. Hopei E-8. Small, straw-yellow seed with brown hilum, badly mottled with brown.

123583. Hopei E-9. Medium size, straw-yellow seed with light-brown to black hilum; mottled slightly with brown and black.

123584. Hopei E-10. Medium size, straw-yellow seed with light-brown hilum, badly mottled with brown.

123585. Hopei E-11. Medium size, straw-yellow seed with brown hilum, badly mottled with brown and black.

## 123577 to 123603—Continued.

123586. Hopei E-601. Large green seed with brown hilum; green cotyledons.

123587. Hopei E-602. Medium size, yellowish-green seed with brown hilum; green cotyledons.

123588. Hopei E-606. Medium size, yellowish-green seed with brown hilum, slightly mottled with brown.

123589. Hopei E-607. Medium small, yellowish-green seed with black hilum, badly mottled with black.

123590. Hopei E-610. Medium size, light yellowish-green seed with light-brown hilum.

123591. Hopei E-611. Medium size, glossy light yellowish-green seed with light-brown hilum.

123592. Hopei E-701. Medium small, flat, black seed quite similar to Wilson-Five; cotyledons yellow.

123593. Hopei E-702. Medium large, glossy-black seed; cotyledons green and yellow.

123594. Hopei E-703. Medium large, somewhat flattened, black seed; yellow cotyledons.

123595. Hopei E-704. Medium size, black seed; yellow cotyledons.

123596. Hopei E-705. Medium large, somewhat flattened black seed; yellow cotyledons.

123597. Hopei E-706. Large dull-black seed; yellow cotyledons.

123598. Hopei E-708. Medium large, dull-black seed; green cotyledons.

123599. Hopei E-801. Medium large, brown seed; seed coat slightly split.

123600. Hopei E-802. Medium size, glossy light-brown seed.

123601. Hopei E-803. Medium large, reddish-brown seed; tendency of seed coat to split.

123602. Hopei E-804. Large, somewhat flattened, black and brown seed; colors arranged in concentric rings similar to the Meyer (P. I. 17852).

123603. Hopei E-805. Large black and brown seed, colors arranged in concentric rings similar to the Meyer (P. I. 17852).

## 123604 to 123609.

From Australia. Seeds presented by J. M. Wistler, Dinninup, Western Australia, through C. D. Tribble, of California. Received April 28, 1937.

A collection of native shrubs.

123604. *CHORIZEMA* sp. Fabaceae.

123605 to 123607. *HIBBERTIA* spp. Dilleniaceae.

## 123604 to 123609—Continued.

123605. *HIBBERTIA* sp.

A small shrub 6 to 12 inches high; flowers yellow, very floriferous.

123606. *HIBBERTIA* sp.

A handsome shrub 1 foot high, with large yellow flowers.

123607. *HIBBERTIA* sp.

A shrub 18 inches high, found growing in sandy loam, with large handsome yellow flowers.

123608. *KENNEDIA COMPTONIANA* (Andrews) Link. Fabaceae.

A shrubby vine with single lanceolate leaflets and terminal as well as axillary racemes of pea-shaped flowers ranging from white through rose to purple.

For previous introduction see 113768.

## 123609. (Undetermined.)

A shrub 2 feet high from Perth, Western Australia.

123610 to 123614. *PHLEUM PRATENSE* L. Poaceae. Timothy.

From Norway. Seeds presented by H. Wexelsen. Felleskjøpets Stamsedgard, Hjellum. Received May 5, 1937.

123610. Selection F<sub>1</sub>.

## 123611. Selection 16-3.

## 123612. Selection 58-0.

123613. Selection F<sub>1</sub>.123614. *Grindstad*, a local strain.123615. *CARICA PAPAYA* L. Papayaceae. Papaya.

From Venezuela. Seeds from the Granda Modelo del Estado Tachira, presented through J. L. Colom, Division of Agricultural Cooperation, Pan American Union. Received May 6, 1937.

123616. *STENOMESON VARIEGATUM* (Ruiz and Pav.) Macbride (*S. incarnatum* Baker). Amaryllidaceae.

From Huancayo, Peru. Bulbs presented by Paul G. Ledig, Huancayo Magnetic Observatory, Carnegie Institution of Washington, D. C. Received July 1, 1930. Numbered in May 1937.

A native amaryllid, native to Peru, with numerous thick lorate leaves about 1½ feet long and a stout scape with several funnel-shaped flowers in an umbel. The flowers, 2 to 3 inches long, are variable in color, pale or bright red, or tawny.

123617. *CITRUS* sp. Rutaceae.

From Greece. Plants presented by John Vorés, Athens. Received May 19, 1937.

A seedless orange, introduced for the use of plant breeders.

123618 to 123621. *GOSYPIUM* spp. Malvaceae. Cotton.

From India. Seeds presented by the Cotton Research Station, Lyallpur, through Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received April 26, 1937.

A collection of cotton strains evolved on the hot plains of the Punjab from American stock.

## 123618. No. 2457. Research Station No. 47 F.

## 123619. No. 2458. Research Station No. 43 F.

## 123620. No. 2459. Research Station No. 289 F.

## 123621. No. 2460. Research Station No. 4 F.

123622 to 123624. *CITRUS* spp. Rutaceae.

From Brazil. Seeds collected by Dr. H. S. Fawcett, Citrus Experiment Station, Riverside, Calif. Received May 17, 1937.

123622. *CITRUS AURANTIFOLIA* (Christm.) Swingle. Lime.

*Ranghpur lime (Laranja Rosa)*. S. A. No. 9. From São Paulo, March 1937.

123623. *CITRUS SINENSIS* (L.) Osbeck. Orange.

S. A. No. 10. From Montenegro, Rio Grande do Sul, April 9, 1937. A sweet orange without any acid.

123624. *CITRUS* sp.

S. A. No. 11. From Uruguay, April 11, 1937. A very large sweet seedling orange from a tree over 50 years old.

## 123625 and 123626.

From Rio de Janeiro, Brazil. Seeds presented through Dr. Doris M. Cochran, United States National Museum, Washington, D. C. Received May 24, 1937.

123625. *PTERODON* sp. Fabaceae.

A tree with pinnate foliage and racemes of violet-pink flowers.

123626. *XYLOPIA* sp. Annonaceae.

The fruits and seeds of this evergreen tree are sometimes used as condiments.

123627. *IPOMOEA BATATAS* (L.) Lam. Convolvulaceae. Sweetpotato.

From India. Plants collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received April 26, 1937.

No. 2422. From Kasargod, Madras Presidency, March 1, 1937. Some tubers are free from fiber and the flesh is more or less sweeter than ours.

**123628 to 123637. SACCHARUM. Poaceae. Sugarcane.**

From the Hawaiian Islands. Cuttings presented by the Experiment Station, Hawaii Sugar Planters Association, Honolulu. Received May 25, 1937.

123628. 31-156.	123633. 31-1211.
123629. 26 C 270.	123634. 31-1213.
123630. 30-2417.	123635. 31-2343.
123631. 30-4422.	123636. 31-2441.
123632. 31-626.	123637. 31-711.

**123638 to 123644. ARACHIS HYPOGAEA L. Fabaceae. Peanut.**

From India. Seeds presented by Dr. J. S. Patel, Oil Seeds Specialist, Coimbatore, Madras Presidency. Received May 26, 1937.

123638. A. H. 45. H. G. No. 1.
123639. A. H. 259. <i>Philippine White</i> .
123640. A. H. 34. <i>Small Japan</i> .
123641. A. H. 32. <i>Gindiyattam Bunch</i> .
123642. A. H. 1. <i>Local Mauritius</i> .
123643. A. H. 811.
123644. A. H. 784. <i>Gigantea</i> .

**123645 to 123660.**

From India. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received May 27, 1937.

**123645 to 123659. ORYZA SATIVA L. Poaceae. Rice.**

From the Rice Research Station, Department of Agriculture, Sabour, Behar, Bengal, April 12, 1937.

123645. No. 2656. <i>Zinjinta</i> . (Local.) Life cycle 100 days.
123646. No. 2657. <i>Surgoza</i> . (Local.) Life cycle 100 days.
123647. No. 2658. <i>Sathi</i> . (Local.) Life cycle 60 days.
123648. No. 2659. <i>Kolaha</i> . (Local.) Life cycle 100 days.
123649. No. 2660. <i>144 I</i> . Life cycle 120 days.
123650. No. 2661. <i>141 BK</i> . Life cycle 120 days.
123651. No. 2662. <i>115 BK</i> . Life cycle 120 days.
123652. No. 2663. <i>5763 Aus</i> . Life cycle 90 days.
123653. No. 2664. <i>Black Ghora</i> . (Local.) Life cycle 80 days.
123654. No. 2665. <i>5537 Aus</i> . Life cycle 90 days.
123655. No. 2666. <i>Brown Ghora</i> . (Local.) Life cycle 80 days.
123656. No. 2667. <i>5 Broh</i> . (Local.) Life cycle 90 days.

**123645 to 123660—Continued.**

123657. No. 2698. *98 BK*. Life cycle 135 days.

123658. No. 2699. *16 BK*. Life cycle 135 days.

123659. No. 2700. *76-1*. Life cycle 120 days.

**123660. ZEA MAYS L. Poaceae. Corn.**

No. 2670. From Jaumpur, United Provinces, April 15, 1937. A locally grown corn, said to have edible ears in 6 weeks after sowing. The Allahabad Agricultural Institute says that this is the only corn they have succeeded in growing.

**123661 to 123664.**

From France. Seeds presented by Maurice Jeanson, St. Quentin-on-Tourmont, par Rue (Somme). Received May 5, 1937.

**123661 to 123663. SOJA MAX (L.) Piper. Fabaceae. Soybean.**

*Soja du Marquenterre*.

123661. 1934 crop.

123662. 1935 crop.

123663. 1936 crop.

**123664. ZEA MAYS L. Poaceae. Corn.**

*Giant popcorn du Marquenterre*. A cross between Golden Bantam sweet corn and popcorn.

**123665 to 123671.**

From India. Seeds purchased from G. Ghose & Co., Town-End, Darjeeling. Received May 17, 1937.

**123665. ALLIUM JACQUEMONTI Kunth. Liliaceae.****123666. ALLIUM WALLICHIANUM Steud. Liliaceae.**

A tall allium, native to eastern Asia, with narrow flat leaves about 3 feet long and purple flower heads.

For previous introduction see 99715.

**123667. COLCHICUM LUTEUM Baker. Melanthiaceae.**

A spring-blooming colchicum with few fleshy strap-shaped leaves about 9 inches long and 1 to 3 golden flowers over an inch across. Native to the temperate Himalayas from 4,000 to 7,000 feet altitude.

For previous introduction see 112109.

**123668 and 123669. IRIS CLARKEI Hook. f. Iridaceae. Clarke iris.**

A curiously local iris native to the Himalayas in a circumscribed area in the Sikkim and Bhutan region at altitudes between 6,000 and 11,000 feet, in ground that is swampy half the year and frozen hard under snow most of the remaining months. The narrow leaves droop at the tips; the upper surface is polished and shiny, the under

## 123665 to 123671—Continued.

side glaucescent. The solid stem is 2 feet long and bears 1 or 2 lateral heads.

For previous introduction see 122069.

123668. A form with pale-blue flowers.

123669. A form with dark-blue flowers.

123670. *STYRAX HOOKERI* C. B. Clarke. *Styracaceae.* Snowbell.

A tree often 40 feet high, native to Sikkim and Bhutan at altitudes between 6,000 and 7,000 feet. The white flowers, 1 inch long, are tomentose outside, and the young branches are stellate-pubescent. The wood is white, close grained, and moderately hard.

For previous introduction see 122142.

123671. *VIOLA DISTANS* Wall. *Violaceae.* Violet.

A prostrate violet with slender stems 1 to 14 inches long, variable leaves, and pale-lilac or blue flowers about one-half inch across. Native to the temperate Himalayas at altitudes of 5,500 to 10,000 feet.

123672 and 123673. *DOLICHOS LABLAB* L. *Fabaceae.* Hyacinth-bean.

From Africa. Seeds presented by the Agricultural Department, Kenya Colony, through Anna E. Jenkins, Bureau of Plant Industry, United States Department of Agriculture. Received May 26, 1937.

123672. A form with brown seeds.

123673. A form with black seeds.

123674. *LIVISTONA MARIAE* F. Muell. *Phoenicaceae.* Palm.

From central Australia. Seeds presented through David Barry, Jr., Los Angeles, Calif. Received June 3, 1937.

From trees growing along the Finke River, Palm Valley. An erect palm with fan-shaped leaves divided into narrow plicate segments.

For previous introduction see 95077.

## 123675 to 123695.

From India. Seeds collected by Walter Koels, Bureau of Plant Industry, United States Department of Agriculture. Received May 6, 1937.

Collected in the Madras Presidency in March 1937.

123675. *AMYGDALUS PERSICA* L. *Amygdalaceae.* Peach.

No. 2491. From Kodai Kanal, Palni Hills. Fruit about 2 inches in diameter, more or less conspicuously beaked; flesh white, decidedly red around the stone, flavor good. The trees fruit and flower at the same time and bear well.

123676 and 123677. *ALLIUM CEPA* L. *Liliaceae.* Onion.

## 123675 to 123695—Continued.

From Sidhout, March 23. Healthy plants growing amid fierce desert winds (temperature 103° F. in the shade); sometimes the leaf tips become burned.

123676. No. 2538. A red globe onion.

123677. No. 2539. Like No. 2538, but sample contains both red and white sorts.

123678. *CITRULLUS VULGARIS* Schrad. *Cucurbitaceae.* Watermelon.

No. 2522. From Sidhout, March 20. Fruit elongate, 18 inches long, pale green with strange broad chain lines of black-green over blotches of sea green; rind 1½ inches thick; flesh red, texture good, but sugar content low.

123679 to 123688. *CUCUMIS MELO* L. *Cucurbitaceae.* Muskmelon.

123679. No. 2508. *Kharbuza.* From Madras, March 17, but said to have come from the Cuddapah District. Fruit globose, up to 10 inches in diameter, lemon yellow with traces of green rib lines and of green netting; flesh white, thick, and sweet.

123680. No. 2509. *Kharbuza.* From Madras, March 17, but said to have come from the Cuddapah District. Fruit globose, tapering slightly, yellow, netted; flesh white, thick, watery, and not very sweet.

123681. No. 2520. *Catasa.* From Cuddapah, March 20. Fruit flattened, 8 to 5 inches, yellow to yellow white, smooth to netted, often with trace of ribbing; flesh white, 2½ inches thick, fairly sweet.

123682. No. 2523. *Jalleur Iami.* From Sidhout, March 20. Fruit subglobose, about 12 inches in diameter, tapering slightly toward the stem, gold brown, heavily netted; flesh white, 2½ inches thick, juicy, but low in sugar content.

123683. No. 2526. *Tela Batasa.* From Sidhout, March 20. Fruit flattened, 6 by 4 inches, smooth, yellow white, unribbed; flesh white, thin, but very sweet.

123684. No. 2527. *Shiranjer.* From Sidhout, March 20. Fruit subglobose to 7 inches in diameter, mottled orange brown, green with traces of ribs, smooth; flesh greenish, juicy, sweet. One of the best.

123685. No. 2528. *Papai.* From Sidhout, March 20. Fruit 8 inches in diameter, rather top-shaped with a rather prominent navel, smooth, lemon yellow, mottled and ribbed green; flesh thick, white, sweet.

123686. No. 2529. *Mashrufatta.* From Sidhout, March 20. Fruit oval, taper-



123675 to 123694—Continued.

ing rather unevenly and more to the stem end, yellow to gold brown, rib-lined paler, moderately netted; flesh juicy, white, thick, fairly sweet.

123687. No. 2584. *Khandas*. From Chennai, March 20. Fruit elongate, tapering abruptly to the stem, often with a conspicuous navel, 12 to 16 inches in diameter, white, obscurely netted; flesh thick, white, juicy, fairly sweet.

123688. No. 2540. From Cuddapah, March 23. Fruit elongate, smooth with a conspicuous navel, yellow green and orange mottled. Probably a cross.

123689. *CUCUMIS* sp. Cucurbitaceae.

No. 2462. From Madura, March 7. A wild cucurbit, sold dry, used as a vegetable.

123690. *CUCURBITA MOSCHATA* Duchesne. Cucurbitaceae. Cushaw.

No. 2494. From Kodai Kanal, Palni Hills, March 4, at 7,500 feet altitude. Fruit ovoid, 1 foot long, smooth with ribs, buffy; flesh rather coarse but of pleasant flavor when cooked.

123691. *ERTADA* sp., Mimosaceae.

No. 11315. From Mahendra Giri, January 24, at 4,000 feet altitude. A climbing vine.

123692 and 123693. *PHASEOLUS VULGARIS* L. Fabaceae. Common bean.

From Kodai Kanal, Palni Hills, March 11. Used as green pods or dry beans.

123692. No. 2479.

123693. No. 2480.

123694. *PHOENIX* sp. Phoenicaceae. Palm.

No. 2541. From Cuddapah, March 23. A palm up to 10 feet high, which bears fruit when only 3 feet high.

123695. *SOLANUM* sp. Solanaceae.

No. 2461. From Madura, March 7. Sold on the market in a dried condition and used as a vegetable.

123696. *MUNTINGIA CALABURA* L. Elaeocarpaceae.

From Cuba. Seeds presented by F. G. Walsingham, Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos. Received May 24, 1937.

A tropical American tree with a spreading crown, pinnate leaves, and small white flowers. The small berries make good tarts or jam and the leaves are used for tea. A yellow-fruited form; normally the fruits are red.

For previous introduction see 91301.

123697 and 123698. *ARACHIS* spp. Fabaceae. Peanut.

From Brazil. Plants collected by W. A. Archer, Bureau of Plant Industry, United States Department of Agriculture. Received

123697 and 123698—Continued.

September 25, 1936. Numbered in May 1937.

123697. No. 3982. Plants collected at Capão Bonito, Matto Grosso, September 5, 1936, in hard red clay, mixed with sand. [Seeds of this number were assigned P. I. No. 118456.]

123698. No. 3992. Plants from the Fazenda das Moças, near Campo Grande, Matto Grosso, September 9, 1936. [Seeds of this number were assigned P. I. No. 118458.]

123699. *HYPARRHENIA RUTA*. (Nees) Stapf. Poaceae.

From Costa Rica. Seeds presented by Don Fernando Castro, through the United Fruit Co., Boston, Mass. Received May 27, 1937.

123700 to 123719. *AMYGDALUS COMMUNIS* L. Amygdalaceae. Almond.

From the Union of Soviet Socialist Republics. Plants presented by Dr. A. Richter, Crimean Section, Yalta Institute, through Dr. A. M. Popov, Acting Director, Department of New Cultures and Introduction, Institute of Plant Industry, Leningrad. Received April 15, 1937.

123700. No. 3605-435-P.

123701. No. 3643-418-P.

123702. No. 3626-423-P.

123703. No. 3619-453-P.

123704. No. 3628-414-P.

123705. No. 3609-446-P.

123706. No. 3636-427-P.

123707. No. 3610-432-P.

123708. No. 3648-448-P.

123709. No. 3639-415-P.

123710. No. 3652-363-P.

123711. No. 3649-452-P.

123712. No. 3600-444-P.

123713. No. 463-P.

123714. No. 3651-429-P.

123715. No. 3597-461-P.

123716. No. 3602-436-P.

123717. No. 3634-424-P.

123718. No. 3624-455-P.

123719. No. 3627-450-P.

123720 and 123721. *PISTACIA VERA* L. Anacardiaceae. Pistachio.

From the Union of Soviet Socialist Republics. Scions presented by Miss Vera Gorbunova through Dr. A. M. Popov, acting Director, Department of New Cultures and Introduction, Institute of Plant Industry, Leningrad. Received April 15, 1937.

123720. No. 182.

123721. No. 188.

## 123722 to 123732. MALUS SYLVESTRIS

Mill. Malaceae. Apple.

From England. Plants purchased from Charles Townsend, Ltd., Fordham, Cambridgeshire. Received April 15, 1937.

123722. *Charles Ross*.  
123723. *Crimson Oor's Orange*.123724. *Ellison's Orange*.  
123725. *George Carpenter*.  
123726. *John Standish*.123727. *Lady Hennifer*.  
123728. *Mère de Ménage*.  
123729. *Norfolk Royal*.  
123730. *Red Joaneting (Juneating)*.123731. *Royal*.  
123732. *St. Everard*.

## 123733 to 123739.

From France. Plants purchased from Pépinières de La Maladrerie, Caen (Calvados). Received April 15, 1937.

123733 to 123736. MALUS SYLVESTRIS Mill. Malaceae. Apple.

123733. *Bedan des parts*.  
123734. *Bonté Normand*.  
123735. *Crémère*.  
123736. *Long Bois*.

123737 to 123739. PYRUS spp. Malaceae. Pear.

123737. *Beurré Gris Lisambert*.  
123738. *Doyenné St. Michel*.  
123739. *Williams Duchess*.

## 123740 and 123741. VITIS VINIFERA L. Vitaceae. European grape.

From Greece. Cuttings presented by Prof. B. Krimbas, Ecole Supérieure Agronomique, Athens. Received April 19, 1937.

123740. *Froula*.  
123741. *Siderites*.

## 123742 to 123757.

From England. Plants purchased from George Bunyard &amp; Co., Ltd., Maidstone, Kent. Received April 20, 1937.

123742 to 123752. MALUS SYLVESTRIS Mill. Malaceae. Apple.

123742. *Aldenheim Blenheim*.  
123743. *Easter Orange*.  
123744. *Laaton's Epicure*.  
123745. *Lord Burghley*.  
123746. *Lord Hindlip*.  
123747. *Lord Lambourne*.  
123748. *Maldstone Favorite*.  
123749. *May Queen*.  
123750. *Rosenbery*.  
123751. *Sandling*.  
123752. *Sunglow*.

## 123742 to 123757—Continued.

123753 and 123754. PRUNUS spp. Amygdalaceae.

123753. *Schreckens Bigarreau* cherry.  
123754. *Triana* cherry.

123755 to 123757. PYRUS spp. Malaceae. Pear.

123755. *Admiral Gervais*.  
123756. *Emile d'Heyst*.  
123757. *Laaton's Superb*.

## 123758 to 123761. ORYZA SATIVA L. Poaceae. Rice.

From India. Seeds presented by B. S. Kadam, Crop Botanist, Rice Breeding Station, Karjat (Kolaba), Bombay Presidency. Received April 21, 1937.

123758. *Patni 6*.  
123759. *Kolamba 79*.  
123760. *Maskaty 1315*.  
123761. *Mugad 161*.

## 123762 to 123768. RUBUS spp. Rosaceae.

From England. Plants and root cuttings purchased from M. B. Crane, John Innes Horticultural Institution, London. Received April 22, 1937.

123762. RUBUS BORRERI Bell Salter. Blackberry.

A blackberry with procumbent stems, corymbose panicles of rose-colored or white flowers, and bright jet-black fruits. Native to England.

123763. RUBUS NITIDIDENS W. Watson.

A rubus with suberect stems and rather large lilac flowers, followed by large fruits resembling those of *Rubus selmeri*. Native to England.

123764 and 123765. RUBUS ULMIFOLIUS Schott. Elmleaf blackberry.

A blackberry with curving-prostrate canes armed with straight prickles. The compound leaves are made up of 3 or 5 coriaceous, evergreen, obovate or orbicular, sharply serrate leaflets, and the medium-sized flowers are red and sometimes double. It is native to Europe.

For previous introduction see 86829.

123766. RUBUS SCHLECHTENDALII Weihe. Blackberry.

A blackberry related to *Rubus macrophyllus*; native to Europe.

123767. × RUBUS THYRSIGER Banning and Focke.

A hybrid of *Rubus scaber*, differing from that species in having a narrow, often elongated inflorescence and broader leaflets, pilose beneath.

123768. RUBUS.

*John Innes*. A cross between *Rubus ulmifolius* and *R. thyrsiger*.

123769 to 123776. EUCALYPTUS spp.  
Myrtaceae.

From Australia. Seeds presented by F. H. Baker, Richmond, Victoria. Received April 1, 1937.

123769. EUCALYPTUS CALOPHYLLA Lindl.

Variety *Rosea*. A medium-sized Australian tree with dense foliage and dark, corky, deeply furrowed bark. The thick firm leaves are ovate-lanceolate, and the flowers, pink in this variety, are often one-half inch across and appear in large panicles. It is an ornamental tree of slow growth, not enduring frost or drought.

For previous introduction see 106333.

123770. EUCALYPTUS CRUCIUS Maiden.

A small tree 25 feet or less high, glaucous throughout, with small, thick, ovate to lanceolate leaves over an inch long. Native to Western Australia.

For previous introduction see 111871.

123771. EUCALYPTUS DIVERBICOLOR F. Muell.  
Karri-gum.

A tall tree up to 350 feet in height, native to Western Australia, straight in habit and a fairly rapid grower. The very dense and elastic wood is considered superior timber, being used by wheelwrights and for shipbuilding. The tree prefers a moist climate, is somewhat frost resistant, but will not endure dry heat.

For previous introduction see 106335.

123772. EUCALYPTUS ERMOPHEILA Maiden.

A spreading shrub or medium-sized tree with smooth scaly bark, shiny, leathery, lanceolate leaves about 3 inches long, and few-flowered umbels of small yellow flowers. Native to Western Australia.

123773. EUCALYPTUS ERYTHROCORYS F. Muell.

Usually a shrub 8 to 10 feet high, this eucalypt is sometimes a tree up to 30 feet high. The broadly linear, rigid leaves are 6 inches long, and the large flowers, in axillary clusters, have bright-red, fleshy caps over the buds; the long stamens are yellow. The ribbed, hemispherical fruits are 1 to 2 inches long. Native to Western Australia.

For previous introduction see 111872.

123774. EUCALYPTUS ERYTHRONEMA Turcz.

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

For previous introduction see 77282.

123775. EUCALYPTUS MACROCARPA Hook.

A stout shrub or small tree up to 15 feet high, with thick, rigid, cordate, glaucous leaves 6 inches long and large soli-

123769 to 123776—Continued.

tary, brilliant-orange or crimson flowers. Native to Western Australia.

For previous introduction see 111873.

123776. EUCALYPTUS MARGINATA J. E. Smith.

An Australian shrub or small tree often clear of branches for two-thirds of its height. The hard durable wood is used for timber, piles, and railway ties. The tree will grow in a great variety of soils, but prefers moist, well-drained situations.

For previous introduction see 106340.

123777. EUCALYPTUS MICROCORYS F. Muell.

A tall tree with persistent wrinkled bark, thin broadly lanceolate leaves, and small white flowers. The yellowish timber is especially useful for ballroom floors because of its greasy nature. Native to Australia.

For previous introduction see 106341.

123778. EUCALYPTUS PYREIFORMIS Turcz.

A shrub or small tree found in Western and South Australia where it attains a height of 8 to 10 feet. The very thick, narrow leaves are rarely more than 3 inches long, and the large flowers are red when fresh. The yellowish-white wood is hard, heavy, and durable.

For previous introduction see 111875.

123779 to 123781. DELPHINIUM spp.  
Ranunculaceae. Larkspur.

From Africa. Seeds purchased from the Mount Elgon Nurseries, Kitale, Kenya Colony. Received April 8, 1937.

123779. DELPHINIUM CANDIDUM Hemsl.

A dwarf perennial delphinium with palmately five-lobed leaves up to 5 inches across and large white, sweet-scented flowers.

For previous introduction see 113840.

123780. DELPHINIUM MACROCENTRUM Oliver.

A perennial delphinium up to 6 feet high, bearing numerous blue-green to deep-blue flowers.

For previous introduction see 113841.

123781. DELPHINIUM WELLSYI Hemsl.

A perennial delphinium about 2 feet high, with palmate leaves 2 to 3 inches across and large blue flowers. Native to Ethiopia.

123782 and 123783. VIOLA spp. Vio-  
laceae. Violet.

From England. Seeds presented by the Royal Botanic Gardens, Kew, Surrey. Received April 8, 1937.

123782. VIOLA ARMENA Boiss. and Huet.

A stemless perennial violet with ovate leaves and very small flowers. Native to the Caucasus region.

## 123782 and 123783—Continued.

123783. *VIOLA CONTEMPTA* Jord.

An annual violet with erect or ascending stems, ovate or oblong-ovate leaves, and pale-blue flowers. Native to Europe.

123784 to 123788. *VIOLA* spp. *Violaceae*.  
Violet.

From Switzerland. Seeds presented by the Director, Botanic Garden, Geneva. Received April 14, 1937.

123784. *VIOLA* sp.

Introduced under the name *Viola arborea* Forsk., a homonym.

123785. *VIOLA BERTOLONII* de Salls.

A perennial violet with stems about a foot high, oval, oblong, or lanceolate leaves, and blue flowers. Native to Corsica.

123786. *VIOLA DACTYLOIDES* Roem. and Schult.

A stemless perennial violet with pale-blue flowers. Native to northeastern Asia.

123787. *VIOLA GRACILIS* Sibth. and Smith.

A violet from southern Europe and Asia Minor, with stems about a foot high and violet or yellow flowers.

123788. *VIOLA UNIFLORA* L.

A hardy violet with cordate leaves on stems about 6 inches high and terminated by a single yellow flower. Native to eastern Asia.

123789 and 123790. *TRIFOLIUM PRATENSE*  
L. *Fabaceae*. Red clover.

From England. Seeds purchased from the Clover Growers' Ltd., Montgomery. Received April 19, 1937.

123789. *Cotswold Late Flowering*.123790. *Montgomery Late Flowering*.

## 123791 to 123793.

From Cuba. Seeds presented by F. G. Walsingham, Atkins Institution of the Arnold Arboretum, Soleñad, Cienfuegos. Received April 9, 1937.

123791. *CARISSA OPACA* Stapf. *Apocynaceae*.

Presented by the Forest Research Institute, Dehra Dun, India. A spreading, thorny, evergreen shrub up to 12 feet high, with elliptic-ovate to suborbicular leaves up to 2 inches long and sweet-scented, white, pink-tinged flowers about ½ inch across. Native to the Himalayan region.

123792. *CASSIA LEPTOPHYLLA* Vog. *Caesalpiniaceae*.

Presented by the Botanic Garden, Rio de Janeiro, Brazil. A Brazilian tree with pinnate leaves composed of 9 to 12 lanceolate-oblong leaflets and many small yellow flowers in terminal racemes about 6 inches long. Native to Brazil.

## 123791 to 123798—Continued.

123793. *SAPIUM DISCOLOR* (Champ.) Muell.  
Arg. *Euphorbiaceae*.

Presented by the Botanic Garden, Hong Kong, China. A glaucous shrub or small tree, with long-petioled elliptic leaves about 2 inches long and short dense spikes of greenish flowers. Native to tropical Asia.

123794. *ATTALEA* sp. *Phoenicaceae*.

Palm.

From Brazil. Seeds presented by P. Campos Porto, Director, Instituto de Biologia Vegetal, Jardim Botânico, Rio de Janeiro. Received April 8, 1937.

The attaleas are attractive tropical American palms of distinctive appearance, with long pinnate leaves usually in a large erect tuft.

123795. *PENTACLETHRA MACROLOBA*  
(Willd.) Kuntze (*Pentaclethra filamentosa* Benth.). *Mimosaceae*.

From Costa Rica. Seeds collected by H. F. Loomis, Bureau of Plant Industry, United States Department of Agriculture. Received April 5, 1937.

*Cavilan*. A large forest tree in the forests about Cairo, Costa Rica. In clearings, the tree makes a handsome crown of foliage which is composed of large shining mimosalike leaves. The small white flowers are in dense clusters about 6 inches long. The wood is prized because of its resistance to decay and termites, being used for posts, railroad ties, and other purposes. The sapwood is light-colored, but the heartwood is bright red. The tree appears to prefer well-drained locations with good soil.

For previous introduction see 108584.

123796. *TRIFOLIUM PRATENSE* L. *Fabaceae*. Red clover.

From Canada. Seeds purchased from the Dominion Seed Branch, Department of Agriculture, Calgary, Alberta. Received April 13, 1937.

*Altaswede* red clover.

123797. *AMYGDALUS PERSICA* L. *Amygdalaceae*. Peach.

From Canada. Plants presented by C. Howard Fisher & Sons, Queenston, Ontario. Received April 24, 1937.

*H. Fisher No. 10*.

123798 to 123807. *VIOLA* spp. *Violaceae*.  
Violet.

From Sweden. Seeds presented by Dr. S. Skottsberg, Director, Botanic Garden, Göteborg. Received April 14, 1937.

123798. *VIOLA BATTANDIERI* W. Becker.

An Algerian violet up to about 1½ feet high, with ovate leaves and violet or yellow flowers. It is allied to *Viola munbyana*.

## 123798 to 123807—Continued.

123799. *Viola* sp.

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

123800. *VIOLA CYANEA* Celak.

A stemless European violet with broad cordate-ovate bright green leaves and sky-blue flowers.

123801. *VIOLA BATTANDIERI* W. Becker.

An Algerian violet up to about 1½ feet high, with ovate leaves and violet or yellow flowers. It is allied to *Viola munbyana*.

For previous introduction and description see 123798.

123802. × *VIOLA FLORAIRIENSIS* Correvon.

A dwarf tufted violet with pale-green leaves; the flower centers are light lilac with the two upper petals deep violet. It is supposed to be a hybrid between *Viola cakeruta* and *V. cornuta*.

123803. *VIOLA JOOI* Janka.

A stemless violet with oblong or ovate-cordate leaves and rather large fragrant lilac flowers. Native to Europe.

123804. *VIOLA PERSICIFOLIA* Roth.

A violet native to Europe.

For previous introduction see 28259.

123805. *VIOLA SEPINCOLA* Jord.

A European violet allied to *Viola odorata*.

123806. *VIOLA SIEBERIANA* W. Becker.

A perennial about 5 inches high, with reniform-cordate basal leaves, broadly ovate stem leaves, and pale-blue or white flowers. Native to Asia Minor.

For previous introduction see 108802.

123807. *VIOLA VILARUM* Pollard.123808. *TRIFOLIUM PRATENSE* L. Fabaceae. Red clover.

From Canada. Seeds presented by the University of Manitoba, Winnipeg. Received April 20, 1937.

Manhardy red clover.

123809 to 123813. *MEDICAGO SATIVA* L. Fabaceae. Alfalfa.

From Germany. Seeds presented by Dr. A. Fischer, Kaiser-Wilhelm Institut für Züchtungsforchung, Münchenberg/Mark. Received April 20, 1937.

123809. *Altfränkische*.123810. *Hochzucht Bendeleben*.123811. *Hochzucht Mahndorfer*.123812. *Pfalzer*.123813. *Unparische*.

## 123814 to 123832.

From India. Seeds collected by Walter Koels, Bureau of Plant Industry, United States Department of Agriculture. Received April 5, 1937.

## 123814 to 123832—Continued.

Material collected in the Madras Presidency in January and February 1937, unless otherwise mentioned.

123814. *AMYGDALUS PERSICA* L. Amygdalaceae. Peach.

No. 2295. From Bangalore, Mysore, February 9. Fruit green yellow, 2 inches high; flesh white, red around the pit, good flavor. The tree produces two crops a year and is said to be never completely dormant.

123815. *CAPSICUM ANNUM* L. Solanaceae. Redpepper.

No. 2379. From Kotagiri, Nilgiri Hills, at 7,000 feet altitude. Fruit strawberry shaped, 1 inch high, red, mild.

123816. *CESTRUM AURANTIACUM* Lindl. Solanaceae.

No. 2333. From Ootacamund, Nilgiri Hills, at 7,000 feet altitude, February 15. A large shrub with wavy, shining, ovate to oblong leaves 3 to 5 inches long and spikes of showy orange-colored flowers followed by large white berries. Native to Guatemala; cultivated as an ornamental in the Tropics of both hemispheres.

123817 and 123818. *CITRULLUS VULGARIS* Schrad. Cucurbitaceae. Watermelon.

From Coimbatore, February 10 and 12.

123817. No. 2313. *Tarbus*. Fruit elongate, dark green, 15 inches long; flesh red, of fair quality; rind white and green, ¼ to ½ inch thick.

123818. No. 2321. Fruit ovoid, 1 foot long, medium green, blotched ribbed with darker green; flesh red; rind white and green, ¼ inch thick, a very thin rind.

123819 to 123824. *CUCUMIS MELO* L. Cucurbitaceae. Muskmelon.

From Coimbatore, February 12.

123819. No. 2314. Fruit 8 by 6 inches, lemon yellow, closely netted; flesh sea green, firm, flavorless; rind very hard, an extreme type never before seen.

123820. No. 2315. Fruit subglobose, 10 inches in diameter, smooth, deeply ribbed, blotched russet and dark green; flesh salmon-colored, fragrant.

123821. No. 2316. *Gosapala*. Fruit subglobose, 1 foot long, pale yellow, netted, line-ribbed green; flesh pale salmon color, fragrant.

123822. No. 2317. *Gosa*. Fruit subglobose, 8 inches, smooth, unribbed, yellow white; flesh white, acid.

123823. No. 2318. *Kaleri Kala*. Fruit cucumber-shaped, 1 foot long, 4 inches in diameter, smooth, unribbed, orange yellow; flesh white, mealy and subacid, no fragrance.

## 123814 to 123832—Continued.

123824. No. 2319. *Malampuram*. Fruit 8 by 4 inches, golden brown, unribbed but rib-lined white; flesh pale salmon color, seeds embedded in the flesh, not sour, but not fragrant.

123825. *CUCURBITA MOSCHATA* Duchesne. Cucurbitaceae. Cushaw.

No. 2296. From Bangalore, Mysore, February 9, 1937. An elongate pumpkin 2½ feet long, ribbed, buff brown; flesh not sweet, rather coarse. Grown in summer.

123826. *HELICHYSUM BRACCTEATUM* (Vent.) Willd. Asteraceae.

No. 2326. From Ootacamund, Nilgiri Hills, February 14, at 7,000 feet altitude. A plant 3 feet high with yellow flowers, found on roadsides and in fields.

123827. *FRAGARIA VESCA* L. Rosaceae. Alpine strawberry.

No. 2293. From Bangalore, Mysore, February 9. Fruit about 2 inches long; watery, but of good flavor.

123828. *RHODODENDRON ARBOREUM NILAGIRICUM* (Zenk.) C. B. Clarke. Ericaceae.

No. 2322. From Ootacamund, Nilgiri Hills, at 7,000 feet altitude, February 14. A tree about 2 feet in diameter, of scrubby form, laden with crimson flowers, growing, usually, where other trees cannot. Tolerates freezing at 10° F. and also summer heat. Probably as adaptable as *Rhododendron arboreum*, which it closely resembles.

123829. *RUBUS* sp. Rosaceae.

No. 2324. From Ootacamund, Nilgiri Hills, at 7,000 feet altitude, February 14. Semiscandent vigorous shrub up to 2 feet high, with long clusters of small yellow fruit.

123830. *SALVIA VERBENACA* L. Menthaceae.

No. 2323. From Ootacamund, Nilgiri Hills, at 7,000 feet altitude, February 14. A hardy herbaceous perennial 1 to 2 feet high, with broadly ovate or oblong leaves and simple or somewhat branched racemes of small blue flowers. Native to Europe.

123831. *SOLANUM* sp. Solanaceae.

No. 2180. From Mahendra, January 22, at 2,000 feet altitude. Fruit globose, 1 inch in diameter, yellow.

123832. *VERBENA* sp. Verbenaceae.

No. 2325. From Ootacamund, Nilgiri Hills, February 14, at 7,000 feet altitude. A perennial about 18 inches high, with 2 or 3 long spikes of purple flowers. Found growing in open ground.

## 123833 to 123836.

From Sweden. Seeds presented by Dr. Robert E. Fries, Director, Botanic Garden, Stockholm. Received April 13, 1937.

## 123833 to 123838—Continued.

123833. *ELSHOLTZIA IANTHINA* (Karst.) Dunn. Menthaceae.

A small erect herb with dense terminal spikes of small lavender-colored flowers. Native to Kansu Province, China.

123834. *ELSHOLTZIA PATRINII* (Lepech.) Garcke (*E. cristata* Willd.). Menthaceae.

For previous introduction see 65864.

123835. *HOSTA VENTRICOSA* (Salisb.) Stearn. Liliaceae.

A plantainlily with broad cordate-ovate leaf blades about 10 inches long and lavender-purple flowers about 2 inches long in elongated racemes, on scapes up to 3 feet tall. Native to China.

For previous introduction see 117052.

123836 to 123838. *VIOLA* spp. Violaceae.

Violet.

123836. *VIOLA PALMENSIS* (Webb and Berth.) Webb and Berth.

A perennial violet with stems about 1 foot high and nodding purple flowers. Native to the Canary Islands.

123837. *VIOLA ELATIOB* Fries.

A perennial violet with tall erect stems, sometimes 18 inches high, lanceolate leaves and large pale-blue flowers. Native to Europe.

For previous introduction see 28253.

123838. *VIOLA LABRADORICA* Schrank.

123839 and 123840. *SACCHARUM SPONTANEUM* L. Poaceae. Sugarcane.

From India. Cuttings presented by the Imperial Sugarcane Breeding Station, Lawley Road, Coimbatore, South India. Received April 29, 1937.

123839. *S. H.* 214. 123840. *S. H.* 219.

123841. *QUERCUS* sp. Fagaceae. Oak.

From France. Plants purchased from N. Maurizot, Saint-Didier, France. Received April 29, 1937.

Truffle oak.

123842 and 123843. *ZINNIA* spp. Asteraceae.

From Italy. Seeds presented by Dr. Mario Ercoli, curator, La Mortola, Ventimiglia. Received April 22, 1937.

123842. *ZINNIA PERUVIANA* L. (*Z. pauciflora* L.).

No. 1721. An erect annual with lanceolate to oblong-ovate leaves and yellow flower heads about an inch across, the rays sometimes red or purple. Native to the Peruvian Andes.

123843. *ZINNIA MULTIFLORA* L. (*Z. verticillata* Cav.).

## 123843 and 123844—Continued.

No. 1722. A siania found wild along fence rows and roadsides. The small flower heads are a light brick red.

For previous introduction see 102643.

## 123844. RAUHINIA GLAUCA Wall. Caesalpiniaceae.

From China. Seeds presented by the Botanic Garden, Hong Kong, through F. G. Walsingham, Atkins Institution, Arnold Arboretum, Soledad, Cienfuegos, Cuba. Received April 9, 1937.

A woody climber with slender branchlets and small deeply cleft leaves 1 to 3 inches long. The small white flowers are in dense terminal corymbs. Native to tropical India.

For previous introduction see 67540.

## 123845. CITRUS sp. Rutaceae.

From Brazil. Seeds presented by Agesilau A. Bitancourt, Sub-Director de Biologia Vegetal, São Paulo. Received April 27, 1937.

*Laranja cravo orange.*

## 123846. ORBIGNYA SPECIOSA (Mart.)

Barb.-Rodr. (*Attalea speciosa* Mart.).

Phoenicaceae. Babassu nut.

From Brazil. Seeds presented through J. W. T. Duvel, Commodity Exchange Administration, United States Department of Agriculture. Received November 19, 1936. Numbered April 15, 1937.

A palm, native to Brazil and the Guianas, which is very much like the Cohune palm, but its fruits, 3 to 4 inches long, are much larger. An edible oil is extracted from the seeds and is now being exported to the United States.

For previous introduction see 99608.

## 123847 to 123849.

From Biltmore, N. C. Plants presented by C. D. Beadle, Biltmore estate. Received April 12, 1937.

A collection of bamboos, originally obtained from a European nursery.

## 123847. ARUNDINARIA sp. Poaceae.

Bamboo.

A handsome running bamboo that bears some resemblance to *Semiarundinaria fastuosa* but has not exceeded about 9 feet in height. There are ultimately 1 to 3 branches at each node of the palm except near the base, and the internodes are often slightly flattened above the branches; culm sheaths are semipersistent. Leaves 6 to 8 on a branch, broad lanceolate, glabrous, 3 to 5 inches long,  $\frac{3}{8}$  to 1 inch wide.

## 123848. SASA DISTICHA (Mitt.) H. G. Camus.

Poaceae. Fern bamboo.

A dwarf hardy bamboo of running habit, 2½ to 3 feet and rarely 5 feet high, with small, closely-ranked leaves. It is useful

## 123847 to 123849—Continued.

as a roadway border where soil conditions do not favor too rapid spreading.

## 123849. ARUNDINARIA sp. Poaceae.

Bamboo.

A handsome running bamboo with culms 4½ feet high, unbranched below but with several branches at each node of the upper half and with rough leaves up to 9 inches long and 1¼ inches wide; culm sheaths persistent.

## 123850. NEANTHE BELLA O. F. Cook.

Phoenicaceae. Palm.

From Washington, D. C. Seeds from plants grown in greenhouses of the Department of Agriculture. April 1, 1937.

These seeds were obtained from hand-pollinated flowers. A small graceful palm with a slender stem a few feet high and spreading deep-green pinnate leaves 1 to 2 feet long. Native to open forests in Guatemala, at about 3,000 feet altitude.

## 123851. QUERCUS sp. Fagaceae. Oak.

From France. Plants purchased from Léopold Laval, Propriétaire-Trafficteur-Récoltant, Martel. Received April 1, 1937.

Truffle oak.

## 123852 to 123904.

From New Mexico. Seeds collected by Leslie N. Godding, Soil Conservation Service, Albuquerque. Received April 3, 1937.

## 123852. AGASTACHE RUPESTRIS (Greene) Standley. Menthaceae.

A perennial herb 1 to 3 feet high, native to the mountains of southwestern New Mexico. The linear-lanceolate entire leaves, about 2 inches long and pleasantly aromatic, and the showy, tubular, coral-red flowers, 1 inch long, are borne in loose panicles.

For previous introduction see 101092.

## 123853. AMOREUXIA PALMATIFIDA Moc. and Sesse. Cochlospermaceae.

A bushy perennial with digitately-parted leaves and showy yellow flowers in panicles. Native to Mexico.

## 123854. ANTHEMICUM TORREYI Baker. Liliaceae.

An anthericum 1½ to 2 feet high, with narrow linear leaves and a scape of many small yellow flowers. Native to the southwestern United States.

## 123855. ARALIA HUMILIS Cav. Araliaceae.

An unarmed shrub 3 to 7 feet high, with bipinnate leaves and small black berrylike fruits. Native to Mexico.

## 123856. ASTER GLAUCODES Blake. Astera-ceae.

A perennial aster with long roots.

123852 to 123904—Continued.

123852. *BOUVARDIA TRIPHYLLA* Salisb. Rubiaceae.

A small shrub with showy red flowers about 1 inch long. Native to Mexico.

123853. *BRICKELLIA* sp. Asteraceae.123859. *CALOCHORTUS* sp. Liliaceae.123860. *CISSUS INCISA* (Nutt.) Desmoul. Vitaceae.123861. *CLEMATIS* sp. Ranunculaceae.123862. *ERYTHRINA FLABELLIFORMIS* Kearney. Fabaceae. Western coralbean.

A low, spiny, deciduous shrub 2 to 4 feet high, native to the upper foothills of the Southwest. The beans range in color from cream through coffee color to bright scarlet.

For previous introduction see 42204.

123863. *EUPATORIUM* sp. Asteraceae.

A very handsome, clear white-flowered, rather bushy eupatorium, growing in rocky canyons in protected but not shaded places.

123864. *EUSTOMA RUSSELLIANUM* (Hook.) G. Don. Gentianaceae.

An annual or biennial 1 to 2 feet high, with ovate to lanceolate-oblong leaves and large lavender-purple flowers. Native to the southwestern United States.

123865. *FAGONIA CALIFORNICA* Benth. Zygophyllaceae.

A compact woody perennial about 1 foot high, with small trifoliolate leaves and small purplish flowers. Native to California.

123866. *FENDLERIA BUPICOLA* Engelm. and Gray. Hydrangeaceae.

An erect bushy shrub up to about 6 feet high, with small elliptic to oblong-lanceolate leaves and, usually, solitary pink or pink-tinged flowers about 1 inch across. Native to Texas and New Mexico.

123867. *FRAXINUS GREGGII* A. Gray. Oleaceae. Ash.123868. *HEBDOMA* sp. Menthaceae.123869. *HEBDOMA* sp. Menthaceae.123870. *HIBISCUS COULTERI* Harv. Malvaceae.

A low shrubby hibiscus with small white or pale-yellow flowers. Native to Mexico.

123871. *JATROPHA ANGSTIDENS* (Torr.) Muell. Arg. Euphorbiaceae.123872. *LIATRIS* sp. Asteraceae.123873 and 123874. *LEOSTEMON AMBIGUUS* (Torr.) Greene. Scrophulariaceae.123875. *LIPPIA LIGUSTRINA* (Lag.) Britton. Verbenaceae.

A shrub up to about 9 feet high, with small lanceolate-oblong leaves and axillary spikes of small, fragrant flowers, white or tinged with violet. Native to Brazil.

123852 to 123904—Continued.

123876. *LIPPIA WRIGHTII* A. Gray. Verbenaceae.123877. *LOBELIA* sp. Campanulaceae.123878. *LONICERA ALBIFLORA* Torr. and Gray. Caprifoliaceae.

A shrub 3 to 7 feet high, sometimes twining, with oval leaves over an inch long and showy white or yellowish-white flowers. Native to the United States.

123879. *ASTER* sp. Asteraceae.

A very showy aster with purple flowers.

123880. *MAURANDY ANTIHEMINIFLORA* Willd. Scrophulariaceae.

A slender vine with thin, hastate-triangular leaves and solitary axillary, pale-blue flowers 1 inch or more long, similar in appearance to snapdragon. Native to northern Mexico and the southwestern United States.

For previous introduction see 104556.

123881. *MAURANDYA WISLIZENI* A. Gray. Scrophulariaceae.

For previous introduction see 4129.

123882. *MELAMPODIUM LEUCANTHUM* Torr. and Gray. Asteraceae.

A low, white-flowered, shrubby composite allied to *Melampodium cinereum*. Native to Texas.

123883. *MENODOROPSIS LONGIFLORA* (A. Gray) Small. Oleaceae.123884. *NISSOLIA SCHOTTII* (Torr.) A. Gray. Fabaceae.

A scandent legume with a stem 2 to 3 feet long, branching from a somewhat woody base, and racemes of small yellow flowers. Native to Mexico.

123885. *NOLINA BIGELOVII* (Torr.) S. Wats. Liliaceae.

A woody perennial with a stout trunk often 5 to 15 feet high, many linear rigid leaves and a tall scape bearing a dense compound panicle of small white flowers.

123886. *ORNOTHERA BOOKERII* Torr. and Gray. Onagraceae.

A tall, showy, yellow-flowered evening primrose. Native to the western United States.

123887. *ORNOTHERA* sp. Onagraceae.123888. *PAROSELA GREGGII* (A. Gray) Heller. Fabaceae.

A low shrub with silky hairy branches and densely hairy compound leaves with 5 to 11 obovate leaflets less than half an inch long. The pink flowers are in dense spikes about 1 inch long. Native to Mexico and Arizona.

123889. *PAROSELA JOHNSONI* (S. Wats.) Vail (*Dalea johnsoni* S. Wats.). Fabaceae.

A diffusely branched shrub with smooth gray bark, leaves 1 to 2 feet long com-



## 123852 to 123904—Continued.

posed of 5 to 11 leaflets, and loose racemes of deep-purple flowers terminating the leafy branchlets.

For previous introduction see 41771.

123890. *PECTIS* sp. Asteraceae.

123891 to 123896. *PENSTEMON* spp. Scrophulariaceae.

123891. *PENSTEMON GLABRA* Pursh.

A herbaceous perennial, 1 to 2 feet high, with showy bright blue to violet-purple flowers in panicles. Native to the Rocky Mountains.

123892. *PENSTEMON BARBATUS* (Cav.) Roth.

An erect, tall, herbaceous perennial with firm, lanceolate to linear leaves and terminal clusters of long slender light-pink to carmine flowers. Native to western North America.

123893. *PENSTEMON* sp.

123894. *PENSTEMON* sp.

123895. *PENSTEMON* sp.

123896. *PENSTEMON SPECTABILIS* Thurb.

A tall herbaceous perennial with slender simple stems up to 4 feet high, ovate to oblong leathery leaves 2 to 3 inches long, and open panicles, 6 to 12 inches long, of many blue or blue-purple flowers about 1 inch long. Native to the southwestern United States.

123897. *PETALOSTEMON* sp. Fabaceae.

123898. *PSILOSTROPHE* sp. Asteraceae.

123899. *SALVIA* sp. Menthaceae.

123900. *SALVIA EARLEI* Woot. and Standl. Menthaceae.

123901. *SOPHORA SECUNDFLORA* (Ortega) DC. Fabaceae.

A shrub or small tree, up to 35 feet high, native to Mexico. The evergreen pinnate leaves are made up to 7 to 11 elliptic to oblong leaflets 2 inches long, and the fragrant violet-blue flowers, 1 inch long, are in racemes.

For previous introduction see 99699.

123902. *VERBENA* sp. Verbenaceae.

123903. *VERBENA* sp. Verbenaceae.

123904. *ZAUSCHNERIA CALIFORNICA* Presl. Onagraceae. Hummingbird-trumpet.

A half-hardy perennial with showy scarlet flowers resembling those of the fuchsia, but erect, not pendent. It is rather variable in form of leaves and in hardness. Native to the southwestern United States.

For previous introduction see 45193.

123905 to 123917. *MALUS SYLVESTRIS* Mill. Malaceae. Apple.

From Canada. Scions presented by M. B. Davis, Central Experimental Farm, Department of Agriculture, Ottawa. Received

## 123905 to 123917—Continued.

April 6, 1937.

123911. *Mantel*.

123905. *Angus*.

123912. *Manton*.

123906. *Breaky*.

123913. *Osman*.

123907. *Elkhorn*.

123914. *Patricia*.

123908. *Godfrey*.

123915. *Rosilda*.

123909. *Gretna*.

123916. *Stevenson*.

123910. *Manitoba*.

123917. *Taba*.

123918 to 123923. *MEDICAGO* spp. Fabaceae. Medick.

From the Union of Soviet Socialist Republics. Seeds presented by the Institute of Plant Industry, Leningrad. Received April 3, 1937.

123918 to 123920. *MEDICAGO HEMICYCLA* Grossh.

A perennial alfalfa with ascending stems about 2 feet high. Native to the Transcaucasus region at altitudes between 2,000 and 6,000 feet.

For previous introduction see 111618.

123918. From the Republic of Georgia. No. K. 191/16695.

123919. From Armenia. No. 214/16719.

123920. From Armenia. No. K. 158/16651.

123921 to 123924. *MEDICAGO HISPIDA* Gaertn.

123921. From Azerbaijan. No. K. 182/16675.

123922. From California, U. S. A. No. 298/164326.

123923. From Shanghai, China. No. K. 104/5365.

123924. From Germany. No. K. 54/690.

123925 to 123928. *MEDICAGO LUPULINA* L. Black medick.

123925. From France. No. 41/K. 6622.

123926. From Germany. No. K. 143/1819.

123927. From Germany. No. K. 101/889.

123928. From Germany. No. K. 141/1830.

123929 to 123955.

From India. Seeds collected by Walter Koels, Bureau of Plant Industry, United States Department of Agriculture. Received April 7, 1937.

From Coimbatore, Madras Presidency, February 21, 1937.

123929 and 123930. *ARACHIS HYPOGAEA* L. Fabaceae. Peanut.

Presented by Dr. Patel, Coimbatore Agricultural College.

123929. No. 2372. A prostrate plant with runners 5 feet long.

123930. No. 2373. A popular drought-resistant type which matures in 130 days, yields 1,500 pounds per acre, and has an oil content of 50 percent.

## 123929 to 123955—Continued.

123931 to 123955. *ORYZA SATIVA* L. Poaceae. Rice.

Presented by the Officiating Paddy Specialist, Agricultural Research Institute, Coimbatore.

Nos. 123931 to 123933 are strains from Adutural.

123931. No. 2342. *Kuruwai*. An early-maturing strain of Tanjore paddy. The crop matures in 95 days and gives an average yield of 2,000 pounds of grain per acre.

123932. No. 2343. *Kuruwai*. Another improved strain of Tanjore paddy which takes a week longer to mature than No. 2342 (P. I. 123931) and yields 10 percent more grain per acre.

123933. No. 2345. *Sarapalli*. A crop largely grown in the Trichinopoly District; matures in 100 days.

Nos. 123934 to 123940 are paddy samples from Maruteru.

123934. No. 2346. *Potti Basangi* (Mtu. 3). A strain which yields from 3,500 to 4,500 pounds of grain per acre.

123935. No. 2347. *Pedha Basangi* (Mtu. 4). A strain noted for enduring indifferent water supply during its vegetative growth. A yield of 3,000 to 3,500 pounds per acre has been recorded under such conditions.

123936. No. 2348. *Garikasannavari* (Mtu. 9). A strain which matures about 10 days earlier than most of the rices grown.

123937. No. 2349. (K. T. K. 1749). *Sanna-krishnakatukulu* (Mtu. 10). A fine-grained selection from *Krishnakatukulu* that matures in 6 months. The strain is especially suited to rich lands where other varieties would require topping.

123938. No. 2350. (K. T. K. 1745). *Krishnakatukulu* strain No. 1745. This strain is similar to No. 10 (P. I. 123937) except that it is not so fine-grained.

123939. No. 2351. (K. T. K. *Krishnakatukulu*). A hybrid paddy that combines the fine grain size of *Krishnakatukulu* and the short growing season of *Basangi*.

123940. No. 2352. *Punasa Konamani*. A white rice that takes 6½ months to mature but is highly esteemed for its nutritive qualities.

Nos. 123941 to 123948 are Pattambi paddy strains, grown under Pattambi conditions.

123941. No. 2353. *Pib. 1*, isolated from *Aryan*. A strain that matures in 145 days and yields 2,500 pounds per acre.

## 123929 to 123955—Continued.

123942. No. 2354. *Pib. 2*, isolated from *Ponnaryan*. A strain that matures in 135 days and yields 2,100 pounds per acre.

123943. No. 2357. *Pib. 9*, isolated from *Thavalakkannan*, a white rice, matures in 140 days and yields 2,000 pounds per acre.

123944. No. 2371. *T. 890*. A strain that matures in 102 days and is grown largely in dry rain-fed areas.

123945. No. 2359. Isolated from *Modan dirty glume* and matures in 135 days, yielding from 500 to 600 pounds per acre.

123946. No. 2360. Isolated from *Modan black glume*. A strain that matures in 135 days and yields between 500 and 600 pounds per acre. A dryland rice, cultivated on hill slopes and rising land as a rain-fed crop. Except for the glume color, it is similar to *Modan dirty* (P. I. 123945).

123947. No. 2361. Isolated from *Kattamodan*. A strain that matures in 145 days, yielding between 600 and 700 pounds per acre. A dryland paddy.

123948. No. 2362. Isolated from *Chennellu*. A strain that matures in 135 days and yields between 400 and 500 pounds per acre. A shade-loving and scented dryland paddy.

Nos. 123949 to 123955 are strains from Coimbatore.

123949. No. 2363. *Tinnevelly Kar* (Co. 9). A red rice, generally sown in June or July, which matures in 116 days and yields about 3,000 pounds per acre.

123950. No. 2364. *Godikar* (Co. 10). A white rice with a dirty-colored glume, which matures in 125 days and yields about 2,500 pounds per acre.

123951. No. 2365. *Jeeragasamba* (nonscented). A small-grained variety of white rice with light-brown glume, which matures in 120 days and yields about 2,900 pounds per acre.

123952. No. 2366. *Jeeragasamba* (scented). A strain that matures in 130 days; similar to the nonscented variety (P. I. 123951).

123953. No. 2367. *Black Puttu*. Glume and rice dark purple in color. Rice glutinous. Matures in 136 days and yields about 1,775 pounds per acre. *Puttu* rices can be dissolved by boiling and in certain districts are converted into a gelatinous sweet.

123954. No. 2368. *White Puttu*. Glume color, gold, and rice white glutinous.

## 123929 to 123955—Continued.

Matures in 120 days and yields 2,700 pounds per acre.

123955. No. 2369. *Red Puttu*. Matures in 130 days; glumes long, awned.

## 123956 to 123958. SACCHARUM. Poaceae. Sugarcane.

From Mexico. Cuttings presented by M. C. Alcántara, Ingenio de Cuatotolapam, Cuatotolapam, Veracruz. Received April 8, 1937.

123956. *Cuato*-302. Selfing of POJ 2878.

123957. *Cuato*-304. Selfing of POJ 2878.

123958. *Cuato*-307. Selfing of POJ 2878.

## 123959 to 123968.

From England. Plants purchased from the Barnham Nurseries, Ltd., Barnham. Received April 8, 1937.

123959 to 123967. MALUS SYLVESTRIS Mill. Malaceae. Apple.

123959. *Charles Eyre*.

123960. *Court Pendu Plat*.

123961. *Guelph*.

123962. *Lady Sudeley*.

123963. *Madresfield Court*.

123964. *Paraquet*.

123965. *Reverend W. Wilks*.

123966. *Royal Jubilee*.

123967. *Saltcote Pipin*.

123968. PYRUS COMMUNIS L. Malaceae. Common pear.

*Madame Soulanges*.

## 123969. AMYGDALUS PERSICA L. Amygdalaceae. Peach.

From the Union of Soviet Socialist Republics. Plants presented by the Institute of Plant Industry, Leningrad. Received April 9, 1937.

*Liagak* No. 769 T.

## 123970. TRIFOLIUM PRATENSE L. Fabaceae. Red clover.

From Canada. Seeds presented by the Seed Branch, Department of Agriculture, Toronto. Received April 2, 1937.

Grade No. 1.

## 123971. CORYLUS sp. Betulaceae. Filbert.

From England. Plants and scions presented by Albert Blake, Malpas, Cheshire. Received April 9, 1937.

## 123972 to 123978.

From the Union of Soviet Socialist Republics. Scions presented by the Institute of Plant Industry, Leningrad. Received April 12, 1937.

## 123972 to 123978—Continued.

123972. PRUNUS AVIUM L. Amygdalaceae. Sweet cherry.

*Tohereshnia Keplovskaya*.

123973 to 123977. PRUNUS CERASUS L. Amygdalaceae. Sour cherry.

123973. *Krasso Severa*.

123974. *Krassnopaynarskaya*.

123975. *Shubinka*.

123976. *Vassilievka*.

123977. *Vladimir*.

123978. PRUNUS MAXIMOWICZII Rupr. Amygdalaceae. Miyama cherry.

A large handsome tree, about 50 feet high, with horizontally spreading branches, coarsely double-toothed leaves, white flowers about  $\frac{3}{4}$  of an inch across, and black fruits about the size of peas. Native to northeastern Asia.

For previous introduction see 66601.

123979 to 123987. CITRUS SINENSIS (L.) Osbeck. Orange.

From Morocco. Plants presented by M. H. Brayard, Directeur de la Station Experimentale, Marrakech. Received April 12, 1937.

123979. *Bernie*.

123980. *Brestienne*.

123981. *Cornice*.

123982. *de Tétouan*.

123983. *Espagnole Sans Pépins*.

123984. *Imperial*.

123985. *Precoce de Valence*.

123986. *Sanguine Ovale M*.

123987. *Violedo*.

123988 to 123999. MALUS SYLVESTRIS Mill. Malaceae. Apple.

From Canada. Scions presented by the Dominion Experimental Station, Ottawa. Received April 12, 1937.

123988. *Oolumbia*.

123989. *Emilia*.

123990. *Gerald*.

123991. *Grover*.

123992. *Lawfam*.

123993. *Linda*.

123994. *Newtonsh*.

123995. *Osman*.

123996. *Sandow*.

123997. *Spicap*.

123998. *Spire*.

123999. *Sptza*.

## 124000 to 124012.

From Cuba. Seeds presented by the Atkins Institution of the Arnold Arboretum, Sole-dad, Cienfuegos, through F. G. Walsingham. Received May 17, 1937.

**124000. ACANTHOPHOENIX CRINITA (Bory)**  
Wendl. Phoenicaceae. Palm.

From the Department of Agriculture, Mauritius. A pinnate-leaved palm 50 to 60 feet high, with finely dissected leaves 7 to 13 feet long, silvery white beneath; the leaf sheaths, 2 to 4 feet long, are thickly covered with short brown bristles and spines. Native to the Mascarene Islands.

**124001. ADINANDRA BOCKIANA E. Pritz.** Theaceae.

From the Botanical Institute, Sun Yat Sen University, Canton, China. A small evergreen tree, with ovate-oblong leaves about 5 inches long. Native to China.

**124002. ALNUS TRABECULOSA Hand.-Mazz.**  
Betulaceae.

From the Botanical Institute, Sun Yat Sen University, Canton, China.

**124003. ANGOPHORA LANCEOLATA Cav.**  
Myrtaceae.

Presented by Alfred Bircher, El Saff, Egypt. An evergreen tree 70 to 80 feet tall, with deciduous bark, lanceolate, leathery leaves to 5 inches long, and small white flowers in terminal corymbs on short panicles. Native to Queensland and New South Wales.

**124004. BRETSCHNEIDERA SINENSIS Hemsl.**  
Sapindaceae.

From the Botanical Institute, Sun Yat Sen University, Canton, China. A handsome tree about 25 feet high, with pinnate leaves, 9 to 18 inches long, of 4 to 8 lanceolate leaflets, and terminal racemes of showy pink flowers. Native to the mountains of Yunnan, China.

**124005. CORDIA HOLSTII Gurke.** Boraginaceae.

Presented by Alfred Bircher, El Saff, Egypt. A tree very much like the catalpa, with broad leaves and very delicate lacelike white flowers. It is used as an avenue tree.

For previous introduction see 117048.

**124006. FOKIENIA HODGINSII (Dunn) Henry**  
and Thomas. Pinaceae.

Presented by the Botanical Institute, Sun Yat Sen University, Canton, China. A coniferous tree up to 40 feet in height, native to southwestern China and probably adapted for cultivation only in the southern United States.

**124007. ONCOBA ROUTLEDGEI Sprague.** Flacourtiaceae.

## 124000 to 124012—Continued.

Presented by Alfred Bircher, El Saff, Egypt. A spiny shrub or small tree up to about 18 feet high, with elliptic oblong or oblong, dark-green leaves from 3 to 5 inches long and large fragrant camellialike white flowers, followed by large globose woody-shelled fruits. It resembles *Oncoba spinosa*, but the spines are shorter. Native to tropical Africa.

**124008. PINUS sp.** Pinaceae. Pine.

Presented by the Botanical Institute, Sun Yat Sen University, Canton, China. Received under the name "kwangtungensis," for which a place of publication has not been found.

**124009. RHODODENDRON SIMIARUM Hance.**  
Ericaceae.

Presented by the Botanical Institute, Sun Yat Sen University, Canton, China. An evergreen shrub, 6 to 8 feet high, with thick oblanceolate to obovate leaves about 3 inches long and racemose corymbs of 4 to 6 pink flowers. The funnel-campanulate flowers are about 2 inches long. Native to southeastern China at altitudes of about 2,000 feet.

**124010. SORBUS FOLGNERI (C. Schneid.)**  
Rehder. Malaceae. Mountain-ash.

Presented by the Botanical Institute, Sun Yat Sen University, Canton, China. A handsome Chinese tree with gracefully spreading branches and oval leaves, dark green above and white hairy beneath. The ovoid red berries are about one-half inch long.

For previous introduction see 79040.

**124011. TABEBUIA CHRYSSEA Blake.** Bignoniaceae.

Presented by Sr. A. Dugand, Barranquilla, Colombia. A tree about 20 feet high, with 5-foliate membranous leaves and many showy yellow flowers in racemes, which appear before the leaves. Native to Venezuela.

**124012. TSUGA LONGIBRACTEATA Cheng.** Pinaceae.

Presented by the Botanical Institute, Sun Yat Sen University, Canton, China. A hemlock about 30 feet high, with linear leaves, dark green above, and about three-fourths of an inch long. Native to southwestern China.

**124013 to 124023. AVENA SATIVA L.**  
Poaceae. Oats.

From India. Seeds presented by Dr. Edgar F. Vestal, Allahabad Agricultural Institute, Allahabad Christian College, American Presbyterian Mission, Allahabad. Received May 26, 1937.

## 124013 to 124023—Continued.

A collection of hybrid oats from Pusa, Bihar, grown at the Agricultural Institute.

124013. X-27.  
 124014. 8-54.  
 124015. B-8-1.  
 124016. G.  
 124017. K-S-10.  
 124018. B-52.  
 124019. J.  
 124020. C-1.  
 124021. *Westene*. From Indore, Central India.  
 124022. *Mulga*. From Indore, Central India.  
 124023. A local variety.

## 124024 to 124048.

From South America. Seeds collected by L. C. Corbett, Bureau of Plant Industry, United States Department of Agriculture. Received May 24, 1937.

124024. *CALLIANDRA TWEEDEI* Benth. (*Annesia tweedii* (Benth.) Lindm.). Mimosaceae.  
 From Argentina. A low tropical tree with bipinnate leaves made up of 3 or 4 pairs of very small, hairy, linear-oblong leaflets and globose flower heads with rather showy purplish stamens. Native to British Guiana.  
 For previous introduction see 104106.  
 124025. *PHLOPHORUM DUBIUM* (Spreng.) Taub. (*P. vogellianum* Walp.). Caesalpiniaceae.  
 A large handsome tree 50 to 60 feet high, with broad spreading branches and bipinnate leaves giving an excellent shade. The bright-yellow flowers are in terminal paniced racemes. Native to Brazil.  
 For previous introduction see 42180.  
 124026. *CRATAEGUS* sp. Malaceae.  
 From Valdivia, Chile.  
 124027. *CUCURBITA MOSCHATA* Duchesne. Cucurbitaceae. Cushaw.  
 From Lima, Peru. A large crook-neck squash; flesh thick, yellow; skin warty.  
 124028. *CUCURBITA MOSCHATA* Duchesne. Cucurbitaceae. Cushaw.  
 From Lima, Peru. From the market. Fruit large; flesh thick, yellow; skin smooth.  
 124029. *ENTEROLOBIUM TIMBOUVA* Mart. Mimosaceae. Timbo.  
 A large tree with bipinnate leaves made up of 2 to 5 pinnae, each bearing 10 to 20 pairs of falcate-oblong leaflets and large heads of greenish flowers followed by coria-

## 124024 to 124048—Continued.

ceous kidney-shaped pods. Native to Brazil.

- For previous introduction see 107293.  
 124030. *ERYTHRINA FALCATA* Benth. Fabaceae.  
 A tropical tree allied to *Erythrina cristagalli*. The oval-oblong leaflets are 4 to 6 inches long, becoming leathery with age. The scarlet flowers, a little smaller than those of *E. cristagalli*, are in small racemes in the upper leaf axils. Native to Brazil.  
 For previous introduction see 104114.  
 124031. *FUCHSIA* sp. Onagraceae.  
 From Chile. A wild fuchsia.  
 124032. *JACARANDA CHELONIA* Griseb. Bignoniaceae.  
 An Argentinian tree, sometimes as much as 90 feet high, with a rounded habit and attractive fernlike foliage. The large blue flowers are in terminal panicles a foot long. The wood is valued in Argentina for cabinet work.  
 For previous introduction see 63987.  
 124033. *LUPINUS* sp. Fabaceae.  
 From Puella, Chile, on Lake Todos Los Santos. A yellow-flowered lupine.  
 124034 to 124039. *LYCOPERSICON ESCULENTUM* Mill. Solanaceae. Tomato.  
 124034. A thin-walled, large-celled, wrinkled tomato, abundant in the Lima market in March.  
 124035. From Lima, Peru, March 1937. Fruit small-celled, thick-walled, very meaty, lobed but quite smooth; flesh red.  
 124036. Italian-grown seeds collected in a tomato-paste factory in the Rio Negro Valley, Argentina.  
 124037. From Valdivia, Chile.  
 124038. From Trujillo, near Chau Chau, Peru.  
 124039. From Trujillo, March 1937. Fruit small, subglobose, 1 1/4 inches in diameter, smooth.  
 124040 and 124041. *MYRTUS* spp. Myrtaceae.  
 From near Niebla, Chile, March 31, 1937. An evergreen shrub 10 to 12 feet high, with leaves about 3/4 of an inch long and 3/8 of an inch wide, myrtle green above and much lighter green and hoary beneath, making a compact flat leaf arrangement. The white rosaceous flowers, in clusters, are followed by berries about 1/4 of an inch in diameter, borne on short stems, like a string of beads, under the leaf stem.  
 124040. A form with bright-blue berries.  
 124041. A form with black berries.

## 124024 to 124048—Continued.

124042. *OXYPTALUM COERULEUM* (D. Don)  
Decne. Asclepiadaceae.

A tender vine with oblong leaves, cordate-hastate at the base and dark-blue flowers in small axillary clusters. Native to Argentina.

124043. *PROSOPIS STROMBULIFERA* (Lam.)  
Benth. Mimosaceae.

From San José, Argentina, April 23, 1937. A low shrub not over 12 inches high, with peculiar screw-shaped persistent pods that look like bright-yellow spikes of flowers a short distance away.

For previous introduction see 62080.

124044. *RUBUS* sp. Rosaceae.

A blackberry found growing wild all over southern Chile; said to be an escape from a German introduction.

124045. *TABEBUIA FLAVESCENS* Griseb. Big-  
noniaceae.

124046. *TABEBUIA* sp. Bignoniaceae.

124047. *TIPUANA TIPU* (Benth.) Lillo (*T. speciosa* Benth.) Fabaceae. Tipu-tree.

A handsome unarmed tree with compound leaves that are unevenly pinnate and showy yellow flowers in loosely branched terminal panicles. The tree is a rapid grower, and its horizontal branches make it an excellent shade tree.

For previous introduction see 88263.

124048. *UGNI MOLINAE* (Barn.) Turcz.  
Myrtaceae.

From Valdivia, Chile. An evergreen shrub with leathery ovate leaves very like those of the myrtle, but with smaller flowers, shorter enclosed stamens, and reflexed, awl-shaped sepals and five petals. It is sometimes grown on walls and is about as hardy as myrtle. The edible berries are sold in the Chilean markets, but no attempt has been made to cultivate the shrub.

For previous introduction see 36151.

124049. *CITRUS* sp. Rutaceae.

From Tahiti, Society Islands. Plants presented by Harrison W. Smith, Papeari. Received June 3, 1937.

A green-fleshed pomelo.

124050. *THEOBROMA CACAO* L. Sterculi-  
aceae. Cacao.

Plants growing at the United States Plant Introduction Garden, Coconut Grove, Fla. Numbered in June 1937.

124051. *WARSEWICZIA COCCINEA* (Vahl)  
Klotzsch. Rubiaceae.

From Cuba. Seeds presented by F. G. Walsingham, Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos. Received June 3, 1937.

## 124051—Continued.

From the Plant Introduction Garden, Canal Zone. An ornamental tree with dark-green foliage and clusters of small flowers each  $\frac{1}{4}$  of an inch across. One sepal of each cluster is brilliant scarlet and over 2 inches long, making a startling splash of color against the dark leaves. The tree blooms during the wet season, whereas most of the showy flowering trees of the Tropics bloom in the dry season. Native to Trinidad, British West Indies.

For previous introduction see 105872.

124052 to 124056. *ALLIUM* spp. Lilia-  
ceae.

From India. Bulbs collected by Walter Koels, Bureau of Plant Industry, United States Department of Agriculture. Received June 3, 1937.

124052 and 124053. *ALLIUM CEPA* L. Onion.

*Pujaz*. From Hyderabad, Sind State, April 28, 1937, but said to have come from Surat.

124052. No. 2793. The bulbs of this variety keep much longer than those of any other onion previously seen on this trip.

123053. No. 2794. Possibly a good keeper.

124054 to 124056. *ALLIUM SATIVUM* L.

Garlic.

124054. No. 2790. *Lassan*. From Jodhpur, Jodhpur State, April 26, 1937.

124055. No. 2791. *Lassan*. From Chitorgarh, Mewar State, April 23, 1937.

124056. No. 2792. *Lassan*. From Hyderabad, Sind State, April 28, 1937.

124057 to 124064. *ORYZA SATIVA* L. Poa-  
ceae. Rice.

From India. Seeds presented by the Rice Research Station, Lakkana. Received May 26, 1937.

124057. *Bengalo*.

124058. *Jajat-77*.

124059. *Kangui-27*.

124060. *Kalango*.

124061. *Lari*.

124062. *Prong-36*.

124063. *Silver Jubilee*.

124064. *Torh*.

124065 to 124067.

From Europe. Seeds presented by P. Uptis, Vestiena, Latvia. Received May 28, 1937.

124065. *PICEA ABIES* (L.) Karst. (*P. excelsa* Link). Pinaceae. Norway spruce. Received as variety *Lettoniensis*.

124066. *PINUS SILVESTRIS* L. Pinaceae. Scotch pine.

Received as variety *Rigaensis*.

## 124065 to 124067—Continued.

124067. *PYRUS COMMUNIS* L. Malaceae.  
Common pear.

A wild pear which grew at 57° north latitude.

## 124068 to 124160.

From India. Seeds and bulbs collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received May 24, 1937.

124068. *ACACIA* sp. Mimosaceae.

No. 2618. From Kodur, Madras Presidency, April 19, 1937. A thorny shrub up to 8 feet high, found in hot dry forest.

124069 and 124070. *ALLIUM CEPA* L. Liliaceae.  
Onion.

*Pujaz*. From Patna, Bihar, April 4, 1937. Globe onions that mature in the hottest weather of the year.

124069. No. 2575. A white variety.

124070. No. 2586. A red variety.

124071. *ALLIUM SATIVUM* L. Liliaceae.  
Garlic.

No. 2543. From Cuddapah, Madras Presidency, March 23, 1937. The smallest variety so far seen.

124072. *BAUHINIA* sp. Caesalpiniaceae.

No. 2547. From Cuddapah, Madras Presidency, March 23, 1937. A small tree, found in hot dry places, with irregularly twisted pods 8 inches long and 1 inch wide.

124073 to 124076. *BRASSICA OLERACEA* E-TRYTIS L. Brassicaceae. Cauliflower.

From Patna, Bihar, April 6, 1937.

124073. *Phulgobi Kataki*. No. 2598. Said to be sown in summer and to be ready in November.

124074. No. 2599. *Phulgobi Asni*. The earliest sort grown in this district, maturing in 85 days with an excellent head.

124075. No. 2606. *Pusaha Phulgobi*. The largest sort grown in this district. The seeds are the most costly because they get worm-eaten before they ripen.

124076. No. 2607. *Pusaha Phulgobi*. Like No. 2606 (P. I. 124075), but from a different source.

124077. *BRASSICA RAPA* L. Brassicaceae.  
Turnip.

No. 2615. *Shalgam*. From Patna, Bihar, April 8, 1937. A native flat white turnip.

124078 to 124081. *CAPSICUM ANNUM* L. Solanaceae. Common redpepper.

124078. No. 2471. *Merakai*. From Madura, Madras Presidency, March 9, 1937. Fruit short, 1½ inches by 2 inches, red and hot.

## 124088 to 124160—Continued.

124079. No. 2542. From Cuddapah, Madras Presidency, March 23, 1937. Fruit red, hot, 3 inches long by ¾ inch wide; end decurved.

124080. No. 2557. From Bombay, March 30, 1937, but said to have come from Goa. Fruit red, mild, about 4 inches by 2 inches. A good sweet type for salads.

124081. No. 2584. *Mirch*. From the market, Patna, Bihar, April 4, 1937. Fruit 3 inches long by ¾ of an inch wide, moderately hot; chiefly used green.

124082. *CINCHONA* sp. Rubiaceae.

No. 2488. From Kodai Kanal, Palni Hills, at 7,500 feet altitude, March 13, 1937. A small tree from the rain forest, with panicles of rose-purple flowers.

124083. *CITRULLUS COLOCYNTHIS* (L.) Schrad. Cucurbitaceae. Colocynth.

No. 2546. From Cuddapah, Madras Presidency, March 23, 1937. Fruits small, orange size; grows in desert.

124084 to 124090. *CITRULLUS VULGARIS* Schrad. Cucurbitaceae. Watermelon.

124084. No. 2552. From Bhanapur, Hyderabad, March 26, 1937. Fruit subglobose, 8 inches in diameter and black green; flesh red and sweet.

124085. No. 2556. From Kopbal, Hyderabad, March 26, 1937. Fruit subglobose, 1 foot in diameter, green, blotched darker; flesh red, fair.

124086. No. 2562. From Bombay, April 1, 1937. Fruit globose, 1 foot in diameter, pale green, unmarked; flesh pink, fair.

124087. No. 2567. From Calcutta, April 2, 1937. Fruit elongate, 16 by 12 inches, medium green with traces of deeper green blotching; flesh pink, fair.

124088. No. 2568. From Calcutta, April 2, 1937. Fruit elongate, 16 by 10 inches, medium green, reticulated darker; flesh pink, watery.

124089. No. 2578. From Patna, Bihar, April 3, 1937. Fruit subglobose, 1 foot in diameter, dark green, line-blotched darker. Flesh pink, fair; rind thin.

124090. No. 2585. *Tarbusa*. From Patna, Bihar, April 4, 1937. Probably Bhagalpur stock.

124091. *CROTALARIA* sp. Fabaceae.

No. 2490. From Kodai Kanal, Palni Hills, March 14, 1937. A prostrate perennial growing on sunny slopes, with ovate, shiny, hirsute leaves and large yellow flowers.

## 124068 to 124160—Continued.

124092 to 124115. *CUCUMIS MELO* L. Cucurbitaceae. Muskmelon.

Nos. 124092 to 124104 were collected in Madras Presidency in March 1937.

124092. No. 2506. *Kharbuza*. Madras, March 17, but fruit said to have come from the Cuddapah District. Fruit flattened, 8 by 4 inches, lemon yellow, nearly smooth; flesh thick, white, sweet.

124093. No. 2507. *Kharbuza*. Madras, March 17, but said to have come from the Cuddapah District. Fruit oval, 1 foot long, yellow, netted coarsely and strongly, very firm, and apparently a good keeper; flesh thick, white, sweet, unlike any American melon known.

124094. No. 2510. *Kharbuza*. Madras, March 17, but said to have come from the Cuddapah District. Fruit subglobose, 16 inches in diameter, tapered toward the stem, golden brown, heavily ribbed and netted; flesh salmon-colored, firm, watery, not of good flavor.

124095. No. 2521. *Tela Babasa*. Sidhout, March 20. Fruit like No. 2520, but the flesh is bright salmon.

124096. No. 2524. *Hingan*. From Sidhout, March 20. Fruit oval, up to 1 foot long, deep gold, netted; flesh salmon-colored, 2 to 2½ inches thick, crisp. Said to keep 2 weeks at temperatures of 80° to 100° F.

124097. No. 2525. *Adamshahi*. From Sidhout, March 20. Fruit flattened, 8 by 5 inches, smooth, pink brown, deep ribs colored paler; flesh soft, juicy, white, fairly sweet.

124098. No. 2530. *Burka Khirne*. From the Cuddapah District, Sidhout, March 20. Fruit elongate, 12 by 6 inches, traces of heavy netting, mottled orange green with green ribbing; flesh white, fairly sweet.

124099. No. 2531. *Shiranir*. From Chennai, March 20. Fruit fig-shaped, about 6 inches long, pink, green and brown, the colors in short lines; flesh green, often very sweet. One of the handsomest and best melons of India.

124100. No. 2532. *Shabat Anar*. From Chennai, March 20. Fruit subglobose, about 6 inches in diameter, pale yellow with traces of green rib lines, some netting; flesh white, sweet. One of the best.

124101. No. 2533. Probably *Tela Babassa* × *Shanbatanar*. From Sidhout, March

## 124068 to 124160—Continued.

20. Fruit subglobose, white, traces of netting and of green ribbing; flesh white, juicy, sweet.

124102. No. 2535. *Nana Pila*. From Chennai, March 20. Fruit much flattened, 8 by 4 inches, smooth yellow, more or less blotched with green; flesh white, quality unknown as specimens were unripe, but said to be especially soft.

124103. No. 2536. An *Adamshahi* variant from Cuddapah, March 23. Fruit flattened to subglobose, heavily ribbed, smooth, pink brown; flesh soft, juicy, white, fairly sweet. Like No. 2525 (P. I. 124097), but not so flat.

124104. No. 2537. *White Burdami*. Cuddapah, March 23. Fruits like *Jal Burdami*, but pale yellow instead of gold.

124105. No. 2553. From Bhanapur, Hyderabad State, March 26. Fruit somewhat flattened, 8 by 7 inches, heavily ribbed, pink brown, smooth; flesh pale yellow-green, good. Much like the *Adamshahi* from Cuddapah, No. 2536 (P. I. 124103).

124106. No. 2554. From Bhanapur, Hyderabad State, March 26. Fruit oval, 1 foot long, golden yellow, obscurely netted, no ribs; flesh 2½ inches thick, juicy, pale salmon; like *Burdami* of Cuddapah District in quality, but more elongate.

124107. No. 2555. From Hospet, Madras Presidency, March 26. Fruit subglobose, 6 inches in diameter, blotched gold, brown and green with greenish rib lines obscurely netted to smooth; flesh thin, juicy, pale orange, insipid.

124108. No. 2558. From Bombay, March 21. Fruit flattened 6 by 4 inches, ribbed, obscurely netted, orange, strongly scented; flesh orange, no flavor.

124109. No. 2560. From Allahabad, United Provinces, April 1. Fruit slightly flattened, 6 by 5 inches, yellow, ribbed green, smooth; flesh salmon, sour, juicy.

124110. No. 2561. From Allahabad, United Provinces, April 1. Fruit globose, 4 inches in diameter, yellow, smooth, unribbed; flesh salmon, flavorless.

Nos. 124111 to 124113. From Calcutta, April 2.

124111. No. 2563. Fruit flattened, 5 by 3 inches, ribbed, rib lines orange, smooth to obscurely netted.



## 124068 to 124160—Continued.

124112. No. 2564. Fruit unevenly elongate, 8 by 6 inches, flattened at ends, ribbed, smooth to obscurely netted, yellow with orange rib lines, fragrant; flesh  $1\frac{1}{2}$  inches thick, rather flavorless.

124113. No. 1565. *Phut.* Fruit subglobose to 14 inches in diameter, smooth, greenish yellow, unribbed, splits open when ripe; flesh mealy, pale yellow, insipid. Fruit is tied up like a parcel before completely ripe.

Nos. 124114 and 124115 were collected at Patna, Bihar State, April 5 and 7, 1937.

124114. No. 2601. *Kabri.* A finely ribbed, crook-necked variety, pale green, unripe now, makes a good salad.

124115. No. 2610. *Phut.* Fruit cucumber-shaped, 15 by 5 inches, unribbed, yellow, smooth; splits open when fully ripe; flesh white, rather insipid.

124116. *CUCURBITA MOSCHATA.* Duchesne. Cucurbitaceae. Cushaw.

No. 2597. *Staphal.* From Patna, Bihar, April 5. Fruits vary in size and shape, some are oval, some flattened, all are ribbed and mostly deep pinkish buff; flesh rather thin; a good keeper.

124117. *CUCUMIS SATIVUS L.* Cucurbitaceae. Cucumber.

No. 2600. *Khira.* From Patna, Bihar, April 5. A cucumber for the hot weather; planted here the end of March and ready by the end of May, the hottest time of the year.

124118. *DAUCUS CAROTA L.* Apiaceae. Carrot.

No. 2580. *Gajar.* From Patna, Bihar, April 3. Said to be a locally grown carrot.

124119 to 124121. *DOLICHOS LABLAB L.* Fabaceae. Hyacinth-bean.

From Patna, Bihar, April 4, 1937.

124119. No. 2583. *Makham Sem.* Pods eaten green.

124120. No. 2591. *Sufed Sem.* Pods on the market are pale yellow.

124121. No. 2593. *Sem Sufed.* Said to have pale yellow pods.

124122. *HYPERICUM sp.* Hypericaceae.

No. 2486. From Kodai Kanal, Palni Hills, at 7,500 feet altitude, March 13, 1937. An attractive shrub with large golden-yellow flowers about 2 inches across, growing in the open, even on sunny slopes. The plant will stand some frost.

124123. *ARGYREIA CAMPANULATA (L.) Alston.* Convolvulaceae.

No. 2551. From Hospet, Madras Presidency, March 25. An evergreen scandent or twining shrub, often in low dense

## 124068 to 124160—Continued.

masses, with ovate-cordate leaves 1 to 4 inches in diameter and large, wide, funnel-shaped, rose-purple flowers in 1- to 3-flowered cymes. The applelike fruits are  $\frac{3}{4}$  to  $1\frac{1}{2}$  inches in diameter, including the sepals which completely envelop the fruit. Native to India.

124124. *LACTUCA SATIVA L.* Cichoriaceae. Garden lettuce.

No. 2588. From Patna, Bihar, April 4, 1937. Probably an acclimated European variety, but this seed is Indian grown.

124125 to 124128. *LAGENARIA LEUCANTHA (Duchesne) Rusby.* Cucurbitaceae. Calabash gourd.

124125. No. 2549. From Hospet, Madras Presidency, March 24, 1937. A wild form with bottle-shaped green fruit 18 inches long with 5 deep ribs; found climbing in thickets.

124126. No. 2574. *Sitar Turnki.* From Patna, Bihar, April 3, 1937. Fruit flattened, 16 by 8 inches, faintly ribbed. Used as the resonator of a stringed instrument called a sitar.

124127. No. 2589. *Kaddu.* From Patna, Bihar, April 4, 1937. An elongate, bottle-shaped sort, 3 feet long.

124128. No. 2590. *Lauki.* From Patna, Bihar, April 4, 1937. Fruits bottle-shaped, 3 feet long.

124129. *LATHYRUS SATIVUS L.* Fabaceae. Bittervetch.

No. 2619. *Kesori.* From Patna, Bihar, April 8, 1937.

124130. *LUFFA ACUTANGULA (L.) Roxb.* Cucurbitaceae. Singkwa towelgourd.

No. 2595. *Jhngani.* From Patna, Bihar, April 5, 1937. A popular vegetable.

124131. *LUFFA CYLINDRICA (L.) Roemer.* Cucurbitaceae. Snakwa towelgourd.

No. 2550. From Hospet, Madras Presidency, March 25, 1937. Growing wild in thickets. Fruit elliptical, 3 inches in diameter and very ornamental.

124132. *LYCOPERSICON ESCULENTUM Mill.* Solanaceae. Tomato.

No. 2504. From Kodai Kanal, Palni Hills, at 7,500 feet altitude, March 15, 1937. A wild plant growing at the edge of a forest. Fruit globular, 1 inch in diameter.

124133. *LYCOPERSICON ESCULENTUM Mill.* Solanaceae. Tomato.

No. 2559. From Bombay, March 31, 1937. Fruit round, red, 1 inch in diameter.

124134. *MORODICA CHARANTIA L.* Cucurbitaceae. Balam-pear.

No. 2572. *Uchhi.* From Calcutta, April 2, 1937. Fruits top-shaped, about  $1\frac{1}{2}$  inches long. One of the smallest varieties cultivated, but considered one of the best.

## 124068 to 124160—Continued.

124135. *MOMORDICA CHARANTIA* L. Cucurbitaceae. Balsam-pear.

No. 2596. *Karela*. From Patna, Bihar, April 5, 1937. A green fruit 5 inches long.

124136 and 124137. *MORUS NIGRA* L. Moraceae. Black mulberry.

*Shahbut*. From Patna, Bihar, April 3, 1937.

124136. No. 2576. Fruit 5 inches long by three-eighths of an inch in diameter, black to purplish, sweet-acid, inclined to be a bit watery.

124137. No. 2577. Fruit 2 inches long by  $\frac{1}{2}$  inch in diameter, black, sweet-sour, rather insipid.

124138. *ORYZA SATIVA* L. Poaceae. Rice.

No. 2608. *Irani*. From Patna, Bihar, April 6, 1937. A common rice, locally grown, ripe in 120 days. The earliest variety grown here.

124139. *OSBECKIA* sp. Melastomaceae.

No. 2475. From Kodai Kanal, Palni Hills, at 7,500 feet altitude, March 10, 1937. A bushy shrub up to 8 feet high, growing usually in the open and bearing, over a long period, an abundance of purple flowers about 2 inches in diameter. It will stand some frost.

124140. *PASSIFLORA* sp. Passifloraceae.

No. 2499. From Kodai Kanal, Palni Hills, at 7,500 feet altitude, March 14, 1937. An attractive climber, found at the edge of a forest, with 3-lobed, maplelike leaves. The long-tubed cerise flowers are 6 inches long, and the elliptical fruits are 4 inches long.

124141. *PONGAMIA PINNATA* (L.) W. F. Wight. (*P. glabra* Vent.). Fabaceae.

No. 2548. From Cuddapah, Madras Presidency, March 23, 1937. A handsome tree with dark shiny leaves and an abundance of small purple flowers. The leaves have value as green manure, the seeds for oil, and the tree as a whole for shade.

124142. *RAPHANUS SATIVUS* L. Brassicaceae. Radish.

No. 2613. *Muli*. From Patna, Bihar, April 8, 1937. An early, long, white radish.

124143. *RUBUS* sp. Rosaceae.

No. 2473. From Kodai Kanal, Palni Hills, at 7,500 feet altitude, March 10. A shrub up to 30 feet high, which forms impassable thickets in places; found in the forest and also on sunny hillsides. Fruit yellow to orange,  $\frac{1}{2}$  inch in diameter, small seeds, somewhat acid, of refreshing flavor, and borne abundantly. The shrub tolerates some frost.

## 124068 to 124160—Continued.

124144. *RUBUS* sp. Rosaceae.

No. 2474. From Kodai Kanal, Palni Hills, at 7,500 feet altitude, March 10, 1937. A shrub 8 feet high found in the open. The small blue-black, tomentose fruits are  $\frac{3}{8}$  of an inch in diameter.

124145. *SALVIA* sp. Menthaceae.

No. 2571. From Kodur, Madras Presidency, March 18, 1937. Plants 3 feet high, found growing in clumps in hot dry areas. Flowers lavender.

124146 to 124151. *SOLANUM MELONGENA* L. Solanaceae. Eggplant.

From Patna, Bihar, from April 3 to 8, 1937.

124146. No. 2605. *Bengan*. Fruit deep purple, 7 by  $3\frac{1}{2}$  inches, few seeds. A popular market variety.

124147. No. 2612. *Muktakasi Bengan*. Fruit subglobose, 6 inches in diameter, purple black. Considered among the best.

124148. No. 2614. *Bengan*. A round, light-purple fruit, 4 inches in diameter; a native variety.

124149. No. 2573. *Bengan*. Fruit white, 7 inches long by  $2\frac{1}{2}$  inches across.

124150. No. 2579. *Bengan*. Fruit subglobose, 5 inches in diameter, pale purplish with a mantle of dark green, and rather few seeds.

124151. No. 2592. *Bengan*. Fruits 7 by  $3\frac{1}{2}$  inches, deep purple, few seeds. A popular variety.

124152. *SOLANUM* sp. Solanaceae.

No. 2617. From Nilambur, Madras Presidency, March 5, 1937. A shrubby perennial up to 6 feet high, with whitish flowers.

124153. *STRYCHNOS* sp. Loganiaceae.

No. 2545. From Kodur, Madras Presidency, March 18, 1937. A medium-sized, ornamental tree growing in dry places, with orange fruits as large as a tennis ball.

124154. *TRICHOSANTHES ANGUINA* L. Cucurbitaceae. Snakegourd.

No. 2582. *Chiminda*. From Patna, Bihar, April 4, 1937. Used as a vegetable while tender.

124155. *TRITICUM AESTIVUM* L. Poaceae. Common wheat.

No. 2604. *Gelum*. From Patna, Bihar, April 5, 1937. A hard wheat which makes good bread.

124156. *VICIA FABA* L. Fabaceae. Broadbean.

No. 2594. *Bagla*. From Patna, Bihar, April 5, 1937. Beans eaten both green or dried.

## 124068 to 124160—Continued.

124157. *VIGNA SINENSIS* (Torner) Savi. Fabaceae. Cowpea.

No. 2587. *Labra*. From Patna, Bihar, April 4, 1937. Said to have pods 1 foot long; green pods are eaten.

124158. *VIGNA SINENSIS* (Torner) Savi. Fabaceae. Cowpea.

No. 2566. From Calcutta, April 2, 1937. Used as dry beans.

124159. (Undetermined.)

No. 2487. From Kodai Kanal, Palni Hills, March 13, 1937, at 7,500 feet altitude. An evergreen tree with a trunk 18 inches in diameter, growing in rain forest.

124160. (Undetermined.)

No. 2616. From Patna, Bihar, April 8, 1937. A prostrate leguminous perennial with an abundance of bright salmon-pink flowers, borne over a long period. Probably attractive as a rock-garden plant.

## 124161 to 124166.

From South America. Seeds collected by Raymond Stadelman, Bureau of Plant Industry, United States Department of Agriculture. Received in April and June 1937.

124161 to 124163. *LYCOPERSICON ESCULENTUM* Mill. Solanaceae. Tomato.

From the market, Huehuetenango, Departamento Huehuetenango, Guatemala, February 25, 1937, at 1,800 meters altitude.

124161. *Tomate Corriente*.

124162. *Manzana* (apple-shaped).

124163. *Pishito*. A small round tomato.

124164. *NICOTIANA TABACUM* L. Solanaceae. Tobacco.

From Chiantia, Departamento Huehuetenango, Guatemala, at 2,000 meters altitude, February 27, 1937.

124165. *LYCOPERSICON ESCULENTUM* Mill. Solanaceae. Tomato.

*Criollo*. From Isnottí, near Betijoque, Estado Trujillo, Venezuela.

124166. *NICOTIANA TABACUM* L. Solanaceae. Tobacco.

*Bianco*. From Isnottí, near Betijoque, Estado Trujillo, Venezuela.

124167 to 124178. *CITRUS* spp. Rutaceae.

From South America. Seeds collected by Dr. H. S. Fawcett, Citrus Experiment Station, Riverside, University of California. Received June 2, 1937.

124167 to 124170. *CITRUS AURANTIUM* L. Seville orange.

From Bella Vista, Argentina, April 13, 1937.

## 124167 to 124178—Continued.

124167. S. A. 13. *Naranja Agrio de Sevilla*.

124168. S. A. 15. *Naranja Agrio (Apepá)*.

124169. S. A. 15—A. *Naranja Agrio Saltifolia*.

124170. S. A. 16. *Naranja Agrio*.

124171. *CITRUS LIMETTA* Risso.

Sweet lime.

S. A. 22. A small sour lime. From Asunción, Paraguay, April 21, 1937.

124172 and 124173. *CITRUS SINENSIS* (L.) Osbeck. Orange.

124172. S. A. 20. A seedling tree from the old location of San Carlos Mission, San Carlos Corrientes, near Pindafoy, April 25, 1937.

124173. S. A. 23. From Salto, Uruguay, April 28, 1937. A sweet seedling, tree 77 years old.

124174. *CITRUS* sp.

S. A. 12. *Laranja Cravo*. From Limeira Fruit Farm, Santos, Brazil, April 7, 1937.

124175. *CITRUS* sp.

S. A. 17. From Posados, Argentina, April 24, 1937. A sour orange tree, possibly over 100 years old, near the Manes orchard.

124176. *CITRUS* sp.

S. A. 18. April 23, 1937. From an old sweet seedling orange tree near the ruins of San Ignacio Mission, northeast of Posados, Argentina.

124177. *CITRUS* sp.

S. A. 19. April 23, 1937. From a very old sweet seedling orange tree at the Santa Ana ruins, Argentina.

124178. *CITRUS* sp.

S. A. 21. April 20, 1937. *Apepá*. A sour orange from the city park at Asunción, Paraguay.

## 124179 to 124242.

From India. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received May 27, 1937.

124179. *ABELMOSCHUS ESCULENTUS* (L.) Moench. Malvaceae. Okra.

No. 2647. *Bhindi*. From Bhagalpur, Bihar, April 2, 1937.

124180. *ABELMOSCHUS ESCULENTUS* (L.) Moench. Malvaceae. Okra.

No. 2688. *Bhindi*. From Bhopal, Bhopal State, April 16, 1937.

124181. *ALLIUM CEPA* L. Liliaceae. Onion.

No. 2685. *Pujaz*. From Bhopal, Bhopal State, April 16, 1937. Said to be a mixture of yellow and red globe onions.

## 124179 to 124242—Continued.

124182. *BRASSICA OLERACEA BOTRYTIS* L.  
Brassicaceae. Cauliflower.

No. 2689. *Phuligohi*. From Bhopal, Bhopal State, April 16, 1937. Said to be a locally grown variety.

124183 to 124203. *CITRULLUS VULGARIS*  
Schrud. Cucurbitaceae. Watermelon.

Nos. 124183 to 124193. Collected in Bihar State from April 8 to 11, 1937.

124183. No. 2611. From Patna. *Tarbuza*. Fruit subglobose, 7 inches in diameter, medium green, blotch-lined with darker green; flesh red, flat.

124184. No. 2620. *Tarbuza*. From Gaya. Fruit subglobose, 10 inches in diameter, dark green, unmarked; rind extremely thin, less than  $\frac{1}{4}$  of an inch thick; flesh purple pink, fair, with the heart constituting one-half of the melon.

124185. No. 2621. *Tarbuza*. From Gaya. Fruit subglobose, 10 inches in diameter, sea green with darker green net-lines; flesh bright rose, fair quality; rind very thin,  $\frac{1}{4}$  inch thick.

124186. No. 2622. *Tarbuza*. From Gaya. Fruit subglobose, 10 inches in diameter, sea green obscurely netted with darker green; flesh rose; rind  $\frac{1}{2}$  inch thick.

124187. No. 2632. *Tarbuza*. From Gaya. Fruit subglobose, 12 inches in diameter, deep green, reticulated with darker green; rind  $\frac{1}{2}$  inch thick; flesh rose, fair quality.

124188. No. 2633. *Tarbuza*. From Gaya. Fruit subglobose, 14 inches in diameter, pale green with broad black stripes of darker green; rind  $\frac{1}{2}$  inch thick; flesh rose, good quality.

124189. No. 2637. *Tarbuza*. From Gaya. Fruit somewhat elongate, deep green, 1 foot long; flesh red; rind  $\frac{1}{2}$  inch thick.

124190. No. 2638. *Tarbuza*. From Gaya. Fruit globose, 10 inches in diameter, pale green with blotched stripes of darker green; flesh red; rind  $\frac{1}{2}$  inch thick.

124191. No. 2639. *Tarbuza*. From Gaya. Fruit light green, unmarked, obscurely but distinctly ribbed, flattened, 1 foot by 10 inches; flesh pink, slightly acid; rind  $\frac{3}{4}$  of an inch thick.

124192. No. 2640. *Tarbuza*. From Bhagalpur. Fruit globose, 18 inches in diameter, weight about 30 pounds; deep green, unmarked; rind 1 inch thick; flesh crisp and fairly sweet. This is a well-known locality for watermelons.

124193. No. 2641. *Tarbuza*. From Bhagalpur. Fruit subglobose, 14 inches in

## 124179 to 124242—Continued.

diameter, light green, obscurely reticulated with darker green, the lines remaining most conspicuously as rib lines; flesh dark pink, quality good; rind  $\frac{3}{4}$  of an inch thick.

Nos. 124194 to 124199. Collected at Allahabad, United Provinces, April 15, 1937. *Tarbuza*.

124194. No. 2671. Said to have come from Farukhabad. Fruit subglobose, 1 foot in diameter, pale green with irregular thin rib lines of darker green; rind  $\frac{1}{2}$  inch thick; flesh rose, of good quality.

124195. No. 2672. Said to have come from Farukhabad. Fruit subglobose, 1 foot in diameter, light green with blotched stripes of darker green; rind  $\frac{3}{4}$  of an inch thick; flesh rose, good quality.

124196. No. 2673. Fruit subglobose, 1 foot in diameter, greenish white, unmarked; rind  $\frac{3}{4}$  of an inch thick; flesh rose, fair quality.

124197. No. 2674. Said to have come from Farukhabad. Fruit subglobose, 16 inches in diameter, deep green with traces of darker reticulations; flesh deep rose, of good texture and flavor. One of the best.

124198. No. 2675. Fruit subglobose, 16 inches in diameter, pale green with rib lines of darker green; rind  $\frac{1}{2}$ -inch thick; flesh of good flavor and texture and with very few seeds.

124199. No. 2676. Fruit subglobose, 14 inches in diameter, deep green; rind  $\frac{1}{2}$ -inch thick; flesh deep rose, of poor quality and fair flavor.

124200. No. 2677. From Itarsi, Central Provinces. Fruit subglobose, 10 inches in diameter, pale green with straight broad rib lines of darker green, rind  $\frac{1}{2}$ -inch thick; flesh deep rose, sweet, very good.

124201. No. 2681. From Bhopal, Bhopal State, April 16.

124202. No. 2703. *Tarbuza*. From Ujjain, Gwalior State, April 18.

124203. No. 2704. *Kaigara*. From Ujjain, Gwalior State, April 18.

124204 to 124216. *CUCUMIS MELO* L. Cucurbitaceae. Muskmelon.

Nos. 124204 to 124207. *Kharbuza*. From Gaya, Bihar State, April 9, 1937.

124204. No. 2623. Fruit subglobose, 10 inches in diameter, unribbed, green, heavily netted; flesh  $1\frac{1}{2}$  inches thick, salmon color, insipid.

124205. No. 2624. Fruit elongate, 12 by 7 inches, obscurely ribbed, smooth, yel-

## 124179 to 124242—Continued.

low to salmon pink, often rib lined with deep green; flesh to 1½ inches thick, pale salmon, insipid.

124206. No. 2625. Fruit subglobose to 8 inches in diameter, smooth, obscurely ribbed, yellow, rib lined with dark green; flesh thin, pale salmon, rather acid, poor.

124207. No. 2631. Fruit subglobose, somewhat flattened, 8 inches in diameter, obscurely ribbed, obscurely netted, pink brown, blotched green with deep green rib lines; flesh salmon, 1½ inches thick, fragrant but insipid.

Nos. 124208 to 124212, *Kharbuza*. From Bhagalpur, Bihar, April 11, 1937.

124208. No. 2643. Fruit elongate, 15 inches long, compressed, 7 to 10 inches in diameter, smooth with traces of ribs, lemon yellow, scented; flesh 1¼ inches thick, salmon, juicy, insipid.

124209. No. 2644. Fruit 8 by 5 inches, heavily ribbed, smooth, pale yellow; flesh 1½ inches thick, salmon, dry, insipid.

124210. No. 2651. Fruit elongate, tapering to stem end, 12 by 8 inches, obscurely ribbed, yellow, nearly smooth; flesh firm, crisp, salmon, juicy, 2½ inches thick, with flavor like a raw potato.

124211. No. 2652. Fruit elongate, 10 by 8 inches, abruptly flattened at ends, deeply ribbed, smooth, lemon yellow, flesh 1½ inches thick, white, scented, rather dry, flavorless.

124212. No. 2653. Fruit subglobose, flattened at blossom end, tapering to stem end, 10 inches in diameter, heavily ribbed, slightly rusty, yellow with deep green rib lines; flesh fragrant, 2¼ inches thick, deep salmon, watery.

Nos. 124213 and 124214, *Kharbuza*. From Itarsi, Central Provinces, April 16, 1937.

124213. No. 2678. Fruit subglobose, 9 inches in diameter, flattened at the blossom end, faintly ribbed, heavily netted, with green rib lines, yellow blotched with russet brown; flesh 2 inches thick, acid, interesting.

124214. No. 2679. Fruit globose, 7 inches in diameter, lemon yellow, obscurely netted, broad rib lines of brownish yellow; flesh 2 inches thick, salmon, insipid.

124215. No. 2701. *Kharbuza*. From Ujjain, Gwalior State, April 18, 1937. A locally grown variety.

124216. No. 2684. *Kakri*. From Bhopal, Bhopal State, April 16, 1937. Fruit

## 124179 to 124242—Continued.

crook-necked, elongate, to 2 feet long, irregularly and closely ridged, pale green. A form now common on the market.

124217 to 124223. *CUCUMIS SATIVUS* L. Cucurbitaceae. Cucumber.

124217. No. 2636. *Kakri*. From Gaya, Bihar State, April 10, 1937. A hot-weather cucumber.

Nos. 124218 to 124221, *Kakri*. From Bhagalpur, Bihar State, April 11, 1937.

124218. No. 2649. A long variety, grown in the rains.

124219. No. 2650. A short variety, grown in the hot season before the monsoon. None on the market yet.

124220. No. 2654. A long variety.

124221. No. 2655. A short variety.

Nos. 124222 and 124223, *Khira*. From Ujjain, Gwalior State, April 18, 1937. The famous "rains" cucumber which is known throughout northern India for its fine quality.

124222. No. 2693. 124223. No. 2696.

124224 and 124225. *CUCURBITA MOSCHATA* Duchesne, Cucurbitaceae. Cuslaw. *Kumsa*. From Bhagalpur, Bihar, April 11, 1937.

124224. No. 2642. Fruit flattened, 14 by 8 inches, ribbed, creamy buff; flesh yellow, 2½ inches thick, moderately sweet and fine grained.

124225. No. 2645. Probably a mixture of elongate and flattened varieties.

124226 to 124228. *DAUCUS CAROTA* L. Apiaceae. Carrot.

124226. No. 2648. From Bhagalpur, Bihar State, April 11, 1937. A purple carrot; small, stubby, and irregular.

124227. No. 2690. From Bhopal, Bhopal State, April 16, 1937. A locally grown form, said to be orange.

124228. No. 2702. From Ujjain, Gwalior, April 18, 1937. A locally grown form, said to be yellow.

124229 to 124231. *DIOSEPYROS* spp. Diospyraceae. Persimmon.

124229. *DIOSEPYROS MONTANA* Roxb. Mountain persimmon.

No. 2634. *Makerken*. From Gaya, Bihar, April 10, 1937. A small bushy tree growing in dry places, with creamy flowers and orange fruits 1½ inches in diameter. Attractive.

124230. *DIOSEPYROS* sp.

No. 2603. *Ghaf*. From Patna, Bihar, April 5, 1937. Fruit tomato-shaped, orange yellow, astringent, 2½ to 3 inches across.

## 124179 to 124242—Continued.

- 124231. DIOSPYROS sp.**  
No. 2668. From Bhagalpur, Bihar, April 13, 1937. Fruit subglobose, 2 inches in diameter, orange, somewhat sweet, edible.
- 124232. FICUS sp. Moraceae.**  
No. 2602. From Patna, Bihar, April 5, 1937. A handsome tree with light-green, elliptical leaves about 4 inches long and purple, orange-mottled fruit about 1 inch across.
- 124233. LUFFA ACUTANGULA (L.) Roxb. Cucurbitaceae. Singkwa towelgourd.**  
No. 2687. *Rabur*. From Bhopal, Bhopal State, April 18, 1937.
- 124234. LUFFA CYLINDRICA (L.) Roemer. Cucurbitaceae. Snakwa towelgourd.**  
No. 2682. From Bhopal, Bhopal State, April 16, 1937.
- 124235. LYCOPERSICON ESCULENTUM Mill. Solanaceae. Tomato.**  
No. 2609. From Patna, Bihar State, April 7, 1937. Fruit red, 3 inches long, of good flavor.
- 124236. MOMORDICA CHARANTIA L. Cucurbitaceae. Balsam-pear.**  
No. 2683. *Karela*. From Bhopal, Bhopal State, April 16, 1937.
- 124237. PHASEOLUS LUNATUS L. Fabaceae. Lima bean.**  
No. 2669. From Allahabad, United Provinces, April 15, 1937. A bean with a long bearing season; said to have been introduced by a missionary.
- 124238. PISUM SATIVUM L. Fabaceae. Pea.**  
No. 2680. *Matar*. From Bhopal, Bhopal State, April 16, 1937.
- 124239 to 124241. SOLANUM MELONGENA L. Solanaceae. Eggplant.**  
**124239.** No. 2646. *Bengan*. From Bhagalpur, Bihar State, April 11, 1937. A large globose purple fruit.  
**124240.** No. 2667. *Bengan*. From the Botanic Section, Department of Agriculture, Sabour, Bihar State, April 13, 1937. Fruit purple, drop-shaped, about 1 foot long; skin thin, few seeds. A fine sort, derived from Bengal stock.  
**124241.** No. 2686. *Bengan*. From Bhopal, Bhopal State, April 16, 1937. Fruit elongate, 12 by 4 inches, black purple.
- 124242. HOLOPTELEA INTEGRIFOLIA (Roxb.) Planch. Ulmaceae.**  
No. 2635. *Chireta*. From Gaya, Bihar State, April 10, 1937. A tall elmlike tree to 3 feet in diameter, with obovate leaves up to 4 inches long.  
For previous introduction see 116039.

## 124243 to 124260.

- From India. Seeds presented by the Lloyd Botanic Garden, Darjeeling, through R. A. Fenton, M. D., Portland, Oreg. Received June 9, 1937.
- 124243. ARDISIA MACROCARPA Wall. Myrsinaceae.**  
A shrub up to 4 feet high with narrowly ovate leaves with crisped-crenate margins, bearing conspicuous glands in the crenations. The umbels of very small reddish flowers are followed by dotted, bright-red berries  $\frac{1}{2}$  to  $\frac{1}{4}$  of an inch in diameter. Native to Sikkim and Nepal at altitudes of 3,000 to 7,000 feet.  
For previous introduction see 102752.
- 124244. ASTILBE RIVULARIS Buch.-Ham. Saxifragaceae.**  
A perennial herb, native to Nepal and western China, with stems 3 to 5 feet high, covered with tawny hairs. The biternate leaves have dentate-ovate leaflets 1 to 3 inches long, and the creamy-white flowers, with pure-white stamens, are borne in large paniced spikes at the top of the stems.  
For previous introduction see 122068.
- 124245. CAREX CRUCIATA Wahl. Cyperaceae.**
- 124246. DAPHNE INVOLUCRATA Wall. Thymelaeaceae.**  
A lax shrub up to 20 feet high, with thin oblong-lanceolate leaves 3 to 6 inches long and silky, white, fragrant flowers in long-stemmed heads. It is native to the Sikkim region in India.  
For previous introduction see 94076.
- 124247. ERYTHRINA ARBORESCENS Roxb. Fabaceae. Coraltree.**  
When covered with its racemes of bright scarlet flowers, this tree is very attractive and is often planted as an ornamental. There are but few prickles on its branches, and the thin greenish trifoliolate leaves are often a foot wide. The strongly curved pods are about 1 inch wide and 6 to 9 inches long. The tree is native to the central and eastern Himalayas up to 7,000 feet altitude.  
For previous introduction see 104771.
- 124248. GOUANIA LEPTOSTACHYA DC. Rhamnaceae.**  
A climbing shrub with ovate, subcordate leaves 3 to 4 inches long and spikes 8 to 12 inches long of small greenish flowers. Native to India.
- 124249. GYMNOSPORA THOMSONI Kurz. Celastraceae.**  
A small spiny tree with lanceolate to oblong-lanceolate leaves about 4 inches long and inconspicuous flowers. Native to the Sikkim Himalayas at altitudes of 2,000 to 5,000 feet.

## 124243 to 124260—Continued.

124250. *ILEX HOOKERI* King. Aquifoliaceae.  
Holly.

A small deciduous tree with leathery, narrowly oblong or lanceolate leaves 3 to 5 inches long and small globular berries  $\frac{1}{2}$  of an inch in diameter. Native to the Sikkim Himalayas.

For previous introduction see 102905.

124251. *ILEX INSIGNIS* Hook. f. Aquifoliaceae.  
Holly.

A small tree or shrub with thick grooved branches, which are purplish when young. The dark-green, leathery leaves, 5 to 9 inches long, are armed at the margins with small spine-tipped teeth. The bright-red, oval berries are nearly  $\frac{1}{2}$  inch long. Native to the Sikkim Himalayas where it grows at 7,000 feet altitude.

For previous introduction see 122095.

124252. *JASMINUM UNDULATUM* (L.) Ker. Oleaceae.

A climbing jasmine with slender hairy branches, opposite leaves about 2 inches long, and white, long-tubed flowers in terminal clusters of 6 to 10 flowers. Native to the Himalayas.

For previous introduction see 65259.

124253. *LILIUM WALLICHIANUM* Schult. f. Liliaceae. Wallich Lily.

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

For previous introduction see 115983.

124254. *MAESA MACROPHYLLA* Wall. Myrsinaceae.

A large shrub or small tree, native to the eastern Himalayas. When the bark is cut, a resinous substance exudes. The wood is light brown and moderately hard.

For previous introduction see 93214.

124255. *MARSDENIA TENACISSIMA* (Roxb.) Wight and Arn. Asclepiadaceae.

A climbing plant, native to the Himalayas up to 5,000 feet, from Kumaon to Burma. The bark of the stems yields a fine silky fiber which is used for bow-strings because of its strength and durability. It is also used in making fishing nets, as submersion in water does not injure it.

For previous introduction see 39685.

124256. *DESMODIUM GYROIDES* DC. Fabaceae.

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

## 124243 to 124260—Continued.

valleys, at times even on the borders of swamps.

For previous introduction see 116599.

124257. *OSBECKIA CRINITA* Benth. Melastomaceae.

A much-branched shrub 4 to 8 feet high, with small narrow bristly leaves and large purple or pure-white flowers borne in terminal clusters. The plant is abundant at altitudes between 4,000 and 8,500 feet in the mountains of Sikkim and Bhutan, India.

For previous introduction see 102908.

124258. *OSBECKIA NEPALENSIS* Hook. Melastomaceae.

An evergreen shrub about 18 inches high, native to the Himalayas, with a rough erect stem, opposite, lanceolate rigid leaves, and large purplish-rose flowers in terminal and axillary panicles or corymbs.

For previous introduction see 122113.

124259. *POGOSTEMON GLABRUM* Wall. Menthaceae.

An erect, stout perennial related to *Pogostemon plectranthoides*. Native to the Himalayan region at altitudes of 1,000 to 3,000 feet.

124260. *RHODODENDRON ARBOREUM* J. E. Smith. Ericaceae. Tree rhododendron.

A bushy tree which sometimes attains a height of 25 feet, common in the temperate Himalayas from the Indus River to Bhutan at altitudes between 5,000 and 10,000 feet.

For previous introduction see 122127.

124261. *ZEA MAYS* L. Poaceae. Corn.

From Estonia, Europe. Seeds presented by Edward Wirgo, Estonian Ministry of Foreign Affairs, through Walter A. Leonard, Chargé d'Affairs, American Legation, Tallinn. Received May 12, 1937.

Sweet corn raised in Estonia from seed originally received from the United States.

124262. *LUFFA ACUTANGULA* (L.) Roxb. Cucurbitaceae. Singkwa towelgourd.

From India. Seeds presented by Adeltha Henry Peterson, Adyar, Madras Presidency. Received June 14, 1937.

Turai, or ridge gourd.

124263. *ERYTHRINA* sp. Fabaceae.

From Guatemala. Seeds presented by the Ministerio de Agricultura, Dirección General de Agricultura. Received June 11, 1937.

124264. *GEONOMA* sp. Phoenicaceae.

Palm.

From Central America. Seeds presented through David Barry, Los Angeles, Calif. Received June 11, 1937.

## 124264—Continued.

A palm collected on the slope of a volcano at 6,000 feet, above the line of occasional frosts. One of the forest undergrowth palms, probably requiring little heat but shade and moisture. The geonomas are slender spineless palms with a ringed, reedlike stem and with more or less pinnatisect leaves usually crowded in a showy terminal cluster.

124265. *STYLOMA PACIFICA* (Seem. and Wendl.) O. F. Cook. Phoenicaceae.  
Fiji fan palm.

From Virginia Key, near Miami, Fla. Seeds collected by David Fairchild on the estate of Hugh Matheson. Received June 11, 1937.

A handsome tropical fan-leaved palm from the Fiji Islands. Sometimes planted around Miami, though seldom fruiting; often confused with *Styloma thurstonii*, a smaller species much more common in southern Florida and often fruiting. The fruits of *S. pacifica* are nearly half an inch in diameter, deep purple at maturity, and are borne in large clusters among the leaves, the inflorescences being much shorter than those of *S. thurstonii*, which often project far beyond the leaves or droop nearly to the ground.

124266 to 124376. *TRITICUM AESTIVUM* L.  
Poaceae. Common wheat.

From China. Seeds presented by Dr. T. H. Shen, National Agricultural Research Bureau, Shaolingwei, Nanking. Received June 11, 1937.

124266. No. 1.	124290. No. 133.
124267. No. 2.	124291. No. 137.
124268. No. 10.	124292. No. 141.
124269. No. 12.	124293. No. 154.
124270. No. 25.	124294. No. 158.
124271. No. 28.	124295. No. 164.
124272. No. 29.	124296. No. 165.
124273. No. 37.	124297. No. 169.
124274. No. 46.	124298. No. 170.
124275. No. 49.	124299. No. 171.
124276. No. 57.	124300. No. 177.
124277. No. 64.	124301. No. 187.
124278. No. 66.	124302. No. 196.
124279. No. 68.	124303. No. 203.
124280. No. 69.	124304. No. 211.
124281. No. 81.	124305. No. 212.
124282. No. 112.	124306. No. 218.
124283. No. 113.	124307. No. 221.
124284. No. 114.	124308. No. 226.
124285. No. 117.	124309. No. 231.
124286. No. 120.	124310. No. 236.
124287. No. 121.	124311. No. 239.
124288. No. 123.	124312. No. 241.
124289. No. 124.	124313. No. 242.

## 124266 to 124376—Continued:

124314. No. 246.	124343. No. 399.
124315. No. 247.	124344. No. 407.
124316. No. 248.	124345. No. 408.
124317. No. 254.	124346. No. 415.
124318. No. 262.	124347. No. 423.
124319. No. 264.	124348. No. 427.
124320. No. 266.	124349. No. 430.
124321. No. 267.	124350. No. 433.
124322. No. 268.	124351. No. 444.
124323. No. 269.	124352. No. 457.
124324. No. 306.	124353. No. 462.
124325. No. 340.	124354. No. 471.
124326. No. 345.	124355. No. 476.
124327. No. 345-A.	124356. No. 481.
124328. No. 346.	124357. No. 483.
124329. No. 349.	124358. No. 486.
124330. No. 352.	124359. No. 487.
124331. No. 357.	124360. No. 1.
124332. No. 360.	124361. No. 2.
124333. No. 361.	124362. No. 26.
124334. No. 365.	124363. No. 22-14.
124335. No. 366.	124364. No. 124.
124336. No. 378.	124365. No. 141-9.
124337. No. 380.	124366. No. 169.
124338. No. 382.	124367. No. 1-195.
124339. No. 389.	124368. No. 1-186.
124340. No. 393.	124369. No. 438.
124341. No. 395.	124370. No. 716.
124342. No. 397.	124371. No. 2905.

Nos. 124372 to 124376 were received without numbers.

124372.	124375.
124373.	124376.
124374.	

124377 to 124380. *PHASEOLUS* spp. Fabaceae. Bean.

From India. Seeds presented by D. Rhind, Economic Botanist, Burma, Mandalay. Received June 2, 1937.

124377. *PHASEOLUS LUNATUS* L.

Lima bean.

*Peleik Pya.*

124378 to 124380. *PHASEOLUS VULGARIS* L.  
Common bean.

124378. *Pebuygate.*

124379. *Pegya.*

124380. *Pent.*

124381. *CINCHONA OFFICINALIS* L. (*C. ledgeriana* Moens.). Rubiaceae.

From the Philippine Islands. Seeds presented by Arthur E. Fischer, Director of Forestry, Bureau of Forestry, Manila. Received June 9, 1937.

From Kaatoan, Bukidnon, Mindanao Island, about 3,500 feet above sea level.

For previous introduction see 18936.



124382 and 124383. *ORYZA SATIVA* L. Poaceae. Rice.

From India. Seeds presented by D. B. Das, Botanical Assistant, Karimganj Farm, Karimganj. Received June 14, 1937.

124382. *As. s. Basmati*.

124383. *S. 22. Latisali*.

124384 to 124390.

From Oklahoma. Seeds presented by Francis A. Flood, Oklahoma City. Received June 11, 1937.

124384 to 124389. A collection of beans that have been used for centuries by the Hopi Indians in the southwestern portion of the United States.

124384 and 124385. *PHASEOLUS COCCINEUS* L. Fabaceae. Scarlet runner bean.

Used like shelled peas while still green; also used for dye.

124386 and 124387. *PHASEOLUS LUNATUS* L. Fabaceae. Lima bean.

The baby lima bean that was taken from the Hopi country to California.

124388 and 124389. *PHASEOLUS VULGARIS* L. Fabaceae. Common bean.

Grown in Arizona.

124388. No. 1.

124389. No. 2.

124390. *SOLANUM JAMESII* Torr. Solanaceae. Nightshade.

From the Navajo Reservation, northwestern Arizona. A species closely related to the potato, which grows wild in the mouths of washes or creek beds that are flooded occasionally during the growing season.

For previous introduction see 28770.

124391 to 124397. *ORYZA SATIVA* L. Poaceae. Rice.

From India. Seeds presented by the Paddy Specialists, Coimbatore, Madras Agricultural Department, Madras Presidency. Received June 15, 1937.

124391. Mtu. 5.

124395. Co. 8.

124392. Adt. 10.

124396. T. 573.

124393. T. 225.

124397. G. E. B. 24.

124394. Co. 4.

124398 to 124501.

From India. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received June 7, 1937.

124398 and 124399. *ABELMOSCHUS ESCULENTUS* (L.) Moench. Malvaceae. Okra.

124398. No. 2707. *Bhindi*. From Ujjain, Gwalior State, April 18, 1937.

124399. No. 2819. *Bhindi*. From Hyderabad, Sind State, April 28, 1937.

124398 to 124501--Continued.

124400 and 124401. *ALLIUM CEPA* L. Liliaceae. Onion.

124400. No. 2722. From Udaipur, Mewar State, April 20, 1937. Said to be a red globe onion.

124401. No. 2807. From Hyderabad, Sind State, April 28, 1937. Said to be a white globe onion.

124402 and 124403. *BENINCASA HISPIDA* (Thunb.) Cogn. Cucurbitaceae. Waxgourd.

124402. No. 2738. *Petha*. Presented by the Superintendent of the State gardens, Udaipur, Mewar State, April 21, 1937. A very large-fruited variety.

124403. No. 2748. *Petha*. From Udaipur, Mewar State, April 22, 1937.

124404. *BETA VULGARIS* L. Chenopodiaceae. Common beet.

No. 2807. *Palag*. From Hyderabad, Sind State, April 28, 1937.

124405 to 124408. *CAPSICUM ANNUUM* L. Solanaceae. Common redpepper.

124405. No. 2770. *Mirch*. From Ajmer, Rajputana State April 27, 1937. Fruit red, mild, tapering, 4 by 1½ inches.

124406. No. 2787. *Mirch*. Jodhpur, Jodhpur State, April 26, 1937. Fruit red, tapering, 5 by 1½ inches; flesh sweet; seeds rather hot.

124407. No. 2803. *Mirch*. From Hyderabad, Sind State, April 28, 1937. Fruit red, top-shaped, 1 inch long, hot.

124408. No. 2805. *Mirch*. From Hyderabad, Sind State, April 28, 1937. Fruit red, hot, 5 by 1½ inches.

124409 to 124424. *CITRULLUS VULGARIS* Schrad. Cucurbitaceae. Watermelon.

124409. No. 2800. *Fuda*. From Hyderabad, Sind State, April 28, 1937. Fruit globose, pale green, 4 inches across, esteemed as a vegetable.

Nos. 124410 to 124413. From Udaipur, Mewar State, April 20 and 22, 1937.

124410. No. 2728. Fruit globose, 1 foot in diameter, medium green with broken, thin rib lines; rind varies from 1 to 2 inches in thickness; flesh bright pink, slightly stringy, sweet; seeds in large air pockets.

124411. No. 2725. Fruit subglobose, 10 inches in diameter, mottled dark and pale green without pattern; rind 1 inch thick; flesh pink, fair.

124412. No. 2754. Fruit elongate, 14 inches long, deep green; rind thick; flesh red, stringy, sweet.

124413. No. 2755. Fruit globose, 12 inches in diameter, medium green with

## 124398 to 124501—Continued.

- traces of darker green, fine rib lines; flesh red, good, crisp; seeds in large air pockets.
124414. No. 2759. *Tarbuza*. From Chitorgarh, Mewar State, April 23, 1937. Fruit globose, 14 inches in diameter, deep green, unmarked; rind  $1\frac{1}{2}$  inches thick; flesh red, good texture, sweet; seeds in large air pockets.
124415. No. 2760. *Tarbuza*. From Chitorgarh, Mewar State, April 23, 1937. Fruit globose, 1 foot in diameter, light green with broad blotched stripes of darker green; rind  $1\frac{1}{2}$  inches thick; flesh deep rose, sweet but slightly stringy.
124416. No. 2761. *Tarbuza*. From Udaipur, Mewar State, April 23, 1937. Fruit globose, 10 inches in diameter, deep green with clouding of paler green; rind  $1\frac{1}{2}$  inches thick; flesh pink, fair texture, somewhat sweet.
- Nos. 124417 to 124420. From Ajmer, Rajputana State, April 24, 1937. *Tarbuza*.
124417. No. 2768. Fruit elongate, 15 inches long, deep green, unmarked.
124418. No. 2769. Fruit globose, 14 inches in diameter, medium green with narrow ribs and clouding of darker green; rind  $1\frac{1}{2}$  inches thick; flesh deep rose, of good texture, rather sweet.
124419. No. 2774. A local mixture that may have something different.
124420. No. 2778. Fruit elongate, 18 by 12 inches, deep green with narrow rib lines and clouding of darker green; rind 1 inch thick; flesh solid, of good texture, deep rose, fairly sweet; many seeds undeveloped.
- Nos. 124421 and 124422. From Marwar Junction, Jodhpur State, April 25, 1937. *Tarbuza*.
124421. No. 2779. Fruit subglobose, 10 inches in diameter, greenish white with traces of narrow rib lines of darker green; flesh sweet, deep rose, fibrous; rind  $\frac{3}{4}$  of an inch thick.
124422. No. 2780. Fruit subglobose, 6 inches in diameter, greenish white with traces of narrow rib lines of darker green; flesh of good quality and sweet.
124423. No. 2818. From Hyderabad, Sind State, April 28, 1937. A local mixture.
124424. No. 2721. From Udaipur, Mewar State, April 20, 1937. The young fruits make a highly esteemed stewed vegetable.

## 124398 to 124501—Continued.

124425. *Cordia* sp. Boraginaceae.
- No. 2786. *Gundi*. From Jodhpur, Jodhpur State. A small tree or large shrub, growing in hot dry places. The fruits, about the size of cherries, are sweet, viscous, and slightly astringent and are in compound racemes.
- 124426 to 124451. *CUCUMIS MELLO* L. Cucurbitaceae. Muskmelon.
- Nos. 124426 and 124427, *Kharbuza*. From Ujjain, Gwalior State, April 18, 1937.
124428. No. 2692. Fruit fusiform, strongly tapered to the stem and with a huge navel at the blossom end, pale lemon yellow with rib lines of brownish yellow, 8 inches in diameter, and smooth; flesh white, very juicy with low sugar content.
124427. No. 2694. Fruit smooth, elongate, 10 by 6 inches, pale lemon yellow with traces of ribs, fragrant; flesh 2 inches thick, pale salmon, very juicy, no sugar.
- Nos. 124428 to 124430. From Rutlam, Rajputana State, April 18, 1937. *Kharbuza*.
124428. No. 2712. Fruit bottle-shaped, 8 inches long, with a trace of netting, lemon yellow with green rib lines; flesh salmon, rather insipid.
124429. No. 2713. Fruit flattened, 8 by 4 inches with a conspicuous navel, golden brown, more or less blotched with green, strongly netted, smooth green rib lines; flesh watery, slightly musky, salmon-colored, but no sugar.
124430. No. 2714. Fruit oval, 8 inches long, lemon yellow, faintly ribbed and rib lined green, obscurely netted; flesh salmon,  $1\frac{1}{2}$  inches thick, watery, rather insipid.
- Nos. 124431 and 124432, *Kharbuza*. From Jaora, Rajputana State, April 19, 1937.
124431. No. 2715. Fruit oval, 1 foot long, smooth, yellow; flesh salmon, rather insipid, juicy.
124432. No. 2716. Fruit subglobose, 8 inches in diameter, faintly ribbed and obscurely netted, blotched brown, gold, and green with green rib lines; flesh salmon, firm, rather insipid.
- Nos. 124433 to 124439, *Kharbuza*. From Udaipur, Mewar State, April 20 to 22, 1937.
124433. No. 2724. A miniature melon, which may be a local variety.
124434. No. 2726. Fruit elongate, 1 foot long, faintly ribbed, obscurely netted,

## 124398 to 124501—Continued.

pale yellow with broad brownish rib lines, fragrant; flesh 2 inches thick, pale salmon, juicy, rather insipid.

124435. No. 2727. Fruit 12 by 6 inches, netted, with netted rib lines, yellow, fragrant; flesh white, very firm, 2 inches thick, insipid.

124436. No. 2728. Fruit flattened, 8 by 10 inches, faintly ribbed, obscurely netted, stronger in ribs, clear yellow; flesh white, 2 inches thick, juicy, insipid.

124437. No. 2749. Fruit not seen.

124438. No. 2752. Fruit subglobose, 6 inches in diameter with a knob at the blossom end, heavily netted, yellow, more or less blotched with golden brown; flesh very pale salmon, 1½ inches thick, sweet.

124439. No. 2753. Fruit elongate, 14 inches long and tapering to the stem, heavily netted, golden brown with smooth yellow rib lines; flesh white, 2 inches thick, juicy, acid, uninteresting.

Nos. 124440 and 124441, *Kharbuza*. From Chitorgarh, Mewar, April 23, 1937.

124440. No. 2756. Fruit elongate, 10 inches long, obscurely netted, blotched yellow and green with green rib lines; flesh orange, rather firm, insipid.

124441. No. 2758. Fruit elongate, 14 inches long, heavily netted, yellow; flesh 2 inches thick, salmon, slightly fragrant, rather firm, juicy.

Nos. 124442 to 124448, *Kharbuza*. From Ajmer, Rajputana State, April 24, 1937.

124442. No. 2762. Fruit subglobose, 6 inches in diameter, nearly smooth with large blossom scar, pinkish yellow with broad dark-green rib lines; flesh green, 1½ inches thick, sweet.

124443. No. 2763. Fruit subglobose, somewhat flattened, 6 inches in diameter, pinkish yellow with broad dark-green rib lines; flesh 1½ inches thick, insipid.

124444. No. 2764. Fruit globose, 6 inches in diameter, pale yellow, coarsely and heavily netted; flesh 2 inches thick, pale salmon, juicy, acid.

124445. No. 2765. Fruit subglobose, 8 inches in diameter, inclined to be flattened, white, obscurely netted, with broad greenish-white smooth rib lines; flesh 2 inches thick, white, with a peculiar sweet-acid taste.

124446. No. 2766. Fruit elongate, 1 foot long, tapering strongly to stem, faintly ribbed, yellow, netted; flesh white, rather acid.

## 124398 to 124501—Continued.

124447. No. 2767. Fruit flattened, 10 by 6 inches, obscurely ribbed, heavily netted, golden brown with green rib lines; flesh 2 inches thick, salmon, insipid.

124448. No. 2777. A local mixture that may contain something different.

Nos. 124449 and 124450. From Hyderabad, Sind State, April 28, 1937.

124449. No. 2810. *Kharbuza*. A local mixture.

124450. No. 2809. *Sarda*. One of the "Persian" melon relatives. Some of them are excellent in flavor and have remarkable keeping qualities.

124451. No. 2751. From Udaipur, Mewar State, April 22, 1937.

124452 to 124456. CUCUMIS SATIVUS L. Cucurbitaceae. Cucumber.

124452. No. 2812. *Wangus*. A small melon-like cucumber, 4 inches long, with a pronounced blossom scar, smooth, green clouded with darker green. The young fruits are peeled and eaten raw. A locally grown variety which has not been seen before on this expedition.

124453. No. 2735. *Khira*. Presented by the Superintendent of the State gardens, Udaipur, Mewar State, April 21, 1937. A locally grown green variety.

124454. No. 2811. *Kakri*. From Hyderabad, Sind State, April 28, 1937. Fruit about 6 by 2¾ inches, smooth green, of good texture.

124455. No. 2750. From Udaipur, Mewar State, April 22, 1937.

124456. No. 2813. *Khira*. From Hyderabad, Sind State, April 28, 1937. Probably the long, heavily ridged, pale-green form which is eaten raw while the fruit is young.

124457. CUCURBITA MOSCHATA Duchesne. Cucurbitaceae. Cushaw.

No. 2729. *Kaddu*. Presented by the Superintendent of the State gardens, Udaipur, Mewar State, April 21, 1937.

124458. CYAMOPSIS TETRAGONOLOBIA (L.) Taub. Fabaceae. Guar.

No. 2711. *Gavar*. From Ujjain, Gwalior State, April 18, 1937. These beans are commonly cultivated in some parts of India, and there are many varieties.

124459. DAUCUS CAROTA L. Apiaceae. Carrot.

No. 2801. *Gajar*. From Hyderabad, Sind State, April 28, 1937. A locally grown orange carrot.

124460. DOLICHOS LABLAB L. Fabaceae. Hyacinth-bean.

## 124398 to 124501—Continued.

No. 2739. *Makhan Sem*. Presented by the Superintendent of the State gardens, Udaipur, Mewar State, April 21, 1937. A variety with pale pods which are used as string beans.

124461. *GOSYPIDIUM* sp. Malvaceae. Cotton.

No. 2717. *Rui*. From Udaipur, Mewar State, April 20, 1937. A cotton used in this area for making clothing.

124462. *INDIGOFERA LINIFOLIA* (L. f.) Retz. Fabaceae. Indigo.

No. 2789. From Gaya, Bihar State, April 9, 1937. A prostrate perennial growing in hot dry places. The simple, linear, silvery-hairy leaves are about 1 inch long, and the small salmon-pink flowers, in copious racemes, are borne in abundance over a long period.

124463 to 124466. *LAGENARIA LEUCANTHA* (Duchesne) Rusby. Cucurbitaceae. Calabash gourd.

Nos. 124468 and 124464. Presented by the Superintendent of the State gardens, Udaipur, Mewar State, April 21, 1937.

124463. No. 2736. *Alkaddu*. A variety 3 feet long, planted in the rainy season.

124464. No. 2743. *Gol Lauki*. A round variety.

124465. No. 2775. *Lauki*. From Ajmer, Rajputana State, April 24, 1937.

124466. No. 2802. *Adu*. From Hyderabad, Sind State, April 28, 1937. A long edible variety.

124467 to 124472. *LUFFA* spp. Cucurbitaceae.

124467 to 124470. *LUFFA ACUTANGULA* (L.) Roxb. Singkwa towelgourd. *Turai*.

124467. No. 2705. From Ujjain, Gwalior State, April 18, 1937.

124468. No. 2741. Presented by the Superintendent of the State gardens, Udaipur, Mewar State, April 21, 1937. Used as a vegetable.

124469. No. 2773. From Ajmer, Rajputana State, April 24, 1937.

124470. No. 2806. From Hyderabad, Sind State, April 28, 1937. Esteemed as a vegetable when young.

124471 and 124472. *LUFFA CYLINDRICA* (L.) Roemer. Suakwa towelgourd.

124471. No. 2706. *Gilti*. From Ujjain, Gwalior State, April 18, 1937.

124472. No. 2740. *Ghiya*. Presented by the Superintendent of the State gardens, Udaipur, Mewar State, April 21, 1937. Used as a vegetable while young.

## 124398 to 124501—Continued.

124473 and 124474. *LYCOPHRASICON ESCULENTUM* Mill. Solanaceae. Tomato.

124473. No. 2785. From Jodhpur, Jodhpur State, April 26, 1937. Fruit flattened and elongate (many freaks), about 2½ inches long, red. Possibly disease resistant.

124474. No. 2815. From Hyderabad, Sind State, April 28, 1937. A long red fruit; said to be an acclimatized variety.

124475. *MEDICAGO SATIVA* L. Fabaceae. Alfalfa.

No. 2804. From Hyderabad, Sind State, April 28, 1937. Used locally as fodder.

124476 and 124477. *MOMORDICA CHARANTIA* L. Cucurbitaceae. Balsam-pear.

124476. No. 2742. *Karela*. Presented by the Superintendent of the State gardens, Udaipur, Mewar State, April 21, 1937.

124477. No. 2772. *Karela*. From Ajmer, Rajputana State, April 24, 1937.

124478 to 124480. *PISUM SATIVUM* L. Fabaceae. Pea.

124478. No. 2816. *Matar*. From Hyderabad, Sind State, April 28, 1937.

124479. No. 2817. *Matar*. From Hyderabad, Sind State, April 28, 1937.

124480. No. 2718. *Matar*. From Udaipur, Mewar State, April 20, 1937, but said to have come from Nagpur, Central Provinces, and to be free from mildew there.

124481. *RAPHANUS SATIVUS* L. Brassicaceae. Radish.

No. 2788. *Muli*. From Jodhpur, Jodhpur State, April 26, 1937. A long white variety; possibly a hot-weather radish for the United States.

124482 to 124490. *SOLANUM* spp. Solanaceae.

124482 to 124489. *SOLANUM MELONGENA* L. Eggplant.

Nos. 124482 and 124483, *Bengan*. From Ujjain, Gwalior State, April 18, 1937.

124482. No. 2709. A long black fruit.

124483. No. 2710. A round black fruit.

Nos. 124484 to 124487, *Bengan*. Presented by the Superintendent of the State gardens, Udaipur, Mewar State, April 21, 1937.

124484. No. 2731. A mixture of local varieties.

124485. No. 2732. A locally grown, long purple variety.

124486. No. 2733. A native, long white variety.

## 124398 to 124501—Continued.

124487. No. 2734. A native, round white variety.
124488. No. 2746. From Udaipur, Mewar State, April 22, 1937. A small, green local variety.
124489. No. 2771. From Ajmer, Rajputana State, April 24, 1937. A small round fruit, 3 inches in diameter.
124490. SOLANUM sp.  
No. 2626. From Gaya, Bihar State, April 9, 1937. A shrubby perennial 7 feet high with white flowers and orange-yellow fruits  $\frac{1}{2}$  inch in diameter.
124491. SPINACIA OLERACEA L. Chenopodiaceae. Common spinach.  
No. 2747. *Palag*. From Udaipur, Mewar State, April 22, 1937. A winter potherb.
- 124492 and 124493. TRICHOSANTHES ANGUINA L. Cucurbitaceae. Snakegourd. *Ohachinda*. Presented by the Superintendent of the State gardens, Udaipur, Mewar State, April 21, 1937.
124492. No. 2730. Green or white, a small race.
124493. No. 2737. Fruits 3 feet long, a good vegetable.
- 124494 to 124498. TRITICUM AESTIVUM L. Poaceae. Common wheat. *Gahun*.  
Nos. 124494 and 124495. From the Government Farm at Udaipur, Mewar State, April 20, 1937.
124494. No. 2719. Govt. No. 13. Origin unknown.
124495. No. 2720. *Pusa 52*. An imported strain from Pusa, said to be rust free and to tolerate frost at fruiting time.
- Nos. 124496 to 124498. From Gaya, Bihar State, April 9, 1937. Hard wheat collected near the southern limit of wheat production in India.
124496. No. 2627. Heads pale, bearded; makes good pastry flour; a short-season hard wheat.
124497. No. 2628. Heads reddish, beardless.
124498. No. 2629. Heads reddish, bearded.
124498. VICIA FABA L. Fabaceae. Broadbean.  
No. 2708. *Rampal*. From Ujjain, Gwallior State, April 18, 1937.
- 124500 and 124501. ZEA MAYS L. Poaceae. Corn. *Makh*. From Udaipur, Mewar State, April 22, 1937. Said to mature in 75 days.
124500. No. 2744.
124501. No. 2745.

## 124502 and 124503. GESNERIA spp. Gesneriaceae.

From Brazil. Seeds presented by Mrs. V. E. Schilling, Nova Friburgo, Rio de Janeiro, through Dr. Doris M. Cochran, United States National Museum, Washington, D. C. Received June 18, 1937.

## 124502. GESNERIA sp.

A bulbous plant with creamy-flesh-spotted, narrow-pointed leaves. The solitary tubular flowers are produced in the leaf axils.

## 124503. GESNERIA sp.

A bulbous plant with velvety green leaves and showy coral-scarlet tubular flowers produced in a terminal umbel.

## 124504. DENDROCALAMUS STRICTUS (Roxb.) Nees. Poaceae.

From Florida. Seeds presented by Julian Nally, Gotha. Received June 23, 1937.

A giant, tropical clump bamboo, native to India, under favorable conditions growing to a height of 60 feet or more. The culms are thick walled and sometimes are practically solid. The plant is injured at 28° F. and is killed at 26°. The entire clump, growing at Gotha, Fla., from which these seeds were collected, seeded heavily from late winter to early summer, producing no leaves, and all the culms died.

For previous introduction see 77061.

## 124505 to 124510. MEDICAGO SATIVA L. Fabaceae. Alfalfa.

From Peru. Seeds presented by Pedro Recavarren C., Dirección de Agricultura, Ganadería, y Colonización, Ministerio de Fomento, Lima. Received June 24, 1937.

124505. A. 124505. D.

124506. B. 124506. E.

124507. C. 124510. F.

## 124511. ALEURITES TRISPERMA Blanco. Euphorbiaceae. Banuealag.

From the Philippine Islands. Seeds presented by José S. Camus, Director of Plant Industry and Commerce, Manila. Received June 19, 1937.

This Philippine relative of the tung-oil tree (*Aleurites fordii*) is a tree 30 to 50 feet high, with heart-shaped leaves and rounded, three-angled fruits about 2 inches in diameter. It is a tropical tree and withstands only a few degrees of frost. The oil obtained from the seeds resembles tung oil, but is somewhat slower in drying.

For previous introduction see 112679.

## 124512 to 124522. GOSSYPIUM spp. Malvaceae. Cotton.

From Brazil. Seeds presented by Prof. J. B. Griffing, Escola Superior de Agricultura e

## 124512 to 124522—Continued.

Veterinaria, Viçosa, Minas Geraes. Received June 1, 1937.

124512. African *Punctatum*, unselfed.  
 124513. South African, 37-38, selected strain selfed for several years.  
 124514. South African, 37-80. A selected strain, selfed for several generations.  
 124515. Cambodian cotton, a selfed strain.  
 124516. *Carolina*, No. 1.  
 124517. *Carolina*, No. 2.  
 124518. *Carolina*, No. 3.  
 124519. *Express*, No. 1.  
 124520. *Express*, No. 2.  
 124521. *Express*, No. 3.  
 124522. *Meade*. A strain selfed for several generations.

## 124523 to 124611.

From India. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received June 12, 1937.

124523. *ABELMOSCHUS ESCULENTUS* (L.) Moench. Malvaceae. Okra.  
 No. 2865. From Godaneri, Madras Presidency, April 30, 1937.  
 124524. *ALLIUM CEPA* L. Liliaceae. Onion.  
 No. 2828. *Basar*. From Hyderabad, Sind State, April 30, 1937. A red globe onion which stands extreme heat.  
 124525. *ALLIUM CEPA* L. Liliaceae. Onion.  
 No. 2839. From Bangalore, Mysore State, April 30, 1937. A locally grown onion.  
 124526. *AMARANTHUS* sp. Amaranthaceae.  
 No. 2867. From Godaneri, Madras Presidency, April 30, 1937. A potherb.  
 124527. *BENINCASA HISPIDA* (Thunb.) Cogn. Cucurbitaceae. Waxgourd.  
 No. 2847. From Anakapalle, Madras Presidency, April 20, 1937.  
 124528. *BETA VULGARIS* L. Chenopodiaceae. Common beet.  
 No. 2822. *Chakunda*. From Hyderabad, Sind State, April 20, 1937. A round beet up to 7 inches in diameter, of good quality, not stringy; grown in extreme heat.  
 124529 to 124532. *BRASSICA* spp. Brassicaceae.  
 From Hyderabad, Sind State, April 30, 1937.  
 124529 and 124530. *BRASSICA OLERACEA* var. *BOTRYTIS* L. Cauliflower.  
 124529. No. 2825. *Phulgoba*. An early native variety.  
 124530. No. 2827. *Phulgoba*. A late native variety.

## 124523 to 124611—Continued.

124531 and 124532. *BRASSICA RAPA* L.

Turnip.

124531. No. 2853. *Goguru*. A purple-red globe turnip.

124532. No. 2826. *Shelgum*. A flat white winter turnip.

124533. *BURSERIA* sp. Balsameaceae.

No. 2881. From Lahore, Punjab State, May 4, 1937. A small ornamental tree.

124534. *CANAVALIA ENSIFORMIS* (L.) DC. Fabaceae. Jackbean.

No. 2895. From Peshawar, North West Frontier Province. Bush form.

124535. *CAPPARIS* sp. Capparidaceae.

No. 2873. From Hyderabad, Sind State, April 20, 1937. A common shrub or small tree on the north Indian plains, blooming in spring with yellow to orange to pink-red blooms. The tree is leafless with green twigs, dense, well-formed, and beautiful when covered with bloom.

124536 to 124540. *CAPSICUM ANNUM* L. Solanaceae. Common redpepper.

124536. No. 2846. From Anakapalle, Madras Presidency, April 30, 1937. A mixture of pointed fruits, red and yellow, 2 to 3 inches long.

124537. No. 2856. From Coimbatore, Madras Presidency, April 30, 1937. A small red fruit about 1 inch long, sharp.

124538. No. 2861. From Godaneri, Madras Presidency, April 30, 1937.

124539. No. 2901. From Peshawar, North West Frontier Province, May 8, 1937. Fruit red, round, 1 inch in diameter, mild.

124540. No. 2902. From Peshawar, North West Frontier Province. Fruit red, pointed, 1½ inches long, pungent.

124541. *CARICA PAPAYA* L. Papayaceae.

Papaya.

No. 2868. From Ujjain, Gwallor State, April 18, 1937. Fruit about 1 foot long, thick walled, small seed cavity, few seeds, good flavor. One of the best found in India.

124542. *CASSIA DIDYMOBOTRYA* Fres. Caesalpinaceae.

No. 2886. From Lahore, Punjab State, May 4, 1937. A large dense shrub or small tree with pinnate leaves 6 to 16 inches long. It is covered with large erect racemes of yellow flowers over a long blooming period. Native to tropical Africa.

124543 to 124547. *CITRULLUS VULGARIS* Schrad. Cucurbitaceae. Watermelon.

124543. No. 2799. *Kalinga*. From Hyderabad, Sind State, April 28, 1937. Fruit globose, 1 foot in diameter, green

## 124523 to 124611—Continued.

with narrow blotched lines of darker green; rind  $\frac{1}{8}$  to  $\frac{1}{4}$  of an inch thick; flesh rose, inclined to purplish, watery, of good texture, but no sugar.

124544. No. 2870. From Karachi, Sind State, April 30, 1937. Fruit subglobose, 1 foot in diameter, pale green with stripes of darker green; flesh rose, tinged purple, insipid, very seedy.

124545. No. 2871. From Karachi, Sind State, April 30, 1937. Fruit subglobose, 1 foot in diameter, pale green, unmarked; rind  $\frac{1}{2}$  inch thick; flesh rose, insipid, very seedy.

124546. No. 2872. From Karachi, Sind State, April 20, 1937. Fruit globose, 1 foot in diameter, pale green, finely reticulated with darker green; flesh rose, tinged purple, watery, insipid, very seedy.

124547. *Tarbuza*. From Lahore, Punjab State, May 1, 1937. Fruit globose, 20 inches in diameter, deep green with faint cloudings of lighter green; rind 1 inch thick; flesh deep rose, fair quality, rather sweet, relatively few seeds.

124548 to 124554. *CUCUMIS MELO* L. Cucurbitaceae. Muskmelon.

124548. No. 2781. *Kharbuza*. From Jodhpur, Jodhpur State, April 26, 1937. Fruit oblong, 14 inches long, smooth, golden brown; flesh 2 inches thick, pale salmon, insipid, though (as is often the case) the melon is fragrant.

124549. No. 2782. *Kharbuza*. From Jodhpur, Jodhpur State, April 26, 1937. Fruit elongate, 15 inches long, tapered to the stem end, coarsely and heavily netted, golden brown blotched with dark green; flesh 2 inches thick, pale salmon, mealy, insipid.

124550. No. 2783. *Kharbuza*. From Jodhpur, Jodhpur State, April 26, 1937. Fruit football-shaped, 10 inches long, ribbed, mostly smooth except for strong netting on the rib, golden brown, clouded with greenish black; flesh 2 inches thick, pale salmon, insipid.

124551. No. 2784. *Kharbuza*. From Jodhpur, Jodhpur State, April 26, 1937. Fruit flattened 1 by 6 inches, smooth with scattered strong netlines, gold, blotched more or less with deeper gold; flesh 2 inches thick, salmon, insipid.

124552. No. 2795. *Kharbuza*. From Hyderabad, Sind State, April 28, 1937. Fruit more or less flattened, 8 by 4 to 6 inches, sometimes with traces of ribs, smooth, usually golden brown with a trace of red shading to deep mahogany; flesh rather thin, yellow green, fragrant, sweet.

## 124523 to 124611—Continued.

124553. No. 2869. From Jungshalls, Sind State, April 30, 1937. Fruit smooth, yellow, elongate, 10 by 8 inches, exceedingly fragrant; flesh salmon, rather flavorless.

124554. No. 2876. From Amritsar, Punjab State, May 4, 1937. Fruit flattened, 6 by 3 or 4 inches, smooth with large blossom scar, lemon yellow often attractively flecked with green, fragrant; flesh thin, white, insipid.

124555. *CUCUMIS SATIVUS* L. Cucurbitaceae. Cucumber.

No. 2845. From Anakapalle, Madras Presidency, April 30, 1937.

124556. *CUCUMIS* sp. Cucurbitaceae.

No. 2849. *Velerika*. From Colabatore, Madras Presidency, April 30, 1937.

124557. *CUCUMIS* sp. Cucurbitaceae.

No. 2854. From Hyderabad, Sind State, April 30, 1937. A very small variety.

124558 to 124560. *CUCURBITA MOSCHATA* Duchesne. Cucurbitaceae. Cushaw.

124558. No. 2798. *Kadu*. From Hyderabad, Sind State, April 28, 1937. Fruit football-shaped, 14 inches long, deeply ribbed, pink brown, smooth. Used like summer squash when green and for pies when ripe.

124559. No. 2835. *Kadu*. From Hyderabad, Sind State, April 30, 1937. A mixture of local varieties, all good keepers and good vegetables when green.

124560. No. 2859. From Godaneri, Madras Presidency, April 30, 1937.

124561. *CUPANIA* sp. Sapindaceae.

No. 2888. From Lahore, Punjab, May 4, 1937. A small ornamental evergreen tree.

124562. *CYAMOPSIS TETRAGONLOBA* (L.) Taub. Fabaceae. Guar.

No. 2829. From Hyderabad, Sind State, April 30, 1937.

For previous introduction and description see 124458.

124563. *DAUCUS CAROTA* L. Apiaceae.

Carrot.

No. 2814. From Hyderabad, Sind State, April 28, 1937.

124564. *DELONIX REGIA* (Boj.) Raf. Caesalpiniaceae. Royal poinciana.

No. 2821. From Karachi, Sind State, April 30, 1937. There are many forms of this tree, varying in flower color and tree habit. This form is dwarf, blooming at the height of 5 feet. The tree from which these fruits were taken had a trunk 16 inches in diameter, a spreading top 15 feet high, and lovely orange-maroon flowers.

For previous introduction see 114938.

## 124523 to 124611—Continued.

124565. *DIOSPYROS MONTANA* Roxb. Diospyraceae. Mountain persimmon.

No. 2878. From Lahore, Punjab, May 4, 1937. An attractive small tree.

For previous introduction and description see 124229.

124566. *DIOSPYROS PEREGRINA* (Gaertn.) Guerke. Diospyraceae. Persimmon.

No. 2885. From Lahore, Punjab, May 4, 1937. A handsome, medium-sized tree whose fruits are used medicinally and for tanning. The seeds yield an oil.

For previous introduction see 98844.

124567 and 124568. *DOLICHOS LABLAB* L. Fabaceae. Hyacinth-bean.

124567. No. 2850. From Coimbatore, Madras Presidency, April 30, 1937.

124568. No. 2851. From Dumugudam, Madras Presidency, said to be grown by the Kayas, an aboriginal tribe of the Godaneri District.

124569. *ELEUSINE CORACANA* (L.) Gaertn. Poaceae. African millet.

No. 2857. From Coimbatore, Madras Presidency, April 30, 1937.

124570. *FIRMIANA COLORATA* (Roxb.) R. Br. Sterculiaceae.

No. 2877. From Lahore, Punjab, May 4, 1937. An ornamental tree with handsome brilliant-orange flowers which appear before the leaves.

For previous introduction see 59678.

124571 to 124575. *LAGENARIA LEUCANTHA* (Duchesne) Rusby. Cucurbitaceae. Calabash gourd.

124571. No. 2820. From Hyderabad, Sind State, April 29, 1937.

124572. No. 2841. From Anakapalle, Madras Presidency, April 30, 1937.

124573. No. 2855. Said to be an Assam variety with fruits about 3 feet long.

124574. No. 2864. From Godaneri, Madras Presidency, April 30, 1937.

124575. No. 2896. From Peshawar, North West Frontier Province, May 5, 1937. Fruit bitter and of interest only to gourd growers.

124576 to 124579 *LUFFA ACUTANGULA* (L.) Roxb. Cucurbitaceae.

Singwa towelgourd.

124576. No. 2837. From Udaipur, Mewar State, April 26, 1937, but said to have come from the nearby village of Salubar; fruits over 5 feet long.

124577. No. 2843. From Anakapalle, Madras Presidency, April 30, 1937.

124578. No. 2860. From Godaneri, Madras Presidency, April 30, 1937.

## 124523 to 124611—Continued.

124579. No. 2891. Presented by the Superintendent of the State gardens, Salubar, Mewar State, May 4, 1937. Fruits said to be over 5 feet long.

124580. *LUFFA CYLINDRICA* (L.) Roemer. Cucurbitaceae. Snakwa towelgourd.

No. 2863. From Godaneri, Madras Presidency, April 30, 1937. Said to be a wild edible variety.

124581 and 124582. *LYCOPERSICON ESCULENTUM* Mill. Solanaceae. Tomato.

From Hyderabad, Sind State, April 28, 1937.

124581. No. 2796. Fruit red, subglobose, flattened or elongate, 1½ inches long. Grown in extreme heat.

124582. No. 2797. Fruit red, flattened, 4 inches across, much ribbed. Grown in extreme heat.

124583. *MILLETTIA OVALIFOLIA* (Wight and Arn.) Kurz. Fabaceae.

No. 2884. From Lahore, Punjab, May 4, 1937. A medium-sized tree with odd-pinnate leaves from 4 to 18 inches long and slender axillary racemes of small blue fragrant flowers. Native to Burma.

For previous introduction see 123224.

124584 to 124587. *MOMORDICA CHARANTIA* L. Cucurbitaceae. Balsam-pear.

124584. No. 2831. *Karela*. From Hyderabad, Sind State, April 30, 1937. A long variety.

124585. No. 2832. *Karela*. From Hyderabad, Sind State, April 30, 1937. A small round variety.

124586. No. 2844. From Anakapalle, Madras Presidency, April 30, 1937.

124587. No. 2890. Presented by the Superintendent of the State gardens, Salubar, Mewar State, May 5, 1937. Fruits said to be 18 inches long or about double the length of any other known Indian race.

124588. *NICOTIANA TABACUM* L. Solanaceae. Common tobacco.

No. 2842. From Anakapalle, Madras Presidency, April 30, 1937.

124589. *ORYZA SATIVA* L. Poaceae. Rice.

No. 2900. From Peshawar, North West Frontier Province, May 8, 1937.

124590 to 124593. *PHASEOLUS* spp. Fabaceae.

124590 to 124592. *PHASEOLUS LUNATUS* L. Lima bean.

124590. No. 2897. From Peshawar, North West Frontier Province, May 5, 1937.

124591. No. 2824. From Hyderabad, Sind State, April 30, 1937.



## 124523 to 124611—Continued.

124592. No. 2898. From Peshawar, North West Frontier Province, May 5, 1937.

124593. PHASEOLUS VULGARIS L.  
Common bean.

No. 2892. From Peshawar, North West Frontier Province, May 5, 1937.

124594. PHOENIX BUPICOLA T. Anders.  
Phoenicaceae. Cliff date palm.

No. 2882. From Lahore, Punjab State, May 4, 1937. A Himalayan palm with a solitary, slender, naked stem 15 to 20 feet high, bright-green leaves 10 feet long, and shining yellow oblong fruits.

For previous introduction see 116530.

124595. PISUM SATIVUM L. Fabaceae.  
Pea.

No. 2894. From Peshawar, North West Frontier Province, May 5, 1937.

124596. PUTRANJIVA ROXBURGHII Wall. Euphorbiaceae. Indian amuletplant.

No. 2883. From Lahore, Punjab State, May 4, 1937. A spreading evergreen tree of attractive form, with small whitish bitter fruits the size of a cherry. From the seeds is obtained an oil used by the natives of India for burning. The polished seeds are strung and used as amulets. The hard gray wood is used for making tools.

For previous introduction see 116578.

124597. RAPHANUS SATIVUS L. Brassicaceae.  
Radish.

No. 2823. *Mull.* From Hyderabad, Sind State, April 30, 1937. A long white hot-weather radish.

124598 to 124601. SOLANUM MELONGENA L.  
Solanaceae. Eggplant.

124598. No. 2830. *Bengan* or *Vangan*. From Hyderabad, Sind State, April 30, 1937. A long purple variety.

124599. No. 2836. *Vangan*. From Hyderabad, Sind State, April 30, 1937. A round purple fruit.

124600. No. 2848. From Mysore State, April 30, 1937.

124601. No. 2862. From Godaneri, Madras Presidency, April 30, 1937.

124602. STERCULIA sp. Sterculiaceae.

No. 2903. From Peshawar, North West Frontier Province, May 8, 1937. An ornamental tree with narrow, three-lobed leaves 4 inches long.

124603. TRICHOSANTHES ANGUINA L. Cucurbitaceae. Snakegourd.

No. 2840. From Anakapalle, Madras Presidency, April 30, 1937.

## 124523 to 124611—Continued.

124604. TRIGONELLA FENNUM-GRANUM L.  
Fabaceae. Fenugreek.

No. 2838. *Meth.* From Hyderabad, Sind State, April 30, 1937. A popular winter potherb; seeds also used for flavoring.

124605. TODNA CILIATA Roemer. Meliaceae.  
Toon tree.

No. 2880. *Toon*. From Lahore, Punjab, May 4, 1937. A large tropical tree with nearly evergreen foliage and white, honey-scented flowers. The fine red wood, which is used for furniture, carving, and for making cigar boxes, is very durable and is not attacked by termites. Native to India.

For previous introduction see 116795.

124606 to 124609. VIGNA spp. Fabaceae.

124606. VIGNA CYLINDRICA (Stickm.) Skeels. Catjang.

No. 2853. From Coimbatore, Madras Presidency, April 30, 1937.

124607 to 124609. VIGNA SINENSIS (Tornev) Savi. Cowpea.

124607. No. 2852. From Madras, April 30, 1937.

124608. No. 2834. *Goar*. From Hyderabad, Sind State, April 30, 1937. Eaten dry.

124609. No. 2893. From Peshawar, North West Frontier Province, May 5, 1937.

124610. XYLOSMA LONGIFOLIA Clos. Flacourtiaceae.

No. 2889. From Lahore, Punjab State, May 4, 1937. An evergreen shrub with rather long, slender branches and linear to oblong-lanceolate leathery leaves 4 to 9 inches long. Native to the Himalayan region at altitudes up to 5,000 feet.

124611. (Undetermined.)

No. 2858. From Udaipur, Mewar State, April 22, 1937. An evergreen shrub or small tree, growing in the desert and bearing an abundance of small white fruits which are eaten by birds. An ornamental for use in warm desert sections.

124612 to 124614. FORTUNELLA spp. Rutaceae.

Plants growing at the United States Plant Introduction Garden, Glenn Dale, Md.; originally grown by the former Office of Crop Physiology and Breeding Investigations. Numbered in June 1937.

124612. FORTUNELLA CRASSIFOLIA Swingle. *Melwa kumquat*.

C. P. B. No. 7946. An evergreen shrub or dwarf tree with very thick leaves and numerous yellowish fruits over an inch in diameter, broadly oval or ovate in outline. Probably native to China.

## 124612 to 124614—Continued.

124613. *FORTUNELLA JAPONICA* (Thunb.)  
Swingle. Kumquat.

C. P. B. No. 7335.

For previous introduction see 30429.

124614. *FORTUNELLA MARGARITA* (Lour.)  
Swingle. Oval kumquat.

C. P. B. 11315.

124615. *PASSIFLORA PURPUSII* Killip.  
Passifloraceae. Passiflora.

From Mexico. Plants purchased from Dr. C. A. Purpus, Zacuapam, Huatusco, Veracruz. Received May 29, 1937.

A passiflora with ovate, cordate leaves about 6 inches long and flowers about 2 inches wide. Native to Veracruz, Mexico.

124616. *SACCHARUM OFFICINARUM* L.  
Poaceae. Sugarcane.

From the Union of South Africa. Cuttings presented by the Natal Herbarium, Durban. Received June 29, 1937.

124617. *CUCUMIS MELO* L. Cucurbitaceae. Muskmelon.

From India. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received June 12, 1937.

No. 2874. *Kharbuza*. From Lahore, Punjab, May 1, 1937. Fruit flattened, 6 by 4 inches, yellow with deep-green rib lines, coarsely and strongly netted, fragrant; flesh salmon, thick, flavorless.

124618. *ASPARAGUS OFFICINALIS* L. Con-vallariaceae. Garden asparagus.

From Rumania. Seeds presented by Dr. Al. Borza, Jardin Botanique de l'Université, Cluj. Received June 30, 1937.

From hay meadows.

## 124619 to 124621.

From French Equatorial Africa. Seeds presented by Miss Margaret Haines, Bangassou, Oubangui-Chari. Received June 21, 1937.

## 124619 to 124621—Continued.

124619. *ANNONA SENEGALENSIS* Pers. Annonaceae.

A shrub or small tree, sometimes 20 feet high, native to both eastern and western tropical Africa. The oval, blue-green, leathery leaves are up to 5 inches long, and the orange-yellow, edible fruits, over 1 inch in diameter, contain an aromatic dark-red pulp which suggests that of the cherimoya of tropical America.

For previous introduction see 55554.

124620. *BRAZZEIA* sp. Scytopetalaceae.

The members of this genus are tropical African trees or shrubs with alternate, gray-green, entire leaves and rather large flowers borne on the trunk in corymblike clusters.

124621. *SOLANUM* sp. Solanaceae.

124622 to 124624. *GOSSYPIMUM*. Malvaceae. Cotton.

From Cyprus. Seeds presented by the Director of Agriculture, Nicosia, at the request of the Empire Cotton Growing Corporation, London, England. Received June 30, 1937.

124622. *Lopithos*.

124623. *Mesowhite*.

124624. *Titsiros*.

124625. *CERCIDIUM PRAECOX* (Ruiz and Pav.) Harms. Caesalpinaceae.

From Venezuela. Seeds collected by W. A. Archer, Bureau of Plant Industry, United States Department of Agriculture. Received May 3, 1935. Numbered in June 1937.

No. 3139. *Yabo*. From near Barquisemeto, March 5, 1935. A spiny shrub or small tree about 25 feet high, with pale-green bark, ascending branches, bipinnate leaves, and small yellow flowers. Found growing in dry semidesert lands among cacti and spiny shrubs. Native to northwestern South America.

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