

45980 and 45981.

From Adelaide, South Australia. Presented by Mr. J. F. Bailey, director, Botanic Garden. Received April 1, 1918.

"These seeds were obtained from the Macdonnell Range through Dr. E. Angus Johnson, of this city." (*Bailey.*)

45980. LIVISTONA MARIAE F. Muell. Phœnicaceæ. **Palm.**

An erect palm with fan-shaped leaves divided into narrow plicate segments. This palm was found in the Glen of Palms in the Macdonnell Range, and seems to be very little known. (Adapted from *Bentham, Flora Australiensis, vol. 7, p. 146.*)

45981. MACROZAMIA MACDONNELLII F. Muell. Cycadaceæ.

An erect palmlike plant with pinnate leaves 2 to 4 feet long having linear segments inserted at a very oblique angle, sometimes almost transverse.

This species is referred to *M. fraseri* Miq. in Bentham, *Flora Australiensis, vol. 6, p. 253*, but at the Adelaide Botanic Garden is considered to be distinct.

45982 to 45987.

From Cartagena, Colombia. Procured by A. J. Lespinasse, American consul. Received April 12, 1918. Quoted notes by Mr. Lespinasse.

45982. CAJAN INDICUM Spreng. Fabaceæ. **Pigeon-pea.**

"*Huandul.* Grown in the Departments of Bolivar and Atlantico."

"The pigeon-pea, or guandul, supposed to be a native of India, is cultivated widely for food in the Tropics and Subtropics. It is perennial in frostless regions, but is usually cultivated as an annual. About ten months are required to mature the seed. Frost kills the plants. There are many varieties of pigeon-peas, some suitable for food and some not. Being a legume, the crop is valuable for soil improvement as well as for the seed. The plant develops into a large, semiwoody bush reaching the height of from 5 to 10 feet. When grown for seed, plant two or three seeds in each hill, in 4-foot rows, and 3 feet apart in the row, thinning later to one plant in a hill. Pigeon-peas are resistant to excessive rains in the Tropics, and the seed does not rot when planted, as is the tendency with some other leguminous crops. Although the skin of the pigeon-pea is a little tough, the flavor is good. The peas are cooked like ordinary shelled beans, that is, soaked over night and then parboiled 10 to 15 minutes with a little soda in the water; boiling for one hour or a little more after this usually cooks them completely." (*R. A. Young.*)

For previous introduction, see S. P. I. No. 4364G.

45983 and 45984. PHASEOLUS LUNATUS L. Fabaceæ. **Lima bean.**

45983. "*Zaragoza* (white). Grown in the Departments of Bolivar and Atlantico."

45984. "*Zaragoza* (red). Grown in the Departments of Bolivar and Atlantico."

45985. PHASEOLUS VULGARIS L. Fabaceæ. **Common bean.**

"White and red beans (large). Grown in the Departments of Tolima and Huila."