

The young shoots are planted about 20 feet apart, and in the course of 10 years the plant occupies an area of from 10 to 15 square feet. The plants bear fruit in the third or fourth year and will yield from 6 to 8 pounds of seeds, about the size and color of a grain of corn, annually for 35 to 40 years. Plants raised from seed do not bear fruit until the fifth year and live but a few years. (Adapted from *Bulletin of the Pan American Union*, vol. 51, p. 268.)

54306. *CLUSIA GRANDIFLORA* Splitg. Clusiaceæ.

From Cambridge, England. Cuttings presented by F. G. Preston, superintendent, Botanic Garden. Received September 30, 1921.

A very beautiful plant up to 11 feet high with handsome large white rose-tinted flowers, each from 7 to 8 inches in diameter. The flowers are fleshy with a delicate white fringe around the center of a deep-yellow, discoid, gummy mass of staminodes. Three flowers are usually borne at the end of a shoot, the central one opening first and hiding the two side buds which open later. This native of Guiana has large handsome leathery leaves, up to 18 inches long and over 7 inches wide; they are borne in clusters towards the end of the twigs. The plant is not in any way susceptible to insect pests. (Adapted from *Gardeners' Chronicle*, 3d ser., vol. 67, p. 315.)

54307 and 54308.

From Honolulu, Hawaii. Plants collected by J. F. Rock, Agricultural Explorer of the Department of Agriculture. Received August 26, 1921.

54307. *COLA NITIDA* (Vent.) Schott and Endl. Sterculiaceæ. (*Sterculia nitida* Vent.)

A tree 20 to 30 feet high, native to Upper Guinea, Africa, closely related to the common cola nut, from which it differs in the broader, shorter stalked leaves, and flowers nearly double the size. These trees furnish the cola nuts so much esteemed by the natives for their bitter flavor, and which are said to enhance the taste of whatever is eaten with them. The numerous seeds are in leathery or woody pods. (Adapted from *Oliver, Flora of Tropical Africa*, vol. 1, p. 221.)

54308. *QUERCUS JAVANICA* (Blume) Drake. Fagaceæ. (*Castanopsis javanica* A. DC.)

A large evergreen tree with very leathery leaves which are shining above, more or less rufous pubescent beneath, and 3 to 10 inches long. The globose tomentose involucre, up to 2 inches in diameter with spines sometimes two-thirds of an inch long, inclose 1 to 4 nuts. Native to Lower Burma and the Malay Peninsula. (Adapted from *Hooker, Flora of British India*, vol. 5, p. 620.)

54309. *DIOSCOREA ESCULENTA* (Lour.) Burkill. Dioscoreaceæ.

Lesser yam.

From Suva, Fiji Islands. Tubers presented by C. H. Knowles, Director of Agriculture. Received September 17, 1921.

This small yam, the *kawai*, is certainly worth the attention of anyone who has facilities for cultivating a small area of food plants. Being indigenous to Fiji, the natives have long recognized its value as a food, and it is cultivated in most if not all of the Fiji Islands. It is cultivated in parts of India and Burma. In the latter it is said to be found wild.

The stem of this creeper is round and full of prickles. It is propagated by planting the small tubers or roots, which, like the old ones, are oblong, of a brownish color outside and a pure white within. When cooked, the skin falls off like the bark of a birch tree. The root is very farinaceous, and when well cooked looks like a fine mealy potato, although of superior whiteness. The taste recalls to mind that of the arracacha of South America. There is a slight degree of sweetness about it which is very agreeable to the palate.