

46862. JATROPHA URENS L. Euphorbiaceæ.

From Santiago de las Vegas, Cuba. Cuttings presented by Dr. Mario Calvino, director, Experiment Station. Received December 30, 1918.

Variety *inermis*.

The *chaya* is a shrub with fleshy branches bearing palmate 3-lobed leaves, 12 to 25 centimeters wide, dark green in color. The flowers are small, white, very pretty, especially in the wild spiny variety. There are two types of *chaya*, one provided with stinging hairs and the other unarmed, except for one or two hairs on the peduncle or petiole. This latter type is the one cultivated in Yucatan for the leaves, which are eaten in the same way as spinach, especially with eggs and hash. These leaves are rather thick and keep easily for several days, so that they could become a winter export, if once they were known and appreciated in the North. The *chaya* is propagated by cuttings, choosing the tips of the branches, to avoid the heavy bark, which calluses with difficulty. (Adapted from *Revista de Agricultura Comercio y Trabajo, Cuba, vol. 2, no. 8, p. 364.*)

"*Chaya de Mexico.* The leaves are edible; the following is the result of an analysis of them made at our station during the rainy season: Moisture, 74.00 per cent; protein, 0.94 per cent; ether extract, 0.20 per cent; carbohydrates, 20.71 per cent; crude fiber, 2.25 per cent; ash, 1.90 per cent." (*Calvino.*)

46863. PAULLINIA CUPANA Kunth. Sapindaceæ. Guarana.

From Para, Brazil. Presented by Dr. J. Simao da Costa. Received December 30, 1918.

A climbing shrub with compound leaves made up of five, irregularly toothed leaflets. The small whitish flowers are borne in long racemes and are followed by 3-valved capsules about the size of filberts, each containing from one to three seeds. The pounded seeds are extensively used in Brazil as a nerve stimulant and restorative. The active principle is said to be the same as their and is produced more abundantly than in any other plant, often as much as 5 per cent being found. The pounded seeds are formed into cylindrical cakes from which about a teaspoonful of powder is rasped off into a glass of cold water, making a refreshing and stimulating drink. (Adapted from *Lindley, Treasury of Botany, p. 852.*)

46864. ACTINIDIA CHINENSIS Planch. Dilleniaceæ. Yang-tao.

Plants grown from cuttings of S. P. I. No. 21781 sent to the Plant Introduction Field Station, Chico, Calif., by Mr. William Hertrich, San Gabriel, and grafted on seedlings of S. P. I. No. 46131. Numbered for convenience in recording distribution.

"The *yang-tao*, a deciduous climber, native to Szechwan Province, has attracted considerable attention because of the high quality of its fruits and the ornamental value of the plant. The leaves have a plushlike texture and an unusual dark-green color, while their large size and regular spacing add to the beauty of the vine. The flowers are buff yellow to white, fragrant, often 1½ inches across and are produced in great abundance. The fruits are ovoid to globose and about 2 inches long. The outside is russet brown and clothed with villous hairs. The flesh is green, of most excellent flavor, resembling that of a gooseberry, but tempered with a flavor peculiarly its own. The fruit is good when eaten fresh, and it also makes a very fine jam and sauce." (*David Fairchild.*)