

other kinds of *Physalis* can be utilized in the same manner. In colder countries *Physalis peruviana* becomes annual. Seeds will keep for eight years." (Mueller, *Select Extra-Tropical Plants*, p. 377.)

47515. STEVIA REBAUDIANA Bertoni. Asteraceæ.

From Asuncion, Paraguay. Presented by Mr. H. H. Balch, American consul. Received May 5, 1919.

Kaá-Hcé. "This Paraguayan herb is of peculiar interest because of the very large saccharin content of the leaves. A fragment placed on the tongue seems sweeter than a lump of sugar of similar size. Several years ago the discovery that this plant, then called eupatorium, contained a substance many times sweeter than sugar was heralded by the press and excited the keen interest of sugar planters all over the world. The substance turned out to be a glucosid, and the anxiety of the sugar interests subsided." (David Fairchild.)

47516. ACHRADELPHA MAMMOSA (L.) O. F. Cook. Sapotaceæ.

(*Lucuma mammosa* Gaertn. f.)

Sapote.

From Laguna, Philippine Islands. Presented by the Bureau of Agriculture, Manila. Received May 14, 1919.

"One of the most important fruits of the Central American lowlands, well known to the Indians since time immemorial. It is wild in many regions, notably southern Mexico and Guatemala. It occurs most abundantly between sea level and 2,000 feet; at 3,000 feet it is still common, while at 4,000 it becomes scarce. It is generally believed that it will not succeed at 5,000 feet, but occasionally trees are seen at this elevation. In the highlands they are slow of growth and the fruit requires a long time to reach maturity.

"In the lowlands the sapote (Spanish orthography *zapote*) is a large forest tree, often 60 feet in height, with a thick trunk and stout branches. The Indians, when clearing land for coffee plantations, usually leave the sapote trees they encounter for the sake of their valuable fruits. The foliage is abundant and light green in color; the leaves are clustered toward the ends of the branchlets and are obovate or oblanceolate in outline, broadest toward the apex, and 4 to 10 inches long. The flowers are very small, produced in great numbers upon the stout branchlets.

"The fruit is elliptical in form, commonly 3 to 6 inches in length but sometimes larger. The skin is thick and woody, externally russet in color and somewhat scurfy. The flesh is salmon red, finely granular in texture, and of sweet, almost cloying flavor, in poor specimens strongly suggesting a squash or pumpkin. The single seed is large, shining brown except on the rough, whitish ventral surface, and is easily removed from the fruit.

"The Indians commonly eat the sapote out of hand. It is occasionally made into a rich preserve, however, and can be used in a few other ways. It is slightly inferior in quality to its near relative, the injerto or green sapote (*Achradelpha viridis*) of Guatemala.

"The seed of the sapote is an article of commerce in Central America. The large kernel is removed, roasted, and used to mix with cacao in the preparation of chocolate. According to some of the Indians, it imparts flavor to the chocolate; others say it is done to increase the bulk of the latter. In view of the high price of chocolate it seems more likely that sapote seeds are used as an adulterant, rather than for their flavor.

"In southern Mexico and Central America this fruit is known as *zapote* (from the Aztec *tzapotl*); in Guatemala the Indians know it under the Maya names *saltul*, *saltulul*, and *tulut*; in Cuba it is called *mamey colorado*; and in the Philippines *chico mamey*." (Wilson Poppenoe.)