

with very few and small seeds, and with a mild, very pleasant flavor, somewhat less rich than that of the California product. The method of drying which is practiced in the Elqui Valley is a curious one. The grapes are taken from the vine to a small house or shed, in which they are suspended from the rafters; the sun never touches them during the drying process." (*Popenoe*.)

54653. LUCUMA OBOVATA H. B. K. Sapotaceæ. Lucma.

From Santiago, Chile. Seeds collected by Wilson Popenoe, Agricultural Explorer of the United States Department of Agriculture. Received November 7, 1921.

"(No. 652a. Santiago, Chile. October 3, 1921.) Seeds from fruits purchased in the market. This is a little-known fruit cultivated in various parts of Ecuador, Peru, and as far south as Santiago, Chile. It is not highly esteemed in Ecuador, but is popular in central Chile, where the fruits seem to be of better quality than in the former country. The tree reaches 40 feet in height, and when well grown it has a round, dense crown of very attractive appearance. The leaves, which are clustered toward the ends of the branchlets, are obovate, oval or elliptic in outline, subacute at the base, and rounded at the apex, commonly 5 to 10 inches long, deep green, with the margins entire. The small flowers are produced in great abundance along the branches; they are three-fourths of an inch long, the corolla tubular, deeply five toothed, and pale green in color. The fruit is round to elliptic, sometimes with a sharp point at the apex, and commonly 3 to 4 inches long. The surface is deep brownish green, heavily marked or overspread with russet. The skin is very thin and easily broken. The flesh is deep yellow, dry, mealy, and very sweet, resembling in flavor that of the sapote and the *ti-cs*, or egg fruit, of southern Florida. The seeds are one or two in number, broadly oval, about 1½ inches long, dark brown and glossy, especially on the flattened and whitish ventral surface.

"The lucma, as this fruit is called in Chile, is probably too tender for cultivation in California, but will perhaps succeed in southern Florida." (*Popenoe*.)

Fruits of the lucma are shown in Plate VI.

54654 to 54658.

From Tourane, Anam, French Indo China. Seeds presented by F. A. McClure, instructor, Canton Christian College. Received November 10, 1921. Quoted notes by Mr. McClure.

54654. ARTOCARPUS INTEGRATA (Thunb.) L. Moraceæ. Jack fruit.
(*A. integrifolia* L.)

"Seeds of the *jack fruit* secured on the market at Hue, Anam, September 30, 1921. Chinese name: *Poh loh mat*."

For previous introduction, see S. P. I. No. 51012.

54655. DRACONTOMELON SINENSE Stapf. Anacardiaceæ.

"Chinese name: *Yan min* or *ngan nim*. The seeds were secured on September 24, 1921, from L. Laforge, who is in charge of the public gardens and trees of Hanoi, Tonkin. The trees from which the fruits were taken are from 8 to 10 meters (26 to 33 feet) in height and are growing along some of the avenues and in the botanic gardens at Hanoi. The soil is fertile delta silt loam, poorly drained. The trees seem to be growing better than ours at the college, which are in tight clay.

"The brownish yellow ovoid fruits are from 3.5 to 5 centimeters (1 to 2 inches) in diameter. The taste is pleasant, but slightly acid."

54656. GARCINIA sp. Clusiaceæ.

"Seeds of a fruit secured from a tree growing in a thicket surrounding a Chinese ancestral hall about 4 kilometers (2½ miles) southeast of Hue, Anam. The Chinese name is *shaan chuk*; local name, *maang tuk*.

"The tree from which the seeds were taken is about 10 meters (33 feet) in height and 25 centimeters (10 inches) in diameter, breast high. The soil in which it is growing is rich, brown sandy loam, and rather moist.