

44625 to 44628—Continued.

it to make room for more coffee bushes, so that it will probably not be in existence a year hence. The altitude here is about 5,100 feet. The tree stands among coffee bushes, many of which grow beneath its branches. The soil is a loose sandy loam, deep and fertile. The tree is about 35 feet high, the trunk 18 inches in diameter at the base, and the first branches 12 feet from the ground. The crown is round, dense, of good form, but high above the ground. The age of the tree is not known, but it would appear to be at least 20 years. The growth is vigorous and shapely, though the branchlets are rather short. The bud wood furnished by the tree is quite satisfactory, the eyes being well developed and not losing their outer bud scales or falling early. The bud sticks, however, are short.

"The hardness of the variety must be considered about average until the facts can be ascertained by a test in the United States. Antigua is not cold enough to show up the hardness of an avocado of the Guatemalan race.

"The tree flowers in late February and March. It ripened a fairly good crop of fruit in 1917 from the 1916 blooms, and set a very heavy crop to ripen in 1918. Its productiveness, therefore, seems to be above the average. The season of ripening is from February, when the fruits change from green to purple and thus indicate their maturity, to May, when the last fruits fall to the ground. It is a midseason sort, commencing to ripen a trifle earlier, perhaps, than the average.

"The fruit is broadly obovoid to pear shaped, about 20 ounces in weight, with a rough surface of rich purplish maroon color. It presents a very attractive appearance. The skin is rather thin and somewhat pliable, but coarsely granular in texture. The flesh is rich cream yellow in color, free from discoloration, and of very rich, pleasant flavor. The seed is medium sized and tight in the cavity.

"A formal description of the fruit is as follows: Form broad pyriform to obovoid; size very large, weight 20 ounces, length 5 inches, greatest breadth $3\frac{3}{4}$ inches; base pointed, the stem inserted obliquely without depression; apex rounded, slightly depressed immediately around the stigmatic point; surface pebbled to rather rough, deep purplish maroon in color, almost glossy, with few inconspicuous, light-colored dots; skin rather thin for this race, about one-sixteenth of an inch throughout, fairly pliable and peeling from the flesh when fully ripe, the purplish maroon color of the surface extending clear through the skin; flesh rich cream yellow in color, changing to pale green close to the skin, firm, of rich flavor; quality excellent; seed medium sized, weighing about 3 ounces, roundish conical, tight in the cavity, with both seed coats adhering closely." (*Popenoe*.)

See also Exploring Guatemala for Desirable New Avocados, Annual Report of the California Avocado Association, 1917, p. 129, fig. 25; reprint, 1918, p. 25, fig. 25; and The Avocado in Guatemala, U. S. Department of Agriculture Bulletin No. 743, p. 57, pl. 18.

44627. "(Nos. 113, 120, 140, 163, 225. Avocado No. 20.) *Tumin*. This variety is remarkable for its unusual productiveness, the fruits often being borne in clusters of two to five, a characteristic which is quite rare in the Guatemala race. The fruit is almost identical with the Florida *Trapp* in form; it weighs almost a pound, and is of handsome appearance, with a smooth, glossy skin of purple-black color. The