

## 54770 to 54775—Continued.

54772. *Perfection* (Laxton, new). Reported as a remarkably fine red variety of exceptionally vigorous growth; a very heavy cropper, with long bunches of large berries.

54773. *Raby Castle* (May's Victoria, or Cherry). Reported to be a large-fruited strong grower.

For previous introduction, see S. P. I. No. 42245.

54774. *Red Dutch*. Said to be the variety usually grown.

For previous introduction, see S. P. I. No. 42240.

54775. *Red Grape*. Reported a very fine berry and heavy cropper.

For previous introduction, see S. P. I. No. 42244.

54776. *GUILLIELMA UTILIS* Oerst. Phœnicaceæ. Pejibaye.  
(*Bactris utilis* Benth. and Hook.)

From San Jose, Costa Rica. Seeds purchased through Sr. Otón Jimenez. Received January 3, 1922.

"In Costa Rica the pejibaye has been cultivated by the Indians since remote antiquity. In the lowlands of Colombia, Venezuela, and Ecuador it forms a staple foodstuff of numerous aboriginal tribes. The Jibara Indians of Ecuador hold the fruit in such esteem that the ripening season is celebrated annually by a feast of several days' duration.

"This palm is pinnate leaved and reaches a maximum height of about 60 feet. Its straight, slender stem, commonly about 6 inches thick, is armed from the ground upward with stiff, very sharp black spines about 2 inches long. The leaves, which are graceful in appearance, especially when the plant is young, are commonly 8 to 12 feet in length and deep green.

"The species is monoecious, the staminate and pistillate flowers being produced upon the same raceme; the latter occur scattered among the former, and both are small, sessile, and yellow-white. The racemes, which are produced from the trunk of the palm immediately below or among the lower leaves and are protected by erect spathes, are stout and 18 to 24 inches long.

"The flowers usually appear during April, May, and June in the lowlands of Costa Rica, somewhat later in the highlands. The first fruits mature in September; and from this month until March or April there are usually ripe fruits on the plant, provided the racemes are not cut when the first fruits reach maturity. The long time which the fruits will remain on the palm in good condition is a noteworthy feature of the pejibaye.

"Racemes of mature fruits sometimes weigh 25 pounds or more, and five or six such racemes are often produced by the palm in a single crop. The maximum production of one palm (or, more properly speaking, one stem, since four or five stems are often allowed to grow from a common base) is about 150 pounds of fruit. It is seen, therefore, that the productiveness of the pejibaye is similar to that of the date palm.

"The individual fruits are top-shaped, conical, or ovoid, and vary from 1 to 2 inches in length. There is a wide range of variation in color, some varieties being clear light yellow, while others are deep orange or reddish orange, sometimes shading to brown. The flesh is dry and mealy, yet firm, and pale orange to yellow. The single seed is conical, about three-quarters of an inch long.

"The relatively small proportion of water contained in the fruit, the large amount of carbohydrates (mainly starch), the considerable quantity of fat, and the small size of the seed compared to the bulk of the edible portion combine to place the pejibaye among the most noteworthy of the tropical fruits. And it is not only a fruit of high food value, but it is delicious as well. We believe that it is destined to become a food plant of great importance in many tropical countries.

"Like the chestnut, which the boiled fruit strikingly resembles in texture and flavor, the pejibaye is used as a stuffing for turkey and chicken. Dried, it might be reduced to a flour which would serve various culinary uses. But to one who has eaten the freshly boiled pejibaye there is no incentive for seeking new ways of preparing the fruit for the table.

"The pejibaye is a plant adapted to tropical conditions, preferring a region where the rainfall is not excessive (75 inches annually or less). It is more adaptable than the breadfruit tree. The latter rarely succeeds in the Tropics