

flavor of the fruit is subacid and slightly acid, resembling that of some of the northern haws (*Crataegus*).

"This plant has been used by Loja as a stock on which to graft the apple, according to Dr. Ramon Eguiguren. It is introduced for trial as a stock plant in the United States." (*Popenoe*.)

53486. DIGITARIA EXILIS (Kippist) Stapf. Poaceae. Fundi.

From Kaduna, Nigeria, Africa. Seeds purchased from P. H. Lamb, Director of Agriculture, northern Provinces. Received March 28, 1921.

"This grass in a single season's testing has proved remarkably promising as forage for our Southern States. In the northern Provinces of Nigeria it seems to be known under the name of *acha*." (*C. V. Piper*.)

53487. ACROCOMIA SCLEROCARPA Mart. Phœnicaceae. Macauba palm.

From Horqueta, Paraguay. Seeds procured by Thomas R. Gwynn. Received May 4, 1921.

"*Mbocaya (coco)*. The *coco*, from the roots up, is a most valuable plant. When very young the roots can be used as mandioca. When matured, the stem, from a foot or two above the roots toward the bud of the plant, makes excellent starch, which is just as good as that furnished by the mandioca plant; moreover, this part of the plant yields nourishing feed, without any preparation, for all kinds of livestock and fowls. The leaves make thread and twine from which the Indians make hammocks that for endurance are par excellence. The *coco* has a long, straight body, sometimes 80 feet in height, and from its top sends out its long, feathery, waving leaves. The fruits are formed at the base of the leaves like huge bunches of grapes. From two to four bunches are produced every year by a single tree. The oil from the kernel is better than any olive oil to be found in this country, and the soap made from it is equal to any toilet soap in use. The one drawback to this palm is the thorns on the stems of the leaves and on the trunk. Sometimes, however, the trunk is entirely free from thorns, especially when very tall and in its full vigor. The leaves also furnish feed for stock; in times of drought when pasture fails the natives fell the trees for their horses and cattle and split open the trunks so that the cattle may eat the pith." (*Gwynn*.)

For previous introduction, see S. P. I. No. 51742.

53488. VACCINIUM MEYENIANUM Klotzsch. Vacciniaceae.

From Hawaii. Seeds collected by J. F. Rock, Agricultural Explorer of the Department of Agriculture. Received June 11, 1921.

"Collected on Isoorora Hill, Northwestern District, British Guiana, in May, shrub 15 feet in height, native to the mountains of Hawaii, related to the ohelo berry (*Vaccinium reticulatum* Smith), and loaded with bright, cherrylike berries which are brilliant red for several months in the year. It grows at an altitude of about 4,000 to 5,000 feet and is especially abundant about the region of the Volcano Kilauea. The berry is less well known than the ohelo berry. Owing to the bright-red color of the berries they have been avoided for fear of their being poisonous. They are much juicier than the ohelo berries, but are often slightly bitter. Some, however, are sweet and delicious. The plant is peculiar to the Hawaiian Islands." (*Rock*.)

53489. CLUSIA sp. Clusiaceae.

From Georgetown, Demerara, British Guiana. Seeds presented by R. Ward, superintendent, Botanic Gardens. Received June 9, 1921.

"Collected on Isoorora Hill, Northwestern District, British Guiana, in May, 1921." (*Ward*.)

The *Clusias* are opposite-leaved trees or shrubs, usually with roseate flowers, native to tropical America. They may be of value as ornamentals.