

† *Astrocaryum Standleyanum*, spec. nov. § *Acanthocarpæ*, Barb. Rodr.
Figs. 67-70.

Palma alta robusta erecta multis spinis complanatis 10-15 cm. longis, truncus late annularis: folia inæqualiter longipinnata, ad 4 m. circa, arcuata, petiolo spinoso et rachi; multæ pinnæ, aliquid aggregatæ, ad 1 m. longæ et 4-15 cm. latæ, glabræ vel laxe furfuraceæ, costa media valida, venæ prominentes, margines aciculares; spatha spinosissima; spadix 60-70 cm. longus, fragrans, ramuli 10-15 cm. longi, basi 1 vel 2 floribus pistillatis: fructus in spadice pendente angustoque, in pedunculo elongato spinosoque, drupaceus, obovoideus acuminatus, papillatus, aurantiacus, exterior aliquid carnosus, circa 4 cm. longus; nux lævis, radiate striata.

Trunk single (Fig. 67), to 40 feet and more, 5-8 inches diameter, wood hard, closely armed with deflexed flattened spines 4-6 inches long with annular spaces intervening, in exposed places bole becoming nearly bare: leaves pinnate, arching and drooping, 8-12 feet long, glossy on upper surface, making a broad close crown; pinnæ very many, irregularly disposed along the ridged and spiny rachis, more or less clustered, $\frac{1}{2}$ -1 $\frac{1}{2}$ inches broad or on young plants not yet with mature foliage or fully separated leaflets some of them 6 inches broad, to 3 feet long, stiffish, glabrous or with loose scurf, with strong midrib ridged on upper surface and prominent lesser parallel nerves, the margins bearing small thin sharp upwardly pointing spicules; petiole 3-4 feet long, rather soft in texture, nearly terete above the expanded base, armed with backward-pointing spines of different lengths (from $\frac{1}{2}$ -6 inches and the large ones very flat): inflorescence fragrant, about 2 feet long at anthesis aside from peduncle, the long narrow densely black-spiny spathe soon becoming free of the flower-cluster which consists of a stout simple unarmed axis 1 inch or more thick from which issue irregular whorls of short branches 4-6 inches long (Fig. 68 left) with stem-like part at base then a zigzag part with 1 or 2 large pistillate flowers at the angles and topped with the long-cylindrical ends of closely packed cream-colored staminate flowers with prominent ex-



FIG. 68. FLOWER STRAND of *Astrocaryum Standleyanum*, somewhat more than one-half natural size, two pistillate flowers at base and remainder staminate; separate flowers \times about 3, staminate above and pistillate beneath.

serted anthers; staminate finger $\frac{3}{4}$ inch diameter in anthesis and perhaps 3 inches long, the flower with minute outer envelope (calyx), gamophyllous 3-parted inner envelope with revolute lobes and about 4 mm. long, the 6 stamens much projected, 3-pointed pistillode in center; pistillate flower about 1 cm. long, conic, with hyaline truncate basal cup 5 mm. long from

which awn-like scales may protrude, two spinescent folds representing outer and inner envelopes, and a lepidote tapering pistil with 3 large stigmas: fruits 1 or 2 to a lateral branchlet, the big cluster pendent on black-spiny peduncle sometimes 4 feet long; drupe somewhat obovoid, orange at maturity, $1\frac{1}{2}$ - $1\frac{3}{4}$ inches long, abruptly pointed, papillate, with a soft but dryish thin pulp; nut ovoid, point downward (toward calyx), about $1\frac{1}{4}$ inches long, attractively marked with longitudinal black stripes and 3 foramen-spots with radiating lines; seed single, nearly filling the nut, with plain continuous albumen and a cavity in center.

Common in woods on Barro Colorado and elsewhere in central Canal Zone; one of the conspicuous forest palms.

DESMONCUS

The American climbing palms known as *Desmoncus* are represented by about forty specific names, some

of which are *nomina nuda* (without diagnosis and therefore not tenable). The genus dates from Martius, 1824, in *Historia Naturalis Palmarum*, ii, 84. The name was not explained by the author but it refers to the hooks (often representing leaflets) by means of which the plants climb. There is

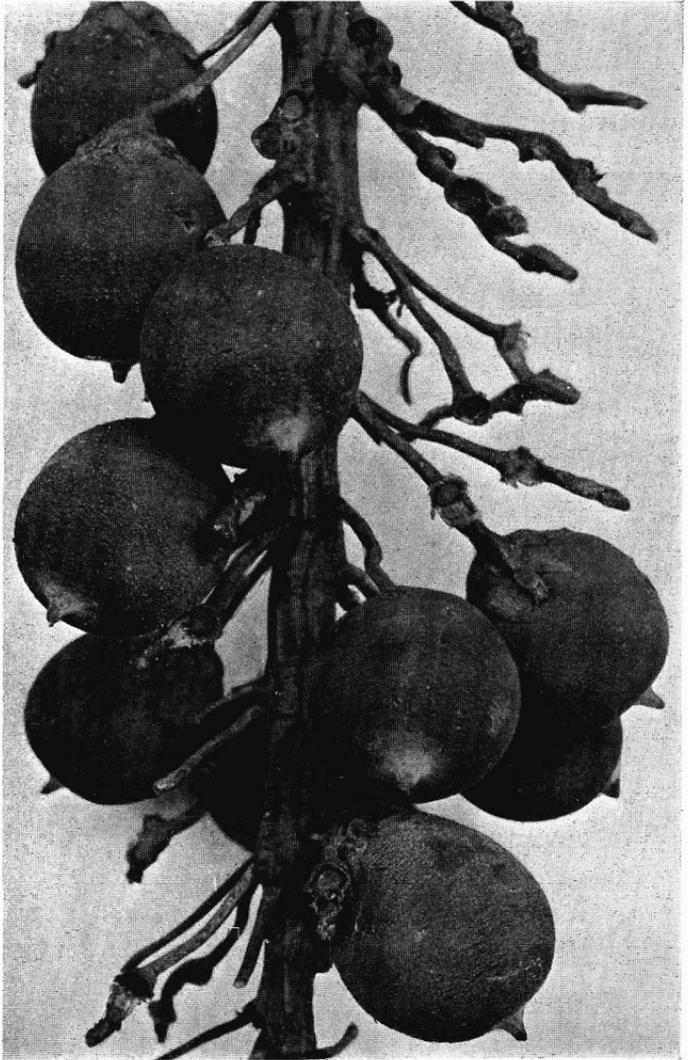


FIG. 69. PART OF A FRUITING BRANCH of *Astrocaryum Standleyanum*, nearly full size. Circular scars show where fruit has fallen, and club-shaped ends where staminate flowers were borne.