

very open, due to the spreading or hanging leaves, on long petioles: leaves to 2 m. across, thin or medium in texture, light glossy green on upper surface, much lighter colored underneath but not glaucous, deeply divided into 40 and more lobes without filaments between them, the points very long and narrow or even filiform, the segments or lobes perhaps 6-7 cm. broad at base and soon narrowing, with about 3 strong ribs before they divide and many fine nerves between; palman 30-40 cm. long and therefore very short for size of leaf; petiole about as long as blade or a little longer, sharp-edged, thin, shallowly concave on upper face; hastula 8-9 cm. long, narrowly long-pointed, margins upcurved: inflorescences or spadices erect or ascending, diffuse, nearly or quite equalling the leaves, much branched, rachillæ 4-10 cm. long, sheaths strongly striate and pointed: fruit glossy, brownish-black, nearly globular and short-tapering to base or pyriform and the lower part scarified or whitish, 8-10 mm. thick and about the same height, sometimes twin (two locules developing); seed small, dark brown, glossy, depressed, flattened or puckered on bottom, 5-7 cm. across, micropyle lateral, obscure, mesocarp prominent but thin.

Panama: Pedro Gonzales Island, in the Perlas group, Bay of Panama, Pacific Ocean, *Paul H. Allen 2604*. Leaves used for thatch.

† 12. *Sabal bahamensis*, stat. nov. BAHAMAN PALMETTO. POND TOP.

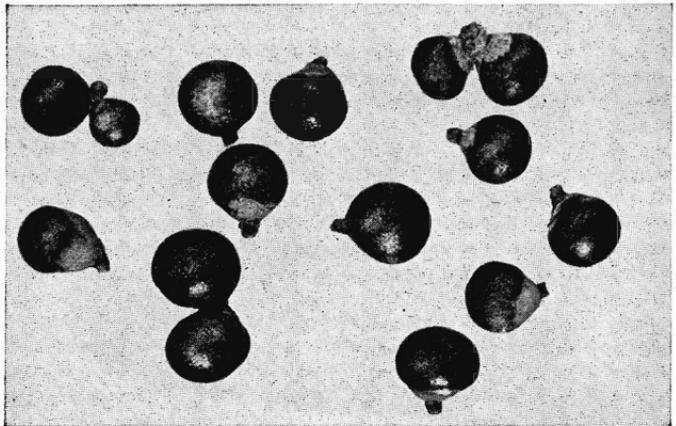
Figs. 197, 221, 222, 225.

*S. Palmetto* var. *Bahamensis*, Becc. in *Webbia*, ii, 38 (1907).

*S. Palmetto*, Britt. & Millsp., *Bahama Fl.* 60 (1920), not Lodd.

Low tree, mostly erect but sometimes leaning, soon becoming clean of boots, trunks 6 m. or less tall, 2-3 dm. thick at base, obscurely ringed; head of old trees globular and dense, the leaf-segments stiff and most of them scarcely hanging: leaves gray-green, not glaucous (although in some lights one may detect a faint bluish cast on the foliage), filaments mostly few or sometimes none, blade to 1 m. or more across, palman 1-2 dm. long; segments to 40 and

more, narrow, usually not more than 2-3 cm. broad at base, to 1 m. long, margins thick, lateral veins many and very thin, long-tapering to narrow thin ends, commonly a narrow yellow band for about 3 dm. along midrib on under side of blade; petiole about as long as blade, plano-convex and centrally ridged on upper face; hastula short, 4-7



220. *SABAL ALLENII*. Fruits natural size; from the Perlas Islands, Panama.

or 8 cm. long, acute, margins not very conspicuous: inflorescences or spadices small, not profusely branched, shorter than the leaves, the ultimate rachillæ very slender or thin: flowers white, narrow and upstanding, not flaring, about 4 mm. long, constricted at base to form a pedicel-like attachment; calyx urceolate, only obscurely ribbed or nervate, deeply notched; petals much exceeding calyx, upstanding, very narrow, acute, not quite equalling the anthers at anthesis and about equalling the columnar pistil: fruit shining black when fully ripe, practically globose, 9-10 mm. transverse diameter; seed 6-8 mm. diameter, chocolate-brown, flattened at bottom, micropyle very small and scarcely sunken.

Low areas and rocky lands, Bahama Islands. Three numbers cited by Beccari in founding var. *Bahamensis*, collected by Eggert: 4360, on New Providence Island, along north side to Lake Killarney, tree 16 feet high; 4114 Hog Island; 4097 Hog Island, 12-14 feet high. New Providence, Britton & Brace 291. Prospect Hill area, New Providence Island, Bailey 1001, in thick stands. Loggerhead Creek region, west side of Andros Island, Bailey 1024, covering acres of land on low ridges with dense forest-like growth, tallest trunks about 18 feet high. Britton and Millspaugh report palmettoes throughout the archipelago.

Palmettoes about residences, in cemeteries and public places on New Providence Island, with taller trunks, larger leaves and broader segments, longer hastulas, more branched inflorescences, larger and more oblate fruits, are probably introduced species.

The Bahaman palmetto differs from the United States palmetto (*S. Palmetto*) in its smaller stature, less shag on trunks, grayish-green rather than pea-green foliage, shorter hastula, leaf-blades less filiferous, less hang of segments, shorter and simpler spadices, more stipitate flowers, rounder fruit and smaller seeds; the trees have a different look.

† 13. *Sabal yucatanica*, spec. nov. Figs. 209, 223.

Arbor ad 20 m. alta, truncus 2-3 dm. diam.: folia magna, rigida, concolora, costapalmata, 1 m. vel plus lata; segmenta multa, erecta, 3-4 cm. lata prope basim, costa media prominens, venæ laterales multæ tenuesque, apices longi angustique sed non graciles, sinus non filiferi; hastula brevis, acuminata, margines sæpe incurvi, 8-9 cm. longi, 4-5 cm. lati: infructescencia multo excedens folia, rami breves validique; rachillæ 3-9 cm. longæ, 1.5-2 mm. crassæ cum maturæ; fructus niger, globularis, 12-13 mm. diam., pulposus; semen 8-9 mm. latum, nitido-brunneum, liberum in crasso mesocarpio, micropyla parva, superlateralis vel pæne apicalis.

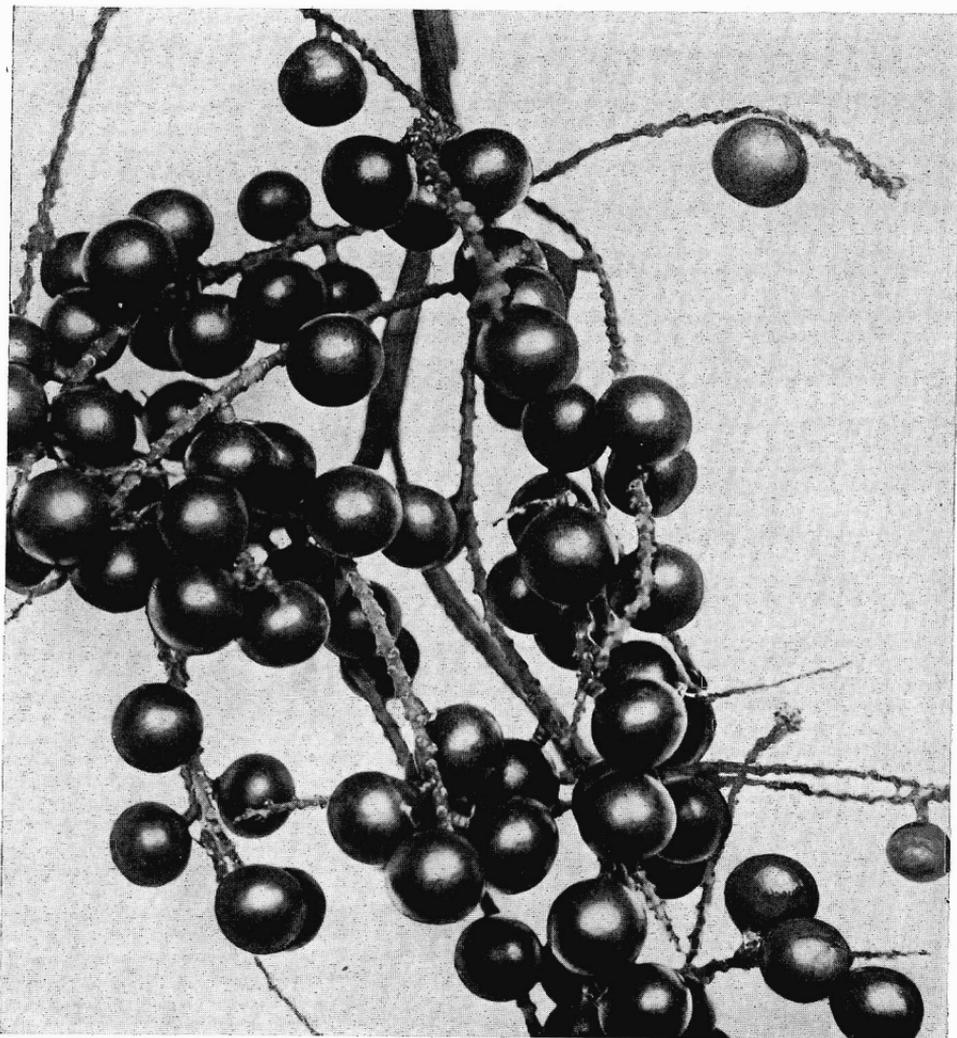
Tree 6-20 m. tall, trunk 2-3 dm. diameter: leaves large and stiff, 1 m. and more across, costapalmate, practically the same green color on both surfaces, non-filiferous in the sinuses; segments erect, close together, 3-4 cm. across, many, very firm in texture, midrib prominent and elevated on upper surface, lateral nerves many and little noticeable except under a lens, cross-lines many but very obscure, tapering into narrow but not filiform or drooping apices, palman large; hastula relatively short and broad unless



221. *SABAL BAHAMENSIS* on Andros Island, Bahamas. A low tree with grayish-green foliage, rigid segments, few filaments on leaves, nearly or quite simple inflorescences, globular fruit and small seeds, stipitate flowers.

when the margins are strongly inrolled, about 8 or 9 cm. long and perhaps 4-5 cm. broad when expanded, the segment bases stoutly plaited against it: infructescence stout, much exceeding leaves, with short branches and rachillæ; flowers not seen: fruit shining, black, globular, 12-13 mm. across, only indifferently if at all narrowed to base; rachillæ 3-9 cm. long, 1.5-2 mm. thick when dry; seed large, 8-9 mm. across, dark glossy brown, pulpy when fresh and eaten by birds, free in firm mesocarp that becomes hard when dry, micropyle small and inconspicuous, superlateral to mid-apical.

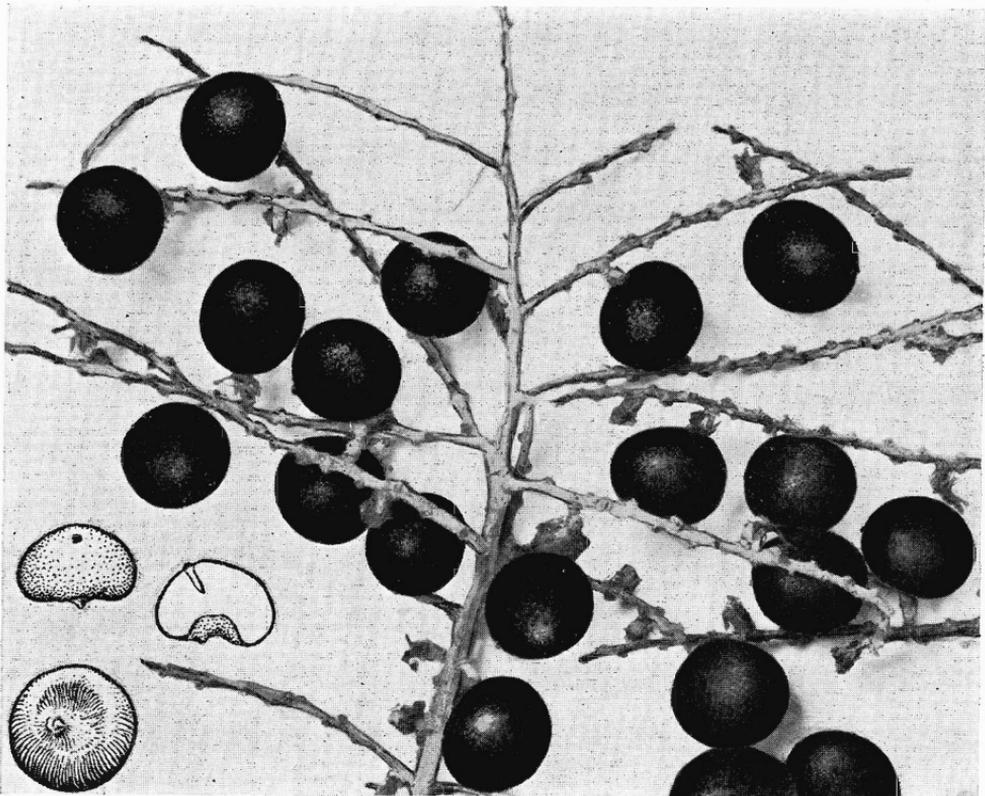
Yucatan peninsula, Mexico, known as "huano" and "xaan," C. L. and



222. *SABAL BAHAMENSIS*. Fruit about natural size, nearly globular. Photographed fresh from the tree.

Amelia A. Lundell: Chichen Itza, Yucatan, in yard of the hacienda, native in the area, *Lundell 7368* (type); Quintana Roo at Coba, bordering Lake Macanxac, *Lundell 7727*.

This palmetto differs from *S. mexicana* in the non-filiferous leaves, segments not filiform or drooping at apex, more rigid and compactly placed segments, shorter hastula, shorter and stouter rachillæ, smaller and rounder fruits. From *S. parviflora* it differs in its erect and not thread-like segment-tips, lack of filaments in the sinuses, shorter and usually broader hastula, longer infructescences, fruits more uniformly rounded, rachillæ commonly stouter. From *S. bahamensis* it is separated by its more rigid segments, strongly margined hastula, longer infructescences, stouter rachillæ, larger fruits. From *S. jamaicensis* it differs in its more rigid less filiformly tipped leaf-segments and its more uniform and rounder not lop-sided fruit as well as stouter rachillæ and broader and relatively shorter hastula and more projected infructescence. It separates from *S. Yapa* by the large palman, erect more rigid leaf-segments, broader or more marginate hastula, shorter



223. *SABAL YUCATANICA*. Fruits natural size. Observe the thick stiff rachillæ. At lower left, the seeds, side and bottom views, micropyle showing near top; section, disclosing embryo.