

Spanish usage, but, as I stated in my *Sabal fascicle* (*Gent. Herb.* iii, 322) it remained for Beccari in 1907 to publish the name and to draw diagnosis from Wright's specimen in Berlin. He made the name *Yapa*, which he implies is the way Wright spelled it on his label, "which, being the first tenable publication, must stand; in any case, *Japa* and *Yapa* would be pronounced alike as a specific name." The fact that Beccari also spelled it *Yapa* five years later in his *Palms of Cuba* (*Pomona Coll. Journ. Econ. Bot.*) shows that he did not desire to change or correct the name.

Beccari assigned *Sabal Yapa* to Yucatan on the basis of a specimen collected there by Gaumer. I had examined the Gaumer specimen in preparing my *Sabal* paper of 1934, and made the same disposition of it, but it is probably *S. yucatanica*: see pages 396, 418.

† 9. *Sabal Morrisiana*, Bartlett, spec. nov. SILVERY BOTAN. Figs. 217, 218.

S. Morrisiana, Bartlett, in Publ. no. 461, Carnegie Inst. Wash. 22, fig. 1, pl. 3, figs. 1 and 2, pl. 6 (1935), *sine descriptione*; Lundell, Veg. of Petén, Publ. no. 478, Carnegie Inst. Wash., 53 (1937).

Altissima gracillimaque, ad 27 m. alta, truncus 25 cm. diam., lignus durus: folia circa 2 m. lata, lætevirentia supra et argentea infra, fibræ paucæ vel nullæ, palman brevissima; segmenta 4-5 cm. lata basi, sed angustissima vel etiam filiformia ad apicem et nutantia; hastula 7-10 cm. longa, anguste acuminata: inflorescentia excedens folia, multi-ramosa; rachillæ validæ, 1-2 mm. crassæ medio, non filiformes, 5-7 cm. longæ: fructus globularis brevi angustaque basi, niger, nitidus, 9-10 mm. diam.; semen liberum, 7-8 mm. diam., micropyla lateralis et prominens.

Very slender and tall, to 27 m. high; trunk 20-25 cm. diameter, smooth, light colored, wood hard: leaves 2 m. more or less across, very deeply cut so that the palman nearly disappears, light green above and silvery on under surface, intersegmental fibers few and short or even wanting; segments 4-5 cm. broad toward base but most of the way 3 cm. and less and long-tapering into very narrow or even filiform and drooping ends, midrib well marked but other longitudinal veins inconspicuous, cross-hatching abundant and strong; petiole at least equalling the blade and on young plants much longer, shallowly concave on upper face and apparently not centrally ridged, more or less scurfy; hastula 7-10 cm. long, long-acumin-

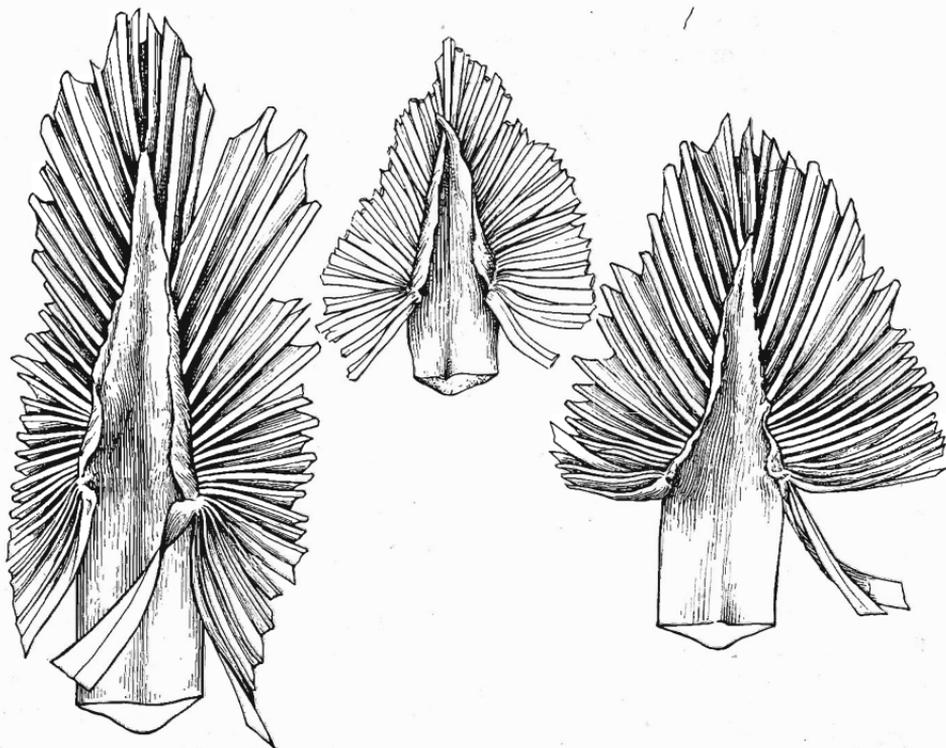


216. FRUITS of *Sabal Yapa*, two at left, with thick interior mesocarp; of *S. causerium* three right, with mesocarp hardly evident. Nearly twice natural size.

ate, the margins narrow and not prominently upturned: inflorescences or spadices conspicuously exceeding the leaves, divaricately branched; rachillæ stout, terete, at least 1 mm. thick at middle when dry and sometimes more, not filiform at end, 5-7 cm. long; spathelets or sheaths dark brown and triangular-pointed at apex, finely striate: flowers not known: fruit black, shiny, globular with somewhat tapering base, 9-10 mm. across, 10-11 mm. high with the stalk; seed free within a hard thin mesocarp, shining dark brown, 7-8 mm. across, micropyle lateral and prominent.

Guatemala, Department of Petén, at Uaxactun, in forest, *H. H. Bartlett* 12284, cited by Bartlett as type top of page 36, Carnegie Publication 461. British Honduras, on high ridge in Stann Creek Valley, *Gentle* 3103. Dedicated "in honor of D. Morris, author of the interesting book *The Colony of British Honduras*, London, 1883." Sir Daniel Morris, who died in 1933 in his eighty-ninth year, was Assistant Director of the Royal Botanic Gardens, Kew, 1886-1898; remembered in *Thrinax Morrisii*.

In describing his *Sabal nematochlada* from British Honduras Burret thinks it may be the same as the *nomen nudum* *S. Morrisiana* of Bartlett, but the two appear to be clearly distinct in the thicker terete more loosely flowered rachillæ of the latter, somewhat larger and apparently less pyri-



217. *SABAL MORRISIANA* at left, about one-half full size, from Petén, northern Guatemala. *SABAL NEMATOCLADA* at right, about one-half full size, from British Honduras. *SABAL ALLENII*, in middle, about one-third full size, from Perlas Islands, Panama.

form fruit, thinner less strongly ribbed leaf-segments with filiform tips, much longer hastula. Undoubtedly other dissimilarities will appear when these palms are compared in the field, in case they are not disclosed to be wide variants of a single species.

10. **Sabal nematoclada**, Burret, in Fedde, Repert. xlviii, 256 (1940).
GREEN BOTAN. Figs. 217, 218.

Very tall and slender palm, to 27 m. high: leaves large, about 2 m. long, green on upper face, lighter colored but not silvery underneath, very deeply divided into many segments, the palman therefore short (probably 30 cm. or less); segments about 6 cm. broad, at apex divided into 2 very long and very narrow but not filiform hanging parts, midrib very strong; hastula narrowly acuminate but small, about 6 or 7 cm. long: inflorescences or spadices much branched and brush-like, spathelets striate and acuminate, blackish at apex when dry; rachillæ very thin, at middle about 1 mm. thick, apex almost filiform, to 10 or 12 cm. long at full growth: flowers cream-colored, closely placed, small, about 3 mm. long, subtended by ovate-acuminate bracts and bractlets; calyx narrowly obovate-oblong, not conspicuously nerved, with 3 ovate-triangular lobes; petals when dry narrow with involute margins: fruit black or nearly so, shining, obovate-pyriform, 8-9 or 10 mm. diameter, and usually 1 mm. longer counting the stalk and adherent parts of perianth; seed about 8 mm. across when full grown, contained in a thin not adherent mesocarp, micropyle supralateral and obscure.

British Honduras in woods at Forest Home, *W. A. Schipp 8443*; *Neil Stevenson 612156*, without locality; Mountain Pine Ridge, San Augustin, in marginal forest, on limestone, *Lundell 6676*, 27 m. tall, trunk 25 cm. diameter, *Lundell 6683*, 20 m. tall, inflorescence 3 m. long.

One of the botan palms. The particular distinguishing botanical mark of this palm is the very slender floral rachillæ, sometimes almost filiform, whence the name *nematoclada*, indicating thread-like branches. It has been supposed to be the same as *S. Morrisiana*, but Fig. 218 top and bottom show the marked contrasts in rachillæ. Other distinctions are the silvery color underneath of the leaves of *S. Morrisiana*, as well as somewhat larger hastula and fruit and narrower segments with filiform ends of that species. Floral bractlets in *S. nematoclada* are sharp and prominent, but not described in *S. Morrisiana*. Other differences undoubtedly will appear when comparative studies are made in the field.

Type collection of *S. nematoclada* (*Schipp 8443*) I have not seen. I am obliged to base my diagnosis and pictures on other collections here cited, after having made careful study of Burret's account.

11. **Sabal Allenii**, Bailey, Gent. Herb. vi, 200 (1943); Ann. Mo. Bot. Gard. xxx, 334 (1943). PALMA DE GUAGARA. Figs. 217, 219, 220.

Erect tall tree to 20 m., trunk not very thick or heavy, prominently ringed and soon becoming bare, about 30 cm. thick at base; head or crown