

most pistillate, the remainder lacking but indicated by scars; pistillate flowers ovoid, the sepals broadly ovate to nearly hemispheric, 0.8–1 mm. long, 1.6 mm. wide, shortly connate to nearly free, petals imbricate below, broadly ovate, 1.6–1.8 mm. long, staminodial ring low, 6-lobed, pistil ovoid, 2 mm. high, stigmas terminal and sessile; staminate flowers not seen: fruit obpyriform, 10–13 mm. long, 10 mm. wide at apex, yellow (fide Allen), black when dry, stigmatic scar lateral; endocarp brown, reticulate-channelled; endosperm ruminant.

Panama, Province of Veraguas, forested slopes of Cerro Tute, vicinity of Santa Fé, altitude 2500 feet, March 25, 1947, *Paul H. Allen 4376* (Herb. Mo. Bot. Gard.).

Synechanthus panamensis, *S. Warscewiczianus*, Wendl., *S. angustifolius*, Wendl., and *S. ecuadorensis*, Burret, form a group of species probably representing a natural subgenus having simple rachillæ and ruminant endosperm (except for *S. ecuadorensis*, the fruit of which is unknown). From *S. Warscewiczianus* and *S. angustifolius*, *S. panamensis* differs in the obpyriform not elliptic fruit and in the shape and length of the pinnæ. From *S. ecuadorensis* it differs in having a six-lobed staminodial ring, more numerous and shorter pinnæ and a larger spadix.

† *Morenia latisecta*, H. E. Moore, spec. nov. Fig. 87.

Arbor ad 8 m. alta: folia regulariter pinnata, ad 1.3 m. longa; pinnæ glabræ, utrinsecus 11 vel plures, alternæ vel suboppositæ, inferiores et mediæ late lanceolatæ, versus apicem falcatæ, 40–60 cm. longæ, 9–12 cm. lata, superiores et terminales lanceolatæ, 25–39 cm. longæ, 3–5 cm. latæ: spadices staminati 6 intra vaginam, pedunculo ca. 23 cm. longo, spathis 3, tubulosis, ad apices patulis, rachi 12 cm. longa, rachillis 50 vel plures, simplicibus, 3–7.5 cm. longis; flores lutei, calyce minuto, petalis ovatis 2.6 mm. longis, staminibus 6: spadix pistillatus ca. 30-ramosus, pedunculo 40 cm. longo, 5-annulato, erecto, rachi pendula, 27 cm. longa, rachillis simplicibus, 12–20 cm. longis, ascendentibus sed apicibus pendulis: fructus (immaturus) globosus, 12 mm. longus, 10 mm. latus.

Caulescent, to 8 m. high (fide Schultes): leaves regularly pinnate, the basal .3 m. long, the upper 1.3 m. long (fide Schultes); sheath and petiole glabrous, striate; blade incomplete, received in five sections, those portions of the rachis seen totalling about 95 cm. in length with about 11 pinnæ on each side; pinnæ glabrous with prominent veins, green above, green with yellowish veins below, alternate to subopposite at intervals of mostly 6–8 cm. along the rachis, the lower and median broadly lanceolate, widest at the middle or above from a base 1.5 cm. along the rachis, 40–60 cm. long, 9–12 cm. wide, falcately tapered on the lower margin to a slender acuminate apex, the upper and terminal lanceolate, more closely spaced, more or less evenly tapered to a shorter apex, 25–39 cm. long, 3–5 cm. wide: immature staminate spadices borne within the sheath in a group of 6, the innermost pair developing first, the outermost last; flowering staminate spadix about 50-branched; peduncle 23 cm. long; spathes 3, tubular with flaring apices, sheathing the peduncle, the outer 12 cm. long, the inner



87. *MORENIA LATISECTA*. Pinna, staminate and pistillate spadices $\times \frac{1}{3}$; portion of staminate rachilla $\times 3$; staminate flower $\times 4$.

20 cm. long, exceeding the peduncle; rachis about 12 cm. long; rachillæ simple, 3-7.5 cm. long, closely spaced on the rachis; staminate flowers yellow, depressed and angled in bud, borne spirally in pairs covering the rachillæ, calyx minute, 0.6 mm. high, 3-lobed, the lobes deltoid, petals valvate, ovate, thick, about 3 mm. long, stamens 6, one-half to two-thirds as long as petals, pistillodium conspicuous, 3-lobed: fruiting spadix large, about 30-branched; peduncle 40 cm. long, bearing 5 spathe rings, erect, becoming cernuous toward the apex; innermost spathe 3.5 cm. long; rachis pendulous, 27 cm. long; rachillæ simple, 12-20 cm. long, ascending with pendulous apices; pistillate flowers not seen: immature fruit green (fide Schultes), spirally arranged, nearly globose, about 10 mm. wide, 12 mm. long; calyx 3 mm. high, deeply 3-lobed, the lobes entire or irregularly crenate, exceeding the corolla remains; endosperm not formed.

Colombia, Putumayo, Valley of Sibundoy, Sibundoy, altitude about 2225-2300 m., May 29, 1946, *R. E. Schultes & M. Villareal 7676*.

This species is distinct from all previously described *Morenias* in its broadly lanceolate median pinnæ 9-12 cm. wide. Other species have linear to linear-lanceolate pinnæ 1.5-5 or rarely 6 cm. wide at the middle.