

shreds at the somewhat expanded base, the surface as well as that of the rachis showing much black hairy pubescence 1-3 mm. long; pinnæ 20 or more either side the ridged rachis, 15-30 cm. long, 10 cm. broad at apex or some of them split into 2 or 3 narrower units, apex irregularly truncate and shallowly erose and toothed and sometimes the upper margin produced into a short sharp finger, sides straight and entire, many-nerved and lacking definite midrib, glabrous, surfaces bearing no spines: inflorescence erect; peduncle slender, 5-7 mm. thick, 1 m. or more long, armed with sharp prickles 15 mm. or less long, lower half inside narrow sparingly weak-prickly spathe-valves, upper or flowering free part 40-50 cm. long, axis angled and dark pubescent, the simple slender branches or rachillæ 30-40 cm. long and strongly ascending; flowers close together along the rachilla, the lower or pistillate ones lightly sunken in shallow cavities, the upper smaller staminate ones superficial; pistillate flowers about 4 mm. thick and 5-6 mm. long; staminate flowers in full bud about 3 mm. either way: fruit not seen.

Cloud forest, on hills above Campana, Province Panama, 600-800 m., *Allen 1870*. Readily distinguished by the dark or fuscous pubescence of flowering branches as well as less markedly of peduncle and leaf-rachis.

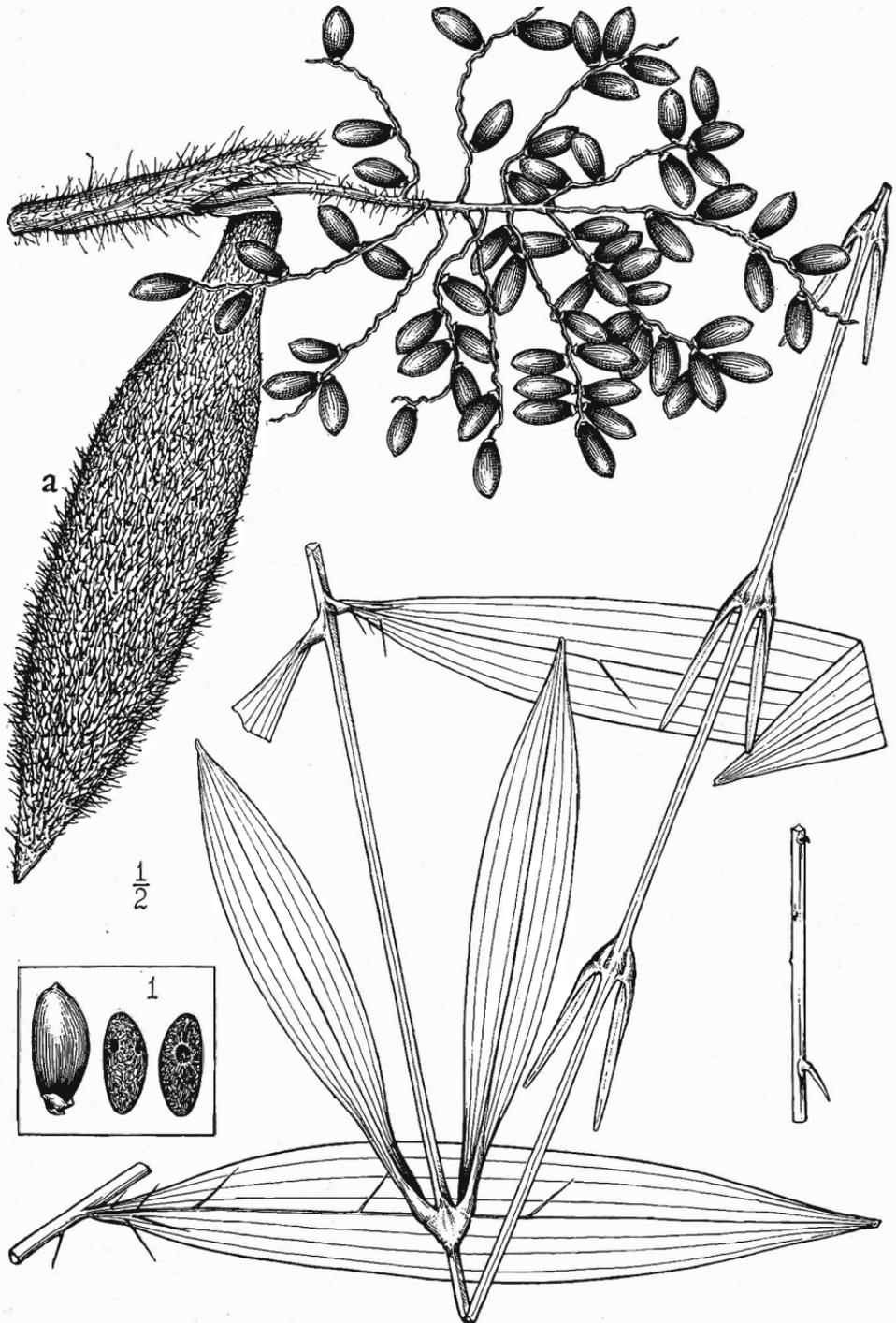
I pronounce the generic name as if spelled A-if'-an-ees.

DESMONCUS

† *Desmoncus isthmius*, spec. nov. § *Orthacanthium*. Fig. 108.

Longi-repens et ascendens; trunci 1-2.5 cm. crassi, glabri, nudi: folia 2 m. longa, glabra, pinnata; petiolus et rachis acute angulati, paucis, rectis spinis 1-2 cm. longis et rare valido, uncinato aculeo 3 mm. longo; vagina striata, multis fuscis planis spinis 5 mm.-2.5 cm. longis, pinnæ alternæ vel pinnæ superiores oppositæ, longo-lanceolatæ, acuminatæ, 15-24 cm. longæ, 2.5-4 cm. latæ, margines inermes, costa media prominens et ferens brevem spinam medio subter, venæ laterales indistinctæ: major cymba 24 cm. longa 5-6 cm. lata, tecta atratis albo-basatis setis 1 cm. longis; spadix anthesi 12-15 cm. longa: fructus ellipsoideus, pæne vel admodum 2 cm. longus et 8 mm. vel plus latus, glaber; cupula non prominens, corolla multo major quam annuliformis calyx; semen 13-14 mm. longum, 6 mm. crassum, angusto-oblongum, illustratum raphalibus lineis, 2 pori in dorso.

Long trailer and climber; trunks 1-2.5 cm. thick, glabrous and nude: leaves 2 m. long, with many large alternate pinnæ becoming opposite on the upper part where they pass into 3 or 4 pairs of retrorse glabrous strong heavily based spines 3.5-4.5 cm. long; petiole and rachis sharply angled, glabrous or at places slightly furfuraceous, bearing a few straight spines 1-2 cm. long with now and then a stout broad-based sharp curved hook 3 mm. long; leaf-sheath many-striate and bearing many dark brown flat spines 5 mm.-2.5 cm. in length; pinnæ long-lanceolate-acuminate, 15-24 cm. long, 2.5-4 cm. broad at middle, glabrous both surfaces or with a trace of puberulence underneath, margins unarmed, midrib pronounced but the several side-veins indistinct, upper surface sometimes marked by elevated cross-lines, usually a spine 1.5-2 cm. long borne on midrib underneath at



108. LEAF, FRUITING SPADIX of *Desmoncus isthmius* of Panama. Setose spathe at *a*. Fruit at lower left. Midnerve spine at lower right.

or prickles on rachis or other parts and not morphological pinnæ, commonly in addition to the pinnular spines.

For Trinidad, one must be aware, also, of the existence of Herbarium List, Botanical Department, Trinidad, by J. H. Hart, F. L. S., Superintendent, published at Port-of-Spain in 1908. This is a catalogue of eighty-nine pages, of "actual specimens mounted, classified, and arranged under their Natural Orders in new Cedar Cabinets." A new but undescribed species of *Desmoncus* is in this catalogue, and I give it name and diagnosis.

Desmoncus major, Crueger ex Grisebach, Fl. Brit. W. Indies, 519 (1864). § *Orthacanthium*. Fig. 109.

Glabrous vigorous climber, uncinata but not aculeate: leaf 1 m. and more long, with angled and grooved petiole and rachis; pinnæ many on either side, opposite and alternate, firm in texture, narrowly lance-oblong and pointed, 20-25 cm. long, 4-5 cm. broad, strongly nerved, narrowed to base, light green in color, often with 1-3 stout black spines 2-3 cm. long on midrib underneath and the pinna itself usually subtended by a much longer spine, the cirrhus whip carrying 5-6 pairs of big-based retrorse stout spines about 3 cm. long or even longer: spadix 30 cm. long and 20 cm. broad, the continuing aculeate rachis bearing several or many lateral unarmed rachillæ, peduncle not armed; cymba (spathe) 30 cm. long, 5-6 cm. broad at expansion and becoming more or less flat, bearing many small white-based spines of differing lengths of which the longest may be 15 mm.; pistillate flowers 4-5 mm. apart, about 2 mm. high, consisting of a very small calyx, a cup-like gamopetalous lightly lobed corolla attached to which on the inside are 6 elongated staminodia and inclosing a protruding columnar pistil: fruit not seen or described.

Distribution on Trinidad not recorded. Grisebach mentioned only Caroni on the authority of Crueger. Britton collected it at Balandra Bay and Swabey at Point Radix. I have taken it in the wild at Mayaro. Hart lists two numbers in the Trinidad herbarium, both of which are before me, but one of them is the new species I am now to describe. There are no Grisebach specimens of *D. major* in the herbarium of the Royal Botanic Gardens, Kew, England.

† ***Desmoncus Prestoei***, spec. nov. § *Campylacanthium*. Fig. 110.

Gracilis, scandens, glaber, ferens et pinnulares rectas spinas reflexas in parte terminali rachidis et breves lato-basatos validos uncinatos aculeos in rachide spathaque: folia circa 1 m. longa; pinnæ oppositæ vel suboppositæ, inermes, elliptico-lanceolatæ, acutissimæ, angustatæ ad basim et spinis non subtentæ, valde nervatæ, circa 15 cm. longæ, 4 cm. latæ, vaginæ brevi-spinosæ et aculeatæ: spadix 30 cm. longa, 2-3 cm. lata, cylindrica; rachillæ tenues, 3-8 cm. longæ, undulatæ; flores pistillati 2-4 mm. inter se distantes, 2-3 mm. alti, calyx non profundus et latus, corolla gamopetalosa et undulata: fructus ellipsoideus, glaber, 20 mm. longus, 15 mm. diam.; semen 15-16 mm. longum, multi-venatum, micropyla subbasalis.