

deflexed spines 3-4 cm. long with white bulbous base: leaves interruptedly pinnate, 1 m. plus long, angled rachis with black spines now and then 1-4 cm. long, petiole very prickly with short little spines underneath and longer ones (to 5 cm.) with white base at intervals; pinnæ 4-5 dm. long, very gradually acuminate, 2 cm. or less broad, margins spinulose, lateral nerves few and strong: spathe about 2-3 dm. long and 4-5 cm. broad, narrowed to base, thinly provided with white-based prickles 1-2 cm. long with smaller spinelets underneath; spadix about 2 dm. long, simple with short branches at top and axis not prolonged, the flat peduncle more or less brown-tomentose: fruit long-elliptic to oblong, 5 cm. long when dry, 2-3 cm. thick, long-beaked; calyx-cup 1-1.5 cm. long, double, margin many-toothed, obtuse.

Trinidad: Arena, San Rafael, *Bailey 168*, in low place by stream among trees; trunks when split used for wattles in building; planted in Botanic Garden, Port-of-Spain, *Bailey 685* (collected 1922), as *Bactris major*, a name then employed for *Bactris* in general in Trinidad. Said to be known as Roseau palm.

†12. *Bactris beata*, spec. nov. Figs. 172, 173.

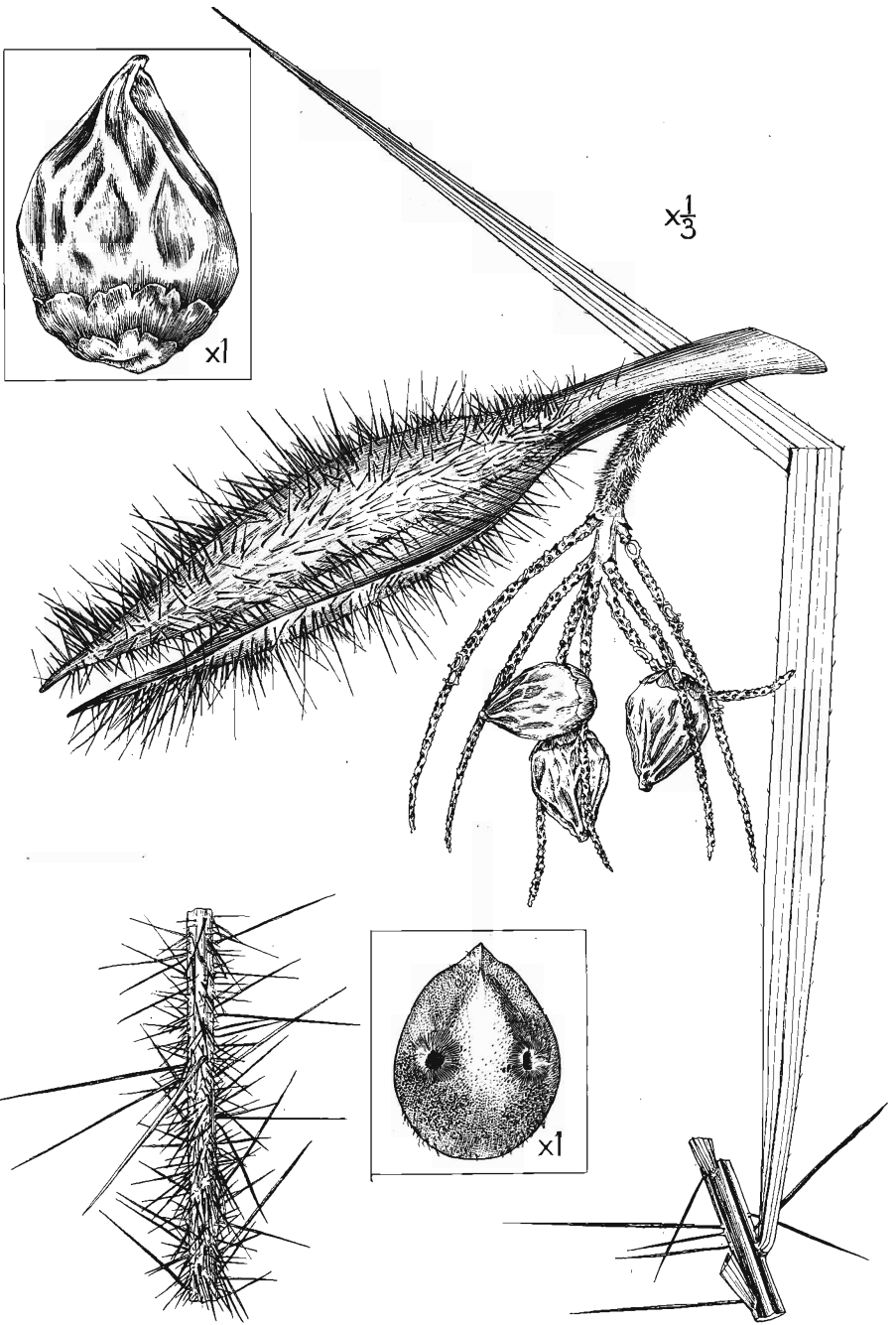
Coloniata, erecta, 3-4 m. alta, truncus spinosus, non albonotatus: folia 1 m. longa, interrupte pinnata, rachis sparsis spinis 3-4 cm. longis; petiolus gracilis, spinis variatis albo-bulbosis basi; pinnæ 6 dm. longæ, 2-3 cm. latæ, minute laterali-nervatæ, margines plus vel minus spinulosi: spatha 3 dm. longa, 4-5 cm. lata, obsita gracilibus nigris aculeis basi alba 1 cm. vel minus longis; spadix 2 dm. longa, ramosa prope apicem, axis non continuus: fructus pæne globulares, 3 cm. longi, 2.25 cm. lati, non attenuati; calyx duplex, .75 cm. altus, obtuse dentatus.

Attractive, erect, 3-4 m. tall, coloniate, trunks spiny not albonotate: leaves 1 m. long, expanding nearly flat, interruptedly pinnate; rachis flat but ridged, with scattered spines of uniform length 3-4 cm.; petiole slender, spines of different lengths and most of them white-bulbous at base, .5-4 cm. long; pinnæ 6 dm. long, 2-3 cm. broad, the upper ones not long-acuminate, finely side-veined, margins more or less spinulose: spathe 3 dm. long, narrowed at base to peduncle, 4-5 cm. broad, abundantly covered with black slender prickles 1 cm. or less long that bear a white bulbous base; spadix about 2 dm. long with rough-tomentose decurved shank and ascending branches from near the apex and without upstanding points after fruiting, axis not continuous: fruit nearly oblong, about 3 cm. long, 2.25 cm. broad, not attenuate at either end; calyx-cup shallow, of 2 nearly equal series, .75 cm. deep, margins obtusely scalloped.

Trinidad: at waters edge, Mayaro, *Bailey 667* (collected 1922), a handsome plant.

†13. *Bactris Swabeyi*, spec. nov. Fig. 174.

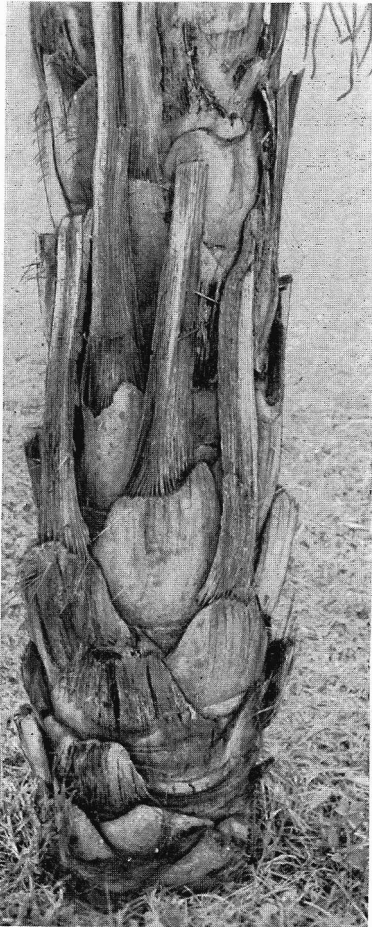
Arbor valde spinifera: folia uniformiter pinnata, 1 m. longa, rachis multis spinis 4-10 cm. longis, petiolus dense spinosus; pinnæ angustæ firmæque, 6 dm. longæ, 1-1.5 cm. latæ, nervi laterales validi, margines aliquid spinulosi prope apicem: spatha 2-3 dm. longa, 5 cm. lata, spinis



174. *BACTRIS SWABEYI*; pinna, spathe and fruit, petiole, seed near bottom.

tenuibus et piliformibus 2 cm. plus vel minus longis interdum basi alba; spadix 2 dm. longa, ramosa apice, axis non continuus: fructus ovoidea, 4-5 cm. longi, 3 cm. lati, angustati ad apicem a basi, rostrum prominens; calyx non profundus, duplicatus, 1-1.5 cm. altus, margo late dentatus.

Very thorny tree: leaves apparently uniformly pinnate, 1 m. and more long, the angled glabrous rachis bearing scattered black-brown spreading spines 4-10 cm. long, some of them with somewhat expanded whitish base; petiole densely black-brown-spinose, spines 1-6 cm. long; pinnæ narrow and stiff, folding lengthwise in the drying process, 1-1.5 cm. or less broad, strongly side-nerved, 6 dm. long, unarmed, margins somewhat spinulose toward apex: spathe 2-3 dm. long, 5 cm. broad, narrowed to a manubrium or handle covered with thin brown hair-like spines 2-3 cm. long, some of which may have a white bulbous base; spadix about 2 dm. long, rachillæ



175. *TECTOCOMIA* SECTION of *Acrocomia*, trunk permanently holding the petiole-bases. From *Gentes Herbarum*, iv, fig. 264.

ascending near the top and axis not continuous, bearing only a few raised points, flattened curved peduncle rough-tomentose: fruit ovoid, 4-5 cm. long, tapered to apex from near the base, beak prominent; calyx-cup shallow and open, 1-1.5 cm. deep, duplicate, margin broadly dentate.

Trinidad: Southern Watershed Reserve, near Arboretum, *C. Swabey 13146* (collected 1937), now of the Forest Department, British Guiana.

## 6. ACROCOMIA—GRU-GRU PALMS

Heavy monœcious trees with single spine-bearing trunk and foliage, great spreading crown of pinnate leaves and long hanging clusters of abundant flowers and nut-like fruits mostly as large as walnuts, the spadix covered by woolly and variously spiny double sheaths or spathes. As occidental genus of traditionally confused nomenclature, monographed by Bailey in 1941 (*Gent. Herb.* iv, fasc. xii), when twenty-five species were accepted. Only one species is known on Trinidad-Tobago, separated at that time from the other species of the genus.

The monograph divides the genus *Acrocomia* nearly equally into two sections on the nature of the trunk: *Tec-*