

from less than 1 to 6 cm. long: spathe short and broad, 2-3 dm. long, 8-10 cm. broad at expansion, narrowed at base to a handle-like part, densely covered with black hair-like prickles 2 cm. or less long; spadix small, 18-20 cm. long including flat woolly curved peduncle, axis not prolonged, branches pointing forward and at fruiting time bearing many elevated points: fruit (not fully mature) ellipsoidal, about 3 cm. plus long, 2 cm. broad, with short apical point, narrowed to base; calyx a closely appressed double cup one-third length of nut, margin obtusely scalloped.

Trinidad: MacNair, *Bailey 113*.

†8. *Bactris planifolia*, spec. nov. Figs. 168, 209.

Gracilis, 5-8 m. alta, coloniata: folia plana, librata, 1 m. vel plus longa, uniformiter pinnata, semi-glaucous subter, petiolus obsitus debilibus spinis brunneis, rachis spinis dispersis 1-3 cm. longis; pinnæ angustæ, 1-2.5 cm. latæ, 4-5 dm. longæ, multi-nervatæ, margines spinulosi: spatha circa 20 cm. longa, 4 cm. lata, obsita brunneis aculeis piliformibus; spadix circa 18 cm. longa, simplex, axis non extensus: fructus elliptici, 4 cm. longi, 2.5 cm. lati, angustati ad rostrum breve; calyx circa quarta pars nucis, duplex, margo obtuse dentatus.

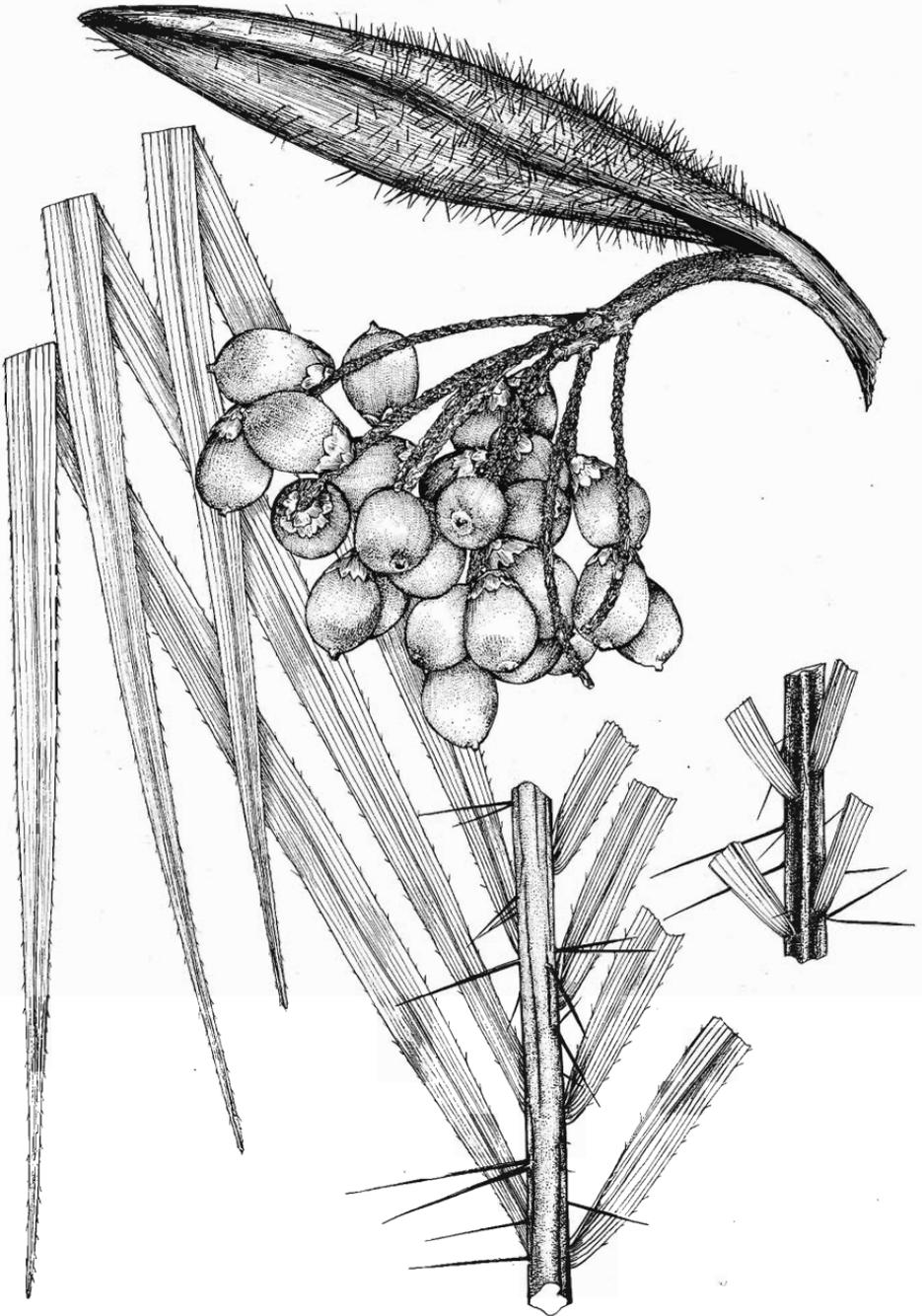
In broad dense clumps with flatly expanded horizontal leaves, some of the trunks 5-8 m. tall, boles with ordinary spinescence and 4-6 cm. thick: leaves 1 m. and more long, evenly pinnate, semi-glaucous underneath, thin in texture, petiole shaggy with brown weak short prickles and a few of them to 3 cm. long, rachis bearing scattered spines some of which are 3 cm. long; pinnæ subopposite to alternate, very narrow, 4-5 dm. long, 1-2.5 cm. broad, with many weak parallel nerves, closely and briefly spinulose on margins, glabrous both surfaces: spathe about 20 cm. long and 4 cm. broad, narrowed to a manubrium or handle, thickly covered with brown hair-like prickles 1.5 cm. and less long; spadix about 18 cm. long, simply branched at apex, axis not continued, shank decurved and brown-tomentose: fruit elliptic, about 4 cm. long and 2.5 cm. thick, tapered to a prominent short beak; calyx-cup nearly or about one-fourth length of nut, double, margin obtusely dentate.

Trinidad: Siparia, St. Patrick, *Bailey 120*. Said to be called "Rosoi" by natives.

†9. *Bactris obovoidea*, spec. nov. Fig. 169.

Gracilis: folia 1 m. vel plus longa, uniformiter pinnata; petiolus et rachis hirsuto-tomentosa in superficie, spinæ maximæ 5 cm. vel plus longæ; pinnæ valde angustæ 1-1.5 cm. latæ, 1 m. longæ, apex graciliter acuminatus, valde laterali-nervatus, margines spinulosi: spatha 2-3 dm. longa, 5 cm. lata, aculeis piliformibus basi alba 1-2 cm. longis; spadix 18-20 cm. longa, ramosa apice, axis non continuus: fructus obovoidea, 4.5-5 cm. longi, 2.5-3 cm. lati, latissimi super medium; calyx duplex, 1-1.5 cm. altus, pars interior tres partes exterioris partis et irregulariter et profunde lobata.

Slender palm with very narrow leaflets and very spiny leaf-rachis and petiole, both of which are scurfy on the surface and strongly angled; pinnæ uniformly placed, subopposite to alternate, rigid, strongly side-ribbed, about 1 m. long, 1-1.5 cm. broad, apex long and slender, margin somewhat



169. *BACTRIS OBOVOIDEA*; pinnae with prickly margins, section of rachis, spathe and spadix, fruits broadest above the middle. $\times \frac{1}{3}$.

spinulose: spathe about 2-3 dm. long and 5 cm. broad, sparsely covered with hair-like prickles 1-2 cm. broad with whitish bulbose base; spadix 18-20 cm. long, short-branched at apex, axis not continued, decurved peduncle flat and roughly brown-tomentose: fruit large, obovoid, 4.5-5 cm. long, 2.5-3 cm. thick, broadest above the middle, abruptly narrowed to short point, long-tapered to base; calyx-cup large, 1-1.5 cm. deep, double, inner cup thrice longer than the outer and irregularly deeply lobed.

Trinidad: at MacNair, *Bailey 114*. Striking plant for its narrow leaflets and large obovoid nuts; spines of leaf-rachis and petiole often 5 cm. and more long.

†10. *Bactris Cateri*, spec. nov. Fig. 170.

Coloniata, gracilis, lepidus, 6-10 m. alta: folia erecto-curva, conduplicata, uniformiter pinnata, spinosa in rachi petioloque, breviter armata in marginibus et nervis subter; pinnæ angustæ, 2-2.5 cm. latæ, longo-acuminatæ: spatha 3 dm. longa, 5 cm. lata, obsita spinis nigris basi alba 1 cm. vel minus longis; spadix 2-3 dm. longa, ramosa apice, axis non continuus: fructus elliptici, 4-5 cm. longi, 2-2.5 cm. crassi, angustati in utrasque partes, rostrum prominens; calyx duplicatus, 1 cm. vel plus longus, margo non profunde dentatus.

Erect, growing in dense clumps and colonies, 6-10 m. tall, foliage upright and trough-shaped, boles slender and well armored: leaves 1 m. and more long, evenly pinnate, heavily armed on the scurfy angled axis where the very sharp prickles may reach 6-8 cm. long, petiole heavily covered with short and long spines; pinnæ narrow, seldom more than 2-2.5 cm. broad, midrib underneath and margins sharply spiculose, lighter colored underneath, apex long-acuminate, lateral nerves several and prominent: spathe about 3 dm. long and 5 cm. broad, well covered with short black hair-like prickles not much if any exceeding 1 cm. long with the white base bulbose, narrowed at base to a manubrium or peduncle; spadix 2-3 dm. long, curved flat peduncle brown-tomentose, short ascending branches at apex and axis not continued, mature branches or rachillæ rough with points: fruit elliptic, broadest at or below the middle and tapered both ways, 4-5 cm. long, 2-2.5 cm. thick, beak prominent; calyx-cup duplicate, 1 cm. plus long, margin shallowly and almost obtusely scalloped.

Trinidad: Arena, San Rafael, *Bailey 100*; making attractive colonies along roads and open trails. Named in compliment to John Cater, Senior Assistant Conservator of Forests, who has aided greatly in finding the palms of Trinidad.

†11. *Bactris albonotata*, spec. nov. Fig. 171.

Erecta, 2-3 m. alta, truncus 3-4 cm. diam. spatiis vacuis 12-15 cm. longis inter fascias albas 2-3 cm. latas et circulos spinarum deflexarum 3-4 cm. longarum alterna, spinæ basi alba bulbosaque: folia interrupte pinnata, 1 m. vel plus longa, rachis spinis nigris 1-4 cm. longis, petiolus valde aculeatus; pinnæ 4-5 dm. longæ, gradualiter acuminatæ, 2 cm. vel plus latæ, margines spinulosi: spatha 2-3 dm. longa, 4-5 cm. lata, aculeata aculeis basi alba 1-2 cm. longis; spadix circa 2 dm. longa, axis non continuus: