

Erect, 8-10 m. tall, very leafy, few trunks in a single stand, boles 5-8 cm. thick, uniformly but not closely prickly; leaves evenly and equally pinnate, 1 m. and more long, gracefully drooping, lighter colored or somewhat glaucous underneath; pinnæ about 1 m. long, 2-3 cm. broad, long-acuminate, lightly many-nerved, margins closely beset with small sharp forward-pointing setæ; rachis bearing scattered black spines 1-4 cm. long; petiole heavily prickly with an under layer of short depressed prickles and also protruding spines to 4 cm. long; spathe 25-30 cm. long and 4-6 cm. thick, densely covered with brown-black prickles 1-2 cm. long; spadix simple and short, flat curved peduncle brown-woolly but not aculeate, axis not continuous and the few short branches forward-looking, about 12-13 cm. long; fruits relatively few, nearly globular, 4 cm. long, 3 cm. thick when dried, beak very short but evident; calyx tightly appressed in two series, margin obtusely lobed.

Trinidad: Mac Nair, *Bailey 112*. Species dedicated to the memory of W. E. Broadway, 1863-1935, Fig. 166, connected with the Department of Agriculture, Trinidad, from 1914 to 1923, with whom I had many satisfactory collecting trips on the island.

†7. *Bactris ellipsoidalis*, spec. nov.
Fig. 167.

Valde gracilis, 6-7 m. alta, trunci pauci vel unici: folia æque pinnata,



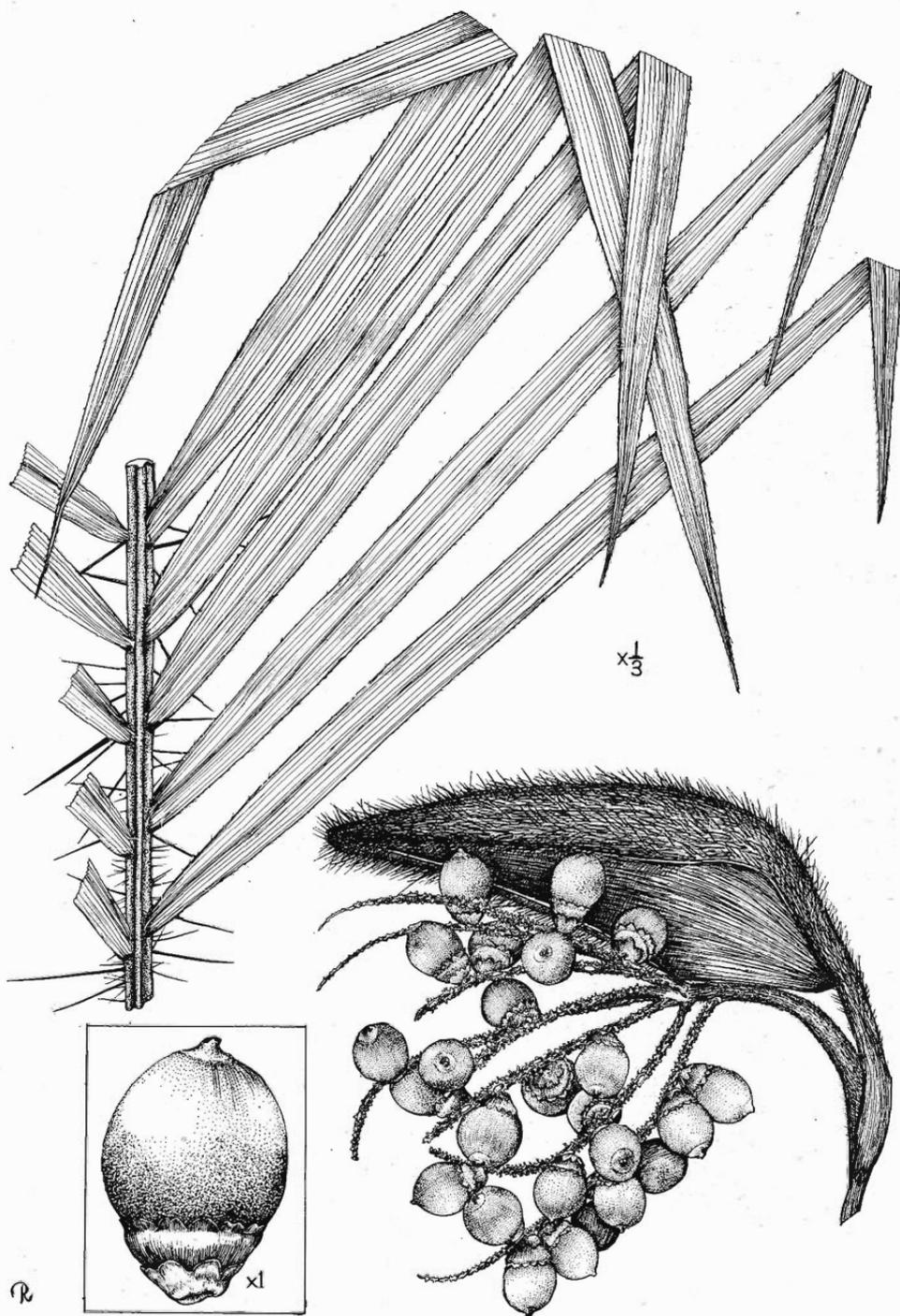
165. GRACEFUL HABIT of *Bactris Broadwayi* in forests of Trinidad.



166. W. E. BROADWAY, for whom *Bactris Broadwayi* is named, collector of Trinidad and Tobago, and of the Guianas, companion on many excursions.

1 m. plus vel minus longa, albidiora subter; pinnæ oppositæ vel suboppositæ, tenues, 5-6 dm. longæ, 2-2.5 cm. latæ, nervi laterales pauci, margines minute setosi; rachis paucis spinis rectis 1-4 cm. longis; petiolus multis spinis 1-6 cm. longis: spatha 2-3 dm. longa, 8-10 cm. lata, dense obsita nigris spinis gracilibus 2 cm. vel minus longis; spadix 18-20 cm. longa, axis non prolongatus, rami ascendentes: fructus ellipsoidales, circa 3 cm. longi et 2 cm. lati, rostrum apicale breve, angustatum ad basin; calyx duplex, appressus, margo obtuse lobatus.

Very slender, erect to 6 or 7 m., trunk single or few, armature not unusual: leaves continuously pinnate, 1 m. more or less long; pinnæ subopposite to opposite, lighter colored but hardly glaucous underneath, very narrow, 5-6 dm. long, 2-2.5 cm. broad, apex gradually attenuate, lateral veins few and not very strong, margins minutely setose, prickles on rachis straight, 2-4 cm. long with shorter ones sometimes between, few in number; petiole very slender, bearing many prickles



167. *BACTRIS ELLIPSOIDALIS*, with foliage, spathe and spadix, mature nut at bottom.

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