nearly or quite nude, main spines mostly brown-black and 2-3 cm. long: leaves 1 m. and more long, glossy, glabrous, unequally and abruptly pinnate; petiole more or less scurfy or furfuraceous, very unevenly armed on the sheath with brown and tawny spines 5 mm.-3 cm. long; rachis glabrous or with traces of furfur, bearing on the lower part and petiole many broad tawny dark-tipped reflexed spines 4-4.5 cm. long; pinnæ 12-16 either side the rachis, alternate and with long unoccupied spaces, 20-25 cm. long, 2.5-9 cm. broad, the terminal pair much the broadest, midrib often not definite, other ribs few to several and very prominent and with indistinct cross-veins between them on the upper surface, margins unarmed, apex acuminate and sometimes short-caudate: cymba 15-20 cm. long, narrow, densely covered with tawny spines 2 cm, or less long; fruiting spadix 10 cm. long and broad, rachillæ indifferently pubescent: fruit (immature) oblong-conic, prominently beaked, glabrous; cupule 5 mm. deep, outer series of 3 nearly separate striate lobes, inner series deeper and urceolate with a nearly entire margin and the exterior prominently strongly setose (the setæ likely to perish with handling).

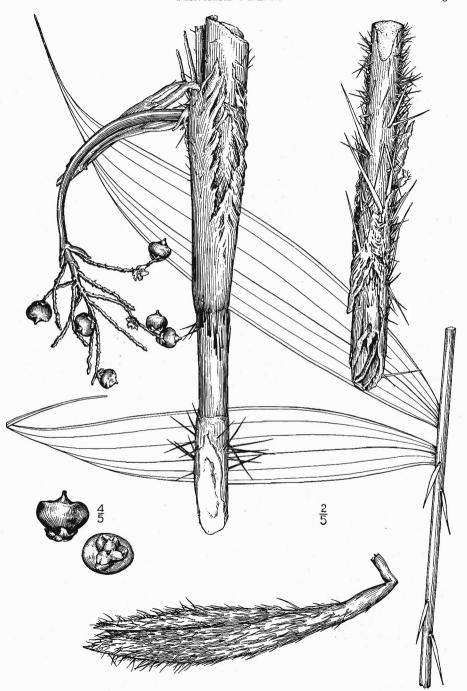
Cerro Campana, Province Panama, Allen 2086.

† Bactris divisicupula, spec. nov. Fig. 120.

Gracilis, 4 m. alta, arundinacea; truncus 2.5 cm. vel minus crassus, nodi 6–7 cm. inter se distantes, internodi nudi; folii vagina longa, vaginata, ferens fusco-albas planas spinas 3 mm.–4 cm. longas: folia lucida, glabra, 1 m. vel minus longa, alterna, interdum valde pauca, ferens spinas planas in nonnullis partibus rachidis; pinnæ inermes, 30–40 cm. longæ, aliæ 4–5 cm. latæ, aliæ 9–10 cm. latæ, anguste caudatæ, prominenter 5–7-nervatæ: cymba 15–20 cm. longa, dense tecta fusci-albis planis aculeis; fructifera spadix 8–9 cm. longa et lata, breves rachillæ pubescentes: fructus oblato-pyriformis, 11–14 mm. crassus et longus, culmen planum, rostratum,

inerme, striatum; cupula divisa in 3 latos lobos extra et intra. Slender, 4 m. tall, trunk arundinaceous, 2.5 cm. or less thick, pithy in center, nodes 6-7 cm. apart and the intervals nude, leaf-sheaths long and tightly closing and thickly provided with brownish-white black-based flat spines 3 mm.-4 cm. long: leaves glossy and glabrous, 1 m. or less long, irregularly pinnate, bearing flat spines between the pinnæ on some parts of the rachis and the pinnæ sometimes few; pinnæ 30-40 cm. long, some of them 4-5 cm. broad and others (particularly the terminal pair) as much as o or 10 cm. broad, apex slenderly caudate, the 5-7 prominent nerves widely spaced and the midrib not much more prominent than they; rachis nearly terete, glabrous except for indistinct lines of furfuraceous pubescence: cymba maturing often below the falling leaves, 15-20 cm. long, densely clothed with tawny flat prickles 2 cm. or less long; fruiting spadix short, 8-9 cm. across either way, the few short branches or rachillæ pubes cent: fruit oblate-pyriform, 11-14 mm. thick, top flat, beak pronounced, surface glabrous and when dry faintly striate, thin mesocarp adhering tightly to the large nutlet; cupule strongly divided into broad lobes or parts in each series.

Northwest rim of El Valle de Anton, Province Coclé, about 600 m altitude, Allen 1817.



120. PINNÆ AND RACHIS, SPINY PETIOLE, SPATHE, FRUITING SPADIX, of Bactrisdivisicupula. Lower left, two fruits, one showing the cupule.