

† *Bactris aureodruga*, spec. nov. Fig. 121.

Pergracilis, 3 m. alta; truncus arundinaceus, 1-2 cm. crassus, paucis parvis nigratis spinis: folii vaginæ 20-25 cm. longæ. tenuissimis spinis 1-2.5 cm. longis: folia 1 m. longa, lucida, inermia præter fortasse in petiolo, glabra subter et leviter puberulenta supra; pinnæ 14-16 in utroque latere rachidis, alternæ prope apicem et dispersæ ad basim, 16-18 cm. longæ, 2-2.5 cm. latæ, longo-acuminatæ, costæ aliquot, margines hispidulosi: cymba 10-14 cm. longa, atrato-setosa; fructifera spadix 7-9 cm. longa et lata; rachillæ aliquid pubescentes: fructus aurantius, pyriformis, 12-14 mm. longus, 9-10 mm. crassus, glaber, rostrum minimum; cupula 3 mm. alta, margo integer vel aliquid irregularis.

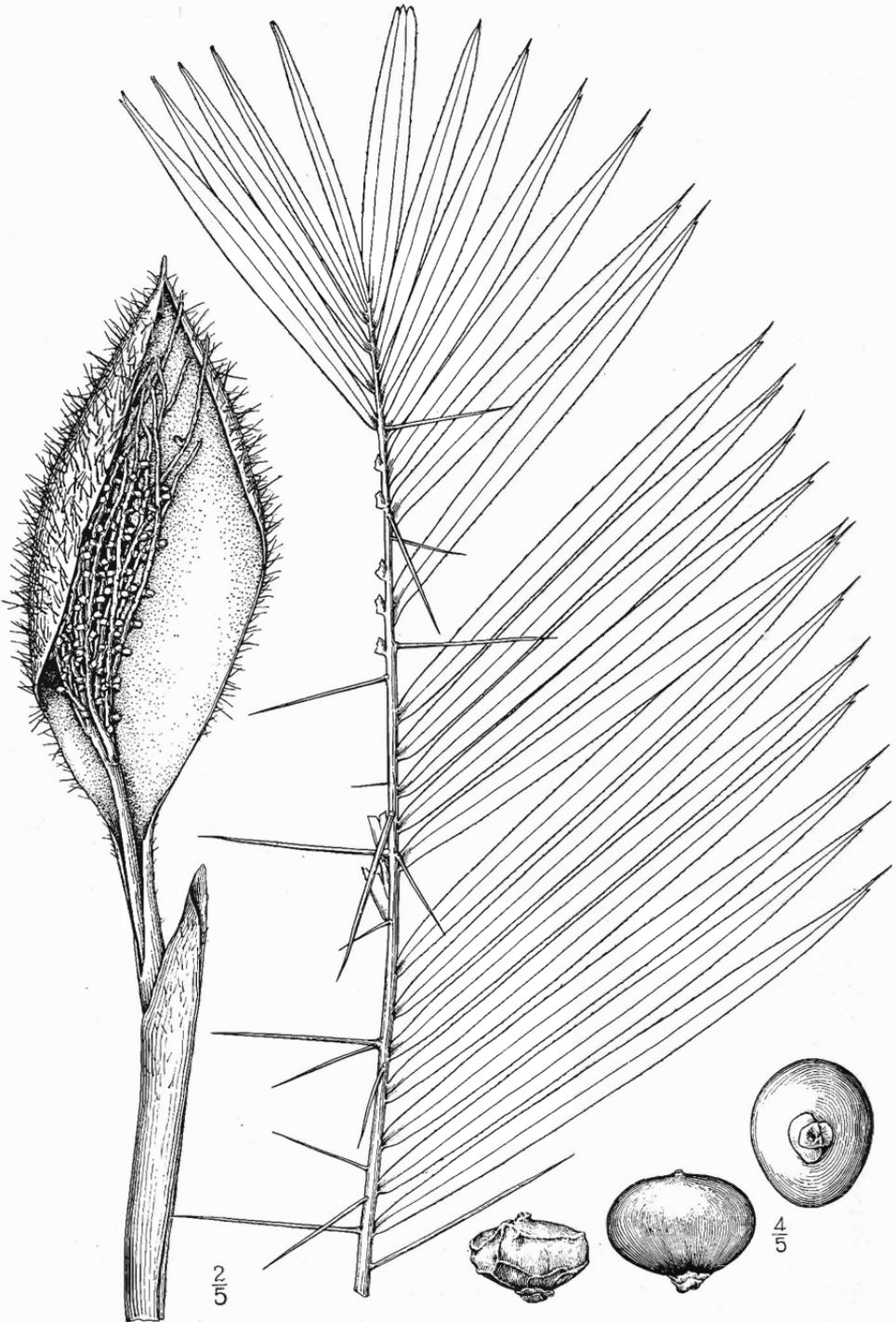
Very slender palm, 3 m. tall; trunk arundinaceous, 1-2 cm. thick, bearing a few small blackish thin spines; leaf-sheaths 20 cm. or more long, closely clasping, armed with very thin spines 1-2.5 cm. long: leaves about 1 m. long, pinnæ irregular in attachment, very glossy on under glabrous surface, less glossy on duller upper surface which also discloses a very close puberulence under a lens; pinnæ 14-16 either side the slender puberulent rachis, with alternate attachment toward apex but scattered on lower part, unarmed but perhaps a spine or two on the petiole, the pinnæ thin in texture, 16-18 cm. long and 2-2.5 cm. broad, long-acuminate and very sharp, midrib not very prominent and accompanied by conspicuous nerves on either side, margins hispidulose: cymba 10-14 cm. long, appressed on middle with short blackish setose hairs; fruiting spadix 7-9 cm. across either way, rachillæ lightly pubescent: fruit pyriform, 12-14 mm. long, 9-10 mm. thick, glabrous, orange, beak so small as to be hardly noticeable; cupule about 3 mm. deep, with almost continuous and only notched or broken edges.

Hills, north of El Valle de Anton, Province Coclé, 1,000 m. elevation, *Allen 2150*.

† *Bactris oraria*, spec. nov. Fig. 122.

Gregaria, trunci 4-6 m. alti, 2-3 cm. crassi, erecti, procumbentes vel sæpe scandentes, cinereis foliis, spiniferi; folii vaginæ longæ, vaginatæ, imbricatæ, brevi-spinosæ: folia 5 vel 6 prope summum caulem, glabra, circa 1 m. longa; pinnæ 65-75, fere oppositæ sed vacuis spatiis; petioli circa 20 cm. longi, sparsis, glaucis, atro-acuminatis spinis 5-9 mm. longis et aliis spinis ad 6 cm. longis; rachis ferens spinas 2-8 cm. longas; pinnæ 12-20 (interdum 30) cm. longæ et 1-2 cm. latæ, pinnæ apice folii 10-12 cm. longæ et 9-12 mm. latæ, acuminatæ ad pungentem apicem, costa media evidens sed multæ venæ laterales indistinctæ: cymba 14-16 cm. longa, 6.5-7.5 cm. crassæ, multis et brevibus spinis; rachillæ 6-9 cm. longæ, glabræ: fructus oblongus, 18-20 mm. longus, 15 mm. altus, culmen planum, luteum, rostrum minimum, glabrum; cupula minima, lobata, striata.

Stems cane-like, usually about 4 m. but sometimes 6 m. tall, 2-3 cm. thick, not always erect but often twisting or almost scandent or procumbent on surrounding vegetation, foliage with a light grayish aspect, in colonies of many canes: leaves pinnate, nearly or quite 1 m. long, 5 or 6



122. LEAF, SPADIX IN ITS SPATHE, FRUITS of *Bactris oraria*. Fruit at left is naturally dried.

in number and tufted at top of cane; petioles about 20 cm. long, flattened on upper surface and convex on lower surface, with sparse gray black-pointed spines 5-9 mm. long and a few flattened ones 2.5-6 cm. long; leaf-sheaths long, more or less imbricate, persistent, covering much of the cane, short-spiny, upper margins held together by fibrous network; pinnæ 65-75, mostly opposite but often with open intervals between them, small, 25-30 cm. long, 2.5-3 cm. broad, the upper ones sometimes only 10-12 cm. long and 9-12 mm. broad, acuminate to sharp points, glabrous, midrib marked but the many lateral veins hardly noticeable, margins scabrid; rachis bearing spines 2-8 cm. long; cymbas firm, interfoliar, persistent, expanded or protruding part of inner or main cymba 14-16 cm. long, 6.5-7.5 cm. wide, acuminate to slender point, bearing many short gray spines some of which may weather away; rachillæ 6-9 cm. long, terete, slender, glabrous; fruit oblate and somewhat irregular in circumference, 20-22 mm. across the long way, about 15-17 mm. high, very little tapered to base, top flat and beak very small, yellow, glabrous, strongly wrinkled when dry; cupule very small, strongly lobed, striate, scarcely applied to base of drupe.

Beaches just back of the sea sands, Nueva Gorgona, Province Panama, *Allen 2551*; vicinity of Farfan Beach, Canal Zone, *Allen 2580*; Taboguilla Island, Panama Bay, *Allen 2543* (type); Trapiche Island off coast of Pedro Gonzales, Perlas Islands, *Allen 2614*; Aguadulce, Province Coclé, along outskirts of the tidal belt, *Pittier 4975*. See comment under *B. minor*, page 221.

CHAMÆDOREA—DOREA PALMS

The Chamædoreas (Chamædò-rea) are a confused group, of about 100 species, perplexing not only because of the many diverse forms but from the fact that the plants are dioecious and the collector may not recognize the two sexes; in fact, different species, sometimes in separate genera, have been founded on the staminate and pistillate plant of the same palm. Efforts in former time to break Chamædorea into differing genera have not been successful. The procedure has been based on small technical floral differences of one sex or the other, while habit and aspect of plant and distribution have been taken little into consideration. Along with these obscure technicalities have gone difficult titles, which according to O. F. Cook, "usually are disregarded, perhaps on account of forbidding names: Eleutheropetalum, Stachyophorbe, Psilostachys, Dasystachys, Stephanostachys, and Spathoscaphè": National Horticultural Magazine, xviii, 161 (July 1939). See *Gent. Herb.* iii, 80, 82 (1933).

Substantial division of Chamædorea into genera cannot proceed until a wide range of specimens is at hand, with both sexes and also mature fruits represented. We shall then be able to determine whether there may not be good organographical characters, and geographical ranges, to supplement the minute floral differences. The species are all American.