

Even as it is, the multiform genus *Chamædorea* is singular in its dicecious character, and there are other good marks of separation. Absence of floral scars of both sexes on the rachillæ constitutes a marked feature, at once recognizable even after the flowers themselves and the fruits have fallen.

Strange and confused similarities run through the many species of *Chamædorea*, and this fact together with the dicecious separation renders it probably the most baffling of American palm genera. Under such circumstances the adventurer in new species assumes unusual risks.

† *Chamædorea coclensis*, spec. nov. Fig. 123.

Tenuis, 1.5 m. alta, culmus 1 cm. vel minus crassus, annulæ 4 vel 5 cm. inter se distantes: folia pauca, simplicia, bilobata apice; lamina 30-40 cm. longa, 20 cm. lata, late obovata in ambitu, cuneata basi, glabra, lucida subter, margines conspicue serrato-dentati, costa pronuntiata, nervi laterales circa 25 in utroque lobo et 5 mm. inter se distantes: staminatæ spadices infrafoliaries, ascendentes vel erectæ, pedunculus 10-12 cm. longus; rachis brevissima, rachillæ 6 vel 7, glabræ, 12-15 cm. longæ; gemmæ staminatæ circa 1 cm. latæ, obtusæ vel oblatæ, calyx integra cupula, petala valvata; pistillata spadix incognita: fructus lucidus, oblongus, obtusus, 12-13 mm. longus, 9-10 mm. latus.

Slender, 1.5 m. tall, the sheathed stem or culm 1 cm. or less thick, rings or nodes 4-5 cm. apart: leaves very few, simple and deeply 2-lobed at apex, blade 30-40 cm. long and 20 cm. wide, broadly obovate in outline, cuneate to base, outer margins on upper half conspicuously serrate or serrate-dentate, glabrous, glossy at least underneath, rachis prominent as a midrib particularly underneath, main lateral ribs about 25 on each side and 5 mm. apart and ending in sinuses of the serratures, prominent on upper face: staminate spadices few from separate nodes beneath the leaves, ascending, peduncle 10-12 cm. long and the bracts soon shedding; rachillæ 6 or 7 from near apex of peduncle, 12-15 cm. long, closely ascending, glabrous, strongly angled in drying, rather closely flowered; staminate flower-buds just preceding anthesis about 1 cm. across, obtuse or somewhat flattened, calyx a connate cup without evident lobes, petals valvate; pistillate sex unknown: fruit oblong, blunt, 12-13 mm. long and 9-10 mm. broad, smooth and glossy, the thin skin soon shattering.

Vicinity of El Valle de Anton, Province Coclé, Panama, 600 m., *Allen 1815* (Herb. Mo. Bot. Gard.).

This species has certain resemblance to *C. nana*, N. E. Br., but is less leafy, spadix infrafoliar, leaves much broader and with twice the number of lateral nerves, rachis of spadix shorter, rachillæ erect rather than drooping, staminate flower-buds much shorter and smaller.

This plant may belong to the subgenus (or genus) *Eleutheropetalum*, but pistillate parts are required for full determination. That genus has been held by Burret and others to comprise two species, *E. Ernesti-Augusti*



123. SIMPLE LEAF, TWO SPADICES, STAMINATE FLOWER of *Chamædorea coclensis*.

and *E. Sartori*, but it is questionable whether these two palms are congeneric (if separated from *Chamædorea*) or whether that small genus is yet properly defined.

† **Chamædorea Woodsoniana**, spec. nov. Fig. 124.

Valida, 5-12 m. alta; lamina 1 m. longa, 20 vel plus jugis oppositarum vel suboppositarum glabrarum satis virentium pinnarum; petiolus 20 cm. vel plus longus super vaginam, valde sulcatus; vagina 30 cm. vel plus longa, lata et plana, multi-striata; pinnæ 60-65 cm. longæ, 3-5 cm. latæ in medio, recte angustatæ ad longum gracilemque apicem, conspicue costatæ, 5 majores costæ 5-7 mm. inter se distantes: spadix staminata magna et diffusa, 75 cm. vel plus longa et valde lata; rachillæ multæ, tenues et flexuosæ, 20-50 cm. longæ; spadix pistillata minor, 15-25 cm. lata cum matura: fructus globularis, 8-10 mm. diam., reticulatus cum siccus; cupula 6-7 mm. diam., profunde lobata.

Stout, 5-12 m. tall, slender: leaf-blade 1 m. long, with 20 or more pairs of opposite or subopposite long and large glabrous dark green pinnæ; petiole 20 cm. and more long above the sheath, strongly ridged on top and more or less triangular in cross-section; sheath 30 cm. and more long, stoutly many-striate, 3-4 cm. broad at middle, clasping the cane, narrowly winged at apex; main pinnæ 60-65 cm. long, 3-5 cm. broad or the upper ones less than 2 cm., gradually and straightly tapering into long narrow ends or the young upper ones slightly curved but not sigmoid and caudate, all conspicuously ribbed particularly underneath, the central rib more pronounced than the 2 others on either side, intermediate nerves not prominent, the 5 main ribs 5-7 mm. apart: staminate spadix or truss large and diffuse in anthesis, 75 cm. and more long and very broad, on a many-sheathed peduncle 30-65 cm. long, sheaths soon shreddy; rachillæ numerous, slender and flexuose, glabrous, simple or some of them once or twice forked, 20-50 cm. long, laxly flowered; pistillate spadix much like the staminate but rachillæ fewer, shorter and less diffuse, 12-20 of them 10-30 cm. long: fruit globular, 8-10 mm. thick in mature dry state, somewhat fleshy on exterior, becoming wrinkled and reticulate in drying, cupule about 6-7 mm. across and with very broad lobes.

Vicinity of El Valle de Anton, Coelé, altitude about 600 m., *Allen 1901* (type), collected in 1939; Chiriqui in vicinity of Casita Alta, Volcán de Chiriqui, 1,500-2,000 m. altitude, *Woodson, Allen & Seibert 948*. Probably in Costa Rica. This plant has been confused with *C. macrospadix* and *C. costaricana*, both of which have sigmoid pinnæ.

† **Chamædorea Seibertii**, spec. nov. Fig. 125.

Gracillima, 2 m. alta, caules 1-2 cm. diam., annulati intervallis 2-3 cm.: lamina 50-90 cm. longa, 16-24 alternis vel suboppositis jugis rectorum pinnarum; petiolus gracilis, 12-14 cm. longus super vaginam striatam; pinnæ lætevirentes, glabræ, 20-25 cm. longæ, 1-2 cm. latæ, gradatim angustatæ ad longum et tenue acumen, aliquid angustatæ ad basim, costa media prominens, plures nervi laterales conferti: spadix pistillata compo-