sita circa 6 aurantiis rachillis $6-12 \mathrm{~cm}$. longis in rachide tantum $4-5 \mathrm{~cm}$. longa: fructus globularis, olivicolor, $7-8 \mathrm{~mm}$. diam., rugosus cum siccus; cupula parva, profunde lobata, $4^{-5} \mathrm{~mm}$. diam.

Very slender, canes $1-2 \mathrm{~cm}$. thick, ringed at intervals of $2-8 \mathrm{~cm}$., plant 2 m . tall: leaf-blade $50-90 \mathrm{~cm}$. long, bearing $16-24$ alternate or subopposite pairs of very narrow glabrous many-nerved straight pinnæ; petiole slender, angled, $12-14 \mathrm{~cm}$. long above the tight closed finely striate sheath which is $18-20 \mathrm{~cm}$. long; pinnæ light green, thin, $20-25 \mathrm{~cm}$. long and $\mathrm{I}-2 \mathrm{~cm}$. broad, tapering regularly to a long slender point which is often broken away, somewhat narrowed to base, standing $2-3 \mathrm{~cm}$. apart on the very slender flattened rachis, with straight prominent midrib and several side nerves close together: pistillate spadix composed of about 6 orange-colored branches or rachillæ 6-12 cm . long issuing from a rachis only 4 or 5 cm . long, the slender reddish-orange peduncle $1^{-15} \mathrm{~cm}$. long that bears 3 or 4 sheaths that soon become shreddy and fall at fruiting time and leave the ringed scars of their attachment: fruit globular, 7-9 mm. thick when dry and deeply wrinkled from the shrinking of the thin flesh, green or olivegreen when fresh; cupule small, $4-5 \mathrm{~mm}$. in expansion, deeply lobed.

Chiriqui, Panama: valley of the upper Rio Chiriqui Viejo, vicinity of Monte Lirio, i, $300-\mathrm{I}, 900 \mathrm{~m} .$, R. J. Seibert 218 (type, Mo. Bot. Gard.); vicinity of Callejón Seco, Volcán de Chiriqui, altitude r,700 m., Woodson \& Schery 502, and by others. This is one of the plants mistaken for C. costaricana, Oersted.
$\dagger$ Chamædorea Allenii, spec. nov. Fig. 126.
Erecta, ad 2 m . alta: folia regulariter pinnata, glabra, costata, aliquid nitida; lamina $60-70 \mathrm{~cm}$. longa; petiolus $30-35 \mathrm{~cm}$. longus super vaginam, carinatus et striatus, $5^{-7} \mathrm{~mm}$. latus; pinnæ circa 9 jugæ, alternæ vel suboppositæ et non plus quam 3 vel 4 cm . inter se distantes, $25-30 \mathrm{~cm}$. longæ, $3-6 \mathrm{~cm}$. latæ, angusto-lanceolatæ, non sigmoideæ, acute acuminatæ vel caudatæ, prominenter circa 9 -costatæ, pinnæ terminales confluentes: spadix solitaria simplex densa spica circa 8 cm . longa; pedunculus circa 24 cm . longus, omnino inclusus 4 vel 5 laxis vaginis; flores pistillati lutei, octomeri, valde compacti, plus vel minus immersi; calyx non profunda integra cupula; petala 3 , stricte includentia ovarium; styli 3 , magni, exserti, reflexi, sessiles.

Erect, 2 m . tall: leaves uniformly pinnate, blade $60-70 \mathrm{~cm}$. long, glabrous, firm in texture, more or less glossy; petiole about $30-35 \mathrm{~cm}$. long above narrow sheath, ridged and striate, $5^{-7} \mathrm{~mm}$. broad; pinnæ alternate or subopposite, about 9 pairs, equally spaced and not more than 3 or 4 cm . apart, terminal pair confluent, $2^{5-30} \mathrm{~cm}$. long, $3^{-6} \mathrm{~cm}$. broad, narrowlanceolate and not sigmoid, somewhat narrowed to base, acutely acuminate to caudate, prominently about 9 -ribbed, main ribs $4^{-7} \mathrm{~mm}$. apart, light colored and pronounced on under surface, nearly confluent at base: spadix a single simple very dense spike about 8 cm . long at anthesis, on a peduncle 24 cm . long and which is completely contained in about 4 loose sheaths of which the uppermost is projected $3-4 \mathrm{~cm}$. with an acuminate herbaceous end; pistillate flowers in 8 rows, bright yellow, so closely placed as to appear to be immersed in the racbis; calyx a shallow more or less undulate but not

126. Leaf, simple spadix, pistillate flowers of Chamrdorea Allenii. Details show the 3 -lobed ovary in the corolla-cup.
lobed cup in which loosely sits the 3 introrse petals inclosing the conic more or less 3 -lobed ovary on which the 3 spreading or reflexed prominent stigmas are sessile; staminate spadix and fruit not seen.

## North rim of El Valle de Anton, Province Coclé, Allen 1909.

$\dagger$ Chamædorea lucidifrons, spec. nov. Fig. 127.
Gracilis, 2.5 m . alta: lamina $40-50 \mathrm{~cm}$. et plus longa, lucida et glabra' rachis convexa in latere dorsali, carinata in latere superiore; pinnæ 30-35 cm . longæ, $6-9 \mathrm{~cm}$. latæ, lanceo-oblongæ et prominenter sigmoideæ, angustatæ ad longum acumen vel caudam, 7-15 conspicuis costis $4^{-10} \mathrm{~mm}$. inter se distantibus in medio et curvatis ad angustam basim: pistillata spadix simplicibus ramis, rachis brevis, circa 22 cm . longa et pæne 22 cm . lata; rachillæ $10-20 \mathrm{~cm}$. longæ, glabræ, divaricatæ vel arcuato-ascendentes: fructus brevi-oblongus, obtusus, $5^{-6} \mathrm{~mm}$. longus, $4^{-5} \mathrm{~mm}$. crassus, non profundis rugis cum siccus; cupula brevis, lobi patuli.

Slender, 2.5 m . tall: leaf-blade $40-50 \mathrm{~cm}$. and more long, glossy and glabrous, with several very broad strongly ribbed alternate pinnæ; rachis convex on the back, lightly ridged on upper face; pinnæ $30-35 \mathrm{~cm}$. long, $6-9 \mathrm{~cm}$. broad, lance-oblong and strongly sigmoid, tapering to narrow point or to a cauda, with $7^{-15}$ conspicuous costa standing $4^{-10} \mathrm{~mm}$. apart at the middle and prominently curved to the narrowed base, lucid particularly on the lower face: pistillate spadix once-branched from a short rachis, about 22 cm . long and nearly as broad, the glabrous rachillæ $10-20 \mathrm{~cm}$. long and divaricate or upwardly curved: fruit small, short-oblong, obtuse, $5^{-6} \mathrm{~mm}$. long, $4^{-5} \mathrm{~mm}$. thick, irregularly and shallowly wrinkled in drying; cupule small, the lobes spreading.

Vicinity of El Valle de Anton, Province Coclé, altitude about 600 m ., Allen 1814.
$\dagger$ Chamædorea latipinna, spec. nov. Fig. 128.
Tenuis, 1 m . alta, folia glabra et lucida: lamina $30-50 \mathrm{~cm}$. longa, pinnata, 2 lobi apicales latissimi et confluentes, aliæ pinnæ paucæ et alternæ; rachis gracillima, complanata, $2-3 \mathrm{~mm}$. lata, carinata supra; pinnæ 25-30 cm . longæ, io-I3 latæ, persigmoideæ, abrupte contractæ ad breve acumen, basis latissima, multis validis curvisque costis i cm . vel plus inter se distantes, venæ intermediæ minus distinctæ, omnes basi pinnæ curvæ: spadix staminata simplicibus ramis a plus vel minus continuente rachide, 25-30 cm . longa et lata, rachillæ $18-25 \mathrm{~cm}$. longæ et laxe floriferæ; flores staminati lato profunde lobato calyce; pistillata spadix aliquid minor quam staminata, circa 20 cm . longa et lata: fructus immaturus oblongus, contractus basi, obtusus, $10-12 \mathrm{~mm}$. longus.

Slender, I m. tall, with smooth glossy foliage: leaf-blades $30-50 \mathrm{~cm}$. long, pinnate, apical part with 2 very broad confluent lobes, other pinnæ alternate, few in number; rachis very thin and flattened, $2-3 \mathrm{~mm}$. broad, ridged on top; pinnæ thin, ${ }^{2} 5-30 \mathrm{~cm}$. long, $10-13 \mathrm{~cm}$. broad, strongly sigmoid, rather abruptly contracted to a short point, base very wide, conspicuous because of several or many curved strong ribs i cm. or more apart and less distinct ones between: spadices once-branched from a more

