

or less continuing central axis; peduncle 25 and more cm. long, its length inclosed in striate sheaths; staminate spadix 25-30 cm. long and nearly as broad, the glabrous rachillæ 18-25 cm. long and laxly flowered; staminate flowers with broad deeply lobed lightly imbricate calyx; pistillate spadix somewhat smaller, the fertile part about 20 cm. across in either direction: fruit (immature) oblong and contracted to base, obtuse at apex, 10-12 mm. long, green in color.

Vicinity of Chiriqui Lagoon, Province Bocas del Toro, *H. von Wedel* 2275 (Mo. Bot. Gard.).

† *Chamædorea Hageniorum*, spec. nov. Fig. 129.

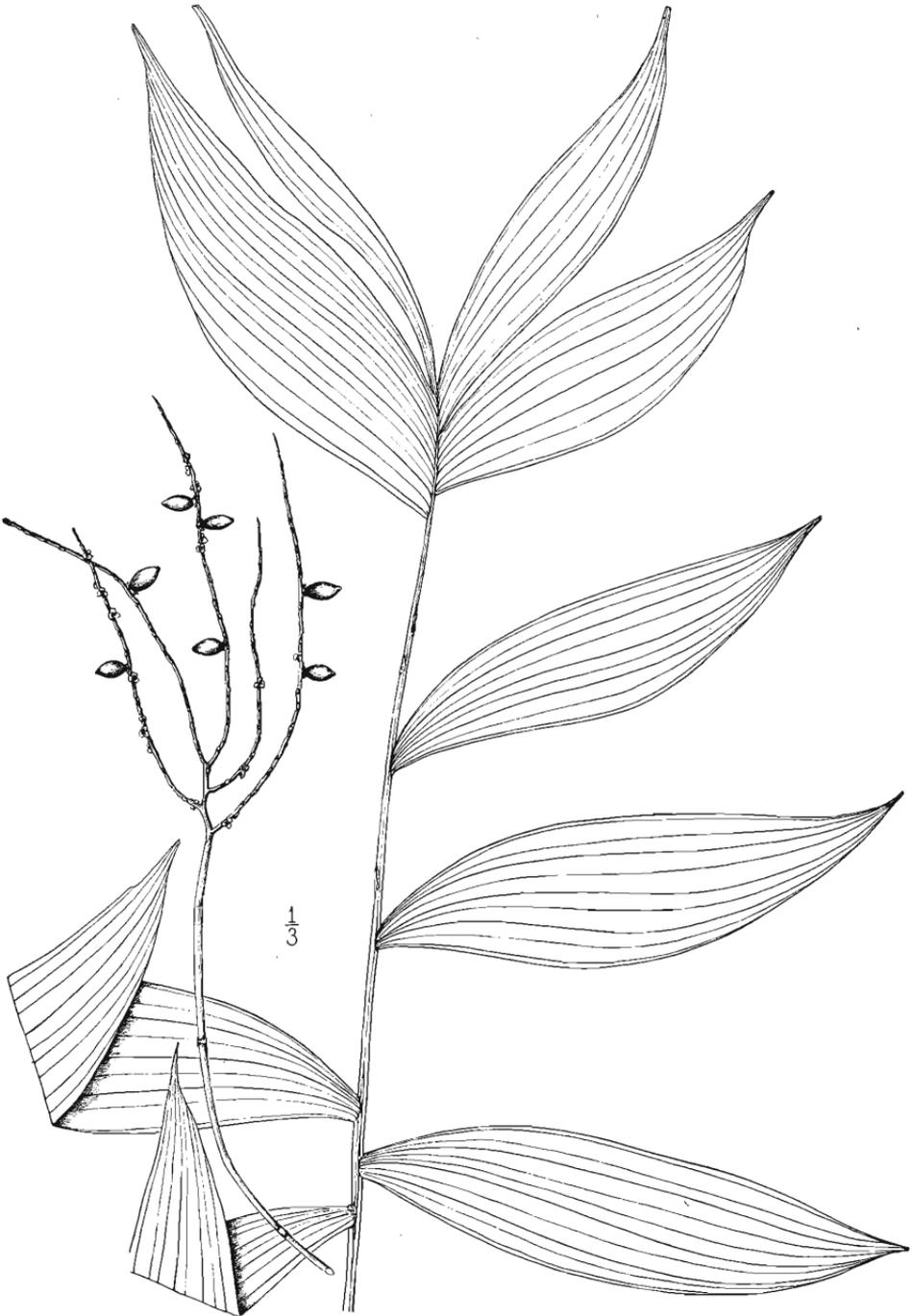
Parva, arboriformis, 1-1.5 m. alta, glabra, folia aliquid lucida: folia pinnata; lamina 35-40 cm. longa, 25-30 cm. lata; pinnæ alternæ, 5 vel 6 in utrisque lateribus, anguste oblongo-lanceolatae, longi-acuminatae vel alternæ, non sigmoideæ, 15-20 cm. longæ, 2-4 cm. latæ, 5 vel 7 pæne æqualibus nervis parallelis: spadix pistillata circa 3 brevium rachillarum ab apice gracilis pedunculi vaginati; sepala pistillati floris brevia, connata basi; petala multo majora, pæne vel admodum libera, imbricata, valde nervata, patula; pistillum oblongum, obtusum.

Tree-like, to 1 m. or a little more tall, glabrous, foliage more or less glossy: leaves regularly pinnate, the blade 35-40 cm. long and 25 or more cm. broad; pinnæ alternate, 5 or 6 on either side, narrowly oblong-lanceolate and gradually narrowed into slender tips, 15-20 cm. long, 2-3 cm. broad at middle or the terminal pair to 4 cm. broad, midrib not much stronger than the 2 or 3 parallel nerves on either side, all nerves converging somewhat toward base but the pinna not sigmoid; petiole 12-18 cm. long above the sheath, strongly ridged and angled as is the rachis: pistillate spadix small, of about 3 striate and angled erect glabrous rachillæ 7-8 cm. long from the top of a very slender peduncle that is inclosed tightly in about 3 sheaths of which only the uppermost has a foliaceous end; sepals of pistillate flower very short and connate at base; petals much larger, nearly or quite free, imbricate, strongly nerved, pointed, soon spreading and chaff-like; pistil after fecundation short-oblong, obtuse.

Cloud-forest at 6,500 feet on Cerro Horqueta, Boquete region of Chiriqui, Panama, *Christine and Wolfgang von Hagen* 2060 (type, Mo. Bot. Gard.). Readily distinguished by its narrowly long-pointed or almost caudate leaflets and prominent loose petals of the pistillate flower as well as by the short few branchlets of the inflorescence and lack of continuing rachis.

† *Chamædorea Wedeliana*, spec. nov. Fig. 130.

Gracillima, ad 3 m. alta: laminæ folii 40-50 cm. longæ, tenues, lætévirentes supra et infra, bilobatae apice et lobi imperfecte divisi; pinnæ alternæ, 3-9 cm. distantes inter se in rachide, lanceolatae vel lato-lanceolatae, sigmoideæ, 16-22 cm. longæ, 3-6 cm. latæ, aliquid angustatae ad basim, graciliter acuminatae, valde 4-5-costatae; petiolus 6 vel 7 cm. longus super vaginam, 3-4 mm. latus, compressus: florens spadix 5 ramis, simplex,



130. SMALL SPADIX, LEAF of *Chamædorea Wedeliana*. Blank space on the rachis is natural.

rachillæ 12-15 cm. longæ, laxe floriferæ, glabræ; pedunculus 30-40 cm. longus, gracilis, compressus: fructus ellipsoideus, 12-14 mm. longus, 6-7 mm. crassus, angustatus ad utrosque fines, non sarcosus; cupula parva, striata intra.

To 3 m. tall, very slender: leaf-blade 40-50 cm. long, thin, bright green both sides, pinnate, terminal part bilobed at apex and imperfectly 2-pinnatisect on either side; pinnæ alternate and spaced 3-9 cm. apart on the rachis, lanceolate or broad-lanceolate or lanceolate and sigmoid, 16-22 cm. long, 3-6 cm. broad at middle, slenderly acuminate, considerably narrowed to base, strongly 4-5-ribbed and with indistinct veins between; petiole very short, about 6 or 7 cm. long above the sheath, striate, 3-4 mm. broad; rachis somewhat flattened, about 2 mm. broad: spadix slender and small; peduncle 30-40 cm. long, compressed, 3-4 mm. broad, bearing 5 or 6 sheaths; fruiting part terminal or nearly so, the rachis only 2-3 cm. long; rachillæ 5, slender, 12-15 cm. long, loosely flowered: fruit ellipsoid, 12-14 mm. long, 6-7 mm. thick, tapering both ways, not fleshy and scarcely roughened in drying; cupule 3-lobed, not greatly enlarged, lobes spreading and striate inside, often remaining on the rachis.

A "terrestrial shrub," Water Valley, Province Bocas del Toro, *H. von Wedel* 719.

† *Chamædorea linearia*, spec. nov. Fig. 131.

Gracilis, 3 m. plus vel minus alta, culmus circa 15 cm. crassus, annulatus, internodi 2-3 cm. vel plus longi: folia longi-pinnata; lamina 30-45 cm. longa, 20 cm. vel plus lata, glabra; pinnæ 15-20 jugæ sed compacte alternæ, 25-30 cm. longæ, 2-3 cm. latæ, longi-lineares, non sigmoideæ, acuminatæ et aliquid falcata; costa media prominentia, venæ laterales pauçæ sed aliquid conspicuæ, venæ non aperte curvæ; petioli vagina 20 vel plus cm. longa, valde striata; rachis spadiceis staminatæ 12-15 cm. longa, rachillæ circa 12 laterales et patulæ vel pendulæ et 10-12 cm. vel plus longæ; vaginæ pedunculi circa 5, vagina terminalis bractifera; flores staminati compacti, 1 mm. alti, petala valvata.

Erect, slender, more or less 3 m. tall, culm about 1.5 cm. thick, internodes 2-3 and more cm. long, rings prominent: leaves long-pinnate, blade 30-45 cm. long and 20 cm. and more broad, glabrous; pinnæ long-linear, alternate but close together, 15-20 or more either side the rachis, 25-30 cm. long, 2-3 cm. broad, not sigmoid but acuminate apices somewhat falcate, midrib pronounced and few side veins also noticeable, veins not clearly curved, base narrow and with nearly straight veins; petiole sheath 20 or more cm. long, strongly striate: staminate spadix with rachis 12-15 cm. long and about a dozen lateral slender glabrous spreading or drooping rachillæ 10-12 cm. or more long; peduncle 20-25 cm. long, sheaths about 5 of which the terminal one is open and with a conspicuous bract; staminate flowers closely placed, about 1 mm. high just preceding anthesis and somewhat broader; calyx a shallow nearly entire cup, 3 petals valvate.

Forests around El Boquete, Chiriqui, 1,000-1,300 m., *H. Pittier* 2922 (U. S. Nat. Herb.).