

The species is sterile; and, if I have ventured to name and describe it as new, it is because of its many characteristic peculiarities. The sheath bears rudimentary spines in the shape of swollen conical knobs which are often blunt and sometimes provided with sharp points. The leaves are sessile and have many inequidistant, unarmed, very narrow, linear-lanceolate leaflets. The flagellum is opposite to the petiole and borne near the lower angle of the obliquely truncate leaf-sheath.

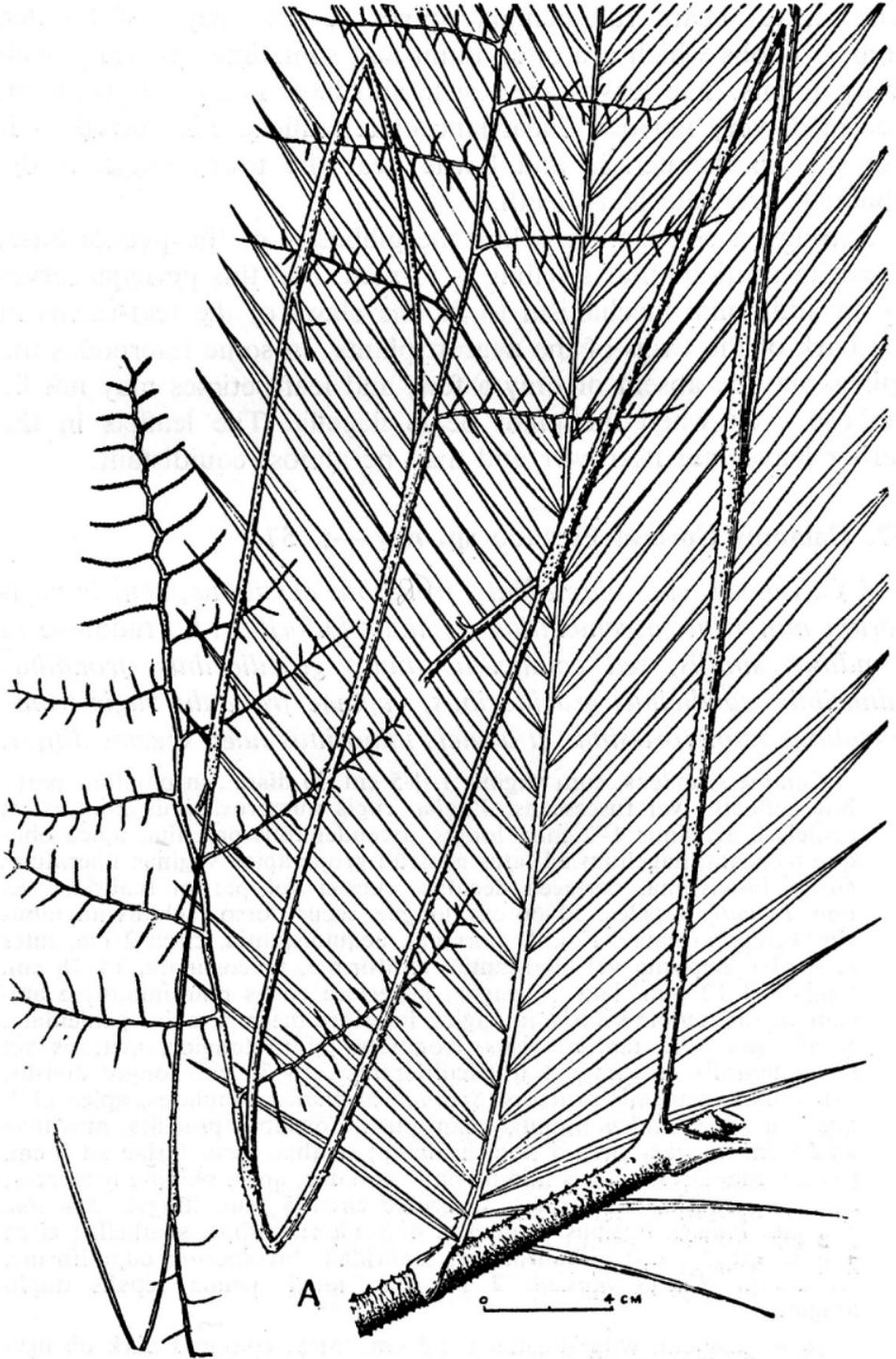
Through a contraction below the gibbosity of the petiole base, a sort of semi-annular swelling is formed, and this perhaps serves as an additional mechanism to fix the claws of the leaf-rachis in the bark of the twigs of the nearest plants. In some internodes the spines may be absent or only a few, and leaf-petioles may not be gibbose even when the plant bears flagella. The leaflets in the earlier leaves are narrower and may be almost equidistant.

57. Calamus Corneri Furtado sp. nov.—t. 57.

A C. rugoso, cui valde affinis, frondibus sessilibus, aculeis vaginarum minoribus ascendentibus, foliolis latioribus. C. raduloso in frondibus similis, sed caudicibus multo gracilioribus, frondibus minoribus, spadicebus gracilioribus, vaginae frondalis rugis transversalibus numerosissimis et aculeis minoribus haec species differt.

Caudex scandens, cum vaginis 1–1.5 cm. in diam., in omnibus partibus coffeatus vel fuscescens. *Vagina* rugis numerosissimis minutis, et aculeis brevissimis 1–2 mm. longis, ascendentibus praedita, apice oblique truncata; flagellum ad latus geniculi prope apice vaginae liberatum. *Ocrea* brevissima, coriacea decidua, rugosa vel partim scabrida, vel non. *Fronde*s sessiles, 50–60 cm. longae, secus dorso rachidis unguibus simplicibus armatae. *Foliola* porrecta, aequidistantia, circa 2 cm. inter se dissita, opposita vel alternantia, ensiformia, uncostulata, 15–18 cm. longa, 10–12 mm. lata, in pagina superiore costis marginibusque apicem versus remote setosis, in pagina inferiore inermia, apice penicillata. *Spadix masculus* tantum visus, frondibus multo longior, metralis vel sesquimetralis, in ramos 4–6 spiculiferentes, 15–30 cm. longos divisus, axi minutis aculeolis armatus. *Spathae primariae* tubulares, apice oblique truncatae, aculeis minutis etiam pustuliformibus praedita, maximae ad 25 cm. longae, circa 5 mm. in diam.; *spathae secundariae* ad 2 cm. longae, tubulares, aculeis minutissimis armatae, apice oblique truncatae; *spathae tertiariae* conformes, scabridae circa 5 mm. longae. *Spiculae* 1–2 cm. longae, floribus utrinsecus 4–6, alternantibus; *spathellae* circa 2 mm. longae, infundibuliformes, scabridae. *Involucrum* cupuliforme, scabridum. *Flores masculi* 2–2.5 mm. longi; petala sepalis duplo longiora.

Stem scandent, with sheaths 1–1.5 cm. thick, coloured dark on drying in all parts. *Leaf-sheaths* flagelliferous, transversely and minutely rugose, armed with 1–2 mm. long, ascendent spines. *Leaves* sessile, 50–60 cm. long, armed on the rachis with short, solitary claws. *Leaflets* porrect, equidistant, about 2 cm. apart, ensiform, largest 15–18 cm. long, 10–12 mm. broad. *Male spadix* flagelliform, about a metre



Tab. 57. *Calamus Corneri* (Corner 30,058—holotypus).

A, Caudicis fragmentum cum folio et spadice masculino.

long, divided into 4-6 branches, each 15-30 cm. long. *Spathes* primary tubular, armed with very small spines; secondary minutely aculeolate, about 2 cm. long; tertiary scabrid. *Spikelets* (male) 1-2 cm. long. *Female plant* not known.

MALAYA: Kemaman, Ulu Bendong in Kajang, alt. circa 170 m. (Corner 30,058).

This species is very closely allied to *C. rugosus* from which differs by the sessile leaves, smaller and ascendent spines on leaf-sheaths, and broader leaflets. The only other species of this group which has sessile leaves is *C. radulosus* which is a much larger species having much thicker stems, larger leaves, and thicker spadices; besides its leaf-sheaths are not transversally rugose as those of *C. Corneri*.

The collector's notes read as follows: Male Calamus; stem $\frac{1}{2}$ inch thick (including sheaths). Inflorescence $4\frac{1}{2}$ ft. long. Flagella 3-4 ft. long, slender. Rachis 20-24 inches long. Petiole 0. Sheaths green, with numerous small green spines separated by a faint, incomplete, transverse ridge. Rachis with a single row of small hooked, black-tipped spines and no terminal flagellum. Base of rachis yellowish on each side of mid line dorsally.

58. Calamus radulosus Becc. in Hook, f., Fl. Brit. Ind. VI (1892) 443; Ridl., Mat. Malayan Pen. II (1907) 198; Becc. in Ann. Roy. Bot. Gard. Calc. XI (1908) 174 t. 35; Ridley, Fl. Malay Pen. (1925) 57.—t. 58.

Stem scandent, 10-15 m. long, scandent, with sheaths 2.5-3 cm. in diam. *Leaf-sheaths* flagelliferous, gibbous above, obliquely truncate at apex, densely armed with 4-6 mm. long, tumescent-based, triangular, obliquely-inserted, distinctly ascendent spines. *Leaves* sessile, 1-1.5 m. long; rachis armed below with black-tipped, solitary claws which are pluriseriate in the lower portion, uniseriate in the upper. *Leaflets* numerous, equidistant, 2-3 cm. apart, papyraceous, green, glabrous ensiform, acuminate, bristly on the three costae and the margins beneath, often setose only on the mid-costa above; the mesial leaflets the largest, 35-45 cm. long, 25 mm. broad; the terminal two the smallest, shortly connate at the base. *Female spadix* very long, flagelliform, divided into a few 30 cm.-1 m. long branches, each bearing distichously 10-15 spikelets on each side; spikelets deflexed, 8-9 cm. long (largest), with 20-23 distichous flowers on each side. *Primary spathes* cylindrical, very long, aculeate, the upper ones often marcescent and decaying in the apical parts; secondary spathes tubular, slightly enlarged and split longitudinally above, obliquely truncate, scarious and lacerated at the mouth, apiculate, strongly scabrid and occasionally aculeate; spathelets short, bracteiform, strongly striate, very scabrid-papillose. *Involucrophore* shallow, subcupular; involucre cupular, scarious at margins; female flowers closely packed. *Fruit* when young, globose, with an explanate perianth; scales not channelled, yellowish-brown with a reddish line across the base of the tip. *Male spadix* similar to the female but ultra-decompond.

MALAYA: Perak, loc. incert. (Scortechini 468^b in Herb. Beccari); Gopeng (Kunstler 8,171).