

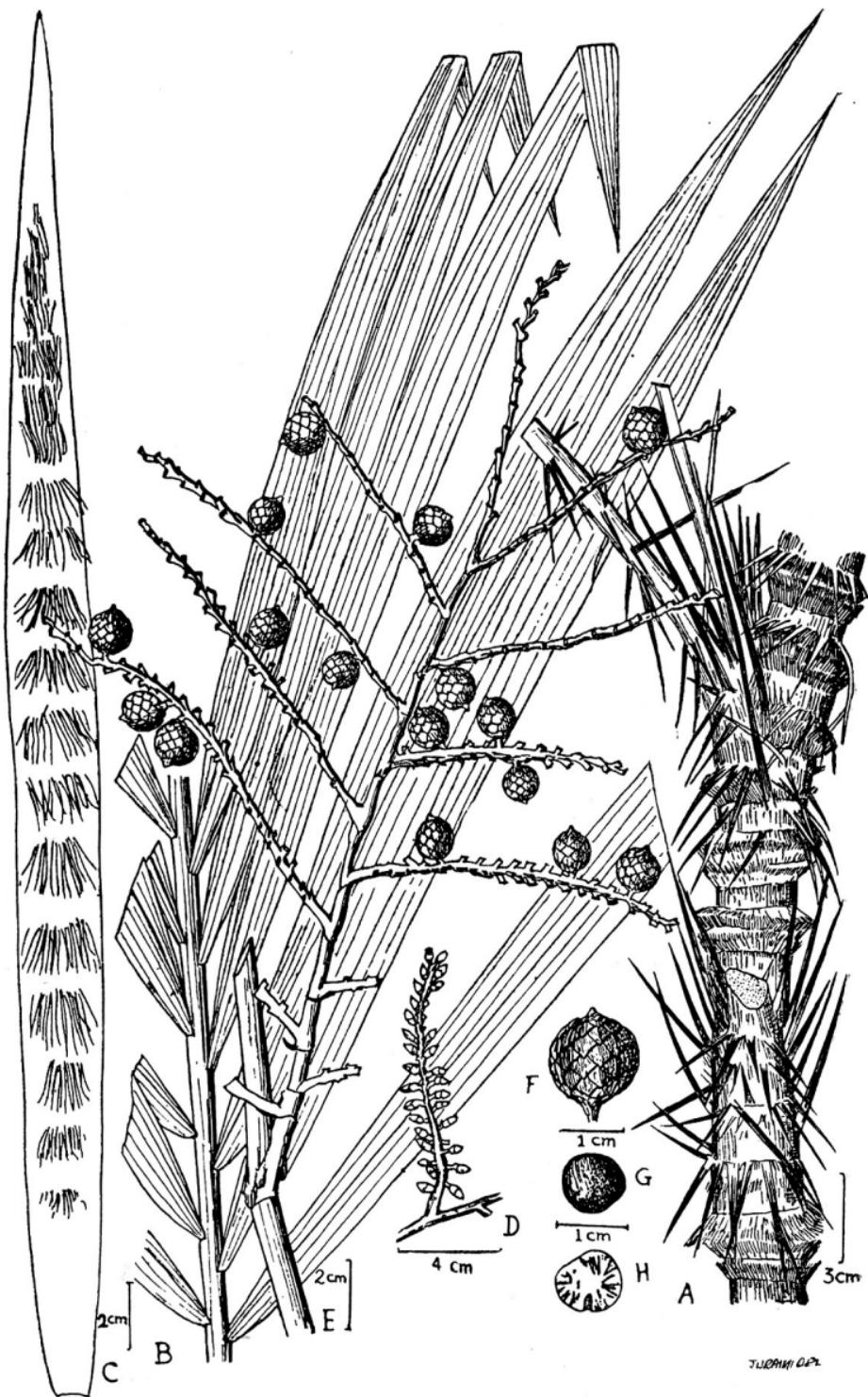
Daemonorops stipitatus Furtado sp. nov.

A D. verticillare cui affinissima, petiolis vaginisque frondium cum aculeis nigrescentibus armatis; foliolis secus 3–5 nervos in pagina inferiore saepe setosis; pedunculo inflorescentiae magis applanato et in marginibus magis acuto, inermi vel obscure armato; involucrophoris exsertis, conspicue pedicellatis.

*Caudex scandens, solitariis, circa 12 m. longus, cum vaginis 4–6 cm. in diam. *Vaginae* frondium spinis basi in annulos membranaceos reversos unitis, 4–6 cm. longis applanatis, nigrescentibus, vel interdum stramineis, margine sinuatis vel non, inter quas spinis minoribus, criniformibus, nigris, politis, pluribus interpositis, armatae; infra annum singulum reversum duo annuli similes sed porrecti cum spinis majoribus perpaucis vel carentibus, spiculis criniformibus pluribus siti; infra petiolum geniculatae, apice spinis ad 15 cm. usque longis nigrescentibus dense armatae. *Frondes* magnae, sine cirro 1 m. longo, 2–3 m. longae petiolus 30–45 cm. longus, biconvexus, spinis in series obliquas circum aggregatis, basi unitis, valde inaequalibus, majoribus secus margines et in dorso basali sitis, dense armatus; rachis basin versus, sicut apex petioli spinis brevibus, valde approximatis, interdum pectinatis vel in verrucas reductis, in altera parte unguibus validis apice nigrescentibus, digitatis subtus tantum armata. *Foliola* numerosa, equidistantia infra medium latissima, apicem versus sensim angustata, penicillata, 30–45 cm. longa, 15–20 mm. lata, superne glabra vel in costa media apicem versus tantum parce setosa; inferne secus costam medianam et secus 2–4 costas subprimarias conspicue setosa, marginibus setulosa. *Spadix femineus* prope petioli basin liber, 85–150 cm. longus, in 8–10 ramos primarios spiculiferentes divisus; pedunculus 10–25 cm. longus, bifacialis, antice valde applanatus, postice convexus, inermis vel secus margines obscure armatus; spatha basalis vetusta, delapsa, tantum visa, circa 45 cm. longa, spiculis criniformibus, in series horizontalibus aggregatis, basi unitis, discoloratis, praedita; alterae spathae primariae non visae; rami primarii 10–30 cm. longi, 3–6 spiculis, alternatis, bifariis utrinsecus, praediti; spathae secundariae basi tubulosae, in apicem triangularem exeuntes; spiculae 8–12 cm. longae, primum porrectae, dein in fructu fere patentes; spathellae deciduo-furfuraceae, infundibuliformes, apice in ligulam triangularem productae. *Involucrophorum* in spathella non immersum, conspicue pedicellatum, porrectum vel horizontale, claviforme, apice obconicum, oblique truncatum; involucrum in uno latere valde exsertum, in altero latere immersum, apice cupulare, truncatum; areola concavo sublunata. *Perianthium fructiferum* explanatum. *Fructus* globosus, circa 12 mm. in diam., apice umbonatus; squamis per series 15 verticales dispositis, roseo-bruneo marmoratis, secus margines albido erosionis. *Semen* fere globosum, in latere raphali minus convexus, 9–10 mm. in diam., profunde ruminatum; embryo basalis. *Spadix masculus* ignotus.*

MALAYA: Kemaman, Ulu Bendong, alt. 150 m. (Corner 30,060, holotypus); Bukit Kajang (Corner 30,465). Kelantan, Sungai Chalil (Henderson 29,519).

This species is a very close ally of *D. verticillaris* from which it is readily distinguished by its pedicelliform involucrophores, usually blackish thorns on the leaf-sheaths and



Daemonorops stipitatus (A-B and E-H: Corner 30,060 and C and D: Henderson 29,549).

A, Caudicis fragmentum. B, Frondis fragmentum medianum. C, Spatha externalis. D, Spicula florifera. E, Spica fructifera. F, Fructus. G, Semen. H, Semen verticaliter discissum.

petiole bases and the 3–5 nerves being usually setose in the lower surface of the leaves. In *Corner* 30,060 there is an abnormal female spadix which is reduced very much and its basal primary spathes are still on the axis though the spadix bears young fruits; all these spathes are moreover unarmed. The scales of very young fruits are nearly straw-coloured with broad dark-yellowish-brown intramarginal lines and whitish, erose margins. The scales of the fully mature fruits appear reddish-brown, but under a lens, colours of rose and brown seem to be splashed, sometimes brown in prominence, sometimes the other.

Daemonorops verticillaris (Griff.) Mart., Hist. Nat. Palm. III, 2nd. ed. III (1850) 206 and 329 pl. 175 f. III, pl. ZXII f. i & pl. ZXXII f. vi & vii; Becc. in Hook. f., Fl. Brit. Ind. VI (1893) 470; Ridl., Mat. Fl. Mal. Pen. II (1907) 186 p.p.; Becc. in Ann. Roy. Bot. Gard. Calc. XII (1911) 166 tt. 68 & 69; Ridl., Fl. Mal. Pen. V (1925) 45 p.p.; Furtado in Gard. Bull. Straits Settl. VIII (1935) 363.

D. periacanthus sensu Ridl., Mat. cit. II (1907) 183 p.p.

D. setigerus Ridl., Fl. cit. V (1925) 45 p.p.

Calamus verticillaris Griff. in Calc. Journ. Nat. Hist. V (1845) 63 et Palms Brit. Ind. (1850) 73 pl. 200 A, B & C.

Stem scandent, solitary (?), 10–15 m. long, 3–5 cm. in diam. Leaf-sheaths armed with usually complete spiniferous, horizontal, reflexed or porrect collars formed by the united bases of large, 4–6 cm. long or shorter, flat, light-coloured sinuous or not, black-tipped spines intermingled between the spaces with minute, black, rigid, glossy, criniform spiculae; these collars arranged in pairs, upper one deflexed downward and the lower pointing upwards to form an annular hollow and harbouring gallery; the lower collar often shorter than the upper one; between these there occurs another collar with patent or slightly porrect spines; the mouth of the sheath obliquely truncate, armed with several, very long, up to 10 cm. long or slightly longer erect, flat light-coloured, black-tipped spines; ocrea indistinct. Leaves large, 1.50–2.50 m. long excluding about 1 m. long, strongly clawed, cirrus; petiole 25–60 cm. long, nearly biconvex, armed densely all round, at short intervals with more or less complete rings of spines; these usually larger in the margins and in the lower surface towards the base, sometimes minute, pectinate in the upper surface; rachis in its basal portion armed on both surfaces with more or less interrupted series of small, pectinate, sometimes tuberculiform prickles, but in higher portions armed only in the lower surface with strong, black-tipped digitate claws. Leaflets numerous, equidistant, 3–4 cm. apart subconcolorous, narrowly lanceolate, broadest a little below the middle, gradually narrowed into an acuminate, subulate bristly tip, the largest 30–45 cm. long, 12–23 mm. broad; subtricostate; the midcosta above sharp, sparsely