

16. *Korthalsia jala* *Dransfield* sp. nov. palmijuncus robustus quoad inflorescentiam et folia *K. feroci* Becc. affinis sed ocrea mira non arcte vaginanti sed in rete magno infundibuliformi expanso differt. Typus: Borneo, Sabah, Ranau, Poring, *Dransfield et al.* JD 5574 (holotypus K; isotypi L, SAN, SAR).

Robust clustering rattan with stems ultimately to about 60 m, suckering basally and branching aerially. Stem without sheaths to 4 cm diam., with sheaths to about 6 cm, usually less; internodes about 20 cm. Sheath \pm unarmed in the lower c 10 cm, very densely covered in floccose pinkish-brown indumentum; distal part of sheath armed with brittle flat pale-brown spines to 20×2 mm, and scattered caducous chocolate-coloured scales. Ocrea very conspicuous and large, net-like, shaped like a funnel, enclosing the stem, to 30 cm long, rarely even larger, and with a mouth c. 15 cm diam., composed of interwoven diagonal fibres on expansion forming a fine open network with lacunae c. 3 mm wide; central leaf opposed area sometimes unexpanded; lower 10–12 cm of ocrea densely armed with brittle flat pale brown spines 1–6 cm long; caducous chocolate-coloured scales abundant on ocrea epidermis before expansion. Leaf excluding the sheath to 2.75 m long (rarely more); petiole to c 40×1.3 cm, semicircular in TS, armed with close horizontal spines to 1 cm long, near the base, and very sparsely armed distally; pinkish-brown indumentum scattered, chocolate-coloured scales also present; cirrus to 1 m armed with groups of 3–5 reflexed grapnel spines to 4 mm long and few scattered solitary reflexed spines, and abundant reddish-brown scurfy indumentum; spine groups c 3 cm distant in proximal region, decreasing to 1–2 cm distant distally; rachis angled adaxially, armed with distant groups of reflexed spines abaxially, and covered with scurfy pale brown indumentum and chocolate-coloured scales throughout. Leaflets broad-rhomboid, about 7 on each side of the rachis; ansa rather short, to 6 mm, sometimes longer in exposed leaves; proximal leaflets to 21×11 cm; mid leaf leaflets to 33×19 cm; distal leaflets slightly smaller; upper margins strongly and unevenly praemorse with teeth to 6 mm or more; main veins to 15 in number radiating from ansa; lamina bright green (when fresh) on adaxial surface, chalky white and with reddish-brown tomentum scattered along veins, especially near the base, on the abaxial surface. Upper leaves subtending inflorescences very much smaller. Inflorescences produced simultaneously in the axils of the uppermost few leaves; inflorescences to 75 cm long, rather lax; bracts on the inflorescence axis tubular, tightly sheathing to 10×1.2 cm very sparsely armed with short triangular spines to 2 mm long, and abundant caducous black scales when young; bract limbs triangular rarely exceeding 2 cm long; main axis subtending about 9 or more first-order branches (partial inflorescences) each with up to 5 rachillae; rachillae somewhat exerted from the subtending bract, 8–11 \times 0.6 cm, conspicuously dark brown indumentose; rachilla bracts almost entirely obscured by indumentum, forming pits c 1×2.5 mm. Flower to 4.5×2 mm; calyx with a short tube to 1 mm, and 3 triangular to somewhat rounded lobes to 1×0.75 mm; corolla with 3 lobes to 3×1.5 mm; stamens 6, poorly preserved in available material; ovary rounded c 1.5 mm diam. with broad triangular stigmas. Ripe fruit not known. (Fig. 1).

DISTRIBUTION. Borneo; widespread in Sabah; known from one collection



FIG. 1. *Korthalsia jala*. **A** stem with sheaths and base of petiole, and showing the expanded ocrea $\times \frac{3}{8}$; **B** tip of leaf with cirrus $\times \frac{1}{3}$; **C** reduced leaf subtending inflorescence $\times \frac{1}{3}$; **D** stem with base of one inflorescence $\times \frac{1}{3}$; **E** ultimate part of stem showing highly reduced leaf and inflorescence $\times \frac{1}{3}$; **F** portion of rachilla with immature fruit $\times 1\frac{1}{2}$. **A**, **B** from Dransfield JD 4652, **C-E** from H. G. Keith 1607, **F** from Dransfield JD 5809. Drawn by Ann Davies.

from 1st/2nd Division boundary in Sarawak viz: *Dransfield* JD 4652 (K, SAR); not known from Kalimantan.

Though it is common locally in Sabah, this seems to be a rare rattan in Borneo generally; there is little peculiar about the nature of its habitat—lowland Dipterocarp forest. In Sabah, *K. jala* appears to be confined to the northern and eastern area of the State, penetrating as far south as Keningau along the east of the Crocker Range but apparently absent from the west of the Range south of Papar where *K. ferox* seems to replace it. Juvenile specimens can occasionally be extremely robust, bearing massive ocreas e.g. *Dransfield* JD 5662 from Loro Forest Reserve, Kudat (K, L, SAN).

This species seems to be most closely related to *K. ferox* but is immediately distinguishable by the possession of the enormous net-like ocrea (which is unique in the genus). I have named the species 'jala', after the Malay name for a casting net. The significance of the net-like ocrea is not understood, though it is possible that the loose net-covering of the stem and its apex may be difficult to penetrate by both large and small herbivores.

17. *Korthalsia rostrata* Bl. in Rumphia 2: 168 (1843); Mart., Hist. Nat. Palm., 3 (2nd Edit.): 211 (1845); Miq., Fl. Ind. Bat. 3: 75 (1855) & De Palm, Arch. Ind.: 26 (1868); Walpers in Ann. Bot. Syst. 3: 492 (1852–53); Becc. in Malesia 2: 76 (1884); Merr., Bibl. Enum. Bornean Pl.: 72 (1921); Dransfield in Kew Bull., 34: 29 (1979). Type: Borneo, Sg. Dusun Müller s.n. (holotype L).

Ceratolobus rostratus (Bl.) Becc. in Ann. Roy. Bot. Gard. Calcutta 12(2): 11 (1918) (in part).

Korthalsia scaphigera Griff. ex Mart., Hist. Nat. Palm. 3 (2nd Edit.): 211 (1845); Miq., Fl. Ind. Bat. 3: 77 (1855) and De Palm. Arch. Ind. 26 (1868); Hassk., Cat. Hort. Bogor 73 (1866); Becc. in Malesia 2: 67 (1884) and in Hook. f., Fl. Br. Ind. 6: 475 (1893); Ridley, Mat. Fl. Malay Pen. 2: 216 (1907); Becc. in Ann. Roy. Bot. Gard. Calcutta 12(2): 112 (1918); Merr., Bibl. Enum. Bornean Pl.: 72 (1921); Ridley, Fl. Malay Pen. 5: 68 (1925); Furtado in Gard. Bull. Singapore 13: 319 (1951); Dransfield, Man. Rattans Mal. Pen.: 47 (1979). Type: Griffith s.n. Malacca (holotype BR; isotype K), **synon. nov.**

Calamosagus scaphiger Griff., Palms Br. India, t 184–A (1850)

?*C. wallichiaefolius* sensu Mart. non Griff. Hist. Nat. Palm. 3 (2nd Edit.): 211 (1845).

K. lobbiana H. Wendl. in Bot. Zeit. 17: 174 (1859). Type: Sarawak, *Lobb* 106 (holotype K), **synon. nov.**

?*K. machadonis* Ridley, Mat. Fl. Malay Pen. 2: 216 (1907); Furtado in Gard. Bull., Singapore 13: 303 (1951). Type: Malay Peninsula, Perak, Kamuning, *Machado* s.n. (not found—see below).

DISTRIBUTION: widespread in SE Asia; S Thailand, Malaya, Sumatra and Borneo.

HABITAT: lowland Dipterocarp forest to about 800 m.

This widespread species is quite variable in the size of its stems and the number and size of the rachillae in the inflorescence. Although variable, it is nevertheless very distinctive in its slender stems and small swollen, usually