

Calamus elopurensis *J. Dransf.* sp. nov. a ceteris taxis gregis *C. javensi* affinis vaginis foliorum cinereo-tomentosis sparsissime armatis, ocrea magna, petiolo valde evoluto, 4–6 foliolis amplis versus apicem rachidis aggregatis distinguibilis. Typus: Borneo, Sabah, *Kadir* A2651 (holotypus K; isotypi SAN, SING).

Clustering slender rattan climbing to c. 5 m only; stem without sheaths to 6 mm, with sheaths to 10 mm; internodes to 22 cm. Sheaths dull green, longitudinally striate, covered with grey tomentum, and armed with very few spines to 8 mm, or unarmed; knee conspicuous, rounded, \pm glabrous; ocrea conspicuous, developed as a triangular limb to 7 cm on the side of the stem away from the petiole, usually grey tomentose and with a fringed margin. Flagellum to 1 m. Leaf ecirrate to 60 cm, including petiole; petiole to 20 cm, sometimes much less, but always conspicuous, c. 4 mm wide, usually densely covered with grey floccose indumentum and armed with distant grapnel groups of spines; leaflets dark green, usually 2 pairs only or 2 pairs and one single leaflet or 3 pairs; terminal leaflet pair joined for c. $\frac{1}{3}$ their length, forming a terminal flabellum to 35×10 cm; lateral pairs with leaflets to 35×5 cm, sometimes in impoverished individuals much less; laminae concolorous unarmed, glabrous except for caducous hairs on the main veins near the base; transverse veinlets conspicuous; young leaves tinged pink. Staminate inflorescence to 1.5 cm with up to 8 partial inflorescences, the first borne c. 80 cm above the base; bracts on the peduncle with expanded lanceolate limb to 16×1 cm, bearing scattered reflexed spines; partial inflorescence with an axis to 9 cm, the first few branches branching further, the others unbranched; bracts on axis of partial inflorescence tubular in proximal 5 mm, with an expanded triangular limb to 5 mm, with scattered grey tomentum and a fimbriate margin; rachillae to 12×0.2 cm, deep cherry red when fresh, bearing close distichous bracts to 1 mm, and bracteoles to 1 mm. Staminate flower to 3.5×1 mm; calyx tubular in lower 1 mm, with 3 triangular lobes to 1×0.7 mm, with conspicuous thickened margins; corolla tubular at the very base, with 3 petals to 3.5×1 mm; stamens 6, with anthers to 1.5×0.2 mm. Pistillate inflorescence similar to staminate but with fewer partial inflorescences; rachilla to 5×0.3 cm, with congested bracts; areole of pistillate flower to c. 2.5 mm. Pistillate flowers and fruit not known. Fig 2.

SABAH. Sandakan, Elopura, Sepilok F. R., *Kadir* A2651 (holotype K; isotypes SAN, SING); Segaliud-Lokan F. R., *Dransfield et al.* JD5774 (K, SAN); Lower Kinabatangan, Subak Estate, *Dransfield et al.* JD5768 (K, SAN, SAR); Beluran, Ulu Tungud F. R., *Dransfield et al.* JD5805 (K, KEP, SAN, SAR); Belotan, *Castro* 3200 (K, SAN); Ulu Dusun, *Dransfield et al.* JD5767 (K, L, SAN, SAR).

Specimens of *Kadir* 2651 in SING had been labelled *Calamus elopurensis* nov. sp. by Furtado, but the name has never been published.

Calamus amplijugus *J. Dransf.* sp. nov. intra gregem *C. javensi* affinem foliolis amplissimis bullatis regulariter dispositis, rachillis longis laxisque distincta. Typus: Borneo, Sabah, *Dransfield* JD5775 (holotypus K; isotypi L, SAN, SAR).

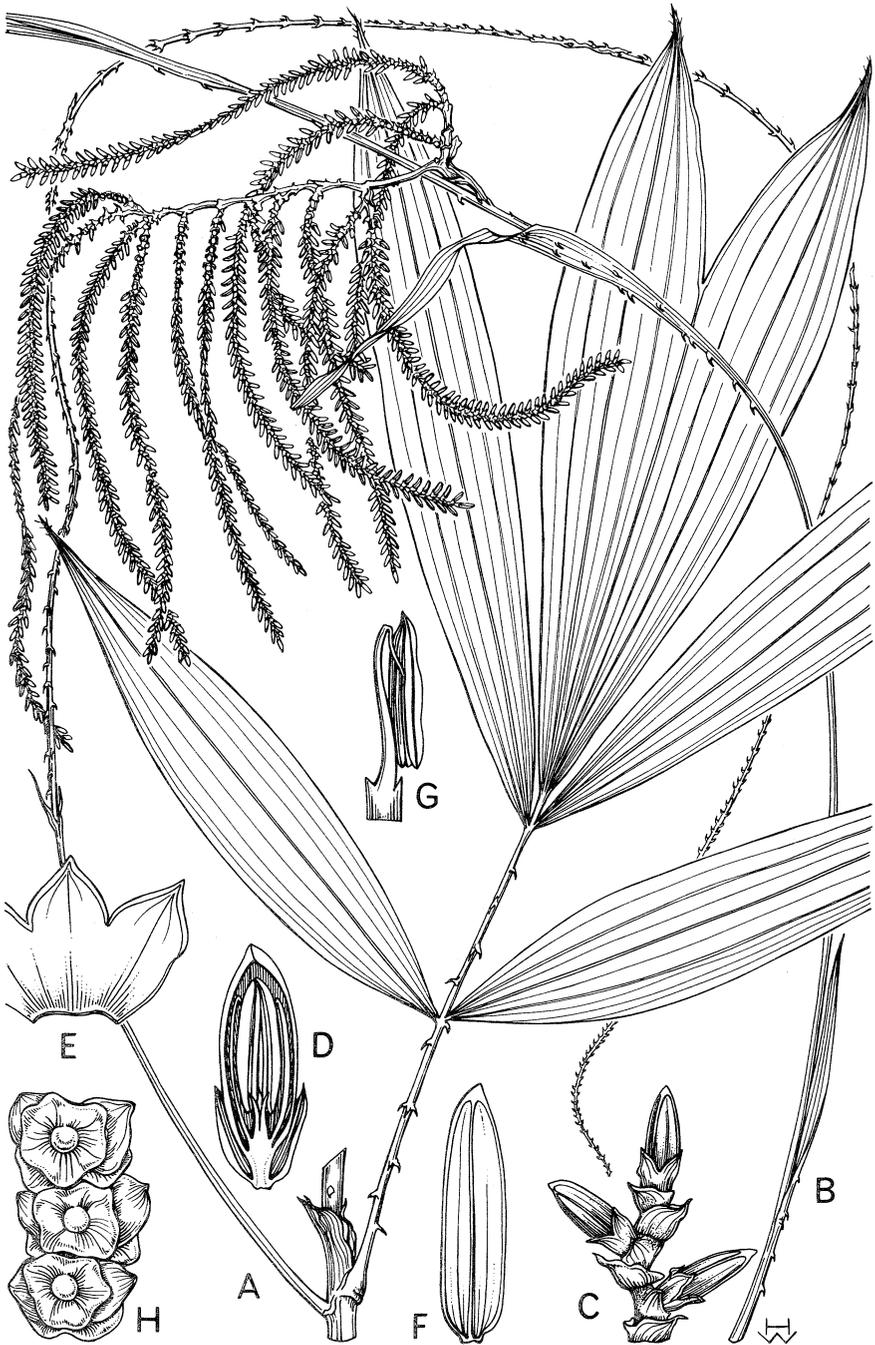


FIG. 2. *Calamus elopurensis*. **A** part of sheathed stem with one leaf, ocrea and flagellum $\times \frac{1}{2}$; **B** part of staminate inflorescence $\times \frac{1}{2}$; **C** tip of staminate rachilla with flower buds $\times 4$; **D** vertical section of staminate flower $\times 7\frac{1}{2}$; **E** calyx of staminate flower $\times 10$; **F** petal of staminate flower $\times 10$; **G** stamen $\times 10$; **H** portion of pistillate rachilla $\times 7\frac{1}{2}$. **A**, **H** from Dransfield JD5768, **B**-**G** from Kadir A2651. Drawn by Heather Wood.