

Four New Taxa of Philippine Rattans (Palmae: Calamoideae)

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Abstract

Calamus aidae E. Fern., *C. balerensis* E. Fern., *C. ornatus* Blume var. *pulverulentus* E. Fern. and *Daemonorops polita* E. Fern. are described as new taxa of rattans from the Philippines.

Recent intensive collection of herbarium material of rattans in the Philippines has resulted in the discovery of undescribed taxa. There is need to provide names for these rattans as most of them are already being commercially exploited and their habitats are threatened. This paper is published to validate names for four new taxa.

Calamus aidae E. Fern., *sp. nov.*

Fig. 1

Species distinctissima, inter species Philippinenses flagello cirroque carentibus, foliis infra dense albide-farinosus setosisque, ocrea papyracea mox fatiscenti distinguibilis. *Typus*: Samar, Basey, Guirang, Rawis, *Baja-Lapis 123* (holotypus K; isotypus LBC).

Robust, solitary, pleoanthic, dioecious rattan. Stems climbing to 15 m; stem without sheaths 2.5–4.0 cm dia., with sheaths to 6 cm dia.; internodes to 18 cm long. Leafsheaths densely covered with creamish-green, mealy indumentum and armed with brown, slender, narrowly laminar and acicular spines to 6.5 cm long, arranged closely in partial whorls, those around leafsheath mouth longer, erect; the spines very brittle and readily breaking off; knee present although hardly developed, armed as the sheath but less densely so; ocrea to 40 cm long, 3 cm wide near the base, papery, creamish or dirty white in colour, the proximal portion sparsely covered with brownish indumentum and armed along the edges with acicular spines to 6 cm long, ocrea prominent in newly expanded leaves, but quickly tattering and disintegrating. Leaf sub-cirrate, to 3 m long, including petiole; cirrus none; petiole to 30 cm long, semi-circular in transverse section, flattened to slightly concave on adaxial side, convex on abaxial side, to 3.5 cm wide, 1.5 cm thick near base, armed with scattered, slender, laminar spines to 5 cm long on adaxial surface and along edges, the spines decreasing in size distally, abaxial surface generally smooth, except near the edges; petiole and rachis covered with brownish, mealy indumentum; rachis at mid-portion nearly triangular in section, bifacial above and armed along top edge with short rigid spines to 4 mm long, arranged 15–25 mm apart, flattened or convex below and armed with rigid and robust 3-hooked grapnel spines to 1.5 cm long, arranged 6–8 cm apart, becoming 2-hooked then single-hooked grapnel spines towards tip. Leaflets to 130 on each side of the rachis, coriaceous, stiff, regularly arranged to 3 cm apart, linear-lanceolate; adaxial surface drying pale or light greenish-yellow, glabrous, except for very short bristles to 2 mm long and spaced to 7 mm apart along margins, transverse veinlets prominent; abaxial surface covered with chalky-white indumentum and dense bristles along all costae, those along the mid-costa to 4 mm long, all others generally shorter;

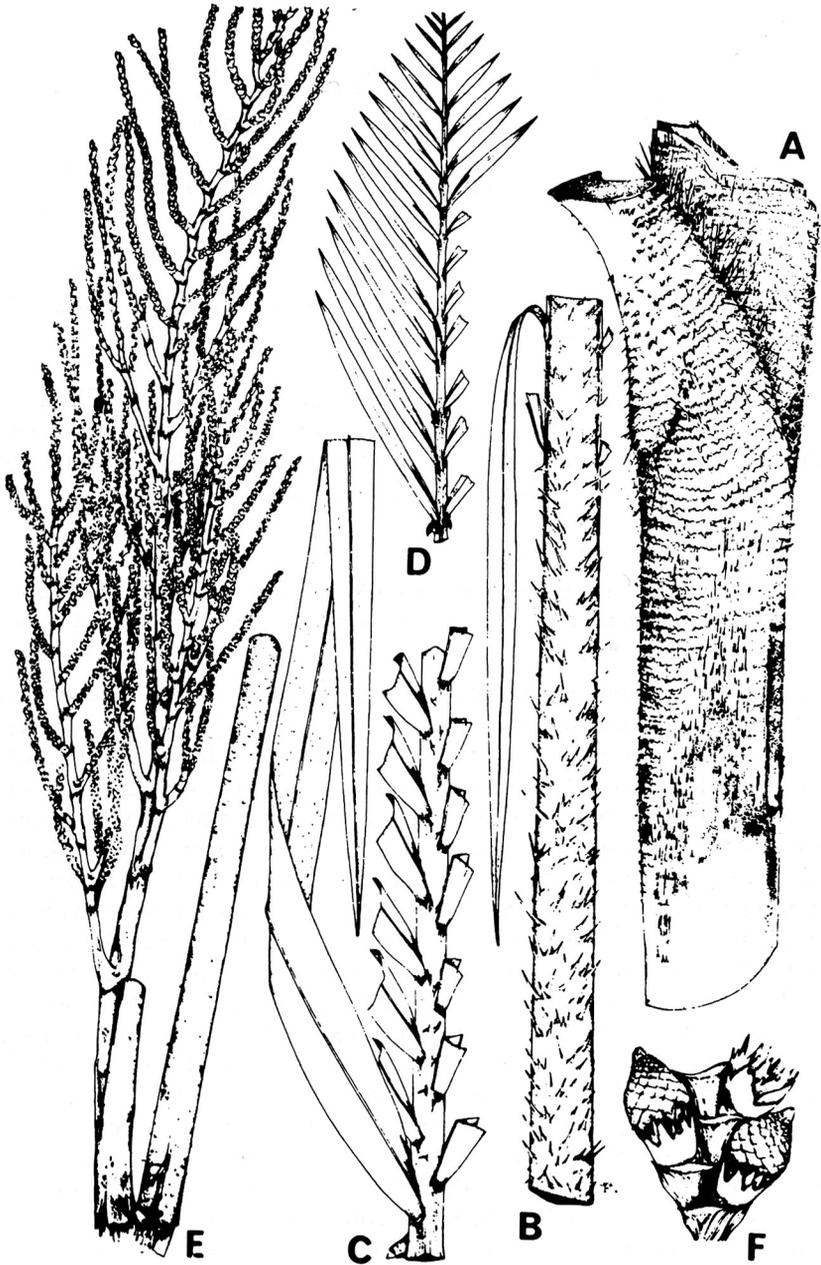


Fig. 1. *Calamus aidae* E. Fern. — A. leafsheath, $\times 2/5$; B. petiole, $\times 2/5$; C. mid-portion of leaf, $\times 2/5$; D. leaf apex, $\times 2/5$; E. portion of pistillate inflorescence, $\times 2/5$; F. portion of rachilla with young fruits, $\times 2 \frac{1}{2}$. A, E, F from *Baja-Lapis* 123; B, C, D from *Fernando* 414.

basal leaflets to 25×1.0 cm; mid-lamina leaflets to 49×2.2 cm, apical leaflets to 5.5×0.3 cm, smaller, rudimentary leaflets often present. Staminate inflorescence not known. Pistillate inflorescence generally ascending, to 2 m long, with up to 5 partial inflorescences spaced to 50 cm apart, decreasing in size distally; prophyll tubular, to 20×1.8 cm, elliptic in section, 2-keeled, armed with scattered laminar bulbous-based spines to 1.5 cm long, mouth of prophyll surrounded with bristles to 5 cm long; other bracts similar but decreasing in size distally and becoming less densely armed to glabrous; peduncle c. 12×1 cm to the prophyll scar; partial inflorescence to 35 cm long, bearing to 20 tubular bracts, each to 13×8 mm, the upper half often tattering, unarmed and covered with creamish-green indumentum, the proximal up to 7th bract bearing second-order branches, the succeeding and ultimate bracts bearing rachillae; second-order branches to 19 cm long, with up to 11 rachillae, each to $40\text{--}90 \times 3$ mm, generally erect, borne above subtending bract; rachilla bearing distichously arranged bracts, each subtending a flower pair, alveolus of sterile staminate flower c. 1 mm dia., that of pistillate flower c. 1.5 mm dia. Sterile staminate and pistillate flowers not known. Fruit (immature) globose, c. 7×6 mm, beaked; pericarp with scales arranged to 13 vertical rows, pale yellowish-green and with prominent mid-scale groove. Seed not known. Seedling leaf (eophyll) pinnate, with 5–7 pairs of leaflets, each to 35×2 mm, with chalky white indumentum and short bristles along margins and midcosta on undersurface.

Distribution and Habitat: Luzon (Sorsogon Prov.), Samar, Biliran, Dinagat, and Mindanao (Surigao Prov. and Agusan del Sur Prov.); in dipterocarp forest at c. 50–500 m alt. Endemic.

Vernacular names: Ulisi (Biliran), Ulasi (Samar), Inhian (Agusan del Sur).

Specimens examined: Luzon: Sorsogon Prov., Irosin, Mt Bulusan, *Elmer 16871* (BM, K); Samar: Basey, Guirang, Rawis, *Baja-Lapis 123* (holotype K; isotype LBC); Biliran: Naval, Mohon, *Fernando 679* (LBC); Dinagat: locality not known, *Ramos & Pascasio B.S. 35250* (in part, as to portion of inflorescence only) (K); Mindanao: Surigao Prov., locality not known, *Ponce F.B. 25070* (BM, K); Surigao del Sur Prov., Bislig, *Fernando 727* (LBC), Agusan del Sur Prov., Trento, *Fernando 414* (K, LBC).

Calamus aidae is an unusual and very distinctive Philippine rattan in the curious absence of either a cirrus or a flagellum, in the dense short bristles and chalky-white indumentum on the undersurface of leaflets, and in the long, papery ocrea which quickly disintegrates. Earlier collections of this species have been referred to either *C. discolor* Mart. or *C. bicolor* Becc. owing to its similarly discoloured leaflets, *C. discolor*, however, has distinctly ecirrate leaves and the leafsheath bears a flagellum; *C. bicolor*, on the other hand, has leaves with a prominent cirrus. Features of the inflorescence suggest that *C. aidae* may be related to *C. inops* Becc. ex Heyne of Sulawesi (Dransfield, pers. comm.).

This species is named for Mrs Aida Baja Lapis who collected the type specimen.

Calamus balerensis E. Fern., *sp. nov.*

Fig. 2

C. usitato Blco. affinis sed foliis subsessilibus multo brevioribus, foliolis non nisi marginibus setosis, pagina adaxiali in sicco nitida, semine brunneo laeve differt. *Typus:* Luzon, Aurora Prov., Baler, *Fernando 478* (holotypus LBC; isotypus K).

Very slender, clustering, pleoanthic, dioecious rattan. Stems to 3 m long, without sheaths 3–4 mm dia., with sheaths to 6 mm dia., internodes to 8 cm long. Leafsheaths