## Retispatha, a new Bornean rattan genus (Palmae: Lepidocaryoideae)

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Summary. Retispatha, a new, monotypic, Bornean climbing palm genus is described and illustrated and its relationships with other rattans discussed.

There are two types of climbing organ present in Asiatic climbing palms (rattans); one, the cirrus, is an extension of the leaf rachis armed with grouped reflexed spines while the other, the flagellum, is a sterile inflorescence, also armed with reflexed spines. The two types of climbing organ are usually mutually exclusive. It is these barbed whips which make rattans such unpleasant plants to collect. Occasionally, species without climbing organs are encountered in the large rattan genera Calamus and Daemonorops; these are nearly always acaulescent, non-climbing species which can scarcely be called rattans, yet belong to rattan genera, but there are also a few rattans which climb without the aid of cirri or flagella. Because these climbing organs are such striking features, the very few species which climb without them are most unusual and hence rather conspicuous when encountered in the forest. Calospatha scortechinii Becc., the recently rediscovered Malayan rattan, is one such species.

On successive expeditions to Indonesian Borneo between 1971 and 1974, I found another robust, climbing palm without cirri or flagella. At first I found it in a sterile state and could not place it in any genus. Then in 1972 I found pistillate material and was immediately impressed by the extraordinary inflorescence, suggesting features of Calamus, Daemonorops and Plectocomia. It was not until 1974 that staminate material became available. Recent investigation of the inflorescence structure has revealed many anomalous features which make it difficult to include this palm in any known genus, and I have come to the conclusion that it represents a new genus. So far this new genus has been found in East and South Kalimantan and in the First and Fourth Divisions of Sarawak. Although found in such distant areas of Borneo, it is apparently very rare, occurring as scattered individuals or colonies; it was apparently never collected before 1971 even though it occurs on well-botanized Gunung Matang near Kuching in Sarawak. All the collections so far appear to be conspecific, and the one species has never been found outside Borneo, making this the second palm genus endemic to the island (the other is Pichisermollia (syn. Gigliolia)). I propose to name the new genus Retispatha, the generic name referring to the extraordinary net-like, imbricate bracts subtending the rachillae.

**Retispatha** J. Dransfield gen. nov. Palma scandens, spinosa, dioica, pleonantha, ad Lepidocaryoideas pertinens. Folium pinnatum subcirratum, vagina spinosa, ocream magnam conspicuam fatiscentem ferente; vagina geniculo flagelloque carens; foliola unicostata. Inflorescentiae axillares,

staminatae et pistillatae superficialiter similes, ramis in ordines 2–3 dispositis; bracteae ramorum ordinis primarii conspicuae, distichae, imbricatae, reticulatae. Rachillae inflorescentiae staminatae ramosae, ramis aggregatis amentiformes; rami rachillae bracteas distichas ferentes, unaquaque bractea bracteolam 1 floremque 1 subtendente. Rachillae inflorescentiae pistillatae non ramosae, bracteas tubulosas distichas ferentes, unaquaque bractea bracteolas 2 floremque 1 subtendente. Flos staminatus calyce tubuloso tridentato, corolla breviter tubulosa trilobata praeditus; stamina 6, breviter epipetala; pistillodium minutum. Flos pistillatus calyce tubuloso tridentato, corolla breviter tubulosa trilobata praeditus; staminodia 6, breviter inter se connata et epipetala; gynaeceum squamatum, stigmatibus 3, loculis 3 praeditum, unoquoque loculo ovulo solitario anatropo instructo. Fructus squamatus monospermus; endospermium homogeneum, embryone basali.

**Retispatha dumetosa** J. Dransfield sp. nov. Palma usque 8 m scandens, caespitosa, dumetum formans. Folium usque 3.75 m longum, foliolis regularibus utrinsecus usque 80. Inflorescentiae usque 1 m longae. Flores staminati minuti. Flores pistillati solitarii, usque 7 mm longi. Fructus obpyriformis,  $20 \times 18$  mm, seriebus verticalibus squamarum 15 tectus. Typus: Borneo, Dransfield 4403 ( $\varphi$ ; holotypus K; isotypi BO, L).

Massive, clustering, spiny, dioecious palm, clambering, looping and rooting, shortly climbing, rarely more than 8 m tall, forming thickets, sometimes bearing short, bulbil-like shoots on the bare stems; stem without the leaf sheaths to 4 cm diam., sometimes to 7 cm diam., green, with conspicuous nodal scars to 10 cm distant; adventitious roots sometimes present just below the nodal scars; stem with sheaths to 6 cm diam., sometimes extremely robust, to 10 cm diam. Sheaths dull green, densely armed with shining, black, flattened spines, from minute spiculae to 1.5 mm long to robust spines to 6 cm long, the larger spines with conspicuous pale, swollen bases, confluent in oblique partial whorls or groups and mostly reflexed, the smaller spines and spiculae mostly upward-pointing; caducous reddishbrown indumentum abundant between the spines; leaf-sheath mouth at first bearing a conspicuous ocrea to 20 cm long also armed with groups of black spines and splitting to produce two lateral ear-like structures, these quickly tattering and disintegrating till ocrea finally absent. Petiole and rachis to 3.75 m long, the leaf subcirrate; petiole arcuate, c. 60 cm long, deeply channelled adaxially, rounded abaxially, c. 2 cm wide near the base, c. 1.5 cm wide at the insertion of the most proximal leaflets; petiole unarmed adaxially, abaxially armed with lateral grapnel groups of 2-5 reflexed, bulbous-based, black spines to 12 mm long, and much smaller scattered spines, the grapnel groups about 5 cm distant, also bearing similar but scattered spines distally along the mid-line; caducous, grey-brown indumentum abundant on young petioles and rachides; rachis arcuate, tapering along its length, strongly angled and unarmed, adaxially, rounded abaxially and armed with groups of up to 5 reflexed, black spines forming grapnels about 10 cm distant proximally, decreasing to 3 cm distant near the leaf tip; solitary reflexed spines also present scattered near the leaflet bases proximally on the rachis. Leaflets up to c. 80 on each side of the rachis, rather fine, regularly about 4 cm distant, dark green, shiny; lowermost few leaflets