

# A New Species of *Salacca* from Sarawak

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1. *Salacca bakeriana*, in cultivation at Semengoh Arboretum, Kuching, Sarawak.

The new species of *Salacca* (Fig. 1) described below is known from a very restricted area of western Sarawak. It has been introduced into the Forestry Department Arboretum at Semengoh where it flowers abundantly.

*Salacca*, a genus of approximately 20 species (Dransfield et al. 2008), shows a high degree of local endemism. Although there are widespread species such as *S. affinis* and *S. zalacca*, many of the species are restricted to very small areas. New species continue to be discovered and described and the subject of the present paper is known from a small area of Borneo, south of Kuching in Sarawak, East Malaysia.

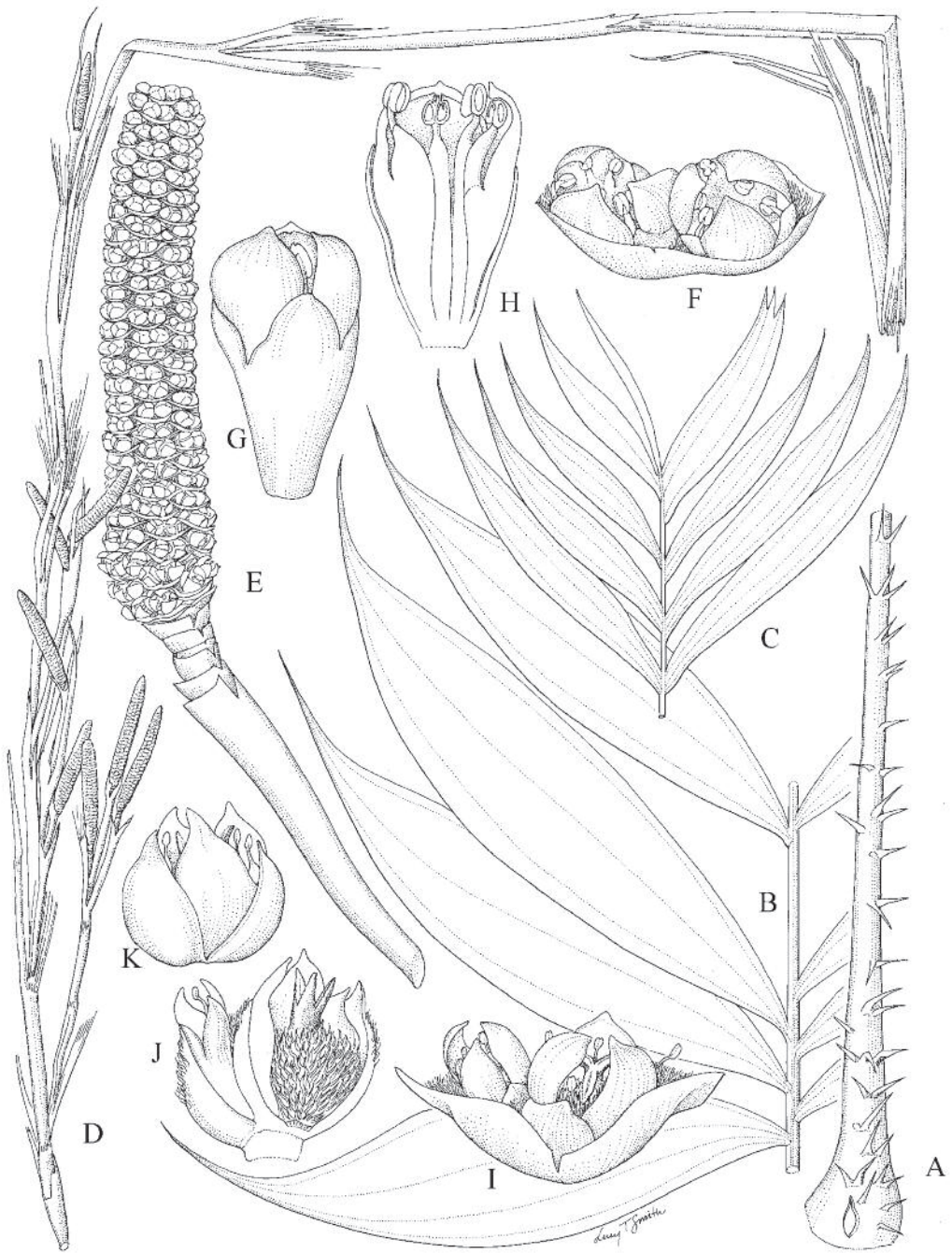
***Salacca bakeriana*** J.Dransf., sp. nov., inter species borneenses inflorescentiis longis flagelliformibus non radicantibus, foliolis nitentibus distincta. Typus: BORNEO. Sarawak: Kuching Division, Baker & J. Dransfield WJB724 (Holotypus K; isotypi KEP, SAN, SAR, SING).

Acaulescent, clustering, spiny, dioecious palm of the forest undergrowth. Stems ca. 6 cm diam., with leaf sheaths ca. 12 cm diam. Leaves erect, to ca. 3.5 m long including the petiole to 2 m long; sheath expanded at the base, armed with scattered or grouped spines and bearing scattered, caducous, red-brown indumentum; petiole covered with dense, caducous, chocolate-brown scales and scattered and grouped, horizontal or reflexed, narrow, triangular spines to 20 × 4 mm; rachis to 1.5 m long, gradually tapering, unarmed;

leaflets leathery, somewhat sigmoid, long acuminate, discolorous, 17–25 on each side of the rachis, arranged in groups of 2 or 3 near the base, ± regularly arranged near the tip, the apical pair composed of 2 or 3 folds, all other leaflets single-fold, the longest to 35 × 5–7.5 cm, upper surface glossy dark green, under surface with thin gray to buff-gray indumentum, transverse veinlets very conspicuous, distant adaxially, invisible abaxially. Staminate and pistillate inflorescences similar, up to 1.2 m long, emerging from a vertical cleft in the abaxial surface of the subtending leaf sheath, then lying along the surface of the ground and partly obscured by leaf litter (Fig. 2). Peduncle of staminate inflorescence to 2 cm long, ca. 0.7 cm diam.; prophyll not exceeding ca. 10 mm, soon tattering; peduncular bracts absent; rachis to at least 90 cm long, bearing ca. 5 evenly spaced rachis bracts; rachis bracts tubular, to ca. 35 cm long, ca. 0.8 cm diam., densely brown scaly and hairy, tattering longitudinally, each subtending a first order branch; first order branches to 20 cm long, each with (1)2 or 3 rachillae; rachillae cream-colored at first, to 4 × 0.6 cm; rachilla bracts 2.5 × 1.5 mm, each subtending a pair of staminate flowers. Staminate flower (pre-anthesis) ca. 2.5 × 1 mm; sepals thin, membranous, striate, ca. 2.3 × 0.9

2. *Salacca bakeriana*, young rachillae held along the surface of the ground, Semengoh Arboretum, Kuching, Sarawak.





3. *Salacca bakeriana*. A. leaf base and petiole  $\times 1/4$ ; B. mid-section of leaf  $\times 1/4$ ; C. leaf tip  $\times 1/3$ ; D. staminate inflorescence  $\times 1/3$ ; E. staminate rachilla  $\times 1 1/2$ ; F. dyad of staminate flowers within rachilla bract  $\times 6$ ; G. staminate flower  $\times 8$ ; H. staminate flower in vertical section  $\times 8$ ; I. dyad of sterile staminate flower and pistillate flower  $\times 5$ ; J. sterile staminate flower and pistillate flower with sepal and petal removed  $\times 4$ ; K. pistillate flower  $\times 4$ . A, C-H from Baker & Dransfield 724; B, I-K from Baker & Jegong 711. Drawn by Lucy T. Smith.

mm, connate in basal half; petals  $2.5 \times 0.9$  mm, coriaceous, connate in basal half; anthers ca.  $0.5 \times 0.3$  mm. Pistillate inflorescence (at least in cultivation) longer and more robust

than the staminate, bearing several distant first order branches, each with a single rachilla; pistillate rachillae to  $5 \times 1.3$  cm; rachillae bracts ca.  $10 \times 6$  mm, splitting irregularly, each

subtending a dyad of a sterile staminate and a fertile pistillate flower. Sterile staminate flower at anthesis 6 × 2 mm; sepals 4 × 1 mm, connate in basal 2–3 mm; corolla tube 4 mm long, lobes 2 × 1.5 mm; filaments ca. 1 mm, anthers rounded ca. 0.2 × 0.2 mm. Pistillate flower 7 × 5 mm, obpyriform; sepals membranous, striate, 5 × 4 mm, broad triangular with rounded tips; corolla coriaceous, with basal tube ca. 4.5 mm long, lobes 2.5 × 2.5 mm; filaments ca. 1 mm; ovary 3.5 × 3 mm, epicarp scales very numerous, erect, spine-like; stigmas sinuous, 1.2 mm long. Mature fruit not known (Fig. 3).

BORNEO. Sarawak: Kuching Division, Padawan, near road to Borneo Highlands Resort, Mt. Penrissen, steep bank above stream, very disturbed forest, 100 m alt., 23 April 1996, Baker & Dransfield WJB724 (Holotype K; isotypes KEP, SAN, SAR, SING); cultivated, Semengoh Arboretum, Kuching, originally from Padawan area, Baker & Jegong WJB711 (K, KEP, SAR).

So far, *Salacca bakeriana* seems to be restricted to the Kuching (First) Division of Sarawak, Borneo. In Borneo, it is unlikely to be confused with any other species; the extraordinary long inflorescences held along the surface of the

ground (Fig. 2) are unusual, though known in several species in Peninsular Malaysia and Thailand, such as *S. flabellata* Furtado and *S. stolonifera* Hodel. However, the tips of the inflorescences of *S. bakeriana* do not develop into new shoots as happens in these two species. Like many species of *Salacca*, *S. bakeriana* tends to form rather untidy clumps when seen in disturbed forest, but the plant cultivated in Semengoh Arboretum is certainly handsome, with its neat glossy leathery leaflets, dark red-brown petioles and the surprising skirt of inflorescences lying along the ground. It is named for the collector, Bill Baker of Kew, who has contributed so much to our understanding of palm phylogeny.

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#### LITERATURE CITED

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