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A Reassessment of the Genus Lophospatha Burret

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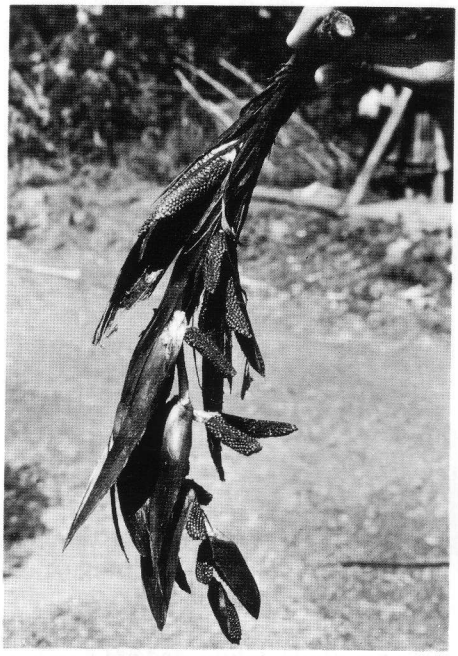
Abstract

New collections of *Salacca clemensiana* from Sabah show a close relationship but not identity with the monotypic genus *Lophospatha*. Examination of available herbarium material suggests the inclusion of *Lophospatha* in *Salacca* and the new combination *Salacca lophospatha* is published.

Lophospatha, a lepidocaryoid palm with a single species *L. borneensis*, was based by Burret on fragmentary material collected by the Clemens in 1931/32 at Dalas on the western slopes of Kinabalu in Sabah (Burret 1942). The collection, *J. & M. S. Clemens 26380*, was widely distributed but very incomplete; we assume that the holotype in Berlin is no longer extant, but isotype material in BM, BO, K, L, and SING consists of a few staminate rachillae and leaf fragments. Although the material is so incomplete, the leaflet and rachilla structure appears to approach that of *Salacca*, and on the basis of this similarity the genus was included, without explanation, as a synonym of *Salacca* by Moore (1973). In preparing a monograph of *Salacca*, one of us (J. P. M.) felt unable to reach any firm conclusion on the status of *Lophospatha* as the material was so poor. The re-finding of *Lophospatha* in Sabah was thus a high priority. Recently, while undertaking rattan fieldwork in Sabah, the other author (J. D.) was able to find a palm with features of the genus, albeit not in the type locality but about 30 km to the south, and so there is now material sufficient to re-examine the status of *Lophospatha*.

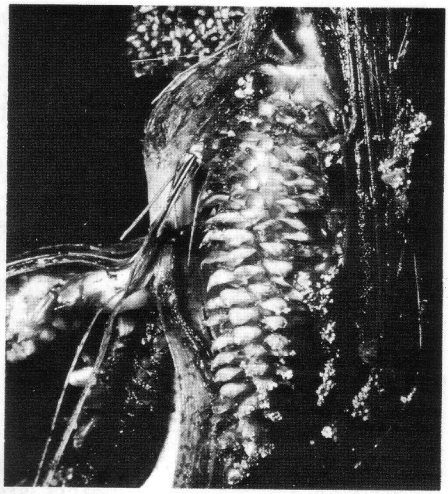
The *Lophospatha*-like palm was discovered beside the new road between Kota Kinabalu and Tambunan (Sinsuron Road) at an altitude of ca. 1,000 m on the northwestern slopes of the Crocker Range. A colony of about twenty plants was found growing in much disturbed forest, transitional between hill dipterocarp and lower montane forest, in a damp hollow on a steep hillslope. In habit the plants are entirely reminiscent of a *Salacca*; the stems are very short, subterranean or partially erect, and bear leaves to about 4 m long, the sheaths and petioles densely armed with black spines. The leaflets are strongly discolorous, dark green on the adaxial, chalky-white on the abaxial surfaces, and the two terminal leaflets are compound, two features which are widespread in *Salacca*, though not diagnostic. Of even greater significance is that the inflorescences emerge from grooves in the abaxial surface of the leaf sheath, a diagnostic character of *Salacca*. The pistillate inflorescence of the Crocker Range plant does not differ from those of *Salacca* and the fruit is covered in scales with spine-like reflexed tips. The staminate inflorescence, however, is more or less pendulous and does indeed have discrete rachilla bracts,



1. Staminate inflorescence of *Salacca clemensiana*, Crocker Range, Sabah. (August 1979)

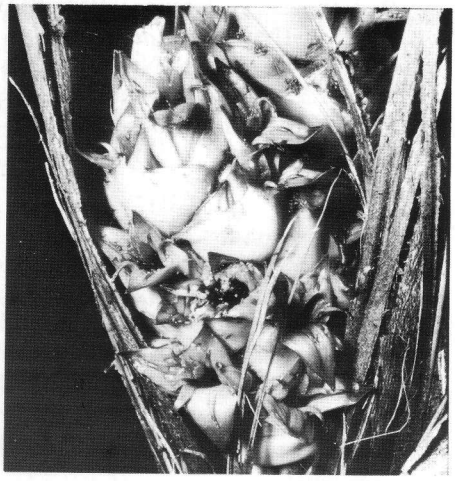
which, incidentally, are a clear pink at anthesis. Unfortunately some of the best material that was collected has been mislaid but we have had the opportunity to study the Sandakan and Bogor sets of the staminate plant (J. D. 5538).

Initial impressions in the field suggested that *Lophospatha borneensis* had indeed been refound; however comparison between the type of *Lophospatha borneensis*, the new Sabah collection, and the Kew material of *Salacca clemensiana* suggests that the new collection is *Salacca clemensiana*, the first record for Borneo of a palm otherwise known from Mindanao, Philippines. Sufficient differences appear to exist between *L. borneensis* and *S. clemensiana* for them to be retained as distinct species, although the material of the former is very incomplete.



2. Rachilla of *Salacca clemensiana* showing staminate flowers and the discrete rachilla bracts.

Burret distinguishes *Lophospatha* from *Salacca* mainly on the nature of the rachilla bracts of the staminate inflorescence which are discrete in *Lophospatha* but joined laterally in *Salacca*. Burret seemed to be quite unaware that Beccari had already described a bract type similar to that of



3. Pistillate rachilla of *Salacca clemensiana* showing the strongly reflexed petals, which are crimson when fresh.

L. borneensis as occurring in *Salacca clemensiana*.

The problem of whether *Lophospatha* is generically distinct from *Salacca* can now be reassessed. As described above, the only significant difference between the two genera according to Burret is the discrete versus laterally-joined rachilla bracts. We do not believe this sufficient to separate *Lophospatha*, especially as in every other respect *Lophospatha* is a *Salacca*, and *S. clemensiana* shows this very feature. Most significantly an intermediate state occurs in the staminate inflorescence of *Salacca dubia* Becc. where the rachilla bracts are united by their bases but do not form horizontal rings (Beccari 1918).

As the epithet "*borneensis*" has already been used in the genus *Salacca* (*Salacca borneensis* Becc. = *S. affinis* Griff. var. *borneensis* (Becc.) Furtado), a new epithet is required if *Lophospatha* is to be included in *Salacca*.

Salacca lophospatha *J. Dransf. & Mogea* nom. nov. Type: Borneo. Sabah, *J. & M.S. Clemens 26380* (holotype B(?); isotypes BM, BO, K, L, SING) *Lophospatha borneensis* Burret in Notizbl. Bot. Gart. Mus. Berlin-Dahlem 15: 753. 1942 (non *Salacca borneensis* Becc. 1886). Type: as above.

Salacca lophospatha can be distinguished from *S. clemensiana* as follows:

Bracteoles of staminate rachillae very densely fluffy hairy .... *S. clemensiana*
Bracteoles of staminate rachillae with an apical tuft of hairs only..... *S. lophospatha*

Unfortunately *S. lophospatha* will remain an incompletely known species until more material can be collected; it is possible that it represents a robust form of *S. clemensiana*.

Acknowledgments

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Erratum

Pinanga sanarani on p. 80 (Vol. 25) should read *Pinanga samarana*.