

New Species of Dipterocarpaceae, Sterculiaceae and Monimiaceae, and a re-interpretation of *Tetranthera rumphii* Bl.

by

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Herbarium Bogoriense

DIPTEROCARPACEAE

Hopea celtidifolia Kosterm., spec. nov.

Arbor ramulis minutissime dense adpresse stellato pilosis, foliis chartaceis vel rigide chartaceis glabris ovato-ellipticis acuminatis basi in petiolem gracilem contractis supra nitida laevia nervo mediano prominulis costis vix prominulis subtus sublaevia nervo mediano prominentibus nervis lateralis inferiore parte erecto-patentibus superiore parte subito verticalibus totis nervum basalem costae parallelum quasi nervaturam palmatum aemulantibus nux elongato ovoideus acutis alae majoribus oblanceolatis obtusis basim versus sensim attenuatis glabris alae minoribus elongato ovatis acutis.

Typus: Versteegh BW 4854 (L).

Tree, up to 28 m high, free bole 24 m, diam. 43 cm; buttresses up to 2 m high, out 1 m; bark brown, not fissured, rather strongly peeling; living bark brown or lightbrown; sapwood yellow or yellowish brown; heartwood yellowish brown or yellow. Branches smooth, glabrous; branchlets slender, densely, minutely adpressed stellate pilose. Leaves chartaceous to thickly chartaceous, glabrous, ovate-elliptic, $2.5 \times 6 - 4 \times 10$ cm, abruptly acuminate, acumen obtuse, up to 5 mm long, base contracted into the slender, up to 1 cm long, above slightly, narrowly canaliculate petiole; upper surface smooth, midrib prominulous, ribs faint, prominulous; lower surface rather smooth, midrib prominent, lateral nerves ca 5 pairs, slender, erect-patent, rather straight, at about halfway the margin abruptly perpendicular and anastomosing with the former and next one, forming two pseudo-basal nerves, that reach up to the leaf tip, at the outside some more arcuate, faint nerves; secondary nerves dense, parallel, faint. Inflorescence unknown. Nut glabrous, elongate-ovoid, acute, up to 1 cm long. The two longest wings oblanceolate, glabrous, obtuse, up to 4 cm long, the widest part 1 cm, 7-9 ribbed, reticulate, gradually narrowed at base; the short wings half, respectively $\frac{2}{3}$ the nut length, acute.

W. IRIAN: S.E. part, E. Digul, Iwur R., alt. 400 m, Agathis forest on clayey soil, ster., BW 8533 (L); along Digul R. near Wage, alt 15 m, Nov., fr., Versteegh BW 4854 (L); Muju Distr., Opka, 10 km N.E. of Ninati, alt. 50 m, BW 6441 (L); 5 km N. of Ninati, alt. 50 m, ster., BW 6430 (L).

STERCULIACEAE

Scaphium burkillii Kosterm., spec. nov.

Arbor magna ramulis crassis glabris lenticellatis foliis alternantibus glabris coriaceis ellipticis acuminatis basi rotundatis supra nitida laevia nerviis primariis gracilibus prominulis subtus opaca dense prominule reticulata nervo mediano prominentibus costis prominentibus basalibus 2 vel 4, majoribus strictis usque ad $\frac{2}{3}$ foliorum lamina adscendentibus, minoribus arcuatis submarginalis costis caeteribus utrinque 3–4 suberectis curvatis marginem versus arcuatim evanescentibus; petiolis perlongis glabris; infructescentiis magnis vix ramosis perdense minutissime stellato pilosis fructus coriaceis Scaphiformibus acutis extus laxe minutissime stellato pilosis, intus pernitidis griseis glabrescentibus semen globosum magnum.

Typus: Ilias Paie S 15575 (SING).

Large tree, 50 cm in diam.; branchlets cylindrical, stout, glabrous, glossy, grey, with tiny lenticels. Leaves spirally arranged, coriaceous, glabrous, elliptical, 11×24 — 12×37 cm, apex shortly acuminate, base rounded; upper surface glossy, smooth, main nerves filiformous, prominulous; lower surface dull, densely, prominulously reticulate, midrib prominent, basal nerves prominent, 2 pairs, the lower pair almost marginal, reaching $\frac{1}{5}$ the blade length, the inner ones straight, reaching $\frac{2}{3}$ of the leaf length; lateral nerves 3–4 pairs, towards margin running out arcuately. Petiole 16–21 cm long, glabrous, thickened at both ends, glabrous.

Infructescence hardly branched, up to 25 cm long, densely, minutely rusty stellate pilose; fruit boat-shaped, acute, up to 7 cm long and (opened) 2 cm wide, leathery; outside sparsely, minutely stellate hairy, inside glossy, grey, glabrescent; seed globose, 3 cm diam.; seedcoat 4 mm thick; peduncle thick, densely pilose, 5–7 mm l.

Outstanding by its leafshape, the thick, leathery capsules and the enormous thick-walled seed. As the tree was collected in a swampy area, one is tempted to ascribe the leathery fruit and the thick-walled seed to the conditions of water dispersal, as opposed to the other species of *Scaphium* where the paperthin capsules and light seed are wind dispersed.

The species is named after Mr. Humphrey M. Burkill, Director of the Botanic Garden, Singapore, under whose directorship the library and herbarium facilities have been greatly extended and improved and whose valuable cooperation to help the Herbarium Bogoriense in the difficult period of 1957 – 1967 is herewith gratefully acknowledged.

SARAWAK: Bintulu Distr., Segan For. Res., swamp forest; fruit chocolate coloured, Nov., fr., Ilias Paie S 15575 (SING) (also distributed to K, L, SAN).

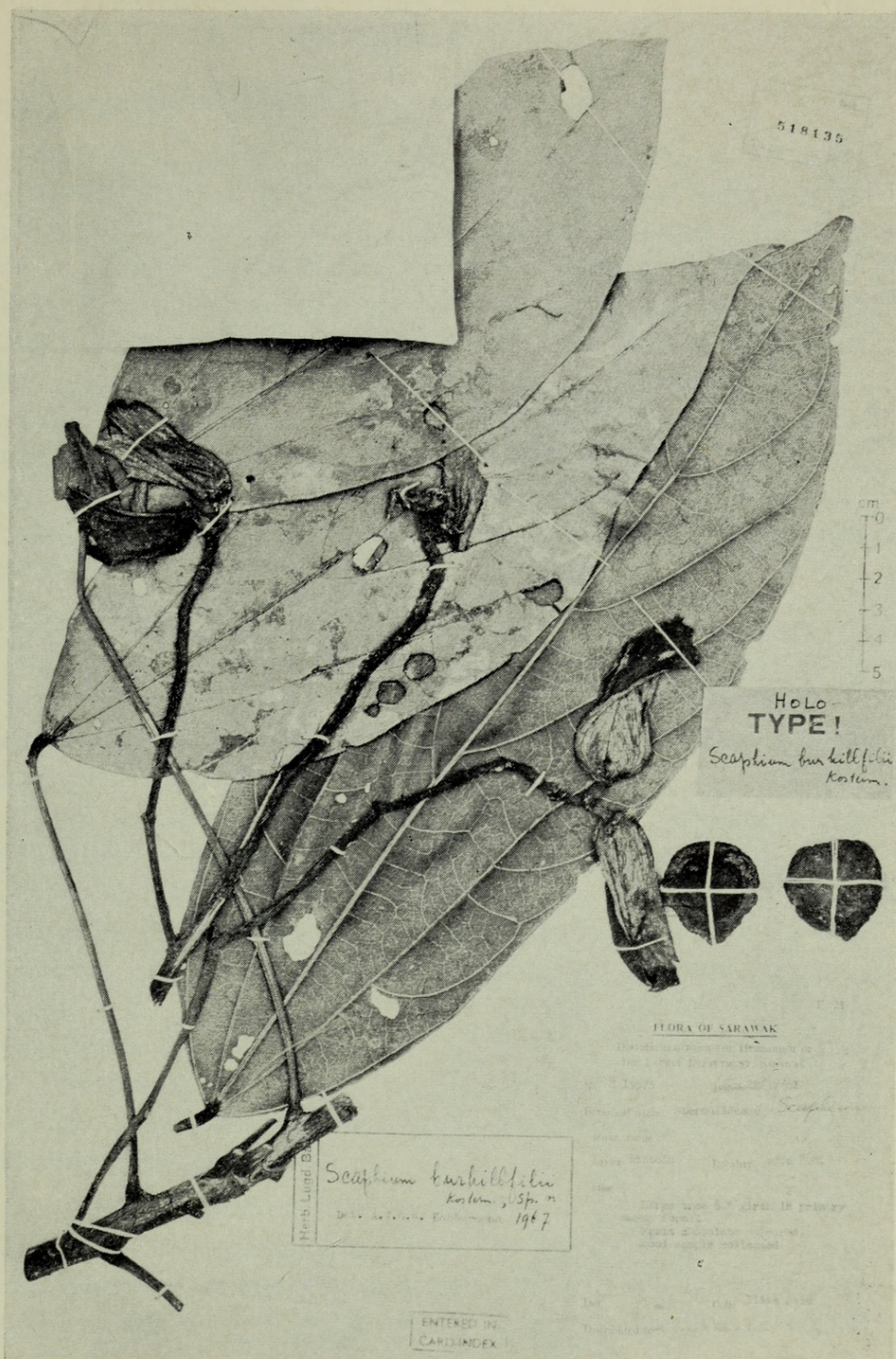
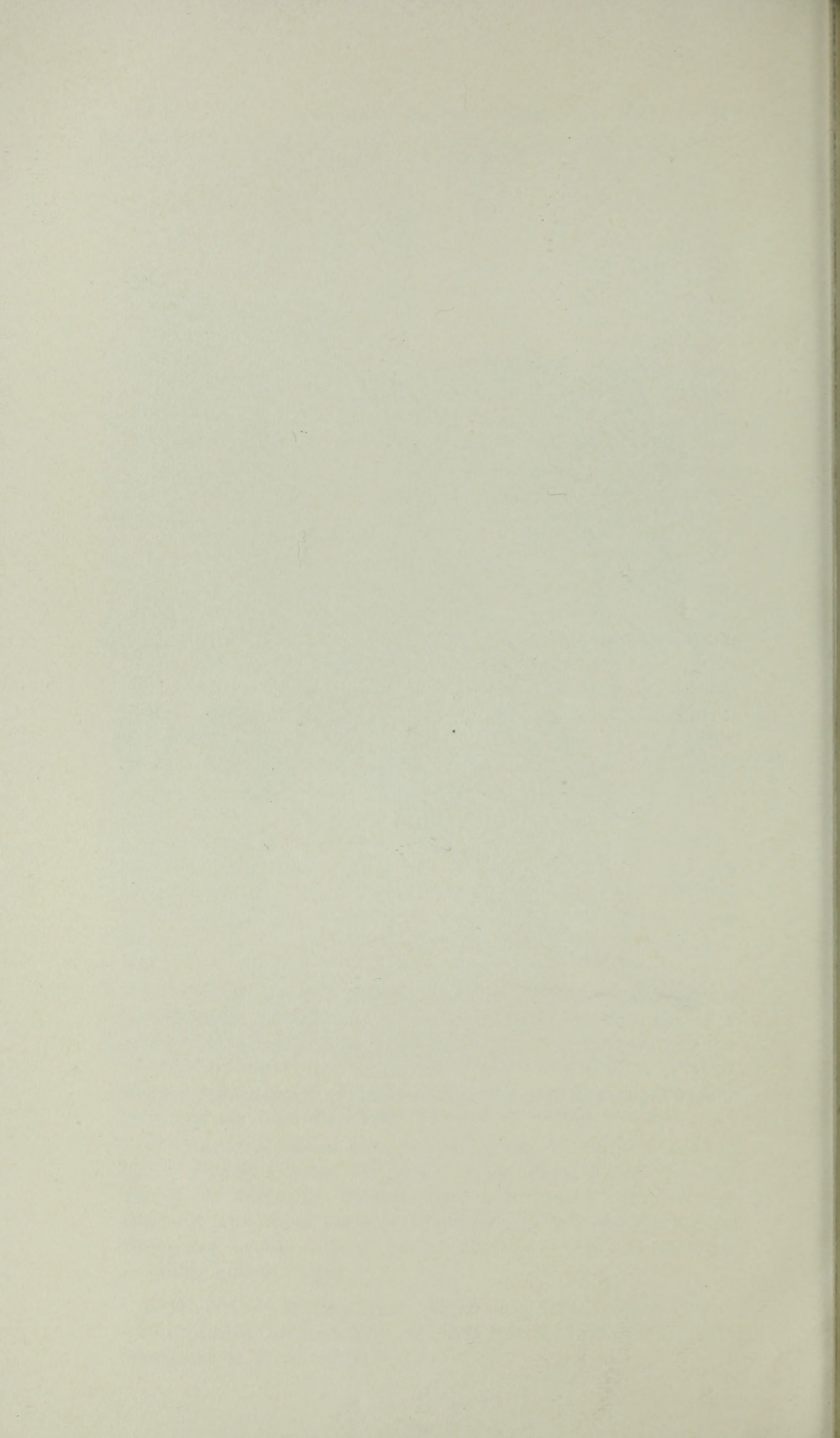


Plate I. Holo-type sheet of *Scaphium burkillfilii* Kosterm. deposited in the Singapore Herbarium, Accession No. 518135.





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