

## BULBOPHYLLUM BREIMERIANUM (ORCHIDACEAE), A NEW SPECIES FROM BORNEO

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### SUMMARY

*Bulbophyllum breimerianum* from Borneo is described. It is most similar to *B. macranthum* Lindl., *B. praetervisum* J.J. Verm., and *B. grandifolium* Schltr.

**Key words:** *Bulbophyllum breimerianum*, Borneo.

Among the Bornean material previously identified as *B. macranthum* Lindl., a third species of similar appearance was collected in East Borneo in 1991 next to *B. praetervisum* J.J. Verm. (see Vermeulen, 2002). The plant is in cultivation in Leiden Botanic Gardens and has yielded the type material when it flowered.

***Bulbophyllum breimerianum* J.J. Verm. & A. Vogel, spec. nov. — Fig. 1**

A *Bulbophyllo macrantho* et *B. praetervisso labii* basi cornibus duobus retrorsis, stelidis ala rotundata secus marginem inferiorem differt. — Typus: *Hort. Leiden* 913636 (L), Indonesia, Kalimantan Timur, Sangkulirang Peninsula.

*Roots* scattered along the entire rhizome. *Rhizome* 4–7 mm diam., sections between pseudobulbs 2.5–5.5 cm long, bract fibres rather thin, persistent. *Pseudobulbs* distant, ovoid, 1.7–3 by 0.8–1.2 cm. *Petiole* 1–1.8 cm. *Leaf blade* elliptic to obovate, 9–13 by 2.7–4.2 cm, index (length/width) 2.8–3.5; obtuse. *Inflorescence* 5–6 cm, 1-flowered. *Peduncle* 1–1.5 cm, bracts 4–6, covering the peduncle. *Floral bracts* tubular, 7–9 mm, acute. *Pedicel* and *ovary* 35–40 mm long, basal node on a c. 8 mm long stump. *Flowers* not resupinate (with the lip turned upwards), widely opening. *Median sepal* spreading with recurved top part, elliptic, 20–25 by 7–8 mm, index 2.5–3.6; acute to shortly acuminate, base rather narrowly attached; glabrous. *Lateral sepals* free, recurved but converging and (almost) touching towards the tip, top part somewhat curved inwards, oblique, ovate-triangular to triangular, 22–23 by 7–9 mm, index 2.4–3.2; base widely attached; otherwise as the median sepal. *Petals* spreading or somewhat reflexed, elliptic to ovate, 17–20 by 6–8 mm, index 2.1–3.3; subacute to shortly acuminate, base narrowly attached; glabrous. *Lip* recurved ± half-way, triangular-hastate with a drawn-out,

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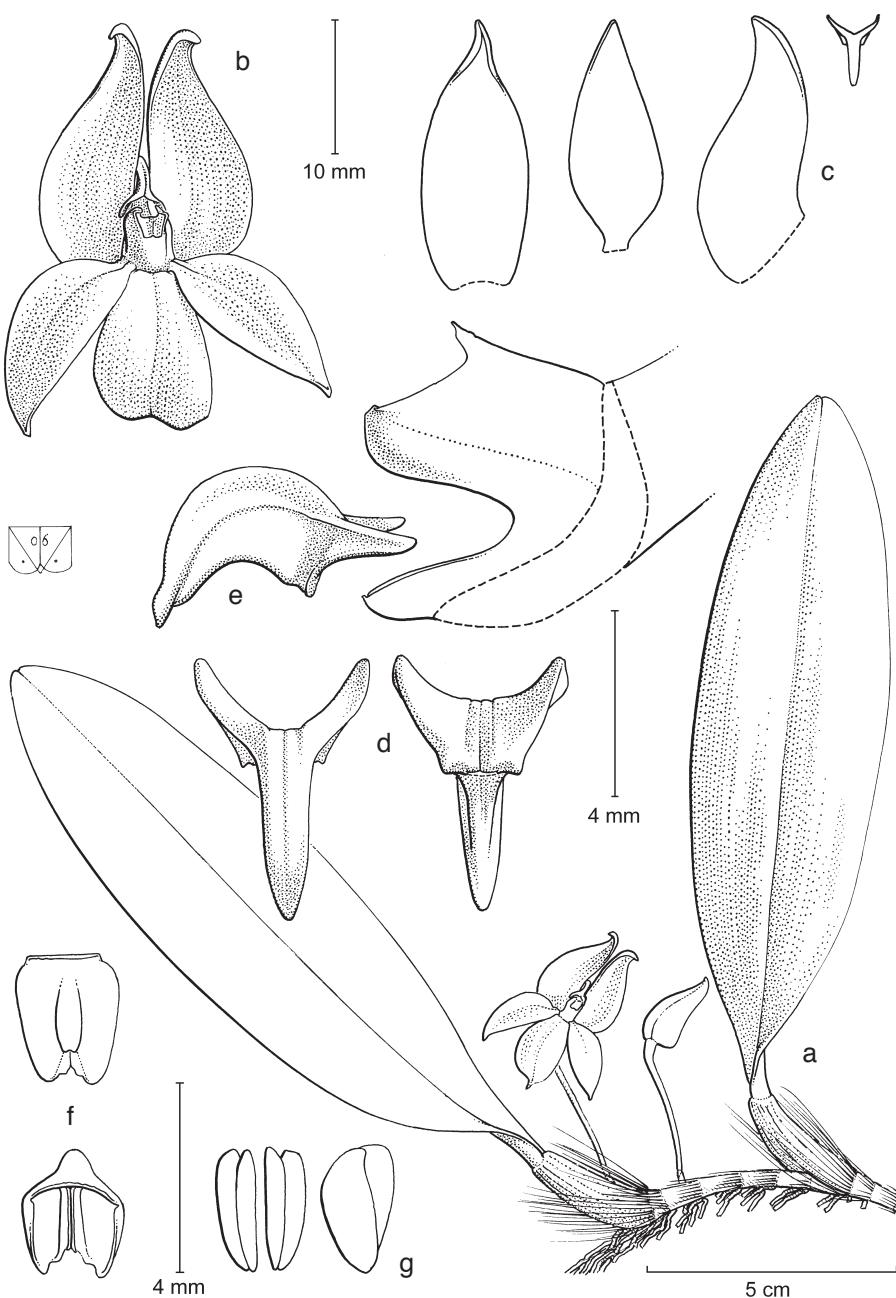


Fig. 1. *Bulbophyllum breimerianum* J.J. Verm. & A. Vogel. a. Habit; b. flower; c. flower analysis, from left to right: median sepal, petal, lateral sepal, lip; d. lip, left: adaxial side, right: abaxial side; e. column and lip, lateral view; f. anther, above: abaxial side, below: adaxial side; g. pollinia, left: two pairs, right: a single pair (all Hort. Leiden 913636).

linguiform top part, 4–6.5 by c. 4 mm, index 1.6–1.7 (all without artificial spreading); obtuse, margins folded into 2 retrorse, thick, ± straight, horn-shaped projections above the base when the lip is observed in lateral view; thick, glabrous; adaxially concave towards the base, convex towards the tip; abaxially with a retuse ridge over most of the length of the lip, top part flat. *Column* 5.4–6 mm long, ± straight in profile, stigma without teeth at the base, inside with 3 keels: one on the back wall and two on the front wall; column foot without ridges. *Stelidia* porrect, deltoid, 1.8–2 mm long, obtuse, near the tip of the column with a deltoid, rounded wing along the lower margin. *Anther* abaxially glabrous, front part slightly drawn out, margin truncate, slightly erose. *Polllinia*: the inner about as long as the outer, without appendages.

**Colours** — Median sepal and petals cream-coloured with red or purple dots. Lateral sepals whitish, yellowish green along the lower margins, blackish red along the upper margins towards the tip, with red or purple spots along the upper margin. Lip yellow, column yellow.

**Habitat** — Epiphyte in lowland rainforest. Altitude up to 300 m. Flowering: March to May.

**Distribution** — Kalimantan Timur.

**Notes** — 1. Among the Borneo species, *B. breimerianum* is most similar to *B. macranthum* and *B. praetervisum*. It is unequivocally distinct at close inspection because of the retrorse ‘horns’ on the lip, as well as the rounded wings along the lower margin of the stelidia. Among species from elsewhere, *B. grandifolium* Schltr. is most similar, but this has a lip of 8–10.5 mm long.

2. The species is named in honour of Prof. Dr. D.D. Breimer, Rector Magnificus and President of the Leiden University, at the occasion of his retirement on 8 February 2007. He inspired the development of Pharmaceutical Research and the Bio-Sciences at Leiden University.

#### REFERENCE

- Vermeulen, J.J. 2002. *Bulbophyllum praetervisum* J.J. Verm. (Orchidaceae), an overlooked species close to *B. macranthum* Lindl. Gard. Bull. Singapore 54: 153–154.