

TWO NEW SPECIES OF BULBOPHYLLUM (ORCHIDACEAE)
FROM PAPUA NEW GUINEA

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SUMMARY

Two new species of the genus *Bulbophyllum*, both originating from Papua New Guinea, are described, viz. *B. drepanosepalum* and *B. entomonopsis*.

Bulbophyllum drepanosepalum J. J. Vermeulen & P. O'Byrne, *spec. nov.* — Fig. 1

Bulbophyllum drepanosepalum a *B. potamophila* in petalis subhastatis, labello secus margines papilloso differt. — Typus: O'Byrne 068 (L).

Rhizome creeping, c. 1 mm diam. *Pseudobulbs* ovoid to ellipsoid, 0.5–1 cm apart, 0.8–1.3 by 0.4–0.6 cm, not flattened. *Petiole* 2–4 mm. *Leaf blade* elliptic, 2.9–5.5 by 1.4–2.1 cm, index 2–2.6, tip emarginate. *Inflorescence* usually single, c. 11 cm, 1-flowered. *Peduncle* c. 6 cm; bracts 3, the longest c. 6 mm. *Floral bracts* tubular, c. 5 mm, tip acuminate. *Pedicel and ovary* c. 23 mm, with the node c. 4 mm from the floral bract. *Flowers* little opening. *Median sepal* ovate, 6–7 by 1–2 mm, index 3.5–6, tip obtuse, cuneate; base rather thick, top thick; glabrous. *Lateral sepals* obliquely ovate, c. 23 by 4 mm, index 5.7–5.8, tip obtuse; thick; glabrous. *Petals* oblique, with a narrow claw and a subhastate blade, 4–4.2 × 1.8–2 mm, index 2.1–2.2, tip finely caudate (cauda c. 1 mm); margins finely erose towards the tip; rather thick; surface glabrous. *Lip* curved, general outline subrectangular, 2–2.5 by 0.6 mm, index 3.3–4.1 (not spread), tip rounded; margins finely papillose, long papillose towards the tip; thick; adaxially slightly concave in the basal half, with 2 distinct, parallel, sericeous ridges over most of its length near its base, surface otherwise glabrous; abaxially with a distinct, rounded median ridge, surface glabrous but long-papillose towards the tip. *Column* from ovary to the tip of the stelia c. 1.7 mm; stigma slightly protruding at its base, slit-like; column foot without accessories. *Stelidia* triangular, c. 0.3 mm; tip acute; with a small, acute tooth along the upper margin, close to the tip. *Anther* abaxially with a ridge ending in a distinct, ovate protrusion overtopping the front margin; front margin not protruding. *Pollinia* 2. *Stipes* absent.

Colours — Median sepal off-white with thick maroon veins. Lateral sepals deep maroon, with an off-white, maroon striped patch near the base. Petals white with 3 dark purple veins. Lip purple, green in the centre, white at the base. Column white with a purple patch on the foot.

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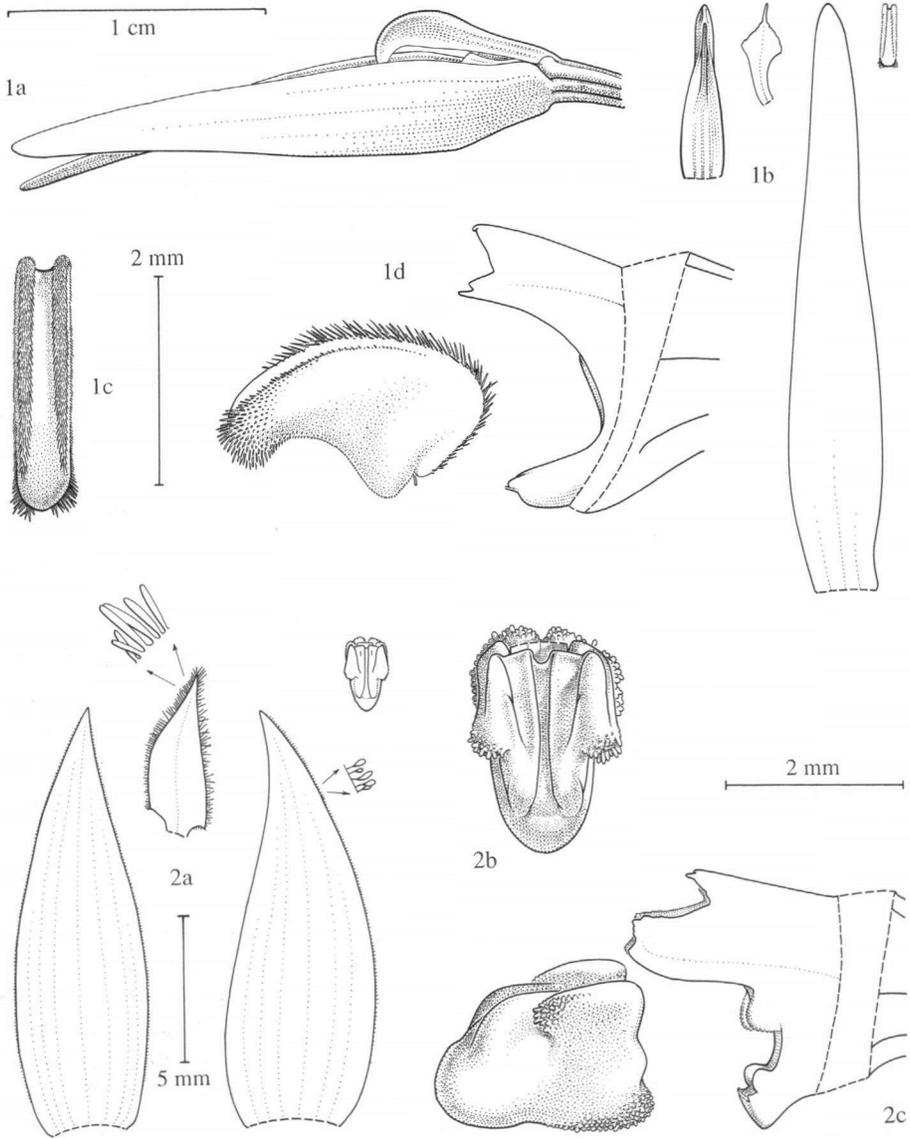


Fig. 1. *Bulbophyllum drepanosepalum* J.J. Vermeulen & P. O'Byrne. a. Flower; b. flower analysis, from left to right: median sepal, petal, lateral sepal, lip; c. lip, adaxial side; d. column and lip, lateral view (O'Byrne 068). — Fig. 2. *Bulbophyllum entomonopsis* J.J. Vermeulen & P. O'Byrne. a. Flower analysis, from left to right: median sepal, petal, lateral sepal, lip; b. lip, adaxial side; c. column and lip, lateral view (O'Byrne 250).

Distribution – Papua New Guinea (Northern Province, near Kokoda).

Ecology – Epiphyte on tree trunks near the forest floor, in mossy rain forest. Altitude c. 800 m asl. Flowering August.

Notes – 1. Similar to *Bulbophyllum potamophila*. This species differs in having ovate petals and a glabrous lip. *Bulbophyllum falciferum* J.J. Smith has acute lateral sepals, petals with three teeth at the tip, and a much wider, ovate lip.

2. *Bulbophyllum drepanosepalum* belongs to *Bulbophyllum* sect. *Ephippium*.

***Bulbophyllum entomonopsis* J.J. Vermeulen & P. O'Byrne, spec. nov. – Fig. 2**

Bulbophyllum entomonopsis a *B. glandulifero* in absentia pilorum glandulosorum secus labelli marginis et a *B. chrysotide* a stelia brevibus latibus differt. — Typus: O'Byrne 250 (L).

Rhizome creeping, c. 4 mm diam. *Pseudobulbs* almost cylindrical, only few mm apart, 3.5–5 by 0.9–1 cm, hardly flattened. *Petiole* 2–4 mm. *Leaf blade* elliptic, 9–15 by 1.7–2.9 cm, index 5–5.5, tip acute. *Inflorescences* few together on a short sympodium, c. 2.5 cm, 1-flowered. *Peduncle* c. 0.5 cm; bracts 2, the longest 8 mm. *Floral bracts* tubular, c. 7 mm, tip acuminate. *Pedicel and ovary* 8 mm. *Flowers* widely opening. *Median sepal* ovate, 11–15 by 4.5 mm, index 3.3–4.5, tip acute; thick; margins and adaxial surface very finely glandulose. *Lateral sepals* 11–15 by 6 mm, index 1.8–2.5; otherwise as the median sepal. *Petals* clawed, obliquely ovate with an acute edge along the lower margin, near the base, 4–11 by 1.2–2.2 mm, index 3.3–5, tip slightly acuminate; margins ciliate; rather thick; surface abaxially pubescent in the upper half. *Lip* 3-lobed, median lobe straight, general outline ovate, c. 2.5 by 1.7 mm, index 1.4–1.5 (not spread), tip rounded; thick; adaxially slightly concave near the base, with a distinct median furrow over most of its length, laterally bordered by obtuse ridges, with 2 more convergent ridges in the basal half, surface glabrous; abaxially without median ridge, surface glabrous except for a thick, papillose lump just below the ligament; lateral lobes forwards directed, semi-elliptic, rounded, thick; margins and surface papillose towards the tip. *Column* from ovary to the tip of the stelia c. 2.5 mm; stigma with two papillose lateral calli at its base, elliptic; column foot with small, fleshy lateral wings close to the attachment of the lip. *Stelia* subtriangular, c. 1 mm; tip obtuse, erose; with a forwards directed, triangular, subacute tooth along the lower margin, close to the tip. *Anther* abaxially with a ridge ending in a rounded, papillose protrusion overtopping the front margin; front margin not protruding, papillose. *Pollinia* 4; the inner pair more than half as long as the outer pair. *Stipes* absent.

Colours – Sepals cream-brown with 7 or 8 brown veins. Petals white with a purple central streak and purple marks near the base. Lip white with purple papillae; lateral lobes dark purple at the tip.

Distribution – Papua New Guinea (Gulf and Central Provinces).

Ecology – Epiphyte in seasonally dry rain forest. Also observed on the branches of an emergent tree with smooth bark in a mixed sago-mangrove swamp. The flowers last 3 or 4 days. The petals, lip and column seem to mimic an insect with compound eyes and long, hairy antennae (the name refers to this character). Altitude 0–300 m asl. Flowering Jan., Feb., May–Oct., Dec.

Note — *Bulbophyllum entomonopsis* is similar to *B. glanduliferum* Schltr. and *B. chrysotes* Schltr. *Bulbophyllum glanduliferum* is of about equal size, but has smaller petals compared to the size of the flowers, and glandular hairs along the margins of the lip. *Bulbophyllum chrysotes* is smaller in all parts, has a median sepal with ciliate margins, and long, narrow stielidia. All three species cannot be placed satisfactorily in any section of *Bulbophyllum*. Schlechter (1913: 784) has included them in sect. *Micromonathe*, a section that he more or less reserved for species of unclear affinities.

REFERENCE

Schlechter, R. 1913. Die Orchidaceen von Deutsch-Neu-Guinea. Fedde, Rep. Beih. 1: 1–1079.