

**BULBOPHYLLUM GEMMA-REGINAE,
AN INTERESTING NEW ORCHID SPECIES FROM BORNEO**

J.J. VERMEULEN

Rijksherbarium / Hortus Botanicus, Leiden, The Netherlands

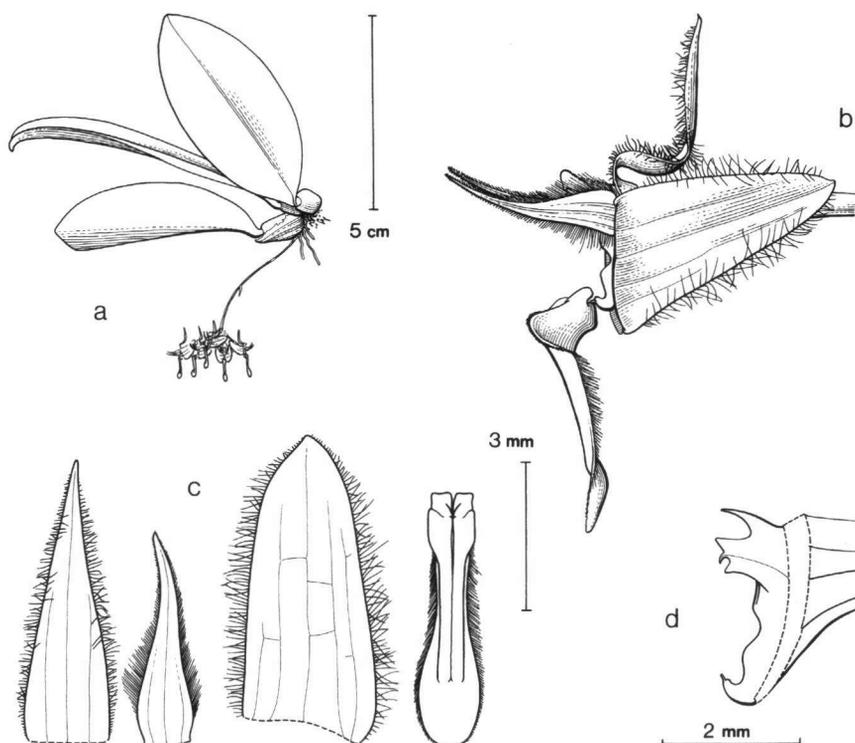
INTRODUCTION

On a field trip into the interior of Sabah, Borneo, in 1986, a small *Bulbophyllum* species (Orchidaceae) without flowers was collected, and transferred to the greenhouse of Mr. P. Jongejan, Amersfoort, the Netherlands. Only after several years the plant rewarded the good care given to it with a few sprigs of flowers. It then appeared to be an undescribed species of great elegance, belonging to the section *Hirtula* Ridley. It displays an unusual combination of characters: it has a distinctly elongated lip, as is found in *B. jolandae* J.J. Vermeulen, and *B. lasioglossum* Rolfe, which both have an elongated inflorescence. The new species, however, has a subumbellate inflorescence, as occurs in *B. carinilabium* J.J. Vermeulen, and *B. hirtulum* Ridley, which both have a shorter lip.

Bulbophyllum gemma-reginae* J.J. Vermeulen, *spec. nov.

Bulbophyllum sectione *Hirtula*, *B. jolandae* similis, inflorescentia subumbellata et labello carinis duobus differt. — Typus: *Jongejan cult. 1856* (L).

Rhizome creeping, c. 1.3 mm diam. *Pseudobulbs* 1-leafed, ovoid to orbicular, 0.2–0.7 cm apart, 0.5–1.2 by 0.3–0.7 cm, not flattened. Petiole 3–4 mm. *Leaf blade* elliptic, 5.0–6.7 by 1.5–3.3 cm, index 1.9–4.1, subacute. *Inflorescence* c. 3 cm, subumbellate, 7–10-flowered. Peduncle patent, c. 2.7 cm; bracts c. 6, the longest c. 3 mm, acute. Rachis pendulous, slightly swollen, c. 0.3 by 0.12 mm. Floral bracts triangular, the longest c. 1.2 mm, acute or shortly acuminate. Pedicel and ovary 7.5–10 mm, with the node c. 0.5 mm from the floral bract. *Flowers* scattered, opening about simultaneously, wide open. *Median sepal* reflexed, triangular, c. 5.8 by 1.9 mm, index c. 3, acute, margins irregularly ciliate, base broadly attached; thin; surface glabrous. *Lateral sepals* free, not falcate, ovate, c. 6.3 by 2.7 mm, index c. 2.3; otherwise as the median sepal. *Petals* erect, slightly falcate, ovate, c. 4.3 by 1.2 mm, index c. 3.6, acuminate, margins regularly ciliate except near the base, ciliae shorter towards the tip; base rather broadly attached; thin; surface shortly pubescent towards the tip. *Lip* curved near the base, general outline spatulate, c. 5 by 1.4 mm, index c. 3.6 (not spread), tip rounded, margins ciliate, ciliae shorter towards base and tip; thick; surface more or less glabrous; adaxially not concave near the base, with 2 distinct, obtuse ridges diverging and coinciding with the margins towards the base, continuing over 2/3–3/4 of the length of the tip, and with a median slit in between; abaxially convex at the base, slightly concave up to 2/3–3/4 of the length of the lip, slightly convex towards the tip. *Column* from ovary to the tip of the stamens c. 1.1



Bulbophyllum gemma-reginae J.J. Vermeulen. a. Flowering plant; b. flower; c. flower analysis, from left to right: median sepal, petal, lateral sepal, lip; d. column, lateral view (all drawn from the type specimen).

mm. *Stelidia* small, falcate, narrowly triangular, c. 0.8 mm, with a distinct, obliquely forwards directed, deltoid, acute tooth along the upper as well as the lower margin, stigma distinctly protruding at its base, triangular; column foot with deltoid, rounded lateral wings about halfway. *Anther* abaxially with a rounded knob, the front margin slightly protruding, truncate, with long hairs. *Pollinia* 4, ovoid, flattened on both sides, the inner more than half as long as the outer.

Colours — Sepals creamy yellow, suffused with pale reddish brown towards the tip. Petals creamy yellow, with almost black lines bordering midvein and margins. Lip white, ridges on adaxial side greyish with minute white specks, margins at top part greyish black; hairs yellowish. Column yellow, foot with reddish purple spots.

Etymology — Named to commemorate the opening of the Van Steenis Building by Her Majesty Queen Beatrix on June 11, 1996. The specific epithet *gemma-reginae* means 'the Queens' jewel'.

Distribution — Malaysia: Sabah, Interior Zone, Ulu Padas area, near Long Pa Sia.

Habitat & Ecology — Primary forest at c. 1100 m altitude. On branches of an understorey tree.

Note — Most similar to *B. jolandae* J.J. Vermeulen but differs in having a sub-umbellate inflorescence and two distinct ridges on the adaxial surface of the lip.