

A NEW SPECIES OF BULBOPHYLLUM (ORCHIDACEAE) FROM
EAST AFRICA

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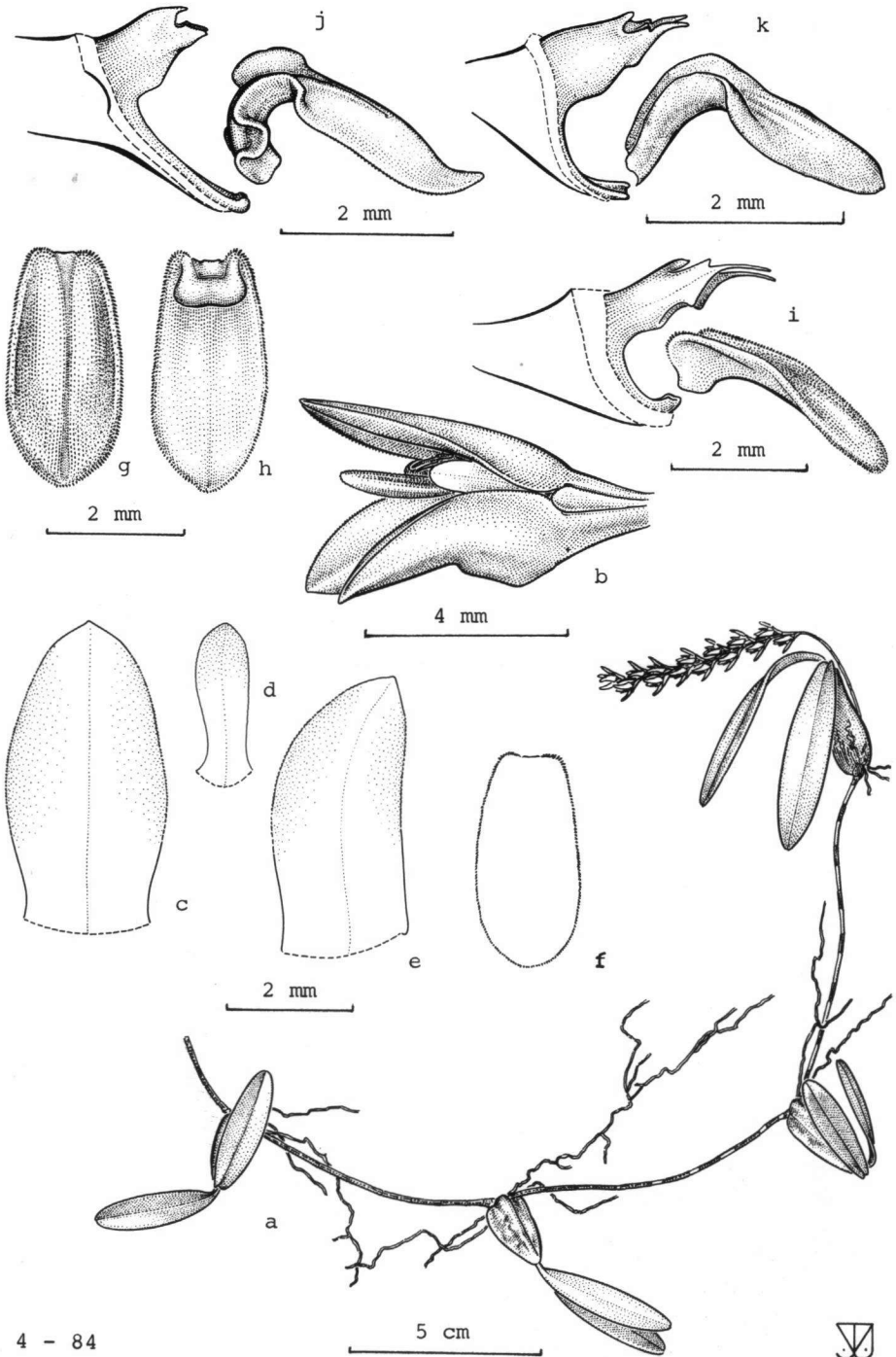
Rijksherbarium, Leiden, The Netherlands

During revisional work on continental African *Bulbophyllum* (Orchidaceae) an undescribed species has been found:

Bulbophyllum bavonis J. J. Vermeulen, *spec. nov.* – Fig. 1.

Bulbophyllo prorepenti et *B. stolzii* affinis, a prima in columnae steliidiis caudatis, a secunda in labello latere adaxiali papilloso differt. – *T y p u s*: *Dowsett Lemaire 674* (K).

Plant creeping, epiphytic. Roots 0.5–0.8 mm diam. *Rhizome* 0.8–1.2 mm diam., nodes not or hardly swollen; rhizome scales tubular, tip acute or subacute, the upper ones obtuse; membranous with some well-spaced nerves; keeled below towards the tip. *Pseudobulbs* 2-leaved, ovoid or narrowly ovoid, 2–9 cm apart, 1.2–3.5 × 0.3–1.3 cm, more or less flattened, strongly 4-angled. Petiole 1–2 mm long. *Leafblade* oblong to lanceolate, 1.7–5.5 × 0.4–1.3 cm; tip rounded to obtuse, usually finely emarginate, either or not oblique; coriaceous, thick; midrib somewhat prominent abaxially. *Inflorescence* 3.5–11 cm long, 4–18-flowered. Peduncle wiry, more or less erect, 1.2–3.6 cm × 0.4–0.5 mm, about orbicular in section, glabrous, with 5–6 scales. Scales tubular, up to 3–4 mm long; tip acuminate, the upper ones acute; membranous, nerves inconspicuous; keeled abaxially towards the tip; glabrous. Rachis somewhat arching or nodding, terete, straight or very slightly zig-zag bent, 2.3–7.4 cm long, glabrous. Floral bracts recurved, deltoid to ovate, 3.2–4.5 × 3–3.2 mm; tip acute; base broadly attached; membranous; keeled abaxially; glabrous. *Flowers* distichous, recurved, many or nearly all open simultaneously, not fully opening. Pedicel and ovary 2–3 mm long, glabrous. *Median sepal* about straight, narrowly elliptic to oblong, 5.2–6 × 2–3 mm; tip obtuse, subacute or very slightly apiculate; margins entire, very finely papillose, especially in the upper half; base broadly attached; rather thin; very finely papillose towards the margins adaxially, especially in the upper half; not keeled and about glabrous abaxially. *Lateral sepals* free, straight to somewhat recurved, obliquely oblong to ovate oblong, 5–5.5 × 2–2.6 mm, tip acute; otherwise as the median sepal. *Petals* straight, obovate-oblong to obovate-lanceolate, 2–2.8 × 0.8–0.9 mm, tip subacute, obtuse or slightly emarginate; margins entire and



glabrous near the base, towards the tip slightly irregular and very finely papillose; base broadly attached; thin; not keeled abaxially; glabrous. *Lip* recurved just above the base, in natural position oblong to broadly lanceolate, 3.6–4 × 1.2–1.8 mm, tip obtuse, rounded or slightly retuse; margins entire, coarsely papillose near the base, finer papillose towards the tip; thick; adaxially with a weakly to moderately developed, rounded ridge in the basal half at each side of the median line, with a hardly or very weakly concave part very near to the base; surface rather coarsely papillose except for a narrow median strip which is glabrous; abaxially with a very low, retuse ridge in the lower half, glabrous or nearly so. *Column* 2.3–3 mm long, with more or less falcate, triangular, caudate stelia of 1.2–1.6 mm long, which have a distinct, deltoid, obtuse or subacute tooth along their adaxial margin, just above their base, and occasionally a small, more or less deltoid, acute, forward directed tooth along their abaxial margin; stigma with a slightly protruding base but without a basal tooth. *Anther* c. 0.6 × 0.5 mm, front margin not drawn out, about truncate, thin, slightly irregular, glabrous; basally deeply emarginate; abaxially with a strongly developed, conical, obtuse, more or less papillose thickening near the top which strongly overtops the front margin, surface somewhat papillose. *Pollinia* 4; ovoid; the small ones strongly flattened on either side, more than half as long as the large ones which are flattened on one side. Fruit not seen.

Colours. Pseudobulbs often reddish. Sepals and petals pale green, tinged with maroon/mauve or entirely maroon/mauve. Lip yellow.

Distribution. Tanzania, Malawi.

TANZANIA. Iringa District. Kiwira Forest Reserve: Johansson 1024 (K), Leedal 6305 (K). Mbeya District. Rungwe Mts, Mwakaleli: Hepper, Field & Mhoru 5462 (K).

MALAWI. Northern Province. Misuku Hills: Dowsett Lemaire 674 (K).

Ecology. Montane forest, 1500–1700 m. Flowering March–May.

Notes. 1. *Bulbophyllum bavonis* is closely allied to both *B. prorepens* Summerh. from the Mitumba Mts in East Zaire and adjacent Ruanda (3 collections seen) and *B. stolzii* Schltr. from Tanzania and Malawi (22 collections seen).

Although it tends to be somewhat more robust, vegetatively it is identical to these species. The three species can only be separated when flowering: *B. prorepens* and *B. stolzii* have sepals and a lip which are glabrous adaxially, not papillose as in *B. bavonis*, they have a lip which is recurved about halfway, not at its very base as in *B. bavonis*, and they have a much less elongate column than *B. bavonis* with distinctly shorter stelia (acute or truncate in *B. prorepens* and shortly acuminate in *B. stolzii*). Besides, *B. prorepens* has a lip with distinctly undulate margins near its base.

2. The shape of the lip varies somewhat in *B. bavonis*: some specimens have a slightly narrower lip than the drawn specimen but are otherwise identical.

Fig. 1. *Bulbophyllum bavonis* J. J. Vermeulen. a. Flowering plant, b. flower, c. median sepal, d. petal, e. lateral sepal, f. lip, g. lip, adaxial side, h. lip, abaxial side, i. column and lip (a–i. Dowsett Lemaire 674, type). – *B. prorepens* Summerh. j. Column and lip (Burt 3152, type). – *B. stolzii* Schltr. k. Column and lip (Stolz 767, type).

3. This species is named in honour of Bavo S. Bruinsma, born the 25th of September 1919. On the first of August 1963 he was appointed Curator of the Botanic Garden of the University of Leiden (The Netherlands); on the first of October 1984 he will retire. During this period he has contributed much to the consolidation of the position of the garden within the university by maintaining on an international level the public collections and the research collections, among which the recently much extended collection of Orchidaceae, especially of the Coelogyninae and the Bulbophyllinae which are subject of taxonomical research at the Rijksherbarium in Leiden.