

New *Crepidium* (Orchidaceae, Malaxidinae) species from Solomon Islands and Bismarck Archipelago

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Received 14 March 2000, accepted 6 August 2000

Szlachetko, D. L. & Margońska, H. B. 2000: New *Crepidium* (Orchidaceae, Malaxidinae) species from Solomon Islands and Bismarck Archipelago. — *Ann. Bot. Fennici* 37: 303–307.

Two new species of the Australasian genus *Crepidium* Bl. (Orchidaceae, Malaxidinae) are described as new and illustrated in line drawings.

Key words: *Crepidium*, Epidendroideae, Orchidaceae, taxonomy

In their recent studies on the orchid flora of the Solomon Islands and Bougainville, Lewis and Cribb (1991) listed six species under the genus *Malaxis* Sol. ex Sw. As was pointed out by Szlachetko (1995), *Malaxis* is a highly heteromorphic taxon and should probably be split into several genera, of which *Crepidium* Bl. is the largest. Of Lewis and Cribb (1991) species, five belong to it. A sixth species, *Malaxis latipetala* (J. J. Smith) P. F. Hunt, belongs to the genus *Pseudoliparis* Finet (Szlachetko & Margońska 1999), and the transfer was made by Margońska and Szlachetko (2000).

Revising materials of Malaxidinae from Solomon Islands and Bougainville lead us to conclude

that the collection *Hunt RSS 2223* represents a new species. Another new taxon was found from Bismarck Archipelago.

Crepidium mariae Marg. & Szlach., *sp. nova* (Fig. 1)

Species haec Crepidio brachyodonti et C. melanophyllo similis, sed labello exarato in parte superiori V-plicato et tepalis brevioribus recedit.

HOLOTYPE: Solomon Islands. San Cristobal, mouth of Pegato River, 24.VII.1965 *Hunt RSS 2223* (L).

Terrestrial. Pseudobulbs 8.6–12.5 cm long,

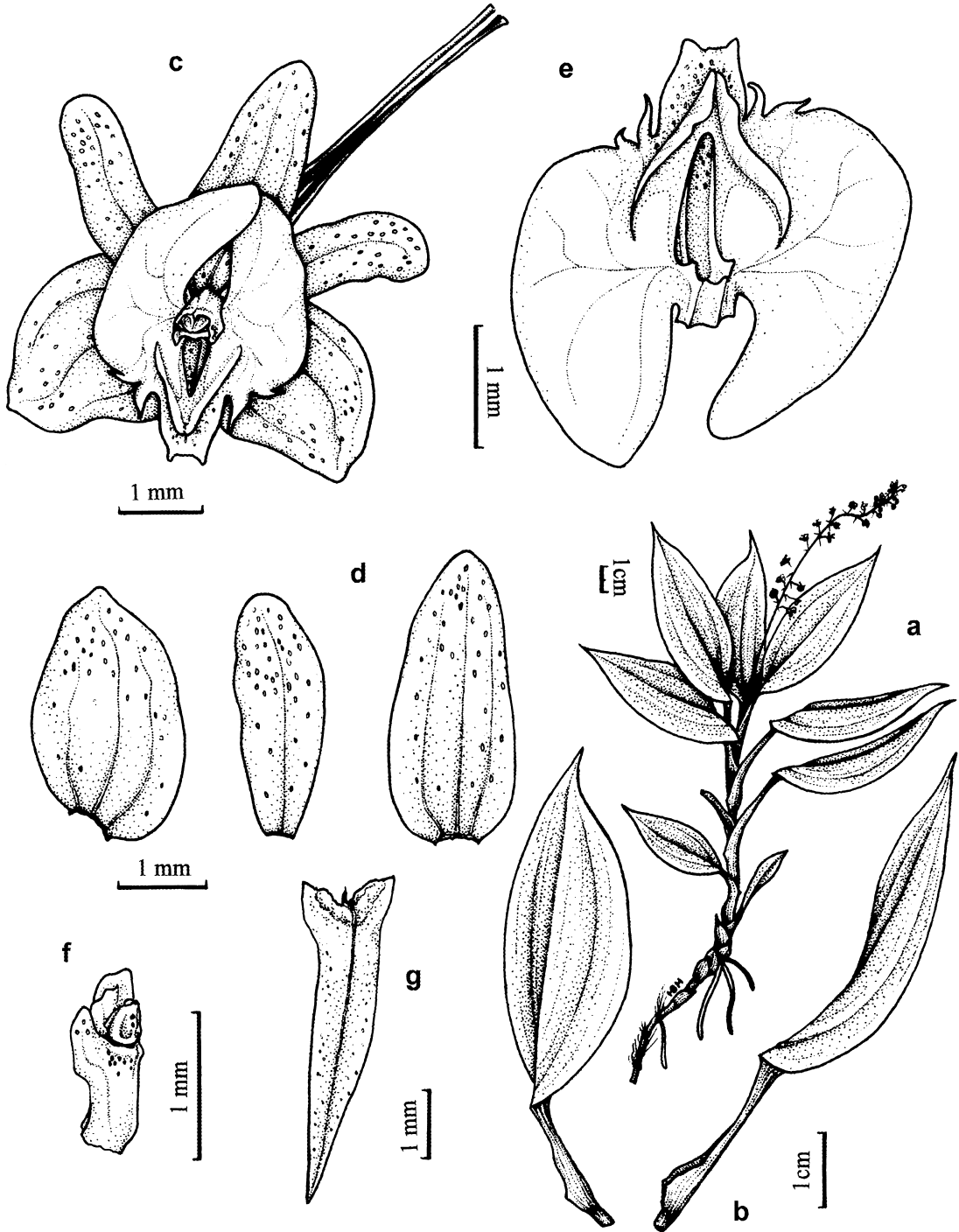


Fig. 1. *Crepidium mariae* Marg. & Szlach. (drawn from holotype). — a: Habit. — b: Leaves. — c: Flower. — d: Tepals. — e: Lip. — f: Gynostemium, side view. — g: Floral bract.

2.5–3.6 mm in diameter, cylindrical to fusiform, slender, ascending. Leaves 8–15, pale grass-green; petiole 0.6–1.8 cm long, canaliculate, widening towards base where forming a sheath; leaf blade 2.0–8.2 cm long, 1.2–2.9 cm wide, elliptic to oblong elliptic, falcate, acuminate, pale grass-green. Inflorescence 10.6–15.8 cm long, erect; spike 5.8–11.2 cm long, ca. 40–80-flowered, fairly dense in lower part, dense above, pale vinaceous purple. Flowers medium-sized for the genus, nonresupinate, yellow-brown with a greenish centre. Floral bracts to 1.2 cm long, wide at base, linear to narrowly triangular, longly acuminate, pale green. Pedicel and ovary to 0.8 cm long, slender, pale green shaded purple. Tepals pale greenish-orange. Dorsal sepal 3.4–3.7 mm long, 1.4–1.6 mm wide, oblong-ovate, rounded to shortly apiculate, 3-nerved. Petals 3.0–3.4 mm long, 1.0–1.3 mm wide, oblong-obovate, slightly falcate, plicate, rounded, 1-nerved. Lateral sepals 2.5–3.2 mm long, 1.7–2.1 mm wide, ovate to oblong-obovate, shortly apiculate, 3-nerved. Lip 3.5–3.8 mm long, 3.2–3.5 mm wide, lamina obscurely orbicular in general outline, orange, red at base of middle lobe; middle lobe 0.8–1.0 mm long, 0.7–0.8 mm wide at base, with 2 small teeth at apex (0.1–0.2 mm long, 0.2–0.3 mm wide at base); lateral lobes with 4 teeth along apical margins, falcate, narrow, acute, internal teeth ascending, to 0.4–0.6 mm long, 0.2–0.3 mm wide at base, external teeth horizontal, 0.2–0.4 mm long, 0.3–0.4 mm wide at base, long-auriculate; auriculae 1.8–3.0 mm long, 1.5–1.8 mm wide at base, semioval, rounded at apex, central cavity deep, narrow, surrounded by a thin border, from above covered by a thick, plicate rim, triangular in general outline, central nerves slightly thickened basally, 1.8–2.2 mm long, 0.2–0.4 mm wide. Gynostemium 1.7–1.8 mm long, typical for the genus, pale greenish-orange.

ETYMOLOGY: The name of the species is dedicated to Mrs. Maria Margonińska-Kortylewska.

DISTRIBUTION: Known so far from the type collection only.

HABITAT: Forest floor near a river bank at ca. 70 m altitude.

This species appears to be related to *Crepidium*

brachyodontum (Schlecht.) Szlach. and *C. melanophyllum* (Schlecht.) Szlach. It differs from both of them, however, in the shape of tepals and lip, in the presence of a canaliculate cavity on the lip disc and a V-shaped rim in its distal part.

Crepidium witkowskianum Szlach. & Marg., *sp. nova* (Fig. 2)

Planta habitu Crepidio acatangulae et C. melanophyllo vergens, sed labello truncato et lobo mediano inciso appendicis quinque filiformibus utrinque praedito recedit.

HOLOTYPE: Bismarck Archipelago. District New Ireland, Subdistrict Kavieng, N Schleinitz Range, 5 km S Logagon village, 24.X.1974 *Croft & Lelean LAE 65634* (L).

Terrestrial. Pseudobulbs 7.8 cm long, 5–8 mm in diameter, cylindrical to fusiform, ascending. Leaves ca. 4; petiole 1.4–1.8 cm long, canaliculate, widening towards the where forming a sheath; leaf blade 6.2–10.6 cm long, 2.7–3.2 cm wide, lanceolate-ovate, acuminate, somewhat glossy, green. Inflorescence ca. 21 cm long, erect; spike 13.0 cm long, with 70 or more flowers, fairly dense in the lower part, dense above. Flowers small, nonresupinate, yellow green. Floral bracts to 7.5 mm long, narrowly triangular, acuminate. Pedicel and ovary to 3.0 mm long, slender. Dorsal sepal ca. 2.6 mm long, ca. 1.2 mm wide, oblong-ovate, rounded to shortly apiculate, 3-nerved. Petals 2.0–2.2 mm long, 0.6–0.7 mm wide, slightly sigmoidally curved, narrow-linear, plicate, obtuse to truncate, 1-nerved. Lateral sepals ca. 2.4 mm long, 1.7–1.8 mm wide, widely ovate at base, narrowing upwards, tip rounded to shortly apiculate, 5-nerved. Lip up 4.0 mm long, to 3.5 mm wide, lamina almost rectangular in general outline, with 12 teeth along apical margins, two central teeth at apex of middle lobe; shortest tooth rounded to obtuse at apex; middle lobe 0.8–0.9 mm long, ca. 0.8 mm wide at the base; lateral lobes semi-orbicular, with 5 teeth of unequal length, the longest tooth to 1.2 mm long, 0.2–0.3 mm wide at base, narrowly linear, acute, sometimes an additional, external tooth present, commonly triangu-

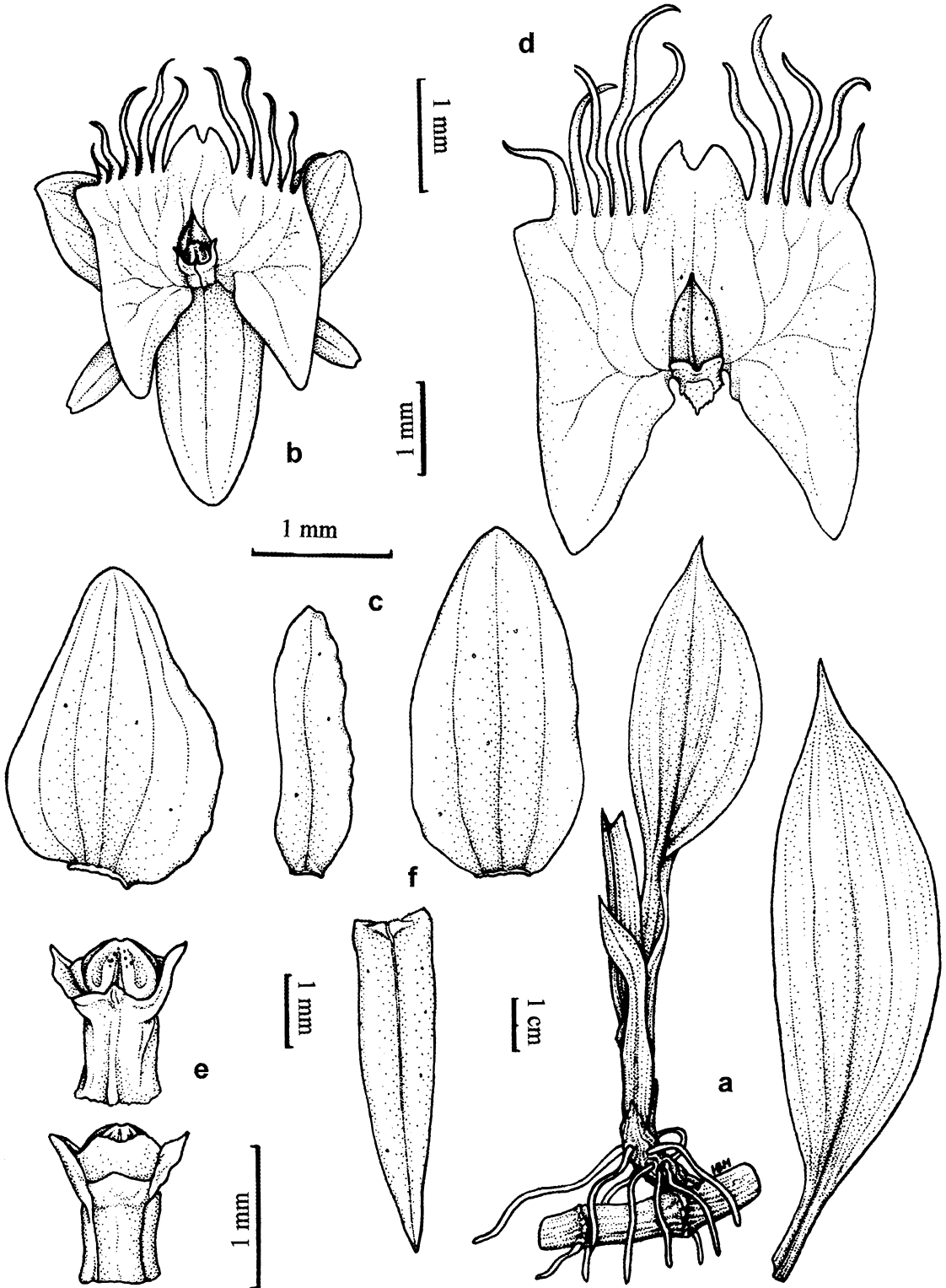


Fig. 2. *Crepidium witkowskianum* Szlach. & Marg. (drawn from holotype). — a: Lower part of stem and a leaf. — b: Flower. — c: Tepals. — d: Lip. — e: Gynostemium. — f: Floral bract.

lar, short and wide, rounded, long-auriculate; auriculae 1.6–1.9 mm long, up to 1.2 mm wide at base, triangular; central cavity deep, obscurely surrounded, 0.5–0.7 mm long, 0.2–0.3 mm wide, central nerves slightly thickened basally. Gynostemium 1.0–1.2 mm long, typical for the genus.

ETYMOLOGY: Dedicated to Prof. Dr. hab. Andrzej Witkowski, an eminent Polish diatomologist.

DISTRIBUTION: Known so far from the type collection only.

HABITAT: Lowland hill forest, karst, limestone outcrops, steep terrain, at ca. 600 m.

This species is habitually similar to *Crepidium acutangulum* (Hook. f.) Szlach. and *C. melanophyllum* (Schlecht.) Szlach. However, it is easily distinguished from both by the truncate lip apex with filiform teeth and an incised middle lip lobe.

ACKNOWLEDGMENTS: We are grateful to Prof. Dr. hab.

Ryszard Ochyra for the Latinization of the diagnoses and the Curators of BM, HBG, L and W for the loan of herbarium specimens and/or their hospitality during our personal visits. This study was financed by KBN (Polish Committee for Scientific Research) grants No. 6P04C-063-15 and 6P04C-055-16.

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