

Notes on the genus *Pseudoliparis* (Orchidaceae, Malaxidinae), with descriptions of two new species from New Guinea

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Two new species of the genus *Pseudoliparis* Finet (Orchidaceae) from New Guinea are described and illustrated: *P. gregorii* Marg. & Szlach. and *P. cruciatis* Marg. & Szlach. Two new combinations within this genus are proposed: *P. balabacensis* (Ames) Marg. & Szlach. and *P. latipetala* (J. J. Sm.) Marg. & Szlach.

Key words: Epidendroideae, New Guinea, Orchidaceae, *Pseudoliparis*, taxonomy

The Australasian genus *Pseudoliparis* Finet (Orchidaceae, Malaxidinae) is characterised by a unique gynostemium structure. There is a horn or a ridge on the dorsal surface of the column part and a narrowly triangular, acute rostellum, subequal in length to the anther. Additionally, the flower segments differ from the related genus *Crepidium* Bl. The sepals and petals are subsimilar, the lip being unlobed or obscurely 3-lobed and basally auriculate. It lacks teeth of any kind.

While examining specimens for a revision of *Pseudoliparis*, we also found some specimens which differ distinctly from all congeners. They represent two new species described here.

***Pseudoliparis gregorii* Marg. & Szlach., sp. nova** (Fig. 1)

Species haec Pseudoliparidi breviscapae similis, sed marginibus sepalorum et labelli undulatis et labello cucullato, concrassatione nullo recedit.

TYPE: New Guinea. West part, valley of the lower Pami River, ca. 5 km N of Manokwari. 25.XIII.1957, *Koster BW 4379* (holotype L).

Terrestrials. Pseudobulbs ca. 6.8 cm long, 4.0–7.0 mm in diameter, cylindrical to fusiform, ascending. Leaves ca. 6; petiole 1.8–3.3 cm long, canaliculate, widening towards base where form-

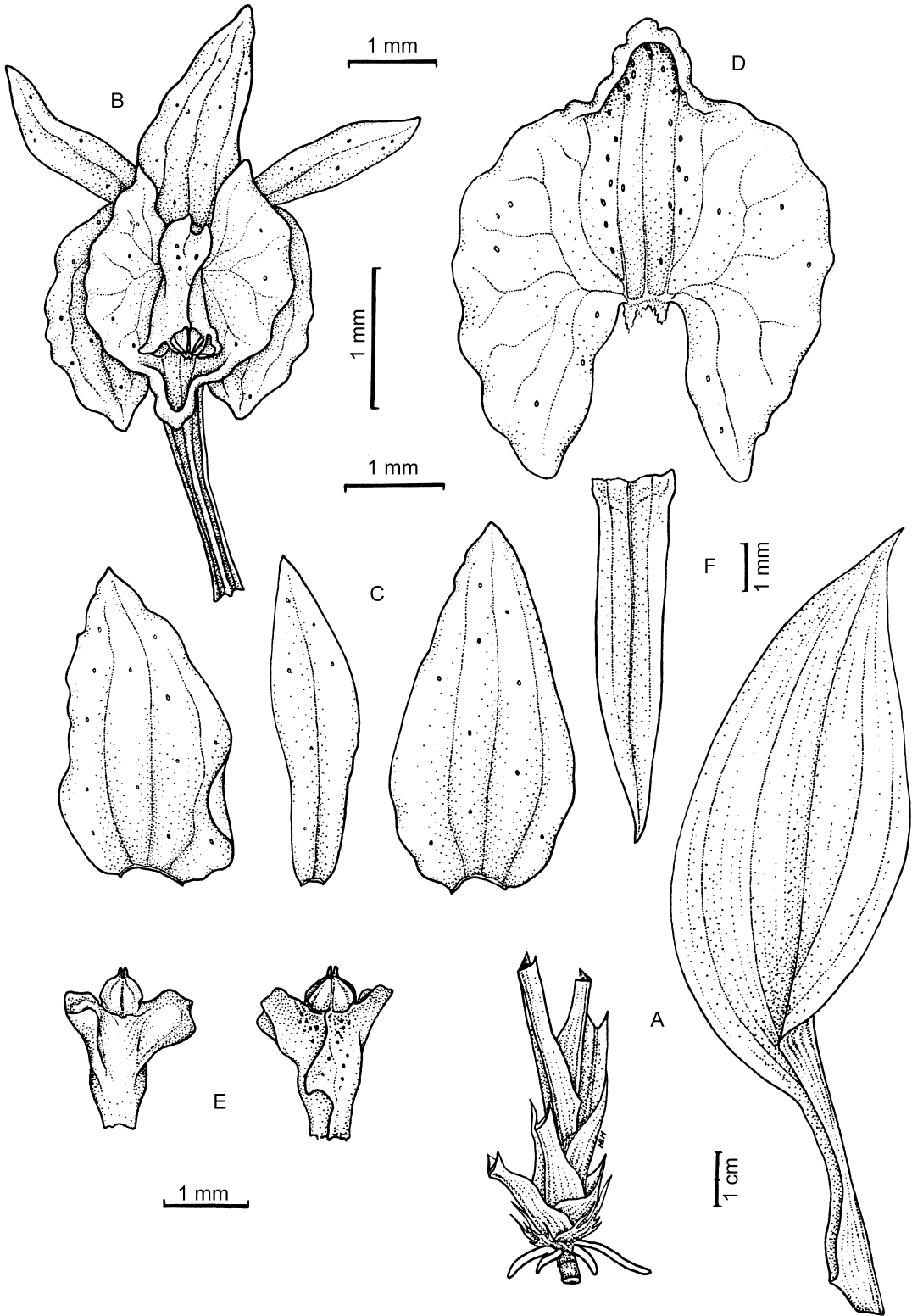


Fig. 1. *Pseudoliparis gregorii* Marg. & Szlach. (from the holotype). — A: Pseudobulb and leaf. — B: Flower. — C: Tepals. — D: Lip. — E: Gynostemium. — F: Floral bract.

ing a sheath; leaf blade 9.2–13.3 cm long, 3.2–4.9 cm wide, ovate to oblong-ovate, acuminate, medium-green. Inflorescence ca. 34.5 cm long, erect; spike ca. 17.2 cm long, with 100–150 flowers or more, fairly dense in lower part, dense above. Flowers rather small, nonresupinate, yellow. Floral bracts up to 1.0 cm long, wide at base, linear to oblong-triangular, acuminate. Pedicel and ovary up to 1.0 cm long, slender. Dorsal sepal 3.2–3.5 mm long, 1.5–2.0 mm wide, oblong-ovate, slightly plicate, acuminate at apex, 3-nerved. Petals 3.2–3.4 mm long, 0.8–0.9 mm wide, oblong-lanceolate, slightly falcate, long acuminate at apex, 1-nerved. Lateral sepals 2.8–3.1 mm long, 1.8–2.2 mm wide, oblong-ovate, acuminate at apex, 3-nerved. Lip 3.3–3.6 mm long, 3.0–3.4 mm wide, lamina obscurely orbicular in general outline, middle lobe semiorbicular, with a shallow cavity, irregularly plicate, rounded at apex, side lobes semiorbicular, long-auriculate; auriculae 1.2–1.5 mm long, up to 1.5 mm wide at base, triangular to falcate, plicate, shortly apiculate to rounded at apex, central part of lip flat. Gynostemium up to 2.0–2.2 mm long, staminodium wide, with a falcate process typical for the genus.

ETYMOLOGY. The species named in honour of Prof. Dr. hab. Grzegorz Węgrzyn, an eminent Polish molecular biologist, working at Gdańsk University, Poland.

DISTRIBUTION. Known only from the type collection. It was growing in a primary forest, on clay soil. Alt. ca. 40 m.

Pseudoliparis gregorii is somewhat similar to *P. breviscapa* (Schlecht.) Szlach. & Marg., although the sepals and lip margins are distinctly undulate. Also, the lip has a cucullate apex and is completely devoid of thickenings.

Pseudoliparis cruciatis Marg. & Szlach., *sp. nova* (Fig. 2)

Species haec Pseudoliparidi graminifoliae et P. stenophyllae vergens, sed recedit labello concrossatione nullo, unguo distincto insidento et staminodis digitatis antice gynostemii cruciatis.

TYPE: New Guinea. Vogelkop Peninsula, Aifat River valley, near Sururem. 24.X.1961, *van Royen & Sleumer 7032* (holotype L).

Terrestrials. Pseudobulbs ca. 3.6 cm long, 1.2–

2.0 mm in diameter, fusiform, ascending. Leaves ca. 8; petiole 2.0–4.0 mm long, canaliculate, widening towards base where forming a sheath; leaf blade 1.8–4.2 cm long, 0.5–0.9 cm wide, oblong-lanceolate, thick, dark-green. Inflorescence ca. 11.3 cm long, erect and delicate; spike ca. 4.2 cm long, with ca. 20–25 flowers, fairly dense in lower part, dense above. Flowers medium-sized, non-resupinate, cream-white. Floral bracts up to 0.5 cm long, wide at base, narrowly oblong-triangular, acuminate. Pedicel and ovary up to 4.0–5.0 mm long, slender. Dorsal sepal ca. 3.5 mm long, 1.8–1.9 mm wide, oblong-ovate, slightly plicate, rounded at apex, 3-nerved. Petals 2.8–2.9 mm long, 1.6–1.8 mm wide, rhomboid, slightly falcately curved, plicate, acute at apex, 1-nerved. Lateral sepals ca. 3.0 mm long, 1.9–2.0 mm wide, ovate, rounded at apex, 3-nerved. Lip ca. 2.8 mm long, 2.5–2.7 mm wide, lamina resembling a wide arrow in general outline; middle lobe wide and semiorbicular, slightly and irregularly plicate, with a small tooth at apex, ca. 0.3 mm long and wide at base, acute at apex; side lobes long-auriculate; auriculae 0.8–1.0 mm long, 0.6–0.8 mm wide at base, semioval, shortly apiculate to rounded at apex, central part of lip flat, basal part of lip very wide, up to 1.2 mm. Gynostemium ca. 1.7 mm long, with a falcate, wide process, dark green, typical for the genus; staminodes narrow and falcately curved.

ETYMOLOGY. The epithet refers to the staminodes crossed in front of the anther.

DISTRIBUTION. Known only from the type collection. Growing in undergrowth of *Castanopsis* forest. Alt. 600 m.

This species appears to be related to *Pseudoliparis graminifolia* (Schlecht.) Szlach. & Marg. and *P. stenophylla* (Schlecht.) Szlach. & Marg.. However, its lip is completely devoid of callosity and is set on a distinct claw. Furthermore, the digitate staminodes are crossed in front of the anther.

In the course of our studies, it became clear that two species currently placed in other genera should be transferred to *Pseudoliparis*. Thus, we propose the following new combinations:

Pseudoliparis balabacensis (Ames) Marg. & Szlach., *comb. nova*.

Basionym: *Malaxis balabacensis* Ames, Phil. J. Sci. (Bot.)

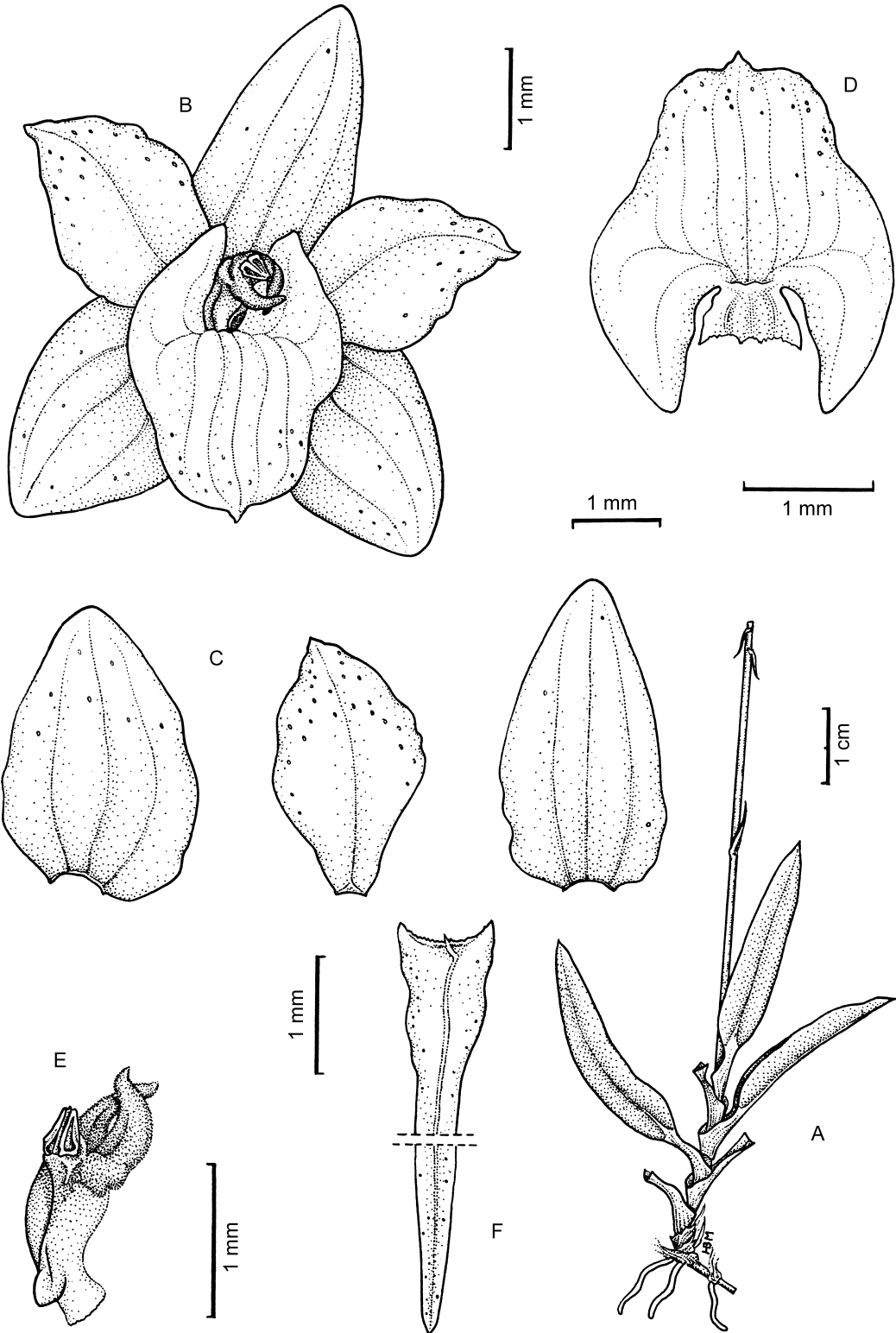


Fig. 2. *Pseudoliparis cruciatis* Marg. & Szlach. (from the holotype). — A: Plant. — B: Flower. — C: Tepals. — D: Lip. — E: Gynostemium. — F: Floral bract.

6: 42. 1911.

Pseudoliparis latipetala (J. J. Sm.) Marg. & Szlach., *comb. nova*.

Basionym: *Microstylis latipetalum* J. J. Sm., Bull. Dep. Agric. Ind. Neerl. 39: 17. 1910.

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