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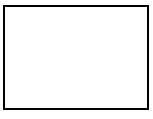

Cover images: Plant and flower of *Appendicula cordata* Wibowo & Juswara. Photos by A. R. U. Wibowo.

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TRICHOTOSIA GABRIEL-ASEMIANA (ORCHIDACEAE), A NEW SPECIES FROM TAMBRAUW, WEST PAPUA PROVINCE, INDONESIA

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ABSTRACT
MAMBRASAR, Y. M. & SCHUITEMAN, A. 2017. A new species of *Trichotosia* (Orchidaceae: Epidendroideae: Podochileae) from Tambrauw, West Papua, Indonesia. *Reinwardtia* 16(2): 107–110. — A new species of orchid, *Trichotosia gabriel-asemiana* Mambrasar & Schuit. from West Papua, Indonesia, is described and illustrated, including a colour photograph.

Key words: New species, Tambrauw, *Trichotosia gabriel-asemiana.*

ABSTRAK
MAMBRASAR, Y. M. & SCHUITEMAN, A. 2017. Jenis baru *Trichotosia* (Orchidaceae: Epidendroideae: Podochileae) dari Tambrauw, Papua Barat, Indonesia. *Reinwardtia* 16(2): 107–110. — Dipertelakan dan disajikan gambar ilustrasi serta foto jenis baru anggrek *Trichotosia gabriel-asemiana* Mambrasar & Schuit. dari Papua Barat, Indonesia.

Kata kunci: Jenis baru, Tambrauw, *Trichotosia gabriel-asemiana.*

INTRODUCTION

New Guinea is one of the global hotspots for orchid diversity, with about 2869 species in 129 genera being recorded so far (Ormerod, 2017). The genus *Trichotosia* Blume (Epidendroideae: Podochileae) is here represented by approximately 23 species, many of which are poorly known and hard to distinguish from each other. The genus as a whole contains about 40–50 species (Cribb & Ng, 2005), distributed from the Himalaya and China, through the Malay Archipelago and the Philippines to the Solomon islands and Vanuatu. New Guinea is clearly one of the centres of diversity for the genus. Its members are easily recognised by the red-brown, yellow or sometimes whitish hairs covering the leaf-sheaths and, usually, the leaves.

In 2016, during field work in the Tambrauw Regency in the Vogelkop or Bird's Head Peninsula of New Guinea, part of the West Papua Province of Indonesia, a team from Bioresources Exploration Papua (Widya Nusantara Expedition Program (E-Win) 2017)-LIPI discovered a species of *Trichotosia* that by its small size, creeping rhizome, single-flowered inflorescences, and maroon flowers appeared quite distinct from any other *Trichotosia* species known from New Guinea. It is, however, remarkably similar to a little-known species from Vietnam, *T. dalatensis* (Gagnep.) Seidenf., but the morphology and indumentum of the lip appear sufficiently distinct to consider the New Guinea material as belonging to a different, undescribed species.

Trichotosia gabriel-asemiana Mambrasar & Schuit., *spec. nov*. — Type: Indonesia, West Papua Province Tambrauw Regency, Fef District, along the road to Syubun village, 21 April 2016, *Michael Mambrasar & Santika 97* (Holotype: BO!). Figs. 1 & 2.

Diagnosis. This species is similar to *Trichotosia microphylla* Blume and *T. dalatensis* by its slender, creeping rhizome, short leaves (less than 2 cm long), and solitary flowers with an abaxial, conical callus near the lip apex. *Trichotosia dalatensis* has flowers that are similar in size and in the maroon colour, but differs in having a glabrous, uniformly thick lip with a distinct adaxial callus, whereas *T. gabriel-asemiana* has a lip that is sparsely pilose abaxially and which is abruptly divided into a fleshy basal part and a thin-textured upper part, but lacks an adaxial callus. *Trichotosia microphylla* has larger, yellowish green flowers (lip *ca.* 9 mm long, *vs*. 4 mm in *T. gabriel-asemiana*), with the lip not pubescent abaxially, and not abruptly divided into a fleshy basal part and a thinner upper part.

Small epiphytic herb. *Roots* numerous from the rhizome and especially from the basal part of the stem, hairy, branching, up to 4.5 cm long, 1 mm

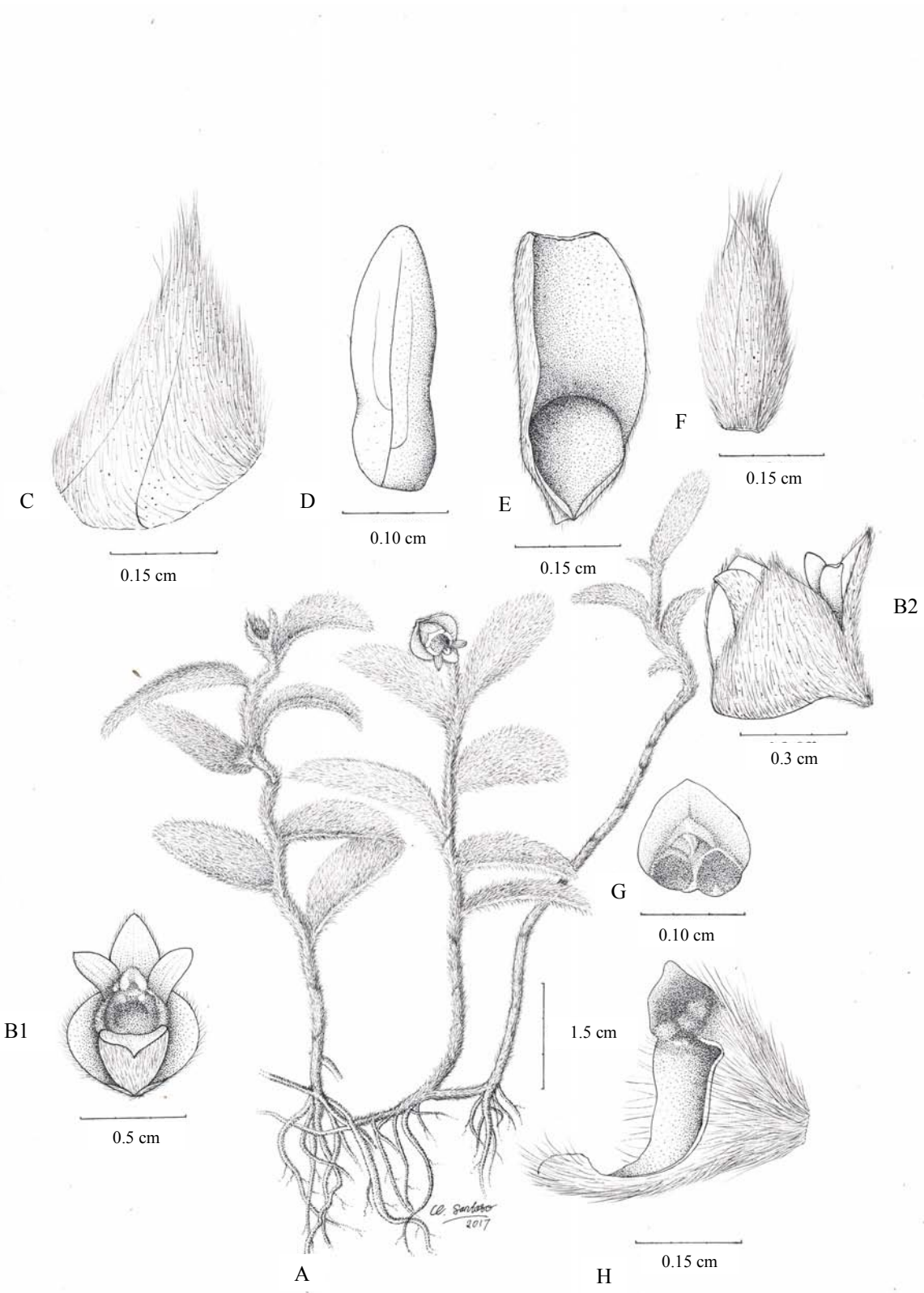

Fig.1. *Trichotosia gabriel-asemiana* Mambrasar & Schuit., *spec. nov.* A. Plant, B1. Flower (top view), B2. Flower (lateral view), C. Lateral sepal, D. Petal, E. Lip, F. Dorsal sepal, G. Anther, H. Column. From *Michael Mambrasar & Santika 97* (BO), drawing by Wahyudi Santoso (BO).

Fig. 2. *Trichotosia gabriel-asemiana* Mambrasar & Schuit., *spec. nov.* Habit and flower. Photo taken from type location by YM Mambrasar (BO).

diam. *Rhizome* slender, creeping, branching, 2–4.5 cm long, 0.5–1 mm diam., covered with hairy sheaths. *Stems* erect, patent or pendulous with ascending apex, green to brown, 4–8.5 cm long, 1–2 mm diam, terete, internodes 5–11 mm long, covered with leaf sheaths, with 10–15 leaves. *Leaves* distichous, increasing in size upwards, subpatent, green, 1.4–1.7 cm × 4–8 mm, oblong to elliptic or narrowly obovate, acute, with decurved margins, thick-coriaceous, rather densely covered in soft, pale greyish brown hairs *ca*. 1.5 mm long. *Inflorescence* emerging laterally from the upper internodes of the stem, short, one-flowered; peduncle very short, covered in soft, pale greyish brown hairs. Floral bract 6 × 3 mm, lanceolate, pilose like the leaves. Pedicel-with-ovary 1 mm long, densely pilose. *Flower* not opening widely, maroon, 7 mm long, 5 mm wide. Dorsal sepal 3 × 1 mm, narrowly ovate, subacute, abaxially sparsely verrucose, pilose, 3-veined. Lateral sepals 4 mm long, at the base 4 mm wide, obliquely broadly triangular-ovate, subacute, sparsely verrucose, pilose, 3-veined. Petals porrect, 3 × 1 mm, narrowly oblong, obtuse, glabrous, with one branching vein, appearing 3-veined near the middle. Lip entire, 4 × 1.8 mm, narrowly oblong-ovate, fleshy in the basal 2.2 mm, abaxially rather sparsely pilose, 5-veined, the apical part (epichile) concave and thinner textured, the transition between the fleshier basal part and the epichile resembling a ridge; margin of epichile undulate near the base, apex obtuse, with a small, conical, abaxial callus. Fruit not seen.

Distribution. New Guinea, endemic. Only known from the type locality in Tambrauw Regency, West Papua Province, Indonesia.

Habitat. Epiphyte on trees in primary forest, elevation 450 m.

Etymology. Named in honour of Gabriel Asem, Regent of Tambrauw Regency since 2011, who in 2015 declared Tambrauw regency a conservation zone.

Notes. *Trichotosia gabriel-asemiana*, which it is our pleasure to name in honour of Gabriel Asem, the Regent of Tambrauw who has done so much for nature conservation in West Papua Province, is distinct from any of the species of *Trichotosia* currently recorded from New Guinea by its small size, creeping rhizome, single-flowered inflorescences, and maroon flowers. It is, however, clearly allied to a small group of taxa related to *T. microphylla* Blume (Blume, 1825; Smith, 1905; 1908-1914, fig. 292), a species from Southeast Asia, Sumatra, Java and Borneo. The new species is particularly similar to *T. dalatensis* from South Vietnam (Gagnepain, 1930, as *Eria dalatensis* Gagnep.; Seidenfaden, 1992), which differs in the characters mentioned in the diagnosis. Another

related species is *Trichotosia dongfangensis* X. H. Jin & L. P. Siu (Jin & Siu, 2004) from China (Hainan). This has different colours (flower yellowish green with two purple calli on the lip), and a larger (7 mm long), glabrous lip of uniform thickness that lacks the conical abaxial callus near the apex; it seems very close to *T. microphylla* Blume. Peter O'Byrne (pers. comm.) observed plants in Sulawesi that appeared indistinguishable from *T. microphylla*, except that the lip was pubescent abaxially, much like our new species. The status of these plants is at present unresolved.

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Scope. *Reinwardtia* is a scientific regular journal on plant taxonomy, plant ecology and ethnobotany published in June and December. Manuscript intended for a publication should be written in English.

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