

***Orchipedum* Breda (Orchidaceae, subfam. Orchidoideae), a new generic record for Thailand**

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ABSTRACT. The genus *Orchipedum* is recognized as a new generic record for Thailand with one species, *Orchipedum plantaginifolium* Breda. The genus and species are described and illustrated.

KEY WORDS: *Orchipedum plantaginifolium*, Orchidaceae, new generic record, Thailand.

INTRODUCTION

The genus *Orchipedum* Breda belongs to the subtribe Goodyerinae, tribe Cranichideae in the subfamily Orchidoideae (Pridgeon et al., 2003), previously placed in other subfamilies, e.g. Neottioideae Lindl. (Seidenfaden & Wood, 1992) and Spiranthoideae Dressler (Dressler, 1993). The genus contains only three species including two Malesian species, *O. plantaginifolium* Breda (Breda, 1827–1829; Seidenfaden & Wood, 1992; Comber, 2001) and *O. wenzelii* (Ames) J.J. Sm. (Smith, 1934), and one species from South Vietnam, *O. echinatum* Aver. & Averyanova., described by Averyanov & Averyanova (2006). Although the subfamily Orchidoideae has recently been treated in the Flora of Thailand, including 4 tribes, 7 subtribes, 30 genera and a total of 146 species (Pedersen et al., 2011), the genus *Orchipedum* has not been recorded from Thailand until now. During a floristic inventory of native orchids in the southernmost part of Peninsular Thailand by the author, *O. plantaginifolium*, previously known only from Peninsular Malaysia, Sumatra and Java, was discovered.

ORCHIPEDUM

Breda, Gen. Sp. Orchid. Asclep. 2: t. 10. 1827 (1829); Seidenf. & J.J. Wood, Orchids Pen. Mal. & Sing.: 79. 1992; J.B. Comber, Orchids of Sumatra: 71. 2001. Type species: *O. plantaginifolium* Breda

Terrestrial, perennial herb; rhizome creeping, succulent, rooting at the nodes; erect stem several-leaved, with a terminal inflorescence. *Leaves* spirally arranged, scattered along the stem, persistent, glabrous, convolute, green; petiole grooved, basally expanded into an amplexicaul sheath; lamina usually obliquely elliptic-ovate or elliptic-lanceolate. *Inflorescences* erect, racemose, many-flowered; peduncle with a few sheathing scale-leaves. *Flowers* sessile, resupinate. *Sepals* free, hairy; dorsal sepal connivent with petals forming a hood; lateral sepals obliquely spreading, base concave, enclosing the labellar spur. *Petals* thin, membranous. *Labellum* 3-lobed, adnate to column base, spurred; spur short, subglobose, inner surface with a group of fleshy dendritic appendages on each side; base of labellum with 2 erect lateral lobes and 2 parallel keels; mid-lobe with a short claw, anchoriform. *Column* arcuate; anther 2-loculate; pollinia 2, sectile; caudicle and viscidium present; stigma lobes connate. *Ovary* hairy. *Capsule* and *Seeds* not seen.

Three species distributed in southern Vietnam, Peninsular Malaysia, Sumatra, Java, and the Philippines. One species in Thailand. The description below is based on Thai material.

This genus can be easily distinguished from other putatively related genera in the subtribe Goodyerinae (e.g. *Herpysma* Lindl. and *Hylophila* Lindl.) by having a short, pouch-like labellar spur

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containing a group of fleshy dendritic appendages on each side.

Orchipedum plantaginifolium Breda, Gen. Sp. Orchid. Asclep. 2: t. 5. 1827 (1829); Seidenf. & J.J.Wood, Orchids Pen. Mal. & Sing.: 79, fig. 29. 1992; J.B. Comber, Orchids of Sumatra: 71. 2001.— *Queteletia plantaginifolia* (Breda) Blume, Coll. Orchid.: 117. 1859; Holttum, Rev. Fl. Malaya 1: 130. 1953. Type: Indonesia, Java, Kuhl 2012 (holotype L). Fig. 1.

Erect part including inflorescence to 1 m high; rhizome creeping, succulent, green, glabrous, 8–12 mm in diam.; each node usually with 4–5 roots; internodes 2.5–6.5 cm long. *Leaves* 6–12, glabrous; petiole (including sheath) 3–5 cm long, amplexicaul sheath ca 1 cm long; lamina obliquely

elliptic-ovate to elliptic-lanceolate, 6–15 by 2–7 cm, apex acuminate, base cuneate, margin straight or slightly undulate, midrib impressed above and prominent underneath. *Inflorescence* dense, 10- to 22-flowered; peduncle 8–9 cm long, glandular-hairy, lower part almost glabrous; scale-leaves sheathing, lanceolate, 2.5–3.3 cm long, apex acuminate, sparsely glandular-hairy or subglabrous; rachis 4–10 cm long, glandular-hairy; floral bracts lanceolate, greenish turning pale reddish brown, 15–25 by 5–7 mm, apex acuminate, glandular-hairy. *Flowers* 12–15 mm in diam. *Sepals* greenish, 5-veined, outer surfaces glandular-hairy; dorsal sepal connivent with petals forming a hood, dorsal sepal strongly concave, narrowly elliptic-ovate, 10–11 by 4–5 mm; lateral sepal spreading, obliquely ovate, 10–11 by 5.5–6 mm. *Petals* thin, membranous, obliquely oblanceolate to oblong-oblanceolate,

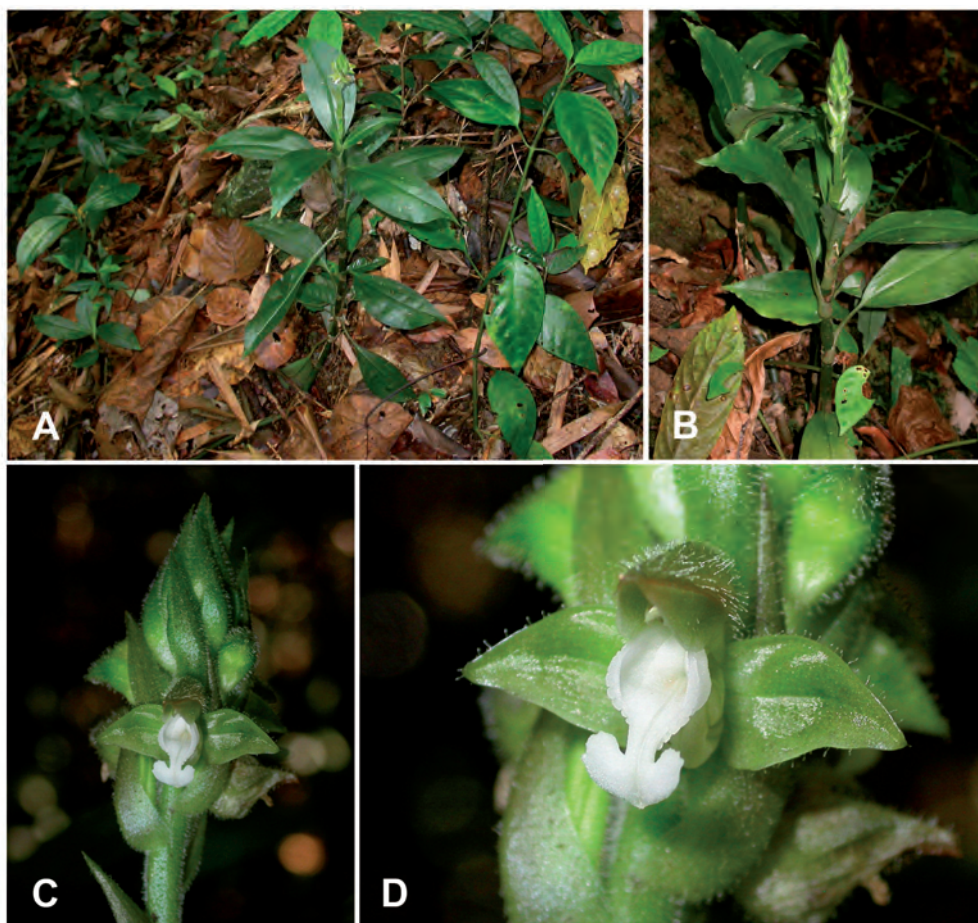


Figure 1. *Orchipedum plantaginifolium* Breda: A–B. Habit and habitat; C. Inflorescence; D. Flower. Photographed by J. Wai.

10–11 by 3.5–4 mm, 1-veined, outer surfaces sparsely glandular-hairy or subglabrous. *Labellum* 3-lobed, with a median longitudinal groove, 10–11 mm long, white; spur subglobose, ca 3 mm in diam., inner surface with a group of fleshy dendritic appendages on each side; lateral lobes erect, semi-circular, 3.5–4 mm high, 5–6 mm long, forward edges thickened, with many small lobulated warts on the underside; keels 2, erect, semi-circular, extending in parallel from the base to near the middle of labellum; midlobe bilobed, with a short claw ca 1.5 mm long, anchoriform, 3–4 by 5–5.5 mm, apex obtuse to subacute; lobules slightly erose. *Column* arcuate, with 2 bidentate rostellar arms, 8–9 mm long; anther narrowly ovoid, ca 6 mm long; pollinia 2, sectile, narrow, clavate; stigma ovate, ca 1 mm long. *Ovary* 8–10 mm long, glandular hairy. *Capsule* and Seeds not seen.

Thailand.—PENINSULAR: Yala [Betong district, Khlong Mu Bo, 3 April 2005, *J. Wai* 187 (PSU); same loc., 12 April 2010, *J. Wai* 1887 (PSU)].

Distribution.—Peninsular Malaysia, Sumatra, Java.

Ecology.—In deep shade along streamside areas in primary lowland evergreen forest at 500–600 m alt. Flowering in March to June.

Conservation status.—Its provisional status is considered to be Least Concern (LC) according to IUCN Red List Criteria Version 3.1 (IUCN, 2001). It is not under immediate threat, because of its wide geographical distribution and existence in well-protected habitats.

Notes.—Although the few specimens collected from Thailand, this species seems to be locally fairly common. During field observations from 2005–2012, a lot of sterile plants were found in Betong, especially in the lowland forest of Bang Lang National Park.

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