

## *Pholidota longibulba* Holttum (Orchidaceae), a new record for Thailand

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ABSTRACT. *Pholidota longibulba* Holttum (Orchidaceae), an epiphytic orchid from Kaeng Krachan National Park, Phetchaburi, is newly recorded for Thailand. The species is described and illustrated.

KEY WORDS: *Pholidota longibulba*, epiphytic orchid, National Park

### INTRODUCTION

*Pholidota* Lindl. ex Hook. is a genus of epiphytic, lithophytic or terrestrial orchids in the subfamily Epidendroideae, tribe Arethuseae, subtribe Coelogyninae, distributed from Pakistan, India, Sri Lanka, Nepal, Bhutan, Myanmar, S China, Taiwan, Indo-China and the Malesian region into the SW Pacific (Pridgeon *et al.*, 2005). Members of this genus are characterized by the labellum having a relatively short, boat-shaped hypochile of which the sides are erect and in front usually drawn out into lateral lobes which continue towards the back of the lip; in addition, the flowers are rather small, and the column is rather short and compact (de Vogel, 1988). Twenty-nine species and 9 sections were listed in a revision of the genus (de Vogel, 1988). Seven species were recorded for Thailand by Gunnar Seidenfaden in his treatment of Thai *Pholidota* [*P. aidiolepis* Seidenf. & de Vogel, *P. articulata* Lindl., *P. bracteata* (D. Don) Seidenf. (= *P. pallida* Lindl.), *P. carnea* (Blume) Lindl., *P. convallariae* (Rchb.f.) Hook.f., *P. imbricata* Hook. and *P. recurva* Lindl.] (Seidenfaden, 1986). Ngernsaengsarua, Tippayasri & Suddee (2014) added *P. rubra* Lindl. as a new record for Thailand, and Suddee (2014) treated those eight species in his account of the genus for the Flora of Thailand.

*Pholidota longibulba* was discovered during field-work in Kaeng Krachan National Park, Phetchaburi Province, Thailand, in September 2010 and October 2013. The plant was found on trees in lower montane forest, along the Phanoen Thung Nature Trail.

### DESCRIPTION

***Pholidota longibulba*** Holttum, Gard. Bull. Singapore 11: 286. 1947; Holttum, Rev. Fl. Malaya I: 237. 1953; de Vogel, Orchid Monogr. 3: 33, fig. 14. 1988; Seidenf. & J.J. Wood, Orchids Penins. Malaysia Singapore: 195, fig. 82d–f. 1992; O’Byrne, A to Z S.E. Asian Orchid Sp. vol. 2: 136, fig. 2011. Type: *Holttum s.n. (VIII-1946)* (SING, n.v.; according to de Vogel (1988: 33) only a sterile specimen is left. The flowers were said to have been stored in spirit but could not be found. An illustration of the plant habit based on the type is found in de Vogel (1988: fig. 14)). Figs. 1 & 2.

Plants epiphytic; rhizome creeping, terete, enclosed by coriaceous scales. *Pseudobulb* ovoid, 3.5–9 × 1.2–4 cm, smooth, base usually enclosed by coriaceous sheaths. *Foliage leaves* 1 per pseudobulb, arising from pseudobulb apex, elliptic-oblong to elliptic-obovate, 8–20 × 3–6 cm, apex acute, base

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cuneate, lamina glossy green, coriaceous; petioles to 3 cm long. *Inflorescence* racemose, hysteroanthous, glabrous, pendulous, 24–38 cm long; peduncle 9–18 cm long, very thin, covered by sterile bracts at base of rachis; rachis slender, 15–20 cm long, weakly zig-zag, laxly 20–46-flowered; floral bracts ovate-lanceolate or elliptic, 6–9 × 2.5–6 mm, inrolled, apex acute, caducous. *Flowers* orangish white, 4 × 3 mm; pedicel and ovary 0.5–2 mm long, angular. *Sepals* dissimilar; dorsal sepal ovate-elliptic, 2.5–3.5 × 2–2.5 mm, apex obtuse or rounded, 3-nerved; lateral sepals oblique, ovate, 2.5–4 × 2–2.5 mm, strongly keeled on the back, apex acute, 3-nerved. *Petals* ovate-oblong, 2–3.5 × 1–1.5 mm, apex obtuse, 1-nerved; *Labellum* obscurely 3-lobed, 3.5–4 × 2.5 mm, concave, base of the 3 veins thickened; mid-lobe orbicular, slightly recurved, apex rounded or subtruncate, whitish, with a large, flattened, emarginate, yellow to yellowish-brown callus; side lobes indistinct, deltoid, 1 mm long. *Column* pinkish-white, stout, 1–1.5 mm long; hood short, on each side at base with a triangular lobe, subtruncate at apex; anther terminal, incumbent, suborbicular in outline, ca 1 × 1 mm; pollinia 4 in 2 pairs, obovoid, ca 0.5 × 0.2 mm, connected by an inconspicuous caudicle; stigma cup-shaped; rostellum large. *Fruit* obovoid, 7–9 × 3–4 mm.

Thailand.— SOUTH-WESTERN Phetchaburi [Kaeng Krachan National Park, Phanoen Thung Ranger Substation, 1000 m, 5°39'572"N, 14°17'495"E, 29 Sept. 2010, *Raksue 140* (BKF, spirit collection); *ibid.*, 950 m alt., 24 Oct. 2013, *Suddee 4612* (BKF, spirit collection); *ibid.*, 28 Sept. 2010, *Toolmal, Raksue & Somprasong 53* (BKF, spirit collection)].

Distribution.— Peninsular Malaysia (type).

Ecology.— In lower montane forest, 900–1000 m alt. Flowering: September–November. Fruiting: October–January.

Vernacular.— Ueang sai soi noi (เอื้องสายสร้อยน้อย), ueang sai soi pha noen thung (เอื้องสายสร้อยพะเนินทุ่ง).

Notes.— *Pholidota longibulba* belongs to *Pholidota* section *Camelostalix* which has 3 more species in Peninsular Malaysia and Indonesia (*P. camelostalix* Rchb.f., *P. globosa* (Blume) Lindl., and *P. longilabra* de Vogel). The section can be recognized by having pseudobulbs close together

on a creeping rhizome, petals twice as long as wide, column longer than wide (Pridgeon *et al.*, 2005). *Pholidota longibulba* differs from all other species in the section in having unifoliate pseudobulbs. It was initially believed, based on the description and illustration in de Vogel (1988), that the Thai specimens differed significantly from the type of *P. longibulba*, especially in the shorter pseudobulbs and the broader, obtuse petals, and could represent a new taxon. However, photographs of Malaysian specimens by Peter O'Byrne published on the internet ([https://orchid.unibas.ch/index.php/en/specimen/en/182945/Pholidota/longibulba/Holttum\\_Richard\\_Erick](https://orchid.unibas.ch/index.php/en/specimen/en/182945/Pholidota/longibulba/Holttum_Richard_Erick)), one of which is reproduced in O'Byrne (2011), convinced us that these differences do not hold. The main characters to distinguish *P. longibulba* from other *Pholidota* species in Thailand include: each new pseudobulb develops from base of previous pseudobulb (differs in this respect from *P. articulata*); pseudobulb with one leaf (differs from *P. aidiolepis*, *P. articulata*, *P. carnea*, *P. convallariae* and *P. recurva*); inflorescence lax, floral bracts caducous, flowers not touching each other, labellum mid-lobe yellow to yellowish-brown with white edges (differs from *P. imbricata* and *P. pallida*).

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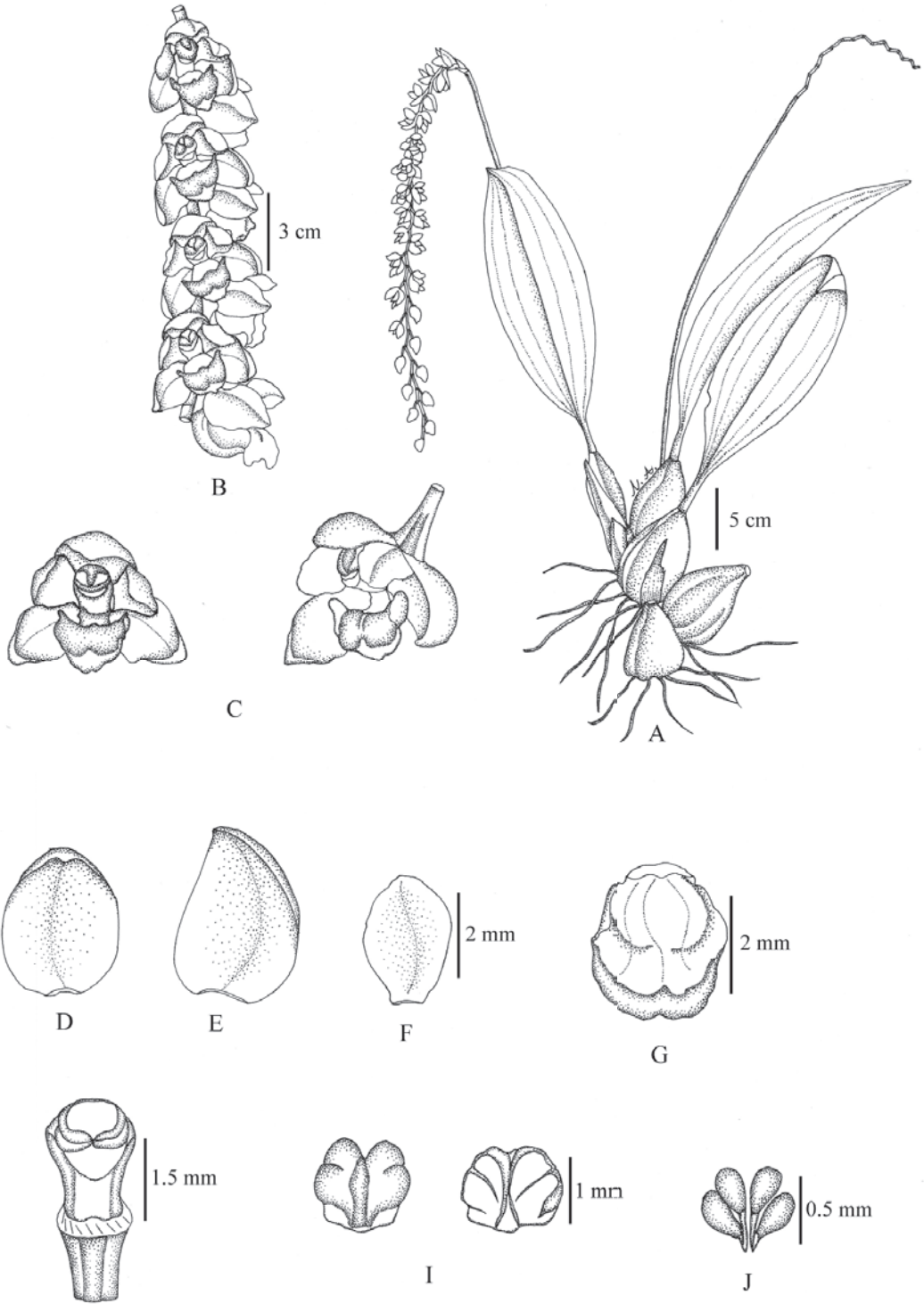


Figure 1. *Pholidota longibulba* Holtum: A. habit; B. inflorescence; C. flower in front and side view; D. dorsal sepal; E. lateral sepal; F. petal; G. labellum; H. column; I. operculum in upper and lower surfaces; J. pollinia, all from Toolmal, Raksue & Somprasong 53 (BKF). Drawn by N. Anuraktrakoon.

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Figure 2 *Pholidota longibulba* Holttum: A. habitat; B–C. flower in front and side view; D. inflorescence and fruit. Photographed by S. Raksue (A–C) and S. Rueangrueta (D).