

Dendrobium calicopsis (Orchidaceae), a New Record for Myanmar

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(Received 28 April 2020; accepted 24 June 2020)

Abstract *Dendrobium calicopsis* Ridl. (Orchidaceae) is recorded in Myanmar for the first time. This species was discovered on branches of trees along stony and mossy riparian forest, the Tanintharyi Nature Reserve, peninsular Myanmar. A description, its locality information in the country and photographic data are provided.

Key words : Burma, epiphyte, section *Pedilonum*, Tanintharyi, Tenasserim.

Introduction

Dendrobium Sw. is distributed widely throughout tropical and warm temperate Asia to Polynesia, and about 1500 species have been recognized (Mabberley, 2017). It is not only one of the three largest orchid genera but also one of the most important genera in commercial horticulture (Gogoi *et al.*, 2014).

Myanmar is one of the richest locations for *Dendrobium*, and Kress *et al.* (2003) reported 120 species of *Dendrobium* in the checklist. Kurzweil and Lwin (2014) published a preliminary checklist of Orchidaceae of Myanmar, in which 121 species were listed. Since then three new species of the genus were described from Myanmar; *D. hkinhumense* Ormerod & Kumar, *D. koyamae* Nob.Tanaka, T.Yukawa & J.Murata and *D. naungmungense* Q.Liu & X.H.Jin (Ormerod and Kumar, 2008; Tanaka *et al.*, 2010; Liu *et al.*, 2018). Recently Aung *et al.* (2020) published the annotated checklist of the genus in

which 144 species of *Dendrobium* were recorded.

During the biodiversity survey in Tanintharyi Nature Reserve, southern Myanmar, we collected *Dendrobium* specimens that belong to section *Pedilonum* Blume but does not match to either of the 144 species recorded in Myanmar. Given the characteristic morphology of flower with a long narrow mentum, and lip with a narrow claw, it was identified as *Dendrobium calicopsis* Ridl., a species known from the Malay Peninsula. Our morphological investigations using a dried specimen and a living specimen cultivated at the Orchid House of Tanintharyi Nature Reserve showed that it morphologically matched the original protologue by Ridley (1903) even it was poor and the drawing in fig. 112 by Seidenfaden (1985) and fig. 163 by Seidenfaden *et al.* (1992). *Dendrobium calicopsis* was described from Langkawi Island, near the border between Malaysia and Thailand, and thus far recorded in Khao Yai and Prachinburi etc., from which the population in Myanmar is less than 400km away (Fig. 1). A voucher specimen is deposited in the herbarium of the Forest Research Institute, Myanmar.

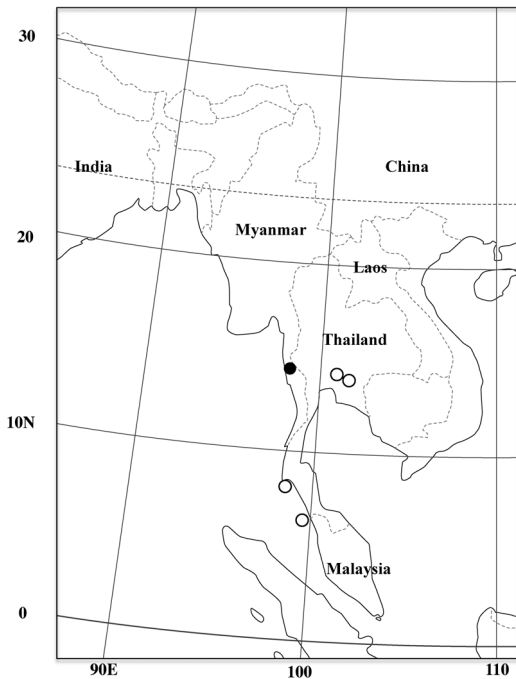


Fig. 1. Location of *Dendrobium calicopsis* in Myanmar. Solid circle indicates a newly recorded population in Myanmar, and open circles indicate known populations in Malaysia and Thailand based on Seidenfaden (1985).

(RAF).

Taxonomic Treatment

Dendrobium calicopsis Ridl. in J. Straits Branch Roy. Asiat. Soc. 39: 72 (1903); Holttum, Rev. Fl. Malaya 1: 313 (1957); Seidenfaden in Opera Bot. 83: 164 (1985); Seidenfaden and Wood, Orchids Penins. Malaysia Singapore: 373 (1992). —Fig. 2.

Anisopetala calicopsis (Ridl.) M.A.Clem. in Telopea 10: 283 (2003).

Pedilonum calicopsis (Ridl.) Rauschert in Feddes Rept. 94: 458 (1983).

Epiphyte. **Stem** pendulous, slender, stout, fleshy, dark purple, covered with white dry sheath, up to 45 cm, 0.5 cm in diameter; **leaf blade** elliptic, green, thin, 10–11 × 3.5–4 cm, apex acuminate, sometime purple striped or spotted on topmost one. **Inflorescence** raceme on

leafless stem, 1.5 cm long, 2–4 flowers; **peduncle** dark purple; **bracts** transparent, white. **Flowers** purple-white, 4 cm across; **pedicel** purple, 1–1.5 cm long; **bracteole** triangular, purple at base, tip white, acuminate, 2 × 2 mm; **dorsal sepal** lanceolate, purple-white with purple margin and tip, 22 × 8 mm, with purple veins, lower side purple, apex acute; **lateral sepal** linear-ovate, white with purple tip and margin, apex acute, 23 × 8 mm, lower side purple spotted; **petal** broadly elliptic, white with purple tip, 25 × 12 mm, obtuse, base tapering, margin erose; **lip** stout, oblong, white with purple tip, with 4 raised veins, margin erose; **spur** 1 cm long, purple, beaked, stout; **column** dark purple; **stigma** white, pollinia 2, yellow; **anther cap** purple with white line in the middle. **Ovary** purple, striped, 1 cm long.

Specimen examined: —**MYANMAR**. Tanintharyi Region. Kalon-htar Local Operation Unit, Tanintharyi Nature Reserve, Yephyu Township, Dawei District, 230 m elev., 14°19'52.6"N, 98°15'10.3"E, 19 August 2015, *Myo Min Latt 001* (RAF).

Habitat: —*Dendrobium calicopsis* grows on the branches of trees along the stream in the riparian forest ecosystem. It mostly grows on the branches projecting over the stream side and moss is common associate plant along the branches of trees. The plant prefers humid places in sparsely light. (Fig. 2A).

Phenology: —Flowering in July to August in rainy season.

Distribution: —Malaysia, Myanmar (new record) and Thailand.

Note: —Many populations were commonly found along the streams, especially southern part of the Tanintharyi Nature Reserve. The species is likely to be common around there, and further surveys in this region may discover more populations. This discovery so far represents the western edge of the species distribution (Fig. 1).

IUCN Conservation Status: —The extent of the populations remains unknown, but the protected area is large (ca. 1700 km²), and deforestation or forest fragmentation were not seen inside

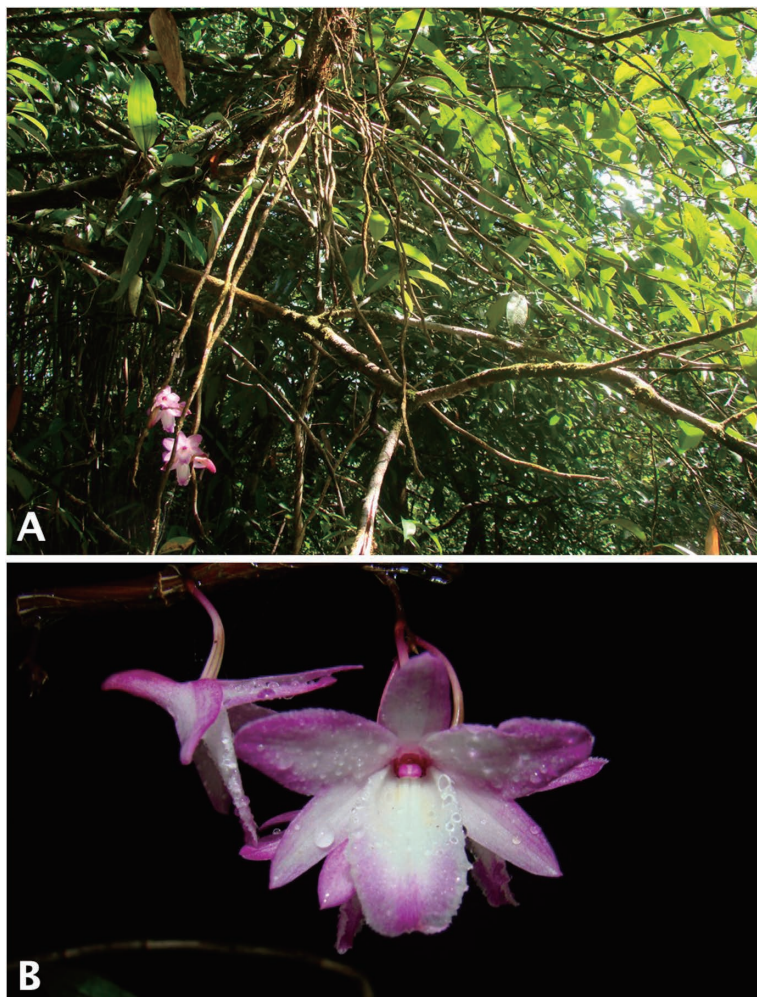


Fig. 2. *Dendrobium calicopsis*. A. Habitat of *Dendrobium calicopsis* associating with bryophytes on tree branches in the riparian forest, Tanintharyi Nature Reserve, Tanintharyi Region. B. Front view of flower.

the area during the survey. *Dendrobium calicopsis* is assessed as Least Concern (LC) (IUCN, 2012). This species is listed in CITES appendix II.

Acknowledgments

This study was carried out by the biodiversity conservation program of Tanintharyi Nature Reserve Project which is the first collaborative project between Ministry of Environmental Conservation and Forestry (presently Ministry of Natural Resources and Environmental Conservation), Union of Myanmar and PETRONAS Com-

pany together with Total E & P Myanmar since 2004. The authors are grateful to Forest Department of Myanmar for permitting and supporting our botanical surveys in the protected areas. We sincerely thank to TNRP staff; Aung Myat Tun, Aung Soe Than, Bo Bo Soe who assisted in field work. Thanks are also due to Saroj Ruchisan-sakun and Hubert Kurzweil for useful comments and sharing knowledge.

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