



Bulbophyllum reflexipetalum (Orchidaceae, Epidendroideae, Malaxideae), a new addition to the flora of India

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Abstract

Bulbophyllum reflexipetalum J.D.Ya, Y.J.Guo & C.Liu (Orchidaceae) has been added to the orchid flora of India. A detailed description and an illustration with photographs are provided in this article.

Résumé

Bulbophyllum reflexipetalum J.D.Ya, Y.J.Guo & C.Liu (Orchidaceae) est ajouté à la flore d'orchidée indienne. L'article propose une description morphologique détaillée et une planche photographique de l'espèce.

Keywords: Arunachal Pradesh, *Bulbophyllum*, India, new record, taxonomy.

Mots-clés : Arunachal Pradesh, *Bulbophyllum*, flore d'orchidées, Inde, taxinomie.

Introduction

Bulbophyllum Thouars (1822: 3) is one of the largest genera in the orchid family, comprising about 2200 species widely distributed in tropical Africa, Asia and America (Pridgeon *et al.*, 2014; Ya *et al.*, 2019). So far, 121 species have been recorded from India (Misra, 2019) and 56 species were recognized in Arunachal Pradesh (Hegde, *revised* 2017).

During a field trip under an orchid translocation project to the forested area of Ziro valley of lower Subansiri district of Arunachal Pradesh on 5 February, 2020, the first author collected an epiphytic orchid without flower. The orchid was planted at the orchid trail located in the Tale wildlife Sanctuary, Ziro valley of Arunachal Pradesh and flowered under observation on 10 March, 2020. On the basis of available literature (King & Pantling, 1898; Pradhan, 1979; Chowdhery, 1998; Pearce & Cribb, 2002; Lucksom, 2007; Chen & Vermeulen, 2009; Rao, 2010; Swami, 2017; Gogoi, 2019; Ya *et al.*, 2019) and critical examination of the flowers, it was identified as *Bulbophyllum reflexipetalum* J.D. Ya, Y.J. Guo & C. Liu (2019: 130). The occurrence of this species previously known only from the type locality of Motuo, Southeast Xizang, China, forms a new record to India and also Arunachal Pradesh thereby making the total number of species in Arunachal Pradesh up to 57.

A detailed description, illustration, information on habitat and a geographic distribution map are provided in the present manuscript. The voucher specimen has been deposited at the Herbarium of the Orchid Research Centre Tippi, Arunachal Pradesh as well as in the Herbarium of The Orchid Society of Eastern Himalaya (TOSEHIM), Regional Orchid Germplasm Conservation and Propagation Centre (Assam Circle), Assam.

Taxonomic treatment

Bulbophyllum reflexipetalum J.D.Ya, Y.J.Guo & C.Liu, *Phyto Keys* 130: 34 (2019).

Specimen examined: India, Arunachal Pradesh, forested area of Ziro valley of lower Subansiri district, 02/05/2020, fl. 03/10/2020 in the Tale wildlife Sanctuary, Gogoi 00808. Fig.1.

Plants epiphytic, with creeping rhizome. Pseudobulbs ovoid or ovoid-conic, 1-2 × 0.8-2 cm, with one leaf. Leaf oblong, 5-6.5 × 1.5-2 cm, leathery,



Fig .1: *Bulbophyllum reflexipetalum*

A. flower close up in natural habitat; B. inflorescence; C, D, E. different views of flower; F. perianth seen from the front; G. perianth seen from the back; H. lip with ovary & column; I, J. different views of lip; K. lip seen from the back; L. column front view; M. column side view; N. pollinia.

apex obtuse and emarginate; petiole 1-2 cm long. Inflorescence 10-20 cm long, longer than leaf, arising from the base of pseudobulb, umbellate, often 2-3-flowered; floral bract lanceolate, acuminate, concave, 6 × 2 mm. Flowers greenish yellow, sepals and petals with dark brown spots; lip greenish yellow, adaxially with dark brown patches. Dorsal sepal ovate, concave, apex obtuse, base with 1 tooth on each side, 8 × 5 mm; lateral sepals falcate-lanceolate, adnate to column foot, twisted inward, 10 × 5 mm; petals reflexed, broadly ovate-triangular, 3 × 2 mm, margin entire, apex mucronate; lip deflexed, triangular, lingulate, 4 × 3 mm, base sub-cordate with papillae on the edge, margin revolute, apex obtuse, adaxially with a longitudinal ridge from base to apex, abaxially with a longitudinal groove; column 3 mm long, with deltoid, rounded wings along lower margins, extended by a 7 mm long foot, apex attached to lip; anther sub-globose; pollinia 4, in 2 pairs, yellow, ovate, waxy.

Flowering: February-March.

Habitat: epiphytic on trees or branches, under broadleaf evergreen forest at an elevation between 1300 m and 1400 m.

General distribution: India (Ziro, Arunachal Pradesh) and China (Motuo County, Southeast Xizang) (Fig. 2)

Conservation status: unknown.

Acknowledgement

The authors are grateful to Dr. Pankaj Kumara, Kadoorie Farm and Botanic Garden (KFBG) Corporation, Lam Kam Road, Tai Po, New Territories, Hong Kong S.A.R., China for providing literature and valuable suggestion during species identification. The authors are also thankful to the Department of Environment and Forest, Government of Arunachal Pradesh (India) for their cooperation during the entire survey.

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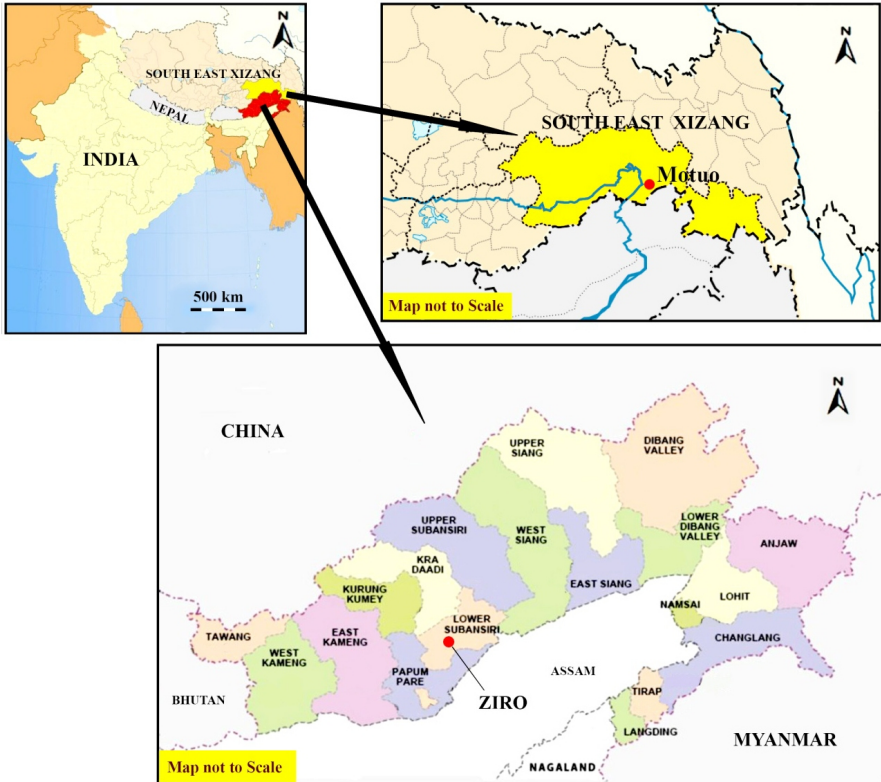


Fig. 2. Distribution map of *Bulbophyllum reflexipetalum*

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