

***Oberonia rufilabris* Lindley (Orchidaceae): a new record for the state of Assam, India**

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Abstract

A collection of *Oberonia rufilabris* Lindley (Orchidaceae) from the Dowarmara Reserve forest, Tinsukia, Assam is presented here as a new record for the flora of Assam. A detailed enumeration, photographs, present status, phenology, local distribution within Assam and geographical distribution are provided herewith for its easy identification.

Key words: *Oberonia rufilabris*, Orchidaceae, New record, Assam

INTRODUCTION

While working on Orchid flora of Assam in North East India, the authors came across interesting specimens of an epiphytic Orchid in its vegetative stage and collected from Dowarmara Reserve forest, Tinsukia, Assam February 2015. The plant was flowered in *ex situ* condition in November 2015. After critical examination, it turned out to be *Oberonia rufilabris* Lindley. A perusal of earlier literature related to the Orchid flora of India (Hooker 1888 – 1890; Rao 1996; Shakya & Chaudhary 1999; Chowdhery 2005; Chowdhery 1998, 2009; Bhagabati *et al.* 2006; Misra 2007; Hajra & De 2011; Gogoi 2012a,b) revealed that the occurrence of this species has not been reported earlier from Assam. Hence the present collection forms the first record of occurrence of the species for the state of Assam in North East India. A detailed enumeration of the species have been prepared based on the fresh specimens along with its habitat, photographs present status, local distribution within Assam and geographical distribution. The voucher specimen will be deposited in the Herbarium of the Department of Life Sciences, Dibrugarh University.

Taxonomic treatment

Oberonia rufilabris Lindley, Sert. Orchid.: t. 8 A. 1838; Hooker f., Fl. Brit. India 5: 683. 1888; King & Pantling, Ann. Roy Bot. Gard. Calcutta 8: 12, t. 15. 1898. [PLATE – I: Figs. 1 – 4]

Malaxis rufilabris (Lindley) Reichenbach f. in W.G.Walpers, Ann. Bot. Syst. 6: 213. 1861. *Iridorkis rufilabris* (Lindley) Kuntze, Revis. Gen. Pl. 2: 669. 1891. *Oberonia tiomanensis* M.R. Hendersson, Gard. Bull. Straits Settlements 5: 79. 1930. *Oberonia neotixieri* Guillaumin, Bull. Mus. Natl. Hist. Nat., sér. 2, 35: 204. 1963. *Oberonia pulchrebracteata* Tixier & Guillaumin, Bull. Mus. Natl. Hist. Nat., sér. 2, 35: 304. 1963. *Oberonia pantlingiana* L.R.Shakya & R.P.Chaudhary, Harvard Pap. Bot. 4: 360. 1999.

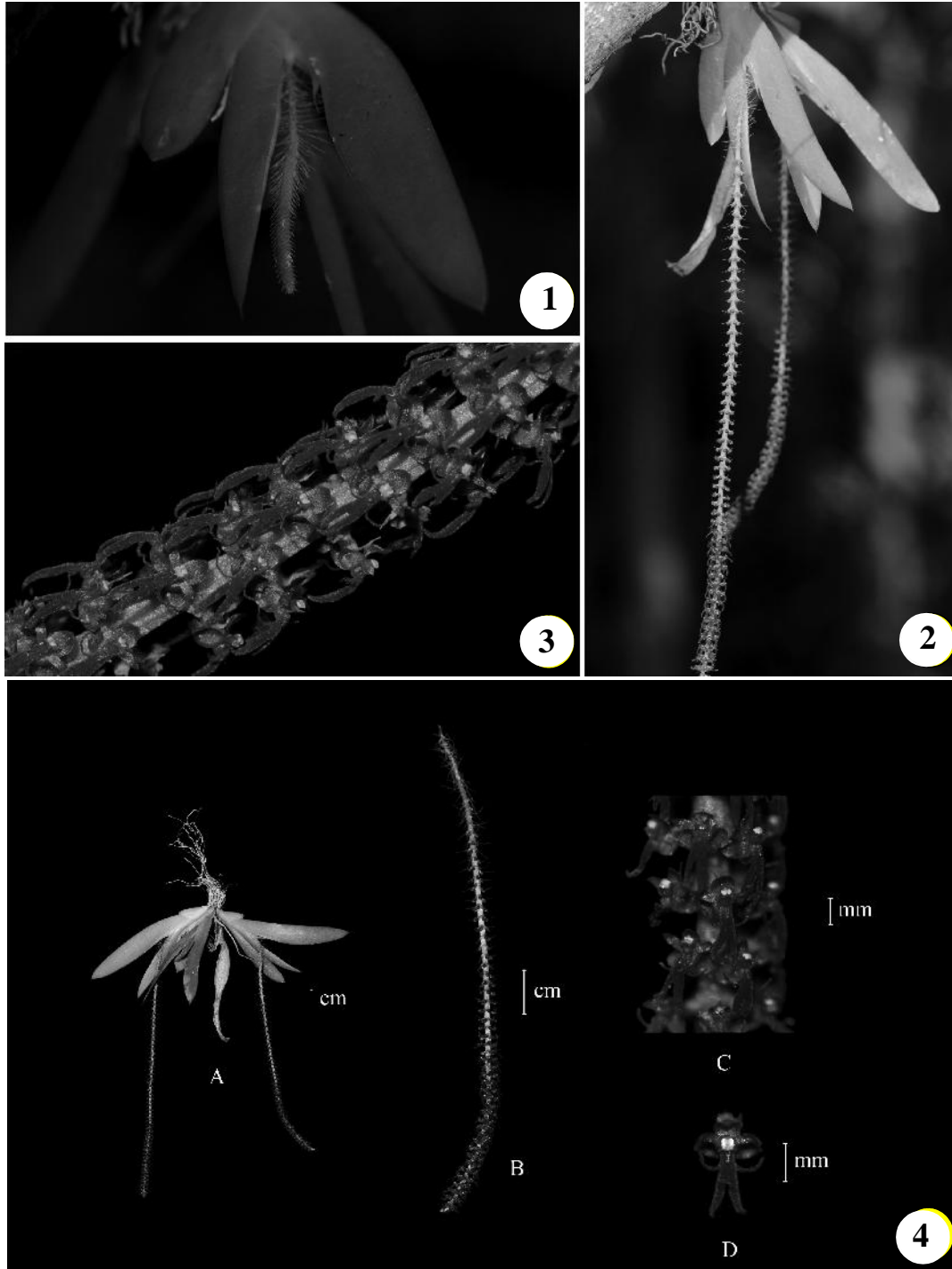


PLATE - I: *Oberonia rufilabris* Lindley. **Figs. 1 & 2:** Plant with inflorescence; **Fig. 3:** Close view of Inflorescence and flowers; **Fig. 4:** [plant and plant-parts are shown with measurements] **A.** plant with inflorescence; **B.** inflorescence; **C.** close view of inflorescence; **D.** flower

Plants epiphytic, 8–12 cm long including leaves. Stem very short, upto 0.5 cm. Leaves 3 or 4, subbasal, distichous-equitant, laterally compressed, linear or linear-lanceolate, 1.5–12 × 0.5–1 cm. Peduncle subterete, 3.5–5 cm, lower part with many sterile bracts; rachis 2.5–6.5 cm, 0.3–0.5 cm across, many flowered; floral bracts narrowly lanceolate, apex aristate. Flowers 3 or 4 in a whorl, red, anther cap white; sepals ovate, 0.8–0.9 × 0.5–0.6 mm, acute or obtuse; petals oblong, 0.7 × 0.2 mm, margin inconspicuously erose, obtuse; lip 3-lobed, 1.2–1.4 × 0.4 mm; mid-lobe deeply lobed again; lateral lobes transversely spreading, narrowly lanceolate; midlobe with 2 divergent, lanceolate or linear-lanceolate lobules. Column stout, toothed.

Flowering: November – January.

Habitat: Epiphytic on trees in dense forest.

Present Availability Status: Rare; the species was found only in one locality. Regular degradation of habitat possibly makes the species threatened in near future.

Exsiccatae: Assam, Tinsukia district, Dowarmara Reserve Forest, *Gogoi 0761*, dated 01.11.2015.

Geographical distribution: NE India (Assam, Arunachal Pradesh and Sikkim), Nepal, Bangladesh, Myanmar, Thailand, Malaysia, Vietnam, Cambodia.

CONSERVATION ASPECT

The forests of Tinsukia district of Assam support a large number of beautiful and important Orchid species. Though some works on the Orchids of Tinsukia district has been conducted but it needs further detailed exploration (Gogoi 2012a). At the same time, no work has been done on the conservation and propagation of these orchids. Incidentally, uncontrolled forest destruction has led to the fast depletion of Orchid habitats. The Orchids are also faced with heavy collection pressures for economic purposes (Gogoi 2012b). Proper enumeration of these species and their conservation are very much needed and greatly emphasized as, in comparison with other plant groups, whole of Orchidaceae is facing much higher risk of survival due innumerable natural and manmade stresses.

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