

Occurrence of *Oberonia emarginata* King & Pantling (Orchidaceae) in Darjeeling Himalaya – a new record for West Bengal, India

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[Received Revised 19.12.2012; Accepted 19.12.2012]

Abstract

Present paper deals with the *Oberonia emarginata* King & Pantling (Orchidaceae) is collected from Today forest areas of Kalimpong Sub-Division of Darjeeling Himalaya of Paschimbanga and is reported as new angiospermic record for the Darjeeling Himalayan region of India. An updated nomenclature, important synonyms, illustrated description, habitat, flowering and fruiting, altitudinal range, specimen examined, local availability status and geographical distribution of species has also been given.

Key words: *Oberonia emarginata*, Orchidaceae, new record, Darjeeling Himalaya, Paschimbanga.

INTRODUCTION

In Orchidaceae the genus *Oberonia* was established in 1830 by John Lindley. The genus comprises over 100 species in Tropical Asia, extending to the Pacific Islands, Australia and with a single species in Madagascar and tropical Africa (Pearce & Cribb 2002). Indian species of *Oberonia* Lindley was revised by Ansari & Balakrishnan in 1990.

Plants epiphytic rarely lithophytic, small to medium in size, erect to pendent. Stems short to elongate, clustered, leafy. Leaves coriaceous or fleshy, distichous, distributed along the stem, bilaterally compressed to terete, often jointed to a compressed leaf base. Inflorescence terminal, racemose or spicate, densely many-flowered, cylindrical. Flowers minute, numerous, non-resupinate, flat, spiral to verticillate. Sepals and petals spreading, free, subequal; petals smaller and narrower than sepals. Lip sessile, deflexed, entire or variously lobed, auriculate at base, ecallose, often erose. Column very short, fleshy, usually enclosed by basal auricles of the lip; pollinia 4, pyriform, waxy.

While working on Orchid flora of Darjeeling Himalaya, the authors came across one interesting unknown epiphytic Orchid species was collected from different localities, and after critical examination the plant was identified as *Oberonia emarginata* King & Pantling. Detailed perusal of the relevant taxonomic literature related to the Orchid flora of Darjeeling

(Hooker 1888 – 1890; King & Pantling 1898; Bruhl 1926; Hara 1966; Hara 1971; Ohashi 1975; Pradhan 1979; Das & Chanda 1987; Pradhan & Pradhan 1997; Bose & Bhattacharjee 1999 and Pearce & Cribb 2002) revealed that the occurrence of this species has not been reported earlier from Darjeeling Himalayan region. Hence the present finding is the first record of occurrence of this species for the state of West Bengal, India. The newly collected specimens were processed and mounted on standard herbarium sheets following Jain & Rao (1977) and have been deposited in the Herbarium of Department of Botany, St. Joseph's College, North Point, Darjeeling and Herbarium of Taxonomy and Ethnobiology Research Laboratory, Cluny Women's College, Kalimpong for future reference. A detailed taxonomic account of the species has been prepared based on fresh specimens along with habitat, altitudinal range, local available status, local distribution within Darjeeling Himalaya and geographical distribution is provided here to authenticate the new record and facilitate its easy identification.

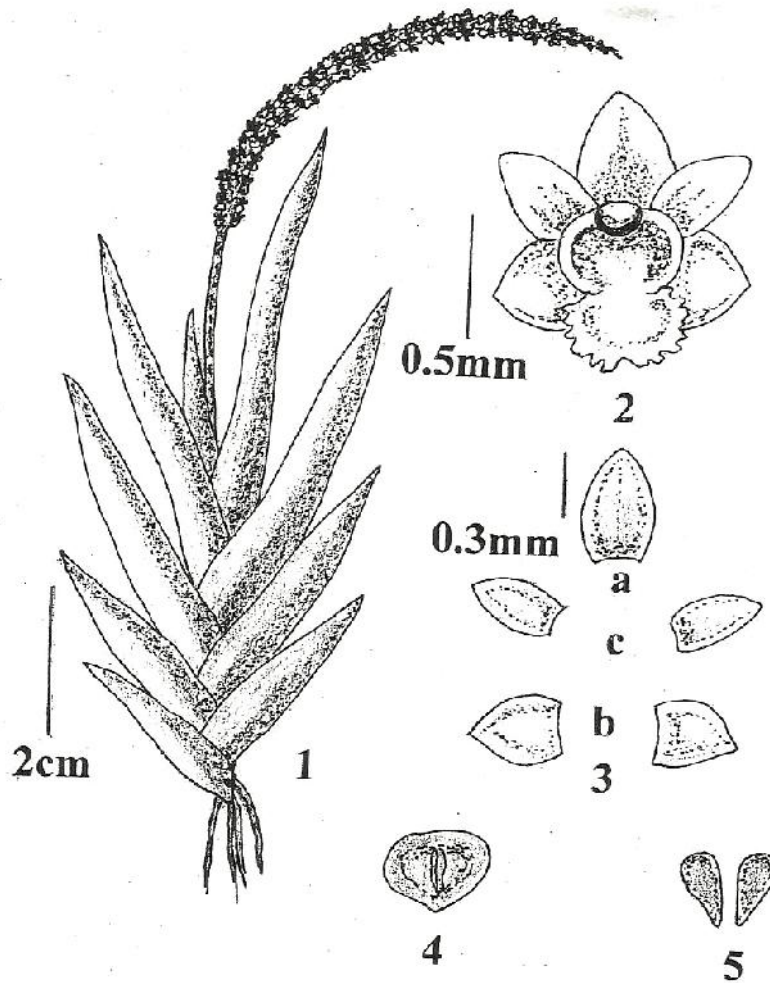


Fig. 1. *Oberonia emarginata* King & Pantling, **1.** Habit (whole plant with inflorescence); **2.** Front view of flower; **3.** Floral perigone, **a.** dorsal sepal, **b.** lateral sepals, **c.** petals, **4.** Anther; **5.** Pollinia.

Taxonomic treatment

Oberonia emarginata King & Pantling in Ann. Roy. Bot. Gard. (Calcutta) 8: 6, t. 2A. 1898.

Oberonia micrantha King & Pantling in Ann. Roy. Bot. Gard. (Calcutta) 8: 6, t.5. 1898.

[Fig. 1]

Plant epiphytic, small, 4 – 9 cm tall. Stem short, 2 – 4 cm long, enclosed by equitant leaf sheath caulescent. Leaves 5 – 7, 1.5 – 3.7 x 0.2 – 0.3 cm, linear–ensiform, acute to subacute. Inflorescence 4.5 – 7 cm long, erect, verticillate, densely many–flowered; peduncle 1 – 1.7 cm long, with minute bracts; rachis 3.5 – 6 cm long; pedicellate–ovary 0.5 – 0.7 mm long; floral bracts 0.7 – 1 mm long, linear–lanceolate, acute. Flowers 0.7 – 1 mm across, uniformly greenish to yellow orange. Sepals sub–equal, 0.5 x 0.4 mm, spreading, ovate, minutely papillose outside; dorsal sepal entire, obtuse; lateral sepals subacuminate. Petals 0.5 x 0.4 mm, ovate, obtuse or acuminate. Lip 3–lobed, 0.6 – 0.7 x 0.5 – 0.7 mm, sub–orbicular, with shallow concavity at the base; lateral lobes oblong to wedge–shaped, rounded at apex; mid-lobe quadrate to semi–orbicular, obscurely 2-lobed at apex, margins entire to dentate. Column 0.3 mm long. Anther white, glabrous; pollinia pale–yellow.

Flowering & Fruiting: June – October.

Habitat: Epiphytic on tall tree trunk and major branches.

Exsiccatae: Todey forest areas of Kalimpong Sub – Division of District Darjeeling, dated 14.08.2009, *Rajendra et al 0921*.

Altitudinal range: 1000 – 2000 m (a.m.s.l.).

Local distribution: The plant is now occurring in the Forest areas in Todey, Tungsong, Algarah, Takdah, Durpin and Dello hills in Darjeeling Himalaya.

Local availability status: Sparsely distributed throughout the regions upto 2000 m.

Geographical distribution: India (North East India, West Bengal); Bhutan and Thailand.

Acknowledgements

The first author is thankful to the University Grants Commission, New Delhi for awarding the Rajiv Gandhi National Fellowship for higher study. Authors are grateful to Prof. A. P. Das, Taxonomy and Environmental Biology Laboratory, Department of Botany, North Bengal University, Siliguri for his valuable suggestions and cooperation.

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