

Notes on vulnerable *Diplomeris pulchella* D. Don [Orchidaceae] – a recollection from Meghalaya, India

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[Received revised 14.11.2012; Accepted 14.11.2012]

Abstract

Diplomeris pulchella D. Don (Orchidaceae) is recollected from Meghalaya after 50 years and has been enumerated here with detailed morphological characters, ecology, phenology and distribution along with coloured photo-plate.

Key words: *Diplomeris pulchella*, vulnerable, Meghalaya.

INTRODUCTION

Diplomeris D. Don of Orchidaceae comprises of 5 species (Rao 2010) and is distributed in the Eastern Himalaya, northeast India, northern Myanmar, southern China, northern Vietnam and northeast Thailand (Iamwiriyakul & Kaewphung 2008). In India the genus is represented by 3 species viz., *D. hirsuta* (Lindley) Lindley, *D. josephii* A.N. Rao & M.S. Swaminathan and *D. pulchella* D. Don and all are confined only in Northeast India (Rao 2010).

During a survey tour to Mowlingdong, East Khasi Hills District, Meghalaya, one of the authors collected one interesting orchid which is growing on moist moss covered boulders along the stream. On the critical examination of the above specimens and consulting literature, it was identified as *D. pulchella* D. Don (Bose & Bhattacharjee 1980; Kataki 1986; Iamwiriyakul & Kaewphung 2008). After consultation with available literature and specimens at ASSAM it is found that this is the only species of *Diplomeris* D. Don reported from Meghalaya (Kataki 1986), that is *D. pulchella* D. Don, and is also included under the Red Data Book of Indian Plants. After a gap of over 50 years the same has been recollected in Meghalaya.

To facilitate easy identification of the species, detailed morphological characters, ecology, phenology and distribution along with coloured photo-plate are given here.

Diplomeris pulchella D. Don, Prodr. Fl. Nepal. 26. 1825; Hooker *f.*, Fl. Brit. India 6: 167. 1890. *Diplochilus longifolius* Lindley in Edwards's Bot. Reg. 18: t. 1499. 1832. *Orchis uniflora* Roxburgh, Fl. Ind. 3: 452. 1832. *Diplomeris boxallii* Rolfe in Kraenzlin, Orchid. Gen. Sp. 1: 470. 1898. **[Plate 1]**

Lithophytic or terrestrial herbs, 10 – 13 cm. Tubers ellipsoid; rhizomes slender. Leaves 2, distichous, suberect, recurved, ensiform to linear-lanceolate, 6.5 – 7.5 x 0.5 – 1 cm, acuminate, glabrous, base tapered into sheath. Inflorescence 1-flowered, suberect, 6 – 7 cm; peduncle slender, glabrous, 4.5 – 5.5 cm; floral bract broadly ovate, green, glabrous, 1.0 – 1.4 x 0.8 –

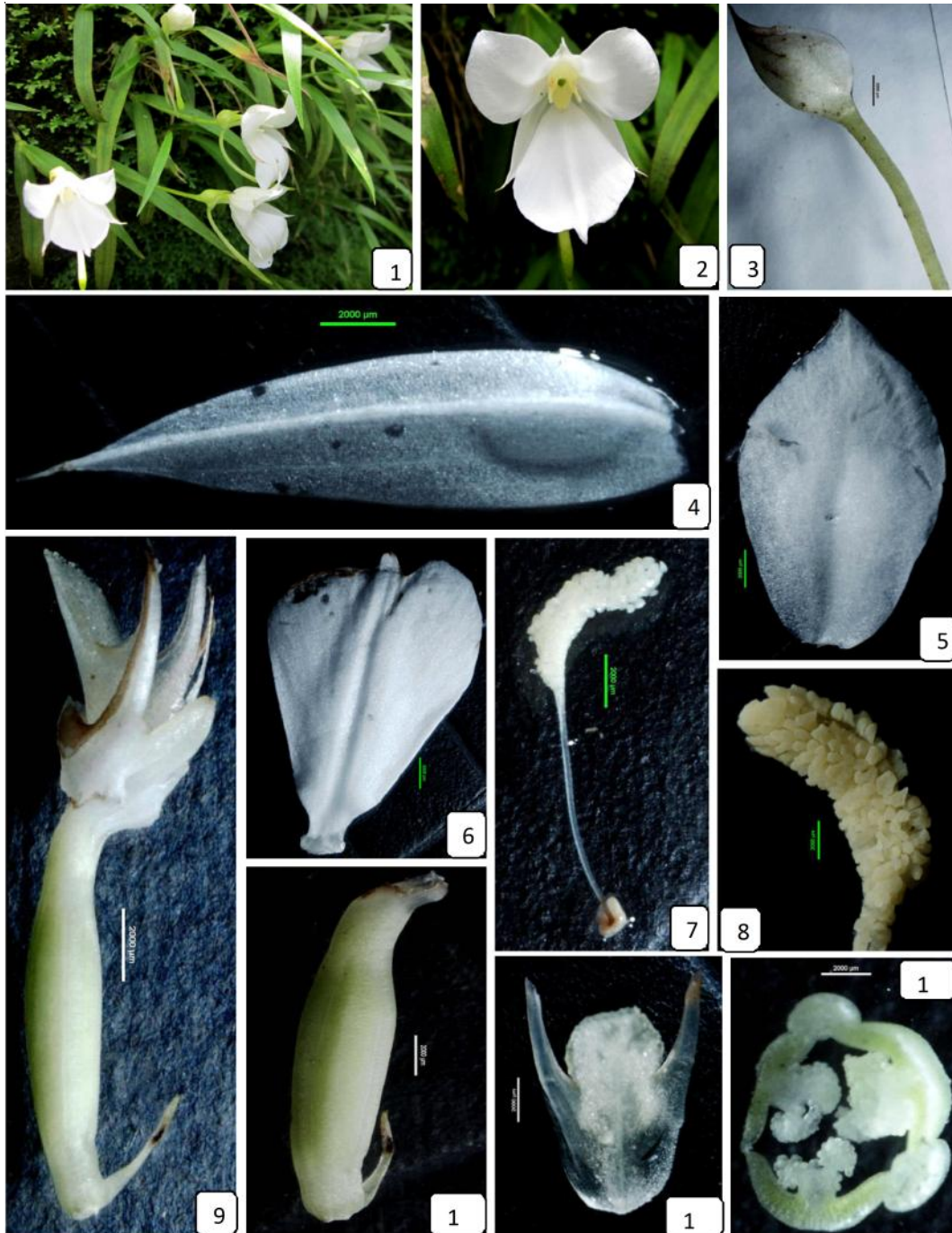


Plate I: *Diplomeris pulchella* D. Don: 1. Habitat, 2. Close view of a flower, 3. Bract with pedicel, 4. Sepal, 5. Petal, 6. Labellum, 7. Pollinaria, 8. Close view of pollinaria showing pollens, 9. Column with ovary, 10. Ovary, 11. Column, 12. T. S. of ovary.

1.0 cm, acute. Flowers large, white, 2 – 2.5 cm across; pedicel 0.8 – 1.2 cm long. Sepals white, spreading, oblong-lanceolate or ovate-lanceolate, acute or acuminate, glabrous, 0.8 – 1.5 x 0.3 – 0.6 cm. Petals white, spreading, broadly obovate or ovate-oblong, retuse, 1.5 –

2.5 x 1.2 – 1.5 cm. Labellum 2 – 2.5 x 1 – 1.5 cm, white, glabrous, broadly obcordate, emarginate with a small acute tooth. Spur 4.5 – 5.5 cm long, pendulous, cylindric, incurved, subacute, slightly thickened from middle to end. Column short, 0.4 – 0.6 x 0.3 – 0.4 cm. Pollinaria erect, 0.8 – 1.0 cm. Ovary cylindric-fusiform, keeled, glabrous, green, 0.8 – 1.2 cm, 3-chambered. Ovules white, numerous.

Flowering & Fruiting: August – October

Habitat: On moss-covered moist boulders

Associated species: *Cyperus* sp., *Sellagenalla* spp., *Caulokaempferia linearis* (Wallich) K. Larsen.

Exsiccatae: Meghalaya, Mawsmoi, 11.08.1962, *D.B. Deb* 28728 (ASSAM); Mamloo, 07.09.1930, *Sister Dagmer* 22456 (ASSAM); Mowlingdong, 18.08.2012, *D.K. Roy & S. Panday* 125699 (ASSAM).

Distribution: N E India: Arunachal Pradesh, Meghalaya, Nagaland. Northeast Thailand, northern Vietnam, northern Myanmar, southern China and southeast Tibet.

Acknowledgement

The authors are thankful to the Director, Botanical Survey of India, Kolkata for facilities and encouragements.

LITERATURE CITED

- Bose, T.K. & Bhattacharjee, S.K. 1980. *Orchids of India*. Naya Prakash, Calcutta. Pp. 242.
- Iamwiriyakul, P. & Kaewphung, T. 2008. *Diplomeris pulchella*: newly recorded in Thailand. *The Orchid Review*: January/February. Pp. 44 – 50.
- Kataki, S.K. 1986. *Orchids of Meghalaya*. Forest Department, Shillong, Meghalaya, India. Pp. 223 – 224.
- Rao, A.N. 2010. A review of Orchidoideae genera in Arunachal Pradesh (India). *Bull. Arun. For. Res.* 26 (1&2): 1 – 28.