

***Zeuxine glandulosa* King & Pantling (Orchidaceae): A new record for Assam, India**

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Abstract

Extended distribution of a rare orchid, *Zeuxine glandulosa* King & Pantling (Orchidaceae), collected from the Joypur Reserve Forest, Assam is discussed here along with its detailed description, photographs, distributional and ecological details.

Key words: *Zeuxine glandulosa*, Orchidaceae, new record, Assam

INTRODUCTION

There are about 50 (King & Pantling 1898; Garay & Sweet 1974; Seidenfaden 1978; Bose & Bhattacharjee 1980; Hashimoto & Kanda 1981; Davis & Steiner 1982; Kanda 1984; Deva & Naithani 1986; Comber 2001) to 90 species (Ormerod 2005) of *Zeuxine* (Orchidaceae) distributed in the tropics and subtropics of the old World of which 19 species has been estimated from India (Misra 2007). So far, 9 species were recognized in Assam (Chowdhury 2005). The author himself collected one ground orchid from Joypur Forest Reserve in Assam in February 2011 that was later identified as *Zeuxine glandulosa* King & Pantling.

Zeuxine glandulosa King & Pantling in Ann. Roy. Bot. Gard. Calcutta 8: 288, t. 384. 1898. **Type:** India, Duars, *Pantling 434* (Holo. CAL). Fl. Bhutan 3(3): 111. 2002. [Plate 1, Fig. 1, 2, 3, 4]
Heterozeuxine glandulosa (King & Pantling) Hashimoto, Proc. 14th World Orchid conf. 125. 1993.

Terrestrial, 5 – 20 cm high; leaves oblong – lanceolate, acute, shortly petiolate, 2.5 – 5 x 0.6 – 1 cm, blackish- purple; petiole expanded into a wide hyaline sheath; inflorescence laxly few flowered; peduncle short, pubescent; rachis densely glandular- pubescent, 2.5 – 3 cm long; floral bracts broadly ovate, bluntly acuminate, shorter than ovary, 0.8 – 1 cm long; flowers 0.5 cm long olive-green, column and central contracted part of lip white; pedicel and ovary glandular-pubescent, 0.7 – 0.9 cm long; sepals connivent, subsimilar, ovate, acute, subequal, sparsely glandular-pubescent, 0.5 cm long; petals asymmetrically suborbicular, suboblique, apiculate, 0.5 cm long; like the petals and most parts of the lip olive- green; lip about as long as the sepals, widely saccate at base, middle part curved inwards and white; the interior of sac with row of 3 lamellate calli on each side and an incurved conical tooth on each margin, 0.5 cm long; column with very large lamellate wings at base, porrect, incurved; rostellum projecting, broad; pollinia pyriform, bifid, grooved; stigmas 2, small, linear- oblong.

Flowering: March – April

Specimen Examined: Joypur Reserve Forest, Assam, *Gogoi 0511*, ASSAM.

Habitat: Growing in the floor of dense cool and shady forest.

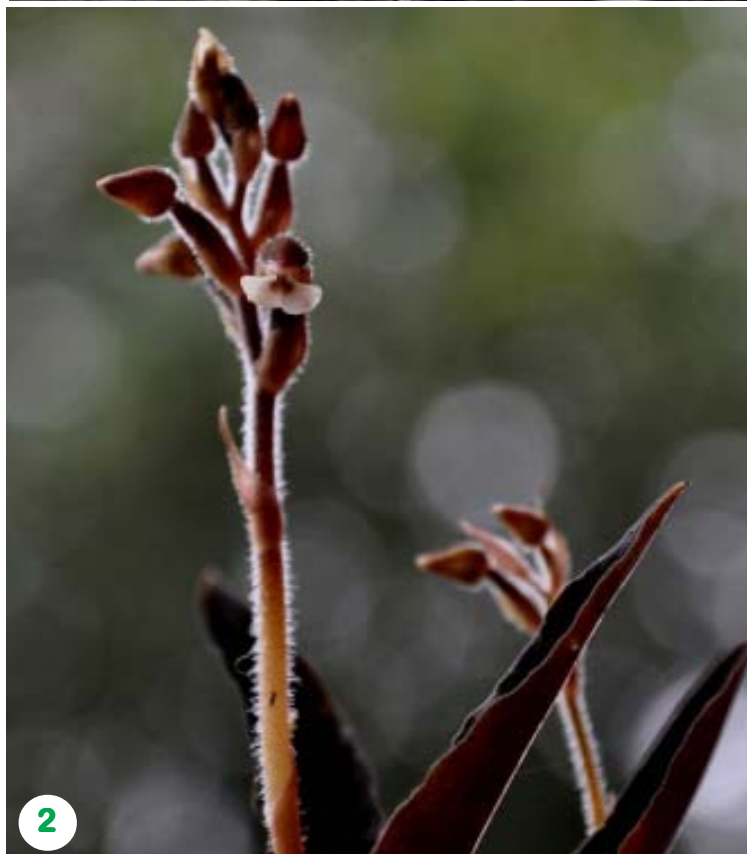
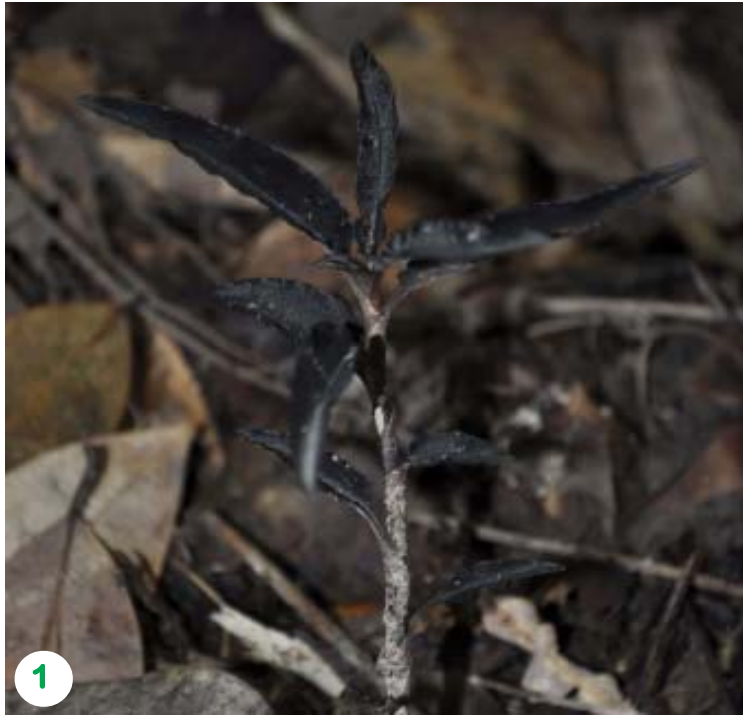


PLATE - I: *Zeuxine glandulosa* King & Pantling. **Fig. 1.** a leafy branch; **Fig. 2.** inflorescence

General Distribution: Lower Bhutan and the Trail of Sikkim Himalaya, North Bengal and Assam.

Status: Rare, the species was found only in one locality.

CONSERVATION ASPECTS

The Joypur Reserve Forest with an area of about 10,876.68 hectares comprises of tropical/sub-tropical wet evergreen forest patches, multistoried in structure and rich in biodiversity, which is considered as one of the best habitat for both epiphytic and terrestrial orchids in Assam with comparatively less disturbed condition (Gogoi *et al* 2009, 2011). But, most of epiphytic orchids are lost due to mass clearance of forests for other developmental activities, increasing rate of grazing, different types unplanned human activities and interference through collection for ornamental, medicinal and other commercially useful plants, many terrestrial and saprophytic orchids are now on the verge of extinction.

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LITERATURE CITED

- Bose, T.K. & Bhattacharjee, S.K. 1980. *Orchids of India*. Naga Prokash, Calcutta, India. 538pp.
- Chowdhery, S. 2005. *Assam's Flora*. Assam Science Technology and Environment Council, Guwahati, Assam, India.
- Comber, J.B., 2001. *Orchids of Sumatra*. Natural history publications, Borneo, Malaysia. 82pp.
- Davis, R.S. & Steiner, M.L. 1982. *Philippine orchids*. 2nd ed. M & L Licudine Enterprises, Manila, Phillipine. 270pp.
- Deva, S. & Naithani, H.B. 1986. *The Orchid flora of north west Himalaya*. Print & Media Associates New Delhi, India. 459pp.
- Garay, L. A. & Sweet, H. 1974. *Orchids of southern Ryukyu Islands*. Harvard Univ. Press, Cambridge, USA. 180pp.
- Hashimoto, T. & Kanda, K. 1981. *Japanese indigenous orchids in colour*. Ienohikari, Tokyo. Japan. 246 pp.
- Kanda, K. 1984. *The wild Orchids of Japan*. Tokyo, Japan. 178pp.
- Gogoi, K.; Boraqh, R.L. & Sarma, G.C. 2009. Orchid flora of Joypur Reserve Forest of Dibrugarh district of Assam, India. *Pleione* 3(2): 135 – 147.
- Gogoi, K.; Boraqh, R.L. & Sarma, G.C. 2011. Additions to the Orchid flora of Joypur Reserve Forest in Dibrugarh district of Assam, India. *Pleione* 5(1): 65 – 70.
- King, G. & Pantling, R. 1898. *Orchids of the Sikkim Himalaya*. Ann. Roy. Bot. Gard. Calcutta 8: 273- 300. Reprint 1979.
- Ormerod, P. 2005. Notulae Goodyerine (ii). *Taiwania* 50: 1-10.
- Misra, S. 2007. *Orchids of India*. Bishen Singh Mahendra Pal Singh, Dehra Dun, India.
- Seidenfaden, G. 1978. *Orchid genera in Thailand*. Pt. 6: Neottioideae Lindl. Dansk Botanisk Arkiv 32: 1- 195.