

## ***Dendrobium sinominutiflorum* S.C. Chen, J.J. Wood & H.P. Wood (Orchidaceae) – a new record for India from Manipur**

**Y. Nanda<sup>1</sup>, K. Chowlu, A. Nageswara Rao and S. P. Vij**

Centre for Orchid Gene Conservation of Eastern Himalayan Region, KVK-Sylvan Campus,  
Hengbung 795129, Senapati District, Manipur, India

<sup>1</sup>E-mail: [nandayumnam@gmail.com](mailto:nandayumnam@gmail.com)

[Received 07.06.2014; Revised 14.06.2014; Accepted 14.06.2014; Published 30.06.2014]

### **Abstract**

*Dendrobium sinominutiflorum* S.C. Chen, J.J. Wood & H.P. Wood (Orchidaceae) is reported for the first time from Manipur as a new record to India. It is enumerated with full description and illustrations.

**Keywords:** Orchidaceae, *Dendrobium sinominutiflorum*, new record, Manipur, India

### **INTRODUCTION**

The genus *Dendrobium* Swartz is one of the larger genera of Orchidaceae comprising of about 1100 species distributed in tropical and sub-tropical habitats of India, China, Japan, Tahiti, Malaysia, New Guinea, Australia, and New Zealand (Wood 2006). It is represented by about 115 species, 2 sub species and 1 variety in India of which about 75 species including 1 variety are found in N. E. India and about 50 species in Manipur (Kumar & Kumar 2005; Misra 2007; Rao 2007; Nanda *et al.* 2012). Under the programme of Intensification of Research in High Priority Areas, the Science and Engineering Research Board (SERB), Department of Science and technology, Government of India, New Delhi has established a Centre for Orchid Gene Conservation of Eastern Himalayan Region (COGCEHR) at Hengbung in Senapati District of Manipur in 2010. With a view to understand the distribution range of various orchid species in Eastern Himalayan Region, the team of scientists of COGCEHR conducted several explorations in various states of N.E. India and samples of several species are brought under cultivation in the Field Gene Bank of the Centre as a part of *ex situ* conservation. Among the flowered species under cultivation, one *Dendrobium* species collected from Senapati district of Manipur has been critically studied and identified as *Dendrobium sinominutiflorum* S.C. Chen, J.J. Wood & H.P. Wood, which is so far known as an endemic species to China (Chen *et al.* 2009). Hence, the present discovery of its occurrence in Manipur, an Indian state, forms the first report of occurrence of *D. Sinominutiflorum* S.C. Chen *et al.* in India.

Based on the fresh collection from Manipur, the species is described below along with the details of habitat ecology, flowering phenology, distribution and colour photos of habit with dissected floral parts.



**Fig. 1.** *Dendrobium sinominutiflorum* S.C. Chen *et al.*: A. Habit; B. Frontal view of flower; C. Floral bract; D. Sepals, petals and lip; E. Column with anther cap and column foot; F. Lateral view of lip, column, column foot and ovary G. Anther cap; H. Pollinia

***Dendrobium sinominutiflorum*** S.C. Chen, J.J. Wood & H.P. Wood, Fl. China 25: 90. 2009. *Dendrobium minutiflorum* S.C. Chen & Z. H. Tsi, Bot. Res., Harbin 9 (2): 27. 1989, *nom. Illeg.* non *Dendrobium minutiflorum* Kraenzlin in Sarasin & Roux, Nova Caledonia, Bot. 1: 84. 1914 & non Gagnepain, Bull. Mus. Natl. His. Nat., ser. 2. 21: 741. 1950.

Small epiphyte found growing in association with some other epiphytic orchids like *D. denudans* D. Don, *D. eriiflorum* Griffith, etc. on moss covered branches of small trees in subtropical to temperate evergreen rain forests at an altitude of 1200 to 1800 m.

Pseudobulbs 4 – 6 noded, fusiform, 1.8 – 4.0 x 0.7 – 0.9 cm. Leaves 4 – 5 per pseudobulb, 1.8 – 4.4 x 0.6 – 1.1 cm, narrowly oblong, acute to obtuse, unequally bilobed; leaf-sheaths membranous and enclosing pseudobulb, broader than lamina, 0.5 – 1.2 x 0.8 – 1 cm. Racemes 2 – 4 per pseudobulb, lateral (opposite to leaf) or terminal, 5 - 8 flowered, 3 – 4 cm long. Floral bracts ovate, acute, 0.3 x 0.1 cm. Flowers pale green or yellowish green, 1 – 1.2 cm long, 0.9 to 1 cm across. Dorsal sepal acute, narrowly ovate, 0.5 – 0.7 x 0.2 – 0.25 cm; lateral sepals acute to slightly acuminate, ovate triangular, 0.6 – 0.8 x 0.3 – 0.5 cm; lateral petals oblong to slightly obovate, acute, 0.5 – 0.6 x 0.15 – 0.2 cm; mentum obtuse, 0.5 cm long; lip oblong, trilobed, 0.6 x 0.35 cm; lateral lobes sharply dentate at apex, margin entire; mid-lobe crispate, emarginated, 0.2 x 0.25 cm; 3 lamellae at base, joint together to form thickened fleshy disc; column shorter than foot, 0.2 x 0.15 cm; foot 0.5 – 0.6 cm long; anther cap 0.9 mm x 0.8 mm, globular, with front margin distinctly fimbriate; pollinia 4, 0.4 mm long, yellow.

**Flowering:** September to October

**Exsiccate:** India: Manipur, Senapati District, Oklong 1611 m, N-25°23.38'x, E-94°00.236', Nanda 00405 (COGCEHR Herbarium, Hengbung, Manipur).

**Distribution:** India (Manipur) and China (South Yunnan). Few plants are now growing in the orchidarium of COGCEHR.

#### Acknowledgements

Authors are thankful to Mr. H. Kipgen, President (FEEDS & KVK, Hengbung) for facilities and encouragement and to the Department of Science and Technology, Government of India for financial support to carry out the study on orchid germplasm of Eastern Himalayan Region.

#### LITERATURE CITED

- Chen, X. Q., Liu, Z. J. Zhu, G. H. Lang, K. Y. Ji, Z. H. Luo, Y. B. . Jin, X. B. Cribb, P. J. Wood, J. J. Gale, S. W. Ormerod, P. Vermeulen, J. J. Wood, H. P. Claton, D. and Bell, A. 2009. Orchidaceae. In *Flora of China*, ed. Z. Y. Wu, P. H. Raven & D. Y. Hong 25. Science Press, Beijing and Missouri Botanical Garden Press, St. Louis.
- Kumar, C.S. & Kumar, P. C. S. 2005. An Orchid Digest of Manipur, North Eastern India. *Rheedea* 15 (1) : 1 - 70.
- Lucksom, S.Z. 2007. *The Orchids of Sikkim and North East Himalaya*. S.Z. Lucksom, Gangtok, Sikkim.
- Misra, S. 2007. *Orchids of India - A glimpse*. Bishen Singh Mahendra Pal Singh, Dehra Dun.

170 *Dendrobium sinominutiflorum* – a new record for India

Rao, A.N. 2007. Orchid Flora of North East India – An Uptodate Analysis. *Bull. Arunachal For. Res.* 23 (1 & 2): 6 - 38.

Nanda, Y.; Sharma, H.B.; Kishor, R.K.; Rao, A.N. & Vij, S.P. 2012. *Dendrobium bicameratum* Lindley (Orchidaceae) – an addition to the flora of Manipur, India. *Pleione* 6 (2): 450 - 452.

Wood, H. P. 2006. *The Dendrobiums*. A. R. G. Gantner Verlag, Ruggell / Liechtenstein