# BRACHYCORYTHIS OBCORDATA (LINDL.) SUMMERH. (ORCHIDACEAE): A NEW ANGIOSPERMIC RECORD FOR BANGLADESH

## M. M. HOQUE AND M. K. HUDA

Department of Botany, University of Chittagong, Chittagong-4331, Bangladesh

Key words: Brachycorythis obcordata, Orchidaceae, New record, Bangladesh

#### Abstract

Brachycorythis (Lindl.) Summerh. of the family Orchidaceae is reported here as a new angiospermic record for Bangladesh flora.

The genus *Brachycorythis* was proposed by Lindley in 1838 in his general account of the *Genera and Species of Orchidaceous Plants* based on a plant characterized by the structure of the labellum i.e. inflated base or hypochile similar to the genus *Stanhopea* Frost ex Hook. and the bluntly galeate perianth which is inserted very obliquely (Bose *et al.* 1999). The genus consists of 33 species distributed in tropical Asia, Africa, Australia, Madagascar and Myanmar. Five species have been reported from India and these terrestrial herbs are mainly distributed in the North East part (Bose *et al.*, 1999) and two species from Bhutan (Pearce and Cribb 2002). In Bangladesh, only one species, *Brachycorythis helferi* (Rchb. f.) Summerh. was reported (Uddin *et al.* 2000, Huda 2000, Khanam *et al.* 2001). *Brachycorythis obcordata* (Lindl.) Summerh. has been reported here for the first time as a new record to the angiospermic flora of Bangladesh. Detailed description, flowering time, ecology and geographical distribution of the species is provided here with illustrations (Fig. 1).

Brachycorythis obcordata (Lindl.) Summerh. in Kew Bull. 10 (2) 243. (1955). *Platanthera obcordata* Lindl., Gen. Sp. Orchid. Pl: 290 (1835); Orchis obcordata sensu Buchanan-Hamilton ex D. Don, Prodr. Fl. Nepal; 23 (1825), non Willemet; *Gymnadenia obcordata* (Lindl.) Rchb. f., Otia Bot. Hamburg.: 32 (1878); Habenaria galeandra sensu Hook. f., Fl. Brit. India, 6 (1): 163 (1890), non Bentham; *Habenaria obcordata* (Lindl.) Fyson, Fl. Nilgiri & Pulney Hill-top 1: 405 (1915); *Phyllomphax obcordata* (Lindl.) Schltr. in Feddes Repert. Spec. Nov. Regni Veg. Beih. 4: 119 (1919), (Fig. 1).

Plant terrestrial, 5-24 cm tall; tuber globose to cylindric, c 1× 0.5 cm. Stem with bladeless sheaths at base, glandular–pubescent, 5.5 - 14 cm long; basal sheaths 2 or 3, overlapping, tubular, 1 - 2 cm long. Leaves many, distant along stem, oblong-lanceolate, elliptic-lanceolate, subacute to obtuse, sessile and sheathing at base, 2.5-5 × 1-1.8 cm; sheath tubular, 1-1.5 cm long. Inflore-scence sub densely few to many flowered; rachis minutely glandular, pubescent, 3 - 9 cm long; bracts oblong-ovate to lanceolate, becoming smaller up the rachis, 0.9-2.6 × 0.3-0.5 cm. Flowers c 1.2 cm across, uniformly pink to pale purple; pedicel and ovary fusiform, curved, puberulous, 0.8-1 cm long. Dorsal sepal erect, ovate-lanceolate, 1-veined, 4-6 × 1.5 mm; lateral sepals ovate-lanceolate, acuminate, falcate, spreading, 1-veined, 5-7 × 1-1.5 mm. Petals ovate-lanceolate, weakly falcate, hooded with the dorsal sepal, 1-veined, 4-5 × 1.8 mm. Lip simple to obscurely 3-lobed, spurred, broadly trinagular to broadly obcordate, mucronate, surface papillose, 7-9 × 6-7 mm; spur short, conical, c 3 mm long, mouth wide. Column 1.5- 2 mm tall; staminodes distinct, curved.

Flowering time: June to August.

*Ecology:* It grows on the moist slopes, along the hill foot and also found to grow on shady place in the jungle or in the wet ever green part of the forests, 610 and 1524 m altitude.



Fig. 1. *Brachycorthis obcordata* Summerh: (a) habit sketch (x 0.75), (b) flower, ovary and bract with stem (x 0.75), (c) flower and ovary (x 3), (d) dorsal sepal (x 75), (e) lateral sepal (x 75), (f) petal (x 75), (g) lip (x 75), (h) pollinarium (wigh massulae) (x 55).

*World wide distribution:* India, Bhutan and Myanmar (Pearce and Cribb, 2002). *Specimen examined:* Bandarban - Chimbuk: 24. 10. 2001, M. M. Hoque and M. K. Huda, 106 (HCU). *Note:* This species is closely related with *B. helferi* (Richb. f.) Schunerh. from which it differs in having smaller stature, sub-acute to obtuse leaves, smaller flowers (0.7 -1.2 cm across) and larger (4 - 6 mm long) ovate-lanceolate sepals.

## Acknowledgement

The authors are grateful to Dr. David Roberts of Royal Botanical Gardens, Kew, UK, for his help and kind cooperation to confirm the identification of the species, and to the Royal Society, UK for giving financial support to visit UK for identification of the specimen. The authors are thankful to Dr. C. C. Wilcock of Aberdeen University and Dr. M. Atiqur Rahman of Chittagong University for their valuable comments and suggestions.

## References

- Bose, T.K., S.K. Bhattacharjee, P. Das and U.C. Basak. 1999. Orchids of India. Naya Prokash, Calcutta, India. pp. 487.
- Huda, M.K. 2000. Diversity, ecology, reproductive biology and conservation of orchids of south east Bangladesh. Ph. D. Thesis, Department of Plant and Soil Science, University of Aberdeen, U.K. pp. 249
- Khanam, M., M.Z. Uddin, M.S. Khan and M.A. Hassan. 2001. Our present knowledge on the Terrestrial orchidaceous taxa from Bangladesh, Bangladesh J. Plant Taxon. 8(2): 35-49.
- Pearce, N.R. and P.J. Cribb. 2002. Flora of Bhutan: The Orchids of Bhutan. The Royal Botanic Garden, Edinburgh and the Royal Government of Bhutan. pp. 130-132.
- Uddin, M.Z., M.A. Hassan, M.S. Khan and M. Khanam. 2000. *Brachycorythis helferi* (Rchb. f.) Summerh. A new orchid record for Bangladesh. Bangladesh J. Plant Taxon. **7**(1): 73-75.

(Manuscript received on 27 October, 2007; revised on 9 November, 2008)