

**REDISCOVERY OF *APPENDICULA CORNUTA* BL. (ORCHIDACEAE)
FROM MEGHALAYA, INDIA**

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The genus *Appendicula* Bl. (Orchidaceae) was established by C. L. Blume in his *Bijdragen tot der Flora van Nederlandsch Indië*. It is allied to the genus *Podochilus* Bl. and is represented by c. 60 species from Tropical Asia to Polynesia (Pearce and Cribb, 2002). In India it comprises of only 2 species, viz. *A. reflexa* Bl. from Andaman and Nicobar Islands (Singh *et al.*, 2001) and *A. cornuta* Bl. from Assam and Sikkim (King and Pantling, 1898).

While on a tour to Leska region, Jaintia Hills district Meghalaya, an *Appendicula* species was collected in flowering condition and after critical study the same led to its identity as *A. cornuta* Bl. This species was first described by Blume in 1825 based on a plant collected from Seribu and Pantjar, Java. In India, it was first reported by Hooker (1890) as *A. bifaria* (Wall. ex Lindl.) Lindl. from Assam (Cachar, Keenan) and Sikkim by King and Pantling (1898), Pantling no. 288A (BM, K) and 288B (K) which has been later reduced to synonym of *A. cornuta*. The species in India has not been collected after Pantling's collection. Although, Pradhan (1979) has simply mentioned its occurrence in Meghalaya without any specific locality and evidence of herbarium sheet, the scrutiny of various other later literatures viz. Jain and Mehrotra (1984), Kataki (1986), Bose *et al.* (1999), and Kumar and Manilal (1992), and thorough herbarium study from ASSAM and CAL also could not trace the occurrence of the same. Hence it is the first report of rediscovery to India from a different locality after more than a century constituting a new generic record for Meghalaya hitherto unreported in the recent works of Singh *et al.* (2001).

A detailed description and illustration with relevant notes are given here to facilitate its identification in field.

***Appendicula cornuta* Bl.**, Bijdr. 1: 302 (1825); Pradhan, Indian Orch. Guide Identif. & Cultr.2: 442 (1979); Seidenf. *Op. Bot.* 89: 138. t. 88 (1986); Pearce & Cribb, Orch. Bhutan: 391. t. 92 (2002); *Dendrobium bifarium* Lindl., Gen. Sp. Orchid. Pl.: 81 (1830). *Appendicula bifaria* (Wall. ex Lindl.) Lindl. in Hooker's J. Bot. Kew Gard. Misc. 7: 35

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(1855); Hook. f. Fl. Brit. India 6: 82 (1890); King & Pantl., Ann. Roy. Bot. Gard. Calcutta 8: 248. Pl. 330 (1898); Brühl, Guide Orch. Sikkim : 146 (1926). *A. bifaria* var. *wallichiana* Hook. f., Fl. Brit. India 6: 83 (1890). *Podochilus cornutus* (Bl.) Schltr. in Mem. Herb. Boissier. 8(21): 34 (1900). (Fig. 1)

Tufted medium sized epiphytic herb. Roots filiform, c. 0.1 mm in diameter, villous. Stems 12-27 cm long, terete, sheathed; internodes 0.8-1.0 cm apart. Leaves many, 1.5-2.8 × 0.7-1.2 cm, oblong-lanceolate, emarginate and mucronate at apex, distichous, many

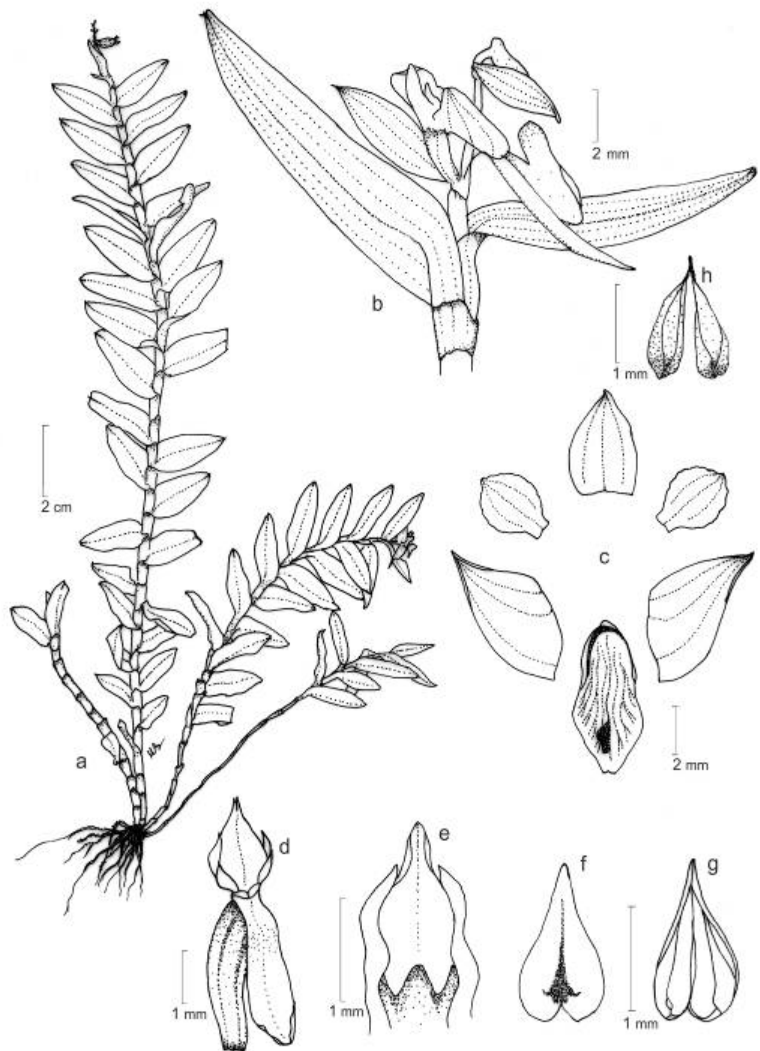


Fig. 1. *Appendicula cornuta* Bl. a. Habit; b. Inflorescence; c. Floral perigone with lip; d. Ovary with column; e. Column with anther and stelia; f. Anther, dorsal view; g. Anther, ventral view; h. Pollinia (Bhaumik 116537, ASSAM).

veined. Inflorescence terminal or axillary, 3-7-flowered raceme; peduncles 6-8 mm long, pale green; floral bract 7-8 × 1.5-2 mm, lanceolate, acuminate, glabrous, entire, pale green, persistent, 3-nerved. Pedicel and ovary c. 2 mm long. Flowers 4.0-6.5 mm long from the tip of the dorsal sepal to the tip of the mentum, sepals and petals white, become yellow at maturity. Sepals 3-nerved; dorsal sepal 4.0-4.2 × 2.6-2.8 mm, broadly ovate, concave, acute to apiculate, glabrous; lateral sepals 4.0-4.2 × 2.7-3.1 mm, broader at base, broadly ovate-lanceolate, acute, base attached with the column foot to form a mentum; mentum c. 3.1 mm long, rounded; petals 3.0-3.2 × 2.0-0.1 mm, clawed at base, broadly ovate, sub-acute, glabrous, 3-nerved, margins minutely undulate towards apex, hyaline. Lip c. 6 × 3 mm, obscurely 3-lobed, oblong-elliptic, fleshy, reflexed; hypochile with basal horse-shoe shaped appendage; epichile narrowed into a truncate, obscurely 2-lobed tip, appendage cylindrical, c. 1 × 1 mm. Column with foot c. 3 mm long, pale yellow; stelidia 1.0-1.2 mm long, pointed towards apex. Anthers 1.5 × 0.8 mm, cordate, acuminate, pale yellow. Pollinia 6 in 2 pairs, 1.1-1.3 mm long, unequal. Fruits c. 6.0 × 1.5 mm, ovoid, ridged. Flowering and Fruiting: September-December.

Distribution: India (Sikkim, Assam and Meghalaya); Myanmar, China, Thailand, Cambodia, Vietnam, East Indonesia, East Malaysia and the Philippines.

Specimen examined: Meghalaya, Jaintia Hills district, Leska, north bank of Amshaning River, c. 600 m, 26.09.2007, Bhaumik 116537 (ASSAM).

Note: *Appendicula cornuta* in the wild is rare and was found growing in tropical forests in the branches of medium sized trees up to 15-20 ft. high associated with other orchid species such as *Podochilus khasianus* Hook. f., *Dendrobium ochreatum* Wall. ex Lindl., *Eria paniculata* Lindl., *Bulbophyllum monanthum* (Kze.) J. J. Sm. and ferns, mosses etc. The shape of sepals, petals and lip of *A. cornuta* found in Meghalaya shows variation compared to the Sikkim plant as illustrated by Pearce and Cribb (2002) from Parish 365 (K). Moreover, Seidenfaden (1986) has mentioned that 'the species shows considerable variability in the shape of the central callus on the epichile of the lip and careful study of fresh material may lead to establishment of several varieties'.

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