Bulbophyllum chyrmangensis (Orchidaceae: Epidendroideae), a new species from Meghalaya, Northeast India

DURGESH VERMA¹, SESHU LAVANIA¹ & SUSHIL K. SINGH²

¹Department of Botany, University of Lucknow, Lucknow—226007, Uttar Pradesh, India; E-mail: durgesh.kv@gmail.com
²Botanical Survey of India, Eastern Regional Centre, Shillong—793003, Meghalaya, India

Bulbophyllum section Brachyantha (Reichenbach 1861: 264) comprises about 26 species distributed from India to Japan and the Philippines, with one species in New Guinea (Vermeulen 2014: 27). In northeastern India, the section is represented by nine species (Hooker 1890, Augustine et al. 2001, Lucksom 2007, Rao 2007, Chen & Vermeulen 2009), which were earlier treated under Bulbophyllum section Umbellata (Bentham & Hooker 1883: 503).

During botanical trip to the Chyrmang sacred grove located in West Jaintia Hills District of Meghalaya, northeastern India, one of the authors (DV) came across an orchid species belonging to Bulbophyllum Petit-Thouars (1822: tab. 3) that flowered from September to October in cultivation. After a careful examination of morphological characters of the species and study of literature (Lindley 1830, 1841, 1843, Griffith 1851a, 1851b, Reichenbach 1852, Hooker 1890, King & Pantling 1898, Finet 1909, Rolfe 1913, Hayata 1916, Seidenfaden 1973, Kataki 1986, Augustine et al. 2001, Pearce & Cribb 2002, Lucksom 2007, Chen & Vermeulen 2009), it has been found that this material belongs to a hitherto undescribed species that is morphologically similar to B. umbellatum Lindley (1830: 56). Hence it is described here as a new species with illustrations based on live material.

Bulbophyllum chyrmangensis D.Verma, S.Lavania & Sushil K.Singh, sp. nov. (Fig. 1)

Type:—INDIA. Meghalaya: West Jaintia Hills District, Chyrmang, 25°25.881’ N & 92°14.573’ E, 1353 m, 8 October 2013, D. Verma 53 (holotype ASSAM!; isotype LWU!).

The new species differs from B. umbellatum Lindl. (1830: 56) in having larger lip, column, foot and long caudate stelidia.

Epiphytic herbs with a creeping rhizome and fibrous sheath, 3–6 mm thick. Pseudobulbs ridged, ovoid, tapering towards the apex, 2.5–4.3 × 1.4–2.2 cm, covered with a sheath that later becomes fibrous, at intervals of 1.6–3.1 cm along rhizome. Leaves glabrous, elliptic-oblong, erect, 8.0–12.8 × 1.4–3.0 cm, apex retuse, contracted at the base to a thick cylindric channelled petiole, 1.4–2.3 cm long. Inflorescence from base of the pseudobulb, erect, shorter than leaves, umbellate, 2–3 flowered, 6.0–10.1 cm long. Peduncle erect, glabrous, light green, streaked with purple, sheathed; sheaths 2, distant, tubular 7–9 mm long. Floral bract ovate-lanceolate, creamy-white, acuminate, 6–8 × 3–4 mm. Pedicellate ovary 2.8–3.2 cm long, slightly ridged, pale green with purple spots. Flowers pinkish yellow with fine purple spots, 3.2–4.0 cm long. Dorsal sepal broadly ovate, incurved, concave, 5–6 nerved, 1.2–1.5 × 0.8–0.9 cm, apex shortly apiculate with purple blotch, base creamy yellow, margin finely irregularly papillose, pinkish yellow with fine purple spots. Lateral sepals obliquely ovate-lanceolate, 5 nerved, 2.4–2.8 × 0.8–0.9 cm, upper margin infolded, cohering at the base, apices convergent, apex acute-acuminate, base creamy-yellow, similar in colour to the dorsal sepal. Petals ovate-triangular, 5 nerved, 8–9 × 5–6 mm, pinkish yellow with fine purple spots, margin finely irregularly papillose, apex obtuse-rounded to shortly apiculate with large purple blotch, adaxially slightly warty. Lip oblong with broad base, 7.0–8.0 × ca. 5 mm, recurved, pinkish white with median creamy yellow stripe and finely spotted with purple, adaxially with a grooved keel, abaxially shallow grooved from base to near apex; base somewhat protruded & hairy along margins. Column 5–6 mm long, with triangular lateral wings; stelidia 2, caudate, ca. 2.0 mm long; foot upcurved, 8–9 mm long with purple spots in front, truncate at apex. Anther cap ovoid, ca. 1.2 × 1.5 mm, creamy yellow with 2 brown stripes along margins. Pollinia 4, ellipsoid, yellow, attached to a disc, ca. 1.2 × 0.8 mm long. Fruit not seen.

Distribution and habitat:—Currently known only from the type locality. The species was found growing on tree trunks of Acronychia sp. (Rutaceae) in subtropical evergreen forest at 1353 m.
more finely papillose in the latter. Similarly the lip of both species is grooved on upper surface, but it is deeply grooved throughout in case of *B. umbellatum* whereas in new species it is shallowly grooved from base to near the apex. The upper surface of lip is minutely hairy near the base in both the species but these are more prominent in the new species (Fig. 2).

**Acknowledgements**

The authors are grateful to P. Singh, Director, Botanical Survey of India, Kolkata and to A. A. Mao, Head of Office, Botanical Survey of India, Eastern Regional Centre, Shillong, for facilities and encouragement. The authors extend their sincere thanks to Forest Department of Meghalaya for help during field exploration.

**References**


http://dx.doi.org/10.5962/bhl.title.499


Lindley, J. (1843) *Cirrhopetalum maculosum.* Edwards’s Botanical Register 29: sub t. 49.


