Dendrobium cumulatum (Orchidaceae). An addition to the orchid flora of Manipur, India

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Abstract
Dendrobium cumulatum Lindley (Orchidaceae) is reported as a new distributional record to Manipur state, India. A detailed description of the species along with a photographic plate is provided here to facilitate easy identification.

Résumé
Dendrobium cumulatum (Orchidaceae) : addition à la flore de Manipur (Inde) – La présence de Dendrobium cumulatum Lindley dans l’État de Manipur, Inde, est enregistrée pour la première fois. Afin de faciliter son identification ultérieure, une description détaillée de l’espèce est proposée, accompagnée d’une planche photographique.

Introduction
The genus Dendrobium O.Swartz has hitherto been represented in Manipur by 56 species (Kumar & Kumar, 2005; Rao, 2007; Chowdhery, 2009; Nanda et al., 2012; 2013; 2014; Kishor et al., 2013). During one of the orchid surveys carried out in the Kwatha area of the Chandel District of Manipur (India) in May 2014, some plants of Dendrobium in vegetative condition have been collected and brought under cultivation in the orchidarium of Centre for Orchid Gene Conservation of Eastern Himalayan Region (COGCEHR) at Hengbung, Senapati District, Manipur where they flowered in the next
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month of July. A comparison of the flowers with the pertinent literature (Seidenfaden, 1985; Chowdhery, 1998; Pearce & Cribb, 2002; Wood, 2006; Lucksom, 2007) allowed us to identify the species as Dendrobium cumulatum Lindley (Orchidaceae), an entity hitherto unknown from Manipur. Hence, the present report of its occurrence in Manipur constitutes a new distributional record for this state. A detailed description of the species along with colour photographs is provided.

**Dendrobium cumulatum Lindley**
The Gardeners’ Chronicle 1855: 756 (1855)

**Callista cumulata** (Lindley) C.Kuntze, Revisio Generum Plantarum 2: 654 (1891)


Type: s.loc., s.d., Warner, C.B s.n. [Type: K (K000364679), digital image!].

**Dendrobium eoum** H.Ridley, Journal of the Linnean Society, Botany 32: 261 (1896)


Type: Thailand, Peninsular Thailand, Phangnga, Kopah, s.d., C. Curtis, s.n. [holotype: SING (SING0049770), digital image!]

Epiphyte; roots up to 10 cm long and ca 2 mm thick, verrucose; pseudobulbs 16-30 × 0.2-0.7 cm, erect, clavate, 7-8 ridged, covered by leaf sheaths at nodes; leaves 7-10 per pseudobulb, alternate, oblong-lanceolate to elliptic, 7-9 × 1.5-2 cm, sheathed at base, acute at apex; sheaths 1.5-2 cm long; inflorescence corymbiform, 3-6 flowered, 1.5-2 cm long, lateral from nodes, borne on a leafless pseudobulb; peduncle terete, 0.5-1 cm long, glabrous; rachis 0.5-1.2 cm long, glabrous; floral bract lanceolate, ca 2 × 1 mm, acute, pinkish; flowers 3.5-4 cm (measured from the tip of the dorsal sepal to the apex of the lip), 2.5-3 cm across (between two lateral sepal tips), white to pale purple, fragrant; dorsal sepal elliptic-obleng, 1-1.3 × 0.5-0.7 cm, sub-acute at apex, glabrous; lateral sepals elliptic, 2-2.5 × 0.5-0.7 cm, sub-acute at apex, falcate, adnate at base to column foot, forming a conical, ca. 1.5 cm long mentum; petals obovate, 1.2-1.5 × 0.5-0.8 cm, obtuse at base, slightly fimbriate at margin; lip spatulate, 2.5-2.8 × 1-1.2 cm, long clawed towards base, emarginated and erose at apex, geniculate at insertion with mentum; column ca. 5 mm long, white, winged at apex with erose margin; foot 1.5 mm long, broader and canaliculate towards apex; anther cap ca 2.2 × 3 mm, white; pollinia 4 in two pairs,
Fig. 1: *Dendrobium cumulatum* Lindley
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clavate, ca 1.5 mm long, pale yellow; pollen tetrad decussate; ovary pedicillate terete or obscurely ribbed, 1-1.6 cm long, glabrous; fruits not known. Fig. 1.

Specimen examined: India, Manipur, Chandel District, Kwatha village (24º18.9´N and 94º16.6´E, 409 m) 24th May 2014, H. Bishwajit Sharma 0062 (COGCEHR herbarium, Hengbung, Manipur).


Flowering: July-August.

Habitat: the species grows epiphytically on moss covered tree branches in subtropical mixed pine forest in association with other orchid species and ferns.

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