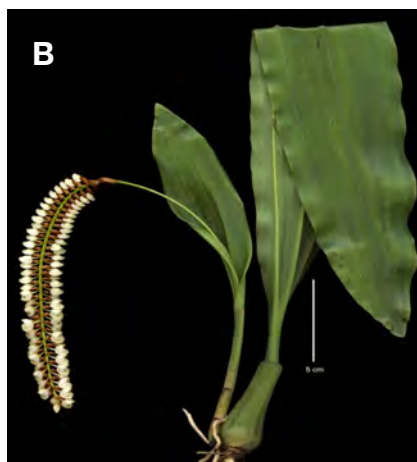


## *Pholidota pallida* Lindl. (Orchidaceae): a new record for northern India from Uttarakhand



*Pholidota pallida* Lindl.: A - natural habitat, B - in flowering condition, C - close-up of flowers on rachis. © Dinesh K. Agarwal (B&C).

*Pholidota* Lindl., a taxonomically interesting genus belonging to the family Orchidaceae, was established by Lindley in 1825, which comprises c. 41 species in the world (Govaerts et al. 2014) and 11 species in India (Chowlu & Rao 2015). The genus is known to be distributed in India, southeastern Asia, New Guinea, and the Pacific Islands to Australia. One of its threatened endemic species *P.*

*pallida* Lindl., so far reported from the eastern parts of India, is reported here for the first time from the virgin forest areas of Nandhour Wildlife Sanctuary in Nainital District of Uttarakhand as a new distribution record for northern India.

During floristic exploration in Nandhour WS of Uttarakhand, an interesting plant species of Orchidaceae was collected

from the dense forest areas at Nandhour River bank on the way to Anwalakhera in Nandhour range. The detailed critical study of the collected specimen with the other allied species of the genus, herbarium consultation at the Botanical Survey of India, Dehradun (BSD), the Botanical Survey of India, Kolkata (CAL), and the Forest Research Institute, Dehradun (DD), and perusal of available literature (Hooker 1890; Osmaston 1927; Babu 1977; Gaur 1999; Uniyal et al. 2007; Chowdhery et al. 2009; Chowlu & Rao 2015) confirmed the specimen as *Pholidota pallida* Lindl. The specimens studied were deposited at the herbarium of BSD.

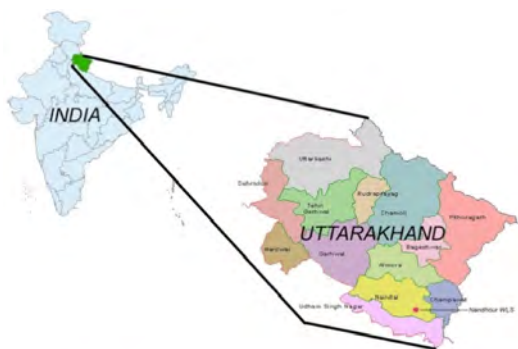
***Pholidota pallida*** Lindl., Edwards's Bot. Reg. 21: ad t. 1777. 1835; H.J. Chowdhery et. al., Mat. Fl. Arunachal Pradesh. 3:144. 2009; K. Chowlu & A.N. Rao, Richardiana. XVI:10-12.2015. *P. calceata* Rchb.f.,

Bonplandia 4: 329.1856. *Coelogyne calceata* (Rchb.f.) Rchb.f. in Walp., Ann. Bot. Syst. 6: 238. 1861. *Pholidota imbricata* sensu Hook.f., Fl. Brit. India 5 (2): 845. 1890. *Pholidota imbricata* var. *sessilis* Hook.f., Fl. Brit. India 5(2): 846. 1890; H.J Chowdhery, Orch. Fl. Arunachal Pradesh 594. 1998. *Pholidota pallida* var. *sessilis* (Hook.f.) Sarkar, J. Econ. Tax. Bot. 5: 1008. 1984.

Epiphytic, unifoliate herbs. Pseudobulbus cylindric, furrowed, 3.0–4.6 cm long, base covered with inconspicuous 3.5–5.5 cm long sheaths; leaf solitary, oblong-lanceolate to oblanceolate, 10–25 cm × 1.5–4.5 cm, acute at apex; petiole 0.6–1.2 cm long; prominently trinerved at the base. Inflorescence a raceme, 20–36 cm long, synanthous, peduncle 9–15 cm long, terete, rachis densely many-flowered; floral bracts ovate-sagittate, 4.0–7.0 mm × 4.0–5.0 mm, acute, membranous, palebrown; creamy-yellow; sepals sub-equal, creamy-white, the dorsal ones oblong-elliptic, 4.0–5.0 mm × 2.0–3.5 mm, obtuse, the lateral ones oblong-ovate, 5.0–7.0mm × 4.0–5.0 mm, connate at base; petals oblong-falcate, 3.0–5.0mm × 1.0–2.5 mm; lip broadly 3-lobed, 4.0–6.5 mm long, lateral lobes 3.0–3.5 mm long, erect, apical lobe divided into two lobules, irregularly quadrate; column winged, spatulate; anther cap dark brown; pollinia 4 in two pairs.

**Flowering and fruiting:** March–June.

**Habitat:** The species was found growing in a tropical dense forest in moist areas along a river bank.



Location Map of Nandhour Wildlife Sanctuary.

**Distribution:** India (Kumaon region and Nandhour WS in Uttarakhand, West Bengal, Arunachal Pradesh, Manipur, and Sikkim), Bhutan, Laos, Myanmar, Thailand, and Vietnam.

**Specimen examined:** 124315 (BSD), 17.iv.2015, India, Uttarakhand, Nainital District, Nandhour Wildlife Sanctuary, 29°08.710"N & 79°48.654"E, 552m, coll. K. Ambrish.

**Additional specimens examined:** 66257, 28.v.1979, Uttarakhand, Kumaon, Pithoragarh District, Kaflani, coll. C.M. Arora; 75647 (BSD), 18.iv.1984, Baram, coll. Bipin Balodi.

**Note:** This taxonomically interesting species is similar to *P. imbricata* Lindl.



**Herbarium sheet of *Pholidota pallida* [124315 (BSD)].**

Earlier workers like Hooker (1890), King & Pantling (1898) and Duthie (1903) placed *P. imbricata* and *P. pallida* together (Deva & Naithani 1986). But with the critical examination, *P. pallida* is distinct with *P. imbricata* in diagnostic characters like thin leaf, herbaceous habit, and lateral sepals connate at the base (Chowlu & Rao 2015). Due to this confusion, this species had never been reported from northern India, hence reported for the first time.

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