



NERVILIA INFUNDIBULIFOLIA BLATT. & MCCANN (ORCHIDACEAE), A NEW DISTRIBUTIONAL RECORD FOR GADCHIROLI DISTRICT (MAHARASHTRA)

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Article Received on 01/05/2025

Article Revised on 21/05/2025

Article Accepted on 10/06/2025

ABSTRACT

Nervilia infundibulifolia is reported for the first time from Gadchiroli district of Maharashtra state, which forms a new distributional record for Gadchiroli district.

KEYWORDS: *Nervilia*, Orchid, Vidarbha region, Maharashtra state, India.

INTRODUCTION

Nervilia commerson ex Gaudichaud is characterized by having fan-shaped venation of leaves and developing flowers and leaves at different times (Liu et al. 2018). The genus *Nervilia* consist 71 taxa distributed in tropical, subtropical and warm temperate regions of Africa, Asia, Australia and the Southwest Pacific Islands (Pridgeon et al., 2005; Govaerts et al., 2013, S.Sharma et al.,2013). In India it is represent by 16 species (Misra, 2017; Jalal et al., 2012; Sharma et al., 2013). In Maharashtra only 4 species are found namely *N. concolor* (Blume) Schlechter, *N. crociformis* (Zollinger and Moritzi) Seidenfaden, *N. infundibulifolia* Blatter & McCann, *N. Plicata* (Andrews) Schlechter (Jeewan Singh Jalal et al., 2018).

During our floristic survey of Dhanora tehsil in Gadchiroli district authors collected few fascinating flowering specimen from dry deciduous forest of Michgao forest range Dhanora tehsil in June 2022. After critical study along with perusal of the relevant literature the specimen identified as *Nervilia infundibulifolia* Blatter & McCann.

METHODS

Study Area

Michgao forest range (Lat. N20.265812” Long. E 80°575877”) is in the southern part of Dhanora tehsil of Gadchiroli district Gadchiroli of Maharashtra state (India) and is well known for dense forest. The Dhanora tehsil is covered with hills and forests and is considered as a tribal area. The Gadchiroli District falls under assured and heavy rainfall zone. The rain, are mainly received from South-West monsoon. The average rainfall

is 1562mm. The climatic conditions are extreme with temperature reaching 47.3°C in summer & 9.4°C in winter.

OBSERVATION

During our extreme exploration in the Gadchiroli district of Maharashtra state of India, we observed the taxa with some interesting characters and is described technically as follows.

***Nervilia infundibulifolia* Blatt. & McCann; Synonym: *N. hallbergii* Blatt. & McCann; *N. calcicola* Kerr**

Tuber globose, 6.0–15.0 mm in diameter. Leaves light green with purple-maroon streaks along the veins, polygonal-cordate and cornutely-toothed at tips of main veins, 2.2–5.2×2.5–5.4 cm across, base cordate, apex acute, glabrous, spreading on ground; petiole-like stalk erect, 1.2–4.0 cm long. Inflorescence 6.5–11.0 cm long, 1-flowered; peduncle purplish-brown with purple flecks, bearing 1 or 2 tubular sheaths; floral bract oblong-elliptic, 2.8–4.6 × 1.0–1.2 mm, apex acute to acuminate, clasping, glabrous. Flowers erect, opening widely, pedicel and ovary 4.0–6.5 mm long. Sepals and petals purplish-brown with purple flecks, narrowly elliptic to linear-lanceolate, 3-veined, apex acute; sepals 14.2– 16.4 × 2.0–2.6 mm; petals slightly falcate, 12.5–16.5 × 1.5–2.0 mm. Labellum white tinged with short papillae and purple-red strips on adaxial; narrow oblong-obovate, 16.5–18.8 × 4.6–5.0 mm, 3-lobed at the middle; lateral lobe tightly embracing the column, ovate-triangular, 8.0–9.0× 1.2–1.5 mm, apex acute; mid-lobe obovate, 8.5–9.2×4.2– 4.5mm, margin entire, apex acute. Column white with purple spots, straight, 8.5–10.0 mm long, with a patch of short hairs below the stigma; anther cap 1.2–

1.5 mm in diameter; pollinium 1.8–2.0 mm long; rostellum protruding stigma shield-shaped.

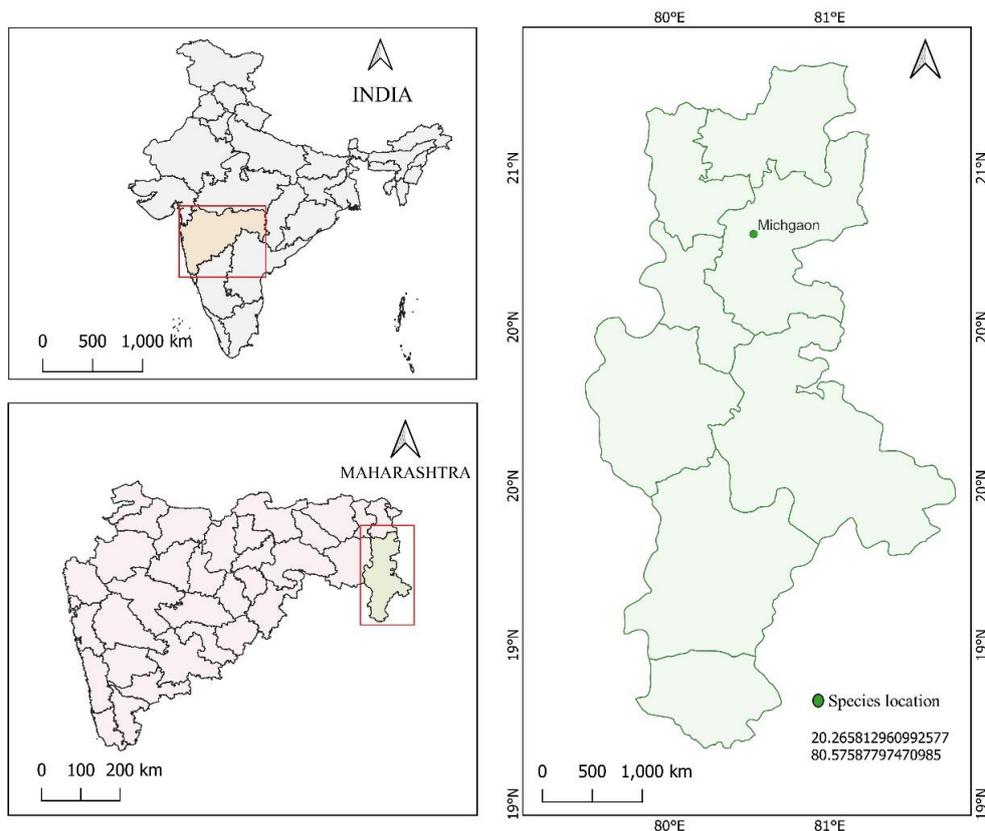
Phenology- Flowering from April to June, in leaf June to October.

Ecology: Extremely rare in dry deciduous forests.

Distribution: India (Arunachal Pradesh, Uttarakhand, Odisha, Andhra Pradesh, Maharashtra, Karnataka, Kerala, Tamil Nadu Jharkhand), Myanmar, Indonesia, Malaysia, Thailand, Laos.



Photo plate 1: A) Flowering stage B) Close-up of flower C) Fruiting Stage. D) Collected full Plant Specimen E) Natural Habitat with Leaves.



Map: Map Showing the Species location in the Gadchiroli district.

CONCLUSION

From the observed characters it is concluded that the given taxa is *Nervilia infundibulifolia* Blatt. & McCann. This taxa was observed in the deep forest of Gadchiroli district of Maharashtra state of India. This taxa is first time reported from Gadchiroli district of Maharashtra state of India. It may help further for the Angiosperms Taxonomist to study its distribution and characteristics.

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