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A note on occurrence of *Phaulopsis dorsiflora* (Retz.) Sant. (Acanthaceae) from Chhattisgarh state, India

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ABSTRACT

Phaulopsis dorsiflora (Retz.) Sant. belongs to family Acanthaceae is first time reported here as an its range extension and occurrence from Chhattisgarh state. This paper deals with a note on its occurrence, taxonomic description, distribution, photo plate and their distribution map.

Key words: *Phaulopsis dorsiflora*, occurrence, range extension, Chhattisgarh.

INTRODUCTION

Family Acanthaceae (Juss, 1789) having 3947 species in 242 genera; is a large cosmopolitan family which is distributed mostly in the tropical and sub-tropical regions of the world. In India, it is distributed throughout the country. Bentham (1876) has divided Family Acanthaceae into five tribes on the basis of presence or absence of retinacula, two or four stamens, aestivation of corolla, and number of seeds i.e. Thunbergieae, Nelsonieae, Ruellieae, Acantheae and Justicieae. The genus *Phaulopsis* Willdenow belongs to Tribe Ruellieae (Bentham, 1876). It is represent by 22 species from Arabian, Peninsula, and Eastern Himalaya to China, Indo- Burma and Africa (Manktelow, 1996). In India, it is represented by two species i.e. *P. imbricate* (Clarke, 1885) and *P. dorsiflora* (Bawri *et al.*, 2016). But in Chhattisgarh state, only *P. imbricate* is reported (Verma, 1985). Present paper deals with occurrence of *Phaulopsis*

dorsiflora and range extension from Chhattisgarh state. It is earlier reported from Arunachal Pradesh (Bawri *et al.*, 2016), Karnataka (Rao *et al.*, 2019) & Madhya Pradesh (Uniyal *et al.*, 2011) in India.

STUDY AREA

Geedam is situated at Southeast of Dantewada district Chhattisgarh. Geographically, this area is situated between 18°58' 27" North and 81° 23' 3" East. It is a reserved forest area with Tropical moist deciduous types of forest.

MATERIAL AND METHODS

While working on making PBR (People biodiversity Register) of Geedam, Dantewada district during year 2019, one of authors collected an unidentified plant species which belongs to family Acanthaceae. After critical examination with the help of Microscopic

characters, study of Herbarium sheets of various herbaria (CAL, BSA, BSJO, BSHC, PBL, ARUN, BLAT, RuBL), and various literatures (Bentham, 1876; Manktelow, 1996; Santapau, 1959; Bawri, 2016), this plant is identified as *Phaulopsis dorsiflora* (Retz.) Sant.

RESULT AND DISCUSSION

Phaulopsis dorsiflora (Retz.) Sant., Kew Bulletin 1948: 276. 1948; Manktelow, *Phaulopsis* (Acanthaceae) - A Monograph 159- 160. 1996; Hu & Thomas in Wu and Raven, Flora of China 14: 430. 2011.



Fig. 1: show live plant photographs of *Phaulopsis dorsiflora* (A): Habitat of *Phaulopsis dorsiflora*; (B, C, D & E): Inflorescence & Flower; (F & G): Calyx; (H): Gynoecium; (I): Androecium; (Photo @ Ritu)

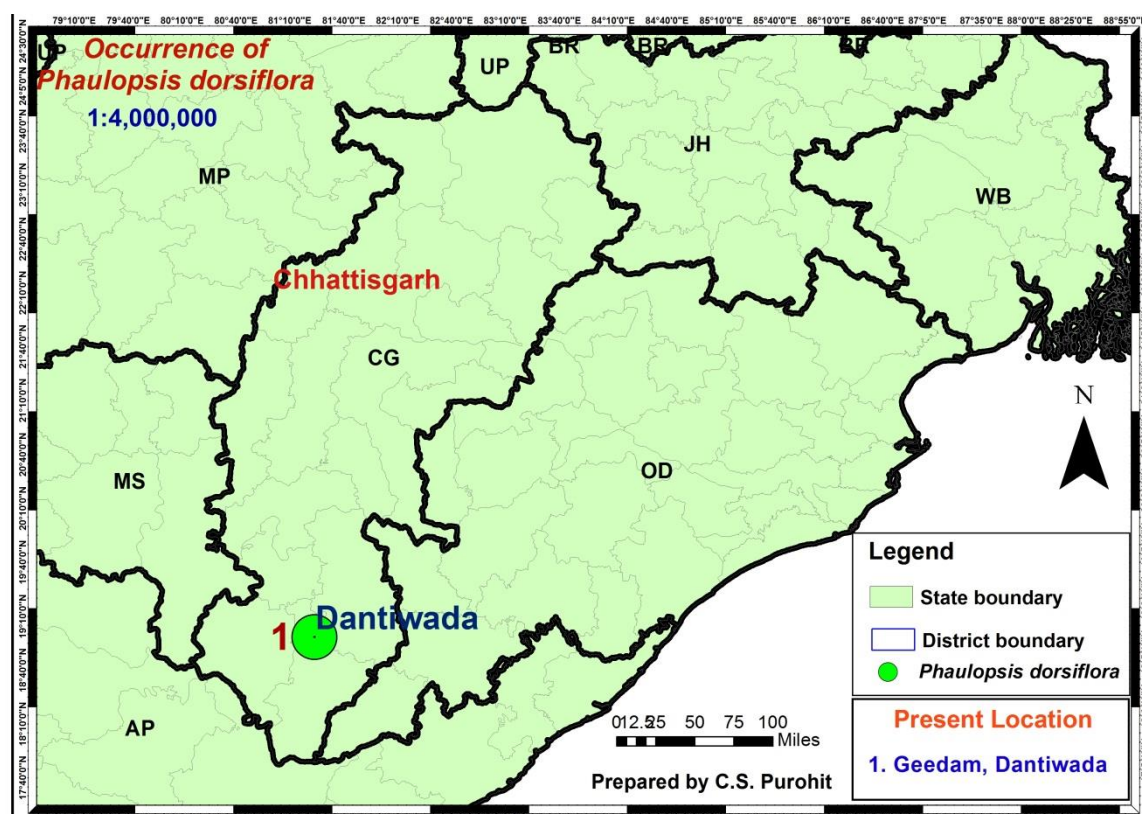


Fig. 2 Occurrence of *Phaulopsis dorsiflora* in Chhattisgarh state, India

Taxonomic description

Erect or decumbent, branched annual herb, up to 50 cm long. Stem 4-angled, retrorsely pubescent, slightly swollen at nodes. Leaves opposite, 2.5 – 11 × 2 – 5 cm, ovate to elliptic, hirsute on dorsal surface, only veins pubescent on ventral surface, serrate-denticulate margin, acute to acuminate at apex, cuneate or oblique at base. Petiole pubescent, up to 6 cm. long. Flower in axillary cyme spike, sessile; leafy bract orbicular, reniform, 1.8 × 1.2 cm, margin ciliate, glandular hairy. Calyx 4-lobed, unequal, 0.8 – 1.2 cm long, ciliate at margin. Corolla white, 1 – 1.4 cm, glandular hairy, bilipid- upper lip 2-partite, lower lip 3-partite. Stamens 4, didynamous, inserted in corolla tube, filament sparsely pubescent, coherent at base, theca bilobed, dorsifixed. Ovary apex sparsely gland tipped, pubescent, bilocular, two ovule in each locule; Style hairy, stigma bilobed, unequal. Capsule clavate, 0.5 – 0.6 cm. long, densely pubescent, 4-seeded; Seed pale-brown, rounded, compressed, 1 – 1.4 mm. long, pilose (Fig.1).

Fl. & Fr.: November to March.

Specimen examined: Chhattisgarh, Dantewada district, Geedam, 18°58'27"N & 81°23'35"E, 14.12.2019, Ritu 341 (BSJO).

Distribution: India [Arunachal Pradesh (Bawri *et al.*, 2016); Chhattisgarh (Present study, Fig. 2); Karnataka (Rao *et al.*, 2019); Madhya Pradesh (Uniyal *et al.*,

2011)]; Bangladesh, Bhutan, China, Laos, Myanmar, Sri Lanka, Thailand, Vietnam.

Note: *P. dorsiflora* is commonly found in moist and humid forest area. It is mostly growing in alluvial and black clayey soil which is capable of retaining water for a long period. It is used for dressing wounds and fresh juice is applied to sores (Uniyal *et al.*, 2011). It is closely related to *P. inbricata* but differs in having characters i.e. white flower, densely pubescent fruit and seeds pilose on edge.

CONCLUSION

During the survey of Geedam, Dantewada district, Chhattisgarh in year 2019 for making PBR (People Biodiversity Register), one of the authors collected an interesting plant and after critical study, it is identified as *Phaulopsis dorsiflora* (Retz.) Sant. belonging to family Acanthaceae. So Present paper deals with its occurrence and range extension from Chhattisgarh state.

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