A note on*Disporumcantoniense*(Lour.) Merr.

Abstract

Recent fieldworks in Bonai Forest Division, Odisha, India resulted in the finding of one unique plant species, *Disporumcantoniense*(Lour.) Merr.with limited distribution in Odisha state. Authors found that this species is abundantly available in Khajurdihi RF, Koira Range and Phuljhar area of Barsuan Range, Bonai Forest Division, Odisha. Morphological descriptions, distribution, and taxonomic notes with photographs are presented here for easy identification in the field and to bring attention towards its conservation.

Introduction

Inside our forest, many plants are available yet to be discovered and explored. Floristic and taxonomic studies are hence useful for the correct identification, distribution, growing season, and finding of unexplored species or new species. Documentation of the plant species is a very important aspect in the field of taxonomyas well as for further scientific research.During the botanical exploration in Bonai Forest Division, Sundargarh, Odisha, authors collected one unexplored plant species belonging to the genus *Disporum*from Khajurdihi RF of Koira Range with a good population (21° 51' 06" latitude, 85° 16' 35" longitude, 792.57 m elevation) during August 2022 and also from Phuljhar area of Barsuan RangeduringOctober 2022.Their morphological characters identified it as*Disporumcantoniense*(Lour.) Merr.belonging to the family Colchicaceae. *Disporum* Salisbury (1812) includes about 24 species distributed in Bhutan, China,India, Japan, Korea, Laos, Malaysia, Myanmar, Nepal, Russia, Sikkim, Thailand, andVietnam (Zhu et al. 2019).Among these, more than fourteen species have been found in China with 8 endemic species, four species are recorded in Japan and four species are recorded in Taiwan (Chien-Ti & Yen-Hsueh2019).In Odisha, only one species has been reported that is *Disporumcantoniense*(Lour.) Merr. (Saxena&Brahmam 1995). Before 1995, *Disporum* members are usuallyerect, branched herbs with angular stems, and rootstock creeping. Leaves cauline, alternate, or sometimes opposite,sessile or shortly petioled, strongly nerved.Inflorescences terminal or pseudolateral (terminal on a short, lateral branchlet opposite a leaf), umbellate or with flowers paired or solitary, bract absent. Flowers bisexual, often nodding, sometimes horizontal, tubular-campanulate to opening flat. Stamens 6, hypogynous, filaments erect, usually flattened, anthers dorsifixed, extrorse. Ovary 3-celled, ovules 2-6 per cell, style long or short, stigmas 3, short. Fruit a berry. Seeds few, sub-globose; testa brown, albumen horny(Saxena&Brahmam 1995; Songyun& Tamura 2000).

Taxonomic Treatment

Disporumcantoniense(Lour.) Merr**.** Philipp.J.Sci.15:229. 1919; Jessop in Steenis, Fl. Males. I.9:218. 1979.

Description

Stout herb, 0.7-1.2 m, dichotomously branched above. Rhizome creeping, thick, without stolon. Leaves alternate and opposite, ovate or ovate-lanceolate, 7-12.5 x 2.5-5 cm, acute or acuminate, stronger nerves about 5-8, petiole very short, decurrent as a raised line on the stem. Flowers white (or dull purple), about 5-6 in short peduncled deflexed umbels, which

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are terminal, leaf-opposed or from upper leaf-axils, pedicels angled, decurved, 2.5-3.7 cm long. Perianth segments spathulate or lanceolate, 1.8-2 cm long, acute or acuminate, saccate or subsaccate at the base. Fruit black, globose or didymous, ca. 8 mm diam., with 1 seed in each cell. Seeds are light brown, orbicular oblong, and 5 mm long (Saxena&Brahmam 1995; Songyun& Tamura 2000; Plate 1).

Phenology: *Flowering &Fruiting*: August - October

Ecology: Along the perennial stream and high altitude, bamboo thickets and associated with *Gnetumedule*.

Associated species: *Dictyospermumovalifolium*Wight., *Gnetumula*Brongn.,*Diospyrosmalabarica* (Desr.) Kostel., *Globbaracemosa* Sm., *Epithemaceylanicum* Gardner etc.

Distribution: Bhutan, China, India, Laos, Myanmar, Nepal, Thailand, Vietnam, etc.

Plate 1: Habitat and collected specimen in Bonai Forest Division, Odisha

Note

As the earlier studies showed that the distribution of the collected specimen is limited in Odisha state, its conservation is needed. Authors also observed that the collected specimen grow near water bodies, so it could be a biological indicator of perennial streams.

Data and materials availability

All data associated with this study are present in the paper.

References

Chien-Ti C and Yen-HsuehT. (2019). Taxonomic revision of *Disporum*Salisb. (Colchicaceae, Uvularioideae)of Taiwan. PhytoKeys. 119: 1–22.

Zhu X, Liao S and Yi S (2019).*Disporumnanchuanense* (Colchicaceae), a new species from Chongqing, China. In: Cai J, Yu W-B, Zhang T, Li D-Z (Eds) Revealing of the plant diversity in China's biodiversity hotspots. PhytoKeys 130: 49–57.

Saxena HO and Bramham M. 1995. The Flora of Orissa, Orrisa Forest Development Corporation Ltd & Regional Research laboratory. Vol I-IV.

Songyun L and Tamura MN. (2000). *Disporum* Salisbury ex D. Don, Prodr. Fl. Nepal. 50. 1825. Flora of China. 24: 154-158.