



A note on *Yamazakia pusilla* (Willd.) from Jamtara Forest Division, Jamtara, Jharkhand, India

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

Yamazakia pusilla has been collected from Jamtara Forest Division, Jamtara, Jharkhand. Earlier, it was known as *Lindernia pusilla*. Very less studies and reports are available on it from Jharkhand state. In the initial observation and literature review, it appeared that it might be a new addition from the genus *Lindernia* to the floral wealth of Jharkhand state, but the e-flora of the Botanical Survey of India (BSI) has listed its synonyms. It is an unexplored plant of Jharkhand state and less idea about its identification, habitat, ecological significance and uses. Therefore, keeping this in mind, a taxonomic note, habitat and uses are presented here along with photographs for easy identification in the field. Plant is identified using flowers and published literature. The communication highlights the importance of exploration works for highlighting the unexplored species of Jharkhand state from Jamtara Forest Division, Jamtara.

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1. INTRODUCTION

Jharkhand state is separated from Bihar in the year 2000. Before separation, few works have been done on floral diversity of undivided Jharkhand state. After formation of Jharkhand state, two books are written on Flora of Hazaribagh district by Botanical Survey of India (BSI), India along with some other books and papers by different organization. Still, very less work has done on floral wealth of Jharkhand and many plants are unexplored. Among the unexplored taxa of Jharkhand, genus *Lindernia* All., has very less documentation. It is a group of flowering plants from the family Linderniaceae, traditionally belonging to the family Scrophulariaceae, comprises about 160 species distributed almost throughout the tropical and temperate regions of the world [1,2,3,4,5]. A preliminary study on the genus *Lindernia* shows that there are 31 taxa reported from India [6] and Hains [7] reported 3 species of *Lindernia* and species from the same. Keeping the importance on documentation of unexplored plants, the team of Ambika Prasad Research Foundation started work in collaboration with Jamtara Forest Division, Jharkhand. During the survey on the floristic studies at Jamtara Range, Jamtara Forest Division, Jharkhand on 24th May 2023, authors collected a species from the genus *Lindernia* All. (24° 0' 1" N, 86° 52' 20" E, 106.01 m elevation). The authors came across a good population of this interesting *Lindernia* spp., growing along with several other herbaceous angiosperms along the banks of occasional ponds and water bodies. Critical comparison with allied taxa has confirmed this is *Yamazakia pusilla* (Willd.) W.R.Barker, Y.S.Liang & Wannan. Earlier it was known as *Lindernia pusilla* (Willd.) Merr. (Linderniaceae). Field observations were noted down using the Field Data Book. This species' name was first published in Australian Systematic Botany [8]. No further more information regarding this genus has been reported yet. At the time of this classification snapshot, this species name was unplaced by WFO (a taxonomist hasn't yet placed the name in the taxonomy). It is unexplored plant in Jharkhand state. Therefore, a note is presented here on its taxonomy, habitat, associated species and uses.

2. METHODOLOGY

The collected specimen was identified by Dr. Sanjeet Kumar through the critical analysis of

morphological characters and intensive comparison with other *Lindernia* species from different literatures [7,3,4,5]. The brief description of the taxonomical note, photographs, phenology, and associated flora were recorded from the field. One herbarium (APRFH-075) was made and deposited to the Biodiversity and Conservation Lab., Ambika Prasad Research Foundation, Odisha. The uses of collected specimen was gathered from Pahadia community through interview and the answers were cross checked and verified with other tribals.

3. RESULTS AND DISCUSSION

It is a suberect, annual plant, growing 6-30 cm tall. Stem prostrate, branches often widely spreading from the root-stock, or prostrate at the base, with long internodes. Leaves ovate to orbicular-ovate, 0.5-2.0 x 0.5-1.5 cm, truncate at base, obtuse at apex, crenate-serrate, with prominent nerves beneath; petioles 1-3 mm long. Flowers 1-4 in axils of leaves. Pedicels 3-20 mm long, slender, glandular-pubescent, longer calyx, tube 1 mm long, smooth, lobes lanceolate, glandular without pilose. Corolla white to purple in color; upper lip erect, 3 mm long, 2-lobed at apex, dirty pale brown or mauvish-brown with purplish lines or pale mauve or pale blue; tube 4 mm long; lower lip 4-6 mm across, mid lobe broadly ovate, slightly larger than lateral ones, with a yellow blotch at the base. Posterior filament 2 mm long, anterior ones longer, all glabrous, Hypogynous disc white, style glabrous; lamellae of stigma ciliolate at margins. Capsule globose, 3-4 mm in diameter, glabrous; seeds oblong- cuniform, 0.5 mm long, truncate at both ends, longitudinally alveolate and tawny (Plate 1).

Type Specimen: India, Jharkhand, Jamara Forest Division, Jamtara Range, Rugdih (24° 0' 1" N, 86° 52' 20" E, 106.01 m elevation), 24th May 2023, Sweta Mishra & Sanjeet Kumar 075.

Phenology: *Flowering & Fruiting:* May to December.

Ecology: Found in grassy bunds of paddy fields and along grassy borders of ponds or tanks in the wet and dry lowlands.

Associated Species: *Drosera burmanni* Vahl., *Bacopa monnieri* (L.) Wettst., *Mitrasacme indica* Wight., *Evolvulus alsinoides* (L.) L., *Evolvulus nummularius* (L.) L.



Plate 1. Habitat and habit of *Yamazakia pusilla*

Distribution: In India, it is commonly distributed in Assam, Bihar, Chhattisgarh, Goa, Kerala, Karnataka, Maharashtra, Madhya Pradesh, Nagaland, Odisha, Sikkim, Tamil Nadu, Tripura, West Bengal, and Jharkhand.

Uses: Pahadia community consume it as a leafy vegetable and known as Pani aala.

4. CONCLUSION

The report emphasizes the need of exploration activity for highlighting the less known species of Jharkhand from Jamtara Forest Division, Jamtara. A note on *Yamazakia pusilla* (Willd.) from Jamtara Forest Division is well presented.

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COMPETING INTERESTS

Authors have declared that they have no known competing financial interests OR non-financial interests OR personal relationships that could have appeared to influence the work reported in this paper.

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