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Psilotum nudum (L.) Pal. Beauv: Pteridophytes new record of Patalkot, Madhya Pradesh, India

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Abstract

Psilotum nudum is recorded for the first time from Shirjoth Ghatlinga, Patalkot District Chhindwara, Madhya-Pradesh. Psilotum nudum habitat of the plant, important synonyms, morphological and palynological descriptions, Study area, Local Name, Distribution, Specimen examined, Location, local name, plant's photograph, and medicinal uses are provided. Furthermore, the conservation of this species in Patalkot Chhindwara district is also suggested.

Keywords: *Psilotum nudum, new record, Patalkot, Chhindwara District, Madhya Pradesh.*

INTRODUCTION

Psilotum nudum is recorded for the first time from Shirjoth Ghatlinga, Patalkot District Chhindwara, Madhya-Pradesh. In spite of its rich plant wealth, the Satpura hill, Chhindwara District, have been completely studied floristically in the recent times. "*Study on the flora of satpura hills with the special references of District Chhindwara M.P.*" (Ph.D. thesis unpublished [-2]"*Pteridophytes of Patalkot Tamia Madhya-Pradesh*" [3-6]. Enumerates Floristic analysis of the flora of Chhindwara shows that 873 species belong to a group of Pteridophytes, Gymnosperms and Angiosperms. 18 species, 15 genera, 15 family belong to Pteridophytes; 5 species, 3 genera, 3 family belong to Gymnosperms; 850 species, 500 genera 122 family belong to Angiosperms, (197 species, 122 genera, 27 family belong to Monocot, 653 species, 388 genera, 95 family belong to Dicot.) have been made in the recent past in this area. Botanical surveys were conducted in 2006 to 2010, by *Psilotum nudum* has been new recorded from Sirjot, Ghatlinga, Patalkot.

Study area

Chhindwara district is a district of Madhya Pradesh state in India, and Chhindwara town is the district headquarters. Chhindwara was the largest district in Madhya Pradesh with an area of 10,293 square km before the bifurcation of Pandhurna district. The district is part of Jabalpur division.

Tamia located in the Chhindwara district of Madhya Pradesh, has a rich biodiversity characterized by Mixed Deciduous Forests and diverse flora like Sal, Tendu, and various grasses and lianas.

The region is a haven for nature enthusiasts due to its dense forests and is near the Patalkot Valley, known for its unique ecosystem and rich ethnobotanical resources, including a variety of wild edible plants used by local Gond and Bharia tribes.

"Patalkot" situated in the hilly block 'Tamia' of Chhindwara district is a lovely landscape located at a depth of 1200-1500 feet in a valley. Latitude: 22° 15' 0.00" N.

Longitude: 78° 27' 36.00" E. It is a treasure of forest and herbal wealth. There are 12 villages and 13 hamlets in this valley, Patalkot valley that include- Chimtipur, Jadmandal, Talabadla, Rated, Pachgol, Sahra, Harra-kachar, Ghatlinga, Gujja, Dongri, Gaildubba, Kareyam, Ghana, with a total population of 2012 (1017 male and 995 female). Most of the people belong to 'Bharia' and 'Gond' tribes.

Materials and Methods

Psilotum nudum plant was collected, pressed, mounted on a herbarium sheet and depositedin the herbarium Department of Botany, Dr. Harisingh Gour Central University Sagar, and Pradesh, India. Specimens were photographed and observed under microscope for morphological features, ecology and conservation statusduring plant collection, the authors had the chance to collect. Although the area has been visited several times butonly a single population of *Psilotum nudum* was identified. The plant was found on a hilly place of Sirjot area. Single population of this species in the collection area is reflecting its rarity. Therefore, the plant needs *in-situ* and *ex-situ* conservation in Sirjot, Patalkot, Chhindwara District, Madhya Pradesh.

Species enumeration

Psilotum nudum (L.) Pal. Beauv., Prod. Fam. Aetheog. 112. 1805; Deb. & Dutta in Journ. Bombay Nat. Hist. Soc. 68(3):581. 1972; Tagawa & K. Iwats. in Fl. Thailand 3(1):5. 1979; De Vol in Fl. Taiwan 1:25. [7-8].

Perennial small or medium-sized herb, subterranean stem creeping, dichotomously much branched and with gemmae and infested with mycorrhiza; bearing brown dense rhizoids.

Leaves have scale-like lateral appendages, 1 mm long, scaly, spirally arranged, awl-shaped, midrib absent, scattered. Sporangia glabrous, sessile on or above the base of forked sporophylls, on short lateral branches, globose green, becoming yellow on when mature. Spores numerous, homosporous, small.

Local Name Bhulbhari. Distribution Endemic in field area. Specimen examined O.B. 1265. Location Sirjot, Ghatlinga, Patalkot, Tamia, Chhindwara District, M.P. GPS Location 22^0.22' to 15^0.10' North(latitude); 78^0.40' to 25.18' East (longitude); 946 m. sea level.

Figures: Psilotumnudum - Field photographsPsilotum nudum - Herbarium No. -1265

Ethno Medicinal usage

1. A decoction of the whole plant is mixed with turmeric and applied to wounds to promote healing.
2. Oily spores are given for to treat diarrhea
3. Traditional medicine to treat respiratory conditions and in some cases, tuberculosis.
4. It has been used for various skin ailments like eczema and rashes.
5. The decoction prepared from the plant isused as an antiseptic to wash the wound.

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