

# OCCURRENCE OF *PTEROPHYLLUM DISTANS* MORRIS FROM UPPUGUNDURU, ANDHRA PRADESH

Recently the authors have collected fossil plants from Uppugunduru which is 19 km north-east-north of Ongole town in Prakasam District of Andhra Pradesh. The fossils are found in the stone quarries. The plants are preserved as impressions on light weight shales of white-yellowish colour. The specimen described here is a Cycadophytic leaf and forms the subject matter of this short communication.

*Pterophyllum* Brongniart, 1828

*Pterophyllum distans* Morris, 1863

The specimen is a large leaf, measuring 12.5 cm long and 8 cm broad; narrowing towards the base. Rachis 3.5 mm thick in the middle, gradually tapering towards the apex and longitudinally striated. Pinnae linear, 4.2 cm long and 4 mm broad narrowing towards the apex. Apex is acute, bases lightly expanded. Pinnae are opposite and laterally attached to the rachis at an angle of 80°-85°. Pinnae are separated by a distance of about one fourth to about their own width. Veins 5-6, parallel (Text-fig. 1).

According to Bose and Banerji (1981) the genus *Pterophyllum* in India is represented by 10 species. Our specimen closely agrees with the characters of *Pterophyllum distans* Morris and hence it is described as such. *Pterophyllum distans* occurs at Rajmahal Hills, Godavari and Satpura basins and Kachchh. For the first time it is reported from Uppugunduru in Prakasam District of Andhra Pradesh. Hence, it appears that *Pterophyllum distans* had wider distribution in India.

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## Explanation of Plate

1. *Pterophyllum distans* × N.S.

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# A PRELIMINARY LIST OF MOSSES FROM RAJASTHAN

Although the study of bryophytes dates back to the last quarter of 18th century (Hedwig, 1782-1801), in India the beginning in this branch of study was made by Prof. Kashyap (1914) when he published an article on the West Himalayan hepatics. Since then quite a good amount of work has been done on various aspects of Bryology. However, mosses did not attract the same attention as the hepatics.

In Rajasthan, which is the second largest state of India in area, the study of mosses remained neglected. With a view to study the bryoflora of Rajasthan, investigations were started a few years back. Mosses have been collected from different places in the districts of Jaipur, Alwar, Bharatpur, Bundi, Sriganganagar and from Mount Abu (a hill station of Rajasthan at an altitude of about 1260m) in Sirohi District. The specimens have been deposited in the Herbarium of Botany Department of Rajasthan University, Jaipur and their numbers have been mentioned within brackets against the species. The detailed account of these species will be given elsewhere. The following is the list of species :

## I. Family Pottiaceae.

1. *Semibarbula orientalis* (Web.) Wijk and Marg. (nos. 14286-14299 & 16212).
2. *S. ranuii* Gang. (no. 16211).
- \*\*3. *Hyophila involuta* (Hook.) Jaeg. (nos. 14300-14308 & 17871).
- \*4. *Aneostangium stracheyanum* Mitt. (no. 17865).
- \*5. *Gymnostomum calcareum* Nees & Hornsch. (no. 17868)
- \*6. *Timmiella dimunata* (G. Muell.) Chen (no. 17870).

## II. Family Splachnaceae

7. *Gymnostomiella vermicosa* (Hook.) Fleisch. (nos. 14309-14318).

## III. Family Fissidentaceae

- \*\*8. *Fissidens curvato-involutus* Dix. (nos. 14319-14321).
9. *F. atroviridis* Besch. (nos. 14332-14323).
- \*10. *F. bryoides* Hedw. (no. 14324).

## IV. Family Bryaceae.

- \*11. *Anomobryum auratum* (Mitt.) Jaeg. (no. 17862).
- \*12. *Bryum argenteum* (P. Beauv.) Hampe. (no. 17863).
- \*13. *B. caespiticium* Lin. (nos. 14325-14329).
14. *B. cirratum* Hoppe et Hornschuch. (nos. 14330, 14331).
- \*\*15. *B. ventricosum* Dicks. (nos. 14332-14335).
- \*16. *Brachymenium sikkimense* Ren. & Card. (no. 17867).

## V. Family Bartramiaceae

- \*17. *Philonotis angustata* Mitt. (no. 17864).

## VI. Family Erpodiaceae

- \*18. *Aulacopilum abbreviatum* Mitt. (no. 17866).

## VII Family Entodontaceae

- \*19. *Levierella fabroniaceae* C. Muell. (no. 17869).
- \*20. *Entodon myurus* (Hook.) Jaeger. (no. 17861).

## VIII. Family Encalyptaceae

- 21. *Encalypta rhabdocarpa* Schwaegr. (nos. 14338-14343).

## IX. Family Funariaceae.

- \*22. *Funaria wijkii* Chopra (no. 14334).
- 23. *Physcomitrium japonicum* (Hedw.) Mitt. (no. 14337).

It is interesting to note that mosses of Mount Abu (alt. 1260 m) and of planes are different except for *Hyophila involuta* and *Fissidens curvato-involutus* (marked with two asterisks) which are common at both places. Mosses marked with one asterisk are collected from Mount Abu only and others are found in the planes only.

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