

## ECONOMIC USES OF PTERIDOPHYTES BY THE TRIBALS OF TAMIA HILLS AND PATAL KOT VALLEY, DISTRICT CHHINDWARA, MADHYA PRADESH

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Tamia Hills and Patal Kot Valley are unusual places, located in the Satpura ranges of Chhindwara district in Madhya Pradesh state of Central India. For details of the geography, geology and climate of the region, along with general aspects of vegetation, ecological and taxonomic accounts of the pteridophytes of the area's reference may be made to Vasudeva & Bir (1987, 1994). It was during the extensive and intensive botanical surveys undertaken by the author to these remote and difficult areas of Satpura hills, for the collection of pteridophytes, that he came in contact with the tribal people and discussed with them the local economic utility of plants. Though 30 species of pteridophytes are recorded from this area, only those which are ethnobotanically significant are mentioned here.

1. Individuals of the spike moss *Selaginella radicata* (Hook. & Grev.) Spring made into a paste is used as diuretic.
2. Dried plants of above mixed with tobacco are smoked by tribals for hallucination.
3. Dried plants of the 'horse tail' *Equisetum debile* Roxb. crushed and made into a paste is applied in bone fracture.
4. Large fronds of the thicket forming fern *Dicranopteris linearis* (Burm.) Underwood, and those of the tree fern *Cyathea gigantea* (Wall. ex Hook.) Holttum, are used as thatching material for making huts.
5. The pinnae of the former are chewed by the tribals against asthma and these are also said to be used by the tribal women against sterility.
6. Tea prepared from the dried and crushed fronds of the polypodioid fern *Leptochilus decurrens* Bl. is used for curing itches, by the 'Gonds'.
7. Whole plants of the climbing fern *Lygodium flexuosum* (L.) Sw. are used as expectorant and externally in sprains and rheumatism, where as its rhizome powder is used against skin diseases, scabies and cut wounds.
8. Crushed fronds of the 'Silver fern' *Cheilanthes bicolor* (Roxb.) Fraser-Jenkins are taken by the locals against fever due to cold. There is a superstition amongst tribals that the smoke produced by the burnt plants drives off the fear in children attributed to the effect of witchcraft.
9. There exists yet another superstition in 'Gonds' that the preparation derived from the fronds of the 'Lip fern' *Cheilanthes tenuifolia* when given to patients cures sickness attributed to the 'evil eye' or 'witchcraft'.
10. Maiden-Hair fern *Adiantum capillus-veneris*

Linn. is used as a tonic and for the removal of blisters in the mouth.

11. *Adiantum incisum* Forsk. is used in cough, fever and against skin diseases.
12. Powdered rhizome of the 'Hansraj' *Adiantum lunulatum* Burm. is given as an antidote against dog-bite and snake-bite.
13. 'Gonds' also use these plants in 'Jadoo Tona' as superstition.
14. Young frond tips of the 'Walking fern' *Ampelopteris prolifera* (Retz.) Copel, the edible fern *Diplazium esculentum* (Retz.) Sw., the davallioid fern *Nephrolepis exaltata* (Linn.) Schott and the 'tuber fern' *Nephrolepis cordifolia* (Linn.) Presl, are used as vegetables.
15. Tubers of the last one (*N. cordifolia*) are also roasted by the 'Gonds' and eaten as food.
16. In the 'spleen wort' *Asplenium unilaterale* Lamk. var. *majus* Sledge, the dried fronds are smoked against cold in the head and chest.
17. There is a superstition according to which the rhizome scales of the athyrioid fern *Hypodematium crenatum* (Forsk.) Kuhn 'Bhootkesri' are put in a copper piece 'Tabiz', which is used against the effect of 'Bhoot' (ghost), witchcraft or evil eye.
18. The individuals of 'Chhoti Buti' *Athyrium falcatum* Bedd. are used against malaria and jaundice.
19. The juice extracted from the fronds of the dryopteroid fern *Dryopteris cochleata* (Buch. Ham. ex D. Don) C. Chr. is used for relief in pain and swellings.
20. The decoction prepared from the rhizome of the 'Basu Naag fern' *Tectaria macrodonta* (Fee) C. Chr. is used against stomachache and asthma. It is also used in getting relief from snake bite and stings by the insects.
21. The individuals of *Blechnum orientale* Linn. ('Hastajori') are used against urinary disorders. The rhizomes of this fern are also used for the 'Yantar Mantar' purposes by the 'Gonds' as a superstition.

The foregoing account indicates that a number of pteridophytes are of economic importance to the tribals of these areas. There is a need for surveying further the unexplored areas of the country and studying this group of plants for their economic utility to the native people in their day today life. Besides, since the exploitation of ferns is very common amongst the tribal people, there is an urgent need for their conservation also to avoid their disappearance.

### References

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