

Ethnobotanical evaluation of some Pteridophytes in North Bengal, West Bengal, India

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In human livelihood the value of medicinal plants is infinite. The knowledge of the use of medicinal plants has been acquired through the centuries by observing the nature and such plants are still valuable for human health care programme.

The ancient medical knowledge of various tribes and folklore systems of medicine which is sometimes referred to as ethno therapeutics and it has provided powerful and more effective strategies for clinically useful compounds.

Pteridophytes (Ferns and Fern allies) are considered as the primitive vascular plants, found throughout the world in the moist shady places. There are about 305 genera, comprising of more than 10,000 taxa of which 191 genera with 1200 taxa are found to be present in India. By virtue of them possessing great variety and fascinating foliage they have been able to draw attention of the florists and the horticulturists. But as a representative of lower group of plants they are always neglected and their useful aspects are largely ignored irrespective of a few cases.

Medicinal values of the Pteridophytes is well known to the human societies from date back to the era of Theophrastus (327 – 287 B.C.) and Dioscorides (100A.D.), who had first referred the medicinal utility of certain Pteridophytes. Sushruta and Charaka in their Samhitas (100A.D.) mentioned the medicinal utility of Marsilea, Adiantum etc. In modern India it is Caius (1935) who first described the utility of Pteridophytes. Later on Nayer (1957), Chowdhury (1973), Vyas and Sharma (1988), Padala (1988), Kaushik and Dhiman (1995), described the ethnobotanical and medicinal utility of the Pteridophytes of India. Parihar et al. (2003a, 2003b, 2003c, 2003d, 2004a, and 2004b) described the antibacterial and anti fungal activities of the pteridophytic plants of India. Singh (1999) presented an account of the medicinal importance of pteridophytic plants and their potent chemical constituents, May (1978) has briefly describe the economic uses and associated folklore of the ferns and fern allies.

But, in relation to West Bengal, there is no such type of work except the publication of Dixit et al (1978).

In this present paper an attempt has been taken to enumerate the ethnobotanical utility of the Pteridophytes from the northern part of the West Bengal. It reveals that there are 23 species of pteridophytic plants belonging to 19 genera under 17 families which are used by the 11 tribal communities of this area for the treatment of 34 different types of ailments. The list includes some common ailments like body ache, fever, haematostatic agents, etc. Besides these, some very critical diseases like diabetes, leprosy, jaundice, general and sexual diseases, etc. are also treated by different tribal communities.

It is an initial attempt to record the empirical knowledge of different tribal communities of this region, which is going to be vanished due to rapid pace of westernisation and acculturation of younger generation.

Biography

Sobhan Kr. Mukherjee FLS did his M.Sc. from the Department of Botany, University of Kalyani, Kalyani, Nadia, West Bengal in 1975 and completed his Ph.D. in 1992 from the same University. He started his carrier as a Lecturer in Botany at Nabadwip Vidyasagar College in 1978 and then from 1981 - 1985, he served at APC College, New Barrackpore and finally he joined in University of Kalyani, as a Lecturer in the Department of Botany and continuing his service as Professor, Taxonomy of Angiosperms and Biosystematics. He possesses his keen interest on the Compositae specially for the Cypselar Morphology and Cypselar Anatomy. Other fields of interest in Botany of him are confined with the study of Floristics, Ethnobotany, Biodiversity and Conservation. Prof. Mukherjee is now guiding more than 12 Research Students and eleven (11) students had already been achieved their Ph.D. under his able guidance. He published 6 books jointly and more than 125 research papers in different reputed national and international journals. For his research contribution and collaborative research work with Swedish botanical science, he was awarded 'Linnaeus Jubilee Medal' of The Royal Swedish Academy of Sciences by Bertil Nordenstam, Ex - Vice President of The Royal Swedish Academy of Sciences and former Chairman of Biological Sciences, Sweden. He is a member of different professional bodies, evaluator of many Ph.D. Thesis in different Indian Universities and founder member of 'Association for Plant Taxonomy' (APT) and The East Himalayan Society for Spermatophyte Taxonomy (Taxo - Club). He is also associated with different Botanical Societies like Botanical Society of Bengal, Indian Association for Angiosperm Taxonomy (IAAT), Indian Botanical Society, Swamy Botanical Club, International Society of Plant Morphologists, and Linnean Society of London. He keeps in touch for research activities with different research organization of India and abroad, like Botanical Survey of India, Institute of Minerals & Materials Technology, Bhubaneswar, Central Inland Fisheries Research Institute, Kolkata and Swedish Museum of Natural History, Sweden.

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