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Ethnomedicinal Uses of some Common Bryophytes and Pteridophytes Used by Tribals of Melghat Region (MS), India

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Abstract

Apart from the higher angiospermic plants, the tribal community of Melghat area (MS) india, is found to use some common lower plants, mostly some common bryophytes and pteridophytes, in their ethnomedicinal health care system. The present paper deals with ethnomedicinal uses of 4 common bryophytes and 7 pteridophytes used by the tribals in the study area for treating various ailments.

Key Words: Ethnomedicine, Lower plants, Bryophytes, Pteridophytes, Melghat.

Introduction

The lower plants are thought by most people to be quite useless members of the plant kingdom. Being a group of lower plants, it remains unattended and their useful aspects are largely ignored. However these can be used for food, fiber, crafts, building material, abrasives, and decoration, and also as medicine (Shankar and Khare, 1994; Vasudeva, 1999 and Shrivastava, 2007a & b). But recently ethno botanical studies have attracted a number of researchers and they have supplied a lot of information about different uses of lower plants world wide. Today, ethnobotany has become a crucial area of research and development in resource management and conservation of biodiversity. As each tribal community has their own health care system, their ancient knowledge, sometimes referred to as ethno-therapeutics, has therefore provided a more useful and effective strategy for the discovery of clinically active drugs. In the present paper, author had attempted to gather this indigenous information about the use of some common lower plants which may be further exploited for the benefit of society.

Material and Method

Plant materials for the present study were obtained from the forests at Hiwarkhed, Shahnur, Popatkhed, Khatkali, Gullarghat and Chikhaldara, of Akola and Amravati District (MS) India. The ethnobotanical data, gathered from tribal medicine men practicing in the study area. The collection of specimens and indigenous data was done during 2006-2007. The information given by them regarding the medicinal uses of bryophytes and pteridophytes is recorded and interpreted.

Results and Discussion

Melghat forests provide an excellent piece of rich biodiversity. The tribal community is solely depends on the forest product products, not only this, they have their own herbal health care system. In this these peoples use various plants, and their products to combat with numerous human diseases. There are several reports reciting the ethnomedicinal uses of higher plants found in this area (Kamble and Pradhan, 1980; Shankar & Khare, 1994 Naik, 1998, Vasudeva, 1999; Rothe *et al.*, 2004; Shrivastava, 2007). However, similar reports on the use of member of lower plant group as medicine are very scars. The author had attempted here to gain the indigenous knowledge of tribal peoples about the use of lower plant group members in medicine system of the community. The tribals of this area are found to use some common bryophytes as well as pteridophytes in their routine health care system to treat the diseases like cold, fever, skin diseases, mental disorders, abdominal & respiratory disorders and sexual problems. 11 important members (4 members of Bryophytes and 7 Pteridophytes) of ethnomedicinally used lower plant group, which are used by the peoples of tribal communities, along with uses are listed below in the table:1.

References

Kambale, S. Y. and Pradhan, S. G. (1980) Ethnobotany of Korkus in Maharashtra. *Bulletin of BSI*., 22: 201-202..

Naik, V. N. (1998) Flora of Marathwada. Amrut Prakashan, Aurangabad.

Rothe, S. P., Suradkar, S. S. and Koche, D. K. (2004) Study of some ethnomedicinal plant species from Melghat tribal region of Amaravati District. *Proc. XIV annual Conf. IAAT*, Thiruanantapuram. pp- 160.

Shankar, R & Khare, P.K. (1994) Ethnobotanical studies of some ferns from Pachmarhi hills (M.P.). Higher plants of Indian subcontinent, vol.111:289-294.

Shrivastava, K (2007) Importance of ferns in human medicine, *Ethnobotanical leaflets*, 11: 231-234 (a).

Shrivastava, K (2007) Ethnobotanical studies of some important ferns, *Ethnobotanical leaflets*, 11: 164-172 (b).

Vasudeva, S, M. (1999) Economic importance of Pteridophytes. *Indian Fern J*. 16(1-2): 130-152.

Table- 1. Ethnomedicinal uses of some bryophyte and pteridophyte members used by the tribals of melghat area in their herbal health care system.

Ethnomedicinal uses of Bryophytes		
Botanical Name		Uses and mode of administration
1	*Marchantia polymorpha* L	**Against inflammation:** The entire thalli is washed thoroughly with water, ground into fine paste and applied externally on inflammation.
2	*Plagiochasma appendiculata* L	**On skin disease:** The fine paste of the thoroughly washed thalli is applied externally on

		affected area.
3	*Polytrichum* species	**For hair growth**: The fine powder of Polytrichum thallus is mixed with oil and applied on hair to improve hair growth. **As wound healer**: The thallus paste is bandaged over the wound for healing.
4	*Riccia* sp.	**Against ringworms in children:** The thallus in washed and ground to paste and mixed with jiggery and given to the children affected by the ringworms.
Ethnomedicinal uses of Pteridophytes		
1	*Adiantum lunulatum* L	- The rhizome powder is use as antidote against **snake bite**
2	*Adiantum phillipense* L	- Rhizome is use to reduce **glandular swellings** - Leaf juice is given in **dysentery**, **ulcers** and **burning sensation**.
2	*Equisetum ramosissimum* L	- Entire plant is use for cooling in **gonorrhea**.
3	*Lycopodium cernum* L	- Used for **cough**, **uneasiness** and **dyspepsia**.
4	*Lycopodium clavatum* L	- Spores are used against **rheumatism**, **cramps** and **varices**. - The plant is chewed to induce **vomiting in case of food poisoning.**
5	*Ophioglossum vulgatum* L.	- The whole plant posses **antiseptic**, **detergent** and **anti-inflammatory** properties.
6	*Osmunda regalis* L	- Whole plant is used in the treatment of **rheumatism**, **intestinal problems** and **rickets**.
7	*Selaginella wallichi* (Hook & Grev)	- Plant extract given to the women after child birth as **protective tonic**.