

**Ethnomedicinal uses of pteridophytes of Vindhyan Region (M.P.)**

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**Abstract**

Pteridophytic flora is the extinct members of plants groups used medicinally by aborigines. These plants have been used as such for various purposes as fodder vegetable & medicinal purpose. The Vindhya valley have a lot of pteridophytes which are even very common and frequently grown in association with the members of the angiospermic plants. The study has been conducted to assess the frequency of these pteridophytic members in the various spots Kymore hills of Vindhyan region. Their conservation is urgently required. The study would be very helpful to know the responsible factor of the region, which are responsible for the extinction of the species from the region. The dry climate, less precipitation & humidity with low nitrogen content of the area significantly destroy the pteridophytic vegetation of the area.

**Key-Words:** Ethnomedicine, Uses, Pteridophytes

**Introduction**

Plants have been used as a source of food medicine and many other necessities of life since time immemorial. Fern and fern allies have always been in the center stage of attraction to botanists, horticulturists and nature lovers since ancient times. This fascinating group of pteridophytes is distributed in the Himalaya, Western Ghats, Vindhya, hilly areas of Bihar, Orissa and other parts of Madhya Pradesh as well as in the Aravalli area. Though economic and medicinal values of higher plants especially the angiosperms have been investigated, pteridophytes have been unfortunately ignored. The pteridophytes formed a dominant part of earth's vegetation in the historic past. Being the second

**Study Area**

The Vindhya Range is a range of older rounded mountains and hills in the west central Indian sub continent into northern India (the Indo-Gangetic plain) and southern India. The western end of the state of Gujrat at the eastern side of the Gujrat peninsula near the border with the modern states of Rajasthan. The southern slopes of the range are drained by the Narmada River which proceeds west wind to the Arabian Sea in the wide valley between the Vindhya Range and the parallel Satpura range further to the south. The northern slopes of the range are drained by tributaries of Ganges, drains the southern slopes of the largest group of vascular plants they form a significant,

Pteridophytic flora of Vindhyan region except for few publications about the fern of Amarkantak had not drawn the attention of pteridologist during first half of the century<sup>1-4</sup>.

Thus the ethno-botanical surveys and studies were conducted in the various parts of Vindhyan region along with tribal communities. Further the information on the economic utility of this group of plants clearly indicated that the pteridophytes are of immense economic importance and there is a great need for their exploitation towards the economic utility in daily life<sup>5-6</sup>.

The Vindhyan land is a plateau that lies to the north of the central part of the range of Bhopal and Indore, which rises higher than the Indo- Gangetic plains to its north.

**Material and Methods**

Ethno medicinal information was gathered by the local and tribal people and interviewed with the local people. All the specimens were collected and Herbarium was prepared. Description of species and identification were done with the help of literature<sup>7-9</sup>.

**Observations**

These tribes have specific culture rituals and living habits. They practice herbal medication which is easily available every where it was observed that most tribes followed medical advice of Ojhas and Mukhias or Patels of their own community. These Ojhas were

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approached through their Mukhias who were very helpful in reaching remote and other wise inaccessible areas. Data was gathered through enquiries, personal observations in their colonies and by holding discussions with the elderly. Interview with a party was more reliable as unanimous affirmations or devials could be easily assessed<sup>10-13</sup>.

### Results and Conclusion

Pteridophytes, the ferns and fern allies as they are known for great medicinal values. Researchers have given stress on the need of conservation of the various pteridophytes.

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### Enumeration

Vindhyan region is a natural reservoir of large number of medicinal plants. Some of the important medicinal pteridophytes in the vindhyan region have been listed in Table 1.

In the present area various species were collected. Number of taxa of ferns and fern allies recorded earlier from various pockets of region. The habitat destruction is one of the basic regions to disappear many species of pteridophytes from the region.

Table 1: List of pteridophytes with their ethnomedicinal use

Scientific Name	Common Name	Family	Medicinal Uses
<i>Actinopteris radiata</i>	Morpankhi	Actinopteridaceae	Plant used as a styptic and anthelmintic also used in bronchitis and gynecological disorders. The dry leaves are used in tuberculosis and typhoid.
<i>Adiantum Lunulatum</i>	Rajhansh	Adiantaceae	Leaf and root decoction is used for the treatment of chest complaints in Malaya.
<i>Adiantum capillus veneris</i>	Hansraj	Adiantaceae	Fresh leaves and rhizomes are said to be effective for cough and as a diuretic also.
<i>Adiantum incisum</i>	Hansraj (Walking fern)	Adiantaceae	Fresh or dried leaves are powdered or crushed into paste. It is efficient to check hair fall.
<i>Equisetum ramosissimum</i>	Putod, sumbok	Equisetaceae	Plant paste applied in bone fracture and young cones are used to treat kidney trouble.
<i>Marsilea minuta</i>	Chaupatti	Marsileaceae	Plants are used in cough, spastic condition of leg muscles. Plant is sweet diuretic, ophthalmic. It is used in Psychopathy, Ophthalmia, Diarrhoea, Leprosy, Skin diseases, Hemorrhoids and Fever.
<i>Ophioglossum petiolatum</i>	Shaambli	Ophioglossaceae	Thick paste of fresh rhizomes and tubers is effective in hair fall.
<i>Ophioglossum reticulatum</i>	Ban Palak	Ophioglossaceae	Used as a cooling agent and in the treatment of inflammations and wounds. Fronds are used as tonic and styptic.
<i>Ophioglossum costatum</i>	Shaambli	Ophioglossaceae	Dried tubers are powdered and used in the case of skin disease.
<i>Pteris vittata</i>	Jasumba	Pteridaceae	Plant extract is used as hypotonic antiviral and antibacterial
<i>Lycopodium japonicum</i>		Lycopodiaceae	Diuretic, antispasmodic, used in rheumatism and disease of lungs and kidney.
<i>Selaginella bryopteris</i>	Sanjeevani	Selaginellaceae	Plant is used as diuretic and in gonorrhoea. The dried plants along with tobacco are smoked by tribal people for inducing hallucinations used as witch craft and worship.
<i>Selaginella delicatula</i>	–	Selaginellaceae	Plant juice is antibacterial and is used for healing of wounds by the tribals at Nilambur.
<i>Selaginella radicata</i>	–	Selaginellaceae	Fronds are used as antibacterial agent.
<i>Isoetes coramandeliana</i>	–	Isoetaceae	Plant gives out a melancholy fluid used by the Europeans in the treatment of spleen and liver disease.