

Pteridophytes of district Chhindwara, Madhya Pradesh India

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SUMMARY

In the present paper the authors have reported 26 pteridophytes plant from natural and cultivated environments *Equisetum diffusum*, *Psilotum nudum*, *Angiopteris evecta*, *Osmunda regalis*, *Actiniopteris radiate*, *Pteris vittata*, *Marsilea minuta*, *Blechnum orintale*, *Selaginella bryoptera* *Azolla pinnata* were collected from natural habitats

Key words : Pteridophytes of Chhindwara District, Madhya Pradesh, India

The district Chhindwara is eastern parts of the state with district headquarters at Chhindwara falling under Jabalpur Division. It is bounded in the north by Seoni District in the south east by Nagpur and in the south by Betul and Hoshangabad district and in the west Narsinghpur District M.P. State. The total geographical area of the district is 1184900 ha. and is located between 21°30' to 22°50' Deg. North (longitude) and 78°15' to 79°25'Deg. East (latitude).

Considerable work has been done which are used for various ailments by the Chhindwara District, M.P. (Rai 1987b, 1989), Saxena and Shukla (1971), Prasad *et. al.* (1990), Rai and Nonhare (1992), Rai *et al.*(2004) and ethno-medicinal aspects of this area as well as the adjoining region of Chhindwara have been reported by Rai (1987a, 1988) and Maheshwari and Dwivedi(1998).

MATERIALS AND METHODS

After extensive survey and tours to different places of Chhindwara district a total number of 26 Pteridophytes plants have been reported (Table 1) they have been identified by consulting literature. The Pteridophytes have been collected from varies hobbits. In natural condition from terrestrial habitat - *Psilotum nudum*, *Selaginella bryopteris*, *Ophioglossum reticulatum*, *Osmunda regalis*, *Pteris vittata*, *Marsilea minuta* have been collected and photographs

RESULTS AND DISCUSSION

The Pteridophytic vegetation of the Chhindwara District can be broadly classified into terrestrial, cultivated, marshy and swampy area. This vegetations are endowed with abundance and luxuriant occurrence of all ecological form of Pteridophytes viz., Epiphytes, lithophytes,

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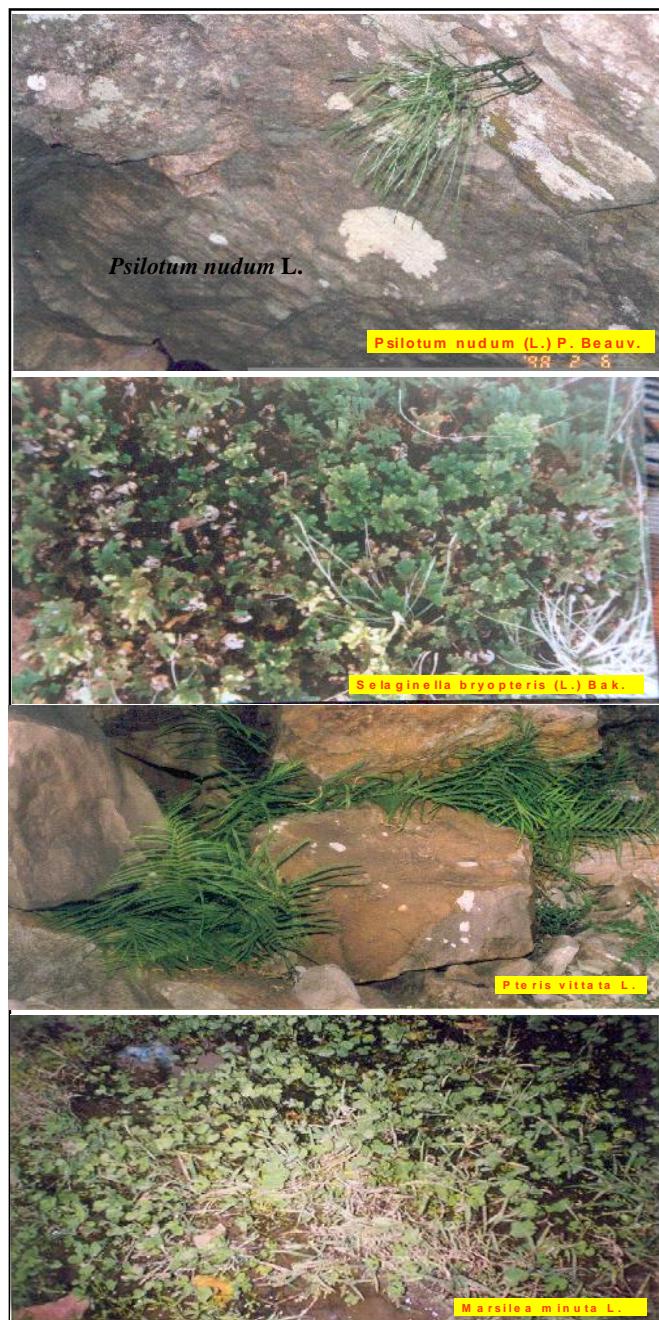


Table 1 : Showing Pteridophytes of Chhindwara District, Madhya Pradesh, India

Sr. No.	Plant Species	Family	Habitat	Locality
1.	<i>Selaginella bryoptera</i> L.	Selaginellaceae	Terrestrial	Dailakhari
2.	<i>Selaginella indica</i> Milde	Selaginellaceae	Terrestrial	Dulhadeo
3.	<i>Isoetes coromandelina</i> L.	Isoetaceae	Swampy	Harrai
4.	<i>Equisetum diffusum</i> D.	Equisetaceae	Marshy	Tamia
5.	<i>Psilotum nudum</i> L.	Psilotaceae	Terrestrial	Ghatlinga
6.	<i>Azolla pinnata</i> R.	Azollaceae	Aquatic	Chhindwara
7.	<i>Osmunda regalis</i> L.	Osmondaceae	Terrestrial	Rathed
8.	<i>Actiniopteris radiata</i> Sw.	Actiniopteridaceae	Terrestrial	Silllewani
9.	<i>Pteris cretica</i> L.	Pteridaceae	Cultivated	Sausar
10.	<i>Pteris vittata</i> L.	Pteridaceae	Terrestrial	Pandurna
11.	<i>Adiantum capillus-veneris</i> L.	Adiantaceae	Terrestrial	Chota mahadeo
12.	<i>Adiantum philippense</i> L.	Adiantaceae	Terrestrial	Parasia
13.	<i>Marsilea minuta</i> L.	Marsileaceae	Aquatic	Parasia
14.	<i>Athyrium falcatum</i> Bedd.	Athyriaceae	Terrestrial	Tamia
15.	<i>Azolla pinnata</i> R.	Azollaceae	Aquatic	Anhoni
16.	<i>Angiopteris evecta</i> Forst.	Angiopteridaceae	Terrestrial	Chota mahadeo
17.	<i>Angiopteris dichotoma</i> Bedd.	Angiopteridaceae	Terrestrial	Chilak
18.	<i>Dicranopteris linearis</i> (Burm.f.) Underw.	Dicranopteridaceae	Terrestrial	Bimalgondi
19.	<i>Pteris cretica</i> L.	Pteridaceae	Terrestrial	Kukdikhapa
20.	<i>Pteris vittata</i> L.	Pteridaceae	Terrestrial	Bichua
21.	<i>Adiantum capillus-veneris</i> L.	Adiantaceae	Aquatic	Junnardeo
22.	<i>Marsilea minuta</i> L.	Marsileaceae	Aquatic	Bhura bhagat
23.	<i>Athyrium falcatum</i> Bedd.	Athyriaceae	Terrestrial	Damua
24.	<i>Dryopteris cochleata</i> D. Don.	Aspidiaceae	Terrestrial	Chiljaoti
25.	<i>Blechnum orientale</i> L.	Blechnaceae	Terrestrial	Tamia
26.	<i>Azolla pinnata</i> R. Br.	Azollaceae	Aquatic	Kapurnala

Terrestrial, Hydrophilous, Epiphytic Pteridophytes are also abundantly distributed in subtropical and tropical area of Chhindwara district, M. P.

The forests of Chhindwara district contain a great diversity of forest types and other natural ecosystem. Chhindwara forest is not exception. Although the district of Chhindwara is comparatively free from external disturbances, but adequate management and strict

vigilance in the cover area of the district forest is necessary to conserve the diverse the flora and fauna of the district in its natural form.

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REFERENCES

- Beddome, R.H. (1883). Hand book to the fern of British India, Ceylon and the Malay Peninsula. Thacker Spink and Co. Calcutta.
- Dixit, R.D. (1984). A Census of the Indian Pteridophytes, Botanical Survey of India, Culcutta.
- Dixit R.D. (1989). Ecology and taxonomy to Pteridophytes of Madhya Pradesh. *India Fern. J.*, **6**:160-180.
- Dixit, R.D. (1993). Pteridophytes. In Fl. Madhya Pradesh. I., D. N. Verma, N.P. Balakrishnan and R. D. Dixit.(eds.) 32-101. Botanical Survey of India, Calcutta.
- Dixit, R.D. (2000). A conspectus of Pteridophytes diversity in India. *Indian Fern J.*, **17** : 77-91.
- Dixit, R.D. (2001). A Census of rare and endangered Pteridophytes of the Eastern Himalayas and conservation strategies. In. *Plant diversity of the Himalaya.*, P.C. Pande and S.S. Samant.(eds.). 605-611. Gyanodaya Prakashan, Nainital.
- Mooney, H.F. (1942). A sketchot the flora of the Bailadiala Range in the Baster State. *Indian for Rec.*, **3**(7): 197-253, 2 maps.

- Pichi-Sermolli, R.E.G. (1977). Tentamen Pteridophytorum genera in taxonomicum Ordinem redigendi. *Webbia*, **31**(2): 313-512.
- Panigah, G. and Dixit, R.D. (1969). Studies in Pteridophytes IV. The family Ophiglossaceae in Indian *Proc. Nat. Inst. Scei. India. Ser. B.*, **35**:230-266.
- Tiwari, S.D.N. (1964). The ferns of M.P. *J. Indian Bot. Soc.*, **43** :431-452.
- Vasudeva, S.M. and Bir, S.S. (1993). Pteridophytes Flora of Pachmarhi Hills, Central India – II (Keys to different taxa and fern families: Ophiglossaceae-Davalliaceae). *India Fern J.*, **10** : 40-72.
- Singh, S. and Panigrahi, G. (2005). Ferns and ferns allies of Arunachal Pradesh, Bishen Singh Mahendra Pal Singh, Dheradun.
- Beddome, R.H. (1883). Hand book to the fern of British India, Ceylon and the Malay Peninsula. Thacker Spink and Co. Calcutta.

