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Study on ethno-medico-botany of some plants of Dindori district of Madhya Pradesh, India

Vipin Soni[1]*, Anil Prakash[1] and Manisha Nema[2]
1, Department of Biotechnology and Bioinformatics Centre
Barkatullah University, Bhopal, (M.P.) - India
2, Department of Botany, Govt. Motilal Vigyan Mahavidyalaya, Bhopal, (M. P.) - India

Abstract

The ethnic peoples of Dindori have good association with plant resources, which they use for the treatment of various ailments. The traditional knowledge for the utilization of these ethnomedicinal plants is widely accepted by these people. Present paper reveals information about 34 ethnomedicinal plants used by ethnic people of Dindori district of Madhya Pradesh. The results are based on ethnobotanical survey carried out during the year 2009 to 2010.

Key-Words: Ethno-Medico-Botany, Conservation, Dindori , Madhya Pradesh

Introduction

Dindori district of Madhya Pradesh is appreciably inhabited by tribal population. Even today, the largest segments of tribal population are dependent on plant resources for the treatment of different disease and ailments. The tribal societies are closely linked to the forest ecosystem with which they traditionally live with harmony and tribal peoples still deriver their daily needs from various plants. The ethno-medicinal particularly in rural and tribal areas of India are still playing a great role in treatment of disease. Keeping in view, the importance of such invaluable knowledge in healthcare management and development of new and novel medicaments, the present investigation has been taken up.

The State of Madhya Pradesh is one of the most dominant tribal areas inhabited by a large numbers of tribal's such as koel, Gond, korwa, Baiga etc. Agriculture is the main occupation of tribal people but forest and their various products play an important role in their daily life.

*** Corresponding Author**
E.mail: vipin.soni21@yahoo.com
Mob.: +91 882882030

Dindori is a district of the Madhya Pradesh state in central India. It is located at 22°57′0"N latitude and 81°4' 48" Eastlongitude and is located at the eastern part of Madhya Pradesh. The area is very rich in plant wealth owing to its ecological diversity and forest type's viz. tropical dry deciduous, tropical moist deciduous and sub tropical forest. It is an area of 1.924 sq km. The forest area in the district is about 6111.0 sq km. accounting for 47.34% of the total geographical area of the district.

The tribal communities of this region are dependent on wild plants for the treatment of different diseases and ailment. The present ethno-medicinal study was carried out to record traditional knowledge on plants used for medicinal purpose by the tribal and local peoples of Dindori district.

Material and Methods

The survey was conducted in different seasons during 2009-2010. In field studies, medicinal uses plants collected with the help and interview of traditional medicine men actively engaged in ethno-medicinal practices. The details about plant parts, mode of administration and local or tribal names etc were specially recorded during the survey. The ethno-medicinally important plant specimens collection were identified with the help of regional floras (Mudgal et al, 1997). All plants specimens are deposited in the herbarium of Department of Biotechnology and Bioinformatics centre Barkatullah University Bhopal.

The plants are enumerated here alphabetical order in table –1 along with the botanical names, local names, plants part, mode of administration, dosage etc.

Results and Discussion

The present observation documents the ethno-medicinal knowledge of the tribe peoples, their skills and practices based on their beliefs and experiences. This observation has explored the indigenous knowledge of the ethnic peoples of the Dindori district on 34 plant species belonging to 34 genera and 25 families, which they are use for medicinal purposes. The plant parts include fruits, leaves, roots, bark, rhizome, seeds and whole plant.

Species like ***Holarrhena pubesens*** (kurchi) is used for treatment of malaria and joint pain. In some cases, whole plant of Chhota Chitra (***Andrographis paniculata***) used for the treatment of malaria and to expel intestinal worm; Root pulp of ***Cassia fistula*** (Amaltas) used for rheumatism, fresh root of ***Careya arborea*** (Kusum) used in Snake bite, root of patharchata (***Boerhavia diffusa***) used for urinary disorder and elephantiasis; root of Murgachundi (***Elephantopus scaber***) is given in malarial fever. It is not denying fact that the traditional knowledge in developing countries like India is eroding at a faster rate. Therefore, it is felt as an urgent need to conservation and record all ethno-medicinal information available into diverse ethnic communities before the traditional culture is completely lost.

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Table1: Indigenous knowledge on some medicinal plants and their uses in district Dindori district

S/No.	Botanical Name and Family	Local Name	Mode of administration and ethno-medico-botanical uses
1	*Andrographis paniculata* (Burm.f.)Wall.ex Nees (Acanthaceae)	Chhota chitra	1) The whole plant is boiled in water and the filtrate is given in malarial fever. 2) Plant is kept overnight and its leaves are internally taken in intestinal worms. 3) Its leaves are pounded with mustard oil and externally applied in fever.
2	*Annona squamosa* L. (Annonaceae)	Sitaphal	The leaf juice is given orally as anthelmintic.
3	*Argyreia nervosa* (Burm.f) Boj. (Convolvulaceae)	Vidhara	The leaves are heated on iron pot and mustard oil is applied externally on the lower surface and leaves are tied on the joint pain, gout.
4	*Bombax ceiba* L. (Bombacaceae)	Semal	Roots are boiled in water and its decoction used in urinary troubles.
5	*Boerhavia diffusa* L. (Nyctaginaceae)	Patharchatta	1) Roots are given in urinary disorders. 2) The whole plant with leaves of Vitex negundo L. is boiled, filtered and the filtrate is given to treat elephantiasis for five days.
6	*Buchanania lanzan* Spreng. (Anacardiaceae)	Charali	Stem bark with sugar candy mixed together, powdered and given in general weakness.
7	*Cassia fistula* L. (Caesalpiniaceae)	Bandar rori	The fruit pulp is boiled in water and filtrate with sugar is taken in rheumatism for five days.
8	*Canscora decussata* (Roxb.) Gentianaceae)	Chirata	The whole plant is kept in water over night and the filtrate is given internally in stomach trouble and also used as blood purifier.
9	*Calotropis gigantea* (Ait.)R.Br. (Asclepiadaceae)	Aak	Latex with mustard oil is boiled and externally applied externally in body pain for three days.
10	*Casearia elliptica* Willd. (Flacourtiaceae)	Kirchi	The powdered root is taken internally in stomach disorder for three days.
11	*Centratherum anthelminticum*(L.) (Asteraceae)	Jangli jeera	The seeds are pounded and taken to remove intestinal worms daily for three days.
12	*Celastrus paniculatus* Willd. (Celastraceae)	Malkagani	The seed oil is externally applied in body swelling and in muscular pain for three days.
13	*Clematis gouriana* Roxb. ex DC (Ranunculaceae)		Paste of leaves is externally applied in skin disease.
14	*Clitoria ternatea* L. (Papilionaceae)	Aparajita	Decoction of root is given daily for three days in dropsy.
15	*Convolvulus microphyllus* Sieb. (Convolvulaceae)	Shankhpushpi	Decoction of the whole plant about one tea spoon is given for three days to treat insomnia.
16	*Costus speciosus* (Koen.) Smith (Zingiberaceae)	Keokand	The paste of the rhizome is applied externally in burning sensation in eyes for three days.
17	*Curculigo orchioides* Gaertn. (Hypoxidaceae)	Kali musli	Root paste is applied externally on head for three days.
18	*Careya arborea* Roxb. (Lecythidaceae)	Kusum	The fresh root is chewed in snakebite.

19	*Dillenia pentagyna* Roxb. (Dilleniaceae)	Bhangra	The whole plant is externally applied in skin diseases.
20	*Eclipta prostrata* (L.) (Asteraceae)		Decoction of stem bark is taken internally to check blood dysentery for three days.
21	*Elephantopus scaber* L. (Asteraceae)	Murgachundi	The powdered root along with powder of whole plant of Kalmegh (Andrographis *paniculata)* is given daily for three days in malarial fever.
22	*Ehretia laevis* Roxb. (Boraginaceae)	Datrangi	The powder of stem bark is given internally in dysentery for three days.
23	*Grewia hirsuta* Vahl (Tiliaceae)	Gursikari	The root paste is applied externally on swollen testicles for three days.
24	*Gloriosa superba* L. (Liliaceae)	Kalihari	The root paste is applied externally for easy delivery.
25	*Holarrhena pubescens* (Buch.-Ham.) (Apocynaceae)	Kurchi	1) The paste of stem bark is applied externally in joint pain for three days. 2) Stem bark with kali mirch (Piper nigrum) powdered and taken orally in malarial fever for three days or till the disease is not cured.
26	*Haldina cordifolia* (Roxb.) (Rubiaceae)	Haldu	The flower buds are made into paste and externally applied in body pain.
27	*Hemidesmus indicus* R.Br. (Asclepiadaceae)	Magrabu	The small pieces of root string in a thread and tied around the neck in fever.
28	*Ichnocarpus fructescens* (L.) (Apocynaceae)	Bakawan	Leaf paste/leaf decoction (half teaspoon) is given to treat piles and malarial fever.
29	*Lannea coromandelica* (Houtt) (Anacardiaceae)	Moyan	The gum is given in the treatment diarrhea and dysentery.
30	*Leea macrophylla* Hornem (Leeaceae)	Hathikan	Root paste is applied externally on body in chest pain
31	*Litsea glutinosa* (Lour.) Roxb. (Lauraceae)	Medalakri	The paste of stem bark is applied on inflamed part of the body in sprain.
32	*Mallotus philippensis* (Lam.) (Euphorbiaceae)	-	The fruit is made into paste and applied in ringworms for three days.
33	*Mitragyna parvifolia* Korth (Rubiaceae)	Mundi	The juice of stem bark is applied externally on abdomen in dropsy for three days.
34	*Nyctanthes arbor-tristis* L. (Oleaceae)	Parijata	The stem bark with (Terminalia arjuna) bark is pounded and the paste is applied externally in internal injuries for three days.

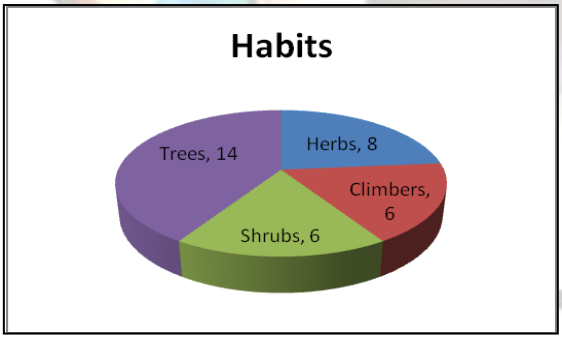

Fig. 1 Habit of different plants species

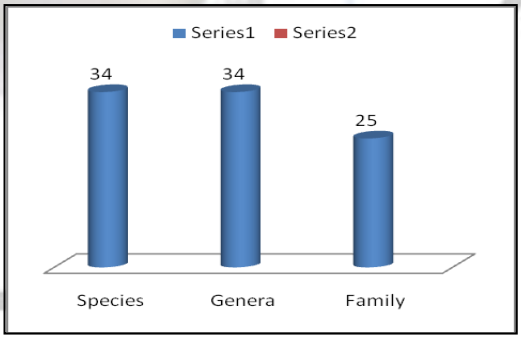

Fig. 2 Numbers of Species, Genera and Family