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Short Communication

Ethno Medicinal Plants used by Tribal Communities for the Treatment of Snakebite in West Nimar, MP, India

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Abstract

Seven Village of Khargone district of Madhya Pradesh, India were selected for observing folklore claims on some plant species used for the treatment of snakebite. Various plants parts are being used in different ways. The study revealed 26 taxa belonging to 25 genera and 16 families of flowering plants. To ascertain credibility of folklore claims, a comparison on use has been made.

Keywords: Ethno medicine, folklore, snakebite, medicinal plants.

Introduction

West Nimar district is the home of tribals and forest dwellers. More than 30% of the population consists of the tribal people with immense traditional knowledge[1]. Traditional knowledge often includes practices based on observations. Multifarious uses of plants among multiethnic societies are all practice based observations. Study of traditional or folk medicines of tribals is called ethno medicine[2]. A review of past literature on ethno botany indicates that sufficient research work has been done in various part of India. The present communication deals with the ethenomedicinal plants which is used by tribal people of west Nimar district of Madhya Pradesh, India for the Snakebite. Majority of the world's population is still dependent on the traditional herbal medicine for their healthcare[3]. Topographically Nimar region is situated centrally in Northern part covered with Vindhyan scabs and Southern part with Satpura hill ranges[4]. Geographically, Khargone district is situated between 21°22' and 22°35' north latitudes and 74°25' and 76°14' east longitudes. The Khargone district region was formerly known as west Nimar. It is situated on the bank of Kunda River. The vegetation is the typical of arid regions with thorny trees like babul, soya bean, wheat, cotton. Chilly, arhar, juwar are main crops of this area. It is famous for the cotton and chilly production. The district is divided into 08 Tehsils and has 1407 Villages. About 40% of the population consists of tribal people bhil, bhilala, barela, tadvi, banjara, gond, korku and mankar are most common tribes. Tribal communities have an intricate relationship with their surrounding vegetation. In the study, emphasis has been laid on plants species, used against snakebite by tribal people in 07 village of Khargone, district of M.P. India. It would also strengthen the credibility of plants, which are used at many regions for the same purpose, i.e. Snakebite for obtaining such results a comparative account of observations of all 07 villages has been made.

Material and Methods

The present study was done during 2009-2010. The information was collected from various villages such as Shrikhandi, Raibidpura, Raibid, Oon, Chotioon, Banihar and Nandgawon. The information was gathered through questionnaire method and discussions with tribal, local healers. The herbarium sheets were prepared and identification was done following the standard literature[5-7].Plant collection carried out by standard method[8]. Identification of plants done with the help of flora and other Taxonomic literature[9-11].Information was gathered (figure -1) through questionnaire method and discussions with tribal, local healers (figure -2).

Plant keeps between fold of blotting paper. Dried the plant specimens by herbarium press. Preserved Plant specimen Standard literature was followed[12-14]. Plant survey carried out by well planned schedule. All habitats of the study area surveyed carefully. Collected specimen by dipping the whole specimens in saturated solution of Mercuric chloride and alcohol. Dry and preserved plants mounted on herbarium sheets by adhesive glue and fevicols.

Results and Discussion

The study reveled in all 26 Taxa belonging to 25 genera and 16 families (table-1). These plants are used in snakebite in the seven village of Khargone district of Madhya Pradesh India. Important Taxa which are used by the tribal people are *Achyranthes aspera, Ageratum conyzoides, Butea monosperma, Calotropis procera, Datura metal, Clitoria ternatea, Tamarindus indica* and others. The above results were compared with ancient literature and recently published research papers and journals[15-17]. These useful plants need protection and more cultivation in the present context, so that the tribal people may more be benefited and our valuable flora may also survive.

Figure-1
Information gathered

Figure – 2
Discussions with tribal and local healers

Figure – 3
Snake with man

Conclusion

In this paper conclusion is made on the basis of plant species and their medicinal uses. Paper of our study is given very valuable information of conservation and maintenance of biodiversity and tribal's traditional knowledge documentations.

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References

1. Mahajan S.K. et.al., A preliminary survey of the Anthelminitic plants used by the tribals of west Nimar district, *M.P. Plant Diversity Human Welfare and Conservation,* 289-292 **(2003)**

2. Patil H.M., Ethno botanical Notes on Satpura Hills of Nandurbar District, Maharashtra, India, *Res.J.Recent.Sci.,* **1(ISC-2011),** 326-328 **(2012)**

3. Patil Sunil J. and Patil H.M., Ethno medicinal Herbal Recipes from Satpura Hill Ranges of Shirpur Tahsil, Dhule, Maharashtra, India, *Res. J .Recent. Sci.,* **1(ISC-2011),** 333-336 **(2012)**

4. Sainkhediya Jeetendra and Ray Sudip, Preliminary study of flowering plant Diversity of Nimar region, *Bioscience Discovery,* 3**(1),** 70-72 **(2012)**

5. Cooke T., *Flora of the Presidency of Bombay,* **1** BSI Calcutta **(1957)**

6. Kirtikar K.R. and Basu B.D., *Indian Medicinal Plants,* Vols. **I - IV**, Lalit Mohan Basu, Leader Road, Allahabad, India, 2793 **(1935)**

7. Solanki C.M., *Flora of Indore* Ph.D. Thesis, D.A.V.V., Indore MP **(1984)**

8. Jain S.K. and Rao R.R., *A Handbook of herbarium methods Today and Tomorrow*, New Delhi **(1977)**

9. Sinha B.K. and Shukla B.K., Synoptic flora of Khargone district Madhya Pradesh-3 Hydrocartitaceae to Poaceae, *J. Econ. Tax. Bot.* **31(1),** 120-149 **(2009)**

10. Sinha B.K. and Shukla B.K., Synoptic flora of Khargone district Madhya Pradesh-3 Hydrocartitaceae to Poaceae, *J. Econ, Tax. Bot.* **31(2),** 487-642 **(2007)**

11. Sinha B.K. and Shukla B.K., Synoptic flora of Khargone district Madhya Pradesh-3 Hydrocartitaceae to Poaceae, *J. Econ, Tax. Bot.* **31(3),** 642-695 **(2007)**

12. Chopra R.N., Nayar S.L. and Chopra I.C., *Glossary of Indian medicinal plants*, C.S.I.R. New Delhi **(1956)**

13. Tarafdar C.R. and Jain S.K., Native plant remedies for snakebite among adivasis of central India, *Ind. Med. J.*, 57**(12),** 307-309 **(1968)**

14. Jain S.K., Credibility of traditional knowledge the criterion of multi locational and multiethnic use, *Indian J. traditional knowledge,* **3(2),** 137-153 **(2004)**

15. Sekhar J. et.al., Ethanic information and treatments for Snakebites in Kadapa District of Andhra Pradesh, *Life Science Leaflets* **(12),** 368-375 **(2011)**

16. Antony G.et.al., Herbs and Indigenous Knowledge of Medicinal Plants used by Saperas community of Khetawas, Jhajjar District, Haryana India, *Jour. of Ethnobio. and Ethnomed,* **6**, 4 **(2010)**

17. Houghton P.J. and Osibogun T.M., Flowering plant used against Snakebite, *J. Ethanopharma,* **39(1),** 1-29 **(1993)**

Table-1
Enumeration of plants

S. No.	Local name	Family	Botanical name	Plant part used
1.	Adhijhara	Amaranthaceae	*Achyrenhes aspera L*	Root
2.	Chirchiri	Amaranthaceae	*Achyranthes porphyristachya W*	Root
3.	Chaulai	Amaranthaceae	*Amaranthus blitum L*	Root
4.	Dhavda	Combretaceae	*Anogeissus latifolia W*	Whole plants
5.	Sahdevi	Asteraceae	*Ageratum congzoides*	Leaf
6.	Hingot	Simaroubaceae	*Balanties aegyptiace*	Fruit
7.	Dhak	Fabaceae	*Butea monosperma*	Leaf
8.	Sarson	Brassicaceae	*Brassica campestris L*	Seed
9.	Chironji	Anacardiaceae	*Buchanania lauzan*	Bark
10.	Madar	Asclepiadaceae	*Calotripis procera R*	Root
11.	Aak	Asclepiadaceae	*Calotripis gigantea R*	Root
12.	Marchiya	Solanaceae	*Capsicum annum L*	Root
13.	Amaltash	Caesalpiniaceae	*Cassia fistula L*	fruit pulp, seeds and leaves
14.	Hulhul	Cleomaceae	*Cleome gynandra*	Whole plant
15.	Gokarni	Fabaceae	*Clitoria ternatea*	Root
16.	Vachan ka rella	Menispermaceae	*Cocculus villous (L.) DC.*	Root
17.	Kala Dhatura	Solanaceae	*Datura metal L*	Seeds
18.	Tendu	Ebenaceae	*Diospyros Melanoxylon R*	Seed
19.	Anantmul	Asclepiadaceae	*Hemidemus indicus L*	Root
20.	Dudhkhuri	Apocynaceae	*Holarrhena antidysenteria*	Bark
21.	Dudhkhuri	Asclepiadaceae	*Gymnema sylvestre*	Root
22.	Lajwanti	Mimosaceae	*Mimosa pudica*	Root
23.	Nagphani	Cactaceae	*Opuntia vulgaris M*	Root
24.	Dupaharia	Sterculiaceae	*Pentapetes Phoenicea*	Root
25.	Amli	Caesalpiniaceae	*Tamarindus indica L*	Seed
26.	Sagwan	Verbenaceae	*Tectona grandis L*	Bark