

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

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Abstract

The ethnic peoples of Shahdol have good association with plant resources, which they use for the treatment of various ailments. The traditional knowledge for the utilization of these ethno medicinal plants is widely accepted by these people. Present paper reveals information about 38 ethno medicinal plants used by ethnic people of Shahdol district of Madhya Pradesh. The results are based on ethnobotanical survey carried out during the year 2016 to 2017.

Keywords: Shahdol, ethnobotanical plants, traditional healers

1. Introduction

The main aim of the present study is to collect information on plants used traditionally by Gond, a primitive tribal community of District Shahdol, Madhya Pradesh. Plants have been used in traditional medicine for several thousand years. India is a repository of medicinal plants. The herbal treasure of nation is rich in its floristic wealth.

Ethno-botany accounts for the study of relationship between people and plants for their use as medicines, food, shelter, clothing, fuel, fodder and other household purposes (Balick, 1996)^[1]. It deals with the interaction of indigenous plants and the local inhabitants of the area. The aim of ethnobotanists is to explore how these plants are used as food, clothing, shelter, fodder, fuel, furniture and how medicinal use of such plants is associated to other characteristics of the plant species. They understand and collect the knowledge of valuable plants by the use of anthropological methods (Ram *et al.*, 2004)^[5].

Central India is one of those region in India where the tribal population and forest dwellers from a considerable part of the population (Jain, *et al.* 2010; Mishra *et al.*, 2010)^[2-3]. Their studies brought to light numerous less known uses of plants and interesting data on about ethno medicinal plants. In many parts of the Madhya Pradesh especially in the Shahdol District there is a rich tradition in the use of plants as an herbal medicine for the treatment of many diseases. Therefore, an ethno-medicinal study was undertaken to collect information proposed to be useful for research on medicinal plants of the Shahdol district of Madhya Pradesh. The state of Madhya Pradesh comprises of a large population of tribal communities belonging to various ethnic groups. These forest dwellers live in forests and possess a vast knowledge on various aspects of plants.

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 Shahdol district.

2. Methodology

The survey was conducted in different seasons during 2016-2017. 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)^[4]. All plants specimens are deposited in the herbarium of Department of Botany, Pt. S.N.S. Govt. P.G. College, Shahdol (M.P.).

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

3. 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 Shahdol district on 38 plant species belonging to 38 genera and 27 families, which they are use for medicinal purposes. The plant parts include fruits, leaves, roots, bark, rhizome, seeds and whole plant.

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

S. No	Botanical Name	Family name	Local name	Mode of administration and ethno-medico-botanical uses
1.	<i>Adhatoda vasica</i> Nees	Acanthaceae	Adusa	Taken a decoction of leaf for joint disease.
2.	<i>Allium cepa</i> L.	Liliaceae	Pyaz	Juice of bulb and mustard oil mix and massage of effected part for gout.
3.	<i>Andrographis paniculata</i> (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.
4.	<i>Annona squamosa</i> L.	Annonaceae	Sitaphal	The leaf juice is given orally as anthelmintic.
5.	<i>Argyreia nervosa</i> (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.
6.	<i>Bombax ceiba</i> L.	Bombacaceae	Semal	Roots are boiled in water and its decoction used in urinary troubles.
7.	<i>Boerhavia diffusa</i> L.	Nyctaginaceae	Patharchatta	1. Roots are given in urinary disorders. 2. The whole plant with leaves of <i>Vitex negundo</i> L. is boiled, filtered and the filtrate is given to treat elephantiasis for five days.
8.	<i>Buchanania lanzan</i> Spreng.	Anacardiaceae	Charali	Stem bark with sugar candy mixed together, powdered and given in general weakness.
9.	<i>Cassia fistula</i> L.	Caesalpiniaceae	Bandar rori	The fruit pulp is boiled in water and filtrate with sugar is taken in rheumatism for five days.
10.	<i>Canscora decussata</i> (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.
11.	<i>Calotropis gigantea</i> (Ait.)R.Br.	Asclepiadaceae	Aak	Latex with mustard oil is boiled and externally applied externally in body pain for three days.
12.	<i>Casearia elliptica</i> Willd.	Flacourtiaceae	Kirchi	The powdered root is taken internally in stomach disorder for three days.
13.	<i>Centratherum anthelminticum</i> (L.)	Asteraceae	Jangli jeera	The seeds are pounded and taken to remove intestinal worms daily for three days.
14.	<i>Celastrus paniculatus</i> Willd.	Celastraceae	Malkagani	The seed oil is externally applied in body swelling and in muscular pain for three days.
15.	<i>Clematis gouriana</i> Roxb. ex DC	Ranunculaceae	Belkum	Paste of leaves is externally applied in skin disease.
16.	<i>Clitoria ternatea</i> L.	Papilionaceae	Aparajita	Decoction of root is given daily for three days in dropsy.
17.	<i>Convolvulus microphyllus</i> Sieb.	Convolvulaceae	Shankhpushpi	Decoction of the whole plant about one tea spoon is given for three days to treat insomnia.
18.	<i>Costus speciosus</i> (Koen.) Smith	Zingiberaceae	Keokand	The paste of the rhizome is applied externally in burning sensation in eyes for three days.
19.	<i>Curculigo orchioides</i> Gaertn.	Hypoxidaceae	Kali musli	Root paste is applied externally on head for three days.
20.	<i>Careya arborea</i> Roxb.	Lecythidaceae	Kusum	The fresh root is chewed in snakebite.
21.	<i>Dillenia pentagyna</i> Roxb.	Dilleniaceae	Bhangra	The whole plant is externally applied in skin diseases.
22.	<i>Eclipta prostrata</i> (L.)	Asteraceae	Bhringraj	Decoction of stem bark is taken internally to check blood dysentery for three days.
23.	<i>Elephantopus scaber</i> L.	Asteraceae	Murgachundi	The powdered root along with powder of whole plant of Kalmegh (<i>Andrographis paniculata</i>) is given daily for three days in malarial fever.
24.	<i>Ehretia laevis</i> Roxb.	Boraginaceae	Datrangi	The powder of stem bark is given internally in dysentery for three days.
25.	<i>Grewia hirsuta</i> Vahl	Tiliaceae	Gursikari	The root paste is applied externally on swollen testicles for three days.
26.	<i>Gloriosa superba</i> L.	Liliaceae	Kalihari	The root paste is applied externally for easy delivery.
27.	<i>Holarrhena pubescens</i> (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 (<i>Piper nigrum</i>) powdered and taken orally in malarial fever for three days or till the disease is not cured.
28.	<i>Haldina cordifolia</i> (Roxb.)	Rubiaceae	Haldu	The flower buds are made into paste and externally applied in body pain.
29.	<i>Hemidesmus indicus</i> R.Br.	Asclepiadaceae	Magrabu	The small pieces of root string in a thread and tied around the neck in fever.
30.	<i>Ichnocarpus frutescens</i> (L.)	Apocynaceae	Bakawan	Leaf paste/leaf decoction (half teaspoon) is given to treat piles and malarial fever.

31.	<i>Lannea coromandelica</i> (Houtt)	Anacardiaceae	Moyan	The gum is given in the treatment diarrhea and dysentery.
32.	<i>Leea macrophylla</i> Hornem	Leeaceae	Hathikan	Root paste is applied externally on body in chest pain
33.	<i>Litsea glutinosa</i> (Lour.) Roxb.	Lauraceae	Medalakri	The paste of stem bark is applied on inflamed part of the body in sprain.
34.	<i>Mallotus philippensis</i> (Lam.)	Euphorbiaceae	Kamala	The fruit is made into paste and applied in ringworms for three days.
35.	<i>Mitragyna parvifolia</i> Korth	Rubiaceae	Mundi	The juice of stem bark is applied externally on abdomen in dropsy for three days.
36.	<i>Nyctanthes arbortristis</i> L.	Oleaceae	Parijata	The stem bark with (<i>Terminalia arjuna</i>) bark is pounded and the paste is applied externally in internal injuries for three days.
37.	<i>Ocimum sanctum</i> Linn.	Lamiaceae	Tulsi	Taken a 5 leaves of ocimum and 2 black peeper for rheumatism.
38.	<i>Withania somnifera</i> (L.)	Solanaceae	Ashwagandha	Taken a 5 gram root powder, 3 gram ghee and 1 gram sugar for cure of rheumatism.

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 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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5. References

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