

Some ethnomedicinal plant species of Jhabua district, Madhya Pradesh

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The work deals with 25 plant species, used traditionally by *Bhil* and *Bhilala* tribes of Jhabua district (Madhya Pradesh) for the treatment of various ailments. Some hitherto unexplored ethnomedicinal uses of plants have also been revealed.

Keywords: Ethnomedicine, *Bhil*, *Bhilala*, Jhabua

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Forests have been the source of invaluable medicinal plants since the time man realized the preventive and curative properties of plants, and started using them for human healthcare. India's traditional systems of medicine are part of a time honored and time tested culture that still intrigues people today. Throughout India, the uses of medicinal plants in meeting family's primary healthcare and nutritional needs are traditional and embedded in all cultures¹⁻². These medicinal plants have the potential to provide green health alternatives and number of other eco-friendly products of domestic and industrial usage³⁻⁴. Madhya Pradesh has approximately 1, 35,164 km² of forested area, which accounts for 30.48% of total geographic area of the state. In Madhya Pradesh, a large number of plant species of immense medicinal value are abundantly found in Satpura, Vindhya, Amarkantak, Pachmarhi and Patalkot areas⁵. Remedies based on these plants often have negligible side effects and due to relatively high cost of synthetic medicines, traditional herbal medicines have become an affordable choice for the poor people in these areas. Although considerable work has been done on floristics and Ethnobotany of various regions and tribes of Madhya Pradesh state⁶⁻¹⁸, the work records novel ethnomedicinal uses of some plant species of Jhabua district, Madhya Pradesh.

Jhabua is predominantly a tribal district, located in the western part of Madhya Pradesh. Panchmahal and

Baroda district of Gujarat, Banskra district of Rajasthan, Dhar and Ratlam districts of Madhya Pradesh, make its boundaries. River Narmada forms the southern boundary of the district. The terrain is hilly undulating typically known as Jhabua hills topography. Its major part is covered with dense forest in which various tribes like *Bhil* and *Bhilala* are living in majority. The *Bhil* tribe is one of the most important and the third largest tribe of India. The name has been derived from Dravidian word *bil* or *vil* meaning bow because they always keep bow & arrow for hunting. *Bhil* and *Bhilala* primarily depend upon medicinal plants of their surrounding for treatment of their ailments. Living close to nature these tribal communities have acquired unique knowledge about the uses of wild flora and fauna. After years of observation and analysis, trial and error experimentation or even use of intuitive methods the innovative members of these communities have selected useful and harmful members of the surrounding vegetation. The study aims to prepare an inventory of medicinal plant species used by these tribals to cure various ailments.

Methodology

Ethnobotanical surveys were conducted in different tribal inhabited localities of Jhabua district during May 2007 to April 2008. The method adopted for collection of data was interview with tribals, local medicine men (*Guniya/Badwas*) and one to one discussion about therapeutic uses of local plants in the treatment of various diseases. A questionnaire was

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prepared to gather data for this purpose. Voucher specimens were collected from the field. The collected plant specimens were identified by using Flora and other pertinent literature¹⁹⁻²¹. The herbarium prepared by standard method has been deposited in the Herbarium of School of Studies in Botany, Jiwanji University, Gwalior.

Observations

The concerned plant species are enumerated alphabetically with their botanical names, family in parenthesis, local names, locality, followed by the folklore claims.

Andrographis paniculata (Burm.f.) Wallich ex Nees, Acanthaceae, *Bhuinimadi*, Katthiwada

Uses: Fresh leaves are pounded in water and filtered. The decoction is given orally twice a day for 7 days in leucorrhoea.

Aloe vera (L.) Burm. f., Liliaceae, *Gwarphata*, Jhabua

Uses: The smooth gel is applied on pimples and blemishes.

Annona squamosa L., Annonaceae, *Sitaphal*, *Sharifa*, Aalirajpur

Uses: Seed powdered is taken orally thrice a day for 5 consecutive days for inducing abortion.

Calotropis procera (Aiton.) R.Br., Asclepiadaceae, *Aakada*, Sehajgaon

Uses: Men take one teaspoonful root powdered with cow milk twice a day for 15 days for inducing sterility.

Cardiospermum halicacabum L., Sapindaceae, *Poptiya*, Khamba

Uses: Paste of seed is applied on affected part for the treatment of swelling on the body.

Celosia argentea L., Amaranthaceae, *Safedmurga*, Harod

Uses: One teaspoonful seed powdered in milk is given orally twice a day for one week to stop burning sensation during urination.

Cissus quadrangularis L., Vitaceae, *Gathiya*, *Aadhanda*, Mathwad

Uses: Paste of the whole plant grounded with water is bandaged on the fractured body parts.

Cocculus hirsutus (L.) Diels, Menispermaceae, *Veshyang*, Sorva

Uses: Fresh leaf juice is given orally twice a day for 5 days in leucorrhoea.

Diospyros melanoxylon Roxb., Ebenaceae, *Tendu*, Padola

Uses: The unripe fruit is first macerated with milk and then the extract is given orally twice a day for 2 days in dysentery.

Echinops echinatus Roxb., Asteraceae, *Oontkato*, Phoolmal

Uses: Root powder is taken with water orally twice a day in headache.

Enicostema axillare (Lam.) A. Raynal, Gentianaceae, *Dedpaliya*, Deojhiri

Uses: Leaf is chewed thrice a day for one week to cure malarial fever.

Gloriosa superba L., Liliaceae, *Kalihari*, *Ranchendi*, Kachla

Uses: The aqueous extract of bulb is used in arrow poisoning.

Merremia emarginata (Burm.F.) Hall.f., Convolvulaceae, *Sarsundari*, Karah

Uses: Juice of leaves is massaged on head for hair growth.

Phyllanthus amarus Schumach. & Thonn., Euphorbiaceae, *Bhuianwala*, Nanpur

Uses: Dried leaf powder is eaten thrice a day for two weeks to cure jaundice.

Phyllanthus maderaspatensis L., Euphorbiaceae, *Miriyakhand*, Mandar

Uses: Fresh leaf extract is used as an insecticide and sprayed on the diseased crop.

Plumbago zeylanica L., Plumbaginaceae, *Chitawal*, *Chitrak*, Bakhtgarh

Uses: Root paste is applied on forehead to get relief from half headache, and the root paste is applied on affected part in skin diseases.

Ricinus communis L., Euphorbiaceae, *Arandi*, Katthiwada

Uses: Leaf decoction in water is given to expel intestinal worms.

Solanum virginianum L., Solanaceae, *Bhuiringani*, Kachla

Uses: Seed powder is filled in tooth cavity in toothache.

Soymida febrifuga (Roxb.) A. Juss., Meliaceae, *Rohan*, Harod

Uses: Stem bark decoction is applied on affected part in blood clotting.

Syzygium cumini (L.) Skeels, Myrtaceae, *Jamun*, Aamkhut

Uses: Bark pounded in water is given orally twice a day for 2 days in diarrhoea.

Tridax procumbens L., Asteraceae, *Satdiya*, Petlawat

Uses: Juice of fresh leaves is applied on wound to stop bleeding and prevent microbial growth.

Vitex negundo L., Verbenaceae, *Nirgundi*, Khamba

Uses: A little amount of warmed leaves is bandaged on old wound.

Wattakaka volubilis (L.F.) Stapf, Asclepiadaceae, *Kadwadudi*, Sehajgaon

Uses: The whole plant is macerated with water and mustard oil is added. This paste is applied on affected parts in rheumatic pain and painful inflammation of joints.

Withania somnifera (L.) Dunal, Solanaceae, *Asgandh*, Aalirajpur

Uses: The whole plant is used as a tonic. The root extract in milk is given daily in the morning to cure fever and weakness there from.

Ziziphus nummularia (Burm.F.) Wight & Arn., Rhamnaceae, *Jharber*, Petlawat,

Uses: Paste of leaves is applied on affected part in scorpion bite.

Discussion

The observation puts into record some novel traditional uses of certain plants as medicines, e.g. sterility inducing property of root powder of *Calotropis procera*, use of *Andrographis paniculata* and *Cocculus hirsutus* in leucorrhoea, *Annona squamosa* seeds in inducing abortion. Unripe fruits of *Diospyrus melanoxylon* and bark of *Syzygium cumini* are effective in dysentery and diarrhoea. Some plants are appreciably effective in curing urinary infections, toothache, skin diseases, arthritis, antidoting scorpion bite, for expelling intestinal worm and healing fractured bones. The survey reveals that many of the herbs used by the rural people for treatment of various diseases are very common, easily available at low cost and hence affordable. Their mode of preparation and mode of administration are also simple and convenient and the treatments are without any side effects. Interestingly, the local people are aware of the sustainable use of these medicinal plants.

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