

Investigation on folkloric medicines in Badwani district (M.P.) India

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Abstract

The paper communicates first-hand information on 25 plant species belonging to 25 genera and 21 families traditionally used by the aborigines and rural populace of Badwani district (Madhya Pradesh, India) to treat various human diseases. Of these, 16 species are being reported for the first time from India. These are administered to various diseases such as dysentery, whitlow, throat infection, mouth ulcers, earache, impotency, fever, bone-fever, cough, migraine, stomach-ache, bone fracture, rheumatism, post-pregnancy complaints, etc., They are employed in the form of extract, infusion, paste, powder, juice, decoction, etc. The district is inhabited by tribes viz., Gond, Baiga, Koraku, Bhariaya, Halba, Bhil, Kaul and Pawara. The population of the region is predominantly rural and tribal having considerable knowledge about ambient plant wealth and their traditional utilities. The correct scientific name of plant, family and local names, preparations of medicinal recipes, dosage, mode of administration and diseases treated are given. These have been gathered from medicine-men, elders and experienced informants. This is attempt to evaluate the ethnomedicinal claims, which in turn on further scientific scrutiny, may emerge as new drugs.

Keywords: Folk medicine, Badwani District, Madhya Pradesh

INTRODUCTION

Badwani district lies between latitude 21° 37' to 22° 22' North and 74° 27' to 75° 30' East. It is situated in southwestern part of Madhya Pradesh. The Narmada River forms its northern boundary. The Satpuda range lies to its south. The district is bounded by Maharashtra state to its south to west, Dhar district to the north and Khargone district to the east. It consist of six tehesils, viz., Pansemal, Nilwali, Sendhwa, Badwani, Tikari and Raipur According to 2001 census, population of the district is 73,222. Forest in the district are dry deciduous type. Apart from rural populace, various tribal communities inhabit the district particularly Gond, Baiga, Koraku, Bhariaya, Halba, Bhil, Kaul and Pawara. They depend on the ambient plant wealth for their sustenance. They are traditional custodians of medicolore of the said region, which has largely remained untapped. The present attempt fills in this lacuna.

METHODOLOGY

The ethnobotanical surveys are carried out in Badwani district since January 2009 as an exclusive topic of research. Ethnobotanical data accrued after frequent visits and discussions with tribal headmen, medicine-men and local informants. Plant specimens were deciphered using various floras such as Cooke(1998), Panigrahi and Murthi (1999), Naik (1998), Sharma *et al.*(1996), Singh and Karthikeyan (2000) and Singh *et al.* (2001). Data is obtained w.r.t. botanical name, family, local name, doses,

mode of administration and disease treated. A special questionnaire was used to document the information. Herbarium specimens have been prepared by using methods suggested by S.K. Jain (1977) and housed in the herbarium of Department of Botany, R. C. Patel Science College, Shirpur, and District Dhule. (M.S., India). The information collected has been compared with the classical literature such as : i) The Wealth of India, Dictionry of Indian Raw Material and Industrial Plant Products (Anonymous, 1946-1976) ii), The Useful Plants of India (Ambasta, 1986) iii) Dictionary of Indian folk medicine and Ethnobotany (Jain, 1991), iv) A Hand Book of Medicinal Plants (Prajapati, 2006), v) Watt, (1889-1899), etc., so as to point out new or little known utilities.

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Ethnomedicinal Enumeration

Sr.No	Botanical Name	Family & Local Name	Part used	Recipe & administration
1.	<i>Acacia nilotica</i> (L.) Willd. ex Del. (Benth.) Brenan 	(Mimosaceae) Babul	Leaves	Leaves are dried and made into paste with coconut oil. It is then applied onto fingers to treat whitlow. It is practiced until cure.
2.	<i>Achyranthes aspera</i> L. 	(Amaranthaceae) Chirchira	Entire plant	Entire plant is crushed in ant-hill soil. The paste is applied on bone fracture for about seven days
3.	<i>Acorus calamus</i> L. 	(Araceae) Wekand	Rhizome	Rhizome rubbed on stone with water, the slurry is applied on forehead to treat fever until cure.
4.	<i>Bambusa arundinacea</i> Willd. 	(Poaceae) Bamboo	Leaves	A cup of leaf decoction is taken orally for 15 days to avoid post-delivery pains
5.	<i>Balanites aegyptiaca</i> (L.) Del. 	(Balanitaceae) Ingonya	Leaves	Leaves are deeped in water overnight; Infusion is used to gargled daily once for 3-4 days to treat throat infection and mouth ulcer.

6	<i>Calotropis gigantea</i> (L.) R. Br.	(Asclepiadaceae) Rui, Akua	Leaves	Juice is obtained from warmed leaves; one or two drops are dropped into ear for three nights against earache.
				
7.	<i>Cannabis sativa</i> L.	(Cannabinaceae) Ganja	Leaf and seed	A cup of leaf and seed extract of the same plant (1:1ratio) is administered orally daily once to overcome impotency. It is advised till cure.
				
8.	<i>Cleome gynandra</i> L.	(Capparidaceae) Harhur	Seeds	Seed paste is applied on forehead and its leaf juice is dropped into opposite nostril to treat migraine till cure.
				
9.	<i>Cordia gharaf</i> (Forsk.) Ehrenb.	(Boraginaceae) Bokharu, Gondan	Fruit pulp	A spoonful pulp of ripe fruits is consumed twice a day for three days to control dysentery.
				
10.	<i>Cassia tora</i> L.	(Caesalpiniaceae) Tarota	Seed	Seed powder and turmeric powder (2:1 ratio), are made into paste by adding coconut oil. The paste is topically applied to treat ring worm until cure.
				

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| 11 | <i>Dalbergia latifolia</i> Roxb. | (Fabaceae) Sisa | Leaf | A cup of leaf juice is advised twice a day for 3-4 days to treat fever. Decoction of leaves. Flowers and pods (1:1:1 ratio), a cup of it taken orally twice a day for 10 days to treat diarrhea. |
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| 12 | <i>Datura innoxia</i> Mill. | (Solanaceae) Dhotara: | Flowers | Flowers are crushed with the leaves of <i>Zizipus glabrata</i> Heyne ex Roth. The paste is applied on body to treat eczema till cure. |
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| 13 | <i>Erythrina variegata</i> L. | (Fabaceae) Chopda-panghar | Leaf | About two spoonful of leaf juice is drunk twice a day for three days against cough. |
| 14 | <i>Eucalyptus camaldulensis</i> Dehnh. | (Myrtaceae) Nilgiri | Leaf | Leaf paste is applied on forehead and leaf oil also used as hair oil to treat migraine. This is followed till cure until cure. |
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| 15 | <i>Hardwickia binata</i> Roxb. | (Caesalpiniaceae) Anjan | Stem bark | Powder of roasted stem bark is mixed coconut oil. Paste is applied on wounds |
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16	<i>Helicteres isora</i> L. 	(Sterculiaceae) Mural, Baua	Fruit	About 10 gm fruit green pulp is consumed twice a day for 3-4 days to control dysentery.
17	<i>Limonia acidissima</i> L. 	(Rutaceae) Kauta	Leaf	A cup of leaf extract is drunk early at morning for 15 days to reduce body heat.
18	<i>Madhuca longifolia</i> (Koen.) Macbr. 	(Sapotaceae) Mahuwa	Seeds	A spoonful of seed powder orally advised twice a day for three days against stomachache.
19	<i>Melia azadirach</i> L. 	(Meliaceae) Bajara-limb, Bakano	Bark	Paste prepared from bark powder applied on fore-head for a night to treat migraine. It is practice till cure. Leaf paste is applied on swellings till cure.
20	<i>Pueraria tuberosa</i> DC. 	(Fabaceae) Aadkuo	Tuber	A spoonful of tuber powder mixed with water is advised orally for few days to a person suffering from stomach complaints.

21	<i>Terminalia arjuna</i> L.	(Combretaceae) Arjun-sadada, Kahua	Stem bark	Stem bark decoction, about 2 spoonful are advised twice a day against heart complaints.
				
22	<i>Tinospora cordifolia</i> (Willd.) Miers.	(Merrispermaceae) Gudochi	Root	Decoction of root and stem, a cup twice a day is used to treat bone-fever. It is advised 10-15 days.
				
23	<i>Vitex negundo</i> L.	(Verbanaceae) Nirgudi	Leaves	Young leaves are dried and powdered. This powder is homogenized with coconut oil. The paste is externally applied to treat rheumatism.
				
24	<i>Xanthium indicum</i> L.	(Asteraceae) Lepadi	Root Leaf	A cup of root extract is taken orally twice a day for 7 days to treat ulcer. Leaf juice is applied on thorn injury for few days.
				
25	<i>Zizipus glabrata</i> Heyne ex Roth	(Rhamnaceae) Buri	Leaves	Tender leaves are chewed twice a day to treat molar ache and for mouth ulcer.

DISCUSSION

During the ethnobotanical field surveys in the rural and tribal villages and hamlets in Badwani district, the present authors noted folk medicinal uses of 25 angiospermic species belonging to 25 genera and 21 families. Comparative of ethnomedicinal claims indicated that 16 species form the first reports for India. They have been in vogue to combat various human ailments viz., dysentery, whitlow, throat infection, mouth ulcers, earache, impotency, fever, bone-fever, cough, migraine, stomach-ache, bone fracture, rheumatism, post-pregnancy complaints, etc.

The recipes used are in the form of extract, infusion, slurry, paste, powder, juice, infusion, decoction and oil. The substances

such as turmeric powder, coconut oil and ant-hill soil are used while preparing these recipes. The recipes prepared are obtained from plant parts like rhizome, roots, stem, leaves, fruits, seeds and stem bark. In majority of cases, sole drugs are employed. These claims, however, need further scientific investigations in respect of their active principles and pharmacology. Further studies may help to clarify their efficacy and provide new leads in development of drugs.

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