



Studies on ethnomedicinal plants of Nimar-ecoregion of Madhya Pradesh

S.K.Mahajan¹, Tripta Sapru² and Bharti Khare³

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Abstract

The present communication deals with the ethnomedicinal plants used by the tribal communities Maheshwar tehsil situated in Khargone district of Nimar-ecoregion, M.P. In all 116 plant species belonging to 92 genera are collected, out of which 26 angiospermic species belonging to 18 families are found to be used by the tribal people of this area to cure various human ailments.

Keywords: Flora, vegetation, human ailments, Khargone district, Maheshwar tehsil

Introduction

Maheshwar is one of the biggest tehsils of Khargone district of M.P. It is situated in the extreme South-West part of Madhya Pradesh state. Before independence major part of Holkar state and a part of Dewas state was included in this tehsil. Biogeographically this area comes under Central India. The biodiversity, of this area is quite rich which is probably due to the wide variation in climate, rainfall, extremes of temperatures and presence of a part of Vindhya mountain in this region. This tract is inhabited by three main tribes namely Darbari bhilala, Rathiya bhilala and Barela bhil. Each of these tribes has its own identity and dialect. These people are very rich in their culture and cultural herbal medicines etc are a component of tribal culture. They offer an excellent scope to study the indigenous knowledge of ethno-biodiversity in the region under investigation. In past four decades ethnobotanical research work has been carried out in various parts of India (Jain, 1995 & 1999; Maheshwari, 1963; Maheshwari *et al*, 1981). As regards Madhya Pradesh state sufficient amount of ethnobotanical work has been done in various districts namely Bastar, Balaghat, Jabalpur and Chhindwara (Jain 1977; Sahu, 1982). In Nimar ecoregion a little research work has been done

(Shastri, 1977; Solanki, 1984; Mahajan & Patel, 2003). The present work deals with some ethnomedicinal plants collected from Maheshwar tehsil of Khargone district which comes under Nimar ecoregion of M.P.

Material and Methods

The present survey was done during the year 2010-11 and in this connection various tribal villages of Maheshwar tehsil which were visited are Jhapri, Chunariya, Karandiya, Moganwa, Kamadiya and Devpaliya. The plants used by the tribal people to cure various human diseases were noted with the help of old tribal medicine men "barwa" and other experienced persons. Herbarium sheets were prepared and identification of the plants was done with the help of standard flora and literature (Kirtikar & Basu, 1935; Chopra *et al*, 1956; Cooke, 1957; Mudgal *et al* 1997; Singh *et al*, 2001; Verma *et al*, 1993; Shah, 1978; Naik, 1998). The herbarium sheets are deposited in the Botany Department of Govt. P.G. College, Mandleshwar. List of ethnomedicinal plant species together with their families is shown in Table 1.

Results and Discussion

Earlier to this investigation, Tenguria *et al* (2006) mentioned in their studies about the smooth muscle relaxant activity of herbal drugs from *Dolichos lablab*. Punjani (2006) has reported 35 plant species that are used traditionally for the treatment of various human ailments and disorders, such as skin

Author's Address

¹Former Professor of Botany, Govt.P.G.College, Khargone, M.P India

² Botany Department, Govt. Girls College, Ujjain, M.P

³ Botany Department, Govt.MLB Girls College, Bhopal, M.P.
E-mail: shrikrishna.mahajan@gmail.com



diseases, colic complaints, headache, fever, piles, asthma, jaundice, diarrhea, dysentery, vomiting wounds etc. Sarvalingam and Rajendran (2012) have reported 60 species of lianas belonging to 47 genera of 18 families from Manthamalai hills of Southern-Western Ghats of India and concluded that areas with density of small trees had high lians density and areas with a high number of trees saplings had a relatively high density of climbing lianas. Patel (2010) has surveyed the medicinal plants of different rural and forest areas of Betul district of Madhya Pradesh and found that 7 plant species i.e. *Aegle marmelos*, *Allium cepa*, *Asparagus racemosus*, *Bryophyllum calycinum*, *Cuscuta reflexa*, *Euphorbia pulcherrima* and *Ficus glomerata*) belonging to 6 families are used by tribal local inhabitants and folk practitioners for the treatment of diarrhea and dysentery. Recently Agnihotri and Bhatnagar (2013) have made an

effort to enlist 8 plant species belonging to 6 families of Pteridophytes from Kanpur and adjacent areas which possess medicinal utility and suggested for their preservation and conservation. Rathore (2013) has also published a review article on "Indigenous medicinal plants and natural herbal products in India" in which he has stated that over the past few years the medicinal plants have however regained a wide recognition due to an escalating faith in herbal medicine in view of its lesser side effects as compared to allopathic medicine besides the necessity of meeting the requirements of medicine for an increasing human population. From Table 1, it is revealed that out of a total of 116 plant species collected, 26 species were found to be used by the tribal people to cure various human ailments in this area. Some of these important plant species used by

Table 1. List of plant species collected from Maheshwar tehsil situated in Nimar eco-region of Madhya Pradesh

S.No.	Scientific name of the plant	Local name	Family name	Plant part used
1	<i>Achyranthes aspera</i> L.	Hathijhara	Amarantaceae	Stem
2	<i>Adhatoda vasica</i> Nees.	adusa	Acanthaceae	leaves
3	<i>Barleria prionitis</i> L.	Pila katasla	Acanthaceae	leaves
4	<i>Bauhinia variegata</i> L.	kachnar	Caesalpinaceae	Bark
5	<i>Boerhaavia diffusa</i> L.	Punarnava	Nyctaginaceae	Leaves
6	<i>Bryonia laciniata</i> L.	Shivlingi	Cucurbitaceae	Seeds
7	<i>Butea frondosa</i> Roxb,	Palas	Fabaceae	Fresh seeds
8	<i>Cardiospermum helicacabum</i> L.	Phugga	Sapindaceae	Entire plant
9	<i>Cissus quadrangularis</i> L.	Harjor	Vitaceae	Stem
10	<i>Cocculus hirsutus</i> (L) Diels.	Jaljamni	Menispermaceae	Leaves
11	<i>Echinops echinatus</i> Roxb.	Unt-katara	Asteraceae	Entire plant
12	<i>Enicostoma axillare</i> L.	Chhota chirayta	Gentianaceae	Entire plant
13	<i>Holarhena antidysenterica</i> Wall.	Kuda	Apocynaceae	Seeds
14	<i>Merremia emerginata</i> Hook f.	Undri-ka-chara	Convolvulaceae	Leaves
15	<i>Ocimum basilicum</i> L.	Jangli tulsi	Lamiaceae	Entire plant
16	<i>Pergularia daemia</i> (Forsk.) Chier.	Utran	Asclepiadaceae	Leaves
17	<i>Peristrophe bicalyculata</i> Nees.	Utran	Acanthaceae	Entire plant
18	<i>Solanum virginianum</i> L.	Pili kateri	Solanaceae	Entire plant
19	<i>Tectona grandis</i> L.	Sagon	Verbenaceae	Stem bark
20	<i>Tephrosia purpurea</i> (L) Pers.	Sarponkha	Fabaceae	Root
21	<i>Tinospora cordifolia</i> L.	Gurwel	Menispermaceae	Leaves
22	<i>Tridax procumbens</i> L.	Kulhara	Asteraceae	Leaves
23	<i>Triumfetta rhomboidea</i> Jacq.	Gadar lapti	Tiliaceae	Leaves
24	<i>Vernonia cinaria</i> Less.	Bhringraj	Asteraceae	Entire plant
25	<i>Vitex negundo</i> L.	Nirgundi	Verbenaceae	Leaves
26	<i>Withania coagulans</i> (Stock) Dunal.	Asagandh	Solanaceae	Leaves, root

the tribal people are mentioned here: *Cocculus hirsutus* (L.) Diels. (in leucorrhoea), *Butea frondosa* Roxb. (= *Butea monosperma* (Lam.) Taub.) (in colic pain), *Merremia tridentata* Hallier (in urinary



problems), *Cissus quadrangularis* L. (in sprains and bone problems), *Solanum virginianum* L. (in joints pain) and *Adathoda vasica* L. (in cough trouble). *Enicostoma axillare* L. (in Sciatica), *Vernonia cinaria* Less. (in fever), *Bauhinia variegata* L. (in fractures), *Boerhaavia diffusa* L. (in kidney trouble), *Tinospora cordifolia* L. (in stone trouble), *Withania coagulans* (Stock) Dunal. (in tension), *Tephrosia purpurea* (L.) Pers. (in leucorrhoea), *Pergularia daemia* (Forsk.) Chier. (in urino-genital septic conditions) and *Tridax procumbens* L. (in wounds and cuts). *Echinops echinata* Roxb. (hypertension), *Eclipta alba* L. (skin disease), *Holarrhena antidysenterica* Wall. (in dysentery), *Bryonia laciniosa* L. (in fertility), *Triumfetta rhomboidea* Jacq. (in hornia) and *Barleria prionitis* L. (in toothache) Besides this, some animals are also used to cure human diseases i.e. Cow (urine used in epilepsy), Goat (milk is used tuberculosis), Hare (meat is used in chicken pox) and Python (for insanity and other neurobiological problems). There is an urgent need for the protection and conservation of these valuable plant and animal species. It is strongly believed that some of these folklore plants and animals might prove to be life saving and lead to effective drugs through detailed investigation by scientific techniques in future.

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