



## MEDICINAL PLANTS IN MUKUNDPUR FOREST OF SATNA DIVISION MADHYA PRADESH

### Botany

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### ABSTRACT

This paper deals with ethno medicinal plants documentation and information which are used by the tribals of Amrpatan tehsil of Satna district on M.P. India. The present study focused to assess the medicinal plant diversity of Mukundpur forest. The plant diversity of this area is quit rich. These plant species are enumerated alphabetically with their botanical name, vernacular name, family, plant parts, used and the way of using them medicinally. A total of medicinal plant 34 species belonging to 28 families are recorded. These tribal people still depend on the medicinal plants were mostly used to cure their diseases and disorders in Amarpatan forest region. The documented ethno medicinal plants were mostly used to cure wound infections, skin infections, stomachache, fever, cough, diabetes diuretics, diarrhea, eye infections and general weakness.

### KEYWORDS

Ethno medicine , medicinal plant, Satna, Mukundpur forest

### Introduction

Medicinal plants play an important role in human life to face diseases since time immemorial.

Traditional medicine widely used the home of tribals and forest dwellers. More than 30% of the population consists of the tribal people with immense traditional knowledge. 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. A review of past literature on ethno botany indicates that sufficient research work has been done in various part of India. Traditional medicine and ethno botanical information play an important role in scientific research among the medicinal plants used in Ayurvedic medicines for their therapeutic action; some of these have been thoroughly investigated. Central India is known for its richness of medicinal flora. Tropical forests which are rich in biodiversity. The present communication deals with the ethno medicinal plants which are used by tribal people of north Satna district of Madhya Pradesh, India. Satna district is situated between north latitude of 24°11'35 to 24°26'25" and east longitudes 81°6'35" to 81°22'20"

The headquarters of Mukundpur range is in Mukundpur village, situated in Amarpatan Tahsil of Satna district in the state of Madhya Pradesh, India. The first white tiger safari is established at this village. The one of the mandate of this zoo and safari is to establish a small research centre for identification and propagation of various species of medicinal plants naturally occurring in adjoining forest areas.

Due to forest region many forest tribes are found in Majhgawan block. There are six tribe types are dominantly exist in the Satna district. Namely these are - Kol, Gond, Mawasi, Bhumla, Pao and Khairwar (Sinha 1994). Plants have many direct or indirect links with tribal life particularly on the economical front. Tribals of the study area commonly use many plant parts for food, medicine, fiber, oil, gum, resins, tribal craft and other miscellaneous uses. Herbalists or traditional healers from these groups frequently use many plant parts in the treatment of different routine body ailments where diarrhea, a condition of having frequent loose or liquid bowel movements, is one of them. Acute diarrhea is a common cause of death in developing countries and the second most common cause of infant deaths worldwide (Anonymous 2004).

India has vast resources of medicinal plants. The use of the plants as medicine is nothing new but according to an estimate there are more than 25000 effective herbal formulations exist in the country (Brahmavarchasva 2005 and Aneesh 2009). But many of them are unwritten. Ahead to this it can be said that each time a tribal medicine man dies, it is as if a library has burned down so there is urgent need of documentation of native knowledge of the before its extinction forever.

Madhya Pradesh has the largest tribal population of all the states with 14.51% of total tribal population of the country. Thus, state possesses

rich diversity in the tribal communities which may be seen in the lifestyle and cultural traditions, social and economic structure, religious beliefs, language and speech, customs etc. Total tribal population of Satna District of the state is above 2.68 lakh as per 2001 census data.

### Material and Method

Mukundpur region mainly comprises the present area of Mukundpur range of Satna forest division. The range has geographical area of 589.71 km<sup>2</sup> with forest area 111.55 km<sup>2</sup>. The area lies between north latitude of 24°11'35" to 24°26'25" and east longitude of 81°06'35" to 81°22'20". The famous world white tiger safari is also situated in northern side of this range. The forest area of this range exists in 7 forest blocks namely Mand, Govindgarh extension, Papra, Jhinna, Sarhai, Kokahansar and Mankesar. The forest blocks of Govindgarh extension and Papra extend in Satna and Rewa forest districts. The part of Mankesar forest block lies in submerged area of Bansagar dam.

Northern boundary lies with Beehar River demarcating Satna and Rewa district. The forest of Mand reserve is situated in this area where first white tiger safari is established. Eastern boundary lies mainly with the district boundaries bifurcating Rewa and Satna districts. The famous Charaki ghati forms one of its boundaries. Southern boundary lies mainly with submerged area of Son River and it extends to district boundaries of Shadol and Satna districts.

The present study was done during 2017-2018. 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. Plant collection carried out by standard method. Identification of plants done with the help of flora and other Taxonomic literature. Information was gathered through questionnaire method and discussions with tribal, local healers. Plant keeps between fold of blotting paper. Dried the plant specimens by herbarium press. Preserved Plant specimen Standard literature was followed. Plant survey carried out by well planned schedule. All habitats of the study area surveyed carefully. Ethno medicinal data were collected by the suggested methodology. The data including local name mode of preparation, medicinal uses, parts used were collected using interview, questionnaire, collecting samples and dissections with the practitioners.

### Result And Discussion

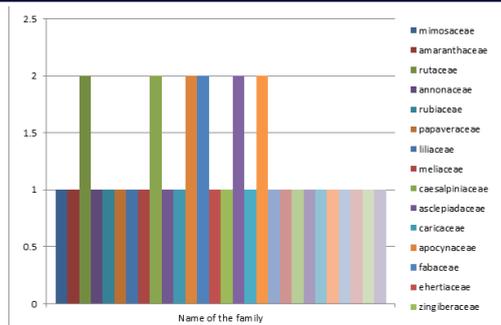
During investigation medicinal plant uses of many as revealed in all 34 species belonging to 28 families it is evidence from the data given in table 1 village of Satna district of Madhya Pradesh India. Important Taxa which are used by the tribal people are *Achyranthes aspera*, *Calotropis procera*, *Datura metal*, *Clitoria ternatea*, *Tamarindus indica* and others. The above results were compared with ancient literature and recently published research papers and journals. 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. Ethno medicinal Wealth, which are used by local inhabitants for various ailment including cough joint

pain, cholera, urinary, trouble kidney, stone diabetes, fever jaundice, syphilis male sterility and gonorrhoea, diseases of liver skin and stomach (Nayak et al.2000,Sharma 1990). These medicinal plant are fold to the dealers are crude drugs for which they happen to be main economic sources of the tribal people realizing that the plant diversity of Satna district is a boon to the tribal people and it is emphasized that

the flora should be conserved for future generations and the tribal population should be an encouraged for growing these medicinal plants on a large scale for optimizing their economic conditions there is also an argent need to documents the indigenous knowledge about medicinal plant are existing still two day in Satna district Madhya Pradesh.

**Table 1: List of Medicinal Plant are Enumerated**

S.N.	BOTANICAL NAME	FAMILY	LOCAL NAME	DISEASE	USES
1	Acacia nilotica	Mimosaceae	Babool tree	Body swelling	Leaves are orally consumed as such and paste is applied locally to cure body swelling.
2	Achyraqnthous aspera	Amaranthaceae	Chirchiri herbs	Stomach pain, fever and cough	Whole plant extract is given orally once as antidote in snakebite. Root decoction is used in stomach pain, fever and cough.
3	Aegle marmelos	Rutaceae	Bel tree	Stomach disorders	Leaf ash is used to kill of animal wound worms. ripe fruits are used in summer season for cooling and stomach disorders.
4	Annona squamosa	Annonaceae	Sitaphal shrubs	Insects bite	Leaf juice is used as an antiseptic in animal wounds.
5	Anthocephalus chinensis	Rubiaceae	Kadamb tree	Rheumatic	Stem bark paste with mustard oil is massaged over rheumatic affected body parts.
6	Argemone maxicana	Papaveraceae	Kateli herb	Jaundice , eye infection	Latex used in dropsy, jaundice and eye troubles. Root paste is applied in scorpion sting.
7	Asparagus racemosus	Liliaceae	Satawar shrub	Lactation deficiency	Boiled tuberous roots are given to animals and women for seven days to increase lactation.
8	Azadiracta indica	Meliaceae	Neem tree	Skin disease	Leaf decoction is used in skin diseases. Poultice of leaves and bark is applied to boils. Decoction of bark, gum, leaves and seeds are used in snakebite and scorpion sting.
9	Bauhinia variegata	Caesalpiaceae	Kachnar tree	pyorrhea	Twinges are used as toothbrush to cure pyorrhea.
10	Calotropis procera	Asclepiadaceae	Madar shrub	Asthma , Bronchitis	Ash of roots is used to remove pus from the gums. Ash of the leaves mixed with sugar is used to cure asthma and bronchitis.
11	Carica papaya	Caricaceae	Papita	Toothache	Cotton soaked with latex is put in between the affected teeth to cure toothache.
12	Carisa carandas	Apocynaceae	Karunda shrub	Appetite	Fruits are eaten to promote appetite.
13	Cassia fistula	Caesalpiaceae	Amaltas tree	Skin disease, Purgative	Leaf paste is used in skin diseases. Fruits are used as purgative.
14	Clitoria ternatea	Fabaceae	Aparajita	Snakebite	Root powdered is given orally in snakebite.
15	Cordia dichotoma	Ehertiaceae	Lasora tree	Influenza	Leaf decoction wit wheat husk and salt is taken to check chest congestion and influenza.
16	Curcuma longa	Zingiberaceae	Haldi herb	Cough and cold	Powdered rhizome with milk is given in internal injuries. Dried rhizomes are used in cough and cold.
17	Dalbergia sissoo	Fabaceae	Sheesham tree	Diarrhea , body pain	Powdered bark is given with water to relieve body pain and decoction is given twice a day in diarrhea.
18	Datura metel	Solanaceae	Dhatura shrub	Asthma	About six inches long root is tied over the pregnant women to check abortion.
19	Euphorbia hirta	Euphorbiaceae	Dudhi grass	Enema	Plant paste with water is used as enema.
20	Ficus racemosa	Moraceae	Gular tree	Diabetes	Dried fruit taken with warm water are helpful in diabetes.
21	Ficus religiosa	Moraceae	Pipal tree	Throat infection	Bark powder ashes on cow dung fire mixed with water is given to children to treat throat infection.
22	Hibiscus rosasinesis	Malvaceae	Gurhal shrub	Urinary problem, kidney trouble	Flower extract is used in urinary problems. staminal column is used as diuretic in kidney troubles.
23	Limonia acidisima	Rutaceae	Kaith tree	Diarrhea , Dysentery	Fruit pulp is given in diarrhea and dysentery.
24	Madhuca longifolia	Sapotaceae	Mahua tree	Hydrocele	Leaves are warmed in mustard oil and tied over the testes in case of hydrocele. Fruits are cooked with milk and given daily foe strength and vitality.
25	Mangifera indica	Anacardiaceae	Aam tree	Pyorrhea	Latex is applied over gums and teeth twice a day to cure pyorrhea.
26	Moringa oleifera	Moringaceae	Sahjan tree	High blood pressure	Fresh leaf juice is taken during high blood pressure.
27	Musa paradisiaca	Musaceae	Kela	leucorrhoea	Stem decoction is given to cure leucorrhoea.
28	Nerium indicum	Apocynaceae	Kaner		Seeds are burnt to ashes, mixed with mustard oil is applied aver wounds.
29	Ocimum tenuiflorum	Lamiaceae	Tulsi herb	Earache , fever	Leaf juice is dropped in ear to relieve earache. Leaf decoction is used in fever.
30	Solanum nigrum	Solanaceae	Makoi herb	Diarrhea	Decoction of whole plant is used in diarrhea and fever.
31	Syzygium cumini	Myrtaceae	Jamun tree	Diarrhea	Fresh juice of bark is given with goat's milk in diarrhea.
32	Shorea robusta	Dipterocarpaceae	Sal tree	Dysentery	Gum mixed with curd is given in dysentery.
33	Trianthema portulacastrum	Aizoaceae	Pattharchata grass	Jaundice ,Leucorrhoea	Leaf juice is given in jaundice & decoction is taken to cure leucorrhoea.
34	Ziziphus mauritiana	Rhamnaceae	Ber shrub	Liver & bladder disease, constipation	Powdered fruit mixed with jiggery are used as cooling drink.it is used for improving muscular strength and weight.



Plant family(species)

#### IV. Conclusion

The study concludes that the role of herbal medicine for the treatment of various diseases and disorders among tribe is crucial. Medicinal plants contain so many chemical compounds which are the major source of therapeutic agents to cure human diseases. Tribals used many different forest plants, weeds, flowers, seeds, bark in their traditional treatment. Beyond documented plants. These people use several other plants for non medicinal purposes. The collection information not only shows that many preparations are made from single plants but rarely mixture of several plants is used. Majority of the preparations are taken orally and applied on the skin. In the studies area, many people still have faith in the herbal remedy which plays an important role in life of these communities. The traditional knowledge on the properties of plants and the medicinal plants uses a vital role against various diseases. Various medicinal plants and plants extracts uses to fever, antiulcer, antipyretic, anti diabetic and anti skin activity.

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