

# Investigation on Ethnomedicinal Plants of District Shahdol, Madhya Pradesh

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**Abstract:** *The present paper highlights in Shahdol district a rich in ethnic and biological diversity since ancient times. Several tribal communities like Kol, Gond, and Mawasi inhabit Shahdol region and utilize wide variety of plant resources for food, fodder, fiber, medicine etc. An ethnobotanical study among the tribal communities of Shahdol district has been carried out during 2012-2013. In the study, ethno medicinal uses of 19 plant species have been reported. The plant parts most commonly used in the treatment of various diseases are root, leaves, whole plant and bark. Mode of drug administration in different ailments are discussed.*

**Keywords:** Ethnomedicine, Gond, Kol, Mawasi, Shahdol, Madhya Pradesh

## 1. Introduction

In India uses of plant based drugs and chemicals for curing various ailments and personal adornment is as old as human cultivation. Plants and Plant-based medicaments are the basis of many of the modern Pharmaceutical we use today for our various ailments (Abraham, 1985 and Ahirwar 2015). The use of the traditional medicine is widely accepted by tribal in district Shahdol. Shahdol district is north eastern part of Madhya Pradesh state. It is lying between 23°17'47" N latitude and 81°21'21" E longitude. Total geographical area sums up to 5671 sq.km. and has a population of 908148. Shahdol is riched in vast resources of forest and minerals. It is bounded in the north by Satna and Sidhi district, in the east by Korea district, in the south by Anuppur district, in the west by Umaria district. The area is

full of water springs which come out on the top hill slopes. The Shahdol division is average rainfall is 85.11% and above temperature 13.6 °C. The Baiga tribes living in some villages situated in and around Shahdol division. They depend solely on their surrounding forest for most of their requirement for food to medicines. Jaitpur forest is a very rich of Botanical wealth and a large number of diverse wild edible plants that are used by different Ethnic people for medicinal purpose grow wild in different parts of the country. The tribal people of the district Shahdol practice a various range of occupation such as hunting, gathering, fishing, plough agriculture and shift agriculture is the main stay of the tribes. Regardless of their principal mode of subsistence they collect and consume major and minor forest product (**Figure 1**).



**Figure 1:** Location Map of study area, district Shahdol, Madhya Pradesh

It is famous of its religions importance, elegant environment and spiritual peace (Sharma, 2003, and Prasad and

Tulsidasa, 1994). Several tribal communities like Kol, Gond, Mawasi etc. reside in Rewa forest area and utilize a wide

variety of plants for food, fodder, fuel, medicine, dye, gum, tannin, household, etc. The age-old tribal knowledge of Plants in an important aspect of ethnobotanical research. The tribal facts is an important aspect of ethnobotanical research. The tribal facts are the store house of information and knowledge on the multiple uses of plants.

## 2. Materials and Methods

An ethnobotanical survey were conducted by me during the period of November 2012 to July 2013 in tribal areas of district Shahdol, Madhya Pradesh. An extensive data sheet was prepared regarding the utility of plants and food and medicine, their application, doses and duration. The distribution was obtained by tribal map of Madhya Pradesh, Tribal Welfare Office and block development office regarding their population and location. The ethnobotanical data were obtained from tribal people, Vaidyas, Ojhas, village Pradhan and many other experienced informants having knowledge of Herbal drugs used by different tribal people. The plants were collected with the help of floristic literature (Oomanchanl and Shrivastava, 1996) and their herbarium was prepared as per standard protocol as described by Varghese (1996), Verma (2014), Ahirwar (2015) and Dwivedi and Pandey, (1992).

The Collected Plants thus pressed, mounted and properly numbered were identified with the help of local floras and other useful works viz. Hooker (1872-1897), Haines (1921-1924).

## 3. Results and Discussion

The study revealed that the Shahdol district is rich in ethnomedicobotanical diversity. The tribal people use locally available plant species for the treatment of human as well as livestock ailments and diseases (Dwivedi, 1999; Jain, 1962 and Maheshwari, 1986). Out of 19 species reported, *Abutilon indicum*, *Aegle marmelous*, *Madhucalongifolia* and *Terminalia arjuna* are used in veterinary medicine and rest are used in the treatment of human ailments. It is revealed that a number of plants are of wide application in day to day life of the tribal, especially for medicinal uses.

### 1. *Acacia catechu* (Mimosaceae)

Local Name - Khair

Part used- Bark

Bark paste is applied in skin diseases. Warm decoction of entire wood about 50gm, boiled in a cup of water) is taken 2- times a day for 3-4 days to relieve throat infection and cough.

### 2. *Abutilon indicum* (Malvaceae)

Local Name - Kakai

Part used- Leaf

Crushed leaf powder with wheat roti is given to cattle to treat diarrhoea.

### 3. *Achyranthes aspera* (Amaranthaceae)

Local Name - Latjira

Part used- Whole plant and root

Whole plant extract is given orally once as antidote in snakebite. Root decoction is used in stomach pain, fever and cough. Six inches long piece of root is taken, its one end is tied with thread, which is held in hand, and the other end is placed at the mouth of the uterus. The child, dead or alive will come out at the time of delivery. The root is immediately taken out to avoid uterus damage.

### 4. *Aegle marmelos* (Rutaceae)

Local Name - Bel

Part used- Leaf, fruit and root bark

Leaf ash is used to kill of animal wound worms. Ripe fruits are used in summer season for cooling and stomach disorders. Root bark is used in fever.

### 5. *Amaranthus spinosus* (Amaranthaceae)

Local Name - Atelichauli

Part used- Leaf and root

Boiled leaves and roots are given to children as laxative. Fresh roots collected on Saturday are given to chew daily in the morning for three days in spermatorrhoea.

### 6. *Argemonemexicana* (Papaveraceae)

Local Name - Bharbhanda

Part Used- Latex and root

Latex used in dropsy, jaundice and eye troubles. Roots paste is applied in scorpion sting.

### 7. *Balanites aegyptiaca* (Simaroubaceae)

Local Name - Ingua, Hingot

Part used- Fruit

Fruit pulp is taken once a day for a month to cure tuberculosis. Unripe fruits are used for whooping cough and skin trouble.

### 8. *Butea monosperma* (Fabaceae)

Local Name - Chihula Palas

Part used- Leaf and flower

Fresh leaves coated with mustard oil and warmed are bandaged in rheumatic pain. Dried flowers soaked in water are used for taking bath for preventing sunstroke.

### 9. *Calotropis procera* (Asclepiadaceae)

Local Name - Madar

Part used- Leaf and root

Ash of roots is used to remove pus from the fums. Ash of the leaves mixed with sugar is used to cure asthma and bronchitis.

### 10. *Dalbergiasisoo* (Fabaceae)

Local Name - Sheesham

Part used- Bark

Powdered bark is given with water to relieve body pain and decoction is given twice a day in diarrhoea.

### 11. *Ficus virens* (Moraceae)

Local Name - Pakri

Part used- Bark

Bark decoction is used as gargle and as a wash for ulcers. Bark extract are given to cure leucorrhoea.

**12. *Hibiscus rosa-sinensis*(Malvaceae) :**

Local Name - Gurhal

Part used- Flower

Flower extract is used in urinary problems. Fresh flower is chewed thrice a day to cure bronchitis and whooping cough staminal column is used as diuretic in kidney troubles.

**13. *Madhuca longifolia*(Sapotaceae)**

Local Name - Mahua

Part used- Leaf, fruit and flower

Leaves are warmed in mustard oil and tied over the testes in case of hydrocele. Fruits are cooked with milk and given daily for strength and vitality. Flowers decoction is given to calf to expel stomach worms.

**14. *Ricinus communis*(Euphorbiaceae)**

Local Name - Rendi

Part used- Leaf and seed

Leaves coated with mustured oil and wormed are applied externally on the chest and stomach during pheumesnial fever. Luke warm seed oil is massaged over joints in rheumatism.

**15. *Shorea robusta*(Dipterocarpaceae)**

Local Name - Sal

Part used-Gum

Gummixed with curd is given in dysentery.

**16. *Syzygium cumini*(Myrtaceae)**

Local Name - Jamun

Part used- Bark

Fresh juice of bark is given with goat's milk in diarrhoea.

**17. *Terminalia arjuna*(Combretaceae)**

Local Name - Kahua

Part used- Leaf and root

Leaves of kahua, Jamun (*Syzygium cumini*), and Khair (*Acacia catechu*) pounded together is given to cattle for treatment of diarrhoea. Root paste is applied on headache. Tender leaf paste with sugar and milk is given once a day for 20 days for the treatment of Spermatorrhoea.

**18. *Withania somnifera*(Solanaceae)**

Local Name - Ashwagandha

Part used- Root

Dry root powder with cow's milk is taken daily for one month to increase the fertility in women for conception.

**19. *Ziziphusaenoplia*(Rhamnaceae)**

Local Name - Jharberi

Part used- Fruit

Ripe fruits are eaten to check dysentery and get relief of burning sensation during urination.

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#### References

- [1] Abraham Z., 1981. Glimpses of Indian Ethnobotany, Oxford & Publishin Co., New Delhi: 308-320.
- [2] Ahirwar, R.K. (2015) "Indian Folk Medicinal Plants of District Mandla Madhya Pradesh" LAP LAMBERT Academic Publishing GmbH & Co. KG, Heinrich-Bocking-Str. 6-8, 66121 Saarbrücken, Germany. ISBN: 978-3-659-42534-9.
- [3] Ahirwar, R.K. (2015) Diversity of Ethnomedicinal Plants in Boridand Forest of District Korea, Chhattisgarh, India. *American Journal of Plant Sciences*, 6, 413-425. <http://dx.doi.org/10.4236/ajps.2015.62047>
- [4] Ahirwar, R.K. (2015) Indigenous Knowledge of Traditional Magico-religious Beliefs plants of District Anuppur, Madhya Pradesh, India. *American Journal of Ethnomedicine*, Vol.2 (2) 103-109. (I.F.-0.394)
- [5] Dwivedi S.N., 1999. Traditional healthcare among tribals of Rewa district of Madhya Pradesh with special reference to conservation of endangered and valuable species, *J Econ Tax Bot.*, 23 (2): 315-320.
- [6] Vindhya Plateau, Vol.1. Herbaceous flora, *J Econ. Tax. Bot., Addl Ser.*, 10 :143-150.
- [7] Haines H.H., 1921-1924. The Botany of Bihar and Orissa, 6 Parts. London. Reprinted 1961, 1-3, Vols. Botanical Survey of India, Calcutta.
- [8] Hooker J.D., (Hook. F.) (Ed.), 1872-1897. The Flora of British India. Vol. 1-72. Reeve and Co. London. Reprinted 1973. Bishan Singh Mahindra Pal Singh. Dehradun and periodical experts, Delhi.
- [9] Jain S.K., 1962. Studies in Ethnobotany- Plants used in medicine by tribals of Madhya Pradesh. *Bull Reg Res Lab Jammu*, (2):126-128.
- [10] Maheshwari J.K., 1986. Kalakoti B.S. & Brijlal, Ethnomedicine of Bhil tribes of Jhabua District, Madhya Pradesh, *Ancient Sci Life*, :255-261.
- [11] Oomanchan M. and Shrivastava J.L., 1996. Flora of Jabalpur, Scientific Publishers, Jodhpur.
- [12] Prasad R.C. and Tulsidas's R., 1994. Motilal Banarasidas Publishers, New Delhi.
- [13] Sharma., 2003. Shrimadvalmikiya Ramayana, Gita Press, Gorakhpur.
- [14] Varghese E., 1996. Applied Ethnobotany, A case Study among the Khairas of Central India. Deep Publication, New Del