

Ethnomedicinal Uses of Plants Species by the Tribes of Shahdol District, Madhya Pradesh, India

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Abstract: *The present paper deals with new or less known ethnomedicinal uses of 35 plants species recorded from Knowledge persons of the area. The Shahdol district is shows remarkable diversity in its floristic elements. An efforts has been made to give an account of angiospermic plants in there, of which potential value among the tribal population observed*

Keywords: Shahdol, Ethnomedicinal, Tribes, Angiospermic plants.

1. Introduction

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 watersprings which come out on the top hill slopes. The Shahdol district is average rainfall is 85.11% and above temperature 13.6 °C. The tribes living in some villages situated in and around Shahdol district. They depend solely on their surrounding forest for most of their requirement for food to medicines. (Figure 1-2)

The area of Shahdol district is inhabited by a large section of tribal population. The highest tribal population, exits in this tract, totally or partially, depends upon natural vegetation for the necessities of life, including remedies for several diseases. Some of these have a supernatural basis to the tribal mind, while others are recognised as physical and attempts are made to treat them. They usually collect their materials from nearby forests and use them in their health care system, which is well developed and proven successfully for generation together. Considerable work has been done on ethno botanical used by various ailments by the tribals, Brijlal and Dubey(1992); Jain (1963,1981); Dubey and Bahadur (1966); Raizada(1984); Maheshwari *et al.*, (1990); Khan(2008); and Ahirwar, (2015)are reported.

2. Material and Methods

The present paper gives an account of 35 plants species of Angiospermic belonging families, used by the tribals of district Shahdol to treat human ailments. More than 20 villages were visiting during the period of 2012 to 2013, to collect the information, some proper Knowledgeable informants, elderly people, head man of the hamlets, tribal medicine man, Vaidya and Ojhas were interviewed, because they are only source to collect the information's about local plant name and their uses. Voucher specimens and recorded

species, were deposited in Department of Botany, Government P.G. College, Shahdol (M.P.) india.

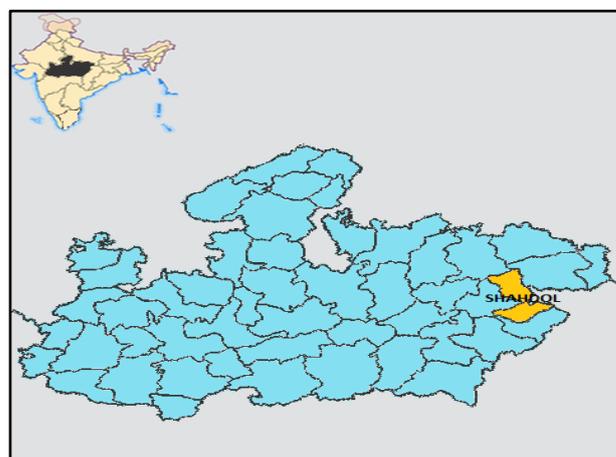


Figure 1: Location Map of India in Madhya Pradesh

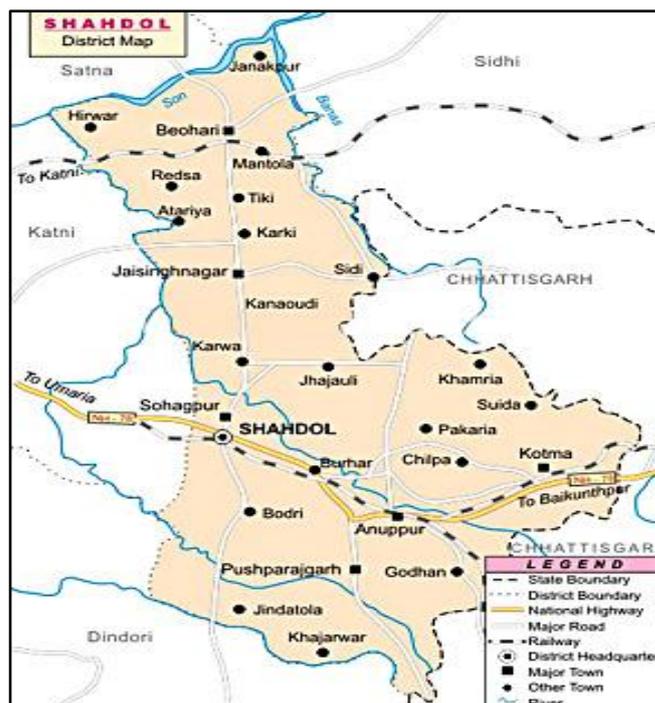


Figure 2: Location Map of study area District Shahdol

3. Results and Discussion

The present study has been reported 35 ethnomedicinal plants represented here. The house hold remedies used by the tribal communities are presented. According to the plant species the plant species have been arranged alphabetically according to their Botanical name, family, local name and plant part used and mode of administration.

- 1) *Achyranthesaspera* Linn. (Amaranthaceae) 'Chirchita'.
Ethnomedicinal Uses: An infusion of the root is used as mild astringent and is also used as for skin diseases.
- 2) *Adathodavastica* Nees. (Acanthaceae) 'Adusa'
Ethnomedicinal Uses: The leaves are boiled with water and extract is obtained. The warm decoction is used for scabies, skin diseases and cough complaints.
- 3) *Ageratum conyzoids* Linn. (Asteraceae) 'Phulani'
Ethnomedicinal Uses: A hot poultice of the leaves and stem is applied to skin diseases. Leaf powder is dusted to cure boils till the relief.
- 4) *Asparagus racemosus* Willd. (Liliaceae) 'Satawar'
Ethnomedicinal Uses: The pulp of ripe fruit is used in efficacious in eczema. The extract of tubers, one teaspoon thrice a day, is given for 15 days for the treatment of excess menstrual flow.
- 5) *Azadirachta indica* Juss. (Maliaceae) 'Neem'
Ethnomedicinal Uses: Chicken pox and measles are controlled when leaf paste is applied on the infected sites.
- 6) *Boswelliaserrata* Roxb. (Burseraceae) 'Salai'
Ethnomedicinal Uses: Stem bark is chewed in toothache and to check pus formation in mouth gums. Lukewarm stem bark paste is applied on eye inflammation.
- 7) *Caesulia axillaris* Roxb. (Asteraceae) 'Akshaphula'
Ethnomedicinal Uses: The whole plant is crushed and juice is extracted, which is given orally thrice a day along with curd to cure amoebic dysentery, indigestion and loss of appetite.
- 8) *Calotropis procera* R.Br. (Asclepiadaceae) 'Aak', 'Madar'
Ethnomedicinal Uses: The flowers are burnt and the ash is mixed with honey and given orally thrice a day to cure whooping cough and asthma. Flower is applied externally on stiff joints to cure the pain.
- 9) *Carissa opacastapf.* (Apocynaceae) 'Karaonda'
Ethnomedicinal Uses: Root paste along with the root paste of *Bombax ceriba* and rhizome paste of *Acorus calamus* is applied on the chest and back of the body for the treatment of pneumonia.
- 10) *Centella asiatica* Linn. (Apiaceae) 'Barahmibooti'
Ethnomedicinal Uses: The whole plant is crushed into a fine paste and then dissolved in water to make a lotion.
- 11) *Chlorophytum arundinaceum* Baker (Liliaceae) 'Safedmusli'
Ethnomedicinal Uses: Root crushed in the rice wash water and the extract is taken twice a day for 2 days for dysmenorrhoea.
- 12) *Croton bonplandianum* Baill. (Euphorbiaceae) 'Char Chongri'
Ethnomedicinal Uses: The stem, leaves and inflorescence are all crushed and juice is extracted and warmed. The decoction is given orally twice a day with sugar syrup to cure cough, congestion of nose and chest and headache arising due to congestion.
- 13) *Cynoglossum lanceolatum* Forsk. (Boraginaceae) 'Kamraaj'
Ethnomedicinal Uses: The roots of the plant are crushed along with molasses and hathil (*Murrayapaniculat* Jacq.): 60 tablets are prepared and are given orally twice a day for a period of one month. The tablets provide strength, vigour and also cure rheumatic pain.
- 14) *Datura metel* Linn. (Solanaceae) 'Kala datura'
Ethnomedicinal Uses: Root powder, 1 teaspoon 2 times a day, after menstruation period is given for 15 days for inducing permanent sterility.
- 15) *Diospyros melanoxylon* Roxb. (Ebenaceae) 'Tendu'
Ethnomedicinal Uses: Powdered leaves along with powdered root of *Gardenia turgid* and *Tephrosia purpurea*, 2 teaspoons 2 times a day, are given for 15 days for the treatment of gonorrhoea.
- 16) *Dryopteris cochleata* C. Chr. (Aspidiaceae) 'Chhoti Bhulan'
Ethnomedicinal Uses: The whole plant crushed in bowl and the extract is given orally twice a day in the event of snake bite. The leaves and roots are applied on the bite wound to prevent infection.
- 17) *Eclipta alba* Hassk (Asteraceae) 'Bhangra'
Ethnomedicinal Uses: The fresh plant is used on various chronic skin diseases.
- 18) *Euphorbia hirta* Linn. (Euphorbiaceae) 'Dudhi'
Ethnomedicinal Uses: Paste of the whole plant and salt is applied on carbuncle boil for suppression and healing.
- 19) *Ficus benghalensis* Linn. (Moraceae) 'Bar'
Ethnomedicinal Uses: Warm paste of the aerial root together with egg paste is applied in bone fracture and tried with the help of *Dendrocalamus strictus* for 3 days for the treatment of bone fracture.
- 20) *Hedychium coronarium* Koenig (Zingiberaceae) 'Gulbakaoli'
Ethnomedicinal Uses: The roots of the plant are crushed and juice is extracted and warmed with water and then it is filtered and cooled. This extract is put into eyes to

cure eye troubles like red eye, swelling eye, pain, excessive excretion watering etc.

- 21) *Heliteresisora* Linn.(Sterculiaceae) ‘Ainhi’
Ethnomedicinal Uses: Aqueous extract of the root, 1 teaspoon thrice a day, is given for 3-7 days for the treatment of dogbite.
- 22) *Holarrhenaantidysenterica* DC. (Apocynaceae) ‘Dudhi’
Ethnomedicinal Uses: Powdered bark, 2 teaspoon thrice a day for 5 days, is given in malarial fever.
- 23) *Jatrophacurcas* Linn.(Euphorbiaceae) ‘Bhakerenda’
Ethnomedicinal Uses: The fresh latex is locally used over scabies, eczema and ring worm.
- 24) *Lapidagathiscristata*Willd.(Acanthaceae) ‘Katili’
Ethnomedicinal Uses: Two teaspoon of plant decoction is given twice a day, for 7 days, for,measles.
- 25) *Leucacephalotus*spreng. (Lamiaceae) ‘Gumma’
Ethnomedicinal Uses: The extract of the seed, 1 teaspoon once a day for 3 days after menstruation, checks conception. Leaf powder is sniffed for treating half headache.
- 26) *Madhuca longifolia*Roxb. (Sapotaceae) ‘Mahua’
Ethnomedicinal Uses: The flowers are dried, grained and applied in the form of a paste on aching muscles to relieve the pain. The flowers also given to cattels to kill worms. Seed oil applied on joints to cure pains and stiffness.
- 27) *Martynia annua* Linn. (Martyniaceae) ‘Baghmecha’
Ethnomedicinal Uses: Due to severe attack of cold, the sphincter of the urinary bladder due to which urine passes out intermittently with much pain. To cure this, the extract of the root is taken orally. The root is crushed in bowl of water to make this extract.
- 28) *Murraya paniculata*Jacq. (Rutaceae) ‘Hanthil’
Ethnomedicinal Uses: The leaves are crushed and made into paste. This paste is mixed with the syrup of old molasses and made into tablets and given orally twice a day to cure joint pains. The leaves are cooked in mustard or till oil along with 20 gm of ‘Sonth’ (dried ginger) and applied externally to the inflamed joints.
- 29) *Psidium guajava* Linn.(Myrtaceae) ‘Amrood’, ‘Bihi’
Ethnomedicinal Uses: The paste of the bark imparts cooling effect on burns and blisters.
- 30) *Sphaeranthes indicus* Linn. (Asteraceae) ‘Mundak’
Ethnomedicinal Uses: The leaves are used to treat chronic skin diseases. 20 grams of the shade dried leaves are given twice a day.
- 31) *Tephrosia purpurea* Pers. (Fabaceae) ‘Pataarchata’
Ethnomedicinal Uses: The leaves are removed from the stem and the denuded stem and root are boiled in water to get the extract. The droplets appearing on the surface of the water are removed and mixed with ‘Ghee’ (

Clarified butter) and heated again after mixing with crushed leaves of the plant. The decoction thus obtained is massaged on the stiff and aching joints of fire to cure stiffness and pain.

- 32) *Terminalia bellirica*Roxb. (Combretaceae) ‘Bahera’
Ethnomedicinal Uses: Good fruits are taken and seeds are removed the remaining portion of fruit are powdered with equal portion of ‘Amla’ (*Emblica officinalis*Gaertn.) and ‘Harra’ (*T. chebula*Gaertn) and dried in sun. This is kept in a corked bottle for two days for ageing, 5 gm powder is consumed daily early in the morning along with 15-20 gm ‘Swarnabhasma’ to cure weakness; it imparts strength, vigour and vitality.
- 33) *Terminalia chebula* Retz.(Combretaceae) ‘Herra’
Ethnomedicinal Uses: Good fruits are selected and seeds are taken out. The remaining portion are dried and powdered with equal portion of ‘Bahera’ (*T. bellirica*Roxb.) and ‘Amla’ (*Emblica officinalis*Gaertn.) and kept for ageing for 2 days in a corked bottle. 5 gm. powder is consumed daily early in the morning along with ‘Ghee’ (Clarified butter) and honey in the ratio of 2:1 or 2 gm long pepper powder or 2 gm Rock salt powder to cure weakness. The powder acts as a brain tonic and provides strength and vigour and enhances vitality.
- 34) *Tinospora cardifolia*Miers. (Menispermaceae) ‘Gurich’
Ethnomedicinal Uses: The leaves and flowers are crushed and juice is extracted, mixed with curd and given orally on empty stomach. After 3 hour since can be given, but fats are prohibited. The medicine is given after every three days for two weeks to cure enlarged liver and reduced bile production.
- 35) *Ziziphus xylopyrus*Willd.(Rhamnaceae) ‘Khatber’
Ethnomedicinal Uses: Powdered leaf along with powdered root of *Cassine glauca*, 2 teaspoons 2 times a day, is given after menstruation period to check conception.

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References

- [1] Ahirwar, Ramesh Kumar (2010). Ethnomedicinal uses of plant roots from Shadol district of M.P. India. *Ind. J. Appl. Pure Bio.* 25 (1):71-76.
- [2] 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>
- [3] Brijlal Dubey, V.P. 1992. A survey of plant ethnomedicine of Amarkantak plateau in Central India, *Agri. Biol. Res.* 8, pp. 29-37.

- [4] Chopra, R.N., Nyar, S.L. and Chopra, I.C. (1956) Glossary of Indian Medicinal Plants. Council of Scientific and Industrial Research, New Delhi
- [5] Dubey, B.K. and Bhadur, F. 1996. A study of the tribal people and tribal areas of Madhya Pradesh. Tribal Res. And Dev. Ins., Bhopal.
- [6] Jain, S.K. 1963, Observations on ethnobotany of the tribals of Madhya Pradesh. *Vanyajati*II(4),pp.177-183.
- [7] Jain, S.K. 1981, Observations on the ethnobotany of Central India. In *Glimpses of Indian Ethnobotany*.
- [8] Khan, A.A., Agnihotri, Santosh Kumar Singh Manoj Kumar and Ahirwar, Ramesh Kumar 2008. Enumeration of certain Angiospermic plants used by Baiga, Tribe for conservation of plants species. *Plant Archives*(8) 1:289-291.
- [9] Maheshwari, J.K., Painuli, R.M. &, R.P. 1990. Notes on Ethnobotany of the Oraon and Korwa tribes of Madhya Pradesh. *Contributions of Ethnobotany of India* pp. 75-90.
- [10] Oommachan M, Masih S.K. (1989) Ethnobotanical observations on certain forest plants of Jabalpur (M.P.) *Ind. J. Appl. pure Bio.*4 (2) 73-78.
- [11] Parna, I.C., Ahirwar, R.K. and Singh, G.K. (2014) Traditional Medicinal Knowledge about Some Herbaceous Plants Used by Baiga Tribes of Bajag Forest, District Dindori Madhya Pradesh India. *Int.J.Sci. Res.* Vol.3 (12) 2232-2236.
- [12] Raizada, A., 1984. Tribal Development of Madhya Pradesh – A planning perspective, Inter – India Publication, New Delhi, pp. 1-220.
- [13] Tiwari, Usha, S.K. Mishra and D. Chatterjee 1996. Conservational aspects of ethnobotanical medicinal plants used by Kol tribes of Bandhavgarh region of Madhya Pradesh. *Ecodevelopment and Environ* (ed. Singh et al.) Vindra Publication, Jalgaon. 48-51.