





# RESEARCH ARTICLE

# Studies on Ethno-botanical Plants Used by Banjara Tribal Community of Hingoli District in Maharashtra, India

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#### **ABSTRACT**

The Ethnomedicinal survey on medicinal plants and their traditional uses was carried out in Sengaon Dist. Hingoli in Maharashtra. These areas are floristically rich area; in this area different species are growing in their natural habitat. The Banjara community of these regions uses some of the plants as medicine for the treatment of human ailments. In this area 100 ethnomedicinal plants species belonging to 50 families were recorded from Sengaon Dist. Hingoli. Some of them, about 45 important plants are mentioned in this paper. These plants are arranged accordingly alphabetically, local names and family and parts used as medicine.

Keywords: Ethnobotanical plants, Traditional knowledge, Banjara community, Jintur Dist. Parbhani

#### INTRODUCTION

The forest areas of the division are mostly situated on the crest lines of the Sengaon range running north-west of south-east which forms a part of the Ajanta ranges emanating from the Sahyadris.

The forest in the region varies from evergreen to dry deciduous types. It is predominantly tribal district. Andh, Banjara, Mahadeo koli these are major segment of tribal population. The traditional Ayurveda and siddha system of India contributed greatly to medicinal botany branch. The Ayurveda is the most popular classical and traditional system of medicine in India which mainly based on plants. Number of ethno medicinal plants with parts used in curing different medical problems (Jain,2004).

The rural population is dependent on natural care for meeting their health care needs. India has a rich knowledge of medicinal plants. In most of the rural areas people are depending on herbal drug system form primary health care. Use of medicinal plants found in almost in all the village of Sengaon Tehsil of Hingoli district. The survey was conducted during the month of Feb. 2018 to July 2019. In India it is reported that 2500 species of plants as rich source of medicine (Pie, 2001).

The aim of this study is to enlist and document traditional, ethnobotanical information of the medicinal plants and their parts used in treatment of different diseases by tribal and local people of Sengaon tehsil through medicinal plants used by the tribal community of Sengaon and acknowledge. The ethanobotanical plants information were gathered through frequent visits, oral questionnaire, group discussion with traditional healers, local people, vaidya, etc.

## **METHODOLOGY**

Ethnobotany is the study of the relationship between man and their surrounding plants in order to understand the plant Human interaction. To know the role of the plant in the lives of the tribal's one has to live among them. The survey was conducted using full oral questioning to elder people, tradition healers and Banjara people in the study area. The information of each species will be recorded with vernacular name, botanical name, family, parts used, ailments and uses. The collected plants were identified with the help of flora of Marathwada (V.N. Naik), the flora of Bombay (Cook) and flora of Parbhani.

#### RESULTS AND DISCUSSION

The botanical, local and family name, habit, origin, plant parts used, ethnobotanical value of 45 plants are enumerated in Table.1. The analysis of the data reveals that the tribal people used the plants to cure various diseases. All these species belong to dicotyledons and monocotyledons. The families include dominant family.

However, some species eg. Plumbago zelanica, pongamia pinnata, solanum virginianum, terminalia Arjuna, terminalia bellirica, Vitex negundo, Acacia catechu, Hemidesmus indicus etc. are well known medicinal plants and their uses in other diseases are widely documented in traditional system of Indian medicine. In some cases administration of medicine is magical in character, designed to reinforce the effect of medicine.

The local people and the tribal villagers are using these plants to cure many diseases like acidity, diarrhoea, dysentery, cough, wound healing, headache, muscular pain, skin diseases, blood pressure, blood sugar, antimicrobial, anthelmintic, anti-inflammatory, asthma, bleeding, kidney stone, skin burning, jaundice, inflammation, insect bite, bone fracture, fever, ulcers, undigestion, smell of mouth, piles, weakness, toothache, vomiting. These observation are well supported by the previous studies of Kimiyne et.al., (2011) and Sutare M S et.al., (2020). Who reported the veg had a medicinal value and cure disease and the vegetables were healthy. Bhogaonkar etal. (2010). The plants specimens and their medicinal uses and ailment for which the particular plants used are thoroughly cross verified.

## **CONCLUSION**

Sengaon region is rich in ethnomedicinal plants species diversity. Ethnomedicinal plants playing significant role in life of day-to-day life of tribal community. Elder tribal people have tremendous folk traditional information of plants. Unsustainable use of land resources has serious negative effects on the flora of this region. The native inhabitants of Sengaon are well versed with the utilization of plants of their surrounding by trial-and-error method. These plants may serve as source of some important medicine against some major disease. Therefore, these trial claims should be further validated scientifically.

# REFERENCES

Anonymous (1986) The useful plants of India. Publication and information Directorate, CSIR, New Delhi.

Bhoganokar Prabha., Y., Vishal R., Marathe and Prachi P. Kshirsagar (2010) Documentation of wild edible plants of Melghat forest, Dist. Amravati, MH. State, India. Ethanobotanical leaflet.14-751-58.

Jain S. K. (2004) Credibility of traditional knowledge- the criterion of multilocational and multi-ethnic use. Indian journal of traditional knowledge. Vol.3 (2). Pp.137-153.

Jain S.K. (2015) Dictionary of Indian folk medicine and ethnobotany, Deep publication, New Delhi- India.

Khare C.P. (2007) Indian medicinal plants; an illustrated dictionary, Vol. I and II, Springer science and Business media.

Kimiyme J., Waudo J., Mbithe D. and Maundn P. (2007) Utilization and medicinal value of Indigenous leafy vegetables consumed in urban and peri-urban Nairobi., African journal of food agriculture nutrition and development. Vol. 7. No. 4.

Naik V. N. (1979) Flora of Osmanabad, Venus publishers, Aurangabad.

Naik V. N. (1998) Flora of Marathwada, Amrut Prakshan, Aurangabad.

Naik V. N.(1998) Marathwadytil Samanya Vanaushadi, Amrut Prakashan, Aurangabad.

Pie, S. J. (2001) Ethnomedicinal approaches of traditional medicine studies. Some experiences from Asia pharmaceuticals Biology. 39: 74-79.

Sutare M. S. and B M Kareppa (2020) Pharmacological activities of potent medicinal plant Adhatoda zeylanica Medic.: A review *International Journal of Life Sciences*, Vol. 8 Issue A14:55-58.

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		Table 1: Lis	t of Ethnomedicin	al plants	
Sr. No.	Botanical name	Common name	Family	Parts	Uses
1.	Abrus precatorius	Gunj	Fabaceae	Leaves Roots Seeds	Leaves are utilized for appetizer and mouth ulcer. Roots and seeds are uses for the cure of some throat, dry cough, urine disorders and serve as blood purifier.
2.	Anogeissus latifolia	Dhavada	Combretaceae	Bark	Infusion of bark is given once or twice a day for easy delivery.
3.	Acacia catechu	Khair	Mimosaceae	Bark	The bark is useful in conjunctivitis, Heartwood has high medicinal value. Asthma, cough, leprosy and skin disorders.
4.	Acacia leucophloea	Deobabhul	Mimosaceae	Roots and pods	Powder of pods and roots of this plant along with <i>Mimosa pudica</i> given to child for dysentery.
5.	Acacia nilotica	Babul	Mimosaceae	Bark Leaves Shoot Leaves Gum	The bark is used in diarrhea, dysentery. The gum is used as dysentery. The leaves, tender shoot are used against tooth pain and toothache.
6.	Adathoda vasica	Adulsa	Acanthaceae	Leaves	Leaves powdered are used to cure the asthma, cough, arthritis, dysentery, malaria. Leaves increases blood flow, oil from leaves directly applied on skin.
7.	Aegle marmelos	Bel	Rutaceae	Fruit pulp Leaves	Fruit pulp is directly given to patient for diarrhea. Fruit pulp mix with turmeric and paste is applied externally in case of pimples. Fresh leaves eat for acidity
8.	Amaranthus spinosis	Kathe math		Root	Root juice is used for diarrhea and dysentery.
9.	Andrographis paniculata	Kalmegh		Whole plant	Whole plant is used dysentery, bronchitis, influenza and fever.
10.	Asparagus racemosus	Shatawari	Liliaceae	Whole plant	Whole plant is medicinal. It is used for epilepsy. Root used in lactation in women and cattle's. The dried roots made into paste and drink with milk to control weakness. Young stem is rich source of vitamins. It is also used for stomach ulcer.
11.	Asteracantha longifolia	Katikorata		Leaves Seeds	Leaves and seeds are used against isabgoal and weakness. Mix the leaves with butter and apply on the isabgoal, the seeds are given to patient as tonic.

12.	Balanities aegyptica	Hinganbet	Balanitaceae	Fruit	Fruit powder is taken twice a day
		Ü			for cure cough, cold and fever.
13.	Bombax cebia	Sawar	Bombaceae	Root	Root powdered is mixed with water and paste is used for injuries and bleeding.
14.	Butea monosperma	Palash	Fabaceae	Root Seeds	Root used to cure fever. Seed is used against round worm and skin disease. Root decoction is used to cure diarrhoea and dysentery.
15.	Balanites aegyptica	Higan	Balanitaceae	Fruit	Fruit and water mixture is used for to cure eye infection.
16.	Calotropis procera	Rui	Asclepidaceae	Root Latex	Root is decotion is used against cough, dysentery and skin diseases. Latex is used against rupture the ulcers. Latex is used to cure piles.
17.	Carissa congesta	Karwand	Apocynaceae	Fruit Latex Leaves	Fruit is used for cough and making the pickle in villages.  Latex is used for curing the injury. Take 25-30 leaves made into paste with butter milk for two weeks for relief from spaint.
18.	Cassia occidentalis	Rantarota	Caesalpiniaceae	Leaves shoots	Leaves are burnt and the shoot is collected on plate applied with coconut oil. The paste is used against burning skin.
19.	Cassia fistula	Bhava	Caesalpiniaceae	Leaves Flowers	The leaves are used for to cure the tooth pain. The flower is used for diabetics.
20.	Cassia auriculata	Tarwad	Caesalpiniaceae	Leaves Young shoot	Tender shoot and leaves is used against to cure diabetes, joint and muscular pain.
21.	Cassia tora	Tarota	Caesalpiniaceae	Young shoot Seeds	The young shoot is used for to cure rheumatism.  The Cassia tora seeds are used to cure the menstrual cycle.
22.	Centella astiatica	Brahmi	Аріасеае	Leaves	Leaves rubbed topically on affected part of the body the compound release can reduce swelling and eliminate irritation as well as inflammation inside the body.
23.	Celosia argentia	Kurdu	Amaranthaceae	Fruit Root	Fruit is used for treating semen in urine. Root infusion is taken once a day in empty stomach for stomach diseases.
24.	Cariss congesta	Karwand	Apocynaceae	Root	Root piece of Karwand is kept on molar tooth, chewed and its remnant is applied on stung part.
25.	Cymbopogan citratus	Gawati	Poaceae	Leaves	Leaves are used for cough, fever- prepare tea by using leaves of gawati chaha, leaves of Tulsi,

					haldi powder and sugar and take it for a week in the morning.
26.	Deospyros melanoxylon	Tandu	Ebenaceae	Leaves Gum Bark	Bark is astringent used in dyspepsia and diarrohea. The extract of the fruit is applied over fistula as well as paste of fruit is used to improve skin fairness. Gum of this plant is used in jaundice and typhoid. Leaf paste along with Madhuca fruit and Adina cordiflolia leaves used for loose motion. Leaf juice used for piles.
27.	Dichrostachys cinerea	Yelatur	Mimosaceae	Roots	Roots are rubbed in water and it is kept overnight the slurry obtained is applied in case of lymph adenitis or torsion in things.
28.	Dolichandrone falcate	Medshing	Bignoniaceae	Leaf	Leaf paste put in water is filtered and water collected and equal amount of water is added to it and once cup of it is taken for dysentery.
29.	Feronia elephantum	Kavit	Rutaceae	Leaf	Leaf powder in one cup of water is taken one or twice a day for cure acidity and ulcer.
30.	Ficus racemosa	Umber	Moraceae	Leaves	The leaves are good wash for wounds and ulcers.  Latex is aphrodisiac and administered in hemorrhoids, diarrhea, diabetes, boils, traumatic swelling and toothache.
31.	Ipomoea turbinate	Guggalvel	Convolvulaceae	Stem	Stem powder is boiled in water the decoction obtained is given against cold and fever.
32.	Jatropha curcus	Mogali errand	Euphorbiaceae	Bark	During muscular pain paste of bark powder applied on affected part and wrapped with cloth till one get relief.
33.	Lawsomi inermis	Mendhi	Lythraceae	Leaves Flowers Roots	Take juice of leaves and mix with the milk and give to the patient in piles. Make flower paste in water and stick it on the burn place. Root is astringent may be pulped and used for cure eye diseases.
34.	Mesua ferrua	Nag chafa	Clusiaceae	Flowers	Flower is used against diarrhea, bleeding, piles. The stamens of flower are used in the form of powder to treatment diarrhea with bleeding.
35.	Plumbago zeylanica	Chitrak	Plumbaginaceae	Seeds	Powder of chitrak seed,

36.	Psoralea corylifolia	Bawchi	Papilionaceae		Hairy tomentum removed from the fruits is homogenized in jiggery. It is given to children as a wormicide.
37.	Pongamia pinnata	Karnj	Fabaceae	Bark Leaves Seeds Roots	The bark is used internally for bleeding piles and beriberi. Leaves juice are used for cold, cough and diarrhea. Seed oil is used for scabies, piles and ulcers. Roots are used for cleaning teeth and ulcers.
38.	Ricinus communis	Yerand	Euphorbiaceae	Root	Paste of root of errand and kumbhi in water juice is given once or twice for treating red urination.
39.	Solanum virginianum	Bhuiringni	Solanceae	Fruit	The heated fruit are_cut into pieces they are put in mouth saliva is continuously dropped of to cure toothache.
40.	Semecarpus anacardium	Bibba	Anacardiaceae	Seed	Seed is used for headache, cough and stomach diseases.
41.	Spilanthus soleraceae	Akalkara	Asteraceae	Flower Roots	Flower increase the brain power and cough. Root powder is mixed with mustard oil and used in the treatment of pyorrhea.
42.	Terminalia tomentosa	Sadada	Combretaceae	Fruit	Decoction of fruits is taken once or twice a day for the treatment of excess heat in the body.
43.	Terminalia arjuna	Arjun	Combretaceae	Bark Leaves	Decoction of the bark has been used as ulcer wash.  Boil the bark powder with water and inhale it to cure headache and to kill worms in teeth.  Leaf juice is used for the treatment of earache.
44.	Terminalia bellerica	Bheda	Combretaceae	Seed Gum Fruit	Seed oil is used in rheumatism. Gum of the bark is demulcent and purgative. Decoction of green fruit is used for cough. Fruit is useful in dysentery, diarrhea, dropsy, piles and leprosy.
45.	Tribulus terrestris	Gokharu	Zygophyllaceae	Fruit Roots	Oil is taken out from fruit and root and given to patient as aphrodisiac.