

## **Ethno-medicinal survey on the use of medicinal plants by tribals of Satmala hillsof Kannadregion District Aurangabad (Marathwada)**

**Anil A. Kshirsagar<sup>1</sup>and Prashant K.Sanghai<sup>2</sup>**

<sup>1</sup>UG & PG Department of Botany, ShivajiArts, Commerce and Science College Kannad District Aurangabad. (MS)

<sup>2</sup>Department of Zoology, ShivajiArts, Commerce and Science College Kannad District Aurangabad. (MS)

### **ABSTRACT**

*The present study deals with the ethno medicinal plants used by the peoples of Satmalahill of Kannadregion District Aurangabad (MS) India. The information was gathered from Thakar, Bhill and Banjara tribes using integrated approach of botanical collection group discussions and interviews during the year 2008-2009. They use medicinal plants as a medicine on common diseases. But due to deforestation, loss of biodiversity and indiscriminate exploitation of wild and natural resources many valuable herbs are at the stage of extinction. A total of 40 medicinal plants species distributed in 25 families are documented. The documented ethno medicinal plants were mostly used for to cure various common diseases, infections and general weakness. This paper enumerates the near about forty plant species.*

**Keywords:** Ethno-medicinal plants, Satmalahills, Thakar, Bhill and Banjara tribes.

### **INTRODUCTION**

The ethnomedicinal plants are used by the tribals like Thakar, Bhill, and Banjaracommunity of Satmala region of Kannad on various diseases as day today ailments. The quest for documentation of traditional knowledge has been concentrated especially around traditional health practices. In India many indigenous plants are used in herbal medicine to cure diseases and heal injuries. The tribal peoples have been in the practice of preserving a rich heritage of information on medicinal plants for preparing the medicine and administration. If this information is yet to be collected systematically and comprehensively maintain in databases in a manner they would help in protecting their valuable knowledge. The traditional medicine and ethno medicinal information play an important role in scientific research<sup>[1,6]</sup> the need for the integration of local indigenous knowledge for a sustainable management and conservation of natural resources receives more and more recognition.<sup>[8]</sup>

The objectives of this study are to document the traditional medicinal plants used by the peoples of Satmala hills of Kannad region, Aurangabad District in Marathwada.

### **MATERIALS AND METHODS**

The Satmalahills of Kannadregion has spread upon sahyadri hills of Western Ghats. This range acquires about 260 sq. km area located from the boundary of Khandesh and Marathwada The region is confined to Ajanta Satmala ranges in Kannad and SillodTahesil. Geographically it is situated 74<sup>0</sup>-55<sup>0</sup> and 75<sup>0</sup>-15<sup>0</sup> east longitude and 20<sup>0</sup>-15<sup>0</sup> and 20<sup>0</sup>-30<sup>0</sup> North latitude.<sup>[7]</sup>

The traditional knowledge about the plants for treating on the common diseases was collected from the tribal peoples especially traditional healers during the year 2008-2009. Monthly visits and interviews of local and tribal peoples of villages of Satmala region was carried out for gathering the information about ethno medicinal plants and documented their knowledge for future generations.

## RESULTS AND DISCUSSION

The present study was concentrated on documentation of traditional knowledge of Bhill, Thakar and Banjara communities. During the present investigation 40 Plants species belongs to 25 families have been recorded. (Table no.1) The local tribals of Satmala and villagers are using these plants to cure many diseases like Asthma, Jaundice, Tuberculosis, Leprosy, Rheumatism, Cough fever, Vomiting, Skin diseases, Hypertension etc. The number of researchers carried out the work on ethno medicinal plants in Maharashtra.<sup>[2,3,4,9,10 &11]</sup> It was observed that practices were freshly. The knowledge of certain herbs, animals and plants that curative and palliative efforts were transmit from generation to generation. The traditional herbalists are integral part of the community and take care of the common ailments of the folk in their home setting.<sup>[5]</sup>

Table 1: shows the ethno medicinal plants used by tribals of Satmala region

Sr. No.	Name of Plants & family	Local Name	Medicinal Uses
1	<i>Amarantusviridis L.</i> Amaranthaceae	Tandulja	Used as blood purifier, used in piles, digestive agent.
2	<i>Allium sativumL.</i> Liliaceae	Lasun	Used as laxative, strength promoter, cures cough etc.
3	<i>AglemarmelosComea.</i> Rutaceae	Bel	Used in dysentery, leaves cures fever, diabetes, piles, fruit as brain tonic.
4	<i>Adathodavasica L.</i> Acanthaceae	Adhulsa	Used in asthma, diarrhea & dysentery, cough, flowers are used in eye disorder.
5	<i>Achyranthusaspera L.</i> Amaranthaceae	Aghada	Cures eye disorder, cough, worms, and indigestion used in snakebite.
6	<i>AccaciachundraWilld.</i> Mimosaceae	Khair	During dysentery concentrated bark extract given twice a day for 2-3 days continuously.
7	<i>Rutagraveolus L.</i> Rutaceae	Shitab	Juice of leaves is used as carminative.
8	<i>Syzygiumcumuni L.</i> Myrtaceae	Jamun	Seed powder is useful in diarrhorrhea, dysentery, & diabetes. Bark is used for mouth wash.
9	<i>Semecarpusanacardium L.</i> Anacardiaceae	Bibba/Bhilawa	Seed oil is applied on the painful spots, Seed pulse used as dry fruit.
10	<i>TerminaliachebulaRoxb</i> Combretaceae	Hirda	Used as gargles in inflammation of mucous membrane, astringent, purgative, laxative etc.
11	<i>TerminaliabellericaRoxb</i>	Behada	Fruit epicarp of this plant mixed with hirda which is used on indigestion.
12	<i>Tinosporacordifolia L.</i> Menispermaceae	Gulvel/Gudvel	Juice of plant with sugar is good for malarial and typhoid fever. Also it is useful for swine flue.
13	<i>Tamarandusindica L.</i> Fabaceae	Imali/Chinch	Laxative dry bark powder relieves gastric pains on aphrodisiac.
14	<i>Zizipus jujube Lamark.</i> Rhamnaceae	Bor/Ber	Used in diarrhea & fever as a blood purifier.
15	<i>AzadirachtaindicaJuss.</i> Meliaceae	Neem	Seeds are used on skin diseases & rheumatism, bark on malarial fever, Fruit are used as a tonic, bark powder cures wounds, twig are used as tooth brush.
16	<i>Asparagus racemosuswilld.</i> Liliaceae	Shatavari	Root powder is used to increase vigour and strength.
17	<i>Argemonemexicana L.</i> Papaveraceae	Pivaladhotara/ Bilayati	Root powder is mixed with sugar & is taken with water for curing skin diseases.
18	<i>Cuscutareflexa L.</i> Convululaceae	Amarvel	Plant extract is applied to get rid of dandruff.
19	<i>Cleodendronmultiflorum (L) Moon</i> Verbinaceae	Arnya	During constipation in cattle leaves are feed or leaf extract is given once in a day for few days.
20	<i>Cassia tora L.</i> Fabaceae	Trvat	Dry seed powder was used on asthma.
21	<i>Cassia fistula L.</i> Fabaceae	Bahawa	Leaves and flower are used in ringworms and other skin diseases/infections. Roots are used in fever.
22	<i>Carica papaya L.</i> caesalpiniaceae	Papita /papaya	Used as digestive laxative, tonic, nutritive and diuretic.
23	<i>Calatropisprocera R.Br.</i> Asclepiadaceae	Madar/Rui	Leaves are boiled and used to remove the thorns from the legs of farmers or villagers.
24	<i>DalbergiasisooRoxb.</i>	Sisam/sisham	Used in ghanorrhoea.

	<i>Fabaceae</i>		
25	<i>Durastramonium L.</i> <i>Solanaceae</i>	Dhotara/Dhatura	Fruits are used in skin related disorders, ulcer and worms. Plant is antidote.
26	<i>Emblicoefficialis L.</i> <i>Euphorbiaceae</i>	Awala/Amala	Used to cure dandruff, fruit used on acidity, gastric troubles.
27	<i>Euphorbia hirta L.</i> <i>Euphorbiaceae</i>	Dudhi	Used in the treatment of cough, asthma, diarrhea, piles etc.
28	<i>Ficus religiosa L.</i> <i>Moraceae</i>	Peepal/Pimpal	Used on whooping cough and genital urinary troubles, asthma etc.
29	<i>Ficus benghalensis L.</i> <i>Moraceae</i>	Vad	Plant latex is good in curing diarrhea, dysentery, piles teeth decay and rheumatism etc.
30	<i>Jatropacarcus L.</i> <i>Euphorbiaceae</i>	Ratanjot	Seeds are used on dysentery, stomach disorders, toothache, rheumatism, gum and it is used as antidote for poisoning
31	<i>Leucaszeylanica R.Br.</i> <i>Lamiaceae</i>	Gooma	Used on fever, scorpions bite snakebite. Leaves and flower are good for to cure Jaundice.
32	<i>Lagenariasieeraria</i> <i>Cucurbitaceae</i>	DudhiBhopala	In cattle during constipation green fruits are feed while in foot and mouth disease. Green fruit slices are rubbed inside the mouth.
33	<i>Ricinuscommunis L.</i> <i>Euphorbiaceae</i>	Erandi	Used as purgative, carminative aphrodisiac and urinary disorders.
34	<i>Punicagranatum L.</i> <i>Punicaceae</i>	Dalimb	Used as an anthelmintic, improving memory brain and strength. Cures fever, burning heart and throat diseases.
35	<i>Phyllanthusniruri L.</i> <i>Euphorbiaceae</i>	Bhuiawali	Whole plant is diuretic, liver tonic given on jaundice and urinary genital infections.
36	<i>Ocimum sanctum L.</i> <i>Lamiaceae</i>	Tulsi	Leaves are used against skin diseases.
37	<i>Moringaoleifera L.</i> <i>Moringaceae</i>	Sahajan	Leaf juice is used in eye diseases whole plant is abortifacient, digestive, diuretic, antihelmintic, carminative and stomach ache.
38	<i>Menthaarvensis L.</i> <i>Lamiaceae</i>	Pudina	Used as stomach ache antelmintic and diuretic. It cures bad taste of mouth, indigestion, constipation and worms.
39	<i>Mangiferaindica L.</i> <i>Anacardiaceae</i>	Amba/Aam	Leaves are used in eruption of the tongue. Plant bark is aphrodisiac, cardiac, appetizer, and astringent. Roots relieve jaundice and skin disorders.
40	<i>Manikarahexandra</i> <i>Rubiaceae</i>	Khirani	Fruits are used on Arthritis, Bloodpurifier, heel burning, wormicidal and cure jaundice.

Photograph of Satmala hills of Kannad (Study Area):





Photographs of some ethno medicinal plants



*Adathodavasica Ficus benghalensis Emblica officinalis*



*Azadirachta indica* *Asparagus racemosus* *Mangifera indica*



*Ocimum sanctum* *Phyllanthus niruri* *Tinospora cordifolia*



*Aegle marmelos* *Tamarindus indica* *Calatropis procera*

### CONCLUSION

The studied survey concludes that, the role of ethno medicinal plants for the treatment of various diseases and disorders amongst the tribals of Satmala is crucial. They use various plants, weeds, flowers, seeds, bark, stems in their day today treatment. Beyond the documented plants the tribal peoples used several other non medicinal plants. The collected information is good for next generation. In the studied area, the many tribals still have faith on the herbal remedy which plays an important role in the life of these communities.

### REFERENCES

- [1] Awadh, A. Ali. N., A-rahni IK & Linedequist U. *Abr. Jou. Traditional complement Alt. Med.* 1. **2004**, 72-76.
- [2] Borkar, L. Mate, D.M. *J.Sci. Infor.* **2013**, 6: 24-27.
- [3] Borkar, S.U. & Theng, P.A. *The Botanique* .**2010**, 14(2) 9-13.

- [4] Iqbal M.S., Suradkar, S.S., Bhadane, D.G. *The Botanique*.**2010**,14(2) 14-17.
- [5] Jain S.K. Glimpses of Indian Ethnobotany, Oxford IBH publishing co.**1981**,New Delhi.
- [6] Kala C.P. *J. of Ethnobiology*.**2005**,1(11).
- [7] Naik, V.N. Flora of Marathwada Vol. I & Vol. II AmrutPrakashan,**1998**,Aurangabad.
- [8] Posey, D.Traditional knowledge, conservation and the rain forest harvest. In: sustainable herbal and marketing of rain forest products; Islands press, Washington DC.**1992**, Pp.46-50.
- [9] Prasad Nepal, *Int. J. Mendel*,**2009**,26 (1-4): 11-12.
- [10] Puranik S. *J. Sci. Infor*.**2013**, 6:120-122.
- [11] Zingare A.K. *J. Sci. Infor*.**2012**,3:58-59.