

ISSN (Online) 2393-8021 ISSN (Print) 2394-1588



International Advanced Research Journal in Science, Engineering and Technology Vol. 8, Issue 4, April 2021

DOI: 10.17148/IARJSET.2021.8415

Study of Medicinal flora and Ethno-botanical knowledge from Amravati Regions (Maharashtra)

Bhupendra K. Dorkar

Associate Professor, Department of Botany, Shree Shivaji Science College, Amravati

Abstract: The current study is based on the forest area of Amravati regions like Melghat forest which is rich in biodiversity and medicinal plants of the local area. The purpose of current investigation is to collect and record ethno botanical knowledge from tribe which is conserved from their ancestors. The survey was conducted during the years 2018-2019 from three different age group peoples and collected information of about 20 different medicinally important plants with their scientific name, family and use. The indigenous drug formation practices were recorded that may will be helpful in providing awareness about these medicinally important plants.

Key words: Amravati, Ethno botany, Medicinal plants, Tribal and Botanical Knowledge.

INTRODUCTION

Ethno botany is the plant sciences were indigenous knowledge among the tribal's and indigenous peoples have been studies to betterment of all mankind's. The term first time coined by Hershberger, that's define as the study of plants used by tribal's. This includes medicinal uses, food value of plants, domestic animals information along with multiple uses of plants by folklore and tribal people (Kosalge *et al.*, 2009 and Wagay *et al.*, 2013). However the practical interest in the use of plant can be traced to the beginning of civilization itself. In order to escape or survive from various diseases tribal people took the help of wild or cultivated plants surrounding them which are easily available. Historically most of the plants have not only provided human with food but also provide materials to make shelter and medicines too (Jain *et al.*, 2005, Jagtap *et al.*, 2006). Hence in man's life plants are most useful even no human activity can completes after direct or indirect involvement of plants and their products. In current evaluative medicinal uses of the wild plants commonly used by tribal's of district and encourage them for preservation of their culture, traditional and medicinal knowledge, in the study area (Bhupendra K. Dorkar 2016 and 2017).

Ethno botany is the science of collecting knowledge which is hidden or less known to common peoples. This valuable information is transferred from generation to generation in secrets from among tribes (Manilal 1989 Kumar *et al.*, 2007 and Patil and Khan 2017). It also scientific studies were flora and agricultural customs of a people are studied (Jain S.K. 2009).

Such valuable information has been collected from the Melghat forest area of Amravati region of Maharashtra. The different tribes have been interviewed for folk medicines information used by them. Village folk are especially the tribal people are still using natural resources (wild plants also) available in their surroundings to treat many diseases. The earlier notable works of this area are of Chaudhari US, Hutke V. 2002, and Bhogaonkar PY, Devarkar VD author used their guidelines for collecting information.

MATERIAL AND METHODS

In present ethno botanical present 25 Korku tribal's peoples were interviewed among which 15 were males and 10 were females by showing following plants samples to them for used of particular plant and its part (Bhogaonkar PY, Devarkar 2002). The informants were divided into 3 age groups that are 20-34 years, 35-60 years and above 60 years old. Each plant was shown to all 3 groups and finalized collected information regarding medicinal importance was recorded

Age group of 35-60 years old comprised the most informants that's due to their age and experience of life in forest. The information was collected from different random locations of Melghat forest area near by Amravati regions during 2018-2019. A slandered questionnaires prepared, interviews and practioners observation, were used to illustrates information's from resource person using slandered method. (Dhore MA 1986). Collected medicinal plants were identified with the help of flora (Dhore MA 1986) and the data regarding medicinal properties of plants species was procured as per the questionnaire (Jain, 1991 and Ayyanar *et al.*, 2005).

IARJSET

ISSN (Online) 2393-8021 ISSN (Print) 2394-1588



International Advanced Research Journal in Science, Engineering and Technology

Vol. 8, Issue 4, April 2021

DOI: 10.17148/IARJSET.2021.8415

RESULTS AND DISCUSSION

Medicinal used of 20 different medicinal plants were collected and finalized after all 3 age tribal groups questioners at random locations. It was found that some plants are used in combination of others plants for particular treatment. The list of plant with their family name and medical used are listed below in table 1.

Table 1: List of Medicinal Plants and their uses

	Table 1: List of Medicinal Plants and their uses		
Sr. No.	Name of Plant (Family)	Medicinal Uses	
1	Aegle marmelos (L.) Corr (Rutaceae)	2-3 leaves along with Nilgiri (<i>Eucalyptus citridora</i>) and Limbu (<i>Citrus lemon</i>) leaves are boiled and inhalation of their vapors helps to cure nose to cure cough and cold.	
2	Achyranthes coynei (Amaranthaceae)	Root powder given internally to kill intestinal worms. Root and stem powder with milk given in general debility. Plant decoction given for easy delivery.	
3	Adathoda vasica Nees. (Acanthaceac)	Respiratory disorders, chest infections, remedy for cold, cough, bronchitis and asthma. useful in tuberculosis The juice of the leaves is used in diarrhea and dysentery and powdered leaves in malaria.	
4	Amorphophallus bulbifer (Roxb) (Araceae)	Corm powder mixed with honey treats duodenal ulcers, intestinal ulcers and blood cancer.	
5	Andrographis paniculata Nees. (Acanthaceae)	1 tablespoon of leaves decoction are taken orally for cure of fever and abdominal pain.	
6	Coriandrum sativum Linn. (Apiaceae)	Decoctions of fruit are given to cure tuberculosis after soaking seeds overnight in water.	
7	Emblica officinalis (Euphorbiaceae)	Fever, laxative, bronchitis, anemia, antioxidant, diabetes.	
8	Hemidesmus indicus (Indian sarsaparilla) (Asclepiadaceae)	Fever, urinary diseases, leucoderma, epileptic fits in children, inflamed eye.	
9	Syzigium cumini (L.) skeels. (Myrtaceae)	Stem bark of this plant is crushed and use to cure asthma and dysentery.	
10	Mangifera indica Linn. (Anacardiaceae)	Problems like stomachache and loose motions are recovered by taking fresh stems extract for 3 days.	
11	Moringa oleifera Linn. (Morigaceae)	Leaves juice of this plant is used to cure piles to the patients.	
12	Ocimum sanctum Linn. (Lamiaceae)	Leaves are used in various alignments like fever and cough by taking its juice with Gulwel (<i>Tinospora cordifolia</i>) leaves. Plant is also use as controller of diabetes and help in blood circulation.	
13	Jatropha curcas L. (Euphorbiaceae)	100ml of latex is mixed with 200-300gm of sugar and is cooked. A spoon of juice is taken orally. Fish, meat chicken are avoided during the treatment period,	
14	Justicia quinquingularis Koen ex. Roxb. (Acanthaceae)	Used to cure Used to cure acidity and urinary stones and white discharge in women.	
15	Sauromatum venosum (Ait.) Schott. (Araceae)	Used to cure tuberculosis, bleeding piles and blood cancer Corm powder used to treat scorpion bites.	
16	Solanum nigrum L (Solanaceae)	Plants berries are used to cure fever and through infections by taking its decoctions.	
17	Riccinus communis L. (Euphorbiaceae)	Sciatica can be cure by orally taking leaf powder of this plant with leaf powder of <i>Nyctanthus arburtristis</i> L with honey for 12 days.	
18	Tectona grandis Linn. (Verbenaceae)	Root and Bark past of plant is used to applied on 'Snake bite' site to cure.	
19	Tridax procumbens L. (Asteraceae)	Plant paste with jiggery is given once in a day for 3-7 days. or 50 ml of the plant juice is given thrice a day for week.	

IARJSET

ISSN (Online) 2393-8021 ISSN (Print) 2394-1588



International Advanced Research Journal in Science, Engineering and Technology

Vol. 8, Issue 4, April 2021

DOI: 10.17148/IARJSET.2021.8415

20 Vitex negundo L.	50 gm leaves with Basango (Justicia adhatoda) leaves in equal
(Verbenaceae)	proportion are boiled, the decoction, use to cure bodyache.

ACKNOWLEDGEMENT

Author is thankful to department of Botany Shri Shivaji Science College Amravati for providing Laboratory facilities for identification of plants and help for their encouragement for work by all staff.

REFERENCES

- [1]. Ayyanar M, Ignacimuthu S. Traditional knowledge of Kani tribals in Kouthalai of Tirunelveli hills, Tamil Nadu, India. J Ethnopharmacol. 2005 Nov 14:102(2):246-55.
- [2]. Bhogaonkar PY, Devarkar VD. Some unique ethnomedicinal plants of Korkus of Melghat Tiger Reserve (Maharashtra). Ethnobotany. 2002;14: 16–19.
- [3]. Bhupendra K. Dorkar. Important of Medicinal Plants and Herbal Remedies: A Review. IOSR Journal of Pharmacy and Biological Sciences (IOSR-JPBS). 2017, 12 (1)IV 88-90
- [4]. Bhupendra K. Dorkar. Study of Some Ethno-Medicinal Plants of Amravati District. International *Journal of All Research Education and Scientific Methods* (IJARESM). 2016, 4(1) 58-61.
- Chaudhari US, Hutke V. Ethno-medico-botanical information on some plants used by Melghat tribes of Amravati District, Maharashtra. Ethnobotany. 2002; 14: 100–102.
- [6]. Dhore MA. Flora of Amravati District with special reference to the Distribution of Tree species. Amravati University, Amravati, 1986.
- [7]. Jagtap SD, Deokule SS, Bhosle SV. Some unique ethnomedicinal uses of plants used by the Korku tribe of Amravati district of Maharashtra, India. J Ethnopharmacol. 2006 Oct 11;107(3):463-9.
- [8]. Jain A, Katewa SS, Galav PK, Sharma P. Medicinal plant diversity of Sitamata wildlife sanctuary, Rajasthan, India. J Ethnopharmacol. 2005 Nov 14;102(2):143-57.
- [9]. Jain S.K. (Ed) Methods and Approches in Ethnobotany. Inu, M. current trends in ethnobotany Tropical J. Pharmaceut. 2009 Res: 8, 295-296.
- [10]. Jain S.K.. Dictionary of Indian folk medicines and Ethnobotany., Deep publication New Dehli. 1991.
- [11]. Kosalge SB, Fursule RA. Investigation of ethnomedicinal claims of some plants used by tribals of Satpuda Hills in India. J Ethnopharmacol. 2009 Jan 30:121(3):456-61.
- [12]. Kumar B, Vijayakumar M, Govindarajan R, Pushpangadan P. Ethnopharmacological approaches to wound healing--exploring medicinal plants of India. J Ethnopharmacol. 2007 Nov 1;114(2):103-13.
- [13]. Patil MB and Khan PA. Ethnobotanical, phytochemical and Fourier Transform Infrared Spectrophotometer (FTIR) studies of *Catunaregam spinosa* (Thunb.) Tirven. Journal of Chemical and Pharmaceutical Sciences. 2017 Vol. 10 Issue 2 PP 950-955
- [14]. Wagay NA. Morpho-taxonomic study of some grass species of the campus of Sant Gadge Baba Amravati University. AARJMD. 2013; 1(11):63-72