



MEDICINAL PLANTS USED BY ADIVASI TRIBALS OF AHMEDNAGAR DISTRICT MAHARASHTRA TO CURE SEVERAL DISEASES

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Article Received on 11/10/2017

Article Revised on 01/11/2017

Article Accepted on 22/11/2017

ABSTRACT

The *Adivasi* tribals reside in Amednagar, Nasik, Nandurbar, Dhule districts of Maharashtra. The field trips in these areas were carried out in May and October. The ethnobotanical study revealed use of 9 plant species belonging to different families to cure cuts and wounds. The method of preparation of crude drugs and their application along with the scientific and local names of the plants is given. The knowledge on the ethnomedicinal uses of the *Adivasi* tribals can help to discover new drugs to cure cuts and wounds provided the data given is scientifically evaluated.

KEYWORDS: Ethnomedicine, Ethnobotany, diarrhea, *Adivasi* tribe, Ulcer anaemia, Skin disorders.

INTRODUCTION

The Scheduled Area notified by the Government of India consists of 5809 villages and 16 towns in 12 districts covering an area of 46,531 sq. Kms, which is about 15.1% of the area of the State. These districts are Thane, Pune, Nashik, Dhule, Nandurbar, Jalgaon, Ahmednagar, Nanded, Amravati, Yeotmal, Gadchiroli and Chandrapur. The Tribal Sub-Plan (TSP) area covers the scheduled area. In addition, the State Government felt that 773 villages in the districts of Raigad, Bhandara, Gondia, Chandrapur, Yeotmal and Pune also deserved to be extended the benefits of TSP, though these villages did not strictly satisfy the criteria laid down by the Government of India for inclusion in TSP area.

Akola district of Maharashtra has **total population of 1,813,906** as per the Census 2011. Out of which 932,334 are males while 881,572 are females. In 2011 there were total 395,690 families residing in Akola district. The **Average Sex Ratio of Akola district is 946**.

Total population of Akole tehsil is 2,91,950. According to 2011 population census enumeration total population is settled in 189 villages. Out of this 47.86 percent (1,39,730) population of Akole tehsil is tribal which is distributed in western part of tehsil. Western area of tehsil is characterized by sparse population because of thick forests, hilly area and low productivity of agriculture. Some villages like Rajur (10,046), Kotul (7917) and Akole (18278) are major settlements in tehsil. Villages of Akole tehsil were grouped according their population from 2001 census. It has been observed that in 102 Villages population is below 1046. In 62 villages

population is between 1047 and 2242. 23 villages have population between 2243 and 4421. There are only 4 villages where population is more than 15500.

The *Adivasi* tribals amounting 3.53% of total tribal population reside in remote hilly regions of Akola, Sangamner, talukas of Ahemadnager covered with dry deciduous forests. They are located in Rajur, kotul, bramhanwada, ratanwadi, bhandardara of Akola taluka and some regions of Sangamner taluka, respectively. Poor economic status, malnutrition and unhygienic conditions are the main causes of illness and due to lack of modern healthcare service the tribals depend on the traditional doctor, the *warkari* or *bhagat* and his medicines. The *warkari* treats the patients with plant-based medicines and advises them to behave in a good manner. The ethnomedicinal study was undertaken with a view to find out the plants used by *Adivasi* tribals of Maharashtra particularly to cure cuts and wounds.

METHODOLOGY

The study was carried out in April & October 2016. The information on plants used to treat various ailments is confined to *warkaries* or *bhagats*. During the studies, the *warkaries* / *bhagats* were interviewed with a view to find out ethnomedicinal plants. The plants used to cure several diseases were collected from the field, pressed, dried and mounted on the herbarium sheets.

Enumeration

The study revealed that the *Adivasi* tribals use 19 plant species belonging to different families to cure cuts and wounds & several diseases.

Table No. 1: Medicinal Plant Data in Scientific Name, Common Name, Family, Parts used and their Medicinal uses.

Sr. No.	Scientific Name	Common Name	Family	Parts used	Medicinal uses
1	<i>Butea monosperma (Lam).</i>	Palas	Fabaceae	Whole plants	Flower used in diarrhea, skin disease. Root used on piles and ulcer. stem bark used on sore throat and snake bite
2	<i>Bauhinia racemosa Lam</i>	Aapta	Fabaceae	Leaves and bark	Dysentery, headache, diarrhea, digestive disorder
3	<i>Abrus precatorius Linn.</i>	Gunj	Fabaceae	Leaves and seed	Leaves are eaten with sugar cube to cure mouth ulcer. paste of seeds is fed to cattle for expulsion of placenta
4	<i>Cassia tora L.</i>	Tarota	Caesalpinaceae	Whole plants	Whole plant extract of this species is used to cure psoriasis
5	<i>Alianthus excela Roxb.</i>	Maharukh	Simaroubaceae		Stem and bark Stem bark is used for treatment of fever and also used as tonic. Leaves pest applied externally on ring worm.
6	<i>Catharanthus roseus Linn.</i>	Sadafuli	Apocynaceae	Leaves	Two teaspoonfuls leaves juice is given orally twice a day for a week for diabetes
7	<i>Ficus hispida.L</i>	Bhui, umber	Moraceae	Whole plants	Ulcer anaemia, jaundice, inflammation and intermittent fever
8	<i>Gloriosa superba (L)</i>	Kal lavi	Colchicaceae	Whole plants	Antidote for snake poison. Recent Advances and Opportunities in Biological Sciences 304 International Journal of Applied Research ISSN Print: 2394-7500, ISSN Online: 2394-5869
9	<i>Terminalia arjuna (Roxb).Wight</i>	Arjuna	Combretaceae	Whole plants	Whole plant is use for treatment of hypertension, high blood pressure
10	<i>Tinospora cardifolia. (Thunb).</i>	Gulwel	Menispermaceae	Whole plants	Enhances memory, improves, hyperacidity, worm infestations, loss of appetite, abdominal pain, vomiting etc
11	<i>Tribulus terrestris L</i>	Gokharu	Zygophyllaceae	Fruits	Kidney stones, painful urination and urinary disorder
12	<i>Vitex negundo H.</i>	Nirgudi	Verbinaceae	Stem and leaves	Skin disorders, headaches, toothbrush, body pains
13	<i>Tephrosia purpuria.L</i>	Unhali	Fabaceae	Leaves	Leaves are use for treatment of fevers, bronchitis, eye and ear infections
14	<i>Withania somnifera (L)</i>	Aswagandha	Solanaceae	Whole plants	Arthritis, anxiety, trouble sleeping (insomnia), tumors, tuberculosis, asthma and chronic liver disease
15	<i>Moringa oleifera L.</i>	Sevga	Moringaceae	Leaves	Leaves are use for treatment of fevers, bronchitis, eye and ear infections
16	<i>Acacia nilotica (L).</i>	Babhul	Mimosoideae	Root, stem, leaves and gums	Leaves used on skin disease, diarrhea. Gum used on mouth ulcer. Stem used as toothbrush as villager for toothache
17	<i>Pergularia deamia</i>	Utrani	Asclepiadaceae	Latex	stem Latex apply on boil and wounds. Stem bark used on malaria
18	<i>Hemidesmus indicus</i>	Anatamul	Apocynaceae	Roots	Roots used on skin disease, tonsillitis, stomach problem. roots are also used in tea preparation.
19	<i>Mangifera indica Linn.</i>	Mango	(Anacardiaceae)	Stem	The shade dried stem bark is burnt into ash; ash paste mixed with coconut oil is applied to the wound twice a day till it gets cured.

DISCUSSION

The tribals mostly depend on the herbs and animals found around them in wild. The knowledge gained about the efficacy of medicinal plants by the tribes for generations is kept secret and is orally communicated to their descendents. It was observed that the tribal people used all these species very carefully. The report accounts for 19 plant species belonging to 16 families, used for cuts and wounds & several disease by *Kokani* tribals of Ahmednagar district. The knowledge on the folklore uses of the medicinal plants lead to open up ways for effective utilization of herbal medicines in future. Further work in this direction may help to discover new drugs to cure cuts and wounds & several diseases.

ACKNOWLEDGEMENT

Authors are thankful to Principal, Sanjivani Arts commerce & science college, Kopargaon for providing necessary facilities and Dr Malpure N V & Dr R R Sanap for identification of plant species.

REFERENCES

1. Almeida M R, *Flora of Maharashtra*, Vol I, (Orient Press, Mumbai), 1996.
2. Almeida M R, *Flora of Maharashtra*, Vol II, (Orient Press, Mumbai), 1998.
3. Almeida M R, *Flora of Maharashtra*, Vol III, (Orient Press, Mumbai), 2001.
4. Almeida M R, *Flora of Maharashtra*, Vol IV, (Orient Press, Mumbai), 2003.
5. Bhattacharjee S K, *Handbook of Medicinal Plants*, 3rd edn, (Pointer Publisher, Jaipur), 2001; 18: 215.
6. Chakraborty M K, Bhattacharjee A & Pal D C, Ethnomedicinal uses of some exotic plants of Purulia district, West Bengal, India, *J Econ Tax Bot*, 2003; 27(3): 559-563.
7. Deokule S S & Magdum D K, Enumeration of Medicinal plants from Baramati area district Pune, Maharashtra State, *J Econ Tax Bot*, Addl Ser, 1992; 10: 289-299.
8. S G Pradhan & N P Singh 1999. Flora of Ahmednagar District
9. Kumar S, Chauhan A K S & Chauhan S V S, Studies of Medicinal plant biodiversity with special reference folklores claims in Bharatpur district of Rajasthan, *J Econ Tax Bot*, 2003; 29(3): 518-527.
10. Painuli R M & Maheshwari J K, Some interesting ethnomedicinal plants used by *Sahariya* tribe of Madhya Pradesh, *J Econ Tax Bot*, Addl Ser, 1996; 12: 179-185.
11. Samwatsar S & Diwanji V B, Plants used for skin diseases, cuts, wounds and bruises by the tribals of Western MP, *J Econ Tax Bot*, Addl Ser, 1996; 12: 192-195.
12. Sharma B D & Lakshminarasimhan P, Ethnobotanical studies on the tribals of Nasik district, Maharashtra, *J Econ Tax Bot*, 1986; 8(2): 439-454.
13. Sharma B D & Malhotra S K, A contribution to the Ethnobotany of tribal areas in Maharashtra, *J Econ Tax Bot*, 1984; 5(3): 533-537.
14. Trivedi P C, *Ethnobotany*, (Aavishkar Publisher, Jaipur), 2002.
15. Upadhye A S, Vartak V D & Kumbhojkar M S, Ethno-medico-botanical studies in Western Maharashtra, India, *J Econ Tax Bot*, 1994; 6: 25-31.