



Ethnobotanical survey of traditionally used medicinal plants in Deulgaon Raja Tehsil

Rohitkumar R Jajoo^{1*}, Amol J Giri², P R Thate³, G R Sitaphale³

¹ Research Scholar, Sant Gadge Baba Amravati University, Maharashtra, India

² Department of Pharmaceutics, Samarth College of Pharmacy Deulgaon Raja, Buldana, Maharashtra, India

³ Research Scholar, Shri JYT University, Jhunjhun, Rajasthan, India

DOI: <https://doi.org/10.33545/27067009.2021.v3.i2a.31>

Abstract

Plants are used by tribal traditions in India in the treatment of many diseases; the traditional healers are on the decline because the younger members of the tribe have started moving towards the towns and cities and are not willing to practice this form of medicine. There is danger that the knowledge of these medicinal plants will also die with them. Some useful species are under serious threat due to unsustainable activities. Hence, a proper documentation of useful plants with their present status and local traditional knowledge as well as practices is urgently needed. The paper enumerates the traditional uses of 11 plant species belonging to 11 families, which are used by the tribal communities of the Buldhana district for the treatment of various diseases.

Keywords: ethnobotanical, inflammatory, Buldhana, Tehsil, Traditional medicines etc

Introduction

The knowledge of medicinal plants has been accumulated in the course of many centuries based on different Indian systems of medicines such as Ayurveda, Unani and Siddha. In India it is reported that traditional healers use 2500 plant species and medicine (Pei, 2001) [5]. In recent years, there has been a tremendous range of interest in the medicinal plants especially those used in Ayurvedas and other traditional systems of medicines. Drugs obtained from plants are believed to be much safer and exhibit remarkable efficacy in the treatment of various ailments. Allopathic drugs have brought a revolution throughout the world but the plant based medicines have its own unique status. There is an urgent need to document the ethno-biological information presently existing among the diverse communities before the traditional knowledge is completely lost (Rao, 1996) [8].

Buldhana district is situated in the part of Maharashtra, India. The main communities are Deulgaon raja, buldhana district along the banks of khadakpurna river and forest areas are full of flora and funa. The tribals p[people use these plant species as their medicines for their ailments, data has been generated after consultation with Vaidya of these communities as they are well versed with traditional knowledge about these medicines. The villages are inhabited by different ethnic tribes like Bhil, Bhilala, Nihal, Tadvi Bhil which are rich in traditional knowledge and totally depend on forest resources.

The dominant tribes inhabiting the study area. The major tribal communities of the district tribes comprise a larger population. The residing people move around the forest for their day today requirements, cultural activities and performing rituals. These tribal live close to the forest and are largely dependent on the wild biological resources for their livelihood. They utilize a wide variety of plants for

their basic needs such as food, fodder, fiber, wood, medicine, gum, tannin, resin, dye and shelter.

Literature survey of ethnobotanical work was done and present communication given results of ethnobotanical survey done in tehsil of buldhana district.

Materials and Methods

Study area

The present ethnobotanical study has been carried out in the Buldhana district of Maharashtra. It is situated in Satpuda ranges. The study is carried out in some villages around the reserve forest area. The villages are inhabited by different ethnic tribes like Bhil, Bhilala, Nihal, and Tadvi Bhil which are rich in traditional knowledge and are totally dependent on forest resources.

Ethnobotanical field work was carried out during 2019-2021, covering almost all seasons. Interviews were taken to gather the information on plants used for other than medicinal purposes. Information was obtained through field interviews with traditional healers. The medicinal uses and mode of administration were gathered from tribal medicine men and herbalists and compared with relevant literature. Each medicine practice was verified and cross checked. Plant specimens were collected, identified with the help of Herbarium and Floras.

Results and Discussion

During the field survey, ethnobotanical information of 11 species of medicinal plants belonging to 11 families was compiled from various habitats of the study areas.

The study shows that among these are the major diseases in the villages. During the treatment of the diseases, various forms of preparation are used. In the following enumeration, the plant species are enumerated by botanical name, family, plant part used and medicinal uses.

Table 1: List of Plant

Botanical name	Picture of plant	Family	Part of Plant used	Uses
Tradescantia spathacea		Commelinaceae	Herb	Medicinally, the plant is used for colds, sore throat, whooping cough, nasal bleeding, and also as an anti-inflammatory. Anticonvulsant
Spermacoce hispida		Rubiaceae	Flowers	In traditional medicine, Spermacoce hispida is used to heal stomach ailments and also used as tonic and anti dandruff. nephrotonic
Acorus calamus		Acoraceae	root (rhizome)	Acorus calamus is used for gastrointestinal (GI) problems including ulcers, inflammation of the stomach lining (gastritis), intestinal gas (flatulence), upset stomach and loss of appetite (anorexia). Hepatoprotective
Canna lily erebus		Cannaceae	All of the plant material has medicinal value (rhizomes)	insecticidal,
Ehretia anauca		Boraginaceae	Whole Plant	Antibacterial activities, Anti-diarrhoeal activities, Anti-inflammatory activities.
Epiphyllum oxypetalum		Cactaceae	Leaf Extract	Epiphyllum oxypetalum is used in homeopathy and recommended for urinary tract infections, for heart conditions such as the crushing pain of angina and for spasmodic pain and haemorrhage. Anticonvulsant, anxiolytics.
Agave americana		Asparagaceae	Leaves, flowers	antiseptic, wound-healing, and anti-inflammatory properties which explain its uses externally as a medicinal herb to treat burns, bruises, minor cuts, injuries and skin irritation caused by insect bites. Antidepressant, Anticonvulsant
Colophospermum mopane		Fabaceae	Bark, Leaves	n extract of the bark is used as a remedy for syphilis and as an application to inflamed eyes
Gliricidia sepium		Fabaceae	Extract	antifungal activity
Cordia sesbentia		Boraginaceae	Edible Fruits	traditional medicine for the treatment of gastrointestinal disorders
Ocimum basilicum		Lamiaceae	Herb	Treatment of headaches, coughs, diarrhea, constipation, warts, worms, and kidney malfunctions.

Conclusion

It is concluded that the persistence of medicine practices of tribals in the wildlife sanctuary area of Buldhana district; the

tribals are still dependent on indigenous knowledge for their health care, providing a cheaper, biological safe and accessible alternative to the high cost pharmaceutical

remedies. The possible benefit of plant-derived medications constitutes a rewarding area of research, particularly in countries such as India which have a rich biodiversity of plant resources coupled with a high prevalence and variety of infectious diseases where sustainable utilization of the biodiversity can be carried out. Therefore, documentation of these plants is the only way to preserve the traditional knowledge of the plant resources endemic to this area.

References

1. Jain SK. A Manual of Ethnobotany. Scientific Publishers, Jodhpur, India, 1987.
2. Jain SK. Dictionary of Indian Folk Medicine and Ethnobotany. Deep Publications, New-Delhi, 1991.
3. Maheshwari JK. Development in ethnobotany Editorial. J. Econ Taxon Bot,1983:4(1):1-4.
4. Naik VN. Marathwadyatil Samanya Vanaushadhi. (Marathi) Amrut Prakashan, Aurangabad, 1998.
5. Pei SJ. "Ethnobotanical approaches of traditional medicine studies: Some experiences from Asia," Pharmaceutical Biology,2001:39:74-79.
6. Rao RR. Traditional knowledge and sustainable development: Key role of ethnobiologist. Ethnobotany,1996:8:14-24.
7. Principe P. Monetising the pharmacological benefits of plants. US Environmental protection Agency, Washington, D.C,2005, 1991.
8. Reddy JS, Rao PR, Reddy MS. Wound healing effects of Heliotropium indi-cum, Plumbago zeylanicum and Acalypha indica in rats. J Ethnopharmacol,2002:79:249-251.
9. Senthil Kumar M, Sripriya R, Vijaya Raghavan H, Sehgal P. Wound Healing Potential of Cassia fistula on Infected Albino Rat Model. J Surg Res,2006:131:283-289.
10. Sharma BD, Karthikeyan S, Singh NP. Flora of Maharashtra state, Mono-cotyledones. Botanical Survey of India. Calcutta, 1996.
11. Singh NP, Karthikeyan S. "Flora of Maharashtra State-Dicotyledones". Botanical Survey of India. Calcutta, 2000, 1.