



# STUDIES ON MEDICINAL AND ETHNOMEDICINAL PLANTS IN AND AROUND OF B. S. PATEL EDUCATIONAL CAMPUS

**Jadhao Anand S. and Shaikh Farah T.**

Department of Botany, Bapumiya Sirajoddin Patel Arts, Commerce and Science College,  
Pimpalgaon Kale, Dist. Buldhana, Maharashtra.

**Email Id:** anand.jadhao14@gmail.com

## **Abstract:**

Ethnobotany is the systematic study of the relationship between people and plants. Ethnobotany locates plants within their cultural context in particular societies and people within their ecological contexts. Plants provides not only food and shelter to the human but also medicine, oil, gums, latex and many forest product. Present study reviews plants used traditionally or ethnobotanically by the communities in Pimpalgaon Kale of Jalgaon (jamod) Tehasil of Buldhana district, Maharashtra, India. During the present investigation 33 species belonging to 21 different Angiosperm families were studied. People mostly used these plants to treat various kinds of diseases. The plant species studied in present research are documented here along with their scientific names, common names, family, part used and their ethno botanical uses.

## **INTRODUCTION:**

B. S. Patel Arts, Commerce and Science College, (Pimpalgaon Kale) educational campus is located in Jalgaon Jamod tahasil of Buldhana district, Maharashtra state. It is 85 Km from the Buldhana district and 20 Km away from Jalgaon Jamod tahasil. The campus is 2 Km away from the village Pimpalgaon Kale on Kurha- Jalgaon Jamod road. Satpuda ranges are 25 Km away from college campus. The region comes under dry deciduous type of forest as it receives the minimum average rainfall and very hot summer. Buldhana district having the great diversity of flora and fauna. People used various medicinal and ethno medicinal plants for the treatment of different kinds of diseases. The educational campus having 3 acres of area and it showed diversity in plants throughout the year.

Ethnobotany deals with the study and evaluation of plant-human relations in all phases and the effect of plant environment on human society. Ethnobotany is considered as a branch of ethnobiology. The term

“Ethnobotany” was coined by J. W. in 1896 (Harshberger, 1896) to indicate plants used by the aboriginals: From “ethno”-study of people and “botany” study of the plants. Ethnobotany is the study of how people of a particular culture and region make of use of indigenous plants. Ethno-botanists explore how plants are used for such things as food, shelter, medicine, clothing, hunting, and religious ceremonies. The plants growing in their natural habitat serve as raw material for industries and other local uses (Salve and Kakde, 2017).

Keeping in mind the values of plants and ethno medicinal properties of the plants attempts were made to enlist the plant diversity of B. S. Patel Arts, Commerce and Science College, (Pimpalgaon Kale) educational campus in and around.

### Objectives of study:

The main aim of the study was to collect information about the vegetation of plant species which are used by local people for various purpose and also the species are identified and documented by collecting samples of plant species. Survey were made for collection of plants for their identification and used by the local people in the treatment of different kinds of diseases. The selected area was visited at regular intervals for the collection of medicinal plants, their digital photographs were also taken.

### MATERIALS AND METHODS:

The field study was carried out during year 2019-2020 in the B. S. Patel Arts, Commerce and Science College, (Pimpalgaon Kale) educational campus in and around, Dist. Buldhana (MS). Description of habitat, material and methods as well as the methods of sample collection described elsewhere (Bimal *et al.*, 1991); and identification was carried out by using the authentic floristic literature (Diwakar and Sharma, 2000; Sharma *et al.*, 1996; Singh, *et al.*, 2001).

### RESULTS AND DISCUSSION

**Table no. 1:** List of medicinal and ethno medicinal plants

Sr. no.	Botanical name	Common name	Family	Part used	Uses/Diseases
1	<i>Cassia tora L.</i>	Tarota	Fabaceae	Leaves	Diabetes
2	<i>Butea monosperma L.</i>	Palas	Fabaceae	Barks, leaves, fruits, seeds and gums	Diabetes
3	<i>Acacia nilotica L.</i>	Babul	Fabaceae	Pods, leaves, bark	Dental use
4	<i>Pongamia pinnata L.</i>	Karanj	Fabaceae	Leaves, flowers, seeds and bark	Wound healing

5	<i>Abrus precatorius L.</i>	Gunj	Fabaceae	Roots	Scorpion bite, swelling, throat problems
6	<i>Ficus racemosa L.</i>	Umbar	Moraceae	Fruit	Anthelmentic
7	<i>Feronia limonia L.</i>	Kawath	Moraceae	Leaves and fruit	Shwet prader
8	<i>Ficus benghalensis L.</i>	Wad	Moraceae	Bark, leaves, fruits, seeds and latex	Anti-diabetic, wound
9	<i>Phyllanthus emblica L.</i>	Awala	Euphorbiaceae	Leaves, fruits and seeds	Vitamin deficiency
10	<i>Ricinus communis L.</i>	Yerandi	Euphorbiaceae	Aerial parts	Jaundice
11	<i>Semicarpus anacardium L.</i>	Biba	Anacardiaceae	Fruit	Piles, worm
12	<i>Hibiscus cannabinus</i>	Aambadi	Malvaceae	Leaves and fruits	Sunstroke
13	<i>Aegel marmelos L.</i>	Bel	Rutaceae	Leaves, root and fruits	Anti-dysentery
14	<i>Adathoa vasica L.</i>	Adulsa	Acanthaceae	Leaves, roots, flowers	Cough and cold
15	<i>Catharanthus roseus L.</i>	Jaganthi	Apocynaceae	Leaves and roots	Diabetics, Menstrual disorder,
16	<i>Terminalia bellirica (Gaertn.) Roxb.</i>	Behada	Combretaceae	Bark and fruits	Vomiting, skin diseases
17	<i>Tridax procumbens L.</i>	Kambarmodi	Asteraceae	Leaves	Kraking foot, Swelling
18	<i>Syzigium cumini L.</i>	Jambul	Myrataceae	Bark, leaves, seeds and fruits	Diabetes, Acidity
19	<i>Cymbopogon citrates</i>	Gawti chaha	Poaceae	leaves	Cough
20	<i>Mimosa pudica L.</i>	Lajalu	Mimosaceae	Whole plant	Sdtiamrruhleana
21	<i>Curcuma longa L.</i>	Halad	Zinziberaceae	Rhizome	Antimicrobial, Wound healing, skin diseases
22	<i>Aloe barbadensis L.</i>	Korphad		Whole plant	sunburns, cold, sores
23	<i>Argemone Mexicana L.</i>	Dhatura	Papaveraceae	Leaves	Body heat

24	<i>Tinospora cordifolia</i> (Thunb) Miers	Gulvel	Menispermaceae	Arial part	Flue, fever
25	<i>Bahunia reacemosa</i> Lam.	Apta	Leguminosae	leaves	Wound healer
26	<i>Ocimum sanctum L.</i>	Tulasi	Lamiaceae	Whole plant	Fever, cough
27	<i>Calatrophis procera</i> Aiton	Rui	Asclepiadaceae	Whole plant	Cough
28	<i>Azadirachta indica</i> A. Juss	neem	Meliaceae	leaf, stem bark	boils and blisters, skin diseases, cough
29	<i>Celosia argentea L.</i>	kuradu	Amaranthaceae	seed	skin rashes and itching
30	<i>Cynodon dactylon L.</i>	Durva	Poaceae	root	Ulcer and boils.
31	<i>Cyperus rotundus L.</i>		Cyperaceae	root	to treat blisters
32	<i>Datura metel L.</i>	Kala-Dhotra	Solanaceae	seed	scabies and psoriasis
33	<i>Withania somnifera</i> (L.) Dunal	Ashwagan dha	Solanaceae	Leaves	cold and fever

Above listed important medicinal plants were found in and around of B. S. Patel Arts, Commerce and Science College, (Pimpalgaon Kale) educational campus, Dist. Buldhana (MS) along with their local name(s), family, distribution, parts used and ethno-medicinal uses. The present study records 33 species of ethno-medicinal plants representing 21 families.

The present study was aimed to investigate plants used by local and tribal peoples of villages for their medicinal values. During the present investigation 33 different plants species representing 21 families used for a medicinal purposes by local and tribal peoples. Knowledge regarding occurrence and availability of selected species was obtained from the local people through participation either by interview or workshop. Semi-structured interviews were carried out. A brief information including botanical name, family, local name, parts used and their medicinal value by the tribal peoples.

The tribal villagers are using these plants to cure many diseases like Blood purifier, Anti-pregnancy, Urinogenital disorder, Menstrual disorder, Hypertension, Cough, Diarrhea, Dysentery, Wound healing, Diabetes, Jaundice, Sunstroke, Fever, Skin diseases etc. These people use to prepare the plant product as decoction, oral treatment, ointment etc.

The extracts and paste are the two main source of methods for treatments of diseases. However, use of a particular plant part depends on the plant habit and user's needs. The most frequently used plant parts in the preparation of herbal remedies were leaves, followed by fruit, roots, rhizomes and whole plants. Seeds, flowers, bark, gum, latex, culms and bulbs have also been used.



The use of specific plant parts for treatment suggests that these parts have strongest medicinal properties but it needs confirmation of biochemical analysis and pharmaceutical screening to cross-check the local information. Liquids part such as water, juices, jaggery, tea, honey, mustard oil, ghee (butter) and milk are mixed with plants or plant parts during the preparation of remedies. The prepared remedies are mostly administered orally, less frequently dermally or both orally and dermally. Similar kinds of research were carried out by some author from different parts of Maharashtra state (Chavhan and Margonwar, 2015; Korpenwar 2012; Shinde, et al., 2018)

## REFERENCES

Diwakar, P. G. and Sharma, B. D. (2000). Flora of Buldhana District, Flora of India Series 3. *Botanical Survey of India*, pp. 297.

Sharma B. D., Karthikeyan S., Singh N. P. (1996) Flora of Maharashtra state, Monocotyledones. Botanical Survey of India. Calcutta.

Singh N. P., Lakshminarasimhan P., Karthikeyan S., Prasanna P. V. (2001) Flora of Maharashtra State- Dicotyledones Botanical Survey of India, Calcutta, Vol. 2.

Shinde Y. P., Arangale K. B. and Jadhav S. A. (2018) Ethanobotanical Study of Plant Species used by Tribal Communities around Ankai Fort of Yeola Tehsil of Maharashtra, India, *International Journal for Research in Applied Science & Engineering Technology*, 6 (IV); 1144-1147.

Korpenwar A. N. (2012) Ethnomedicinal Plants Used To Cure Skin Diseases In Ambabarwa Wild Life Sanctuary Area of Buldhana District (M.S.), India, *International Journal of Recent Trends in Science And Technology*, 2(3):36-39

Chavhan Pankaj R. and Margonwar Aparna S. (2015) Ethnobotanical Survey of Markanda Forest Range of Gadchiroli District, Maharashtra, India, *British Journal of Research*, 2(1):55-62

Harshberger J. W. (1896). The purpose of Ethnobotany. *Bot. Gaz.*; 21:146-158.

Salve Mahendra S. and Kakde Nilesh P. (2017) Flora of Shri Vyankatesh arts, comm. & science college campus Deulgaon raja dist. Buldhana (MS), *International Journal of Advanced Scientific Research*, 2(2): 54-56.