



## Ethnomedicinal studies of some rare plants of Hingoli district, Maharashtra, India

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### Abstract

This research paper presents the findings of an investigation on traditional remedies of diarrhea and dysentery among the ethnic group (*andh* tribe) in the Hingoli district of Maharashtra state, India. 20 valuable species belonging to many different families were identified with relevant information and are documented alphabetically in this paper with regard to their botanical name followed by family name, local name, parts used, mode of preparation and medicinal uses.

**Keywords:** Medicinal plants, rare species, Hingoli District, Maharashtra

### Introduction

The plants have been the important source of medicines used by man from prehistoric times for relieving suffering and curing ailments. The need for the integration of local indigenous knowledge for a sustainable management and conservation of natural resources received more and more recognition (Posey, 1992) [2]. In India, it is reported that traditional healers use 2500 plant species and 100 species of plants serve as regular source of medicine (Pie, 2001) [1].

This part should be in Aundha nagnath hill region of Hingoli District have rich diversity of vegetation mostly tribal and rural communities, depending on plant resources for their day to day life. The rural communities are well versed with traditional knowledge and are using various parts of major, minor plants and tree species extensively for health care and other purposes. The present study, therefore aimed to highlight 20 ethno medicinal plant species belonging to many different families with their local name of plant parts used as medicine in Aundha nagnath hill region of Hingoli District in Maharashtra. The objective of this study is to document the traditional medicinal plants used by the peoples of Aundha tehsil of Hingoli district (M.S.), India.

### Materials and Methods

The exploration studies of the Medicinal plants are conducted from September to November 2016. First-hand information regarding the plants in the selected sites and the conventional knowledge about the medicinal uses of plants were obtained through interview of local healers, during field survey, with data collection. The priority had given to the older people in study sites for collecting exact knowledge about the medicinal uses of the selected plants. Collected information is match with the available literature. The collected medicinal plants are deposited in the department of the Botany at Toshniwal college, Sengaon. The specimen are identified by the using of renowned flora (Naik 1979, 1998, Singh and kirtan-2001) [3, 4]. Plant species have been enumerated alphabetically with their scientific name, vernacular name, family name and their Ethnomedicinal usage, dosage, duration and formulation.

### Results and Discussion

The tribes and rural population of India are highly dependent on the medicinal plant therapy for meeting their health care needs. There is an urgent need to catalogue the plants used by indigenous around the Country and to collaborate with chemists to analyze the compound in medicinal plants. It is high time for agriculturists and foresters to introduce new crops, for anthropologists to gather more information on traditional culture and conservation of biodiversity and the sustainable use of plant resources. The survey in different area Aundha hill region revealed that we were engaged in the collection of large no. of plant parts like stems, barks, leaves, flowers, fruits and roots of their day to day requirements.

The collected ethnobotanical information of medicinal plants is presented in the Table 1.1. Total 20 different plant species were collected from selected study area. The different parts of Bael are used for various therapeutic purposes, such as for treatment of Asthma, Anaemia, Fractures, Healing of Wounds, Swollen Joints, High Blood Pressure, Jaundice, Diarrhoea Healthy Mind and Brain Typhoid Troubles during Pregnancy (Saswati Parichha 2004) [6]. The unripe dried fruit is astringent, digestive, stomachic and used to cure diarrhea and dysentery. Sweet drink prepared from the pulp of fruits produce a soothing effect on the patients who have just recovered from bacillary dysentery. Leaf poultice is applied to inflammation; with black pepper for edema, constipation and jaundice. *Achyranthes aspera* Linn. is a well-known plant drug in Ayurvedic, Unani-Tibbi, Siddha, Allopathic, Homeopathic, Naturopathic & Home Remedies [Dhale *et al.* 2013] [9]. *Achyranthes aspera* (Amaranthaceae) is an important medicinal herb found as a weed throughout India. Though almost all of its parts are used in traditional systems of medicines, seeds, roots and shoots are the most important parts which are used medicinally. It is also useful to treat cough, renal dropsy, fistula, scrofula, skin rash, nasal, infection, chronic malaria, impotence, fever, asthma, piles and snake bites [Singleton 1999] [11]. This plant is astringent, digestive, diuretic, laxative, purgative and stomachic. The juice of the plant is used in the treatment of boils, diarrhea,

dysentery, hemorrhoids, rheumatic pains, itches and skin eruptions [Londonkar *et al.* 2011].

**Table 1:** List of plants used to treat number of diseases in the study area

Sr. No.	Name of Species	Family	Parts used	Uses
1	<i>Aegle marmelos L.</i>	Rutaceae	Fruit, leaves	Dysentery, cough, laxative
2	<i>Achyranthus aspera</i>	Amaranthaceae	Leaves, roots	Cough, cold, fever.
3	<i>Abrus precatorius (L)</i>	Fabaceae	Leaves, Seeds	Paste in stiffness in shoulder joints, Asthma, Burns
4	<i>Adhatoda vasica</i>	Acanthaceae	Root, leaves	Bronchitis, asthma, fever, jaundice.
5	<i>Aloe vera</i>	Liliaceae	leaves	Skin diseases, inflammation, fever.
6	<i>Asparagus racemosus</i>	Liliaceae	Roots	Dysentery, appetite, Gastrointestinal activity, inflammation, liver diseases.
7	<i>Bauhinia purpurea (L)</i>	caesalpinaceae	Bark, leaves	Gripping pains from stomach and bowels abscesses, Fever, bark is used for fractures.
8	<i>Bombax ceiba</i>	Bombacaceae	Spine, cotton	Pimples, astringent ,homeostatic
9	<i>Butea monosperma</i>	Fabaceae	Bark, leaves, flower	Piles, tumors, diarrhea, fractures of bones.
10	<i>Carissa carandus (L)</i>	Apocynaceae	Root, ripe and unripe fruits	Laxative, cooling, antipuretic, aphrodisiac.
11	<i>Centella asiatica (L)</i>	Apiaceae	Root, leaves	Tonic for hair growth, skin diseases, piles.
12	<i>Helicteris isora (L)</i>	Sterculiaceae	Bark, pods	Diarrhea, dysentery, diabetes.
13	<i>Heidesmus indicus</i>	Asclepiadaceae	Roots, latex	Fever, urinary diseases, inflamed eyes.
14	<i>Mimosa pudica (L)</i>	Mimosaceae	Roots, leaves, fruits	Urinary complaints, mouth and throat inflammation, ulcer.
15	<i>Plumbago zeylanica (L)</i>	Plumbaginaceae	Root, latex	Scabies, rheumatism, leprosy.
16	<i>Semecarus anacardium (L)</i>	Anacardiaceae	Root,leaves,seeds	Asthma, cough, skin diseases.
17	<i>Terminalia cheblla (Retz)</i>	Combretaceae	Fruits	Ulcer, dental caries, laxative, antioxidant, antidiabetic, renoprotective, hepatoprotective, anticancer
18	<i>Terminalia bellerica</i>	combretaceae	fruits	laxative, diuretic, cardiotoxic
19	<i>Tinospora cordifolia</i>	menispermaceae	Leaves,stem	Fever, cough, cardiotoxic, chronic diarrhea.
20	<i>Vitex negudo (L)</i>	Verbenaceae	Roots, bark, leaves	Headachae, inflammatory swelling, typhoid, growth of hair.

Among the plant parts, the leaves and bark are most largely used for treatment of various diseases. The parts of plant like stem, seeds, flower and laxative are also used to cure the various diseases. Traditional systems of medicine make use of nearly 7000 species. Out of the 17000 economic species of angiosperm known worldwide about 5000 occur in India. Of these 3000 are medicinal plants in which root drugs constitute the largest number of species followed by drugs originating from fruits. (vanilla *et al.*, 2008) [12]. Most of the medicinally important plants are forest based or the dwindling area of forest. However improper harvesting, neglect of preservation accompanied by unscientific and vast collection has led them to a stage where many of them are on the verge of extinction. This study indicates the local peoples of this area well equipped with the knowledge of medicinal plants and their uses.

### Conclusion

This study concluded that even through the accessibility of western medicine for simple and complicated diseases is available. Many people in the studied parts of Aundha nagnath is still continue to depend on medicinal plants at least for the treatment of some simple diseases. It this becomes necessary to acquire and preserve this traditional system of medicine by proper documentation and identification of specimens.

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