

A Study of Select Ethno Medicinal Plants in Shirur Kasar Tehsil of Beed District: A Critical Investigation

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Abstract:

A survey of Ethno Medicinal plant was conducted from Shirur Kasar Tehsil of Beed District. Present study documents 5 medicinal plant species, most commonly found in Shirur Kasar tehsil. A total of 5 medicinal plants distributed in 5 species and 5 different families were collected and identified. These plants are Arjuna, Varun, Nilgiri, Jakhmjodi and Gunj. The roots, leaves and seeds of select plants have been commonly used in many diseases like chest pain, pain and inflammation, blood sugar, cough problems and hair fall. Thus, the present study explores the critical investigation of select Ethno Medicinal Plants in Shirur Kasar tehsil of Beed District.

Key words: Ayurveda, Ethno Botany and Medicinal Use

Introduction:

The ayurveda is also known as *Ayurvedic* medicine. It is a traditional form of Indian medicine. It is a best example of a disciplined system of traditional health care, both preventive and therapeutic. It has a lengthy history, with its roots dating back to India around 3000 years ago. It is still widely used in many regions of Asia, particularly India, where it accounts for the bulk of people's health care either alone or in addition to Western practises. Research on plants from a cultural perspective is crucial, "to expose the ancient times and current culture about plants in the world and reserving original knowledge of medicinal plants. The quantitative ethno botanical studies were used to identify the plant uses as food, human health care medicines, veterinary medicine and economically important."¹

Dr. J. W. Harshberger (1895) used the word "Ethno botany" to designate his area of study, which he described as the investigation of Plants Employed by Primitive and Aboriginal People, during a presentation he gave in Philadelphia. Further, he suggested that "ethno botany" is a field that sheds light on the "cultural position of the tribes who used the plants for food, shelter, or clothing"². "Ethno botany is the study of interrelations between humans and plants; however, current use of the term implies the study of indigenous or traditional knowledge of plants."³ The field was concerned with the investigation and evaluation of plant-human associations at every stage and the impact of the plant environment on human society. Some examples of how plants have been utilised in human communities that ethnobotanists study include their employment in cooking, healing, cosmetics, textiles, currency, ritual, clothing, and even musical instruments.

Area of Research:

Beed is a significant district in the state of Maharashtra's Marathwada area. It is bounded to the north by Aurangabad and Jalana, to the east by Parbhani, to the southeast by Latur, to the south by Osmanabad, and to the west and south by Ahmadnagar. Its northern limit is $18^{\circ}28'$ to $19^{\circ}28'$, while its eastern limit is $74^{\circ}48'$ to $76^{\circ}45'$ in longitude. Beed town is the seat of authority for that district. Beed, Georai, Patoda, Ashti, Shirur (Kasar), Ambajogai, Kaij, Majalgaon, Dharur, Parli (Vajjnath), and Wadwani are the eleven tehsils that make up the greater Beed region for administrative reasons. Our current examination focuses on one particular tehsil (out of a total of eleven): shirur kasar tehsil Kasar (Fig: 1)



(Fig: 1) Map of the study area

Objectives of the study:

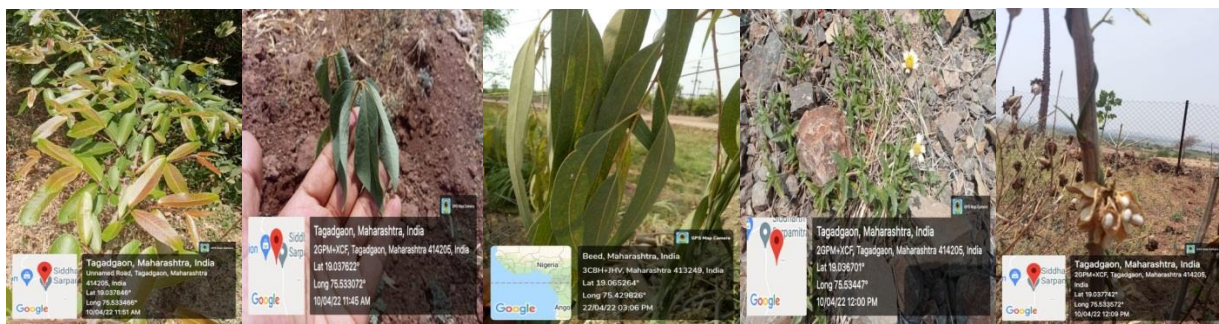
1. To collect information about medicinal plants from Shirur Kasar Tehsil of Beed District
2. To make awareness about ethno medicinal plants in Shirur Kasar Tehsil of Beed District
3. To study the medicinal use of ethno medicinal plants from Shirur Kasar Tehsil of Beed District

Research Methodology:

At the commencement of this research, survey visit was made to Sarpradni Project situated at Padali, Shirur Kasar tehsil. The researcher has been taken interview of Sidharth Sonwane and his Wife to understand primary information about ethno botanical plants. The researcher has taken help of local expert to identify the plants, herbs and their medicinal use. The present research has used a field survey method, interview method and talks with local expert's method to complete the work. A help of authentic literature and specimen is also taken to complete the work. (Fig. 2 & 3)



(Fig. 2: Personal interviews and talks with local residents)



(Fig. 3: A collection of ethno medicinal Plants)

Results and Discussion:

Ethno medicinal study is noteworthy to understand social, cultural and economic factors influencing health-related issues. Now a day most human beings prefer traditional medicine over allopathic medicine because every plant has medicinal properties since three thousand years ago. Therefore, researcher has chosen the ethno medicinal study to understand medicinal value of ethno botanical plants.

Plant Profile: Arjuna Tree

Kingdom- Plantae
Division- Magnoliophyta
Class- Magnoliopsida
Order- Myrtales
Family- Combretaceae
Genus- Terminalia
Species- T. Arjuna
Botanical Name- Terminalia Arjuna

Description: Arjuna, from the Sanskrit, literally means "white and clean as the brightness of day." Arjuna's literal translation from Sanskrit is "white and clean as the brightness of day." Arjuna is a 60-85 foot tall evergreen tree with yellow blooms and conical leaves. Arjuna's fruit measures between 2.5 and 3.5 centimetres in length, is woody and fibrous, is glabrous, has five

hard wings, and is ribbed and grooved by many curving veins. The Arjuna tree is one of India's sacred trees, according to legend. Due to the curse cast upon him by the saint Narada, Kubair has given birth to twins, and one of them is Arjuna. The Hindu gods Vishnu and Ganpati are often appeased with offerings of its leaves and petals. Its history of usage in Ayurvedic medicine goes back centuries.⁴

Due to my work as a researcher, I was able to gather Arjuna Tree and other ethno medicinal plants from the dense forest of the Sarpradni project in Padali, Shirur Kasar tehsil. Sarpradni's director, Shiddharth Sonwane, is an advocate for both traditional medicine and wildlife. He compared Arjuna to a big tree, explaining that he had leaves. Arjuna trees may grow to be anywhere between 60 and 85 metres tall. It has conical, yellow-flowering leaves and remains green year-round. The greyish bark is smooth and unbroken. The fruit is 2.5-3.5 cm in length and has fibrous woody, glabrous, five robust wings that are made obvious by many curving veins. The fruits of the arjuna tree may be found throughout the months of September and November, with flowering occurring between the months of March and June. He further discussed the medicinal use of the Arjuna as follows; "it contains calcium salts, magnesium salts, and glycosides which has used in Ayurveda. It helps to maintain a normal cholesterol level, as it contains antioxidant properties such as Vitamin E. It strengthens the heart muscle and keeps the heart functioning properly. It also improves cardiovascular function. It also used to treat coronary artery disease, heart failure, edema, angina and high cholesterol. This tree is very dry and tough due to that it is used for daily routine work by native."⁵

Medicinal Uses:

There are many medicinal plants in Ayurveda, which can be used to keep the body healthy and also to keep away many problems. One of them is the fruit of Arjuna. Arjuna fruits are very nutritious and useful. Health's related problems can also be overcome by using them. The main parts of Arjuna like the stem bark, root bark, fruits, leaves and seeds, has its own medicinal properties. The benefits of Arjuna bark are very helpful in relieving acidity. If fever has occurred due to change of weather or due to any infection, Arjuna helps a lot in relieving its symptoms. If you are suffering from the problem of blood bile, then taking Arjuna will give quick relief. Drinking decoction of Arjuna or making tea from the bark of Arjuna reduces swelling. Applying the powder of Arjuna bark mixed with honey is beneficial in acne and sarcasm. Drinking a decoction of Arjuna bark is also beneficial in leprosy. Using Arjuna bark not only provides relief from bone pain but also helps in bone joining. Arjuna bark helps a lot in stopping excessive bleeding. It is much useful for woman. Based on the evidence of available plants, Arjuna is commonly used to treat cardiac issues like angina, chest discomfort, hypertension, and hyperlipidemia. It is also effective against infections of the ear and the urinary tract. Thus, both the fruit and the bark of the Arjuna tree are utilised as medicine in Ayurveda.

Plant Profile: Varuna Plant

Kingdom- Plantae

Division- Magnoliophyta

Class- Magnoliopsida

Order- Brassicales

Family- Capparaceae

Genus- Crateva

Species- *C. nurvala*
Botanical Name- *Crateva religiosa*

Description:

Varuna is a slow-growing tree found in almost all parts of India. It is a plant of Ayurveda medicine, known as *Hadavarna* or *Hadavarna* in Marathi. In the Sanskrit language the word Varuna means ‘**what people sincerely desire**’. **Setuvrksha (tree that fetters diseases) and marutapaha (that what .rrtis diseases arising from the destabilization of the humour aata) are the other Sanskrit names of this plant.**⁶ It belongs to Capparaceae family which has *C. nurvala* species. It is known as ‘Three Leaved Caper’ in English.⁷ Leaves are trifoliate, odd and estipulate. The flowers are large, white and fragrant, and the fruits are round, 3-4 cm in diameter, smooth and yellow. The fruit contains many seeds. The tree is found in damp and shady areas along riverbanks and streams in almost every province of India. They farm near Muslim cemeteries. Two or three times in a year, delicate white-yellow flowers bloom in the month of April. And then the fruits came.

Medicinal Uses:

As discussed with Siddhartha Sonvane, he tells that *Varun* plant is found to be beneficial in the anti-inflammatory area as it reduces the joint pain inflammation. It helps in controlling wrinkles and increases moisture content in the skin because of its oily nature. The bark of the *Varuna* tree is said to stimulate the hunger. Gas, stomach discomfort, anorexia, tumours, liver problems, flatulent dyspepsia, helminthiasis, and fever can all be alleviated by drinking a decoction made from Varuna leaves. Leafy greens are another edible option. The leaves are used as a tonic in the form of juice or vegetables. It is considered to be an anticonvulsant in traditional Filipino medicine.⁸

Plant Profile: Nilgiri Tree

Kingdom- Plantae
Class- Mammalia
Order- Myrtales
Family- Myrtaceae
Genus- Eucalyptus
Species- *E. globulus*
Botanical Name- Eucalyptus

Description:

Nilgiri is one of the Ayurveda medicinal plants. It is known not only for their biodiversity but also for their diversity in ethnic groups such as the Kurumbas, Todas, Irula, Kattunayakas, Paniya and Kotas. “The genus Eucalyptus is a member of the Myrtaceae family, mainly originated from Australia, comprising of more than 700 species.”⁹ The fruit of the eucalyptus tree is small in size and strong and open like a deer. Eucalyptus trees grow taller and appear to grow more in low rainfall areas. The environment around this tree is dry and its trunk is white. A eucalyptus tree looks very dry. The leaves of this tree have a large number of oil glands so the leaves of this tree are oily.

Medicinal Uses:

The smell of eucalyptus oil is aromatic. Eucalyptus oil is an antiseptic and is bitter. Eucalyptus oil is digestive and is extremely useful in cough and flatulence. This oil is used to dilute phlegm due to cold. Eucalyptus oil is also used as an antiseptic. Eucalyptus oil is useful for bronchitis, respiratory diseases, and respiratory disorders. Eucalyptus oil is used to make essential oils, industrial oils and medicinal oils. Eucalyptus oil is an antiseptic and antibacterial, so it kills the germs that cause infections. Eucalyptus oil is antifungal and is useful in treating skin ailments and other infectious diseases.

Plant Profile: Jakhamjodi Plant

Kingdom- Plantae

Order- Asterales

Family- Asteraceae

Genus- *Tridax*

Species- *T. procumbens*

Botanical Name- *Tridax procumbens*

Description:

The jakhamjodi is a flowering plant that belongs to the Asteraceae family. It is commonly known as “coatbuttons or tridax daisy.”¹⁰ It grows mostly in *Murumad* (sandy) region. It is a weed that grows in fields and barren lands in India. In Marathi, this shrub is called “Ekdandi, Dagdi Pala and Bandukiche Phool.”¹¹ It is a plant that grows about a foot from the ground. It is spread out like a vine and is very soft. With a slight push, it breaks. The parrot-green stalk bears an unripe flower. After a few days of flowering, it dries out and leaves dark black-brown seeds. These seeds spread everywhere with a gust of wind. It is a neglected plant, growing abundantly in low water areas, open meadows, and near farm areas.

Medicinal Uses:

“*Tridax procumbens* has been extensively used in Indian traditional medicine for wound healing, as anticoagulant, antifungal and insect repellent; in diarrhea and dysentery.”¹² The juice extracted from the leaves is used directly on the wound. Extracts of its leaves were used for skin infections in traditional medicine. It is also used to treat boils, blisters, and cuts by local healers in parts of India. The *Tridax* plant is widely distributed in India, where it serves as a source of traditional medicine for a wide range of conditions.

Gunj Plant:

Plant Profile (Scientific Classification)

Kingdom- Plantae

Division - Magnoliophyta

Order- Fabales

Family- Fabaceae

Genus- *Abrus*

Species- *A. precatorius*

Botanical Name- *Abrus precatorius*

Description:

Gunj is a vine-like tree which has five types of echoes namely red echo, black echo, white echo, green echo and yellow echo. “Based upon the colour of the seeds, three types of Gunja have been described i. e. *Rakta* (red), *Shweta* (white) and *Krishna* (black). Completely white coloured seeds are rare.”¹³ It is a perennial vine belonging to the Leguminosae family and its botanical name is *Abrus precatorius*. This small branched deciduous vine grows up to five to six meters tall on another tree. It is commonly found in tropical, sparse and humid coastal forests. It is found in Marathwada, Konkan region of Maharashtra and in the northern Karwar region of Karnataka. Gunj leaves are compound, rectangle and 5-10 cm long, the foliage is short and 10-20 pairs. The flowers are kite-shaped, small and pink and sprouting in large numbers in the rainy season.

Medicinal Uses:

Gunja roots, leaves and seeds are medicinal. In addition to its numerous uses in the treatment of leucoderma, this plant is also used to heal wounds and ulcers produced by dogs, cats, and mice. The roots are used to treat jaundice and hemoglobinuric bile. Root paste is used to treat belly ailments, swellings and diarrhea. The root is chewed as a remedy for snake bites. Roots and leaves are useful for fever, headache, asthma, tooth decay and thirst. Biting the leaves helps relieve a sore throat. Seeds are mildly poisonous, but the rest of the plant is far more dangerous. You may cure a migraine by sniffing their powdered brown nose.

Conclusion:

Plants are essential to human survival because they provide oxygen, aid in medication production, and serve as natural barriers against pollution. Numerous plants have significant medical potential and contain medicinally active compounds. Many plant species are in danger of extinction because of human activities including global warming, an expanding human population, a lack of government funding for research efforts, and a general lack of knowledge about therapeutic plants. To address this issue, researchers in Shirur Kasar tehsil, known for its rich cultural history and biodiversity and hence a significant centre of ethno botanical study, conducted studies on the identification and categorization of therapeutic plants. As a result, the study here is centred on the indigenous medicines used in Shirur Kasar tehsil.

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