



RESEARCH ARTICLE

ALGAE BIOTECHNOLOGY

**ETHNO-MEDICO-BOTANICAL STUDIES ON KATEI BABA SACRED GROVE AND
NEARBY AREA OF ADHALWADI FROM AKOLE TALUKA, AHMEDNAGAR
DISTRICT (MAHARASHTRA)**

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ABSTRACT

Ethno-medico-botanical survey was conducted in the village, Adhalwadi and nearby area of Akole taluka in Ahmednagar district. In the study area Katei Baba, sacred grove was selected because of faith of the traditional healers. The area is rich in biodiversity. It was revealed that 20 medicinal plant species have been used for various remedies. The information collected from the traditional healers is rich and faithful source for traditional knowledge regarding medicinal plants.



KEY WORDS

Ethno-medico-botany, medicinal plants, traditional healers, Akole taluka.

INTRODUCTION

The traditional or tribal societies of diverse regions of the planet have exposed various uses of natural resources around them. The traditionally followed system is based on their necessities, instinct, observations, trial and error method and generation to generation's experience. The traditional knowledge is based on not only plants but also on some animal products¹⁻³.

Ancient Hindus had the recognition for cultivating what is now called 'Ethnobotany'. In the 1950s Janaki Ammal initiated ethnobotanical work in India⁴. India is very rich in faunal and floral diversity. It encompasses about 45,000 species of plants and 81,000 species of animals⁵.

Study Area

The Akole taluka of Ahmednagar district is rich in tribal inhabitants. The study area Adhalwadi -Katai Baba (sacred grove) and surrounding area belong to Akole taluka play an imperative role in medicinal plant collection. The sacred grove area is more than an acre. In the grove, the plant cutting is proscribed, results in dense patch of forest. The protection of sacred grove was not only for conservation of biodiversity but also as some sort of fear and water source⁶⁻⁸. The name of deity suggests or might be ancestor of tribal families. The deity is male god/ ancestor, stone polished with red oxide (vermilion) (photoplate:1). At the time of ploughing and harvesting of rice, people arranged festival and sacrificed the cock (photoplate: 2). The sacred grove is with thickest patch of *Carisa congesta* Linn. and *Lantana camara var. acultea*. These two species which are found here grew naturally and as time goes on, the patch becomes thicker, because forbidden for cutting of tress.

MATERIAL AND METHODS

During the field investigations, special efforts were made for collection of first hand information on traditional knowledge of plants used by the tribal. More than ten intensive field trips were conducted in the study area covering different seasons of the year 2005 and 2007. Various visits were made to various remote localities emphasized specially in the tribal rich area to establish a friendly relations and rapport with the inhabitants. The traditional knowledge was gathered through subsequent conversations with local herbal practitioners. Many of them used to carry on this profession as their family creed. Some of them were very suspicious and not readily prepared to divulge their secret knowledge while others appear to have a sense of fear among them because they claim that they do not have proper authority to practice herbal medicines.

In most of the time, traditional healers or *vaidus* came with us in the forest depending upon their physical conditions. In the field, interviews are noted down in the notebook in standard format.

The collected plant specimens were preserved as herbarium materials⁹⁻¹⁰. Proper identification of the plants has been done with the help of regional floras and correct botanical names were ascertained for each of them in accordance with the rules of International Code of Botanical Nomenclature¹¹⁻¹³.

RESULTS AND DISCUSSION

The results on the survey were presented in the enumeration of plants in the Table 1. Enumeration follows the pattern of Botanical name, Local name, Family and collection



number in bracket, frequency of quote and their importance.

In Ahmednagar district 20 sacred groves are reported¹⁷. The Katai Baba sacred grove, Adhalwadi is an addition to the present status. In the sacred grove and surrounding area total 20 species of plants belonging to 13 families and 20 genera were noted and were discussed as they have intense value. The family Fabaceae and Lamiaceae are represented by maximum number of plant species i.e. 3 and the second ranking reporting to 2 plant species are family Verbenaceae and Caesalpiniaceae. The four plant species are used for skin diseases, six plant species for water borne diseases, four plant species are used on the wounds or cuts and one plant species is used on scorpion sting, conjunctivitis and as an abortifacient. Out of 20 plant species dried or fresh plant parts were used for various remedies. The plant parts were used such as leaf for 6, bulb / rhizome / roots for 2, flower for 1, seeds / fruits for 8, bark for 2 and 1 whole plant for 1 remedies.

From the survey it was clear that skin, eye and water borne diseases are most prevalent because of unhygienic conditions. It also gives information that people whose life style depends on forest have sound knowledge

of plant species useful for wounds or cuts and scorpion stings. The knowledge of abortifacient plant species shows primitive life style and less dependency on allopathic practices.

Survey not only gives the information regarding the medicinal plants but also gives information about the other uses. The plant species *Madhuka longifolia* (Moha) is used for liquor preparation; wood of *Woodfordia fruticosa* is used for making central axis of agricultural equipments or bullock cart and wood of *Bauhinia purpurea* is used for fencing and leaves as a vegetable. The *Clematis triloba* and *Cocculus hirsutus* are used as fodder and sometimes vines are used as a rope.

Though the practice of traditional health care system is effective, safe and it has a few side effects, the application of such wisdom on herbal drugs is declining due to faster rate of developed urban culture and destruction of habitats. During the time of survey it was observed that the life style of the tribal communities have been changing very rapidly due to modernization. Thus it was necessary to record all information as early as possible for future investigations about the sustainable use of the plant species.

Enumeration

Sr. No.	Family, Botanical Name and Herbarium No.	Local Name	Fre. of quote	Importance
1	Fabaceae <i>Abrus precatorius</i> L. (SN23)	Gunj	2	Leaf decoction used in conjunctivitis.
2	<i>Butea monosperma</i> (Lam.) Taub. (SN 33)	Palas	2	Extract of seed mixed with flower of <i>Madhuca longifolia</i> used for abortifacient in early pregnancy.
3	<i>Pterocarpus marsupium</i> Roxb. (SN 46)	Tiwas	5	1) Bark gum is used for lip cracks. 2) Bark powder used for wounds (injuries). 3) Decoction of bark is used for stomachache.
4	Alliaceae <i>Allium sativum</i> L. (SN34)	Lasun	2	1) Decoction of bulb mixed with <i>Brassica compestris</i> oil in earache. 2) Paste of bulb and leaf extract of <i>Ocimum sanctum</i> used for Chai (Instant



5	Papavaraceae <i>Argemone mexicana</i> L. (SN 24)	Bilayat	4	removal of hairs from Mustache or beard). Paste of seed mixed with <i>Datura fastuosa</i> seeds in limejuice used for Scabies.
6	Meliaceae <i>Azadirachta indica</i> A. Juss. (SN 27)	Neem	3	Water decoction of leaves is administered and applied for Skin infection.
7	Caesalpiniaceae <i>Cassia occidentalis</i> L. (SN 25)	Kasindri	1	1) Decoction of seed used for whopping cough. 2) Powder of seed along with black pepper in water for loose weight or reduce fat from the body.
8	<i>Cassia fistula</i> L. (SN 39)	Bahava	3	Decoction of seed in honey used for indigestion problem in children.
9	Cucurbitaceae <i>Cucumis sativus</i> L. (SN 40)	Ganja	5	Decoction of seeds in water used for urine infection.
10	Hypoxidaceae <i>Curculigo orchidioides</i> Gaertn. (SN 35)	Kali musali	6	Paste of rhizomes is used for skin diseases.
11	Moraceae <i>Ficus racemosa</i> L. (SN 41)	Umabar	3	Root extract is used for general weakness.
12	Celastraceae <i>Maytenus senegalensis</i> (Lam.) Excell. (SN 37)	Ehankal	4	1) Milk extract of leaf is used in jaundice. 2) The immature leaves are administered for throat problems and cough.
13	Sterculiaceae <i>Helectres isora</i> L. (SN 34)	Murud sheng	3	The fruit paste is used for flatulence.
14	Asclepiadaceae <i>Hemidesmus indicus</i> (L.) Schultes. (SN 33)	Aswal	3	Decoction of whole plant in milk used for stomach pain.
15	Verbinaceae <i>Lantana camara</i> L. var. <i>acultea</i> (L.) Mold.	Tantani	2	Juice of leaf applied on wounds.
16	<i>Tectona grandis</i> L.f. (SN 47)	Sag	3	Administered Mixture of seed powder, cow's milk and ghee for kidney stone.
17	Lamiaceae <i>Leucas aspera</i> (Willd.) L. (SN 42)	---	2	Paste of leaves prepared limejuice is used for scorpion-sting.
18	<i>Lavendulla bipinnta</i> O. Ktze. (SN 32)	Dukkar-muraki	1	Juice of leaf applied on wounds.
19	<i>Colobrokea oppositifolia</i> L. (SN 21)	Bhaman	6	The leaf extract used for wound.
20	Poaceae <i>Orya sativa</i> L. (SN 43)	Sal	1	Mixture of curd and cooked rice is used for dysentery.

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Photoplate 1
Male deity: Katei Baba sacred grove.



Photoplate 2
Showing pieces of cock body after sacrifices at the time of rice harvesting.

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