

ETHNOMEDICINAL PLANTS USED AGAINST JAUNDICE BY THE TRIBALS OF AKOLE TALUKA (M.S.)

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A brief description of 16 ethnomedicinally important plant species is discussed in the present paper. These plants are effectively used by the tribals of Akole taluka in treatment of jaundice.

Keywords: Ethnomedicine; Jaundice; Tribals.

Akole taluka of Ahmednagar district, (Maharashtra state, India) is the part of Western Ghats and run parallel to the western coast, called as Sahyadris. This taluka include Sahyadris and its three east ward offshoots, the Kalsubai-Adala range in the north, the Baleshwar range in the middle and the Harishchandragad range in the south. The peaks like Kalsubai (1646m), Harishchandragad (1424m), Ratangad (1297m), Kulang (1470m) and the Ajoba dongar (1375m) are the most striking high peaks of this taluka. Akole taluka that ends on the Sahyadris, is the highest part of the district, averaging about 800m in height above the mean sea level and situated at 19° 15' N-74° 20' E. The maximum temperature of this taluka is about 35° -41° C and min. of 4° -15° C. Ghatghar and Bhandardara of Akole are the areas receiving highest rain i.e. 2000-3000 mm of rain every year. Forest is of moist deciduous type including some semi-evergreen patches. Government of Maharashtra has declared Kalsubai-Harishchandragad area as a wild-life sanctuary during the year 1986. Forest has a great impact on tribal life, as they derive food, fodder, medicine and housing material from it¹.

Akole taluka is rich with botanical and ethnomedicinal wealth. The area is occupied by large number of tribes viz. Mahadev-kolies, Thakars, Bhils and Ramoshies. These people have close association with the plants and are having good knowledge of the medicinal use of those plants. The tribals and rural folks inhabiting these areas have an age old tradition of using specific medicinal plants for curing specific ailments. These people practice home remedies and the formulae which are passed from one generation to the other.

Frequent field tours were conducted to the areas of Akole taluka during the year 2003-2005 i.e. Ghatghar, Murshet, Kumshet, Kothale, Harishchandragad, Bhandardara, Randha, Ratanvadi, Kalsubai, Maveshi, Dhamanvan, Rajur, Shenit and Gardhani. Plant species used against jaundice were collected with the help of tribal vaidyas. The tribals having a long standing practice in ethnomedicine were interviewed to obtain the information

on the use of medicinal plants. Among them Vaidya Bhaurao Ughade and Vaidya Kisan Bhangare are the two prominent tribal vaidyas. Vaidya Bhaurao Ughade has taken training from Government of Maharashtra Tribal Research And Training Institute, Pune and Vaidya Kisan Bhangare is a member of Raja Harishchandra Vanaushadi Sanstha, Rajur. A questionnaire was prepared containing the information about the tribal Vaidya, their living style, source of income, educational background, medicinal uses of particular plant species and their style of disease treatment. The plants are correctly identified with help of Cooke², Pradhan & Singh³ and Singh *et al.*⁴. Scientific techniques were used to prepare herbarium specimens which are maintained in the departmental herbarium. Photographs of some plant species were taken during the field tours. The collected information from the tribal vaidyas is compared with the already published ethnobotanical works to find new use of the listed plants.

About 16 plant species are enumerated in the present paper. Various parts of these plants are effectively used by the tribals of Akole in the treatment of Jaundice and other common diseases. Comparison of medicinal uses of these plants with the already published ethnobotanical work reveals that these plants along with validate existing uses also show few new uses. The plant species used in the treatment are mentioned below as -

Aegle marmelos (L.) Corr. (Bel) - The leaf extract is referred in the treatment of Jaundice. Leaf juice along with sugar is a remedy to increase haemoglobin percentage.

Fresh leaves mixed with crushed Chilli are applied on abscess. Leaf juice is useful in the treatment of heart diseases and in fever⁵. Unripe fruit pulp is used as a remedy in dysentery⁶.

Argemone mexicana L. (Bilayat) - Yellow juice of the plant is important in the Jaundice treatment. Along with seed oil the juice is applied on certain skin diseases.

Seeds mixed along with Datura seeds and Lime juice are made into paste and applied externally on scabies⁷. Leaf juice along with common salt is applied on ring worm,

scabies and skin diseases⁸.

Boerhavia repens L. (Punarnava) - Crushed roots are useful in Jaundice. Small pieces of roots are tied in a thread and placed around the neck of patient as a pendant.

Root juice mixed with crushed Chilli is used to treat bronchial asthma. Leaf juice is taken orally to treat jaundice⁵. Root powder is used in the treatment of hypertension⁹.

Emblica officinalis Gaertn. (Awla) - Fruits of *Emblica* are useful in Jaundice. These fruits are diuretic, carminative, and rich in Vitamin-C and are used in the treatment of eye diseases and dysentery.

Fruit juice is administered as eye drop in conjunctivitis and given orally in skin diseases⁸.

Ficus religiosa L. (Pimpal) - Decoction of bark is used as a remedy in jaundice and is also useful in purification of blood.

Stem bark is used in mending of bone fracture¹⁰. Bark is useful in gonorrhoea, urinary trouble, scabies and in piles¹¹.

Hygrophila schulli (Buch-Ham) S.M.Almeida (Talimkhana) - Leaves and seeds are useful in the treatment of jaundice. The seeds are also referred to the wrestlers as a tonic.

Seeds are used to improve quality of semen or improve sexual vigour. Plant extract is useful in purification of blood, in rheumatism and urinogenital diseases¹².

Mangifera indica L. (Amba) - Bark paste along with lime is applied on the hands of patients suffering from jaundice. The bark and fruit decoction is also useful in the treatment. Fruit are edible and useful in treatment of Liver diseases¹³. *Phyllanthus fraternus* Webst. (Bhui-awla) - Juice of entire plant or only the roots is a good remedy in the treatment of jaundice.

Paste of whole plant is used to cure Jaundice and dysentery⁸. Leaf extract is used to cure diarrhoea. Root extract is used to treat Jaundice¹⁵.

Ricinus communis L. (Yerand) - Leaf juice is useful in jaundice. The leaf latex along with milk is referred to children in cases of dysentery.

Leaf paste is used for massaging to get relief in joint pain and body swelling. The seed oil is used to get relief from headache⁸. Seed oil is given to animals to cure stomach and gas problems and to sheep to cure throat infection⁹.

Rubia cordifolia L. (Manjisth)

Roots are useful in jaundice, amenorrhoea and paralysis. The root paste is applied on skin diseases and freckles of skin.

Decoction of roots is used to treat irregular menstruation and also in eye and ear diseases¹⁴.

Sesbania grandiflora (L.) Poir. (Agasta, Hadga) - Fruits are useful in the treatment of jaundice. These are also used as antidotes for certain poisons.

Flowers are used to treat headache while juice from flowers is used as an eye drop⁶.

Sphaeranthus indicus L. (Gorakhmundi) - Decoction of leaf is useful in the treatment of jaundice and skin diseases.

Seeds and roots are anthelmintic⁵. Root and seed powder is given orally to kill intestinal worms. Bark powder is applied externally to cure piles⁸.

Tinospora cordifolia Miers. (Gulvel) - Stem powder is aphrodisiac, diuretic, emetic and used in the treatment of jaundice.

Leaf and bark decoction is used in the treatment of diarrhoea and dysentery⁵.

Urginea indica Kunth (Ran-kanda) - Bulb is useful in the treatment of jaundice, asthma, skin diseases and leprosy.

Bulb is used in the preparation of Chandi Bhasma useful in paralytic affections. It is used as expectorant, digestive, antirheumatic, antiasthmatic and in jaundice¹¹. *Woodfordia fruticosa* (L.) Kurz. (Dhayati) - Leaf juice is useful in the treatment of jaundice. The juice is also applied on burns and boils.

Leaves are used to prepare alcoholic beverages to cope with adverse climatic conditions¹⁶.

Wrightia tinctoria R. Br. (Kala-kuda) - Juice of young leaves is useful in the treatment of jaundice.

Stem bark powder is useful in the treatment of urinary stones¹⁰. Bark is useful in dysentery, piles and in skin diseases¹¹.

Traditional knowledge of plants is fast disappearing among the tribals due to modernization and gradual migration of main tribal vaidyas. There is an urgent need to study and document the precious ethnomedicinal knowledge of tribals because knowledge of curing ailments is also confined to tribals as to the doctors. The tribals of Akole taluka use the above mentioned plant effectively in curing of jaundice as well as other common diseases. The comparison of medicinal uses of above mentioned plants shows similarity with already published ethnobotanical work but in certain species the medicinal uses differ. So these dissimilar ethnomedicinal uses practiced by the tribals of Akole could be the new findings.

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