

Ethnomedicinal plants used for treatment of Liver disorders with reference to Panhala taluka of Maharashtra

Gauri Soman

Department of Botany,
Maharshi Dayanand College, Parel, Mumbai-400012 (India)

Abstract

Panhala taluka lies in the Sahyadri ranges of Western Ghats of Maharashtra state 16°48'0" N and 78°8'0" E. It is characterized by black rocky basalt to reddish yellow coloured soil, with dense dry semi evergreen to moist deciduous type of forest. It is enriched with lush green hills, diversified flora and fauna. There are 130 villages situated within the taluka, most of them in remote rural areas. The local people dwelling there make use of traditional knowledge to cure local ailments. The paper deals with medicinal plants used by these locals for treatment of liver disorders. The data on ethnomedicinal plants is on the verge of extinction and special efforts are required for documentation, conservation and sustainable utilization of these plants. So a survey was carried out to collect valuable information on traditional medicinal plants. The information regarding use of plants, their botanical names and local names is described in this paper.

Ethnobotany is a branch of economic botany which deals with the role of plants in the life of tribal people² "Glimpses of Indian Ethnobotany"³, Ed. S.K. Jain, Oxford and IBH Pub Co. New Delhi (1981).

A number of tribal communities live in the remote areas of our country. In the dense forest pockets nature has been so kind that for thousands of years it has been possible for these tribals to live and rely on plants and plant products⁴.

They are dependent on plants for their basic needs such as food, shelter, clothing and essential amenity including medicines. The

tribals are using traditional medicine system for centuries. This branch of ethnobotany is termed as Ethnomedicine⁵, Sacred grooves of Tribal areas along the Western Ghats⁵, Pune.

Ethnomedicine has become an interdisciplinary science. Ethnomedicinal claims may aid in finding novel lead molecules for welfare of mankind and the data can be useful for further scientific investigations. Jain *et al.*³, have published a paper entitled, "Some interesting medicinal plants known among several tribal societies of India" Ethnobotany 1:89-).

Scientists are now well convinced that

ethnomedicinal claims can be successfully utilized as focal points for development of new resources in medical sciences.

India is endowed with rich wealth of medicinal plants (Chopra, R.N.; Nayar, S.L. and Chopra, I.C. — Glossary of the Indian Medicinal Plants, CSIR Publication, New Delhi 1956).

The indigenous traditional knowledge transmitted orally for generations is rapidly disappearing due to advent of modern technology and transformation of traditional culture botany in the process of urbanization. That is the significant reason why research in this field should be undertaken, otherwise there is every possibility that the valuable data on ethnomedicine will be lost in near future.

Area under study :

Panhala is a famous hill fort village taluka/ town 3127 ft above sea level in the Sahyadri ranges. It is located 16° 48' North and 74° 8' East, 20 km from Kolhapur, in Maharashtra, India. It is characterized by dense dry semi evergreen to moist deciduous type of forest. The average rainfall is 75" to 80" per year. The temperature ranges from 34.4°C maximum to 18°C minimum in winter. It is enriched with lush green hills, beautiful landscape, fauna and flora. There are more than three thousand trees including fruits, flower, foliage, ornamental garden plants, grasses and medicinal plants. Panhala has not only been gifted with lush green cool nature, birds, fresh air and calm atmosphere but a place with great history blessed by Shivaji Maharaj. It is endowed by natural beauty with many lakes like Someshwar, Sadhoba, Shivtirth, Nimajaja

and gardens like Mayur Garden, Gopaltirth Garden, Tabak Van Udayan Teen Darwaja Udyan *etc.* Its historical importance coupled with being a hill station made it to be established and a taluka place. There are 130 villages situated within this taluka with a total area of 56,867.35 sq.kms. It includes many rural areas and many villages are impassable and remote. Because of rich fertile soil and good rainfall farming is the main occupation. Not only for food but they (local villagers) rely heavily on plants for their health care. Most of the local people make use of traditional knowledge and use different parts and products of the medicinal plants to cure local ailments such as skin infections, diseases, cold, cough fever, jaundice and liver disorders, snake and scorpion bites, cuts wounds, feminine or gynaecological disorders *etc.*

The following paper deals with plants used for liver disorders.

Several survey's were conducted through regular field trips in different villages and padas in the area under study. A prior consent was obtained from the knowledge providers at each location. The information on medicinal plants was collected through frequent interviews with the local physician practicing indigenous medicine (vaidus) villagers and local elderly folk.

The field observations included local names, uses, habitats and supportive specimens of tribal and local folklore claims. The data obtained during these excursions is documented and compiled in a systematic study.

The list of ethnomedicinal plants used in the treatment of liver disorders with their local

name, botanical name, family, part used, mode of administration for medicinal purpose are given below :-

Plants used for liver disorders –

1. *Eclipta alba* (L) Hassk. (Maka)

Family – Asteraceae

Habit – Herbaceous weed

Part used – Leaves

Mode of administration - Juice of the leaves – ½ cup in morning and half cup in evening – given on swelling of liver.

2. *Tinospora cordifolia* Miers (Gulvel) (Guduchi)

Family – Menispermaceae

Habit – Climbing Shrub

Part used – Stem

Mode of administration - Decoction of the stem – one cup – twice a day for 7 to 21 days for liver disorders.

3. *Ficus religiosa* L. (Pipal)

Family – Moraceae

Habit – Large tree

Part used – Bark.

Mode of administration - Small pieces of the bark are ground fine and kept in ½ glass of water overnight- this is taken early in the morning for 7 days for treatment of weak liver

4. *Alstonia scholaris* (L.) R.Br. (Satvindh)

Family - Apocynaceae

Habit – Small Tree

Part Used – Bark, Leaves

Mode of administration - Infusion of the bark and leaves given in the treatment of fever including malarial fever and liver disorders.

5. *Phyllanthus niruri* L. (Bhuiavala)

Family – Euphorbiaceae

Habit – Medium tree

Part used- Roots

Mode of administration -Extract of roots is given in treatment of liver disorders

6. *Andrographis paniculata* (Burm.f.) Nees (Kirta)

Family – Acanthaceae

Habit – Medium Herb

Part used- Entire plant

Mode of administration -Bitter extract of herb or decoction of leaves is given in treatment of sluggish liver and other liver disorders.

7. *Piper longum* L. (Kalimiri)

Family – Piperaceae

Habit – Climber

Part used- Entire plant

Mode of administration -Bitter extract of plant or decoction of leaves is given in treatment of alcoholic liver and Cirrhosis.

8. *Ficus religiosa* L. (Pimpal)

Family-Moraceae

Habit-Tree

Part used- Bark

Mode of administration -Powder of the bark is given with warm water early in the morning for liver disorders.

9. *Gossypium herbaceum* L. (Kapus)

Family-Malvaceae

Habit- Shrub

Part used-Roots

Mode of administration - Extract of roots in water ½ glass is given twice a day for liver disorders.

10. *Tridax procumbens* L.

Family-Asteraceae

Habit-Herbaceous weed

Mode of administration - ½ cup juice of entire plant is given thrice a day for all liver disorders.

11. *Azadiractha indica* A. Juss. (Neem)

Family-Meliaceae

Habit-Tree

Part used-Bark

Mode of administration - The bark is crushed to powder and boiled in water, 5 ml extract is prescribed twice a day for two weeks.

12. *Achryanthes aspera* L. (Aghada)

Habit-Shrub

Family- Amaranthaceae

Part used-Root

Mode of administration - The root is crushed to powder and boiled in water. 2 glasses of root decoction is given in the morning daily.

The rapid intrusion of modern civilization into forest areas due to urbanization is leading to deforestation.

Therefore special efforts should be made to collect, record and store the valuable data on Ethnomedicine before its extinction.

References :

1. Chopra, R.N., S.L. Nayar, and, I.C. Chopra (1956) Glossary of the Indian Medicinal Plants, CSIR Publication, New Delhi.
2. Gadgil, Madhav and V.D. Vartak — Sacred grooves of Maharashtra “Glimpses of Indian Ethnobotany”, Ed. S. K. Jain, Oxford and IBH Pub Co. New Delhi (1981).
3. Jain, S.K., B.K. Sinha, and Arvind Saklani “Some interesting medicinal plants known among several tribal societies of India” *Ethnobotany I*: 89-100.
4. Vartak, V.D., (1982) *Tribal Res Bull*, 4(2): 9-10, Pune.
5. Vartak, V.D., M.S. Kumbhujkar, and D.S. Nipunage (1987) Sacred grooves of Tribal areas along the Western Ghats, Pune.
6. Vartak V.D. and Madhav Gadgil - Studies in Ethnobotany—A New Vista in Botanical Sciences, Pune.