



Uses of leaves in traditional medicine in Gautala Sanctuary of Aurangabad district (Maharashtra) India.

*I.H.Zahid, *A.S.Bawazir, Ashwin Kumar Kshirsagar** ***Rafiuddin Naser*

Dept. of Botany, Abeda Inamdar Seniro College, Azam Campus, Pune.

*Dept. of Pharmacognosy, Y.B.Chavan, College of Pharmacy, Dr. Rafiq Zakaria
Campus, Rauza Bagh, Post Box No.-33, Aurangabad.(M.S.) 431001. INDIA

**Dept. of Biotechnology, MGM, Cidco, Aurangabad.

***Dept. of Botany, Maulana Azad College, Dr. Rafiq Zakaria Campus, Rauza Bagh,
Post Box No.-27, Aurangabad.(M.S.) 431001. INDIA <rafiuddinnaser@rediffmail.com>

Abstract

Aurangabad a district of Maharashtra (India) offers a great scope for ethnobotanical studies because of its biodiversity and tribal population of the region, who primarily depends on plants of their surroundings for curing different diseases. Leaf therapy is an old practice among them. Locally available plant species are used for the prevention and cure of diseases like piles, mouth ulcers, cough, diarrhea dysentery, contraceptives, abortifacient, boils, swelling and injury etc. The objective of present study is to highlight the information of leaf therapy used by rural and tribal people of the region. During study field trips arranged and informations collected on the basis of personal interviews with traditional healers, village heads and knowledgeable persons of the society. Investigation reports 37 plant species, some of the species are *Abrus precatorius*, *Acacia nolotica*, *Alangium salvifolium*, *Annona squamosa*, *Azadirachta indica*, *Calotropis gigantea*, *Enicostemma littorale*, *Lawsonia inermis*, etc. are documented. This knowledge has not been recorded earlier by any worker from the reported site. The collected information confirmed by the medicinal practitioners. Plant species identified with the help of taxonomist, available literature and floras. Herbariums are deposited in the herbaria of Botany Department of Maulana Azad College, Aurangabad. This information provided first hand knowledge to all herbalists.

Key words :- Ethnobotanical, rheumatism, contraceptives, abortifacient etc.



INTRODUCTION:

Aurangabad district, a soul of Marathwada region, forms a part of Maharashtra state. It extends over an area of 9272 sq. km. And is situated in the upper Godavari basin to the extreme north west of the Marathwada. In general, the district slopes down towards the south and southeast. The district lies, between the parallels of 19° 20' and 20° 40' 10" north and between 70° 40' and 75° 50' east. The general elevation above the sea level varies between 665 and 735 meters on the north and between 565 and 635 metres towards south.

Soils of Aurangabad district are medium to deep black and contain large quantities of calcium and magnesium carbonates. They are deficient in nitrogen and phosphorus and crack heavily in summer. The soils are quite fertile and particularly suitable for cultivation of wheat, cotton, jowar, tobacco, chillies and dry land fruits.

STUDY AREA:

(MAPS OF INDIA,

MAHARAHTRA,

AURANGABAD)



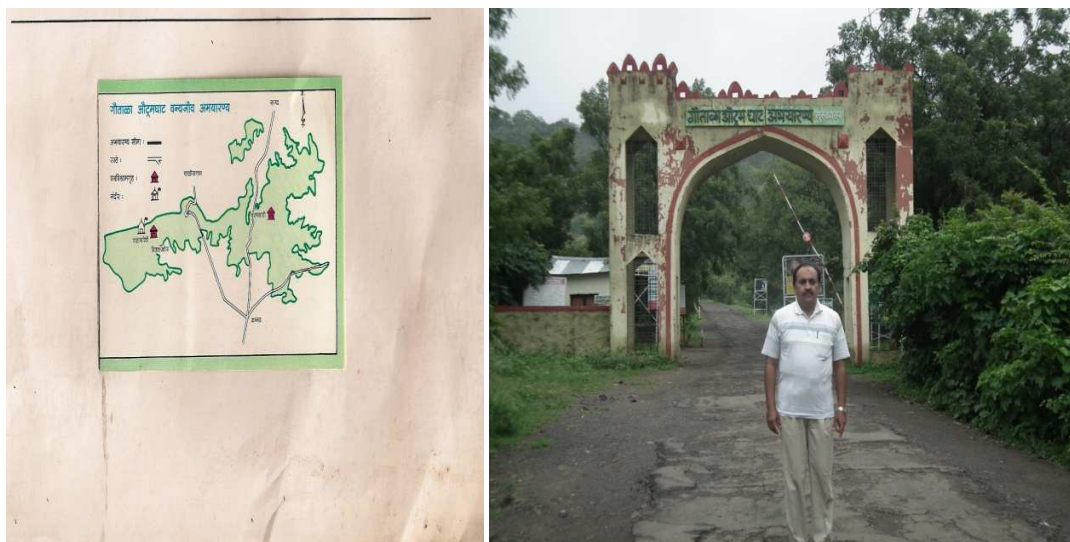
Accumulation of ethnomedicinal uses is an integral part of indigenous heritage. From the earliest days mankind has turned to plants for healing and various other uses. Leaf therapy is common in Ayurved and Unani system of medicine. The survey of different systems reveal that many leaves of plants are used for curing various diseases. During the ethnobotanical exploration around 30 villages of the district, it is observed that tribals, non tribals, are using leaves for various problems. This has been done unless the permission obtained from the



vaidyas, hakims, village medicinal men and senior persons, they suggest some leaves of plants for suitable problem. Experts administer particular dose with keen observations. Present information about traditional uses of leaves confined with the village physicians, chieftains of different communities and older members of the family. This knowledge is limited with a few experts alone. This work is an attempt to provide new information of leaves of plants used in the area. For this investigation around 30 villages of Aurangabad district is visited and information collected from more than 60 persons. Uses of the leaves of the plants are confirmed by the comparing the data with available literature on the medicinal plants (Chopra-1956, Dastur-1962, Joshi-2000, Naik-1998) and observed that, this folklore information contains lot of new uses of some leaves of common plants available in the area.

ABOUT GAUTALA SANCTUARY:

Gautala forest 90 km form Aurangabad is well known and considered as an important “hot spot” of plants and also of animal diversity. The Gautala Sanctuary has dry deciduous forest with rich natural vegetation. It has some draught resistant trees like



Gautala Forest map and entry



Anjan, Khair, Dhawada. There are many plant species in the sanctuary that have medicinal and commercial values. Gautala Autramghat Sanctuary is a [protected area](#) of [Maharashtra](#) state, [India](#). It lies in the Satmala and Ajantha hill ranges of the [Western Ghats](#), and administratively is in [Aurangabad District](#) and [Jalgaon District](#). It covers a total area of 26,061.19 hectares (64,399 acres) with [Reserved Forest Areas](#) of 19706 ha. Its name comes the nearby village of Gautala, which was itself named after Gautam Rishi, a Hindu ascetic mentioned in the [Ramcharitmanas](#).

METHODOLOGY:

Present study is based on personal interviews with tribals, non tribals, medicinal men, senior citizen etc. Plant specimens have been collected from the field and their identities as recognized by the tribal, non tribal healers have been confirmed. The herbarium specimens are prepared, given suitable voucher numbers and deposited in the herbaria of Department of Botany of Maulana Azad College, Aurangabad.

ENUMERATION:

The plants have been arranged alphabetically, each by its botanical name, local name, followed by family (within parenthesis), and voucher specimen number. The folk uses are described with details of method of preparation of dosage, dose administration and combination with herbs if any recorded.

***Abrus precatorius* L. Syst. Nat. ed. – Gunj - Fabaceae. MACH0003.**

- Powder of leaves or dry leaves or extract of leaves or decoction gives in throat trouble, cold, cough etc., three times a day, until it cures.

***Abutilon indicum* (L.) sweet Petari, Mudra, Shikka, Malvaceae MACH0004.**

- The powder of 21 leaves + 21 pepper seeds is prepared to make 07 tablets, out of it one tablet to be taken morning and evening with water for curing of piles for 5-7 days.

***Acacia nilotica* (L.) Del. Bubhul. Mimosaceae, MACH0009.**

- Leaf paste- prepared in water and
- If applied on forehead-cure headache.
- If applied over the soles of the feet –prevent cracking.
- If tied on anus-treats piles.



***Acacia sinuata* (Lour). Merr. Shikekai Mimosaceae MACH0010.**

- Leaves chewed in jaundice, pods pest is given in morning and evening for controlling of cough and cold. Pods also used as a detergent for hairs.

***Achyranthes aspera* L. Aghada Amaranthaceae MACH0011.**

- Dried leaves used as chronic cough, bronchitis, asthma etc. twice or thrice a day.
- Leaves used as vegetable in fresh form.

***Acorus calamus* L. Wekhand Araceae MACH0012.**

- Leaves are useful for cough, cold, etc.

***Adhatoda vasica* Nees Adulsa Acanthaceae MACH00311.**

- Leaf juice is given in diarrhea, dysentery, asthma, paste is useful for skin problems etc.
- Decoction of leaves used for skin infection and other problems of animals.

***Adhatoda zeylanica* Medic. Adulsa. Acanthaceae. MACH0014.**

- 2-3 Fresh leaves -chewed daily, 2-3 times-for treatment of diabetes.

***Aegle marmelos* (L.) Corr.ex Roxb. Bael Rutaceae. MACH0015.**

- Leaf decoction is useful in ulcer.
- Leaves oil is useful in respiratory problems.

***Alangium salviolium* (L.F.) wang. Ankol Alangiaceae MACH0018.**

- Leaf extract is use an antidote to Poison, rheumatic pain, menstrual complaints etc.
- Leaves oil is useful in respiratory problems.

***Albizia amara* (Roxb). Bohn. Kansar Mimosaceae .MACH0019.**

- Leaf paste is useful in inflammation, boils, ulcers etc.
- Leaf powder gives as an astringent, also gives in piles, diarrhea, gonorrhoea etc.

***Albizia lebbek* (L.) Shirish Mimosaceae .MACH0020.**

- Leaves powder -given in piles, diarrhea, dysentery, gonorrhoea.

***Aloe vera* (L.) Corr. Korphad, Kumari. Liliaceae MACH0025.**

- Juice of leaves is applied externally to cure boils, burns, wounds and scratches.
- Juice of leaves is mixed with honey and taken as a remedy of cough.

***Andrographis paniculata* (Burm.f.) Wall. Ex. Nees. Kalmegh Acanthaceae. MACH0312.**

- Fresh leaves juice is useful for controlling of diabetes.

***Anisomeles indica* (L.) O. Kuntze Lamiaceae. MACH0035.**

- Powder of dry leaves given 2-3 times a day to children for controlling of Rickets in children.

***Annona squamosa*. Linn. Sitaphal. Annonaceae. MACH0038.**

- Leaves decoction is useful for treatment of vomiting.
- Leaves extract is useful for removal of intestinal worms in cattle.

***Argemone Mexicana* L. Sp. Pl. Piwala Dhotra, Bilayati, Papaveraceae MACH0042.**

- 2 gm ash of leaves in water if applied in morning and evening is useful for treatment of piles.
- Leaf juice externally applied to cure ringworm.



***Azadirachta indica* A. Juss. Neem, Kadu limb. Meliaceae. MACH0047.**

- Fresh leaf juice is very useful for treating of diabetes.
- Leaf extract is useful as an antidote for snakebite.
- Leaves juice is useful for intestinal problems.
- Fresh leaves chewed for stomach trouble, typhoid, malaria fever etc.

***Barleria prionitis* L. Kate Koranti. Acanthaceae. MACH0052.**

- Leaves boiled and tied around boils for treatment.

***Biophytum sensitivum*. (L.) Dc. Lajalu, Jharera. Oxalidaceae. MACH0057.**

- Decoction of roots is given for removal of kidney stone (Lithiasis).
- Fresh leaves decoction is taken for the treatment of kidney trouble.

***Bombax ceiba* L. (*Salmaia malabaricum* Dc.) Kate sawar. Bombacaceae. MACH0059.**

- Dry leaves is useful in the treatment of kidney stone.
- Leaves powder is useful for urination.

***Butea monosperma* (Lamk.) Taub. Palas. Fabaceae. MACH0063.**

- Leaves juice or decoction is useful as per requirement for kidney trouble.
- Hot fresh leaves applied on swelling and injury.

***Calotropis gigantea* (Ait) R.Br. Rui, Ruchki, Madar, Akda. Asclepiadaceae. MACH0068.**

- Leaves of plant should be boiled in water and rectum must wash with this water for treatment of piles.
- Residual paste should apply on affected area of piles.
- Latex of leaves is used as ointment to cure backache, swellings, scorpion sting etc.

***Cassia occidentalis* L. Sp. pl. Kaswinda. Caesalpiniaceae. MACH0080.**

- Mixture of leaves of plant 10 gm + water + 3 gms Gero—must be taken orally. It stops bleeding of piles.

***Celastrus paniculata* Willd. Mal kanguni. Celastraceae. MACH0087.**

- Fresh leaves crushed and mixed with curd, gives before break fast—no intake except water up to 3pm—releases stone from kidney in the form of powder.

***Crateva adansonii* Dc. Sabs. Waiwarn. Caparaceae. MACH00301.**

- Leaves should be boiled in bathing tub and sit in it for half an hour daily for the treatment of piles.

***Dodonaea viscosa* Auct. Jakhmi. Sapindaceae. MACH0314.**

- Fresh leaves with water can be taken twice a day for controlling of diabetes.

***Enicostema littorale* bl. Nai, Mamijiwa. Gentianaceae. MACH0315.**

- Fresh Leaves paste is used in toothache.
- Fresh leaves (4-5) chewed in morning for controlling of diabetes.

***Ficus benghalensis* L. Hort. Cliff Wad. Moraceae. MACH0150.**

- Decoction of leaf is useful in piles.

***Gymnema sylvestre* (Retz.) R.Br. ex Schult. Aphu Mari, Gudmar.**

Asclepiadaceae. MACH0161.

- Leaf powder is used against diabetes—one teaspoon in morning and one in evening is given.

***Lawsonia inermis* L. Mehndi, Lythraceae. MACH0189.**

- Boiled water of leaves is used for gargling in gums problems.



***Lepidium satvium* Linn. Chandrasur, Aliv. Brassicaceae. MACH0316.**

- Decoction of leaves used in preventing pregnancy after child birth.

***Mentha spicata* L. Pudina. Lamiaceae. MACH0305.**

- Fresh leaves should be taken with salt after a particular intervals throughout the day for removal of kidney stone.

***Mimosa pudica* L. Lajalu, Lajwanti. Mimosaceae. MACH0198.**

- Leaf juice is added in tea and used time to time for treatment of kidney stone.

1) *Ocimum sanctum* L. 2) *Ocimum album*. L. Sabza. Lamiaceae. MACH0208.

- Dry the leaves in shadow, prepare the powder. This powder can be utilized twice a day for diabetes control.
- Juice of leaves with honey is used for applying on Gums to relive pain and strengthen them.
- Juice of leaves with pepper powder (tablets) is used for toothache.

***Sida acuta* Burm. Bala, Kharenti, Chikna. Malvaceae. MACH0317.**

- Leaves are used as an abortifacient.

RESULT AND DISCUSSIONS:

The present study deals with 37 species of plants belonging to 25 families, the leaves which are being used for treatment in the study area. Present study reveals new uses of leaves recorded for various ailments. The indigenous people of Aurangabad district have rich and unique traditional knowledge about the uses of leaves. These ethnomedicinal plants used in leaf therapy for the treatment of different types of diseases by tribal, non tribal people of the area. This ethnomedicinal data provide a base to start search for phytochemistry, pharmacology and pharmacognosy of new compounds. With the help of these informations we seek to record orally transmitted knowledge in danger of being lost. These studies of traditional plant lore may also help discover new drugs for the welfare of mankind.

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