

Ethnobotanical Survey Of Medicinal Plants In Ajanta Region (MS) India

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Abstract: *The study was conducted in Ajanta region in that Lenapur, Ajanta gaon, Savarkheda and Fardapur etc. in Aurangabad District (M.S.). Ajanta forests are situated between latitude 20° 31" North and between 75° 44" east. In ethnobotanical study the selected plants are wild and endemic viz. Caralluma adscendens(Roxb), Madhuca longifolia (J.Konig), Terminalia arjuna (Roxb.), Euphorbia tirucalli (L.), Tridax procumbens (L.) Bombax ceiba (L.), Terminalia ballirica (Roxb), Terminalia chebula (Retz), Trichosanthes tricuspidata(L.), Tinospora cardifolia (Thunb). etc. We met tribal, old peoples, Hakims and Vaidu for collection of ethnobotanical data. On the basis of data we concluded that these locally available medicinal plants having great importance in there different ailments.*

Keywords: *Ethnobotanical, Endemic plants, Carruluma adscedens, Madhuca indica, Terminalia arjuna, Tribal.*

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I. Introduction

Aurangabad district has very well preserved forest patch such as (Goutala) reserved as wild life sanctuary, Ajanta forest it has been observed that some tribal communities practicing tribal medicines live in jungles. This point laid me to study the matter seriously. I met with such persons and could find useful remedies for several diseases. Villagers from adjoining region of the forest take benefit in various treatments of these communities.

Aurangabad district has an international importance due to the famous Ajanta and Ellora Caves.

The follow tribal communities enjoy shelter in the jungle of Ajanta. No.1) Mahadeo koli, 2) Tadvi Bhill, 3) Nomedic tribes. The knowledge of herbal remedies has come in this communities from generation to generation. It appears that the remedies developed by these tribes are by experience. It was also an intension to presume the knowledge of this communities and disclosed the plants used by them. Similarly it was thought that the plants should not disappear from forests due to their excessive use. The endangered and threatened species will be protected by various methods. An effort has been made to compare the remedies available in standard literature with tribal remedies.

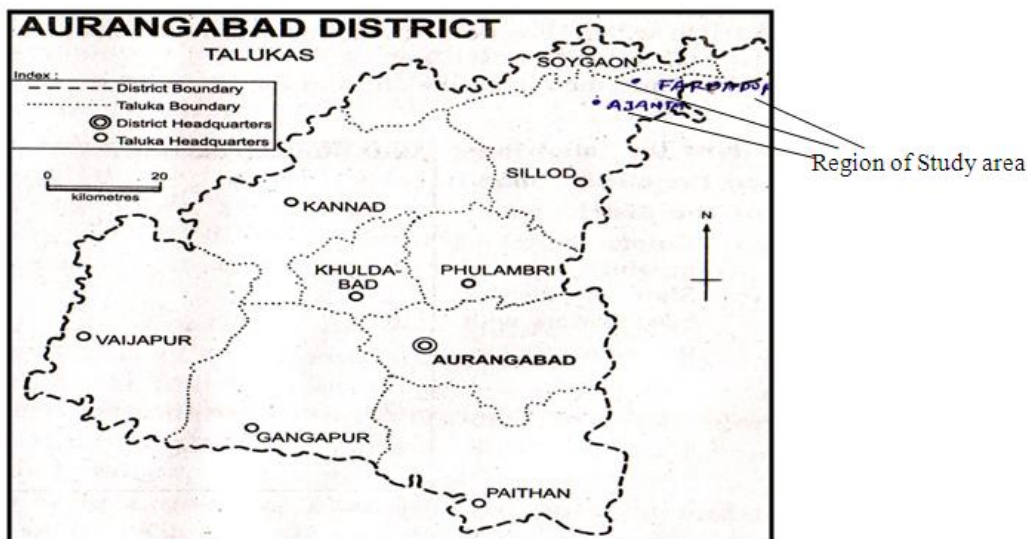
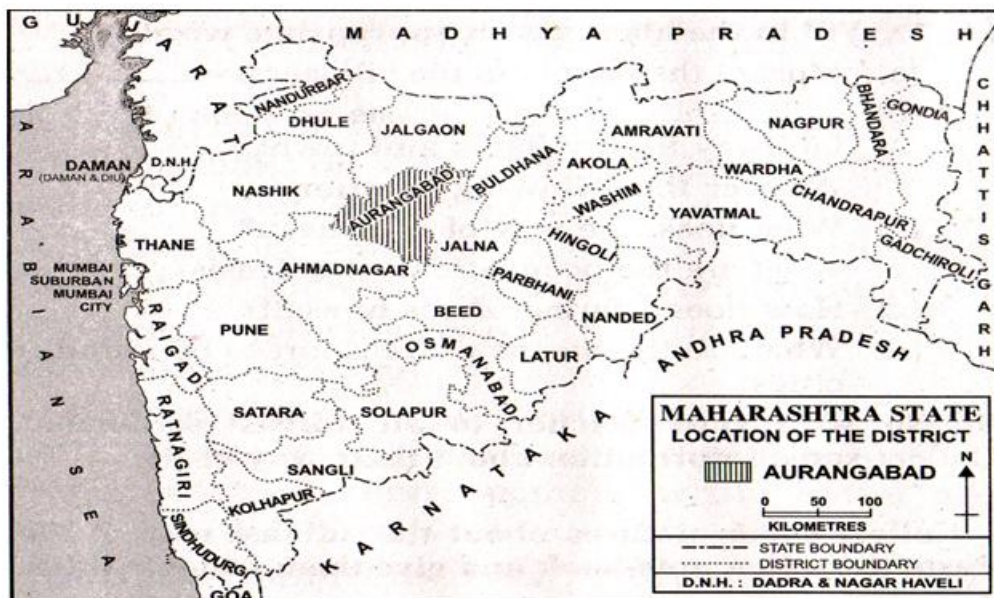
A vast amount of literature is available in the medicinal plant species (Chopra *et.al.*, 1956, 1965, Dastur 1962, Dey 1980, Jain 1996, Kirtikar and Basu 1934 and Mohan Ram, 1999), Naik (1998) has attempted the study of such plants of this district in his comprehensive account of Marathwada drug plants. No separate publication on Aurangabad drug plants is available.

In the present study the Ajanta, Lenapur and Fardapur comprise the tribal population and also some vaidhya of this region. Traditional practices of curing ailments using plants resources are practiced by all these people. In an enquiry to document their traditional knowledge of the medicinal plants. We conducted 2 months survey in this region from Sept. to Nov. 2012. The data was collected by interviewing local and traditional practioners and villagers. Our studies have shown that these people have accumulated a wide knowledge in the usage of plant wealth over the centuries. But due to the illiteracy this knowledge may be lossed. In this study an attempt has been made to give detailed information on plant species regarding their role in human welfare.

II. Material & Methods

A combination of social survey and direct field observation was used in the study. The present work shows the little more than 02 moths of intensive exploration of the Ajanta region in Aurangabad district. This study was carried out mostly in hilly areas and some negligible area of Ajanta region.

Study area map



The study area is rural and somewhat backward. The entire area is divided in or 2 zones one is northern hilly region includes Ajanta, Savarkheda, Lenapur, Fardapur, Ajanta gaon, another zone is plane in nature not hilly. Ajanta, Ajanta caves, Lenapur, Fardapur, Savarkheda, were surveyed and the traditional medicines used for various diseases were gathered with the help of elderly and experienced individuals practicing indigenous medicines. The tribal people and ethnic races have developed their own cultures costumes, religious rights, legends and myth songs, language ford and medicinal practices. Many wild and cultivated plants play a very important and vital role among these people. These relationships have evolved over generations of experience of practices. The modern civilization which is penetrating in the most region of this Sillod of Soyegaon Tq. During the study period from Oct. to Dec. 2012 several botanical tours have been conducted in various areas of the region. Emphasis has been given to visit the areas where more and diverse tribal belts and rural people in habiting different villages are studied. Some of the important places under study are listed below.

- 1) Sillod region – Ajantagaon
- 2) Soyegaon region – Lenapur, Savarkheda and Fardapur.

In these villages few are tadvi bhill mahadeokoli, and some shepherd. These tribal depend upon agriculture and forest products. In spite of the modern civilization the tribal and rural folks hold their traditional faith in the benefits of indigenous medicines. These people attribute most of the ills of the life to spirit and often seek help of the medico religious practices to get rid of them. Information was considered only after confirmation through or more informants. The interviews focused on plant species used in curing different or common disease.

The botanical species were identified by the vendors; the part (s) of the species used and methods of application during utilization were identified and recorded.

The abundance of the species identified was determined in the study area: for this purpose, rural and tribal communities which were far from the urban influence, were selected in each zone.

Earlier workers like Faulks (1958) discussed the question relating to this field of inquiry in detail. (Rao and Hajra) 1967 emphasized the importance of special forms for ethno botanical work.

During investigation it is observed that the majority of the informants give most common uses of plants for food, agriculture for fish catching, fodder and particular ailments like headache, scorpion loiter, corn fracture. In tribal the elder person, in village vaidu or Hakeem were the resource person. The data collected on a particular ailment or species were verified by discussing about these aspects with tribal facilities. Information of species, their dosages days. During the dialogues care was taken not to contradict or enforce them with the informants on any points.

The discussion noted in the field dairy on the spot and in the possible situation taken with the help of camera.

Proper information of the plant was filled in the herbarium sheet from the field dairy. The herbariums were arranged alphabetically. According to the Benthum and Hooker classification. While writing the test plants were mentioned according to Benthum and Hooker classification system followed by vernaculars name or local name and family. A brief information of habit, habitat and distinguishing characters of the plant is mentioned. After the locality and distribution is explained initially the general uses of the species and medicinal uses narrated.

The dosages are narrated is separate chapter by different men. The above information compared with the literature published by Naik V.N, 1998. Flora of Marathwada, Chopra (1956), and Jain S.K. (1987, 1991)

III. Result

In the present investigation “An Ethno botanical survey of Ajanta region”. Various field trips were arranged at the different places. Ajanta, Lenapur, Fardapur, Savarkheda and other places for getting information of the plants.

The discussion one arranged with the tribals, tadvi bhills, hakeems, rural people for the drag plants and the animal health care in different area. The discussion were also arranged with the people of different communities to know the use of plants.

Knowledge is consolidated from the traditional practitioner. Their practice has come from their ancestor. During this investigation some people hesitate to disclose their knowledge to other person who belongs to other community.

In this research we met tribal and local old peoples who are worked as a traditional Hakims and Vaidu on different ailments. All results shown in tabulated manner. (Table no.1).

Table No. 1 : Medicinal plants name and medicinal used guided by tribal’s of Anjanta region.

Sr. No.	Taxonomical Name of Plant	Common Name	Family	Locality	Part used	Medicinal uses
1	<i>Celosia angenteal</i> L.	Kurdu	Amaranthaceae	Ajanta hilly region and Lenapur	Roots	40 to 50gm of roots are mixed with water (500ml) boiled. The remaining half part of the decoction, given orally once in a day for 3 day. In kidney stone.
2	<i>Colocasia esculenta</i> L.	Alu, Pothinichepan, Chamkura.	Araceae	Ajanta hilly region and Lenapur	Rhizome and leaves	Rhizome in useful in tumour of tonsil, tumour on hand, leg. The Rhizome should be rubbed on infected part for 3-4 days. That tumour automatically vanished.
3	<i>Caralluma adescendens</i> (Roxb).	Makad Shing	Asclepiadaceae	Ajanta hilly region.		Stem is used in piles. Process: 1. Take 3 beetle leaf. 2. Polish it with the help of kwath and chuna (calcium carbonate) 3. 4From 1 long st5em cut species of 1 inches. 4. Kept it on beetle leaf. 5. eat that beetle leaf with empty

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						stomach. 6. The process will continue for 3 days or 5 days.
4	<i>Bombax ceiba</i> L.	Kate Sawar, kate shewari	Bombaceaceae	Frequent in valleys of Ajanta and Soyegaon region.	Bark	Bark of bombax ceiba+bark of terminalia ballirica+ Bark of tribulus terrestris. 5-10gms of each stem and fruit bark of behada were made in to powder and mixed. Administered externally for 21 days in piles
5	<i>Tenninadia arjuna</i> Heyne ex-Roth	Arjun Sadada	Combretaceae	Frequent along gullies and river banks	Bark	The bark cooling astringent 1}10 to 15gm bark ash mixed with coconut oil used on wounds during burning. 2}The wounds also cured by bark powder. 3}The decoction (boiled) of bark (25gm) useful in heart problem.
6	<i>Terminalia ballirica</i> (Gar in) Roxb	Behada	Combretaceae	Frequent in hilly regions of Ajanta region	Fruit	Fruits are used in cough and asthma. 5 to 10 gm seed eaten in early morning in cough asthma. Fruit laxatine useful in 30 preparation in combination ethers, like triphala, bitter astringent tonic anti pyretic given in piles, dropsy, diarrhoea, headache, extract, useful in leprosy. Dry fruit bark used for teeth and gum problems.
7	<i>Terminalia chebula</i> Retz.	Harda, Hirda	Combretaceae	Rare in hill forests. only some part of the soyegaon it occur.	Fruit and bark	The decoction of bark is given in cough for 2 to 3 days one time in a day. The triphala churna contain harda fruit useful in indigestion also useful in diabetes.
8	<i>Tirchersanthes tricuspidata</i> Lour.	Kavandal	Cucurbitaceae		Seeds	It is used in jaundice with tantani and gulwel. (4-5 seeds only)
9	<i>Diospyrous melanoxylo</i> Roxb.	Tembruni, Tembru, Tendu.	Ebenaceae	Common in Ajanta and Soygaon hilly areas	Leaf, Latex, Flowers.	Latex from the leaf applied over infected tooth and toothache. The leaf is used as bandage in fracture to reduce the pain dried flower are useful in skin and blood disease.
10	<i>Calotropis giganatea</i> (L.)	Ruee, Ruchki	Asclepiadaceae	Common on waste land.	Leaves, flower.	The one teaspoonful leaves powder is dusted over, wounds. The flowers are useful in allergic cough or dry cough. 4 flowers eaten in morning for long period.
11	<i>Euphorbia hirta</i> L.	Dudhi gavat, Dudhani, Dudhanali	Euphorbiaceae	Throughout the region.	Leaf	Leaf should be grind / crushed in mixe. The juice of leaves administered for 3 days to vanish skin disease externally.
12	<i>Euphorbia tirucalli</i> L.	Sher, newali	Euphorbiaceae	Naturalized in Ajanta way region.	Stem	The mature upper part of the stem i.e. yellowish in color is used in gangrene.
13	<i>Abrus precatorius</i> L.	Gunj	Fabaceae	Ajanta Jungle, Savarkheda, Lenapur	Leaves, Stem and Roots	10 to 20gm leaves used in all throat troubles handful of leaves is used in cold, cough colic etc. roots possesses glycyhizin which is used in cough, cold and colic. The paste of seed in used in abortion and infertility, it can also useful in skin disease (externally). Roots are blood purifier. Veterinary use: Roots decoction are used in the treatment of animal ulcer. Seed powder and

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						coconut oil mixed together is used for wound.
14	<i>Ocimum americanum</i> L.	Rantulas, Ajgandha	Labiatae	Ajanta hilly region and Lenapur	Leaves, seeds	20ml juice of leaf with salt is used externally on skin disease (Anjat). Handful of leaf boiled in water is useful in cough and cold. Paste of leaf is used in parasitical skin disease, applied in fever on finger and toe. Seeds decoction used in ulcers.
15	<i>Aloe vera</i> (L.)	Korphad, Kumari.	Liliaceae	Ajanta hilly region and Lenapur	Pulp of lesves.	The extract of leaf is used for skin infection and wounds of the skin. Juice of leaf is used in ear pain and cough and pulp apply on burn skin.
16	<i>Asparagus racemosus</i> (Willd).	Shetavari	Liliaceae.	Ajanta, Fardapur and Lenapur	Root, leaves, stem, tubers,	Plant parts used on headache. Roots are refrigerant, demulcent, diuretic, aphrodisiac, antispasmodic, alterative, anti dysenteric, glagogogue and as demulcent. Tubers are used on gastric complaints, tonic stomach, root boiled in milk is used as appetizer. 10 to 15gm root powder boiled in water useful in cardiac problem.
17	<i>Chlorophytum tuberosum</i> (Roxb).	safed musali	Liliaceae.	Ajanta region, Lenapur area.	Root tubers	The root powder is useful in anemic condition. Two teaspoonful powder mixed with 100 ml milk given orally in a day for rheumatism and general weakness. Fresh tubers eaten directly on sperm development, also useful in infertility.
18	<i>Ficus racemosa</i> L.	Umber	Moraceae	Ajanta region, Lenapur area.	Root	Decoction of root is given on dysentery. The sap root of this tree is soaked in 100ml water for one night that juice is useful in diabetes.
19	<i>Syzygium cumini</i> L.	Jambhul	Myrtaceae	Sillod and Soyegaon.	Seed	Two spoonful seed powder with one glass water, given orally once in a day in diabetes.
20	<i>Madhuca longifolia</i> (koen) Macor	Mowa, Mahuwa	Sapotaceae	Common in Ajanta jungles also common near field.	Bark, flower.	The internal bark is externally applied on mammary gland for more milk. Flowers are appetizer, cooling, nutritive. The deshi wine made up of this flower useful in Asthma and cough.
21	<i>Helicteres isora</i> L.	Murud sheng	Sterculiaceae	lower parts of hills in Ajanta reserve forest	Legume / fruit.	10gm paste of dried fruit is given on stomach to children. Dried fruit is also used for intestinal disorders.
22	<i>Tribulus terrestris</i> L.	Sarata, gokhru.	Zygophyllaceae	Sillod, Soyegaon and Ajanta	Fruit	The fruit powder (20gm) are used in back bone pain also in infertility. The decoction of fruit/seed given to the patient for 8 days or 15 days.
23	<i>Tinospora cordifolia</i> (Willd)	Gulvel	Menispermiaace	Common in hedge and on trees in moist, shady places along streams.	Stem and Root	The stem is reputed ayurvedic medicine. 100gm of stem boiled in one liter water with tantani leaves (50g) + caundel seed (10g). It is useful remedy in Jaundice. This remedy given 3 days continuously. The juice of stem is useful in

						debility and anemia. The water extract of root is used in leprosy.
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IV. Discussion

According to WHO report, several diseases of modern times are generally life style diseases. Medicinal plants have great importance in providing health care to about 80% of the population in India. Plants have been an important source of precursors and products used in a variety of industries, including those of pharmaceuticals, food, cosmetics and agrochemicals. The continuing search for new drugs has seen researchers looking to the natural world for potential products. On the other hand the traditional medicines are enjoying an upsurge in popularity because of their low or no residual toxicity.

This investigation shows that various professions of these communities are plant based have the important place in the village economy and self employment. The health care problem on primary stage and save diseases such as fever, jaundice, skin diseases are cured by these people. In herbal drag more than 23 species being used. This is constant with the other general observation which has been reported earlier in relation to medicinal plant studies by the Indian Traditional System of Medicine like Siddha and Ayurvedha (Kirtikar and Basu, 2001; Gogte, 2000; Anonymous, 1992; Asolkar et al., 1992). Different types of preparation made from medicinally important plants included decoction, juice, powder, paste, oil and plant part extract. Some plants were even used in more than one form of preparations. The leaves and roots are the two major plant parts which are frequently used for the treatment of by traditional healers. Preparations from medicinal plants are applied externally to cure the disease like, skin, wound, rheumatism and poisons bites oral consumption was recommended against the disease like fever, cold, cough, diarrhea, indigestion etc. Drugs are prescribed either as a single or in a combination of more than one plant / parts of same or different plants to the people suffering from various diseases.

In this study or survey it is observed that deforestation and water problem one rapidly increased. It is necessary to secure and develop the forest area of Ajanta and Soyegaon region. During this investigation we have visited different localities, libraries for the proper information.

Acknowledgment

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