



ETHNOMEDICINAL PROSPECTIVE OF FAMILY ASTERACEAE IN SOME TRIBAL AREAS OF DISTRICT GADCHIROLI, MAHARASHTRA, INDIA.

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Abstract:

The present investigation deals with the ethnomedicinal uses of **23** species belonging to the family Asteraceae. Gadchiroli district has diverse habitats for the growth of various medicinal plants. Tribal peoples have strong faith in traditional herbal treatment by ethnomedicinal plants. Hence, appropriate credentials of useful ethnomedicinal plants with their present status and local traditional knowledge as well as practices is needed without any delay. Attempts must be initiated to employ appropriate conservation measures for safeguarding and sustainable uses of these useful species.

Keywords: *Ethnomedicines, Asteraceae, Gadchiroli district, Tribal peoples.*

Introduction:

In India despite the progress in modern medical and pharmaceuticals research, the use of medicinal herbs has become an important part of daily life. About 7500 plant species are known to have medicinal properties in India. There are several attempts have been made to explore indigenous knowledge to determine common medicinal plants for the treatment of various diseases.

Gadchiroli district has a long medical tradition and traditional learning of plant remedies. The district is regarded as a Tribal and undeveloped district and most of the land is covered with forests and hills. Forests cover more than 75.96 % of the geographical area of the district. The district is surrounded on West, South and East by the Wainganga, Godavari and Indrawati rivers respectively.

Total tribal population of in the district is 1,20,754 (As per 2011 Census) which makes 38 % of the total population of Gadchiroli district and it includes diverse communities like Gond, Raj-gond, Kolam, Halbi and Pardhan etc. They have their own languages as "Gondi and Madiya". Seven languages are spoken in the district i.e., Gondi, Madiya, Marathi, Hindi, Telugu, Bengali and Chhattisgadi. For day to day basic needs, the tribals depend on the forest. The tribals being cultivators cultivate various crops in the open forest area. The modern civilization has proved to be a threat to their rich culture.

The district is blessed with wide distribution of medicinal plant species while each tribe uses its own plants and has its own customs. Traditional home remedies and herbal medicine constitute prominent dimensions of local health tradition and unique heritage of district Gadchiroli. In the district, traditional home remedies and herbal medicines are

administered both in remote rural areas as well as in urban areas where allopathic medicine is easily available.



Figure 1. Map showing study area at Gadchiroli district of Maharashtra, India.

Material and Method:

Present Research work is the outcome of extensive exploration carried out during March 2014–February 2015 in the some tribal area of Gadchiroli district. In the present study, 3 taluka places viz. Armori, Kurkheda and Korchi of the district were investigated. Field work was carried out in order to investigate the existing ethnobotanical practices. During this investigation different plant species of the family Asteraceae were collected, dried, documented and were identified both by comparing them with herbarium specimen and with the help of flora. The field work includes interviews,

observations and guided field walks. Salutory usage data were collected from local tribal people and practitioner herbal healers (*Vaidu*) that practice traditional medicines regularly. Total 28 informants having an experience of minimum 10 years, including males and females, were interviewed in this concern.

Result and Discussion:

In the present study 23 plant species of the family Asteraceae have been recorded which are used by the tribal people in the ailment of human diseases. It seems that more plants from

Asteraceae family have been used for medicinal purposes because of their wide range of biologically active compounds which lead to medicinal properties and also because of being one of the largest families in the plant kingdom. Local people are using the plants for the treatment of various diseases i.e. Fever, Diarrhea, Rheumatism, Wounds, Bites, Burns, Jaundice, Piles etc.

Results have shown that several parts of plant species have been used for medical purposes (Table 1).

Table 1: Enumeration of the ethnomedicinal plant species of family Asteraceae

Sr.No.	Plant Name	Local Name	Application/Mode of Administration
1	<i>Ageratum conyzoides</i> L.	Osadi	1.Wounds, Bites, Burns –leaves are made into a paste and applied directly. 2.Colic, Colds, Fevers, Diarrhea, Rheumatism, muscle spasms and as a tonic – decoction of leaves is used orally.
2	<i>Caesulia axillaris</i> Roxb.	Maka	Roots are chewed to cure mouth sores.
3	<i>Cyathocline purpurea</i> (Buch.-Ham. ex D. Don) O. Ktze var. <i>purpurea</i>		The roots are reportedly used to relieve stomach pains. This plant releases an essential oil that has antimicrobial, anthelmintic and hypotensive properties.
4	<i>Eclipta prostrata</i> (L.) L.	Bhringraj	1.Bronchitis-The plant extract is crushed & is mixed with equal quantity of honey given twice a day for 4-6 days. 2.Jaundice-Leaf juice mixed with curd and given daily once for a week.
5	<i>Emilia sonchifolia</i> (L.) DC.	Kadu	1.Cold and flu-The leaves are boiled. The liquid is used to bathe a sick person 2.Dysentery-A tea made from the leaves is used. 3. Eye inflammations, night blindness, cuts and wounds and sore ears-The juice of the leaves is used. 4.Diarrhea-The juice of the root is used. 5.Teeth decay-The flower heads are chewed and kept in the mouth for about 10 minutes.
6	<i>Gnaphalium polycaulon</i> Pers.		Plant ash mixed with coconut oil and is applied on burns.
7	<i>Goniocaulon indicum</i> (Klein ex Willd.) C.B.Cl.		Young leaves used as vegetable.
8	<i>Grangea maderaspatana</i> (L.) Poir.	Godri	Cough-A decoction of the roasted leaves is given.
9	<i>Lagascea mollis</i> Cav.		Leaf paste is given in cuts and wounds. Flowers are given for ear complaints.
10	<i>Launaea procumbens</i> (Roxb.) Ramayya & Rajgopal	Pathani	The plant is grinded in water along with candy. and is given orally for painful micturation.
11	<i>Parthenium hysterophorus</i> L.	Gajar-gawat	Root decoction is given in dysentery.
12	<i>Pentanema indicum</i> (L.) Ling	Sankuli /Sonuli	A paste of the plant is used to treat bone fractures
13	<i>Sonchus arvensis</i> auct. non L.	Pivali-dudhi	1.The leaves are used as a poultice and are said to have anti-inflammatory activity. 2.An infusion of the leaves has been used in the treatment of caked breasts. 3.A tea made from the roots is used in the treatment of asthma, coughs and other chest complaints. 4.A tea made from the leaves is said to calm the nerves.

14	<i>Sphaeranthus indicus</i> L.	Gorakhmundi	1.Jaundice- Juice of leaves is given. 2.Piles-Plant extract with castor oil and cumin seed taken orally for bleeding piles. 3.Labour pains- plant powder is given with rice gruel, till cure.
15	<i>Spilanthus paniculata</i> Wall. ex DC	Akkal-kadha	Skin disease-Juice of leaves is given
16	<i>Tricholepis glaberrima</i> DC.		1.Weakness- decoction of whole plant is given. 2.Decoction is also used as brain tonic. 3.Leucoderma and other skin diseases- decoction of whole plant is given.
17	<i>Tridax procumbens</i> L.	Kambarmodi	Jaundice-Plant paste with jaggery is given.
18	<i>Vernonia cinerea</i> (L.) Less.	Sahadevi	1. Fever- Oil cooked with juice of plant is given. 2.Accidental wounds- Wounds are filled with root juice and then bandaged. 3. Boils- root is rubbed with rice water and paste is applied to boils.Paste of plant is applied on eruptive boils. 4.Leucoderma-1 spoonful seed powder mixed with 2-3 black pepper fruits. This is given once a day for a month.
19	<i>Xanthium strumarium</i> L.	Vinchu	1. Hoarsness of voice - ghee cooked with decoction of root is given. 2.Herpes- leaf powder is taken along water. 3.Leucoderma- plant decoction is given daily two times till cure.
20	<i>Calendula officinalis</i> L.	Zendu	The plant is signally valued for healing wounds, ulcers, burns, and other breaches of the skin surface.
21	<i>Helianthus annuus</i> L.	Suryaphool	The plant is used in scorpion-sting and snake-bite. The seeds are use for expectoration.
22	<i>Tagetes patula</i> L.	Zendu	The leaves are used in the treatment of piles, kidney troubles, muscular pain. Leaf juice is used for earache.
23	<i>Chrysanthemum indicum</i> L.	Shevanti	Flowers are used in treatment of Headache, hypertension.

Conclusion:

The present investigation shows the importance of family Asteraceae in life of some tribes of the Gadchiroli district. The important objective of this study was to record the indigenous uses of these plants used by the local tribes for various purposes. The ethnomedicinally important plants are the source of health treatment and income.

The issues of conservation of medicinal plants and their sustainable use are interlinked with these local treatments. Initiatives are recommended for collection, processing, non-destructive harvesting and cultivation of medicinal plants for health security and employment promotion in district Gadchiroli of Maharashtra. It is very important that the precious ethnobotanical knowledge about these plants should be transferred to the younger generations. The data may be valuable in the future for pharmacological studies. It is, therefore, important that this oral knowledge system must be preserved and documented.

The proportion of the peoples using allopathic medicines as compare to these traditional medicines is less because they are

directly dependent on plants for medication and other basic needs. The ethnomedicinally important and other beneficial plants are quite useful for the basic health and hygiene of these peoples. These plants are a source of interaction between the people and the nature.

It was observed that the availability of these plants is decreasing at an alarming rate. This observation also reveals that habitat destruction, over exploitation and unplanned agriculture were the reasons for depletion of medicinal plants. Therefore, the medicinal plants used in traditional healthcare system need urgent attention.

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