



Ethno Veterinary Practices of Some Plant Species By Ethni People of Bhadrawati Tahsil From Chandrapur District, Maharashtra (India).

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Abstract:

A study on ethno veterinary usage of wild medicinal plants by ethnic people from BhadrawatiTahsil of Chandrapur District, Maharashtra was conducted from July 2010 to January 2012. All together 34 species are being indentifiedof total 26 families under 33 genera having used to treat different veterinary diseases.

Keywords : Ethno veterinary, plants, ethnic people, BhadrawatiTahsil ,Chandrapur District, Maharashtra.

Introduction :

Bhadrawati is a Tahsil place nearly 25 Km North of Chandrapur and 125 Km South East from Nagpur. It is situated at about 211m above the mean sea level and is at 20° 06' 35.67" N latitude and 79° 07' 7.33" E longitude. Bhadravati is a city and a [municipal council](#) in [Chandrapur district](#) in the state of [Maharashtra](#), [India](#). It lies 18 km from Anandwan. It has a major ordinance factory and several open-cast coal mines. There are about 20 villages in the [taluka](#).(en.wikipedia.org) The rural people are either farmer or agriculture labour and they bear livestock mostly cattle's, buffalo, goats, sheeps etc. In BharawatiTahsil of Chandrapur District, many livestock owners, especially those who are poor and live in remote areas use ethno veterinary medicine for the primary healthcare of their animals. Ethno veterinary medicine (EVM) or veterinary anthropology refers to holistic and interdisciplinary study of traditional knowledge, skills, methods, practices and folk beliefs of the people about the health care, healthful husbandry and production of livestock.

The term ethno veterinary was for the first time in research forum, applied and used by Dr. Constance McCorkle in 1986. She defined it as a local of indigenous knowledge and methods for caring, for healing and managing livestock. (McCorkle, 1986). According to United Nations Food and Agricultural organization (FAO), the lack of drug diseases and infections results in losses of 30 – 35% in the breeding sector of many developing countries, where poor animal health remains the major constraint to increased production (FAO, 2012). In most rural areas people prefer to treat their animals with indigenous drugs. At present over 35,000 plants are known to have healing properties (Jain, 1991). The importance of the traditional knowledge on ethno veterinary practices by specialists (*Vaidyas*) and local healers who are knowledge and experienced in traditional systems of treatment, but their knowledge is not documented, and is dwindling fast (Jain, 2000).





As local healers did not document their knowledge and experience, and did not pass it on to others readily, there was danger of extinction of that knowledge (Mathias and Anjara, 1998).

Ethno veterinary medicine is developed by farmers in fields and barns, rather than by scientist in laboratories and clinic. It is less systematic and less formalized and is usually transferred by word of mouth rather than in writing (Mathias 2004). The role of ethno veterinary medicine in livestock development is beyond dispute (Martin et al.2001). The available information on ethno veterinary medicine in Maharashtra is scanty (Deshmukh et.al 2011, Salve and Reddy ,2012) no other such report from Chandrapur District.

Material and Methods :

Several field trips were under taken during the period from July 2010 to January 2012 to the ethnic villages in BhadravatiTahsils of Chandrapur District. The data have been collected personally from the tribal pockets and pastoral villages of non-tribe also. The resource persons included aged ethnic male and women cum owners of cattle's, .buffalos, gots and sheeps, besides the local *Vaidyas*. The botanical specimens of all folk drug plants were collected, indentified with the available floras and deposited at the PG. Dept. of Botany, JanataMahavidyalaya, Chandrapur for further reference (Ugemuge 1986, Yadao and Sardesai 2002, Naik 1979,1998, Cook T. 1967, Sharma et.al. 1996, Singh and Kartikeyan 2000, Singh et.al. 2001).

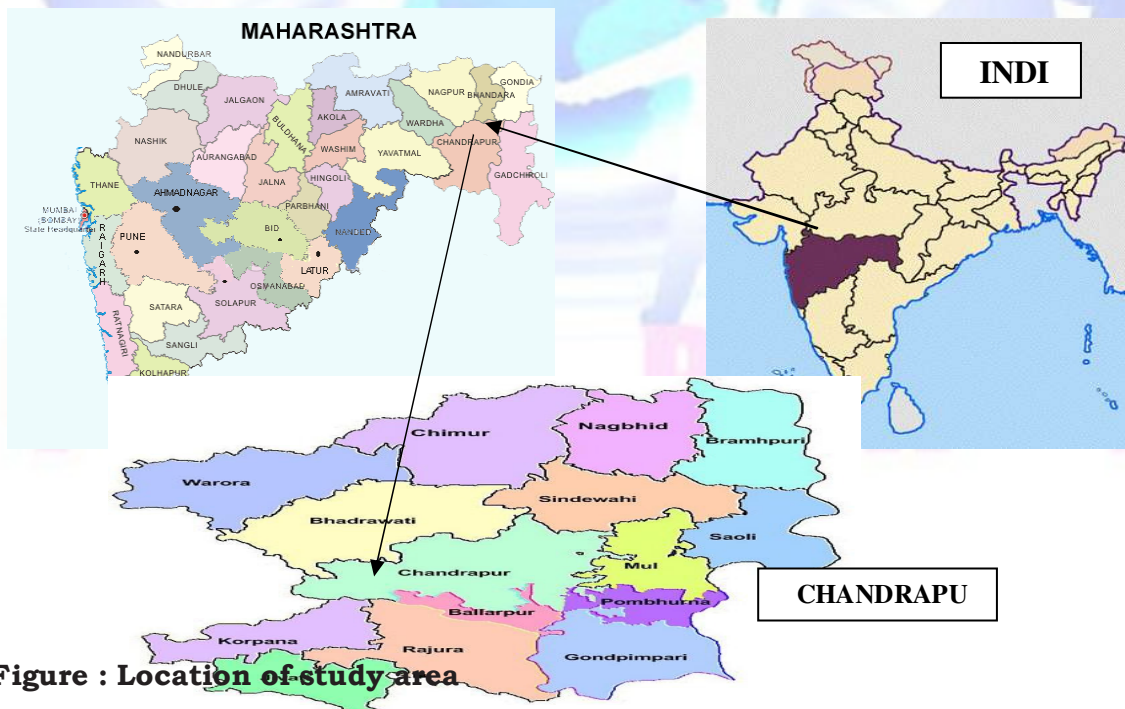


Figure : Location of study area

Enumeration :-

The information gathered on ethno veterinary medicine for different diseases to cattles in BhadravatiTahsil of Chandrapur District by the local ethnic people and





herbal practitioners are presented alphabetically under the scientific name of species followed by author's abbreviations, plant family, vernacular names, source, plant part, ethno veterinary practices, (Table 1). The paper reveals some of the unique traditional ethno veterinary medicines from BhadrawatiTahsilof Chandrapur District of Maharashtra.

Table.1- List of ethno veterinary plants used by ethnic people from BhadrawatiTahsilChandrapur District.

S. N.	Botanical name	Family	Vernacular name	Source	Plant parts	Ethno veterinary practices
1	<i>Abrus precatorius</i> L.	Fabaceae	Gunja	Wild and Cultivated	Whole Plant	One glass of whole plant extract given orally for to retained placenta.
2	<i>Acheranthes aspera</i> Linn.	Amaranthaceae	Kutri	Wild	Root	One glass fresh root extract given orally to the goats for to expel placenta and lochia after parturition.
3	<i>Aegle marmelos</i> L. Corr.	Rutaceae	Bel	Wild	Fruit	Fruit pulp paste given to the cattle for foot and mouth disease.
4	<i>Allium cepa</i> L.	Liliaceae	Kanda	Cultivated	Bulb	2-3 drops of bulb extract dropped into eyes of cattles for 2-3 times in a day to expel insects.
5	<i>Allium sativum</i> L.	Liliaceae	Lasun	Cultivated	Bulb	Bulb paste is applied on infested wounds
6	<i>Andrographis paniculata</i> Nees	Acanthaceae	Bhuinimb	Wild	Whole plant	One glass whole plant extract along with <i>Vitex negundo</i> leaves for ephemeral fever (Three day fever).
7	<i>Anonaspumosa</i> Linn.	Annonaceae	Sitafhal	Wild and Cultivated	Leaf	Fresh leaf paste with a pinch of Calcium carbonate (Chuna) and Tambaku (<i>Nicotianatabacum</i>) applied externally as an insecticides to the cattle's.
8	<i>Argemone Mexicana</i> Linn.	Papaveraceae	Pivala Dhotra	Wild	Leaf	One cup juice of leaves given orally to relief from malarial fever to cattle's, buffaloes. and goats.
9	<i>Asperagurace mosus</i> Willd.	Liliaceae	Shatavari	Wild and Cultivated	Root	Half cup root powder mixed with cattles feed to newly pastured cows and buffaloes to enhance early lactation and to improve period of lactation.
10	<i>Azadiarchtaindica</i> A. Juss.	Meliaceae	Kadulimb	Wild	Leaf	Leaf extract used externally to wash the fresh wounds and given orally for the digestive disorders. Leaf paste is applied externally for the skin diseases to cattle's.
11	<i>Balanites aegypt</i>	Balanitaceae	Hinganbet	Wild	Seed	Seed powder 2-3 teaspoon





	<i>tica</i> (L.)Del.					mixed with water given orally for to check internal inflammation on the neck of oxen.
12	<i>Barleliaprinoite</i> sLinn.	Acanthaceae	Katekoranti	Wild and cultivated	Leaf	Fresh leaf paste applied in inter digital space in animal suffering from foot and mouth disease.
13	<i>Brassica compestris</i> L.	Brassicaceae	Mowari	Cultivated	Seed	One cup seed paste with water given orally in constipation and gas trouble to cattle's
14	<i>Buteamonosperma</i> (Lamk) Thanbert	Fabaceae	Palas	Wild	Flower	Fresh or dried flower paste applied to inflammeted areas of skin of cattle's.
15	<i>Caesalpinia bonduc</i> (L.)Roxb.	Caesalpinaceae	Sagargoti	Wild	Seed	Two teaspoon of seed powder mixed with human urine and applied externally for rheumatism.
16	<i>Calotropis proce</i> ra (Ait.)R.Br.	Asclepiadaceae	Rui	Wild	Leaf	Roasted leaves along with <i>Linum sitatissium</i> oil are are bandaged on swelling, fracture and dislocated joints of cattle's.
17	<i>Cassia fistula</i> Linn.	Caesalpinaceae	Bahava	Wild	Fruit	Crushed fruit pulp with water given orally against the dysentery to the cattle's.
18	<i>Choloroxylon swietenia</i> DC	Rutaceae	Bhera	Wild	Young Twigs	Young twigs half burned and smoke used to withdraw the mosquito and other insects from cattle's house
19	<i>Citrullus colocynthis</i> (L.) Schrad.	Cucurbitaceae	Indrayan	Wild	Leaf	Leaf juice applied all over the body of cows , bullocks and buffelos as rheumatism.
20	<i>Cordia dictoma</i> Forst.	Boraginaceae	Bhokar	Wild	Fruit	A cup of fresh or dried fruits mixed with jaggary given orally to cattle's for a week to cure pneumonia.
21	<i>Cordiospermum halicacabum</i> L.	Sapindaceae	Ghanphol	Wild	Seed	One teaspoon seed powder along with one glass of buttermilk given orally for 2-3 times for dizziness.
22	<i>Coriandrum sativum</i> L.	Apiaceae	Dhania	Cultivated	Whole plant	One tea cup paste of fresh whole plant paste given orally for a week to get relief from foot and mouth disease.
23	<i>Cucurma longa</i> L.	Zingiberaceae	Halad	Cultivated	Rhizome	Paste of dried rhizome powder along with <i>Linum sitatissium</i> oil applied externally on the necks of oxen for internal inflammation and also applied on wounds to checks the microbial





						infection.
24	<i>Cyperus rotundus</i> L.	Cyperaceae	Lai, Nagarmotha	Wild	Rhizome	Half cup rhizome powder along with water given orally to intestinal warm for a week.
25	<i>Dioscoria bulbifera</i> L.	Dioscoriaceae	Matalu	Wild and cultivated	Bulbil (Tuber)	Tuber extract applied externally for the skin diseases to the cattle's.
26	<i>Eclipta prostrata</i> (L.) L., Mant.	Asteraceae	Maka	Wild	Leaf	Leaf paste is applied on the wounds for rapid healing.
27	<i>Gossypium</i> sp.	Malvaceae	Kapus	Cultivated	Seed	Water soaked seed of <i>Gossypium</i> given to lactation cattle for prolongation of lactation period and increase the milk quantity.
28	<i>Linum usitatissimum</i> L.	Linaceae	Jawas	Cultivated	Seed	Seed remain after oil extraction given to lactating cattle for prolong the period of lactation. One cup seed oil given orally for cattle for constipation, indigestion and gas trouble.
29	<i>Pergularia damiana</i> (Forsskal) Chiov.	Asclepiadaceae	UtranVel	Wild	Leaf	Leaf extract along with latex used externally for cattles to relief from muscle disorders.
30	<i>Ricinus communis</i> Linn.	Ephorbiaceae	Arandi	Cultivated	Leaf	Leaf extract of used to hasten the expulsion of placenta in cattle's.
31	<i>Semecarpus acardium</i> L.f.	Anacardiaceae	Bibba	Wild	Seed	Seed along with two and half leaves of <i>Calotropis procera</i> given orally to get relief from constipation and gas trouble to cattle's .
32	<i>Soymida febrifuga</i> A.Juss.	Meliaceae	Rohan	Wild	Stem Bark	Stem bark powder applied externally on the injury by iron things to the cattle's
33	<i>Syzygium cumini</i> L.Skeel.	Myrtaceae	Jambhul	Wild and Cultivated	Stem Bark	Decoction of Bark along with Margosa bark in equal proportion used on the joint pain and rheumatism, arthritis of cattle's.
34	<i>Vitex negundo</i> L.	Verbenaceae	Nirgudi	Wild	Leaf	Leaf extract applied externally for to kill the lice and other insects of cattle's.

Table. 2-Source of plants

Wild	20
Cultivated	08
Wild and cultivated	06





Table. 3-Plant parts used

Plant Parts used	Number of species
Leaf	10
Seed	07
Whole plant	03
Fruit	03
Rhizome	02
Young twigs	01
Root	02
Bulb	02
Stem bark	02
Bulbil	01
Flower	01
Total : 11	34

Result and Discussion :

During the field visits (Table. No. 01) in all 34 species belonging to 26 families under 33 genera , of that dicot families 22 and monocot families 04. In dicot families major contribution of families FabaceaeLiliaceae (04 species) and, Asclepiadaceae, Acanthaceae, Meliaceae, Caesalpiniaceae,Rutaceae (02 species each),and remaining dicot families contribute one species each. Monocot families (04),namelyLiliaceae (03) Cyperaceae (01), Zingiberaceae (01),Dioscoriaceae(01) etc. On the basis of source of ethno veterinary plant (Table no.02),wild plant contributed mostly useful to the ethnic people of BhadrawatiTahsil of Chandrapur . On the basis of plant parts used (Table no. 03).

Some ethno-veterinary plants cultivated in agriculture and in home garden as the become easily available like *Allium sativum* L., *Allium cepa*L., *Cucurma longa* L., *Linum usitatissimum*L., *Gossypium* species etc. Single plant species is used to treat many diseases and in many disease a single plant also used.. All the taxa used are being in everywhere in the world but in today condition it is going on extinction due to the documentation of ethno veterinary medicine is very important because in the modernization young generation not interested in animal husbandry and traditional knowledge is way of extinction.

Conclusion:

Information collected from study area indicates the local informants *Vaidyas* of the district possess good knowledge of traditional ethno-veterinary medicine. But the documentation of ethno-veterinary medicine is very important because in the modernization young generation not interested in animal husbandry and traditional knowledge in a way of extinction. In order to document conserve and evaluative the efficiency of these valuable drugs, collective efforts by the ethno-botanists and ethno pharmacologist needed by checking their scientific validity, clinical studies are required.





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