# ETHNO-VETERNARY MEDICINAL PREPERATIONS OF TRIBALS FROM SHIRPUR TAHSIL, DHULE DISTRICT, MAHARASHTRA, INDIA

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#### ABSTRACT

Ethnobotanical surveys can potentially bring out many different clues for the development of safe, effective and inexpensive indigenous remedies. Present study has been focused on tribals of Shirpur Tahsil Dhule district of Maharashtra, India. Field surveys of this area were carried out during 2010–2011 through several field visits and interviews. The aim of the present study was primarily to evaluate and inverntorize ethno veterinary medicinal uses of the plants known to tribals and to encourage preservation of their culture, conservation and sustainable utilization of the plant wealth. After such survey made 21 plant species of angiosperms are found useful against the various common diseases occurring among the domestic animals of the tahsil. The plants used by the tribe are arranged alphabetically followed by family name, herbarium number, local name, parts used, method of preparation and mode of administration of the drug.

Key words: Tribals, Ethno veterinary medicine and Shirpur tahsil, Dhule district.

#### **INTRODUCTION**

India has very rich and diversified flora. This provided valuable medicinal plants. Since ancient times, manuscripts such as Rig Veda and other ancient treatises documented by Indians content wealth of information, which cures different diseases of human beings. Now, a days the documentation of ethno-veterinary practices based on plants is in flux. There are many such reports from Nepal (1,2) from India Rajasthan (3),Bihar(4),Uttara khand (5),Uttar Pradesh (6) and also from Maharashtra (7,8,9). In India more than 75% population is rural the people who rare animals usually treat them with traditional methods for the different diseases. In Maharashtra Shirpur tahsil is one of the tribal dominated tahsil in Dhule district. Satpuda ranges falls along the northern side of tahsil where, trible communities are residing. Among them prominent are Pawara ,Barela ,Tadvi, Bhil etc. In spite of vivid plant wealth there are no reports on ethno-veterinary medicinally used plants in the present study area.

#### MATERIALS AND METHODS

Ethno-botanical explorations were carried out in the Shirpur tahsil in 2010-11. Several remote localities as well as some villages were visited. The information for collection of data was done with the usual ethno-medical botanical method (Jain 1987). The medicinal plants collected were identified with the help of established floras (Cook,1965; Patil,2003; Shah,1978) and voucher specimens are deposited at Department of Botany,V.N.College Shahada dist: Nandurbar. The correct botanical name family in parenthesis and local name plant part used,method of preparation, mode of administration of the drug against the ailments is provided and the plants species are arranged alphabetically.

KATHMANDU UNIVERSITY JOURNAL OF SCIENCE, ENGINEERING AND TECHNOLOGY VOL. 9, No. I, July, 2013, pp 134-139

## **ENUMERATION**

*Calotropis procera* (Ait.)R.Br.(Asclepiadaceae), Rui Plant parts used : Roots Method of preparation: Few roots are crushed and soaked in 1 L. of water. Mode of administration: The decoction is orally given to the cattle not foraging.

Curculigo orchioides Gaerth. (Hypoxidaceae), Kali-musali,

Plant parts used:Roots

Method of preparation: The roots are ground to powder and mixed with wheat flour and small size clods are prepared.

Mode of administration: About 2-3 clods are feed to the cattle suffering from pest attack in the foot and horns.

Cassia fistula L.(Caesalpiniaceae), Bahawa

Plant parts used : Pods

Method of preparation : Few pods are soaked in water for overnight or 4-5 hours. Mode of administration : The infusion is given to the goat suffering from stomach enlargement. It is also useful to the hens suffering from "Mirgi" Rani khet.

Cassia auriculata L.(Caesalpiniaceac), Awin

Plant parts used: Flowers

Method of preparation: Handful of fresh flowers are crushed and soaked in a glass of water for 4-5 hrs.

Mode of administration: The mixture is filtered and 1/2 cup of infusion is give to the she goat, after premature delivery, to get relief from constipation. It is repeated for 2-3 days or as required.

Citrullus colocynthis (L.) Schrad.(Cucurbitaceae), Kadu-indrawan

Plant parts used : Fruits Method of preparation : The immature green fruits are crushed to watery paste. Mode of administration : The paste is applied externally over the swelling on the neck (boils) of cattle. Repeat it for 4-5 days.

Caesalpinia bonduc (L.)Roxb (Caesalpiniaceae),Sagar gota

Plant parts used: Leaves

Method of preparation: The leaves are burnt to obtain smoke.

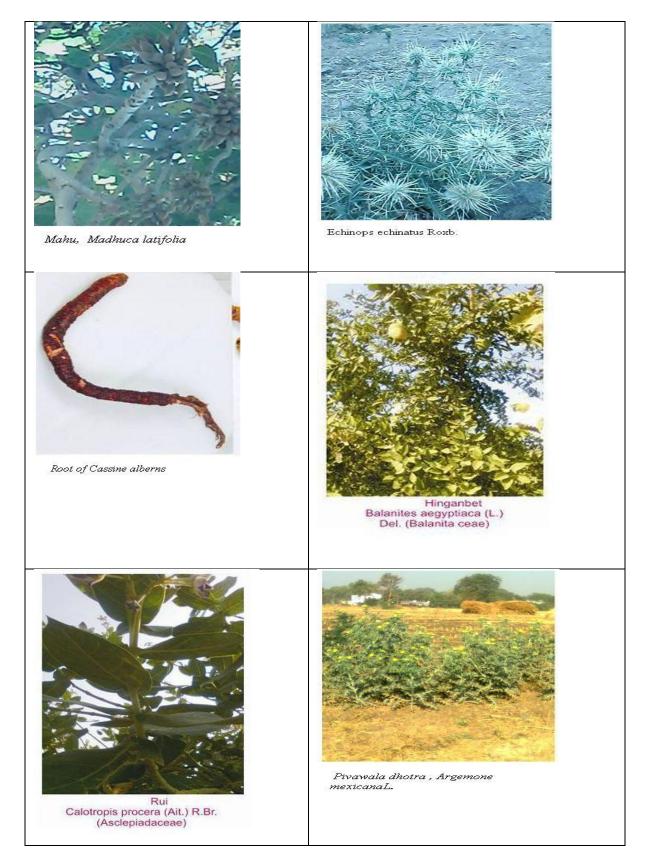
Mode of administration: The leaf smoke is given to the cattle suffering from food poisoning. It is followed once a day for 2-3 days.

Argemone mexicana L. (Papaveraceae), Pivla dhotra

Plant Parts used: Whole plant body

Method of preparation: The whole green plant body is crushed and soaked in a glass of water over night.

Mode of administration: This cup of infusion is applied over the boils on neck or other body part of cattle.



Hemidesmus indicus L. (Periplocaceae), Dudhi Vel

Plant part used: Leaves or entire shoot.

Method of preparation: The leaves from healthy plant are collected handful of leaves/shoots crushed and mixed with wheat flour and small size lumps are prepared.

Mode of administration: The small size lumps are fed to the cow or buffalos or goat if they are not giving enough milk or even it is practiced during pregnancy.

Madhuca latifolia (Roxb.) Chev.(Sapotaceae), Mahu

Plant Parts used: Leaves

Method of preparation: 5-7 leaves of Mahu are cooked with a cup of rice.

Mode of administration: The boiled rice is fed to the cow, buffalo or goat after delivery for early detachment of 'Jar'(placenta).

Drimia indica (Roxb.) Jessop. (Liliaceae), Jangli Kand,

Plant Part used: Leaves

Method of preparation: About 8-10 fresh leaves are crushed to obtain a cup of juice. Mode of administration: A cup of leaf juice is administered as a single dose to the cattle having dysentry.

Dioscoria bulbifera L. (Dioscoriaceae), Kadu kand

Plant parts used: Bulbils.

Method of preparation: The bulbil is rubbed over stone to prepare thick paste. Ample amount of paste is mixed with wheat or sorghum flour to prepare bread or chapatti.

Mode of administration: The paste is applied extremely over the wound or even in pest attack in foot and horns. The bread or chapatti is fed to the cattle. It is repeated for 4-5 days or till cured.

Euplophia herbacea Lindl.(Orchidaceae), Kukad Kand,

Plant Part used: Tuber

Method of preparation: The tube is crushed to paste.

Mode of administration: The paste is applied externally over the swelling on neck. It is repeated till cured.

Cassine alberns (Retz.)Kostern. (Celastraceae), Butyakes

Plant part used: Roots

Method of preparation: Few roots are crushed and a cup of juice is obtained.

Mode of administration: The cup of juice is administered to the cattle, not eating the fodder, Repeat it for 2-3 days.

Syzygium cumini (L.) Skeels. (Myrtaceae), Jamun,

Plant part used: Leaves or Roots

Method of preparation: Few leaves are crushed and soaked in water to obtain the juice similarly roots are also processed to obtain the juice.

Mode of administration: A cup of juice obtained from leaves or roots is administered to the goat with dysentery/ diarrhea.

KATHMANDU UNIVERSITY JOURNAL OF SCIENCE, ENGINEERING AND TECHNOLOGY VOL. 9, No. I, July, 2013, pp 134-139

*Millettia extensa* (Benth.) Baker. (Papilionaceae), Agari, Plant parts used: Stem bark or Root Method of preparation: The bark or root of suitable size is crushed and soaked in water. Mode of administration: The infusion is applied over the body of cattle affected by tick.

Dolichos uniflorus Lamk. (Papilionaceae), Kudit,

Plant Parts used- Seeds

Method of preparation: 10-15 gm. seeds are boiled in a glass of water. The infusion is extracted and seed cake is also collected.

Mode of administration: The infusion or seed cake or both are fed to the cattle for early detachment of placental connection after delivery.

Bombax ceiba L. (Bombacaceae), Sawar,Plant part used: Stem barkMethod of preparation to prepare: Stem bark is crushed and the paste is prepared and mixed with the wheat flour balls.Mode of administration: The cattle suffering is fed with suitable size ball every day for 2-3 days

Allium cepa L. (Liliaceae), Kanda,

Plant parts used: Bulb

Method of preparation: The bulb is rubbed to obtained the juice.

Mode of administration: The fresh juice of 'Kanda' is applied over the pest affected area or wound or the crushed 'Kanda' is over the affected area. It is repeated till cured.

Echinops echinatus Roxb.(Compositae), Udkata.

Plant part used: Roots

Method of preparation: Roots are crushed and soaked in ample amount of water.

Mode of administration: The infusion from the roots is orally given to the cattle if it is suffering from exit of placenta.

Belanetis aegypticeae (L.)Del.(Belanitaceae), Hinganbet

Plant parts used: Fruit pericarp

Method of preparation: The fruit (mature) is crushed and the cup of extracted juice is collected. Mode of administration: In the swellings applied the juice is orally given the cattle for 4-5 days or till cured.

## DISCUSSION

The present study reveals the ethno-veterinary medicinal information related to 20 plant species belonging to 16 families of angiosperms. The ethno-veterinary medicinal uses of such plants against the ailments in cattle ,hens, goats etc. such as foot and mouth disease, Ranikhet (Mirgi),germs in Horns,cattle not foraging, boils, detachment of placenta, constipation, tick removal, wound, dysentery/ diarrhea, food poisoning etc. From the present knowledge it reveals that the leaves ,roots, stems, stem bark, underground parts ,succulent leaves ,flowers, fruits, fruit pericarp etc. are employed for curing the diseases in the domestic animals. This is shows the understanding of the local people about the ethno-veterinary uses of the plants ,their knowledge of ailments , method of preparation of medicine , and the amount of appropriate doses for particular ailment. In spite of availability of modem medicines, rural peoples recourse to their

own traditional therapy. This shows their faith in traditional ethno medicine .Such crude drugs needs to be investigated on pharmacological and clinical lines to develop potential drugs.

# ACKNOWLEDGEMENTS

Authors are thankful to the Principal, V. N. College, Shahada and S.J.Patil is grateful to the Hon' President Shri Amrishbhai Patel (MLA), Hon'Chairman Shri Rajgopalji Bhandari, Hon' C.E.O Shri S. N. Patil and Principal Dr.D.R.Patil, R.C.Patel Sr.College, Shirpur and Principal Sau. M. S.Agrawal for providing facilities and kind support for the research work.

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