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# Ethno-Veterinary Uses of Medicinal Plants of Bhokar Tahesil, Nanded district, MS, India

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## ABSTRACT

The rural and tribal peoples are generally depends on plant based remedies practices with the help of Vaidus and some experienced local farmers to cure their livestock due to inadequate facilities. The present study was carried out to know and document the Ethno-veterinary uses of medicinal plants by the tribal and rural people of Bhokar tahesil to treat their livestock. The 29 medicinal plants belonging to 23 different families were found as Ethno-veterinary medicinal plants used by tribal peoples to cure different diseases of livestock of Bhokar belongs to Nanded district of Maharashtra.

**Keywords:** Livestock diseases, Ethno-veterinary medicinal plants, Bhokar tahesil, Maharashtra

## INTRODUCTION



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Relationship of Human and animal is as old as human civilization. Human is dependent on his livestock for various requirements like food, milk, agriculture, fertilizers, clothing etc. for keeping livestock healthy some experienced persons (Vaidu's) treat various diseases with locally available herbs. These practices passed down orally from generation to generation. The study of traditional healing practices of animal's health is called ethno-veterinary medicine. Ethno-veterinary medicine consists of local people's knowledge, skills, methods, practices and beliefs applicable to animal health and production (Mc Corkle, 1986).

Different workers documented ethno-veterinary practices in different parts and districts of Maharashtra time to time as (Deshmukh *et al.*, 2011), in Jalna, (Gadpayale *et al.*, 2014), in Bhandara, (Wath and Jambu 2014), in Melghat region, (Patil and Patil 2013), shirpur tahesil, (Patil and Patil, 2001), from Nashik, (Rothe, 2005), Melghat, (kulkarni *et al.*, 2014) vidarbha region, (Salve and Gopal Reddy 2012) Ashthi taluka Beed, (Somkunwar *et al.*, 2012), Chndrapur (MH), (Marathe *et al.*, 2010) from Khamgaon and recent work by (Marathe and Deshmukh 2020), from Hadgaon taluka of Nanded district.

No one has documented ethno-veterinary work in Bhokar tahesil of Nanded district hence present work was undertaken to explore data from traditional practitioners and tribal peoples of study area.

## **MATERIAL AND METHODS:**

Several field trips were conducted to collect the data from different villages of Bhokar Tahesil during Jan. 2017 to March 2019. Ethno-veterinary data was collected by conducting open interviews with farmers, Shepherds, experienced persons and traditional healers of local area. (Deshmukh *et al*, 2011). The plants were collected and identified on the basis of standard floras (Naik, 1998; Yadav and Sardesai, 2002).

#### Study area

Present study was conducted in Bhokar Tahesil of Nanded district of Maharashtra State. It has average altitude of 1509 feet. The total area covered by tahesil is 66247 R.R. of these the area under cultivation is 47409 hectares. Out of this, the area under dry area is 45345 hectares and the cultivable area is 1064 hectares. The forest area of Bhokar tahesil is 12004 hectares. Bhokar taluka has average 996.60 mm of rainfall.

#### **RESULT AND DISCUSSION**

Different medicinal plants used by tribal peoples of study area are enumerated in table 1.

Table 1: Identified plant species as ethno-veterinary medicinal plants from Bhokar Taluka

Sr. No.	Botanical name	Family	Part used	Ethno-veterinary use
-	Ann dise alter in dian A Turn	M - 1:	Dl-	
1	Azadirechta indica A. Juss.	Meliaceae	Bark	Mastitis
2	Bombax ceiba L.	Bombacaceae	Bark	Anorexia and Joint pains
3	Blepharis repens (Vahl) Roth	Acanthaceae	Leaf	Bone Fracture
4	Cardiospermum halicacabum L.	Sapandiaceae	Seeds	Kidney stones
5	Cassia fistula L.	Caesalpinaceae	Leaf	Mouth ulcer
6	Curcuma longa L.	Zingiberaceae	Rhizome	Mouth ulcer and Body itching
7	Datura stramonium L.	Solanaceae	Leaf	Galactagogue
8	Dioscorea bulbifera L.	Dioscoreaceae	Bulbis tuber	Internal injury and wound
9	Ficus racemosa L.	Moraceae	Latex	Bone fracture
10	Mucuna prureins (L.) DC.	Fabaceae	Seeds	Wound itching
11	Piper betle L.	Piperaceae	Leaf	Vomiting
12	Cissus quadrangularis L.	Vitaceae	Stem	Bone fractures
13	Ixora brachiata Roxb.	Rubiaceae	leaves	Improves lactation
14	Limonia acidissima L.	Rutaceae	leaves	Hemorrhagic septicemia
15	Calatropis gigantia (L.) R.Br.	Asclepediaceae	Latex	Snake and dog bite
16	Aegle marmelos (L.) Corr.	Rutaceae	Leaves	Snake bite
17	Santalum album L.	Santalaceae	Leaves	Eye injury.
18	Bauhinia racemosa Lamk.	Caesalpiniaceae	Friuts	Scorpion bites
19	Semicarpus anacardium L.f.	Anacardiaceae	Seed	Dental treatment
20	Madhuka longifolia (Koen.) Machbr.	Sapotaceae	Fruits	Shivering fiver
21	Cassia tora L.	Caesalpiniaceae	Leaves and Seeds	Dog bites
22	Mangifera indica L.	Anacardiaceae	Bark with lime	Dysentery
23	Butea monosperma (Lamk.) Taub.	Fabaceae	Roots	Tympany
24	Annona squamosa L.	Annonaceae	Leaves	Wounds
25	Citrus limon (L.) Osbeck	Rutaceae	Leaf and fruit	Foot and mouth diseases
26	Tinospora cordifolia (Wild.) Miers.	Menispermiaceae	Whole plant	Fever
27	Abelmoschus esculnntus (L.) Moench.	Malvaceae	Roots	Burn and injury
28	Ricinus communis L.	Euphorbiaceae	Leaf juice and Seed oil	Indigestion and gas trouble
29	Tectona grandis L.F.	Verbenaceae	Seed powder	Indigestion and Tympany

Part Used	% Diseases cured
Roots	6.45
Leaves	38.7
Whole plant	3.22
Seed	16.1
Bark	9.67
Fruits	9.67
Latex	6.45
Stem	3.22
uber	3.22
Rhizome	3.22

Table 2: Plant parts used by the traditional practitioners to cure diseases.

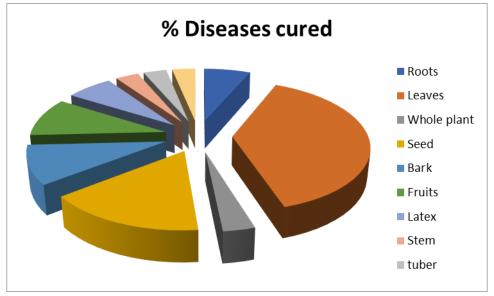


Figure 1: Use of plant part to cure % diseases.

The plants are arranged as local name followed by botanical name, family, part used and ethno-veterinary use. The study reveals 29 different medicinal plants from 23 different families against different animal diseases of the area. It is noted that Caesalpinaceae and Rutaceae family represented with 3 plants species while Fabaceae and Anacardiaceae represented by 2 plants species.

The plant parts used by traditional healers in treatments are shown in table 2, figure 1. The most widely used plant part to cure the animal disease was leaves with 38.7 % followed by seed with 16.1 %, bark and fruits with 9.67 % and stem, tuber, rhizome with 3.22 %.

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#### REFERENCES

Deshmukh RR, Rathod VN and Pardehsi VN (2011) Ethnoveterinary medicine from Jalna district of Maharashtra state. *Indian Journal of Traditional Knowledge*. 10 (2): 344-348.

- Gadpayale JV, Khobragade DP, Chaturvedi AA (2014) Traditional Ethno-Veterinary practices in Bhandara district (M.S.) India. *Int. J Scie. Appl. Res*, 1(2): 91-99
- Kulkarni S, Kulkarni DK, Deo AD, Pande AB and Bhagat RL (2014) Use of Ethno-veterinary medicines (EVM) from Vidarbha region (MS) India. *Bioscience Discovery.* 5 (2): 180-186.
- Manjusha Wath and Sangeeta Jambu (2014) Ethnoveterinary survey of herbal therapy for treating livestocks of Melghat region (Maharashtra), *Int J. Plant, Animal and Environ. Sci.* 4 (3)
- Marathe Vishal R, Prachi P. Kshirsagar and Prabha Y. Bhogaonkar (2010) Documentation of Traditional ethnoveternary practices in Khamgaon taluka (Dist. Buldhana Maharashtra State). *Indian Journal of tropical Forestry*. 26 (2): 60 - 62.
- Marathe Vishal R and Deshmukh Muzammil M (2020) Ethnoveterinary medicinal plant species of Hadgaon Taluka, Nanded District, Maharashtra, India. *Int. J. of. Life Sciences.* 8(2): 404-410.
- McCorkle CM (1986) An Introduction to Ethno-veterinary Research and Development. *J. Ethnobiol.* 6:129-149.
- Naik VN (1998) *Flora of Marathwada*, I & II, Amrut Prakashan, Aurangabad.
- Patil US and Deshmukh OS (2015) Plants Used In Ethno-Veterinary Medicines by Tribal Peoples in Betul District, Madhya Pradesh, India. *International Journal of Science and Research.* 4 (10): 1536-1538.
- Patil HM and Patil SJ (2013) Ethno-veterinary medicinal preparations of tribals from shirpur tahsil, dhule district, Maharashtra, India, KU *Journal of Science, Engineering and Technology* 9(I):134-139.
- Patil MV and Patil DA (2001) Ethnoveterinary herbal medicines from Nasik District (Maharashtra). *Journal of Non-timber Forest Products* 8(1-2), 19-24.
- Rothe SP (2005) Ethno-veterinary medicinal plants study from Melghat tribal region of Satpuda range. *J. Bioinfolet* 2(2):141-43.
- Salave AP and Gopal Reddy, Some Reports (2012) On traditional ethnoveterinary practices from Savargaon areas of Ashti Taluka In Beed District (M.S.) India. *Int. J. Adv. Biol. Res.*, 2(1):115-119
- Somkuwar SR, SA Kalkar and RR Chaudhari (2012) Ethnoveterinary Usage of Wild Medicinal Plants in Chandrapur District. *Research Trends in Biological Sciences*.79-84.

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