



Science

**SURVEY AND DOCUMENTATION OF ETHNOVETERINARY
HEALTHCARE PRACTICES USED BY RURAL PEOPLE OF AKOLA
DISTRICT OF MAHARASHTRA**



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Abstract

The people of rural areas still depend to a large extent upon plants and household remedies for treating their animals. The present study deals with the survey and documentation of ethnoveterinary medicinal plants used by rural people from Akola district. The ethnoveterinary information included with local name, family, parts used, local uses and its mode of preparation for ethnoveterinary treatments. The common cattle diseases of the area reported are foot and mouth diseases, black quarter, fracture, Diarrhoea and Dysentery and dysentery, blood dysentery, intestinal worm, tympani, prolapsed uterus, retention of placenta, wound, maggotted wound, fever, snake bite, eye diseases, ectoparasite (tick), galactagogue etc. In this study we observed that old aged people have more knowledge and experience particularly in remote areas for curing veterinary ailments. Ethnoveterinary medicine can provide an opportunity for new drug development.

Keywords: Ethnoveterinary Uses; Medicinal Plants; Veterinary Ailments; Livestock.

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1. Introduction

The people of rural India still dependent on traditional medicines for their health care and treatment of diseases. Eighty percent of population in the developing countries depends on indigenous practices for treatment of various diseases of both human beings and animals (Balaji and Chakravarti, 2010). Rural India is a rich source of ethnoveterinary medicines. Medicinal plants have been used since long in Indian medicine systems.

Ethnoveterinary Medicine (EVM) deals with the folk beliefs, knowledge, skills, methods and practices pertaining to the health care of animals (Mc Corkle, 1986). The traditional knowledge of ethnoveterinary medicines has been identified by the traditional communities through a

process of experience over hundreds of years. These practices have been transfer from one generation to next generation by word of mouth. Due to lack of proper records and over exploitation of these plants by local people, the natural resources along with related traditional knowledge are reduce day by day (Roy, 2003).

The traditional system of treatment is one of the most important prevailing systems in the area where modern veterinary health care facilities are rare or in very poor conditions. The documentation of traditional knowledge is valuable for the communities and their future generations and for scientific consideration of wider uses of traditional knowledge in treating livestock. Therefore, it is necessary to record this valuable information for the utilization of community and for the further scientific pursuit.

2. Study Area

Akola district is lies between 19° 51' and 21° 16' latitude and 76° 38' and 77° 44' longitude. Akola District has an area of about 5,431 km². The Melghat referred as the Satpuda scarp in Vidarbha region of Maharashtra State also forms a very small part within the district. District consists of seven talukas namely Akot, Telhara, Akola, Balapur, Patur, Barshitakli and Murtajapur. The climate of this district is characterised by a hot summer and general dryness throughout the year except during the south-west monsoon season. The mean daily maximum temperature at Akola is 42.4° C and the mean daily minimum temperature is 27.5° C. The average annual rainfall of the district is 846.5 mm. The forest in the district is “South Indian Tropical dry deciduous” type. According to census 2011 total population of Akola district is 1,818,617. The major communities of tribal those reside in the district are Banjara, Jhingabhoi, Pal Pardhi, Bedar, Kannadas, Gopal, Pathrat, Korku and Lonaris etc.

3. Materials and Methods

A field survey was conducted in different villages of the Akola district. Data collected through informal discussions, interviews and village walk with informants, medicine men were held to enhance understanding and gather information about different species of medicinal plant available around the villages. The questionnaires were used to obtain information on medicinal plants with their local names, parts, used, mode of preparations and administrations. Plant species were identified with help of floras Cooke (1967), Naik (1998) and Singh and Karthikeyan (2000).

4. Results and Discussions

In the present study a total of 93 plant species representing to 83 genera and belonging to 43 families. The plants of ethno-veterinary significance are enumerated in alphabetical sequence (Table: 1) of Botanical Name with family and local name (in parenthesis) followed, plant part used, diseases and mode of administration. A total 139 different plant preparation to treat 22 type of animal diseases. 93 plant species are used in the treatment of different animal diseases and disorders. Majority of preparations from Leaves (47), Underground parts (20), Stem bark (20), Fruits (13), Seeds (19), Whole plant (7) and other (15).

Table 1: Details of plant species with their ethno-veterinary uses

Sr. no.	Botanical name	Plant part	Diseases	Mode of administration
1	<i>Abrus precatorius</i> L. Papilionaceae Gunj	Seed	Retention of placenta	Paste of 5 seeds in lukewarm water is given orally for animal after delivery to easy removal of placenta.
2	<i>Aegle marmelos</i> (L.) Rutaceae Bel	Leaves	Foot and mouth diseases	About 100 gm leaf paste mixed with honey is applied over mouth of cattle to cure mouth disease.
3	<i>Ailanthus excelsa</i> Roxb. Simaroubaceae Maharukh	Stem bark	Diarrhoea and Dysentery	100 gm stem bark is pounded in ½ litre butter milk is given orally 2-4 times a day to cure diarrhoea.
		Stem bark	Tympani	100 gm bark pounded with ½ litre water and prepared extract is given orally twice a day to cure tympani.
4	<i>Annona squamosa</i> L. Annonaceae Sitaphal	Leaves	Wound	Paste of leaves in water is applied on wound.
		Leaves	Maggotted wound	Fresh or dry leaves are crushed with camphor is applied over maggotted wound. The seed-paste is also applied to treat maggotted wound.
		Leaves	Ectoparasite	Leaf extract of the plant is also reported to be very effective in case of external parasites.
5	<i>Argemone mexicana</i> L. Papaveraceae Bilayti	Root	Foot and mouth diseases	10 gm roots are ground into cut into piece immersed inside the bread is fed to cattle twice a day to cure mouth diseases.
		Seed	Tympani	50 gm of seeds pounded with water is given orally once in day to cure tympani.
		Seed	Wound	Seed powder is applied externally to cure wound.
6	<i>Asparagus racemosus</i> Willd. Liliaceae Asakand	Root	Black quarter	Root is given twice a day to cure black quarter.
		Root	Galactagogue	The mixture of root powder and wheat flour is given to the cattle for increasing milk.
7	<i>Azadirachta indica</i> A. Juss. Meliaceae Nim	Leaves	Foot and mouth diseases	Decoction of leaves is used to wash infected area of cattle to cure foot and mouth diseases.
		Leaves	Blood Dysentery	100 ml decoction of leaves is given 3 times a day to cure blood dysentery.
		Leaves	Intestinal worm	Leaf juice is mixed in water is given orally for expelling intestinal worms.
		Leaves	Wound	Leaves pounded and boiled in water, lukewarm decoction is used to wash wound then dried leaf powder spread externally for quick healing of wound.

		Leaves	Fever	100 gm leaf extract is given internally to cure fever.
8	<i>Bombax ceiba</i> L. Bombacaceae Katesaver	Stem bark	Bone fracture	Stem bark-powder mixed with ant heap soil luckwarm paste plastered around fracture part and tied with piece of cloth for early healing.
		Stem	Intestinal worms	The juice extracted from 250 gm bark in cupful of water is given orally once in a day to expel intestinal worms.
9	<i>Brassica napus</i> L. Brassicaceae Mohair	Seed	Mastitis	100 gm seed powder mixed with 250 gm jaggery and the paste is applied over cracked nipples to treat mastitis.
10	<i>Caesalpinia bonduc</i> (L.) Caesalpinaceae Sagargoti	Seed	Intestinal worms	Decoction of seed powder with water orally to the cattle suffering from intestinal worms.
		Leaves	Wound	Dry leaf paste is applied on wound till healing.
11	<i>Calotropis gigantea</i> (L.) Asclepidaceae Rue	Latex	Wound	A mixture of latex and red lead applied on wound.
12	<i>Calotropis procera</i> (Ait.) Asclepidaceae Rue	Leaves	Tympani	2 ½ leaves given orally to cure tympani.
		Latex	Eye diseases	Five drops latex is mixed with 1 teaspoon ghee and mixture is applied externally on infected eyes to cure eye diseases.
		Latex	Swelling	A strip of rag adhered with sticky latex and red lead (shindur) is pressed around swollen area until cure.
13	<i>Capparis zeylanica</i> L. Capparaceae Waghota	Leaves	Bone fracture	250 gm leaves crushed in water mixed with warm ant heap soil, paste prepared and is plastered around fractured bone and bandaged with the help of hairs, cloth strips and bamboo splints.
		Leaves	Diarrhoea and Dysentery	Leaves are given as feedstuff for 2-3 days in diarrhoea.
15	<i>Capsicum annum</i> L. Solanaceae Mirachi	Fruit	Mouth diseases	Fruit paste is given orally in mouth diseases.
		Fruit	Snake bite	Fruit are fed to the cattle in case of snake bite.
16	<i>Cassia auriculata</i> L. Caesalpinaceae Tarod	Leaves	Diarrhoea and Dysentery	250 ml leaf juice is given to cattle twice a day to cure blood dysentery. 100 gm tender shoot tip crushed with 50 gm butter and jaggery given to cure blood dysentery.
17	<i>Cassia fistula</i> L. Caesalpinaceae Bahava	Stem	Diarrhoea and Dysentery	50 gm stem paste and salt boiled in 1 litre water, prepared decoction is given twice a day orally in case of diarrhoea.

		Stem bark	Snakebite	The bark juice mixed with water is given orally to treat snakebite.
		Fruit	Swelling	Heated fruit applied on affected area to get relief from swelling.
18	<i>Cassia obtusifolia</i> L. Caesalpiniaceae Tarota	Leaves	Diarrhoea and Dysentery	100 ml decoction of leaves mixed with common salt is given orally to cure dysentery.
19	<i>Cassia occidentalis</i> L. Caesalpiniaceae Devtarota	Leaves	Diarrhoea and Dysentery	Leaves are fed with fodder to cattle to cure dysentery.
20	<i>Cayratia trifolia</i> (L.) Vitaceae Kumbbhela	Fruit	Fever	100 gm paste of fruit is mixed with water is given orally to cure fever.
		Root	Tonic	100 ml root extract is given as tonic to the cattle.
21	<i>Cissus quadrangularis</i> L. Vitaceae Hadjul	Stem	Bone fracture	Stem crushed in water and paste applied on fracture area and tied with stick of bamboo.
22	<i>Citrullus colocynthis</i> (L.) Cucurbitaceae Kaduedrayan	Seed	Tympani	20 gm seeds powder crushed with water is given to the animal twice in a day in case of tympani.
		Seed	Retention of placenta	Equal amount of seeds and jaggery mixed with 250 gm ginger is given to the animal to easy expulsion of placenta.
23	<i>Citrus aurantifolia</i> (Christm.) Rutaceae Nimbu	Fruit	Mastitis	Warm fruit juice mixed with indigo is applied to udder to cure the swelling of teats (nipple).
		Fruit	Eye diseases	The filtered fruit juice is used to pour in eyes twice a day to treat eye diseases.
		Fruit	Eye diseases	Mixture of fruit juice and alum is dropped to the eyes to treat general eye problem.
24	<i>Colocasia esculenta</i> (L.) Arecaceae Alu	Leaves	Infertility	Leaves are fed with fodder to cattle in case of infertility.
25	<i>Convolvulus arvensis</i> L. Convolvulaceae Chandvel	Root	Maggotted wound	Root paste is applied on wound to destroy maggot.
26	<i>Corallocarpus epigaeus</i> (Rottl. & Willd.) Cucurbitaceae Mirachikand	Bulb	Prolapsed of uterus	Overnight soaked bulb in animal urine, crushed and applied on uterus to the animal suffering from prolapsed of uterus.

27	<i>Cordia dichotoma</i> Forst. Ehretiaceae Gondhan	Bark	Bone fracture	1 ½ kg bark powder, 250 gm of brick powder, 10 gm of hairs and 125 ml cooking oil pounded and prepared paste is applied over fractured bone and bandaged with the cloth strip.
28	<i>Coriandrum sativum</i> L. Apiaceae Dhania	Whole plant	Foot and mouth diseases	Whole plant is fed along with fodder to treat foot and mouth diseases.
		Seed	Diarrhoea and Dysentery	250 gm dried seed powder mixed with water is given orally twice in day for three days to cure diarrhoea.
29	<i>Cuminum cyminum</i> L. Apiaceae Jire	Seed	Fever	100 gm seed powder boiled with water and prepared decoction is given twice a day to cure fever.
30	<i>Curcuma amada</i> Roxb. Zingiberaceae Aambhaladi	Rhizome	Bone fracture	Paste of rhizome is applied topically on fracture bone and bandaged with cotton cloth.
		Rhizome	Tympani	One teaspoon rhizome powder, 100 gm of jaggery, 2 gm alum mixed with water is given to cure tympani.
		Rhizome	Foot and mouth diseases	50 gm rhizome powder mixed with 100 ml cooking oil and 100 gm jaggery is applied on infected area of mouth 2-3 times in day to cure mouth diseases.
31	<i>Curcuma longa</i> L. Zingiberaceae Haladi	Rhizome	Foot and mouth diseases	100 gm rhizome powder mixed with 100 gm butter is applied on tongue to cure mouth diseases.
		Rhizome	Wound	An ointment, prepared from rhizome powder in cooking oil is applied on Wound.
32	<i>Cuscuta chinensis</i> Lamk. Cuscutaceae Amarvel	Stem	Galactagogue	Animals are fed with stem to increase the milk production.
33	<i>Dalbergia sissoo</i> Roxb. Papilionaceae Shisam	Leaves	Diarrhoea	Leaves ground with butter milk and given twice a day to cure blood diarrhoea.
34	<i>Datura inoxia</i> Mill. Solanaceae Dhotra	Leaves	Swelling	A warm leaf is tied on swollen area.
35	<i>Datura metal</i> L. Solanaceae Kaladhotra	Leaves	Black quarter	Leaf paste is applied on leg to cure black quarter.
36	<i>Dioscorea bulbifera</i> L. Dioscoreaceae Dukkarkand	Bulb	Prolapsed of uterus	Overnight soaked bulb in animal urine, crushed and applied on uterus to the animal suffering from prolapsed uterus.

37	<i>Eucalyptus globulus</i> Labill. Myrtaceae Nilgiri	Leaves	Twisted leg	Warm leaves are tied on twisted leg.
		Oil	Maggotted wound	Oil is applied on wound to kill the worms.
38	<i>Euphorbia prostrata</i> Ait. Euphorbiaceae Gondhan	Whole plant	Diarrhoea and Dysentery	250 gm whole plant pounded with butter milk is given orally thrice a day to cure dysentery.
		Whole plant	Wound	Crushed whole plant is applied on wound
39	<i>Ficus racemosa</i> L. Moraceae Umber	Fruit	Retention of placenta	One kg fruit are fed after delivery to facilitate the removal of placenta.
		Stem	Snake bite	Infusion of 250 gm stem in 1 litre water is given orally 3-4 times a day in case of snake bite.
40	<i>Ficus religiosa</i> L. Moraceae Pinpal	Gum	Snake bite	Gum of the plant is applied on snake bite area.
41	<i>Gardenia resinifera</i> Roth. Rubiaceae Dikamali	Resin	Foot and mouth diseases	One gm resin boiled with 250 ml of cooking oil is applied on infected area of foot to cure foot diseases.
		Resin	Bone fracture	Nearly 2 gm resin mixed with egg albumin applied externally on fracture part.
42	<i>Gloriosa superba</i> L. Liliaceae Kallai	Root	Prolapsed of uterus	Roots are fed to the cattle in case of prolapsed uterus.
		Root	Wound	Freshly prepared root paste is applied on wound.
		Root	Galactagogue	2 gm shade dried root powder is fed to cattle for seven days after delivery to improve lactation quality.
43	<i>Gossypium hirsutum</i> L. Malvaceae Kapus	Floss	Wound	Ash of white floss mixed with coconut oil is applied externally on wound.
44	<i>Helicteres isora</i> L. Sterculiaceae Muradsheng	Root	Diarrhoea and Dysentery	50 gm roots soaked overnight in water and extract is given orally 2 times a day to cure dysentery.
45	<i>Hibiscus cannabinus</i> L. Malvaceae Ambadi	Leaves	Haematuria	Dry leaves are used as fodder to control haematuria.
		Leaves	Retention of placenta	Leaves are fed to cattle to hasten placental discharge following delivery. Dried leaves powder and jawar bread (bhakari) is also given orally to cattle after delivery for easy discharge of placenta.
46	<i>Holarrhena pubescens</i>	Bark	Diarrhoea and Dysentery	100 gm bark paste soaked overnight in water; the extract is given orally to cattle

	(Buch.-Ham.) Apocynaceae Kadakura			twice in day till cure diarrhoea.
47	<i>Ipomoea aquatica</i> Forsk. Convovulaceae Haravel	Whole plant	Galactagogue	100 gm whole plant mixed with fodder is given daily to increase milk production.
48	<i>Ipomoea fistulosa</i> Mart. Convovulaceae Beshrum	Leaves	Swelling	Warm leaves are applied on swollen area of body.
49	<i>Jatropha curcas</i> L. Euphorbiaceae Chandrajoti	Leaves	Wound	The leaves are crushed on stone with little amount of water to make a paste, it is used as ointment on wound.
50	<i>Lagascea mollis</i> Cav. Asteraceae	Leaves	Wound	Leaf extract is applied over the wound till healing.
51	<i>Lagenaria leucantha</i> (Duch.) Cucurbitaceae Kadubhopala	Fruit	Black quarter	250 gm fruit pulp mixed with 4 gm camphor and ½ litre milk is given 3 times in day to cure black quarter.
		Leaves	Intestinal worms	250 ml leaf juice is given orally for 2 times in day for in case of intestinal worms.
52	<i>Leucaena latisiliqua</i> (L.) Mimosaceae Subabhul	Leaves	Diarrhoea and Dysentery	250 gm leaves are pounded and mixed with one litre water or butter milk. It is given orally twice a day to cure dysentery.
53	<i>Linum usitatissimum</i> L. Linaceae Jawas	Oil	Diarrhoea and Dysentery	250 ml seed oil is given orally twice a day to cure diarrhoea.
		Oil	Tympani	250 ml oil is given to cure tympani
54	<i>Madhuca indica</i> Gmel. Sapotaceae Moh	Flowers	Retention of placenta	The dried flowers mixed with jaggery is given to cattle after delivery for removal of placenta.
55	<i>Martynia annua</i> L. Martyniaceae Waghnakhi	Fruit	Infertility	100 gm fruit powder mixed in 1 litre water is given orally in case of infertility.
56	<i>Medicago sativa</i> L. Papilionaceae Lasun gavat	Whole plant	Galactagogue	The animal is fed with Whole plant early in the morning galactagogue.
57	<i>Melia azedarach</i> L. Meliaceae Bakan	Leaves	Diarrhoea and Dysentery	Leaves are fed with fodder to cure dysentery.
58	<i>Mentha spicata</i> L. Lamiaceae Pudina	Leaves	Diarrhoea and Dysentery	250 gm leaf paste mixed with ½ litre buttermilk is given twice a day to cure dysentery.
59	<i>Millettia auriculata</i>	Root and	Ectoparasite	Root and stem juice is applied on body

	Baker Papilionaceae	stem	(tick)	of cattle to remove ectoparasite (tick).
60	<i>Mimosa pudica</i> L. Mimosaceae Lajalu	Leaves	Maggotted wound	20 gm fresh leaves are fed with jawar bread (bhakari) twice a day to cure maggotted wound.
61	<i>Momordica charantia</i> L. Cucurbitaceae Karli	Leaves	Blood Dysentery	250 ml leaf decoction is given to cattle twice a day to cure blood dysentery.
62	<i>Murraya koenigii</i> (L.) Rutaceae Godnim	Leaves	Diarrhoea and Dysentery	100 gm leaves pounded with butter milk is given orally twice in day to cure dysentery.
63	<i>Musa paradisiaca</i> L. Musaceae Kela	Fruit	Galactagogue	Fruit are fed with fodder to increase lactation period.
64	<i>Nicotiana tabacum</i> L. Solanaceae Tambakhu	Leaves	Wound	Dried leaf powder mixed with lime and jaggery is applied on wound.
		Leaves	Ectoparasite (tick)	Decoction of dry leaves powder is applied on body to removal of tick.
		Leaves	Eye disease	After chewing dry leaves, saliva is spited into the eye to cure eye disease Dry leaves are soaked in water for 5-6 hour and the filter use to wash eyes to cure eye diseases.
65	<i>Nyctanthes arbor-tristis</i> L. Oleaceae Parijatak	Leaves	Foot and mouth diseases	Infusion of 1 kg leaves is given orally twice a day to cure mouth disease.
		Leaves	Wound	Fresh leaves along with turmeric powder ground to form a paste are applied on the wound.
66	<i>Ocimum sanctum</i> L. Lamiaceae Tulasi	Leaves	Wound	Leaf paste is applied on wound.
67	<i>Oroxylum indicum</i> (L.) Bignoniaceae Tetu	Bark	Black quarter	200 gm bark pounded with ½ litre butter milk is given orally twice in day to cure black quarter.
		Stem	Diarrhoea and Dysentery	Stem crushed with water is given twice a day to cure diarrhea and dysentery.
68	<i>Ougeinia oojeinensis</i> (Roxb.) Papilionaceae Ruthu	Stem bark	Diarrhoea	250 gm stem bark paste put overnight in water and extract is given twice in day to cure diarrhoea.
69	<i>Pergularia daemia</i> (Forssk.) Asclepidaceae Utaran	Whole plant	Black quarter	250 ml plant extract is given orally twice in a day to cure black quarter.
70	<i>Phyllanthus amarus</i> Schumach & Thonn.	Whole plant	Diarrhoea and Dysentery	Whole plant is fed with fodder to cure dysentery.

	Euphorbiaceae Bhuiawala	Leaves	Wound	Leaf paste is applied on wound.
71	<i>Phyllanthus emblica</i> L. Euphorbiaceae Awala	Leaves and stem	Eye diseases	Equal quantity of leaves and stem ground into juice dropped on the affected eye twice a day for a weak.
72	<i>Piper nigrum</i> L. Piperaceae Kali-miri	Seed	Fever	10 gm seed is pounded with water and boiled; prepared decoction orally given twice a day to cure fever.
73	<i>Pongamia pinnata</i> (L.) Papilionaceae Karnji	Leaves	Wound	Leaf ash mixed with coconut oil is applied on wound.
74	<i>Psoralea corylifolia</i> L. Papilionaceae Bawchi	Seed oil	Foot and mouth diseases	Seed oil is applied on infected foot to cure foot disease.
		Seed oil	Wound	Seed oil is applied on wound until recovery.
75	<i>Pueraria tuberosa</i> (Roxb. ex Willd.) Papilionaceae	Root	Tympani	Root cut into pieces mixed with equal amount of salt given orally to cure tympani.
76	<i>Radermachera xylocarpa</i> (Roxb.) Bignoniaceae Tetu	Seed	Snake bite	Seed powder applied on snake bitten area.
77	<i>Ricinus communis</i> L. Euphorbiaceae Erandi	Leaves	Retention of placenta	Fresh leaves pounded with equal amount of salt is made into a paste is given orally after delivery for easy removal of placenta.
78	<i>Semecarpus anacardium</i> L. Anacardiaceae Bibba	Seed oil	Foot and mouth diseases	Seed oil is applied on infected area of foot and mouth to cure FMD.
79	<i>Solanum melongena</i> L. Solanaceae Vangi	Fruit	Foot and mouth diseases	Roasted fruit are fed to cure mouth disease.
80	<i>Solanum surattense</i> Burm. Solanaceae Dorli	Root	Maggotted wound	Root paste is applied on wound as wormicide.
81	<i>Sorghum bicolor</i> (L.) Moench. Poaceae Jawari	Grain	Diarrhoea and Dysentery	250 gm dry grains burnt into ash and mixed with butter milk and given orally twice a day to cure dysentery and diarrhoea.
		Seed	Wound	Dried seeds burnt into ash and mixed with coconut oil is applied on wound.
82	<i>Soymida febrifuga</i>	Stem	Foot and	100 gm paste of bark boiled with water

	(Roxb.) Meliaceae Rohini	bark	mouth diseases	and prepared extract is applied on foot to cure foot disease.
83	<i>Syzygium cumini</i> (L.) Skeels. Myrtaceae Jamun	Stem bark	Diarrhoea and Dysentery	100 gm stem bark crushed and soaked overnight in water is given twice a day to cure dysentery.
		Stem bark	Haematuria	50 gm of bark powder mixed with 250 ml ghee and ½ litre curd is given orally twice in day to cure haematuria.
84	<i>Tamarindus indica</i> L. Caesalpiniaceae Chinch	Leaves	Bone fracture	Fresh leaf paste and equal amount of ant heap soil mixed with warm water is applied on bone fracture area to cure fracture.
85	<i>Tectona grandis</i> L. Verbenaceae Sag	Leaves	Wound	Leaf paste is applied on wound.
86	<i>Terminalia arjuna</i> (Roxb.) Combretaceae Arjun	Stem bark	Bone fracture	The stem bark paste is smeared over the fractured area to treat bone fracture.
87	<i>Trachyspermum ammi</i> (L.) Apiaceae Ova	Seed	Fever	50 gm seed powder mixed with milk is given orally twice a day to cure fever.
88	<i>Tragia hildebrandtii</i> Muell.-Arg. Euphorbiaceae Agya	Root	Maggotted wound	Root paste is applied on maggot wound.
89	<i>Vernonia anthelmintica</i> (L.) Asteraceae Kadujira	Seed	Intestinal worm	20 gm seed powder is boiled with one liter is given orally to cure intestinal worm.
90	<i>Vigna radiata</i> (L.) Papilionaceae Mung	Seed	Foot and mouth diseases	½ kg seeds soaked overnight in water is given orally to cure foot and mouth disease.
		Seed	Diarrhoea and Dysentery	½ kg seeds soaked in water is given with fodder to cure diarrhoea.
91	<i>Vitex negundo</i> L. Verbenaceae Sambalu	Leaves	Eye diseases	Juice of the leaves is dropped into eye to cure diseases.
92	<i>Wrightia tinctoria</i> R. Br. Apocynaceae Dudhkadi	Fruit	Galactagogue	Fruit are fed to cattle daily to increase lactation.
93	<i>Xanthium strumarium</i> L. Asteraceae Gokharu	Leaves	Wound	Leaf paste is applied on wound.



Abrus precatorius L.



Annona squamosa L.



Argemone mexicana L.



Asparagus racemosus Willd.



Capparis zeylanica L.



Cassia fistula L.



Cassia obtusifolia L.



Cassia occidentalis L.



Cissus quadrangularis L.



Convolvulus arvensis L.



Cuscuta chinensis Lamk.



Gloriosa superba L.



Helicteres isora L.



Holarrhena pubescens (Buch-Ham)



Lagascea mollis Cav.



Leucaena latisiliqua (L.)



Martynia annua L.



Mimosa pudica L.



Pergularia daemia (Forssk.)



Phyllanthus amarus
Schumach & Thonn.

5. Conclusion

The present study have explored interesting data on the plants used in traditional veterinary practices, which provides scope for further pharmacognostic and pharmacological studies to understand the potential in these plant based crude drugs. Folk ethnoveterinary practices largely remain neglected and little has been done to document this precious wealth hence there is urgent need to document it on scientific line. Therefore, the documentation of such knowledge is very crucial before its extinction for the utilization of community and for the further scientific validation. There is need for proper analysis of medicinal plants to relate the authenticity of these drugs. Ethnoveterinary medicine can provide an opportunity for new drug development.

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References

- [1] Cook, T. (1967). "The Flora of the Presidency of Bombay." Vol. I, II, III. Calcutta: Botanical Survey of India. (Rpr.)
- [2] Balaji, S. N. And Chakravati V. P. (2010). Ethnoveterinary practices in India- A review. *Veterinary World*. 3.12, 549-551.
- [3] Mc Corkle, C.M. (1986). An introduction to ethnoveterinary research and development. *J Ethnobiol*. 6, 129-149.
- [4] Naik, V.N. (1998). The flora of Marathawada. Aurngabab: Amrut prakashan.
- [5] Roy, Burmen, J.J. (2003). Tribal medicine. New Dehli: Mittal Publications.
- [6] Singh, N.P. and Karthikeyan, S. (2000). Flora of Maharashtra State. Vol. I, II, III. Calcutta: Botanical Survey of India.

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