

**SOME REPORTS ON ETHNOVETERINARY PRACTICES IN ASHTI AREAS OF BEED DISTRICT (M.S.)
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ABSTRACT: The present paper enumerates traditional ethno-veterinary knowledge about 13 plant species belonging to 11 genera and 9 families hidden among the local inhabitants residing in the study areas i.e. Ashti taluka in Beed district (M.S.) India. Of these, seed in 2 plants, leaf in 4 plants, root in 1 plants, stem in 3 plants, fruit in 2 plant and flower in 1 plant are used for ethno-veterinary purposes by the local inhabitants. The results of this study are organized in tabulate form and include botanical name followed by vernacular name, family (in parenthesis) and ethno-veterinary uses. The information was gathered from 26 informants, from 15 villages under the jurisdiction of Ashti taluka of Beed district through verbal interviews in an informal ways at their working places. The age of the informants was in the range between 18-78 years. Of these, informant having age group 69-78 (47 %) claimed to have the rich ethno-veterinary knowledge. The emphasis has been laid on the scientific validation of medicinal properties of the native plants that are used in traditional medication system of the pet animals to know and reward the traditional wisdom of the local communities.

Keywords: Ethnoveterinary, Medicinal plants, Ashti, Traditional knowledge

INTRODUCTION

In recent years, interests in ethno-veterinary investigations have been increased enormously on national and international level. Ancient ethnobotanical literature suggests that the tribal, non-tribal and rural populace has been using wild ethnoflora since long ago for curing various diseases and disorders in the pet / domesticated animals. All these plants should be screened scientifically in order to investigate newer sources of ethno-veterinary drugs and medicines. Fortunately, since last three to four decades considerable progress has been made in the ethno-veterinary sciences due to recent ethnobotanical and ethnomedicinal explorations.

Study area:

Ashti is one of the taluka of Beed district which is famous for its diverse vegetation and wild ethno-medico-flora of pet animal's disease care and cure. It is located along western side of Beed district and is adjacent to the Pathardi Taluka of Ahmednagar district (M.S) India. It lies at an elevation of 680-738 meters from MSL and located in between 19°08'51"N-19° 09'81" N latitude and 75°09'69"E-75° 14'88" E longitude. It has remained inhabited to some extent constantly by the indigenous local populace until now for certain primary needs and also for curing specific diseases and disorders of the pet animals in these areas.

Methodology:

This field surveys were arranged during the period from pre-monsoon of 2008 to post-monsoon of 2010 to collect and record the plants of ethno-veterinary significance and traditional ethno-veterinary knowledge hidden among the local inhabitants¹. In the first phase of field surveys knowledgeable informants and prominent traditional healers from the study area were visited, motivated and interviewed informally² at their home and working places to know and collect the traditional ethno-veterinary knowledge hidden among them. In second phase plants of ethno-veterinary interest were collected through the cordial help and suggestion of the local informants³ and traditional healers.

In the third phase the collected plant specimens were identified with the help of standard literature.⁴⁻¹¹ The voucher specimens are preserved alphabetically with their scientific names, synonyms, local or vernacular names, plant family, plant parts used and ethno-veterinary usages. Finally the voucher specimens were deposited in the Herbarium Laboratory of Botany Department, Padmshri Vikhe Patil College, Pravaranagar (Loni), Dist Ahmednagar as future reference and record.

Enumeration

The plants have been described alphabetically in detail with reference to botanical name, vernacular name, family, plant part used and ethno-veterinary usages.

Results and discussion:

From the above study, it reported (Table:1) has been found that, In all total 13 plant species from 11 genera and 9 families that are used for curing certain diseases and disorders by the local inhabitants have been reported. Of these, one species belong to Pteridophyte group and remaining twelve species belong to Angiosperm group.

Table: 1-Detailed analysis of plant species with ethno-veterinary significance:

S.No	Botanical name and family	Vernacular name	Plant part	Ethno-veterinary usage
1.	<i>Actinopterys radiata</i> (Sw.) Link (Actinopteridaceae)	Bhui-tad	Leaf	Paste from 100gm of green leaves is mixed with 1-2 tsp of Lasun (<i>Allium sativum</i>) extract and same formulation is applied topically on the body region of pet dogs once a day for 7-9 days to cure ringworm disease.
2.	<i>Aristolochia bracteata</i> Lamk. (Aristolochiaceae)	Aswali	Leaf	An extract from 5-7 fresh leaves is mixed with 1-2 tsp of Neem (<i>Azadirachta indica</i>) seed oil and is recommended for once daily in the morning for 9-12 days to expel out intestinal worms
3.	<i>Asparagus racemosus</i> Willd (Liliaceae)	Shatavari	Tuber	2-3 tsp of shade dried tuber's powder is mixed with specific quantity of Groundnut (<i>Arachys hypogea</i>) cake and same mixture is fed to cattle and buffaloes to improve lactation quality.
4.	<i>Balanites aegyptiaca</i> (L.) Diels. (Balanitaceae)	Hingani	Stem bark	A cupful of pulp from semi-ripen fruits is mixed in 100-200 ml of Rockel (Kerosene) and same preparation is massaged on the body region (i.e. skin) of pet animals once daily for 3-4 days to drive away ticks and lice.
5.	<i>Canvalia cathartica</i> L. (Fabaceae)	Abaiwel	Fruit	Powder from seeds and fruits is mixed in a fodder and fed to cows and buffaloes in the last stage of lactation period once a day for 15-18 days for successful conception.
6.	<i>Jatropha gossypifolia</i> L. (Euphorbiaceae)	Mogali Erand	Stem bark	Stem latex and seed oil are applied thoroughly on the affected body region (i.e. skin) of pet dogs twice or thrice a day until total relief from ringworm and dermal itching.
7.	<i>Morinda citrifolia</i> L. (Rubiaceae)	Hasfal	Flower	Chatak (approx. 50gm) flower buds are boiled with of Kale (<i>Piper nigrum</i>) mire powder and of Dhane (<i>Coriandrum sativum</i>) powder (a tsp each) in a 200-300ml of water for 1-2 minutes to obtain decoction which is given orally to the sheep and goats twice daily for 10-12 days to cure amoebic dysentery.
8.	<i>Morinda pubescens</i> Sm. ex Rees. (Rubiaceae)	Bartondi	Leaf	2-3 tsp of powder from shade dried leaves is mixed a specific quantity of safflower (<i>Carthamus tinctorius</i>) cake and same mixture is fed once daily in the evening to age old cows and buffaloes to restore fertility and conception.
9.	<i>Phyllanthus emblica</i> L. (Euphorbiaceae)	Vasanwel	Seed	Powder from dried seeds is mixed in poultry fodder and the same preparation fed to hens to improve egg laying capacity.
10.	<i>Phyllanthus fraternus</i> Webster. (Euphorbiaceae)	Bui-awla	Leaf	Green leaves of the plant are crushed in certain amount of rice cooked water with little amount of gur (jaggery) and the extract is fed to calves once daily as an ideal tonic for fast and healthy growth.
11.	<i>Sida spinosa</i> L. (Malvaceae)	Futani-chirmi	Stem bark	Stem bark extract in rice cooked water is given internally to the sheep and goats with a piece of gur (jaggery) once daily in evening for 12-15 days as a tonic to increase lactation period.
12.	<i>Tinospora cordifolia</i> Miers. (Menispermaceae)	Gulwel	Fruit	Aatpav (aprox.100gms) of semi-ripen fruits are crushed with sunth (<i>Zingiber officinale</i>) powder and Haldi (<i>Curcuma domestica</i>) powder (one tsp each) to obtain extract which is given internally to the goats twice daily for 10-12 days to cure Q-fever.
13.	<i>Urena lobata</i> ssp. <i>sinuata</i> (L.) Borssum. (Malvaceae)	Van-bhendi	Seed	An extract from a handful of green leaves in a cupful of Erand (<i>Ricinus communis</i>) seed oil is mixed with a tsp of Nilgir (<i>Eucalyptus globulus</i>) oil and same mixture is given orally to sheep and goats once daily for 3-4 days to cure mastitis (mastication problem).

Table: 2- Analysis of plant parts used in number of plant species:

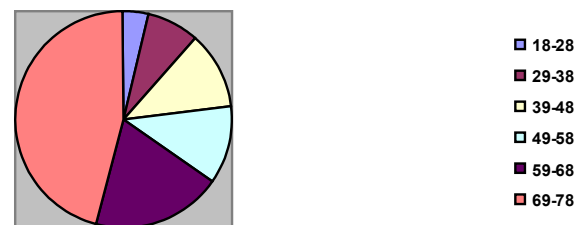
Plant part used	Leaf	Root	Stem	Flower	Fruit	Seed
Number of plant species	4	1	3	1	2	2

In the study, it has been found (Table:2) that, in four (31%) plant species leaf parts, in one (8%) plant species root parts, in one (8%) plant species flower part, in three (23%) plant species stem parts, in two (15%) plant species fruit parts and in remaining two (15%) plant species seeds are found useful. The plant parts are either used singly or in combination with some other plant parts from same or other plants.

Table: 3:-Number of informants having ethno-veterinary knowledge with their Age groups:

Age group	18-28	29-38	39-48	49-58	59-68	69-78
Number of individuals	1	2	3	3	5	12

From the study, it has been reported (Table:3) that 26 individuals in and around the 15 villages across the Ashti taluka proved to be have traditional ethno-veterinary knowledge the age of the most of individuals was ranging in between 18-78 years. Of the total interviewed informants, the individuals having age group 69-78 (46.15 %) claimed to have the rich ethno-veterinary knowledge. While individual having age group 18-28 (3.84%) have ethno-veterinary knowledge. The individuals in age group 59-68 (19.23%) have ethno-veterinary knowledge.

**Pie Graph: Percentage of individuals having rich ethno-veterinary knowledge**

Conclusion:

Few plants of this locality possess potential of better economic exploitation. Some of the important plant species among them are *Tinospora cordifolia* Miers. (Gulvel), *Actinopteris radiata* (Sw.) Link.(Bhui-tad), *Asparagus racemosus* Willd (Shatavari), *Aristolochia bracteata* Lamk.(Aswali), *Morinda citrifolia* L (Hasfal), *Morinda pubescens* Sm. ex Rees.(Bartondi), *Canvalia cathartica* L. (Abaivel), *Phyllanthus fraternus* (Bhui-awla), *Phyllanthus emblica* L.(Awla) and *Jatropha gossypifolia* L.(Mogli-erand). Since all these plant species are being used world wide in more or less proportion, there is urgent need of time to protect and conserve and use them in sustainable manner in future.

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