Golden Research Thoughts

Abstract:-

A survey for documentation of ethno-veterinary medicinal plants used by the Sahariya traditional healers in Shivpuri block of Shivpuri district in Madhya Pradesh, India. Ethno-veterinary information was gathered through individual interviews and observations among the Sahariya tribals and locals. A total of

Black Soil in Madhya Pradesh

Paddy Grown Land in Madhya Pradesh

32 species of ethno-veterinary medicinal plants belongs to 19 families and 30 genera were recorded in the study with the help of nine ethno-veterinary traditional healers. Among the plant parts used by the Sahariya and villagers for their domestic animals, leaves are most commonly used for the preparation of medicine.

Keywords:

Ethno-veterinary, Domestic animal, Medicinal plants, Animal healthcare.

ETHNOVETERINARY USE OF SOME MEDICINAL PLANTS OF SHIVPURI DISTRICT (M.P.) INDIA

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INTRODUCTION

Forests constitute one of the major natural resource of India. They produce a large variety of woods, which are used as fuel, timber and industrial raw material. Medicinal plants are plants that have a recognized medical use. They range from those used in the production of mainstream pharmaceutical products to plants used in herbal medicine preparations. Herbal medicine is one of the oldest forms of medical treatment in human, animal history and could be considered one of the forerunners of the modern pharmaceutical trade. Plants that have medical uses can be found growing in many settings all over the world. Ethno-veterinary medicine was practiced as early as 1800 B.C. at the time of King Hamurabi of Babylon who formulated laws on veterinary fees and charged for treating cattle and donkeys (Schillhorn van Veen, 1996).

The present survey was undertaken in the Shivpuri district of Madhya Pradesh in India. It covers the total area of 10278 sq. kms. The district is located at N latitude 260 05' to 240 40' and E longitude 770 01' to 780 29' and falling in Survey of India toposheet nos 54H, K & L. District Shivpuri is divided in 5 divisions (Shivpuri, Pohari, Kolaras, Karera and Pichore) , 8 blocks (Shivpuri, Pohari, Kolaras, Karera, Narwar, Pichore , Khaniyadana, Badarwas) 605 Panchayats and 1459 villages, Out of 1459 villages, 133 are deserted and 15 forest villages. Plants of ethno-veterinary significance have been identified by the folk through a process of experience over hundreds of years. In remote areas no organized veterinary medicinal aid is available therefore they depend mainly on local herbal medicines.(Mondal, et al., 2012). There are limited veterinary health centers in rural areas. Under such circumstances, these people treat their domestic animals with plants remedies based on their empiric knowledge. Ailments covered include- Attack of parasites (lice and kilns), Hoops and mouth diseases, wounds and cuts, Pneumonia, Flatulence, Fractured bone, Plants toxic to cattle (Merwe, et al., 2001). Medicinal plants are associated with the local heritage all over the World. Medicinal plants provide raw material for use by pharmaceutical, cosmetic, and flavor industries. Medicinal plants are very much important for human being health as well as for plant and animal protection. Besides human being this plants are used as medicines for many domestic animals (Selvaraju, et al., 2011).

The Shivpuri District of Madhya Pradesh State, India has rich flora of indigenous medicinal plants. The ethno-medicinal practice is very common among the local and tribes of Shivpuri District of Madhya Pradesh, India. In this field survey we found 32 plants belonging to 19 families, and their herbal preparation are used as potent medicine to treat various disease and disorders of domestic animals. This is also an endeavor to draw attention for the in depth study on the concerned medicinal plants, the result of which could provide novel, better and efficient remedies for animal healthcare (Juyal, et al., (2013).

MATERIALAND METHODS:

The work was based mainly on ethno botanical field work in areas mainly inhabited by tribes of Sahariya and villagers, who depend mostly on forests for their needs and have sound knowledge over herbal remedies in Shivpuri District. The plants used for medicinal purpose were recorded through personal interview during field trips. Subsequently the medicinal values of the concerned plants were ascertained using appropriate medical terms. Firstly 32 plants were observed in those areas. Some specimens were dissected and some of the collected specimens were preservation and the rest worked out following standard taxonomic methods and authentic literature (Prain.1903). After correct identification, the plant species were enumerated giving their local names, information about locality, ethno-botanical use etc. The local knowledgeable informants were the primary sources who were interrogated during field work and the data have been recorded along with their names, address and the medicinal uses recorded from them. The observation made during the field survey has been given in the following enumerations. The medicinal plant species have been described along with their families, local name and their various uses in domestic animals in the Table No. 01.

Table No. 01: List of ethno-veterinary medicinal plants

S.N.	Botanical Name	Local Name	Family	Plant parts used	Animal	Medicinal uses (for domestic animals)
1	*Abrus precatorius*	Chirmu	Fabaceae	Leaves, root	Cow, goat	Acute colic, ephemeral fever, skin allergy.
2	*Abutilon indicum*	Kanghi	Malvaceae	Leaves	Cow, goat	Leaves ground with butter milk and the extract given to cure dysentery.
3	*Achyranthes aspera*	Latjira	Amaranthaceae	Leaves	Cow, goat chicken	Leaf is ground with saffron and the filtered juice is used to pour in eyes to get relief from watering in eyes.
4	*Adhatoda vasica*	Adusa	Acanthaceae	Leaves	Cow, goat	Decoction of leaf and stem are given to treat fever.
5	*Aegle marmelos*	Bel	Rutaceae	Fruit, seed	Cow, goat	Flatulence, any type of gastric problems.
6	*Allium sativum*	Lehsun	Liliaceae	Bulb	Cow, goat	Prepare a cream with beeswax and a few cloves of Lahasun and apply to the udder and injures of animals .Prepare milk and cooking oil with "Lahsun" and gives drink to the dogs affected by snakebites.
7	*Aloe vera*	Gubarpata	Liliaceae	Leaves	Cow	The leaf pulp is made into a paste and given to cattle for nconscious condition (drooping head).
8	*Andrographis peniculata*	Kalmegh	Acanthaceae	Whole plant	Cow, goat	Decoction of whole plant is used to treat fever and cough.
9	*Azadirachta indica*	Neem	Meliaceae	Leaves	Cow, goat	Antipyretic, thrust, nausea, vomiting, skin diseases and ulcer.
10	*Calotropis gigantean*	Safed aak	Asclepiadaceae	root	Cow, goat	Root is kept in nostrils for few minutes to get relief from running nose.
11	*Calotropis procera*	Aak	Asclepiadaceae	Leaves	Cow, goat	Darrhea and dysentery.
12	*Capsicum annum*	Shimla mirchi	Solanaceae	Fruit		Treatment of cattle castrated.
13	*Cassia fistula*	Amaltas	Fabaceae	Leaves, fruits	Cow, goat	Insect bites, swelling, rheumatism and facial paralysis
14	*Cassia tora*	Punaar	Caesalpiniaceae	seed	Cow, goat	Seed is mixed with water and ground into paste and applied topically to cure skin diseases.
15	*Cissus quadrangularis*	Harjod	Vitaceae	Leaves	Cow, goat	Leaves are ground with pepper and garlic and made into a decoction. The decoction is given to cure fever.
16	*Dalbergia latifolia*	Kalasisham	Fabaceae	Stem bark	Cow, goat	Stem bark is ground with garlic and pepper and the mixture is given for the animals which are lazy in grazing.
17	*Dendrocalamus strictus*	Bans	Poaceae	Fruits	Cow	Roasted fruits are given once a day to treat dysentery and cough until cure.
18	*Datura metel*	Dhatura	Solanaceae	Fruits	Cow, goat	Roasted fruits are given once a day till the dysentery and cough is cured.
19	*Eclipta alba*	Bhrigraaj	Compositae	Entire plant	Cow, goat	Blindness, bronchitis, leucoderma.
20	*Euphobia hirta*	Dudhi	Euphorbiaceae	Milk	Cow, goat	Latex is applied externally on wounds to heal soon.
21	*Ficus recemosa*	Gular	Moraceae	Fruit, leaf	Cow, goat	Renal problems, dermatitis, diarrhea, ulcer, anthelmintic
22	*Gloriosa supera*	Calihari	Liliaceae	Leaves	Cow, goat	Swelling, chronic ulcers, colic pain in bladder
23	*Lantana camera*	Phuleri	Verbenaceae	Leaves ,flower	Pig	Skin itches, as an antiseptic for wounds and scabies.
24	*Mimosa pudica*	Lajwanti	Mimosaceae	Leaves	Cow	Leaf is ground with pepper, garlic, onion and saffron and fed to barren cows during fever.
25	*Pongamia pinnata*	Kanji	Fabaceae	Leaves	Cow, goat	Leaf is ground with pepper and given to cure fever. Decoction of stem bark is given orally to treat dysentery.
26	*Ranunculus pulchellus*	Kush	Ranunculaceae	Leaves	Cow, goat	Plant paste is applied on cuts and wounds of cattle.

27	*Tagetes erects*	Gainda	Compositae	Entire , plant mainly leaves	Cow	Cuts and wounds.
28	*Tamarindus indica*	Imli	Fabaceae	Fruits	Goat	Carminative, laxative and digestive properties.
29	*Terminalia chebula*	Harra	Combertaceae	Stem bark	Goat	Stem bark is ground with pepper and garlic and given to cure fever.
30	*Tridax procumbens*	Ghamra	Asteraceae	Leaves	Goat	Leaf paste is applied on cut wounds to heal soon.
31	*Vitex negundo*	Nirgundi	Verbenaceae	Leaves	Cow	Tender leaves are ground with pepper and garlic and given to cure infectious diseases.
32	*Zingiber officinales*	Adrak	Zingiberaceae	Rhizome	Cow, goat	Dyspepsia, flatulence, colic and diarrhea

RESULTS AND DISCUSSION:

In the present study 32 species of ethno-veterinary medicinal plants were recorded which belonged 19 families with 30 genera (Table No.01). Fabaceae is found to be most often used family in the study with four species. The leaves are the predominant part utilized in the treatment of veterinary diseases and most of the plants are used to treat fever in livestock.

Ethno-veterinary alternatives are an option for small-scale livestock farmers who cannot use the allopathic drugs because of expensiveness. They use the plants medicines because these are cheap and safe and are available in their nearby areas. Similar observation was noted by ethnic groups Ayurvedic practitioners, Herbal vendors, Vaidyas about medicinal plants used in animal ailments. Some of the important references on the use of medicinal plants in the treatment of animals has been given by Pal (1980 and 1991), Issar (1981), Anonymous (1986-1992), Reddy and Sudarshanam (1987), Sensarma (1989 and 1991), Jha et al (1991).Some studies on ethno veterinary practices from different regions of India have been reported is no such studies are available for Shivpuri district. Few similar study were reported by Girach et al., (1998), Ganesan et al., (2008), Geetha et al., (2006), Kiruba et al.,(2006), Reddy et al., (2006), Yineger et al., (2007), Mini and Sivadasan, (2007), Harsha et al., (2008), Satya and Solanki, (2009), Yadhav, (2009), Rahman et al., (2009).

The present research paper is an attempt to enlist the herbal plants of veterinary use with the help of locals. In this investigation 31 herbal plants have been documented which are used to cure different ailments of animals. Traditional knowledge of plants in many tribal communities is changing because of rapid socioeconomic and cultural changes. This is particularly true in the villagers of Shivpuri district of Madhya Pradesh. Documentation of this knowledge is valuable for the communities and their future generations and for scientific consideration of wider uses of traditional knowledge in treating domestic animals. The low cost and almost no side effects of these traditional preparations with medicinal plants make them adaptable by the local community. The wealth of this knowledge of medicinal plants points to a great potential for research and the discovery of new drugs to cure the diseases of animals. So, further scientific assessment of these medicines for phyto-chemical, biological and pre-clinical and clinical studies are, however, greatly needed.

ACKNOWLEDGEMENT:

The authors wish to thank the many informants who collaborated in all aspects of this study. The authors express their sincere thanks to the local people and tribal's of the study area for providing valuable information about plants used in veterinary medicine.

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