Peer Reviewed Journal Email: - aiirjpramod@gmail.com www.aiirjournal.com

Ethno- Veterinary Plants Used in Animal Health Care Practices by Livestock Owners From Katepurna Region Dist-Akola (M.S.) India

Khadse P. M.¹ and Kakpure M. R.^{*2}

¹Department of Botany, Shri RLT College of Science, Akola *2Department of Botany, L. R. Bharti Arts, Commerce & S. S. R. Bharti Science College, Arni, Dist-Yavatmal

Abstract

Livestock economy forms a major part of our agriculture economics. Tribals in far flung rural areas are still depending upon plant and household remedies for curing various veterinary ailments. The folk knowledge of ethnoveterinary significance has been identified by tribals through a process of experience over hundreds of year. The present study throws a light on herbal remedies used in animal health care of Katepurna region district Akola, Maharashtra, India. The paper deals with 15 diseases of domestic animals and their treatments by 50 plant species found in close vicinity of the rural peoples of the study area.

Key Words: Domestic animals, herbal medicines, animal healthcare and Katepurna region.

Introduction

In India enough attention has not been given to the traditional veterinary herbal remedies (Boddings, 1927; Bandyopadhyay et. al., 2005 and Prajapati & Kumar, 2005). The use of plant and animal parts for medicines long been in existence and documented in records kept in ancient China, India and Egypt. These ancient indigenous practices were discovered by a series of trial and error which then could not be substantiated by proven scientific theories. However, these practices have produce result of proven efficacies compared to conventional modern medicines (Chopra et. al., 1956 and Prajapati et. al., 2003).

In recent times, herbal medicines have become indispensable and are forming an integral part of the primary health care system of many nations. There has been rich tradition and indigenous knowledge about animal healthcare in India (Raja Reddy, 1987; Sharma, 1993 and Bhattacharjee, 2001). Modern healthcare in the tribal and rural areas of Katepurna region is characterized by the deficiency of infrastructure, of qualities personal and of medicine. So, the present study was undertaken in rural as well as in forest areas of Katepurna in Akola district.

Methodology

The traditional knowledge of plant base remedies for the treatment of ailments rests with the medicine man, all of which belong to one family of hereditary indigenous practitioners. Skill and experiences are passed on from one generation to the next by word of mouth and guarded like secrets. In view of secretiveness of traditional men and women, it was decided to interview a number of elderly people, who have a great deal of practical knowledge about the plants and animal products used as medicine in the native system. Before actually launching into the field work, rapport was established with tribals of the locality. Experienced people, such as some elders, professional healers, medicine men can provide important information on useful medicinal plants.

To determine the authenticity of information collected during field work, repeated verification of data from different people and at different times was done. The collected plants were identified up to species level with the help of flora (Kamble & Pradhan, 1988; Karthikeyan & Kumar, 1993; Naik, 1998; Singh & Karthikeyan, 2000 and Singh et. al., 2001). The information presented includes the name of ailment, plant parts, animal product or chemical used, their scientific names and mode of usage. The data are presented alphabetically disease and disorder wise.

Observations

In all 50 plant species are used by the natives in the treatment of domestic animals.

- 1] Anorexia: 50 gm tuber powder of Corallocarpus epigaeus Rottl.et Willed. mixed in 250 ml wine is given in anorexia for Loss of appetite.
- 2] Bloat: Leaves of Ocimum basilicum L. crushed with sugar and the decoction in water is given for blood purification. Tuber of *Discorea bulbifera* L. rubbed in cow urine and paste is applied over bloat. Inflorescence of Mangifera indica L. crushed in cow urine and the paste applied thrice a day on bloat. Tuber paste of Corallocarpus epigaeus Rottl.et. willd. Clarke made in cow urine administered over bloat.
- 3] Blood purification: Agents believed to remove impurities or deficiencies from blood. Leaves of Ocimum basilicum L. crushed with sugar and the decoction in water is given for blood purification.

- 4] Bone fracture: The stem branches of *Viscum articulatum* Burm. f. given orally or mixed with fodder. Warm leaves of *Soymida febrifuga* (Roxb.) A.Juss applied on fracture part. Poweder of leaves of *Blepharis repens* (Vahl) Roth. mixed with whey or pulses of black gram given for healing bones. Stem bark paste of *Terminalia arjuna* (Roxb.ex DC.) Wight & Arn. applied over bone fracture. Root powder of *Bauhinia racemosa* Lamk. with butter and rice given to animals to join the bones. Leaves of *Capparis zeylanica* L. crushed within castor oil, mixed with bulk of egg and sieve white soil. Paste prepared is plastered around fracture bone bandage with the help of hairs, cloth strips and wooden splints made of lightwood.
- 5] Cough, Cold and pneumonia: This disease makes the animal to cough continuously due to climate change or by grazing newly raised grasses on the ground. Warm vapour of *Eucalyptus globus* given to the animal in cough and cold.
- **6] Constipation:** Constipation is a condition of bowels when defectaion of faeces is irregular or difficult. *Abrus precatorious* L. seeds powder are used orally along with water. Crushed seeds of *Jatropha curcas* L. after removing epicarp are given to animals for same.
- 7] **Dysentery:** A disease caused by bacteria or protozoa, causing inflammation of mucus membrane and glands of large intestine, resulting in painful dysentery. The stool often accompanied by mucus or blood. Decoction of leaves of *Eucalyptus globules* Labill mixed with water and by adding by camphor given to animals. Decoction of leaves *Embelia ribes* N. Burm mixed with boiled fruit in water given to animals in dysentery. Dried fruits of *Cucumis melo* L. var. crushed and mixed with wheat for three days in morning given to cattel. Decoction of leaves of *Dolichondrone falcata* (Wall. Ex DC) Seem. after sieving through piece of cloth mixed with butter and given to animals. Decoction of pods of *Cassia fistula* L. mixed with water given to animals. Crushed leaves of *Cardiospermum halicacabum* L. mixed with butter milk given to animals against dysentery. Fruits of *Aegle marmelos* (L.) fed to animals to cure. Fruit powder of *Careva arborea* Roxb., *Sappindus emarginatus* Vahl mixed with *Curcuma longa* L. and decoction is prepared in ghee and 1 lit. decoctions given to cure dysentery.
- 8] Diarrhoea: A common symptom of gastro- intenstinal diseases resulting infrequent discharge of watery stool. Bark of *Ixora arborea* Roxb. Ex Smith soaked with pulses of *Phaseolus mungo* L. overnight in water then next day mixture is crushed together and mixed with 1 litre whey and given twice a day to cure body diarrhoea. The decoction of leaves of *Barleria prionitis* L. mixed in water is given to animals. Leaves and flowers of *Madhuca indica* J. The decoctionis given to cure body diarrhoea. Crushed leaves of *Cayratia auriculata* (Wall. Ex Wight & Arn.) Gamblle mixed with one liter butter milk and sieving through a piece of cloth is given to animals. The decoction of leaves and young pods of *Acacia nilotica* (L.) Willd. Ex Del. is given to animals against diarrhoea.
- 9] Eye diseases: Seed paste of *Balanites aegyptiaca* (L.) Del. Applied to eyes to cure corneal opacity. Seed paste mixed with juice of *Citrus limon* L. and *Curcuma aromatic* Salisb. Applied to cure injury of eyes. Fruit paste made in cow urine applied to cure redness of eyes. Latex from leaves of *Ficus benghalensis* L. applied in eyes to cure corneal opacity and watering of eyes. Fruits of *Semecarpus anacardium* L. f. crushed in cotton and soaked cotton is moved in eyes two to four times to cure redness in eyes.
- 10] External parasites: The leaf juice of *Ailanthus excels* Roxb, is used to kill external parasites like lice and ticks.
- 11] Fever: Body temperature increases, which can be judge b the touching the animals ear. Decoction of roots or leaves of *Trianthema portulacastrum* L. given to cure fever after worm infection. Decoction of crushed roots of *Marsdenia tenacissima* (Roxb.) Moon. given to cure fever. Bark of *Butea monosperma* (Lamk.) Taub. crushed in cow milk, mixed in cow milk, mixed in water and given to cure fever of bullocks. Leaves and flowers of *Madhuca indica* J.F. Gmel and *Tamarindus indica* L. crushed together and decoction is given to cure fever of Goat.
- **12] Maggoted wounds**: Root powder of *Gloriosa superba* L. is dusted on maggoted wounds to kill worms. Leaf decoction of *Alianthus excels* Roxb. is applied on the wound to remove maggot. Decoction of leaves of *Datura metel* L. used to cure maggot wounds. Decoction of leaves of *Cleome viscosa* L. applied on sores for killing maggots. Decoction of leaves of *Clerodendrum multiflorum* (Burm. f.) O. Ktze. droped on worm infested wounds and crushed leaves are also applied to kill worms.
- **13] Hebicide poisoning:** Roots of *Baliospermum montanum* (Willd.) Muell. Arg. Are crushed and put under canine tooth in herbicide poisoning. Whole plant of *Cuscuta reflexa* Roxb. Crushed and mixed with 250 gm butter is given orally in herbicide poisoning.
- **14] Itch:** Sense of irritation on skin. Inner bark of *Acacia nilotica* (L.) Willd. Ex. Del. *Emblica officinallis* Gaertn. *Ziziphus nummularia* Burm. f. and leaves of *Feronia elephantum* Corr. Boiled together. The

decoction is sieved through a piece of cloth, one spoon of pepper powder mixed with two spoon hot butter is added into above decoction and one bottle is given twice a day in itching.

15] Repeat breeder: Crushed fruits of *Thespesia populnea* (L.) Soland. Ex Corr. Boiled, mixed with half litter water and given orally for three days in repeat breeder or anestrus.

Discussion

The present study included extensive survey and research work regarding the use of herbal medicine in the Akola district. As observed in most of the cattle owners and common peoples, first choice of treating their animals is traditional herbals remedies. On field tests, it is revealed that the above common ailments were cured fully in all the cases excepting the few negligible. There were no side effects. Further, the costs of all these herbal remedies were negligible in comparison to modern veterinary medicines as prescribe by the veterinarians. As majority of the inhabitant of the Katepurna region solely depends on agriculture and animal husbandry sectors, their poor economic condition does not permit them to meet the cost of allopathic medicines. Hence, they strongly believe and rely upon their traditional herbal medicines.

References

- 1. **Bandyopadhyay S., Mukherjee and Sobhan K. R.** (2005) Ethno-veterinary medicine from Koch Bihar district, West Bengal. *Indian Journal of Traditional Knowledge*, Vol. 4(4):456-461.
- 2. **Bhattacharjee S.K.** (2001) Handbook of medicinal plants. Pointer Publishers, Jaipur.
- 3. **Boddings P. O.** (1927) Studies in Santal medicines and connected folklore-II "Veterinary medicine". *Memories of the Asitica society of Bengal*, 10 (2):394-404.
- 4. Chopra R. N., Nayar S. L. and Chopra, I. C. (1994) Glossary of Indian medicinal plants. National Institute of Science, Communication, New Delhi India.
- 5. Kamble S. Y. and Pradhan S. G. (1988) Flora of Akola District. Botanical Survey of India, Calcutta.
- 6. Karthikeyan S. and Anand Kumar (1993) Flora of Yavatmal District. Botanical Survey of India, Calcutta.
- 7. Naik V. N. (1998) Flora of Marathwada. Vol. I & II, Amrut Prakashan, Aurangabad.
- 8. Prajapati Narayan Das Purohit S.S., Sharma A.K. (2003) A handbook of medicinal plants. Agrobios (India), Jodhpur.
- 9. Prajapati Narayan Das, and Kumar U. (2005) Agros Dictionary of Medicinal Plants. Agrobios (India), Jodhpur.
- 10. **Raja Reddy K. and Sudarsanam G.** (1987). Plants used as veterinary medicine in Chitoor district of Andhra Pradesh, India. International Journal of Crude drug Research 25(3):145-152.
- 11. **Sharma S. K.** (1993) Traditional arts of animals treatment of Himachal Pradesh. Keynote papers and extended abstracts, Congress on traditional Sciences and Technologies of India, 28 Nov.- 3 Dec. 1993, IIT, Bombay. Knowledge Vol.3(4),pp.397-406.
- 12. Singh N. P., Lakshminarasimhan P., Kartikeyan S. & Prasanna P. V. (2001) Flora of Maharashtra State. Vol. II, Botanical Survey of India, Calcutta.
- 13. Singh, N. P. and Kartikeyan, S. (2000) Flora of Maharashtra State. Vol. I. Botanical survey of India, Calcutta.
- 14. Venkatraman V. (1941) Palapoodu "Vinca pusilla" poisoning in cattle. Indian Veterinary Journal 17 (4): 372-373.

