

## **ETHNOVETERINARY PRACTICES IN COIMBATORE DISTRICT DURING FOOT AND MOUTH DISEASE OUTBREAK**

**<sup>1</sup>N. Vimal Rajkumar, <sup>2</sup>N.V. Kavithaa and <sup>3</sup>C.M. Sree Lakshmi**

<sup>1</sup>Assistant Professor, Department of Veterinary and Animal Husbandry Extension, Madras  
Veterinary College, Veppery, Chennai, Tamilnadu – 600007

<sup>2</sup>Assistant Professor, Veterinary University Training and Research Centre, Erode – 638004

<sup>3</sup>Assistant Professor, Department of Veterinary and Animal Husbandry Extension, College of  
Veterinary and Animal Sciences, Mannuthy, Kerala Veterinary University  
E-mail: <sup>2</sup>kavikulandai1979@gmail.com

**Abstract:** The indigenous knowledge and practice based on locally available bioresources are effective to cure diseases. In this way, an attempt has been made to document the herbal medicines to treat the FMD affected animals. The data regarding the ethno veterinary treatment of Foot and Mouth Disease were gathered from the livestock farmers of Pollachi Taluk of Coimbatore District through personal interview method and documented.

### **Introduction**

Ethnoveterinary medicinal plants used extensively and quite effectively for primary health care treatment to make domestic animals productive and healthy. The indigenous knowledge of the veterinary health care system acquired by traditional herbal healers is orally transformed from one generation to other (Phondani et al., 2010). Economic dependence on livestock, lack of veterinary infrastructure has forced the local farmers even today to apply their indigenous knowledge to look after and maintain their livestock population. The interest in medicinal plants has been shown all over the world because of safe and effective constituents of plant products (active principles of medicinal plants). In South India, many livestock owners, especially those who are poor and live in remote areas, use ethnoveterinary medicine for the primary healthcare of their animals.

Foot and Mouth Disease has been the great concern for the local livestock owners as they completely depend upon their domestic animals for their economic needs. The indigenous knowledge and practice based on locally available bioresources are effective to cure diseases and they don't have financial cost and are easily administrable

## Materials and Methods

The Ethoveterinary data regarding treatment of Foot and Mouth Disease practiced in Pollachi Taluk of Coimbatore District were identified and collected by conducting interviews with livestock farmers.

## Results and Discussion

Diseases are the basic problems for the livestock owners. Villagers are traditionally considered to take a subsidiary role in the care of animals. Traditional and valuable information regarding ethnoveterinary medicine is disappearing nowadays and it is necessary to document the ethnoveterinary knowledge for the future generations. In this context, a study was conducted in Pollachi Taluk of Coimbatore District to identify and document the traditional ethnoveterinary medicine used in the treatment of Foot and Mouth Disease at the time of outbreak of disease.

**Table 1.** Documented Ethnoveterinary practices for the treatment of Foot and Mouth Disease practiced in Pollachi Taluk of Coimbatore District.

S.No	Common Name	Binomial Name	Animals treated	Quantity and Frequency of administration
1.	Sirumalai banana	Musa paradisiaca	Cattle	Five fruits of Sirumalai banana with Amanakku oil 25 ml is effective to treat FMD when it is given orally for three days
2.	Amanakku oil	Ricinus communis		
3.	Sirumalai banana and pig fat	Musa paradisiaca and Lard	Cattle	Mixture of five fruits of Sirumalai banana and 100 gm pig fat (Lard) is effective to treat FMD when it is given orally once a day for five days
4.	Chiryanangai	Andrographis paniculata	Cattle	Paste of leaves of Chiryanangai, Periyangai,
5.	Periyangai	Peristrophe paniculata		

6.	Seeragam	<i>Cuminum cyminum</i>		Seeragam and bulb of <i>Allium cepa</i> is given orally to cattle for three days
7.	Onion	<i>Allium cepa</i>		
8.	Kambu	<i>Pennisetum typhoides</i>	Cattle	Kambu ground with water daily during recovery stage
9.	Ellu oil	<i>Sesamum indicum</i>	Affected animals(Cattle and Goat)	An infusion of dry fish (150 gm with 5 Litre of water) mixed with Ellu oil (100ml), Amanakku oil (100ml) and neem oil (100 ml) is applied externally for a week
10.	Neem oil	<i>Azadirachta indica</i>		
11.	Amanakku oil	<i>Ricinus communis</i>		
12.	Oduvanelai	<i>Cleistanthus collinus</i>	Sheep and Goat	A paste of handfull leaves of Oduvanelai, Thumbai and a spoon of calcium carbonate powder given orally once a day for five days
13.	Thumbai	<i>Leucas aspera</i>		
14.	Neem with few pieces of bones	<i>Azadirachta indica</i>	Cattle (Shed)	Fumigation is also done by burning the leaves of neem with few pieces of bones for three days

The data in Table 1 reveals the documented ethnoveterinary practices for the treatment of Foot and Mouth Disease practiced in Pollachi Taluk of Coimbatore District. The documented ethnoveterinary practices for the treatment in cattle was paste prepared from five fruits of Sirumalai banana with Amanakku oil 25 ml is effective to treat FMD when it is given orally for three days and also mixture of five fruits of Sirumalai banana and 100 gm pig fat (Lard) is effective to treat FMD when it is given orally once a day for five days. Apart

from the above ethno veterinary treatment paste of leaves of Chiryanangai, Periyangi, Seeragam and bulb of *Allium cepa* is also effective for the treatment of FMD when it is given orally to cattle for three days. The boiled seed of kambu ground with water is also fed to the animals during recovery stage. In affected animals an infusion of dry fish (150 gm with 5 Litre of water) mixed with Ellu oil (100ml), Amanakku oil (100ml) and neem oil (100 ml) is applied externally for a week. A paste of handfull leaves of Oduvanelai, Thumbai and a spoon of calcium carbonate powder is effective to treat FMD in sheep and goat when it is given orally once a day for five days. Fumigation is also done in cattle shed by burning the leaves of neem with few pieces of bones for three days. It is clear from the present study traditional herbal medicines are effective to cure the contagious disease from the locally available bioresources. Proper documentation of ethnoveterinary medicines; pharmacopoeia of ethnoveterinary medicines should be developed for its popularity and to check patenting; to develop a proper link between traditional veterinary healers and modern veterinary doctors; and rare ethnoveterinary medicinal plants should be listed and preserved. (Devendrakumar and Anbazhagan,2012). Awareness among the local people should be created to avoid overexploitation of local flora.

### **Conclusion**

India has got great traditional background in the field of ethnoveterinary medicine and practices, but in the process of modernization, this knowledge is vanishing very rapidly. (Devendrakumar and Anbazhagan, 2012). Hence Documentation and Standardization of ethnoveterinary knowledge is more important for the benefit of future generations.

### **References**

- [1] Devendrakumar, D and Anbazhagan, M. 2012. Ethnoveterinary medicinal plants used in Perambalur District, Tamilnadu. *Research in Plant Biology*, 2(3) :24-30.
- [2] Phondani, P.C., Maikhuri, R.K and Kal, C.P.,2012. Ethnoveterinary Uses of Medicinal Plants Among Traditional Herbal Healers in Alaknanda Catchment of Uttarakhand. India. *Afr. J. Tradit. Complement. Altern.Med.*,7(3) : 195-206.