

Ethno-Veterinary Drug Therapy for Ear Mange in Sheep

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Abstract

Sheep from two flocks showed scab lesions around nostrils, eyes and on the face with facial alopecia and thickening of the skin. The case was confirmed as ear mite (*Psoroptis ovis*) by microscopic examination of skin scrapings. Percent incidence in flock I and Flock II recorded was 12.5, 11.4 respectively. Affected sheep were divided into two groups each containing nine animals. Group I was treated with preparation containing 50ml Azadirachta indica oil, 50ml Pogamia pinnata oil, 25gm Camphor, 50gm Sulphur powder and 500ml coconut oil applied on an affected skin twice a day for 15 days and Group II treated with preparation having 50gm of Curcuma longa rhizome and 25gm of Azadirachta indica oil applied once a day for 15 days. The first preparation was found highly effective against ear mange in sheep. It was found to be very convenient for use in field conditions, did not cause any adverse reaction locally as well as systemically.

Keywords: Ethnoveterinary, Ear mange, Sheep, Drug, Therapy.

Introduction

Poor nutrition, stress and presence of other infections may contribute to the susceptibility of sheep to mange outbreak. Sheep on poor nutrition have significantly higher mite population. Psoroptic mange is of greatest importance in sheep in which it causes sheep scab and responsible for ear mange (Radostitis, et al, 2000). So, this study was conducted to access the efficacy of two polyherbal ethno-veterinary preparations in the treatment of Mange in sheep.

History and Clinical Observations

Present case was reported from two shepherd flocks at villages Adarki and Badali, tal-Phaltan, dist-Satara during Sept.2008. Clinical examination revealed scabs mostly found around nostrils, on the face, around the eyes. The scabs were white in colour and cheesy in consistency. Eczema was also observed in 10 sheep. There was facial alopecia and thickening of the skin around nose, forehead and ear. On detailed examination there was a decline in body condition but respiratory rates, pulse and temperatures were normal. Affected sheep were emaciated, weak and depressed. The case was tentatively diagnosed as ear mite/psoroptis ovis and confirmed by microscopic examination of the skin scrapings collected from the affected sheep as per Soulsby (1982). Percent incidence in flock I and Flock II recorded was 12.5, 11.4 respectively depicted in table-1.

Table-1. Prevalence of *Psoroptis ovis* infestation in sheep flocks.

Flock	Sheep	Positive	% incidence of mange
Flock I	120	15	12.5%
Flock II	35	4	11.4%

Treatment and Discussion

Affected sheep were divided into two groups each containing nine animals. Affected area of each sheep was cleaned with potassium permanganate solution (Venugopalan, 1985). Group I was treated with preparation containing 50ml Azadirachta indica oil, 50ml Pogamia pinnata oil, 25gm Camphor, 50gm Sulphur powder and 500ml coconut oil applied on an affected skin twice a day for 15 days and Group II treated with preparation having 50gm of Curcuma longa rhizome and 25gm of Azadirachta indica oil applied once a day for 15 days (Ghotage and Ramdas, 2005). It is found that ingredients in the both the preparations namely Azadirachta indica (Kaduneem), Pogamia pinnata (Karanj) has antibacterial, fungicidal, antihelminthic and depurative properties (Ravikumar et al, 2009; Grover and Rao, 1977) whereas Curcuma longa (Halad) rhizome are known to be antiseptic, anti-inflammatory and antiprotozoan (Ghotage and Ramadas, 2008; Satyavati et al, 1976).

Marked improvement in condition characterized by healing of lesion, hair growth and disappearance of mites in the skin scrapings was observed on

completion of the treatment in Group I (100%) whereas in Group II, six affected sheep (66%) showed complete cure. Recurrence was not seen in a follow-up period of two weeks. The first preparation was found highly effective against ear mange in sheep. The ingredients in both the preparations are easily available to shepherds. It was found to be very convenient for use in field conditions, did not cause any adverse reaction locally as well as systemically.

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