INTRODUCTION

Mange is a common contagious skin disease of animals caused by parasitic mites. Several acaricides are available for use against mange. But extensive use of these acaricides poses problems with regards to safety and development of drug resistance. Hence, in the present study an indigenous, less toxic ayurvedic product, Nimant Gel was tried in the treatment of mange in buffalo calves. Fifteen buffalo calves affected with mange were divided into three groups of five each. The first group of calves were given one external application of Nimant gel for five days. The second group of calves where two applications of the ointment was practiced for five days, the recovery was faster and the animals were free from the infection within a week. In the control group of calves which were not treated with Nimant Gel there was persistence of mange in buffalo calves.
of the lesions with presence of mites in the skin scrapings. Nimant Gel was found to be a better alternative for chemical acaricides in the treatment of mange in buffalo calves.

Mange is a contagious skin disease of animals caused by parasitic mites. Mange is considered to be a serious entity of livestock, which accounts for production and economic losses (Bagherwal et al., 1991). Mange causes severe irritation, itching, alopecia in domestic animals, apart from considerable economic loss in terms of decreased production, thickening and wrinkling of skin, thus lowering the market value of hides.

Mange is also of Zoonotic importance as the people handling the infected animals are liable to contract the infection (Srivastava and Chhabra, 1971). Certain mange mites of animals also cause infestations in human beings, which is known as scabies (Soulsby, 1974).

Although, many acaricides are available against mange, still it exists among livestock. Large scale use of chemical insecticides have limitations viz., Less safety indices, chance to induce drug resistance, etc.

Therefore, less toxic and non-residual insecticides have evolved. There is hardly any report on the efficacy of indigenous preparations against mange in buffaloes. Hence, the present study was taken up to establish the acaricidal effect of Nimant Gel against mange infestations in buffaloes.

MATERIALS AND METHODS

Composition of Nimant Gel: (An Ayurvedic product of Respel Pharms, Bangalore Company)

Nimant Gel is an ayurvedic product which mainly contains Tila Taila (Sesamum indicum) Naktamala Taila (Pongamia glabra), Ravipriya Taila (Melia azadirachta), Vatri (Ricinus communis), Madhuchista (Bees wax), Neelangi (Eucalyptus globules), Rajani (Curcuma longa), Devakusum patra (Ext) (Myrus caryophyllus), Vrikshaha patra (Ext) (Vitex nirgunda), Gandhagatha Patra (Ext) (Anona reticulate), Chitrak-stupa patra (Ext) (Leucas cephloles), Himavaluka (Campora officinarum), Base Q.S.

STUDY DESIGN

The efficacy of the Nimant Gel in the treatment of mange in buffalo calves was tested. The study was conducted in 15 buffalo calves which were infested with mange in a nearby village of Tirupati. Skin scrapings were collected from the affected sites and examined before treatment. The animals were divided into three groups consisting of five animals each.

The calves in group I were treated with Nimant Gel for 5 days once a day by external application at the affected parts and no other treatment was given to the animals. In group-II calves, Nimant Gel was applied twice daily for five days and then discontinued. Calves in group-II were kept as control group without giving any treatment.
Calves from all the three groups were observed and skin scrapings were collected and examined daily for the presence of mites for up to 20 days post treatment.

RESULTS AND DISCUSSION
Examination of skin scrapings from the affected animals showed the presence of Psoroptes species of mites. The lesions were observed mostly on neck, base of horns, withers, croup and root of tail. The affected animals exhibited irritation, itching and patches of alopecia on the skin. In group I animals, the calves responded to treatment in 12 to 15 days. The skin lesions subsided slowly and there was presence of mites up to 12 to 15 days. The skin lesions subsided slowly and there was presence of mites up to 12 to 15 in the skin scrapings and there were no mites after the 16th day post treatment. In group-II animals which received two applications of Nimant Gel the healing was rapid as compared to the calves in the group-I. The skin lesions subsided within a week of the treatment, the animals showed relief from itching and irritation. The examination of skin scrapings revealed no mites from 8th day post treatment. In group-III animals, which were not treated with Nimant Gel, the skin lesions persisted in the animals and skin scrapings continued to have mites.

Which the present observations it could be concluded that Nimant Gel has good efficacy against mange in buffaloes. Thus Nimant Gel can safely be recommended against mange without any untoward effects of the drug on calves following external application on the skin.

ACKNOWLEDGMENT
The authors express their thanks to the M/s. Respel Pharma, Bangalore for the supply of
Nimant Gel for the drug trials and to Dr M Sukumar, Assistant Director, Veterinary Hospital, Venkatagiri for his assistance extended.

REFERENCES


