

## Parasitic Management in Cattle & Buffaloes

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<https://doi.org/10.5281/zenodo.8277336>

### Introduction

In bovine control of ecto and endo parasitic infestations are one of the biggest problems in field and dairy animals. Due to External and Internal parasitic infestations bovines are suffering from health issue like decrease absorption of good nutrients, impairment of digestion, irritation, sucking of blood from body by parasites, results anemia, damage body tissues which produce mechanical obstruction, secretion of toxin and suppress immune body system.

In Cattle & Buffaloes, ecto and endo parasitic control is one of the best exercises to keep good health and maintain the production of our animals. Worm infested animal looks lethargic, depressed and discomfort, loss of appetite, mucous & blood contains diarrhea, rough hair coat, eat soil & other unwanted things (cloths, wire, licking wall etc.). Finally, loss of body weight, decrease milk production, reduce reproductive preformation and the farmer has to face economic losses.

Some factors play a very important role for attracting different types of parasites like hot & humid weather, rainy season, poor quality grazing area, condition of animals (thin & diseased), weak immune system.

### Types of Parasitic Infestation

Parasitic infestation occurs in animals, either externally like fleas, ticks, mites and lice or internally parasites such as fluke (Trematodes), tapeworm (Cestodes), round worm (Nematodes) and protozoal infection like coccidiosis.

Among these parasites, ticks are more prevalent in various area of India due to Lack of awareness, favorable climatic conditions, insufficient source to control of ticks.

External parasites directly affect the cost of animal in form of skin problems (Itching, irritation), disease transmission (Theileriosis, Babesiosis, Anaplasmosis) and reduced milk production.

## Drug Administration's Method

Most common drug administration method in cattle and buffaloes are orally and parentally. Internal parasitic infestations can be managed by oral medication and external parasites can be controlled by direct application of antiparasitic medication in form of spray and by injectable drugs.

## Selection of Drug for Parasite Control Depends On

- Age and body weight of animal.
- Dietary and watering habits of animal.
- Body condition (healthy & diseased) of animal
- Application method of drug (oral, injectable and externally use)
- It should be effective against all stage of the parasite and having long-term effect
- It should be worked on the target site of parasite
- Animal production stage (lactation and pregnancy stage)
- Cost of drug
- It should be safe for both animal and owner.

## Parasitic Drugs for Internal Parasites

- Benzimidazoles (White dewormer): - Albendazole, Fenbendazole, Mebendazole, Oxfendazole
- Imidazothiazoles: - Pyrantal, Levamisole and Maratel
- Macrolytic Lactones or Avermectins :- Ivermectin, Doremectin and Moxidectin
- Other: - Praziquantel, Clorsulon.
- Benzimidazoles work against large strongyles, small red worm, round worm, and pinworm.
- Praziquantel is effective against tapeworm infestation.
- Pyrantel dewormer fight against large strongyles, small red worm, round worm, tapeworm and pinworm.
- Macrolytic Lactones good for large strongyles, small red worm, round worm, tapeworm and pinworm.
- Dose of bolus Albendazole 20mg/kg in large ruminants but it is not suitable for pregnant animals.
- Dose of bolus / liquid of Fenbendazole 10mg/kg orally.
- Levamisole 12 mg/kg as a dewormer in cattle & buffaloes.

## Parasitic Drugs for External Parasites

For external parasite injectable and direct applicable medicine are available.

- Spray Deltamethrin worked against ticks, mites and lice apply external only.
- Injectable Ivermectin by subcutaneously route. Injection Ivermectin are useful against



both endoparasites (gastrointestinal worms) and ectoparasites (lice, mites and grubs)

### **Prevention And Control of Ecto and Endo Parasites Infestations**

- Keep animal house clean and dry.
- Fecal examination should be done on regular basis.
- Feed sources should always be free from parasite load.
- Fresh and clean water should be given.
- Proper follow deworming schedule.
- Add some good amount of mineral and vitamins in animal feed.
- Add some amount of salt in feeding manger.
- Keep the house free from any insect, fly and mosquitos.

### **Conclusion**

Most of the cattle & buffalo's owners are aware about deworming of large ruminants and they kept animals free for the internal as well as external parasites. Farmers those not follow the schedule of deworming and external parasite infection control strategy and leave the animals to exposed parasitic infections, they suffer from economic losses and this type of routine can cause restlessness in animals, decrease the production capacity and increase the risk of diseases and even death of animals. Proper use of dewormer against ecto and endoparasites brought significant returns to the farmer in term of production of milk, meat, hides and manure from the animals.

