

DEWORMING IN CATTLE

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ABSTRACT

Deworming sometimes referred to as drenching is the administration of antihelminths to get them free from helminths such as roundworms, tapeworms, or flukes. They are of very economic importance as they can cause economic loss in growth rate, and milk production, release toxins, and cause diseases such as bottle jaw, toxemia, etc according to the estimates around 42% of animals are affected by different types of worms is of great concern so we aim to aware the farmers about the importance of deworming and its drastic effects.

Introduction:

Parasitic infections are common all around the world but their prevalence is more common in tropical and subtropical regions which include countries like India, Pakistan, Iran etc. Such hot weather favors parasite's growth and their lifecycle. There is more prevalence in summer than in winter season of internal parasites which causes huge economic losses to the farmers such as reduced feed efficiency, milk reduction, low body score, lowered fertility, and thus less productivity. Most common internal. Internal parasites found in animals are schistosomiasis *spp*, *dictylocaulus viviparus*, *strongylidae spp*, *Buxtonella silicate*, *Eimeria spp*, *Cryptosporidium*, *pharamphistomum spp*, *tricostrongylus*, *Ostartagia spp*, *Cooperia spp*, *Fasciola spp* etc. Internal parasites are found mostly in the stomach and intestine of animals and those animals which are grazed on pastures are more susceptible to parasitic infestation than feedlot animals. silamilarly young calves and bulls are also more susceptible to parasitic infections because they lack such immunity however immunity plays less role.

Gastrointestinal parasites are of serious concern all over the world affecting efficient milk and meat production. The productivity through reduced feed intake and decreased feed efficiency due to subclinical or chronic infections reference (2) are responsible for economic losses in the livestock industry with regular deworming of around 400-500 grams daily had been achieved and around 1-liter increase in the milk in a lactating cow can be accomplished reference (3). It is very important to deworm all animals in a herd three times a year or at least twice or once for better productivity and efficiency but it case if it is not possible to deworm all animals then at least those animals should be dewormed who are susceptible to internal parasites by looking at their sign and symptoms like stunted growth, reduced milk production, diarrhea due to parasites or via fecal diagnosis. For effective deworming it is very important to understand the life cycle of the worms, type of worm infestation by diagnosing, the animal deworming record and right dose at the right time which can lead to better results and thus good outcomes.

Lifecycle of parasites

It is very important to understand the lifecycle of parasites for their better control firstly the parasitic-infested animal harbor an adult worm, the egg produced moves out with the faeces of the animal where they develops into a different larval stage .L3 larva is then re-ingested again where they develop into the adult worm and produce eggs again and lifecycle goes on like this reference (5).

Dewormers and their methods of administration

An accurate dose calculation is very important for effective results. Under-dosing or overdosing can result in complications such as relative resistance and toxicity can occur so the recommended should be used. There are different routes of administration of dewormers such as oral drenches, pour, and injectables however the oral route of administration is most commonly used but the drug should be properly administered otherwise complications such as drenching pneumonia, etc can happen. Nowadays dewormers are also fed through blocks and added to the feed which makes deworming easy in case of a large herd. There are many dewormers in the market but the selection

Signs of worm-infested animals

Signs of worm-infested animals are loss of weight, delay in puberty, soil licking and eating of cloth, decrease in milk production, weakness and slow growth, milk reduction, thin and rough growth, and even mortality

Diagnosis

Before proceeding for deworming diagnosis of parasites is very treatment. There are different tests available such as fecal examination, fecal egg count, McMaster technique, biological test like PCR, serological test like Elisa, etc (6).

Treatment

Treatment should be based upon whether there is mono-parasitism or multi-parasitism, parasites burden and the common parasites found in the area. Some of the common drugs used in deworming are albedazole, oxfendazole, mebendazole, ivermectin, levamisole (7).

Control

Control can be done by reducing overcrowding, rotational grazing, regular deworming, control of parasite-host, and providing hygienic food and water

Conclusion

Thus doing regular deworming had positive effect on efficient growth rate, milk volume and milk quality such as solid non-fat, lactose, solid percentage and total protein percentage

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