

## **Prevalence of gastrointestinal nematodes in sheep faeces, after experimental infection, submitted to association of anthelmintics agents**

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Gastrointestinal nematodes are the most frequently observed parasites in ruminants worldwide. They are responsible for the economic loss, causing a strong negative impact. The main method of control used for gastrointestinal nematodes is the chemical, with anti-helminths; however, the inadequate use of the excessive treatment with these drugs has resulted in widespread anthelmintic resistance, being a barrier to maintain the sanity when raising small ruminants. The present study aimed to evaluate the prevalence of gastrointestinal nematodes, through sheep faeces submitted to the association of anthelmintics agents, after experimental infection. Twenty animals were used feces were weekly collected to verify the OPG (eggs per gram of feces) and coproculture, in order to standardize the infection of the herd. Thus, all animals before starting the proposed treatment would have equivalent parasite load. A solution containing the third stage larvae (L3) of *Haemonchus sp.*, obtained from adult parasites removed from the abomasal mucosa of necropsy animals was administered orally. Each animal received a 10mL volume of this solution, containing approximately 12,000 larvae. The animals were randomly divided into 5 groups, as it follows: group 1 (control group), group 2 (received Triclorfon and Albendazol), group 3 (Triclorfon and Ivermectin), group 4 (Albendazol and Ivermectin) and group 5 (animals received only Trichlorfon). The group that received the combination of Trichlorfon and Albendazole (group 2), as well as Trichlorfon and Ivermectin (group 3), showed an intense decrease in the number of eggs per gram of feces. The results confirmed multiple infections of *Strongyloides sp.* and *Eimeria sp.*; in all treatments except group 5, which did not have *Strongyloides sp.* Eggs of the strongyloidea type, present in 97.1% of the analyzed samples; oocysts of *Eimeria sp.*, present in 56.52% of the analyzed samples and eggs of the genus *Strongyloide sp.*, found in 13.04% of the samples. The highest prevalence was eggs of the strongyloidea type (82.46%), followed by *Eimeria sp.* oocysts (16.71%) and *Strongyloide sp.* (0.83%).

**Key words:** Small ruminants; Anthelmintic resistance; *Haemonchus*; Prevalence.