

## Evaluation of methods of control gastrointestinal nematodes in sheep herd

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The administration of anthelmintics to control gastrointestinal nematodes can increase the production system costs and/or develop parasitic resistance. In this way, the aim of this work was evaluate three methods to control gastrointestinal nematodes: FAMACHA, strategic control based on albendazole administration and the eggs per gram (EPG) counts. It was used 240 sheep undefined breed, divided in three groups with 80 sheep each that represents the average characteristics of original herd and kept together on pasture naturally infected by gastrointestinal nematodes (85% of *Haemonchus* sp. in larvae cultures). In each group it was used a different method of worm control: I - FAMACHA®, II - strategic control (SC) based on albendazole administration and III - based in eggs per gram (EPG) counts, using the 500 EPG averages as a cutoff to anthelmintic administration. During eight months, each 14 days on rainy season and each 30 days in dry season, feces from 20 animals belonging to each treatment were collected to EPG counts. At the same day, the animals were submitted to FAMACHA method and only animals from group I that presented FAMACHA 3, 4 or 5 were medicated with albendazole. The EPG mean was higher in animals of groups I and II (570 EPG;  $P>0.05$ ) and lower in group III (300 EPG;  $P>0.05$ ). During the experimental period, the animals from group II were medicated with anthelmintic three times in a year and that from group III, once. The worm control by FAMACHA permitted to save 40% of costs regarding to strategic method. The FAMACHA and EPG counts permitted reduce the use of anthelmintics and, consequently, the lower costs than strategic control. However, to obtain similar results, it is necessary to have a book keeping records of the herd to help the decision of how method of control use and a team with knowledge in FAMACHA method and/or estimate the EPG counts in laboratory. Study funded by Funcap, CNPq and Embrapa Caprinos e Ovinos.

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