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Résumés - Abstracts
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CATTLE TRICHOSTRONGYLOIDOSIS IN THE PROVINCE OF LEON (SPAIN).


trichostrongyliidae - Cattle - Epizootiology - Spain.

In this study, the egg elimination rate in cattle faeces, the number of infected animals, the influence of their age on the infection and the seasonality of all these parameters was followed. A study of the monthly trichostrongylids eggs elimination was carried out in 10% of the total cattle (Brown-Alpine), at five localities of the Porma river basin, between March 1986 and March 1987. The farming system for the livestock studied was of extensive type. The cattle were divided into the following age groups: less than 3 years old, from 3 to 7 years and over 7 years. The faeces were collected early in the morning directly from the rectum of animals chosen at random. The eggs were detected by the flotation method with saturated salt solution. McMaster chambers were used for the eggs counts.

Of the 1252 faecal samples examined 27.9% contained trichostrongylids eggs. The highest percentage of the infected animals was observed in winter (43.1%) with the maximum value in February (48.2%). According to the chi-square test ($X^2$), statistically significant differences were observed among the five localities ($X^2 = 12.77; P \leq 0.025$) and the months of sampling ($X^2 = 78.3); P $\leq 0.005$), with regard to infection prevalence.

The eggs per gramme (epg) elimination with the faeces ranged between 50 - 2000, average 132.5 ± 7.2. The maximum value of the epg mean was observed in May (233.9 ± 67.4), followed by the ones from September (184.2 ± 20.0) and August (180.9 ± 25.2). By means of one-way analysis of variance statistically significant differences were observed, in relation to the epg, among the months of sampling (F = 3.73; P $\leq 0.005$).

The infection prevalence and the number of eliminated epg decreased with the host’s age.

EARTHWORMS (LUMBRICIDAE) REDUCE NEMATODE PARASITES ON GRASS

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Earthworms, nematode parasites, pasture contamination.

A field experiment has been carried out to study the influence of earthworms on the transmission of infective Cooperia oncophora larvae from experimental cow pats to grass. Results showed that cow pats, protected from attack by earthworms, disappeared at a much lower rate than unprotected cow pats. The rapid disintegration of unprotected cow pats resulted in an approximately 50% reduction of infective Cooperia oncophora larvae on grass in the vicinity of these cow pats as compared with Tärval contamination of grass around protected cow pats.

As earthworms are beneficial soil organisms and as they eat cow pats, it is important, that results from another experiment have showed that, apparently, earthworms are not adversely affected by eating faeces from cattle treated with anthelmintic drugs.