

Gastrointestinal parasites in small ruminants in South-Western Spain: questionnaire and survey.

A. MARTÍNEZ-MORENO¹, P.J. RUFINO-MOYA¹, L.P. GONÇALVES-REIS¹, I. ACOSTA-GARCÍA¹, R. ZAFRA-LEVA¹, D. E. RUIZ DI GENOVA³, J. MARTÍNEZ-BLASCO³, F.J. MARTÍNEZ-MORENO^{1,2}.

¹ Parasitology and Parasitic Diseases. Animal Health Department. University of Córdoba. Spain.

² fjmartinez@uco.es. Parasitology and Parasitic Diseases. Animal Health Department. University of Córdoba. Spain.

³ COVAP. Córdoba, Spain.

ID: CMBR2

INTRODUCTION

Helminth infections are one of the major problems in small ruminants' livestock. The control of these parasitosis has been carried out by means of pharmacological treatment. However, resistance to antiparasitic drugs is increasing in the recent time.

In many cases, farmers are the main responsible of the treatment, and no veterinary advisory is required. In this way, it is very important their opinion in the health problems of livestock.

OBJECTIVES

1. Survey of farmers on management systems, veterinary advice and anthelmintic treatment and rotation.
2. Coprological study of gastrointestinal parasites, the relationship between the parasite burden and the type of production, and the answers of the survey.

MATERIAL AND METHODS

OBJECTIVE 1.

A questionnaire was supplied to 198 farmers, asking about different items:

- Type of production
- Importance of parasites in their farms
- Frequency of parasite presentation
- Veterinary advice
- Who decide the antiparasitic treatment
- When is the treatment
- How many treatments per year
- Which products use for treatment
- Faecal egg test
- Treatment of new animal
- General Treatment/Selective treatments
- Presence of resistance

OBJECTIVE 2.

In the same farms, fecal samples were obtained from three rearing animals and three breeding animals, and two pools were made from them. Three grams per pool were analysed by McMaster method.

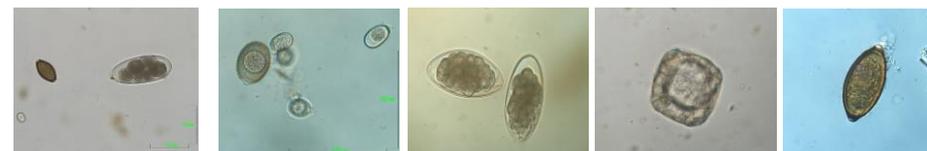
	FARMS (198)		
	Sheep		Goat
	Meat	Milk	
Replacement (143)	132	11	39
Breeding (155)	143	12	39
	159*		39

*Not all farms the same number

RESULTS

Parasites were identified as *Eimeria* spp., *Moniezia* spp., *Dicrocoelium dendriticum* and *Trichuris* spp.

		PREVALENCE (%)			
		<i>Eimeria</i>	Strongilida	<i>Moniezia</i>	<i>Trichuris</i>
BREEDING	SHEEP MEAT	94,40	65,73	16,78	0,69
	SHEEP MILK	100	66,66	0	0
	GOAT	97,43	33,33	5,12	2,56
REPLACEMENT	SHEEP MEAT	100	67,42	28,03	6,81
	SHEEP MILK	100	18,18	0	0
	GOAT	100	2,56	2,56	0



According to the type of production, a significant association was observed in meat-producing sheep in relation with the presence of strongilids ($P = 0.04$) and *Moniezia* spp. ($P = 0.006$). The replacement animals (92.86 %) presented higher percentage than breeding animals (7.14 %).

Respect to the questionnaire, the most relevant questions about the veterinary advisory service and the use of antiparasitic products, reveal that only 20% of the farmers use the veterinary services, and almost 50 % treat more than twice per year. Related to the rotation of antiparasitic drugs, about 50 use 2 or more antiparasitic products. Only the frequency of deworming influenced the prevalence of strongilids, and there was an association between treatment (more than twice a year) and the lowest percentage of animals having no parasites.

CONCLUSION

The prevalence was influenced by different factors: type of small ruminant, type of production and physiological status. The type of infection depends on the ruminant specie, production, and physiological status. The most frequent infections were the single infection with *Eimeria* spp. and double infection with *Eimeria* spp. and strongilids.

fjmartinez@uco.es

Funding source: FEDER-UCO-1263234