

**DEVELOPING A TREATMENT SCHEME TO CONTROL
ENDO-PARASITES DISEASES IN SHEEP
- second part -**

Czirják, T. Zs. *

* University of Oradea, Faculty of Environmental Protection, 26 Gen. Magheru St., 410048 Oradea;
Romania, e-mail: drcziri@yahoo.com

Abstract

In general, through the influence of the environment on the leaving organisms undergo morphological changes more or less accentuated. Parasitism offers the most typical example that shows precisely the changes bodies depending on the environmental conditions.

Key words: sheep, internal parasites, treatment.

INTRODUCTION

Parasites infestation consequences on the host are of particular importance in the medical report. This phenomenon is showing through the following actions: mechanical, spoliation, toxic and inoculation.

Ways in which parasites are leaving the hosts, different forms of resistance spread, or the existence of a large number of intermediate hosts, all of which increase the possibility of infestation. Currently in Romania, one of the most important branches of the economy is agriculture, cattle breeding, respectively.

Sheep breeding is a main branch of cattle breeding, sheep being found in all regions of the country. Given the diversity of products, biological and economic value of sheep, all contributed to the appreciation over time.

This paper intends to establish a scheme of antiparasitic treatment in sheep based on necropsic analysis and coproparasitological examinations carried out. Have only used drugs on the market products from Romania, easy to get hold cost relatively little.

MATERIALS AND METHODS

This research has been conducted in the north-western part of Romania, Bihor County, Abram, the village of Suiug.

Following necropsis and copro-parasitological examinations to determine both the extent of the infestation and the type most common parasites found in that area. Copro-parasitological examinations have been conducted between the 10th and 15th day of each month for the duration of the research.

This research was conducted during the period of 01.03.2016-28.03.2017 and was carried out on a flock of 1000 sheep, of which 600 adult sheep heads respectively 400 lambs, Țurcană and Carabaș from the race. The 1000 sheep we have divided into two groups. The experimental lot consisting of 560 adult sheep heads and 380 heads of lambs; the control group comprised of 40 adult sheep and 20 heads of lambs.

The control group was held on the same pasture with the other batch of sheep but to avoid access experimental batch at the controls, I used a pen. During study I conducted of 480 copro-parasitological exams by Willis method, 10 necropsis exams and 5 exams by gastrointestinal sedimentation method.

In each series of tests has been harvested from the faeces samples from 30 randomly chosen ends. Sacrificed an animal in order to perform the necropsic examination. Based on the analysis carried out it is an established protocol for disinfection.

RESULTS AND DISCUSSIONS

In the wake of the necropsis examination carried out at two lambs, respectively in 13.04.2016 and 14.04.2016 it was found that the presence of intestinal parasites *Moniezia expansa*.

The 15.04.2016 was administered Panacur, with a dose of 1 ml per 10 kg of body weight. This drug is based on the active substance Fenbendazol. Antihelmitic effect manifests itself both in the adult form, and the immature of gastrointestinal nematodes and airway. Following this treatment, the lambs began to eliminate the adult cestode but and eggs.

According to the prospectus, after twenty days I repeated deworming, only that this time I administered a drug that is based on the active substance praziquantel. The product is called Prazicest and is rapidly absorbed in the body with a high efficacy over the cestodose, causing the disintegration of the parasite, contracture of the skin.

On 05.05.2016 I managed The Prazicest product, with a dose of 1 ml per 10 kg of body weight, mode of administration is intramuscular.

On 02.05.2016 I have sacrificed a lamb to necropsic examination carried out yet to see if they are still infested with *Moniezia expansa* but following this examination we found a lack of these pests.

All to make an exam the necropsic, on 06.08.2016 I sacrificed a lamb and the result of the analysis was negative: do not present any sort of infestation.

On 05.09.2016 we conducted analysis of fecal matter from which resulted the presence of *Nematodirus Trichostongylus* and byloidiasis induced, encountered and the adult sheep. That's why I managed Ascacid 2.5%, but with a dose of 10 ml per 30 kg bodyweight.

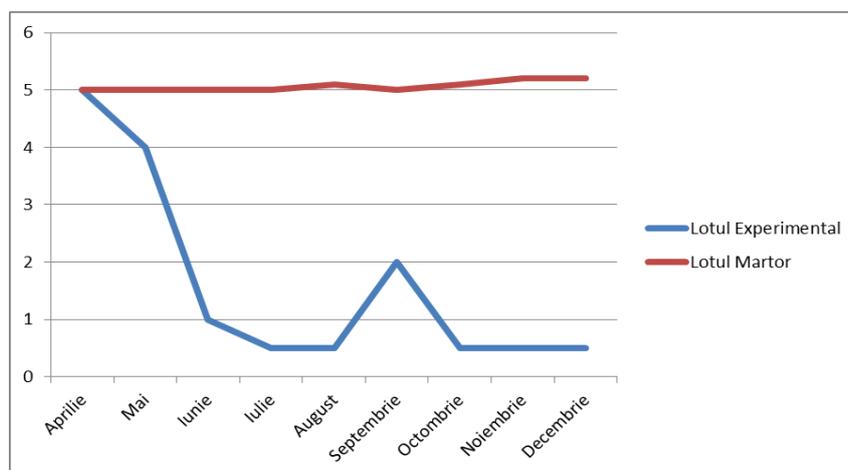


Fig. 1. Infestation in lambs

As can be seen in April, following two exams necropsice, lambs were diagnose as infested with *Moniezia expansa*; being a massive infestation. As a result of product administration to combat parazitosis, the degree of infestation of the lambs has plummeted.

In May I performed another exam necropsic where I noticed the presence of *Moniezia expansa*, only this time in a lower number in relation to the first necropsis exams. The months of June, July and August were some months the new breed were not present in the bodies of animals subject to research. Instead, in September, as a result of the analyses I noticed the presence of *Nematodirus helmintes* and *Trichostongylus*. Then in the months of October, November and December the lambs were free of infestation of any kind of damage caused by pests.

In contrast, the control group from the beginning to the end of the research had no tendency to decline, even to the death of animals due to the degree of infestation.

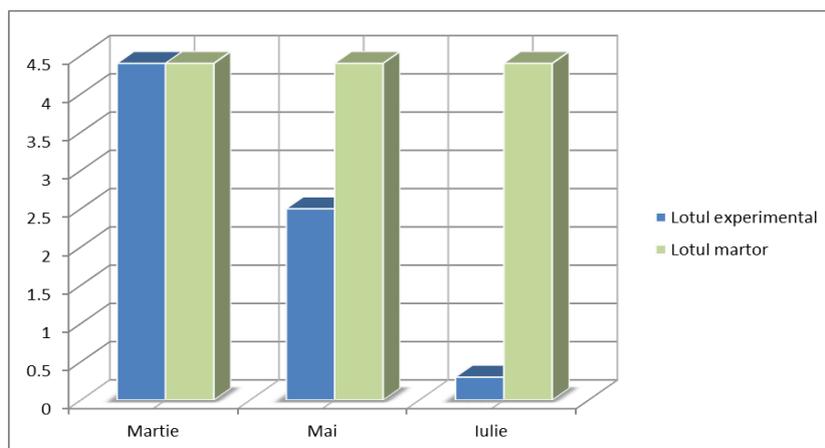


Fig. 2. *Moniezia expansa* infestation in sheep

In Figure 2. we can observe movements *Moniezia expansa* in sheep with infestation during research; from a massive infestation before administration of antiparasitic products for fighting *Moniezia expansa* from an infestation.

We can find that a number of 30 tests experimental batch in the first series, which took place in March, 28 of them could observe the presence of *Monieziei expansa*.

In the second series of tests is apparent lessening the degree of infestation after treatment, from 30 to 14 analyses could observe the presence of *Monieziei expansa*.

And in the third series of 30 tests at 4 it was found that the presence of *Monieziei expansa*.

In contrast, the control group from the beginning to the end of the research had no tendency to decline, even to the death of animals due to the degree of infestation.

CONCLUSIONS

Throughout the sheep research subject study were recorded the following issues: *Fasciola hepatica*, parasitic Cestoda, *Coenurus*, *Moniozia*, *Dicrocoeliosa*, *Eimeriosis expansa*.

Of the 20 selected lambs to be part of the control group, the remaining 11; because of massive infestation with *Moniezia expansa*, 9 lambs have died.

Regarding the lot of lambs, from 380 ends investigated 376 remaining of the four ends, lambs were slaughtered in order to be able to perform a diagnostic exam necropsic and concrete as possible.

Treatment scheme carried out in the course of research is lambs:

- 14.03.2016 date I managed product Sel-E-Vit, to prevent disturbances on the growth
- 15.04.2016 I managed to combat the Panacur product, *Moniezia expansa* infestation
- 05.05.2016 date I managed the product Prazicest
- the 05.09.2016 I Ascacid 2.5% product administered to combat infestation with helminthes and *Nematodirus Trichotrongylus*.

In conclusion, the greatest infestations occurred with *Fasciola hepatica* in adult sheep and the sheep's youth was a massive infestation with *Moniezia expansa*.

REFERENCES

1. ADAMESTEANU I.,(2000) - Patologie și clinică medicală, Edit. Didactică și pedagogică.
2. BAUER C. (1990) – Veterinary Record
3. COSOROABĂ I. (1992) – Entomologie veterinară, Edit. Ceres, București.
4. COSOROABĂ I., GH. DĂRĂBUȘ, I. OPRESCU (1995) – Compendiu de parazitologie veterinară. Vol. 1-2, Edit. Mirton, Timișoara.
5. COZMA V., O. NEGREA, C. GHERMAN (1998) – Diagnosticul bolilor parazitare la animale. Edit. Genesis, Cluj-Napoca.
6. DULCEANU N., CRISTINA TERINTE (1994) – Parazitologie veterinară. Vol. 1-3, Edit. Moldova, Iași.
7. GHERGARIU S. (1995) – Bazele patologiei medicale a animalelor, Vol 1-2, Edit. All, București.
8. GHERMAN I. (1997) – Parazitologie medicală modernă. Edit. Olimp, București.
9. NICULESCU A L. (1964) – Parazitologie veterinară, Edit. Didactică și pedagogică.
10. ȘUTEU I. (1996) – Zooparaziții și mediul înconjurător. Vol. 2, Edit. Genesis, Cluj-Napoca.
11. ȘUTEU I., COZMA V. (1998) - Bolile parazitare la animalele domestic., Edit. Ceres.
12. ȘUTEU I., VARTIC N., COZMA V. (1997) – Diagnosticul și tratamentul parazitozelor la animale, Edit. Ceres.
13. ***http://ansa.gov.md/uploads/files/Nomenclator%20IN/in_evomec%20sol_inj%20-%201958.PDF
14. ***<http://fainadepeste.ro/enterotoxemia-boala-de-supraalimentare-la-ovine-si-capine-1/>
15. ***http://www.arhiva.lumeasatului.ro/avortul-salmonelic-al-oilor_1143.html
16. ***http://www.farmavet.ro/site/catalog/index.php?route=product/product&product_id=215
17. ***<http://www.vetexpert.ro/medicamente-veterinare/antiparazitare-suspensii-solutii-orale/antiparazitare-suspensii-solutii-orale-c120/vermitan-10-p1156.html>
18. ***<http://www.vetexpert.ro/medicamente-veterinare/antiparazitare-suspensii-solutii-orale/antiparazitare-suspensii-solutii-orale-c120/panacur-p980.html>

