

## **FIRST FINDING OF METASTRONGYLUS ELONGATUS (DULARDIN, 1946) RAILET ET HENRY, 1911 AND CHOEROSTRONGYLUS PUDENDOTECTUS (WOSTOKOW, 1905) IN SHEEP IN R. MACEDONIA**

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### **INTRODUCTION**

In the respiratory channels of swine's in 1777 Ebel found white filiform nematodes and named them *Gordius pulmonalis* apri. Latter, the name of this parasite has been changed from different authors till 1946, when Dujardin named it *Metastrongylus elongatus*, which is accepted until today.

Gamelin in 1970 in the lungs of swine estimated species of parasite morphologically different then the previous one and named it *Ascaris* apri. The Russian parasitologist Skrjabin in 1924 renamed this species as *Choerostrongylus pudendotectus*.

Further investigations pointed the cosmopolitanism of this nematodes, and as a main carrier wild and domestic swine were mentioned.

In the parasitological literature world wide (1,2) is pointed that the infection with *Choerostrongylus pudendotectus* in certain cases is found also to be present in sheep and *Metastrongylus elongatus* very rare can also be found in sheep, cattle, goats, deer, dog and man.

Analusing the etiology of the verminous bronchopneumonia in sheep, among the other species of parasites we estimated also infection with *Metastrongylus elongatus* and *Choerostrongylus pudendotectus*. This fact we considered as a valuable contribution toward knowing and understanding the species of parasites that may be a cause of verminous bronchopneumonia in sheep in R. Macedonia.

### **MATERIALS AND METHODS**

Investigations were conducted on lambs around 6 months of age, by the methods of parasitological section. Parasites extracted from the respiratory channels were conserved by 70% of alcohol. Determination was done on a native preparations with glycerin alcohol, on the base of the morphological characteristics of the parasites.

### **RESULTS AND DISCUSSION**

Among the 13 examined lambs that originated from Tetovo end Gostivar region in 3, respectively 23,1% of examined sheep, *Metastrongylus elongatus* and *Choerostrongylus pudendotectus* infections were estimated, and *Dictyocaulus filaria* was present in 53,75%.

Intensity of infection with *Metastrongylus elongatus* was within the limits of 5-150, and with *Choerostrongylus pudendotectus* within 12-124 samples of parasites (Table. 1.)

Tab.1. Intensity of the lamb infection with *M. elongatus* and *Ch. pudendotectus*.

No. of animals	Intensity of infection					
	<i>M. elongatus</i>			<i>Ch. pudendotectus</i>		
	male	female	Total	male	female	Total
1.	15	28	43	31	31	62
2.	3	2	5	5	7	12
3.	67	83	150	32	92	124

This finding is important from the aspect that it is fulfillment of the previous known list of parasites of sheep in R. Macedonia.

It is also necessary to mention that our result also point the possibility of sheep as a possible hosts that might have a role in epizootiology of metastrongilidosis in sheep. We explain this with the big fertility of the female parasite of *M. elongatus*, the considerable resistance of their eggs in the surrounding area, than the data that the lifetime of the earthworm which is the carrier of the development stages of this parasites is almost 10 years in which period the infective larvae of *M. elongatus* stay vital and capable of development in the host.

On the individual sector of the animal stock breeding in our country is not rear that different kind of animals are greasing on the same pasture, which in some cases with the a help of not characteristic hosts enable closing of the biological cycle of some species of parasites.

## CONCLUSION

The parasitological section of the respiratory tract of 13 lambs from Tetovo and Gostivar region was done.

Apart from the infection with *Dyctiocaulus filaria*, in 23,1% of examined animal we estimated infection with *Metastrongylus elongatus* and *Choerostrongylus pudendotectus*.

This paper represent the first finding of this species of parasites in sheep in R. Macedonia and point out the possible role of sheep in the epizootiology of metastrongilidosis in swine on the individual sector of animal husbandry.

## REFERENCES

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**ПРВ НА ОД НА METASTRONGYLUS ELONGATUS (DULARDIN, 1946)  
RAILET ET HENRY, 1911 И CHOEROSTRONGYLUS PUDENDOTECTUS  
(WOSTOKOW, 1905) КАЈ ОВЦИТЕ ВО Р. МАКЕДОНИЈА**

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Извршена е парзитолошка секција на 13 шилежиња, кои потекнувале од регионот на Тетово и Гостивар. Освен инфекција со *Dictyocaulus filaria*, кај 23,1 % од испитаните животни утврдилме присуство и на *Metastrongylus elongatus* и *Choerostrongylus pudendotectus*.

Ова испитување представува прв наод на метастронгилиди од свиња во белите дробови на овци на територијата на Р. Македонија и укажува на можната улога на овците во епизоотиологијата на метастронгилидозата на свињите на индивидуалниот сектор на одгледување.