

Distribution of Goat Fasciolosis in Surkhondaryo Region

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Abstract: The spread of fasciolosis among goats, the extent and intensity of the invasion have been determined in the conditions of Surkhandarya region.

Key words: *Fasciola hepatica*, *Fasciola gigantica* L. *auricularia*, *L. bactriana*, trematode, helminth, macrohelminthoscopy.

Relevance of the topic. Fasciolosis is a widespread trematodous disease among farm animals in all countries of the world, including Uzbekistan. The disease is widespread in the irrigated and mountainous regions of our Republic.

Sheep and goat farms especially suffer from fasciolosis. In the second half of the last century, massive deaths of sheep from fasciolosis were observed in the south of Uzbekistan. In some regions, sheep breeding was abandoned due to the prevalence and economic damage of fasciolosis. [1,2]

Fasciolosis is a widespread trematodous disease of all agricultural and several species of wild mammals, which occurs in chronic, acute and mixed forms. There are 8 types of causative agents in the world, and two of them (*Fasciola hepatica* L., 1758 and *Fasciola gigantica*, Cobbold, 1856) are widespread in Uzbekistan. Among them, *Fasciola* L., 1758) is distributed everywhere in the republic, and *F. gigantica* is found in the north-western part. Like other animals, goats are affected by both types of fasciola, but *F. hepatica* is more common among them. [3,4]

Both *F. hepatica* and *F. gigantica* develop in the presence of two hosts. The intermediate hosts of *F. hepatica* are molluscs (*Lymnaea truncatula*) living in small water bodies (streams, spring waters), therefore these parasites are distributed in rural areas, low mountain foothills and mountainous regions. In the mollusk, an infectious larva of the parasite is formed - an adolescent (in the period of cestogony).

The intermediate hosts of *F. gigantica* are relatively large aquatic molluscs such as *L. auricularia* and *L. bactriana*. They are often found in lakes, springs and rice paddies. Cattle infestation with *F. gigantica* is slightly less common than *F. hepatica*. [3,5]

It is necessary to emphasize that fasciolosis is a very dangerous disease for other species of animals, therefore, the study of the spread of fasciolosis and the development of prevention methods is the demand of the time.

Inspection methods. Inspections were carried out using epizootological, clinical, and helminthocropological methods through a series of washing methods.

Object and scope of research. Scientific research work was carried out in the neighborhoods of Khojabulgan in Boysun district of Surkhandarya region, Gulbahor in Termiz district, Yakka Tol in Muzrabot district and in the parasitology laboratory of the State Center for Animal Disease Diagnosis and Food Safety in Surkhandarya region.

In the study, 26 goats were taken care of by residents of Khojabulgan neighborhood of Boysun district, 32 goats were taken care of by residents of Gulbahor neighborhood of Termiz district, 18 goats were

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taken care of by residents of Navro'z neighborhood, and 11 goats were taken care of by residents of Yakka Tol neighborhood of Muzrabot district. Stool samples were taken and examined by macrohelminthoscopy using serial washing method.

Research results and their analysis.

The results of studying the spread of fasciolosis among goats are presented in Table 1.

Table 1 Results of examination of goat dung samples.

T/r	Name of district and territories	Number of animals from which faecal samples were taken	Helminth eggs were found			
			<i>F. hepatica</i>		<i>F.gigantica</i>	
			the number	%	the number	%
1.	Boysun District Khojabulgan neighborhood	26 head goat	4	15,4	8	30,8
2.	Gulbahor neighborhood of Termiz district	32 head goat	3	9,4	11	34,4
3.	Termiz district Nowruz neighborhood	18 head goat	3	16,7	7	38,9
4.	Yakka tol neighborhood, Muzrabot district	11 head goat	0	0	4	36,4
	Total:	87	10	11,0	30	34,4

As can be seen from the table, when the dung samples of 26 goats under the care of residents of the Khojabulgan neighborhood of Boysun district were examined, it was found that 4 heads contained eggs of the causative agent of *F. hepatica*, the infection rate was 15.4 percent, and 8 heads were *F. gigantica*. It was found that the eggs of the causative agent were present, the level of infection was 30.8 percent, in 3 heads of 32 goats in the care of residents of Gulbahor Mahalla, Termiz District. Eggs of the causative agent of *F. hepatica* were found, the infection rate was 9.4%, 11 heads were found to have eggs of the causative agent of *F. gigantica*, the infection rate was 34.4%, 18 heads in the care of the population of Navroz neighborhood 3 heads of goats were found to contain eggs of *F. hepatica* pathogen, infection rate was 16.7%, 7 heads were found to contain eggs of *F. gigantica* pathogen, infection rate was 38.9%, Yakka Tol neighborhood of Muzrabot District when samples of goat dung from 11 goats in Eggs of *F. hepatica* pathogen were not detected, eggs of *F. gigantica* pathogen were detected at the beginning of 4, infection rate was 36.4%.

When examining a total of 87 examined dung samples of goats, 10 dung samples contained *F. hepatica* eggs, the infection rate was 11.0%, and 30 dung samples contained *F. gigantica* eggs, the infection rate was 34.4%.

Conclusions:

1. The results of the conducted scientific research shows that among goats in the conditions of Surkhondarya region, the level of infection with *F. hepatica* is 11%, and with *F. gigantica* it is 34.4%. The above-mentioned data revealed that *Fasciola gigantica* prevails among goats, and its prevalence is high.
2. In our research conducted in different irrigated biocenoses of Termiz and Muzrabot districts, it was found that the intensity of invasion of fasciolosis in areas that are unhealthy for fasciolosis in the autumn season has much higher indicators compared to other seasons of the year.

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