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Article

The Epizology of Cattle and Sheep Helminthoz in some Districts of Samarkand and Kashkadarya Regions

Meyliev Salohiddin[1], Ulukov B.K[2]

1 PhD base, Veterinary Scientific Research Institute
2 Base doctoral student, Veterinary Scientific Research Institute
* Correspondence: salohiddin.meyliyev@mail.ru

Abstract: This article describes the helminthos found in cattle, sheep, and cattle raised in the Taylok, Urgut, Bulungur, and Ishtikhan regions of the Samarkand, cattle ranches in the book and Guzar districts of the Kashkadarya region, and in the households of the population.

Keywords: cattle, sheep, helminth, helminthosis, fasciolysis, monesiosis, strongylylagiosis, marshallagiosis, nematodirosis, invasion

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1. Introduction

It is known that today's rapidly developing and changing world economy, as well as the growing population all over the world, including in our country, also lead to an increase in demand for livestock products.

An important sector of agriculture in our country, providing employment and income for the population living in the village, is the livestock sector.

Therefore, the livestock network is also important in meeting the population's need for environmentally friendly and high-quality livestock products—meat and milk, as well as products made from them.

Due to the above, much attention is paid to the further development of the livestock sector in our Republic today. The main thing is to increase the number of cattle heads, increase productivity, increase the number of cattle heads bred in the herd, and increase the production of environmentally friendly and high-quality livestock products due to the introduction of scientific achievements to all livestock sectors. The state program on the implementation of the strategy for the development of our country in 2022-2026 sets out extremely important tasks for the scientific development of livestock and further improvement of the provision of veterinary services to livestock, as well as ensuring the stability of the epizootic situation.

In the implementation of the tasks set in the field, the protection of livestock, especially cattle and sheep, from various infectious, non-infectious, and invasive diseases, in particular helminthiasis, remains one of the urgent tasks. Therefore, this research aims to study on the degree of distribution of helminthoses among cattle and sheep in some districts of Samarkand and Kashkadarya regions.

2. Materials and Methods

Subjects and methodologies of study: The research was carried out in Toyluk, Urgut, Bulungur and Ishtikhan tumuns of Samarkand region, Kitab, and Ghuzar districts of Kashkadarya region. In the course of the studies, the damage of livestock with helminths was examined by the Foulleborn and sequential washing methods of thesis samples and improved methods of helmintholarvoscopy by The Berman-Orlov Veterinary Research Institute .

3. Results and Discussion

The results of the research carried out show that the dynamics of cattle and sheep infestation with helminthuses in some districts of the Samarkand and Kashkadarya regions are reflected in the tables.

We can see from Table 1 that the degree of distribution of helminths among sheep and cattle varies significantly from one another. This situation directly depends on the age of the livestock, the season of the year, climatic conditions, and to what extent preventive measures were carried out.

The rate of damage to sheep and cattle raised in the care of the population and livestock farms in the Ghuzar District of the Kashmir region with helminths.

Table 1. Degree of distribution of helminths

Helminthoses	Cattle n=35		Sheep n=65	
	head	%	head	%
Marshallagiasis	5	14,28	35	53,84
Nematodirosis	3	8,57	28	43,07
Other gastrointestinal strongylatoses	19	54,28	41	63,07
Fasciolosis	6	17,14	21	32,30
Monieziosis	3	8,57	3	4,61
Total damage	**22**	**62,85**	**48**	**73,84**

In the Ghuzar District of the Khashkadarya region, a survey of cattle being cared for in livestock and population households found that 35 heads of cattle of different ages (calves up to 6 months old, young cattle 1-2 years old, and cattle over 3 years old) were examined helminthologically, among them 5 heads (14.28%) with cattle marshallagies, 3 heads (8.57%) with nematodiruses, 19 heads (54.28%) with other gastrointestinal strongylatoses, 6 heads (17.14%) with fasciolysis, and 3 heads (8.57%) were found to be damaged by moniesiosis.

The total incidence of cattle with helminthoses is 62.85%, and they have been found to be mainly gastrointestinal strongylylatoses (ostertagiosis, trichostrongylosis, and kooperiosis). Common among sheep (63.07%) were found to have been affected by gastrointestinal strongylillatoses and marshallagiosis (53.84).

This information testifies to the fact that it is advisable to develop measures aimed at the prevention and treatment of these helminth diseases and carry out research on the search for more local antgelminth agents.

In the Ktitob District of the Kashkadarya region, the rate of damage to sheep and cattle raised in the care of the population and on livestock farms with helminths.

Table 2. Rate of damage to sheep and cattle

Helminthoses	Cattle n=40		Sheep n=45	
	head	%	head	%
Marshallagiasis	3	7,5	20	44,44
Nematodirosis	-	-	12	26,66
Other gastrointestinal strongylatoses	32	80	28	62,22
Fasciolosis	3	7,5	6	13,33
Monieziosis	2	5	6	13,33
Total damage	35	87.5	38	84.44

Table 2 shows the results of the inspection of cattle and sheep under the care of ranchers and residents in the book district of the Kashkadarya region.

A 20-head examination of cattle of the simmintal breed on the cattle farm "Charos Garden" in the district found that 1 head (5%) of them were infected with marshallagiosis, 17 heads (85%) with gastrointestinal strongylylagiosis, 3 heads (15%) with fasciolysis, and 2 heads (10%) with moniesiosis.

A 20-head examination of cattle of the local breed on the "Chirkay" farm in the book district found that 2 heads (10%) were infected with marshallagiosis, and 15 heads (75%) were infected with gastrointestinal strongylylagiosis. Of the total 40 heads of cattle examined in this district, 35 heads were affected by various levels of helminthosis, with an average of 87.5% of the invasion extensibility.

The sheep examined in the district were found to have been affected by helminthological examination, including 20 heads (44.44%) with marshallagies, 12 heads (26.66%) with nematodiruses, 28 heads (62.22%) with other gastrointestinal strongylylases, 6 heads (13.33%) with fasciolysis, and 6 heads (13.33%) with moniesiosis

A total of 75 heads of cattle and 110 heads of sheep were infected with various levels of helminthosis in the Kashkadarya region, with an average of 77.29% invasion extensiveness.

In the Taylok, Urgut, Bulgur, and Ishtikhan regions of the Samarkand, 107 heads of cattle and 110 heads of sheep were examined by helminthocoprological methods in the research carried out. According to the data obtained (Table 3), of the 110 heads of sheep examined, 29.09% had marshallagiosis, 28 heads (25.45%) were found to parasitize nematodirosis triggers in sheep, and 30 heads (27.27%) parasitized other gastrointestinal strongylillatoses in sheep. 56 heads, or 50.90%, of the sheep examined were found to be infected with fasciolosis and 5 heads (4.54%) with moniesiosis.

Table 3. Samarkand region livestock—cattle and sheep—extensorized with helminthocoprological examinations

Helminthoses	Cattle n=107		sheep n=110	
	head	%	head	%
Marshallagiasis	15	14,01	32	29,09
Nematodirosis	11	10,28	28	25,45
Other gastrointestinal strongylatoses	27	25,23	30	27,27

Fasciolosis	18	16,82	56	50,90
Monieziosis	6	5,60	5	4,54
Paramphistomatosis	7	6,54	-	-
Total damage	**74**	**69,15**	**83**	**75,45**

When examined in the Samarkand region, 107 heads of cattle of different ages (calves up to 6 months old, 1-2 young moles, and moles over 3 years old) were helminthologically examined, among them 14.01% (15 heads) of marshallagiosis, 10.28% (11 heads) of nematodirosis, 25.23% (27 heads) of other gastrointestinal strongylylases, 16.82% (18 heads) of fasciolysis, 5.60% (6 heads) of monieziosis, and 6.54% (7 heads) were found to be affected by paramphistomatosis. The total extensorization of cattle and sheep with various helminths was found to be 72.35 percent.

Table 4. General indicators of damage to sheep and cattle raised in the care of the population and livestock farms with helminths in some districts of the Samarkand and Kashkadarya regions

Helminthoses	**Cattle n=182**		**Sheep n=220**	
	бош	**%**	**бош**	**%**
Marshallagiasis	23	12,63	87	39,54
Nematodirosis	14	7,69	68	30,90
Other gastrointestinal strongylatoses	78	42,85	99	45
Fasciolosis	27	14,83	83	37,72
Monieziosis	11	6,04	14	6,36
Paramphistomatosis	7	3,84	-	-
Total damage	**131**	**71,97**	**169**	**76,81**

When the studies carried out in the Taylok, Urgut, Bulungur and Ishtikhan regions of the Samarkand, book and Guzar districts of the Kashkadarya region were analyzed in general, it was found that 169 heads of 220 head sheep examined in total gelmintoovoscopically were damaged to varying degrees, while invasion extensiveness was 76.81%.

When 182 head of cattle were examined, it was noted that 131 of their heads were damaged by various helminthoses, with invasion extensiveness of 71.97% respectively.

Out of a total of 402 head of cattle (cattle and sheep)examined, at the beginning of 300 different levels of invasions were detected, and it was revealed that the overall invasion extensiveness averaged 74.62 percent.

4. Conclusion

1. In the districts of Samarkand and Kashkadarya regions, according to the results of gelmintoovoscopic examination, it was observed that the extensiveness of invasion in sheep and cattle of different ages increases depending on the age of the animal.
2. In the kashkadarya region, 57 head (76 %) of cattle are affected by helminthoses in general, among which gastrointestinal strongylillatoses and fasciolosis are the main

helminthoses. In the Samarkand region, 69.15% of cattle were found to be affected by helminths in general.

3. In the districts of Samarkand and Kashkadarya regions, a total of 220 head sheep were found to be affected to varying degrees by gelmintoovoscopic examination, and invasion extensiveness was found to be 76.81%. When 182 head of cattle were examined, 131 heads were recorded to be infested with various helminths, and the intensity of invasion was 71.97%, respectively.

References

1. Азимов Ш. А. Гельминты и гельминтозы овец юга Узбекистана. Автореф. канд. дисс., Москва, 1963.

2. Азимов Ш. А. Фасциолёз и аноплоцефалятозы овец и крупного рогатого скота в Узбекистане. Тошкент,1974 215 с.

3. Азимов Д.А., Дадаев С.Д., Акрамова Ф.Д., Сапаров К.А. Гельминты жвачных животных Узбекистана. Изд-во «Фан», Ташкент, 2015. 12-13, 224 с.

4. Қайпанов М.Т. Қорақалпоғистон Республикаси қорамолчилик хўжаликларида гельминтозларнинг тарқалиши. "Ҳайвонларнинг ўта хавфли касалликларини тарқалиши ва бартараф қилишнинг мониторинги" мавзусидаги халқаро конференция тўплами. Самарқанд, 2004. С. 105-108

5. Мейлиев С.С., Орипов А.О., Йўлдошев Н.Э. Қорамол ва қўйларнинг асосий трематодозлари. // Ветеринария медицинаси, №5, 2022, Б.18-20.

6. Мейлиев С.С., Йўлдошев Н.Э. Андижон, Фарғона ва Наманган вилоятларида парваришланаётган қорамолларда гельминтозларнинг тарқалиши. // Ветеринария медицинаси, №6, 2022, Б.10-11.

7. Орипов А.О., Давлатов Р.Б., Йўлдошев Н.Э. "Ветеринария гельминтологияси", Ўқув қўлланма Тошкент 2016. б 57-78.

8. Орипов А.О., Йўлдошов Н.Э., Жаббаров Ш.А., Гельминтозларга қарши даволаш-профилактика чора-тадбирлари бўйича тавсиялар// Тошкент-2015. 8-9. б.

9. Орипов А.О. Гельминтозларга қарши курашишнинг замонавий стратегияси, услуб ва воситалари. //Ветеринария медицинаси журнали. №11. Тошкент, 2021. -Б17-19.

10. Сафаров Х. Самарқанд ва Қашқадарё вилоятлари бўйича чорва моллари гельминтозларининг эпизоологик ҳолати. //Ветеринария медицинаси журнали. №10. Тошкент, 2021. –Б25-27.

11. Сафаров Х.А., Джаббаров Ш.А. Чорва молларининг асосий гелминтозлари ва уларнинг тарқалиш даражаси. //Ветеринария медицинаси журнали. №12. Тошкент, 2021. -Б12-14.