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## Research Article

# MAIN HELMINTHIASES OF FARM ANIMALS AND THEIR SPREADING RATE

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## ABSTRACT

The article describes the results of studies on determining the degree of distribution of the main helminthiasis of farm animals in the Samarkand, Kashkadarya regions and the Republic of Karakalpakstan.

## KEYWORDS

Helminth, helminthiasis, helminthovoscopy, helmintholavoscopy, cattle, sheep, equine, camel, infestation.

## INTRODUCTION

As the development of the livestock sector in Uzbekistan, the full provision with high quality

products (meat, milk, eggs, etc.) is an important goal at the level of public policy, the implementation of



which is in the constant focus of our Government. In particular, measures such as quality and adequate feeding of livestock, the creation of a stable fodder base in livestock farms, improving the breed of cattle, effective use of their genetic potential, strict adherence to zoohygiene, veterinary and sanitary requirements for livestock are the main factors of the implementation. However, a number of infectious, parasitic and non-infectious diseases, especially helminthiasis, are serious obstacles to the development of animal husbandry, increasing the number of head of livestock, increasing their productivity [1,2,9]. Based on this principle, we conducted a research to identify the main helminthiasis and their prevalence, which are common and cause significant economic damage among livestock.

## SCOPE AND METHODS OF RESEARCH

In order to determine the prevalence of helminthiasis throughout Uzbekistan, the study was conducted in three geographical and climatic zones, taking into account the natural geographical and climatic features of the regions. The research was conducted among livestock - cattle, sheep, goats, horses and camels in

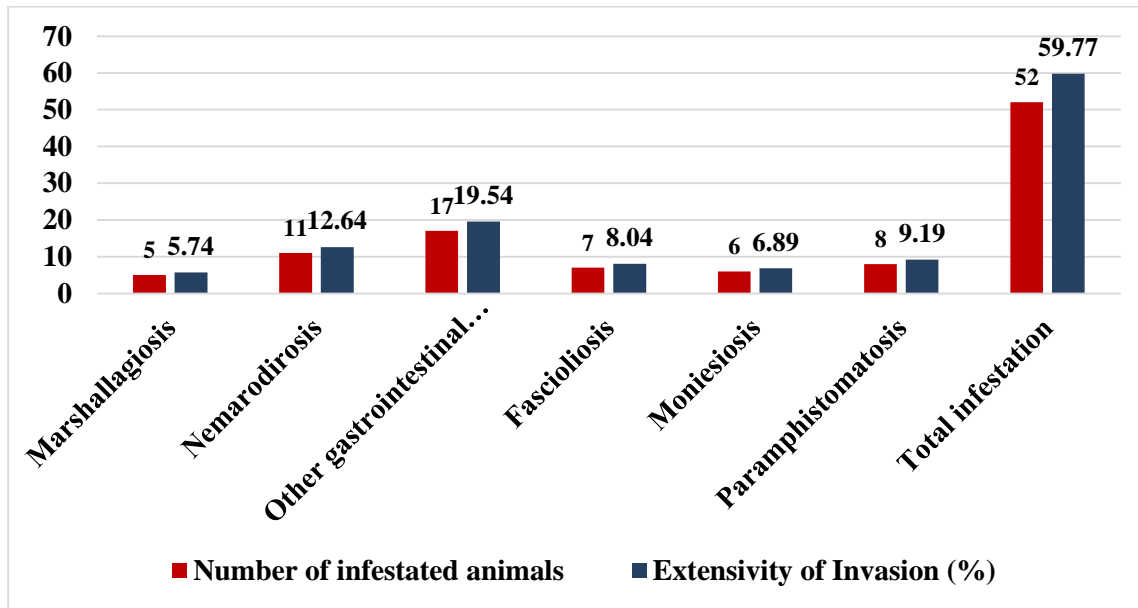
the central region - Samarkand region, the southern region - Kashkadarya region and the northern region - the Republic of Karakalpakstan, In order to determine the main helminthiasis of livestock and the level of their distribution, 87 cattle, 115 sheep and goats from some farms in Taylak, Urgut, Pakhtachi and Nurabad districts of Samarkand region, 37 cattle and 227 sheep and goats from certain farms in Kitab and Guzar districts of Kashkadarya region, as well as 247 head of cattle, 218 head of sheep and goats from some farms of Nukus, Kegeyli, Turtkul, Beruni, Amudarya, Takhtakor, Kungrad districts of the Republic of Karakalpakstan were examined by helmintholaryoscopic methods. Across the country, 43 horses and 12 camels were also examined by helminthological methods.

## RESEARCH RESULTS

According to the results of the study, the total cases of helminthiasis in the districts of Samarkand region was 59.77% in cattle, 79.13% in sheep and goats. Marshallagiosis (5.74%), nematodiosis (12.64%), other gastrointestinal strongylosis (19.54%), fascioliosis (8.04%), moniesiosis (6.89%) and paramphistomatosis (9, 19%) were reported among cattle (Diagram 1).

Diagram 1

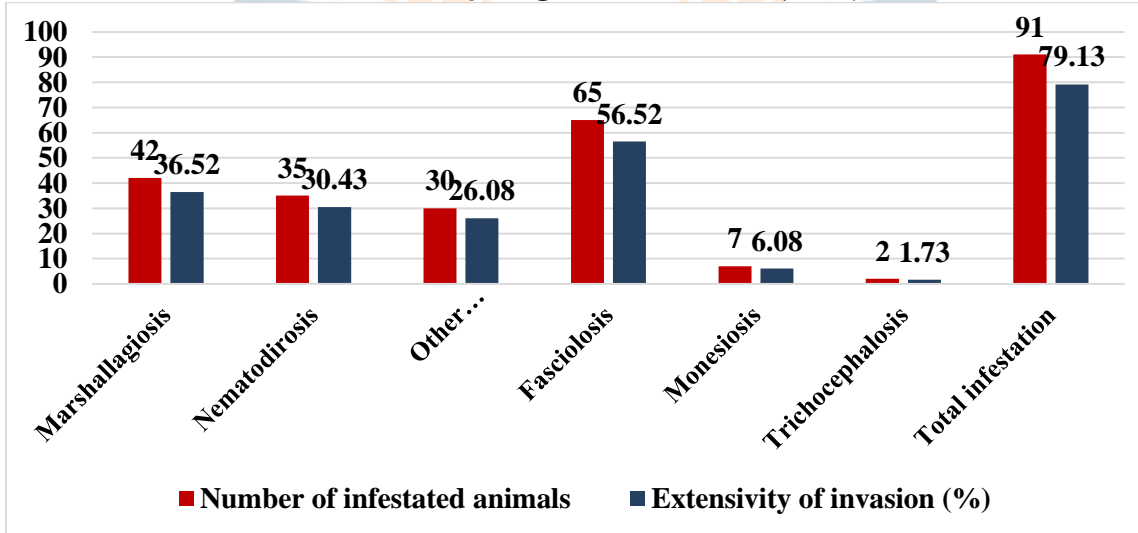
Extensive infestation of cattle with helminthiasis in some districts of Samarkand region, based on helminthic coprological examinations (n = 87)



Marshallagiosis (36.52%), nematodirosis (30.43%), other gastrointestinal strongylosis (26.08%), fasciolosis (56.52%), moniesiosis (6.08%) and trichocephalosis (1.73%) infestation was detected among sheep and goats (Diagram 2).

Diagram 2

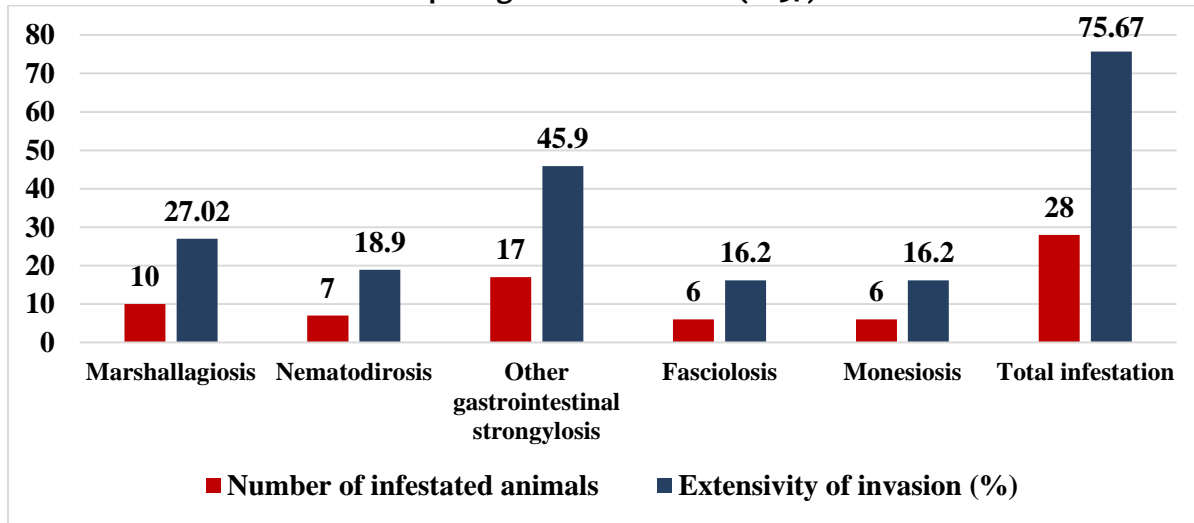
Extensive infestation of sheep and goats with helminthiasis in some districts of Samarkand region, based on helminthic coprological examinations (n=115)



According to a study conducted in the districts of Kashkadarya region, marshallagiosis (27.02%), nematodirosis (18.9%), other gastrointestinal strongylosis (45.9%), fasciolosis (16.2%), moniesiosis (16.2%) infestations was registered among cattle with total infestation of 75.67% (Diagram 3).

Diagram 3

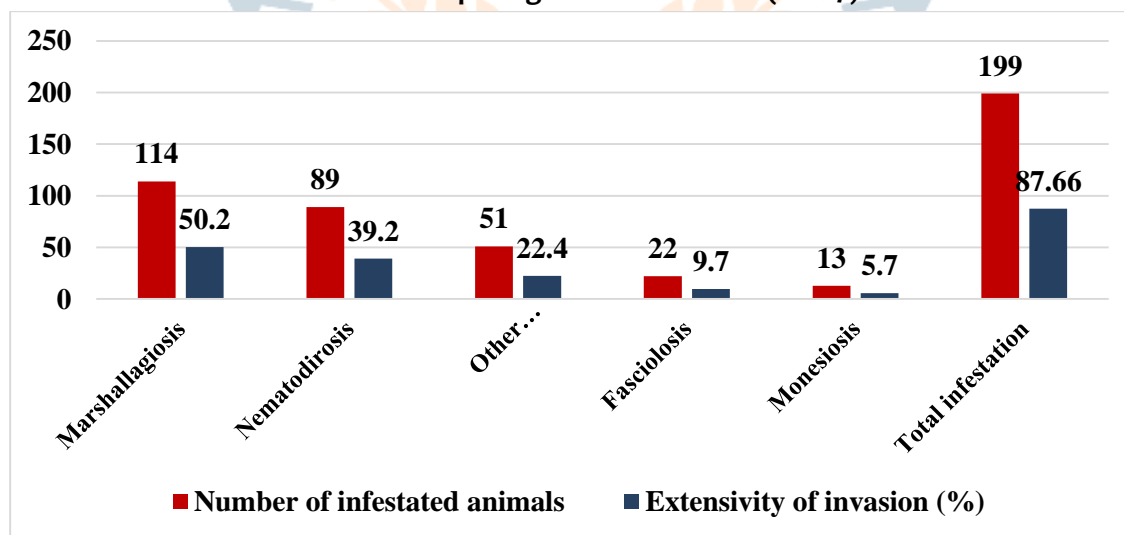
Extensive infestation of cattle with helminthiasis in some districts of Kashkadarya region, based on helminthic coprological examinations (n=37)



The cases of common helminthiasis among sheep and goats was 87.66%, including marshallagiosis (50.2%), nematodirosis (39.2%), other gastrointestinal strongylosis (22.4%), fasciolosis (9, 7%), moniesiosis (5.7%) (Diagram 4).

Diagram 4

Extensive infestation of sheep and goats with helminthiasis in some districts of Kashkadarya region, based on helminthic coprological examinations (n=227)

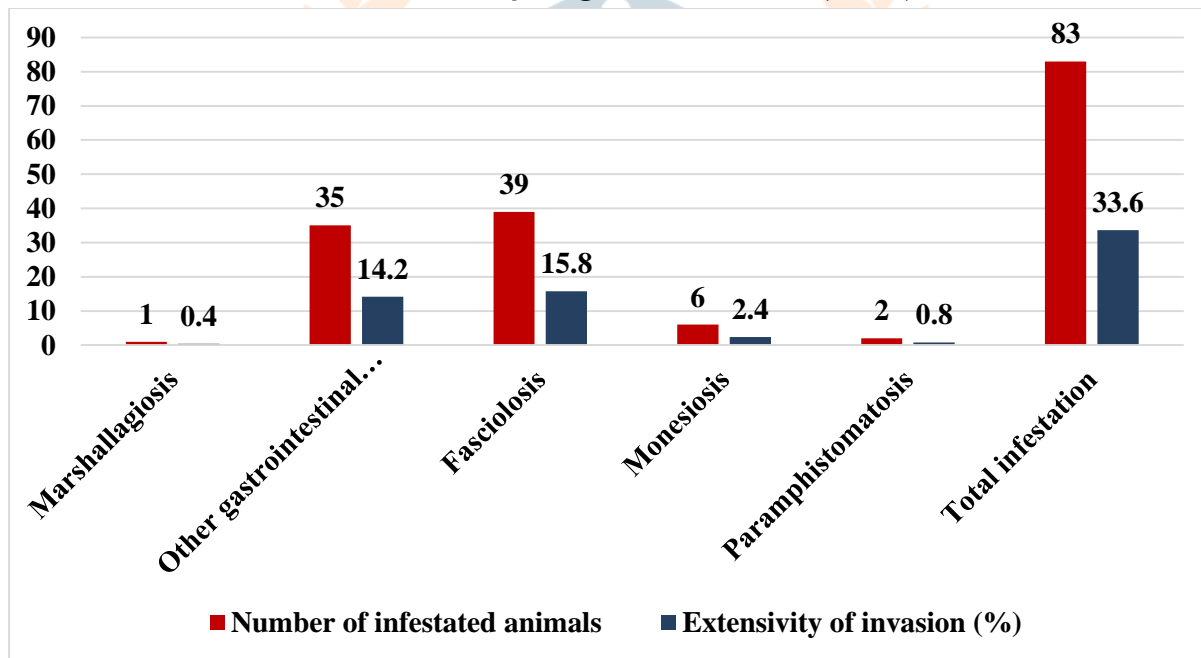


Part of the research was conducted in the Republic of Karakalpakstan. Under the influence of unfavorable environmental conditions associated with the drying of the Aral Sea in this region, salinization of soil and water, hot and dry air temperatures have occurred. Nevertheless, in almost all districts of the Republic of Karakalpakstan, the development of livestock sector is below the average. Various diseases, including helminthiasis, are also found among livestock in this area [4,5,6,8].

According to a study conducted in the Republic of Karakalpakstan, the total infestation of cattle with helminthiasis was 33.6%, sheep and goats - 36.7%. In contrast to other regions, in this region cases of cattle with marshallagiosis (0.4%), other gastrointestinal strongylosis (14.2%), fasciolosis (15.8%), monieziosis (2.4%) and paramphistomatosis (0.8%). % was found to be very low (Diagram 5).

Diagram 5

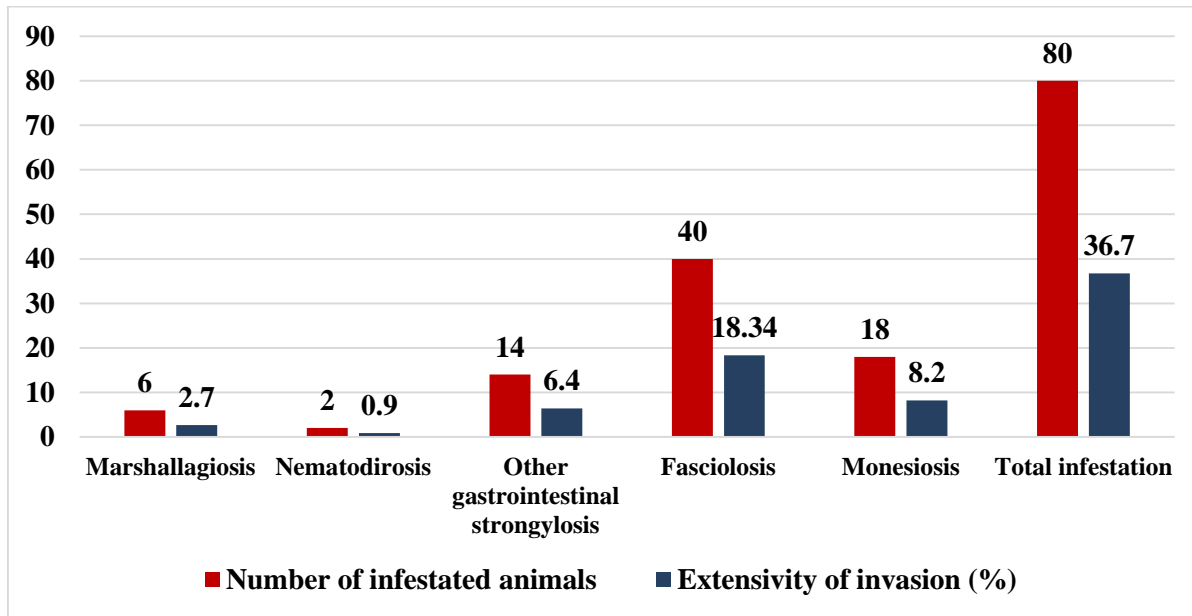
Extensive infestation of cattle with helminthiasis in some districts of the Republic of Karakalpakstan on the basis of helminthic coprological examinations (n=247)



Among small ruminants, such as sheep and goats, cases with marshallagiosis (2.7%), nematodiosis (0.9%), other gastrointestinal strongylosis (6.4%), fasciolosis (18.34%), moniesiosis (8.2%) was in a relatively low range (Diagram 6).

Diagram 6

Extensive infestation of small ruminants with helminthiasis in some districts of the Republic of Karakalpakstan on the basis of helminthic coprological examinations (n=227)



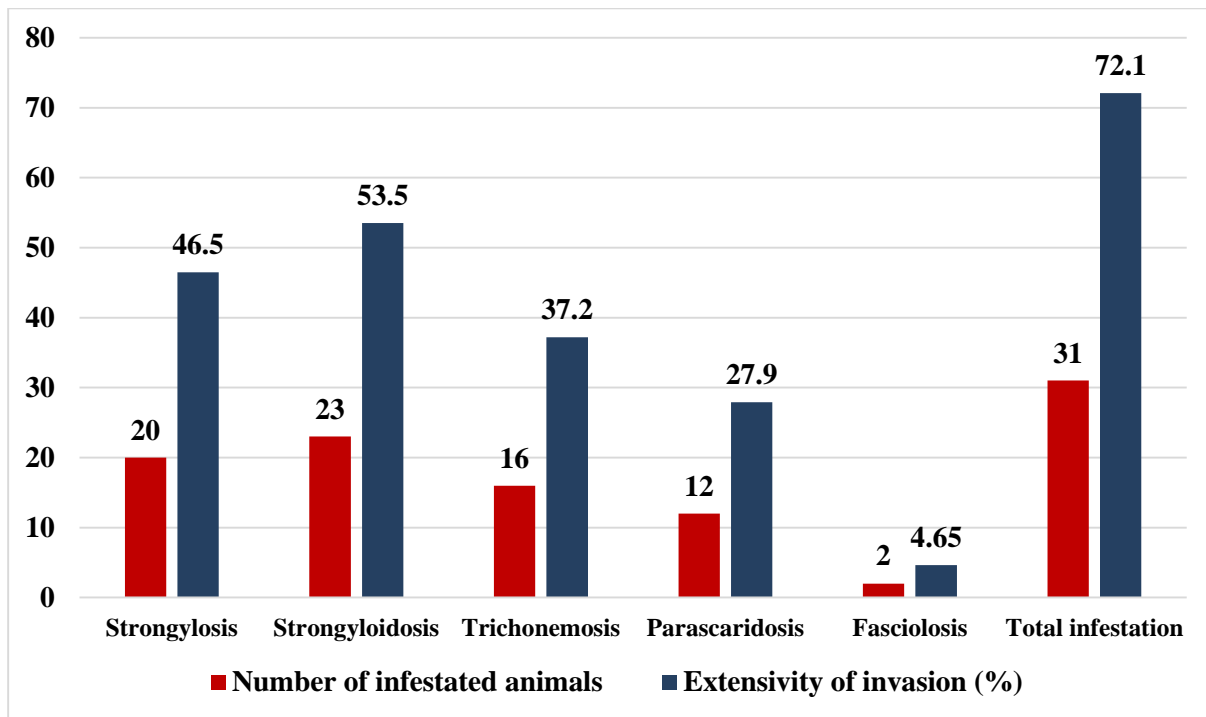
Horse breeding is one of the important areas of livestock and various infectious, non-infectious and invasive diseases hinder the increase in the number of head. Among such diseases, helminthiasis has a special place. The main helminthiasis of horses in Uzbekistan are strongylosis, trichonematosis, storongyloidosis and parascaridosis, which have a special place in the pathology of horses [3].

In addition to the above, there are cases of oxyurosis, intestinal cestodes - anoplocephalyosis [7].

According to a study conducted in Samarkand, Kashkadarya regions and districts of the Republic of Karakalpakstan, the total infestation with helminthiasis in horses was 72.1%. The examined horses were found to be mainly infected with strongylosis (46.5%), strongyloidosis (53.5%), trichonemosis (37.2%), parascaridosis (27.9%). A relatively small number of the examined horses were found to be infected with fasciolosis (4.65%) (Diagram 7).

Diagram 7

Infestation of horses with helminths throughout the country (n=43, based on helminthic coprological examinations)



## CONCLUSION

1. The study revealed varying degrees of helminthiasis in Samarkand and Kashkadarya regions and districts of the Republic of Karakalpakstan.
2. The study found that the overall cases of helminthiasis in cattle was higher in Kashkadarya region (75.67%) than in Samarkand region (59.77%) and the Republic of Karakalpakstan (33.6%).
3. In Samarkand and Kashkadarya regions, marshallagiosis, nematodirosis, gastrointestinal strongylosis and fasciolosis are widespread, they are the main helminthiasis.

4. The examined horses were found to be mainly infected with strongylosis (46.5%), strongyloidiasis (53.5%), trichonemosis (37.2%), and parascaridosis (27.9%).

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