



EPIZOOTIOLOGY AND DIAGNOSIS OF CATTLE HELMINTHIASIS IN YANGIYUL DISTRICT, TASHKENT REGION

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Relevance of the topic. Nematode diseases of cattle are widespread in all regions of our country, causing economic losses due to cattle mortality, unsuitability of meat from forcibly slaughtered animals for consumption, and milk being deemed unfit for human consumption. These losses also include the cost of veterinary and sanitary measures. Therefore, research into nematode diseases in cattle is of great importance.

Helminthiases pose a serious health issue for cattle, negatively affecting productivity, growth rate, and overall condition. These diseases are caused by parasitic intestinal worms, including nematodes (roundworms), trematodes, and cestodes (tapeworms). Studying the spread of helminth infections in Yangiyul district, Tashkent region, and developing early detection and effective treatment methods is of great significance.

Research objective. To study the epizootic status of helminth infections in cattle in Yangiyul district, identify the most prevalent helminth species, and develop diagnostic and preventive measures against them.

Research results. A total of 60 cattle were examined both in the laboratory and clinically. Among them, 20 were calves under 6 months old. Fecal samples were collected from each animal, and the Fulleborn method (using saturated salt solution) was employed to detect helminth eggs. Focus was placed on nematodes (roundworms) and *Moniezia* species (*Moniezia benedeni* and *Moniezia expansa*).

Fulleborn Method

The Fulleborn method is one of the most effective flotation techniques used for detecting helminth eggs. Animal feces are dissolved in 50–100 ml of saturated NaCl (sodium chloride) solution, allowing eggs to float to the surface. These are then



identified under a microscope. This method is especially useful for detecting helminth eggs at the early stages of light infections.

The research results are shown in the table below:

Cattle Group	Total animals	Infected	Nematodes (%)	Moniezia benedeni (%)	Moniezia expansa (%)
Calves under 6 months	20	16	60	25	15
Adult cattle	40	24	50	30	20
Total	60	40	53.3	27.5	19.2

Clinical signs in infected cattle include decreased appetite, dry skin, hair loss, abdominal distension, and sometimes diarrhea.

The study showed that approximately 66.7% of cattle in Yangiyul district were infected with helminths. This high rate may be due to climatic conditions, poor sanitation, and inadequate preventive measures.

Higher infection rates in calves are linked to their underdeveloped immune systems, making them more susceptible to parasites. Nematodes are the most common parasites due to favorable conditions for their lifecycle and reproduction.

Moniezia parasites, particularly in calves and young cattle, damage the intestinal lining, reducing nutrient absorption. Therefore, improving treatment and prevention measures is essential.

As found in the study, young calves have a higher infection rate due to their immature immune systems.

The Fulleborn method proved to be the most effective, allowing detection of even small numbers of eggs. It enabled early diagnosis of parasitic diseases, improving treatment outcomes.

According to the research, helminths are widespread among cattle in Yangiyul, mainly nematodes and Moniezia species. Out of 60 animals, 40 were



infected. The Fulleborn method allowed for accurate and early detection of parasite eggs. Hence, its use in veterinary practice is highly recommended.

Conclusions.

To prevent these diseases, the following recommendations are appropriate:

1. Conduct preventive deworming treatments quarterly.
2. Pay special attention to calves by strengthening their immune systems with proper nutrition and vitamins.
3. Regularly clean and disinfect pastures and livestock areas.
4. Conduct laboratory tests for each animal at least every six months, especially using the Fulleborn method.

REFERENCES:

1. "Parasitology and Invasive Diseases" by D.J. Azimov et al., published with approval from the Ministry of Higher Education, Science, and Innovation of the Republic of Uzbekistan, December 22, 2023. Tashkent - 2024, "Fan ziyosi" publishing house.
2. "Veterinary Parasitology" by D.T. Isakova, E.B. Shakarboyev, textbook for vocational colleges. Tashkent, "Nashir", 2017.
3. Educational-methodical complex on the subject "Veterinary Helminthology". Daminov A.S., G'oyipova M.E., Otaboyev X.E., Tashkent - 2023.