

EPIZOOTOLOGY OF EIMERIOSIS (COCCIDIOSIS) OF RABBITS, TREATMENT AND PREVENTIVE MEASURES.

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Annotation: This article presents scientific data on the effectiveness of drugs that are currently used in the treatment of eimeria in rabbits, which have been demonstrated in experiments with antiparasitic and anti-inflammatory effects on the tissues of spontaneously infected rabbits. And the results of scientific research on epizootology, diagnostics and measures to counteract rabbits contained in our republic.

Keywords: Rabbit, eimeriosis, oocyst, invasion, parasitological method, coprological method, extensiveness, intensity, eimeriostatic, intracox oral, furazolidone.

Introduction. In recent years, in our country, special attention has been paid to the development of animal husbandry, in particular rabbit breeding, which is one of the small branches of animal husbandry. To do this, special programs are being developed and a number of facilities for industry representatives are being created. One of the important steps in this direction was the state registration of the Association of Rabbit Breeders of Uzbekistan by the Ministry of Justice of the Republic of Uzbekistan on December 12, 2018 No. 859.

Taking into account the current trends in healthy eating and the recommendations of the World Health Organization on the norm of dietary consumption of meat, it should be noted that 5% of meat is consumed per year, that is, 4.5 kg of rabbit meat. Based on this, we can say that in the markets of our country there is a demand for 150,000 tons of rabbit meat per year.

Relevance of the topic. Currently, rabbit breeding in the country is at an early stage of development, and there are not many people involved in this profitable business. They also lack knowledge and skills. Therefore, it is important to intensify educational work in this area, develop rabbit breeding at an industrial level and form the fodder base of the industry.

When performing these urgent tasks, there is a risk of certain parasitic diseases in rabbits, and the introduction of effective methods of their prevention and treatment into production is a necessity for this industry. Because parasitic diseases of rabbits in our country are practically not studied by researchers.

The amount of protein in rabbit meat is higher than in lamb, beef and pork. By the content of vitamins and minerals, it surpasses almost all types of meat. The content of vitamins, macro- and microelements in rabbit meat cannot be compared with any other type of animal meat (table 1).

Table 1

The chemical composition of rabbit meat

Body parts	Percentage of body weight (%)				Energy value of 100 g of meat, kcal.
	Water	Protein	Fat	Ash	
Thigh – shin	70,30	21,21	5,83	2,66	140,31
Shoulder blade – shoulder	71,39	20,43	4,87	3,31	122,05
Waist – coccyx	71,05	19,96	6,98	2,01	147,14
Neck-chest	71,95	18,76	5,42	3,87	124,82
long fibrous muscle	71,03	22,10	4,10	2,77	125,53

Purpose and objectives of the study. The main purpose of the study is to determinate and analyze the epizootology of eimeriosis (coccidiosis) in rabbits, and to develop therapeutic and preventive measures.

Our research was conducted in the Pastdargom and Urgut districts of the Samarkand region. Experimental, microscopic, parasitological, scatological and statistical methods were used during the research.

Research results. Initially, the presence of eimerium oocyst was determined in the faecal samples of the examined rabbits, and then the study was continued.

As a result of the study and analysis of the epizootology of eimeriosis (coccidiosis) of rabbits, it was found that 70 out of 155 rabbits grown at the State Unitary Enterprise "Guzalkent Dostoni" are infected with eimeriosis, the prevalence of invasion was 45.1%, out of 225 rabbits bred at the private enterprise "Maxudabonu business service" of the Urgut district, 80 were diagnosed with eimeriosis, the extensive invasion was 35.5% (Table 2).

Table 2

The results of a coprological study of eimeriosis in rabbits

Name of the farm	Number of rabbits	Check method	Extensiveness of invasion	
			number	percent
SUE "Guzalkent Dostoni"	155	coprological	70	45,1
PE "Maxsudabonu business service"	225	coprological	80	35,5

Thus, the prevalence of invasion in both farms averaged 40.3%.

Antiparasitic drugs effective against eimeriosis have been tested for the treatment and prevention of eimeriosis in rabbits.

For comparison, we studied the eimeriostatic effects of **"Intracox oral"** (Interchemie werken "De Adelaar" B.V. Metaalweg Nederland) and the eimeriostatic effects of **furazolidone**.

For the experiment, rabbits with a spontaneous disease of eimeriosis and a high intensity of invasion were selected, which were divided into 4 groups according to the rule of analogues: 1 - healthy control group; 2 patients in the control group; 3-4 were divided into experimental groups (Table 3).

Table 3

Results of coprological research of rabbits

Groups	Experience control	Number of rabbits	Check method	Microscopy results
1 Group	Healthy	65	Coprological	Negative
2 Group	Patient Control Group	65	Coprological	Positive
3 Group	Experience	65	Coprological	Positive
4 Group	Experience	65	Coprological	Positive

In the course of examinations after clinical, parasitological, microscopic examination of all four groups of rabbits, the following eimeriostatic preparations were tested on rabbits of groups 3-4, where experiments were carried out to detect eimeriosis.

Rabbits of the 3rd group were injected with the drug **"Intracox oral"**, dissolved in 1 ml per 1000 ml of water, continuously for 2 days;

Rabbits of the 4th group were given 0.5 g of **furazolidone** per 1 kg of feed for 9 days.

Rabbits of the control groups 1-2 were not given the drug.

The effectiveness of the drugs used was determined based on the clinical signs of the disease and the results of laboratory tests (table 4).

Table 4

The results of the effectiveness of drugs used in the treatment of rabbit eimeriosis

№ Groups	Name of the Groups	Name of drugs	Dose of drugs	Number of rabbits in a group	The safety of rabbits in the group, %	Intensity of invasion after drug administration						The effectiveness of the drug, %
						Examination dates (number of oocytes, copy)						
						3 – day	4 – day	5 - day	6 - day	7- day	8- day	
1	Healthy control group	-	-	65	100	-	-	-	-	-	-	-
2	Patient Control Group	-	-	65	60	15,6	16,9	21,6	18,6	16,4	17,2	-
3	Experimental group	Intracox oral	1 ml per 1 liter of water	65	100	10,1	9,9	7,3	5,4	2	1	95
4	Experimental group	Furazolidone	0.5 g per 1 kg of feed	65	95	12,2	11,9	10,8	6,8	3,2	2	75

According to the results of the study, the death of rabbits of the 3rd group with continuous administration of drugs for 2 days was not observed. In the 4th group, 3 heads of rabbits died. In the 2nd control group, 5 rabbits died. After the administration of the drugs, repeated coprological studies were carried out according to the established scheme, when determining the activity of the eimeriostatic action in terms of the intensity of separation of the eimeria cells, it was noted that the effectiveness of the test drug "**Intracox oral**" in the 3rd group was 95%, and in the 4th group the effectiveness of **furazolidone** was over 75%.

Conclusion.

1. The results of the study show that coccidiosis is the most common invasive disease in rabbits.
2. It is important for the study, practice and production of the prevalence, diagnosis and modern chemoprophylaxis of emirosis (coccidiosis).
3. Of the new eimeriostatic drugs, Introcox oral is highly effective and we recommend that it be used in practice in an amount of 1 ml / 1 l of water.
4. Failure to keep rabbits in cages, and frequent cleaning of mangers and water containers will prevent the spread of the disease.
5. The results of the study show that eimerosis (coccidiosis) of rabbits is widespread (extensity of invasion averages 40.3%), and the effectiveness of "Introcox oral" from new eimeriostatic drugs in the treatment and prevention of the disease was 95%.

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Picture 1. PE "Maxsudabonu business service" studies

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