

Diagnostics and seasonal dynamics of eimeriosis in rabbit breeds kept in Uzbekistan

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Abstract. This article presents information on eymeriosis, one of the parasitic diseases that hinders the development of the rabbit breeding sector, which, when applied in a small but targeted manner, brings great benefits to the livestock industry. Also, as a result of the conducted research, the extensiveness indicators of eymeriosis in rabbit farms were studied, the consequences of the disease were determined, the disease was diagnosed based on parasitic and pathological anatomical examinations, the incidence of eymeriosis in some rabbit farms was studied in the article, the extent of the disease in productive and local rabbit breeds was determined, the results of experiments on the extensiveness of the invasion were analyzed and practical recommendations were given to farms. The article also analyzed the dynamics of the incidence of eymeriosis by season and the relevant data on the incidence of the disease in productive and local rabbit breeds bred in rabbit farms in Samarkand and Fergana regions, and presented a conclusion. In addition to the recommendations given to practitioners, the research work conducted by world scientists on rabbit eymeriosis was also studied, and the opinions of scientists and the scientific and practical work carried out by us and the research results obtained were compared.

1 Relevance of the Study

At present, the global demand for livestock products, including rabbit meat, dietetic foods derived from it, as well as fur and skin raw materials, is steadily increasing year by year. Meeting this demand, creating new employment opportunities, and further expanding rabbit meat production have become important tasks. When rabbits are affected by eimeriosis, if timely treatment is not carried out, up to 90% of the population may perish within 15-20 days. Therefore, identifying invasive diseases of rabbits in different regions, as well as developing effective treatment and preventive measures, has both significant scientific and practical importance [3,5,6,10,11,12].

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On a global scale, the development of effective technologies for the utilization of rabbits in farms and household settings, the increase in rabbit production, and the rapid advancement of intensive rabbit farming have led to improved profitability in the sector. In this context, rabbit breeds raised in farms across different regions of the world hold particular importance. Therefore, the timely identification of parasites occurring in various rabbit breeds, along with the implementation of effective treatment and preventive measures, remains a pressing issue [2,4,8,13].

2 Degree of Investigation of the Problem

Invasive diseases of rabbits, particularly rabbit eimeriosis, as well as the causes of the disease, its etiology, epizootiology, clinical course, treatment, and preventive measures, have been extensively studied by foreign researchers such as P. Augustine, Z. Cerna, D.J. Doran, D.S. Dougald, B.S. Gill, I. Hollands, A.A. Kasim, D.C. Nayak, and M.E. Rose, who have achieved significant scientific and practical results. In the Commonwealth of Independent States (CIS), scholars including V.F. Abramova, K.I. Abuladze, K.Kh. Agaev, M.Sh. Akbaev, V.A. Aleksandrov, S.V. Burlakov, D.V. Vasileva, I.I. Vershinin, V.A. Gerasimchik, E.Kh. Daugalieva, J.F. Dzaumameluna, A.F. Evtushenko, G.M. Kamaletdinova, G.A. Kotelnikov, N.M. Lapshin, A.I. Mayorov, A.F. Manjos, M.A. Musaev, N.P. Orlov, R.V. Petrov, S.A. Pleshakov, A.N. Ponomarenko, V.P. Ryutova, S.K. Svanbaev, and A.I. Yatusevich have also carried out research on these issues [1,7,9,14].

Among researchers of our republic, studies on the species composition of rabbit eimeriosis have been conducted by L.I. Irgasheva, while investigations on the epizootiology, treatment, and preventive measures of eimeriosis in other animals have been carried out by I.Kh. Irgashev, T.Kh. Rakhimov, R.B. Davlatov, D.I. Ibragimov, and A.N. Khudjamshukurov. However, in recent years, no specialized scientific studies on rabbit eimeriosis have been conducted [4].

3 Research Results

Our studies conducted in rabbit farms of the Samarkand region revealed that rabbits, regardless of age, were infected with *Eimeria* oocysts. However, the disease had severe consequences mainly in rabbits up to 3-4 months of age, i.e., during the pre-maturity period. Older rabbits demonstrated higher resistance to the disease and developed immunity against eimeriosis. From birth, kits become infected with *Eimeria* oocysts through alimentary routes, and the intensity of invasion reached 100%. The infection was most severe in rabbits aged 20 to 60 days, and in the absence of timely preventive measures, mortality was observed among the affected animals.

In rabbits, eimeriosis manifests in various forms and stages. In young rabbits, the invasion occurs in subacute and acute forms, whereas in older animals it develops in chronic or latent forms. The disease is classified into intestinal, hepatic, and mixed types.

The intensity of eimeriosis in rabbitries reaches its peak at the time of weaning in young rabbits, with the first clinical signs appearing primarily in weak and emaciated individuals. From the age of four months, rabbits develop resistance to eimeriosis, resulting in a relative decrease in mortality caused by the invasion. After six months of age, the disease occurs in a mild form, and the rate of infection with eimeriosis declines.

In our studies, *Eimeria* oocysts were detected in the feces of nearly all rabbit kits across different age groups.

The seasonal occurrence of *Eimeria* oocyst infection in rabbits is associated with the sporulation period of oocysts in the external environment. Sporulation of oocysts in the

environment occurs only within specific ranges of temperature and humidity. When the temperature in rabbit houses is maintained at 18-22°C and humidity levels increase, the sporulation process accelerates and oocysts undergo successful sporulation.

According to our observations, outbreaks of rabbit coccidiosis occur more frequently during the winter and spring months. This is mainly attributed to increased heating of rabbit houses and excessive humidity levels. Although the disease does not completely disappear in summer and autumn, its occurrence is significantly lower compared to the other two seasons.

In our study, rabbits of different breeds from the dysfunctional rabbit farm of the state unitary enterprise “Go‘zalkent Dostoni” located in Pastdargom district were examined in relation to seasonal dynamics. Among them, 20 Chinchilla breed rabbits were subjected to parasitological examination. The results showed that in spring, *Eimeria* oocysts were detected in 14 rabbits; in summer, in 9 rabbits; in autumn, in 7 rabbits; and in winter, in 17 rabbits (Table 1).

Table 1. Seasonal dynamics of coccidiosis in Chinchilla breed rabbits at the state unitary enterprise “Go‘zalkent Dostoni”.

Season	Number of rabbits	Examination method	Invasion prevalence	
			Number	Percentage (%)
Spring	20	Coprological	14	70.0
Summer	20		9	45.0
Autumn	20		7	35.0
Winter	20		17	85.0
Total	80		47	58.7

The obtained results indicate that the prevalence of invasion in this farm reached 70.0% in spring, 45.0% in summer, 35.0% in autumn, and 85.0% in winter.

In total, *Eimeria* oocysts were identified in 47 out of 80 Chinchilla breed rabbits, corresponding to an overall prevalence of 58.7%.

In the course of examining 20 Californian breed rabbits, *Eimeria* oocysts were identified in 13 animals in spring, 8 in summer, 6 in autumn, and 15 in winter (Table 2).

Table 2. Seasonal Dynamics of Eimeriosis in Californian Breed Rabbits Based on Coprological Examinations at the “G‘ozalkent Dostoni” State Unitary Enterprise.

Season	Number of rabbits	Examination method	Invasion prevalence	
			Number	Percentage (%)
Spring	20	Coprological	13	65.0
Summer	20		8	40.0
Autumn	20		6	30.0
Winter	20		15	75.0
Total	80		42	52.5

The findings revealed that, in this farm, the prevalence of invasion among Californian breed rabbits reached 65.0% in spring, 40.0% in summer, 30.0% in autumn, and 75.0% in winter.

Eimeria oocysts were identified in 42 out of 80 Californian breed rabbits, yielding an overall prevalence of 52.5%.

In the course of examining 20 Giant breed rabbits in the farm, *Eimeria* oocysts were identified in 11 animals in spring, 7 in summer, 5 in autumn, and 14 in winter (Table 3).

The results showed that the prevalence of invasion among Giant breed rabbits in this farm reached 55.0% in spring, 35.0% in summer, 25.0% in autumn, and 70.0% in winter.

Table 3. Seasonal Dynamics of Eimeriosis in Giant Breed Rabbits Based on Coprological Examinations at the “Go‘zalkent Dostoni” State Unitary Enterprise.

Season	Number of rabbits	Examination method	Invasion prevalence	
			Number	Percentage (%)
Spring	20	Coprological	11	55.0
Summer	20		7	35.0
Autumn	20		5	25.0
Winter	20		14	70.0
Total	80		37	46.2

Eimeria oocysts were identified in 37 out of 80 Giant breed rabbits, yielding an overall prevalence of 46.2%.

In the course of examining 20 Chinchilla breed rabbits in the farm, Eimeria oocysts were identified in 13 animals in spring, 8 in summer, 7 in autumn, and 15 in winter.

The results indicated that the prevalence of invasion among Chinchilla breed rabbits in this farm reached 65.0% in spring, 40.0% in summer, 35.0% in autumn, and 75.0% in winter.

Out of a total of 80 Chinchilla breed rabbits, Eimeria oocysts were detected in 43 animals, and the prevalence of invasion was found to be 53.7%. Based on the data presented in the tables and diagrams, it was revealed that the occurrence of eimeriosis in the studied rabbit breeds was almost the same across different seasons of the year (Table 4).

Table 4. Seasonal Dynamics of Eimeriosis in Chinchilla Rabbits at the State Unitary Enterprise “G‘ozalkent Doston”.

Season	Number of rabbits	Examination method	Invasion prevalence	
			Number	Percentage (%)
Spring	20	Coprological	13	65.0
Summer	20		8	40.0
Autumn	20		7	35.0
Winter	20		15	75.0
Total	80		43	53.7

Although the prevalence of eimeriosis was found to be nearly the same across all rabbit breeds, highly productive breeds proved to be more susceptible and less resistant to the disease compared to Chinchilla rabbits and those breeds better adapted to the climatic conditions of our republic. This pattern was studied seasonally at the farm “Bo‘riboy Mustayev Zamin Nur” in the Bulung‘ur district.

In the farm “Bo‘riboy Mustayev Zamin Nur” located in Bulung‘ur district, young rabbits of the Chinchilla breed weaned from milk were selected according to the principle of analogs, with 10 animals examined in each season. Coprological examination of fecal samples revealed Eimeria oocysts in 27 out of 40 rabbits, indicating an invasion extensiveness of 67.5%. In the absence of treatment measures, 13 animals died within 10 days, which demonstrated that failure to apply timely therapeutic interventions could result in a mortality rate of 48.15%.

During examinations conducted in the spring, 10 Chinchilla breed rabbits were observed, of which 7 were found to be infected with Eimeria oocysts, giving an invasion extensiveness of 70%. In the untreated experimental group, mortality occurred in 4 out of 7 infected rabbits (57.1%). These results clearly reflect the potential economic risk and losses that may arise in the farm in the absence of timely treatment measures.

During the summer investigations, 10 Chinchilla breed rabbits were examined, of which 5 were found to be infected with Eimeria oocysts, resulting in an invasion extensiveness of 50%. In the untreated experimental group, mortality occurred in 1 out of 5 infected rabbits

(20%). These results demonstrate that the summer season represents the lowest rate of both infection and mortality associated with the disease.

The third stage of our research was carried out in the autumn season. Among 10 examined Chinchilla rabbits, 6 were found to be infected with *Eimeria* spp., resulting in an invasion extensiveness of 60%. In the untreated experimental group, mortality occurred in 2 out of 6 infected rabbits (33.3%). These findings indicate that during autumn, both infection and mortality rates represent intermediate levels compared to the other seasons.

The fourth stage of our research was conducted during the winter season. Out of 10 examined Chinchilla rabbits, 9 were infected with *Eimeria* spp., resulting in an invasion extensiveness of 90%. In the untreated experimental group, mortality occurred in 6 out of 9 infected rabbits (66.67%). These findings demonstrate that during winter, both infection and mortality rates reached the highest levels compared to the other seasons (Table 5).

Table 5. Coprological Examination Results and Seasonal Dynamics of Eimeriosis in Hycole Rabbits at the “Bo‘riboy Mustayev Zamin Nur” Farm in Bulung‘ur District.

Season	Number of rabbits	Examination method	Invasion prevalence		In untreated rabbits, mortality was observed within 10 days	
			Number	Percentage (%)	Number	Percentage (%)
Spring	10	Coprological	7	70	4	57.1
Summer	10		5	50	1	20.0
Autumn	10		6	60	2	33.3
Winter	10		9	90	6	66.67
Total	40		27	67.5	13	48.15

In young Californian rabbits weaned from milk, fecal samples from 10 animals in each season were examined using the coprological method. Out of a total of 40 rabbits, *Eimeria* oocysts were detected in 25 individuals, with an overall prevalence of 62.5%. In the absence of treatment, 7 rabbits died within 10 days, indicating that failure to implement timely therapeutic measures resulted in a mortality rate of 28.0% (Figure 1).



Figure 1. Rabbits that succumbed to eimeriosis at the “Bo‘riboy Mustayev Zamin Nur” farm in Bulung‘ur district.

Investigations were conducted in spring, during which 6 out of 10 Californian breed rabbits examined were found to be infected, resulting in an invasion prevalence of 60%. In the untreated spring experimental group, mortality was observed in 2 of the 6 infected rabbits, representing 33.3%, clearly indicating the potential level of economic losses for the farm.

When our investigations were conducted in summer, 4 out of 10 Californian breed rabbits examined were found to be infected with *Eimeria* oocysts, resulting in an invasion prevalence of 40%. In the untreated summer experimental group, mortality was observed in 1 of the 4 infected rabbits, representing 25%, demonstrating the lowest incidence of infection and mortality during the summer months.

The third phase of our study was conducted in autumn, during which 5 out of 10 Californian breed rabbits examined were found to be infected with *Eimeria* pathogens, resulting in an invasion prevalence of 50%. In the untreated autumn experimental group, mortality was observed in 1 of the 5 infected rabbits, representing 20%, indicating an intermediate level of infection and mortality compared to the other seasons.

The fourth phase of our study was conducted in winter, during which 7 out of 10 Californian breed rabbits examined were found to be infected with *Eimeria* pathogens, resulting in an invasion prevalence of 70%. In the untreated winter experimental group, mortality was observed in 3 of the 7 infected rabbits, representing 42.86%, showing the highest level of infection and mortality compared to the other seasons (Table 6).

Table 6. Coprological Examination Results and Seasonal Dynamics of Californian Breed Rabbits at the “Bo‘riboy Mustayev Zamin Nur” Farm in Bulung‘ur District.

Season	Number of rabbits	Examination method	Invasion prevalence		In untreated rabbits, mortality was observed within 10 days	
			Number	Percentage (%)	Number	Percentage (%)
Spring	10	Coprological	6	60	2	33.33
Summer	10		4	40	1	25.0
Autumn	10		5	50	1	20.0
Winter	10		7	70	3	42.86
Total	40		25	62.5	7	28.0

From young rabbits of the Gigant breed raised on milk, 10 individuals were selected in each season, and coprological examination of their fecal samples revealed that 27 out of a total of 40 rabbits were infected with *Eimeria* oocysts, indicating an invasion prevalence of 67.5%. In the absence of treatment, 4 of these rabbits died within 10 days, demonstrating that lack of timely intervention can result in a mortality rate of 14.81%.

Our investigations conducted in spring showed that 7 out of 10 Gigant breed rabbits from the unhealthy “Bo‘riboy Mustayev Zamin Nur” farm in Bulung‘ur district were infected, resulting in an invasion prevalence of 70%. In the untreated spring experimental group, mortality was observed in 1 of the 7 infected rabbits, representing 14.8%, clearly reflecting the potential level of economic loss for the farm.

When our investigations were conducted in summer, 5 out of 10 Gigant breed rabbits examined were found to be infected with *Eimeria* oocysts, resulting in an invasion prevalence of 50%. In the untreated summer experimental group, no mortality was observed among the 5 infected rabbits.

The third phase of our study was conducted in autumn, during which 6 out of 10 Gigant breed rabbits examined were found to be infected with *Eimeria* pathogens, resulting in an invasion prevalence of 60%. In the untreated autumn experimental group, mortality was observed in 1 of the 6 infected rabbits, representing 16.66%, indicating an intermediate level of infection and mortality compared to the other seasons.

The fourth phase of our study was conducted in winter, during which 9 out of 10 Gigant breed rabbits examined were found to be infected with *Eimeria* pathogens, resulting in an invasion prevalence of 90%. In the untreated winter experimental group, mortality was

observed in 2 of the 9 infected rabbits, representing 22.22%, showing the highest level of infection and mortality compared to the other seasons.

However, experiments clearly demonstrated that Gigant breed rabbits exhibited higher resistance to eimeriosis compared to Chinchilla and Californian breeds (Table 7).

Table 7. Coprological Examination Results and Seasonal Dynamics of Gigant Breed Rabbits at the “Bo‘riboy Mustayev Zamin Nur” Farm in Bulung‘ur District.

Season	Number of rabbits	Examination method	Invasion prevalence		In untreated rabbits, mortality was observed within 10 days	
			Number	Percentage (%)	Number	Percentage (%)
Spring	10	Coprological	7	70	1	14.28
Summer	10		5	50	0	-
Autumn	10		6	60	1	16.66
Winter	10		9	90	2	22.22
Total	40		27	67.5	4	14.81

From young Chinchilla breed rabbits, which are relatively resistant to eimeriosis, 10 individuals were selected each season. Coprological examination of their fecal samples revealed that 29 out of a total of 40 rabbits were infected with Eimeria oocysts, indicating an invasion prevalence of 72.5%. In the absence of treatment, 1 of these rabbits died within 10 days, demonstrating that lack of timely intervention can result in a mortality rate of 3.44% (Table 8).

Table 8. Coprological Examination Results and Seasonal Dynamics of Chinchilla Breed Rabbits at the “Bo‘riboy Mustayev Zamin Nur” Farm in Bulung‘ur District.

Season	Number of rabbits	Examination method	Invasion prevalence		In untreated rabbits, mortality was observed within 10 days	
			Number	Percentage (%)	Number	Percentage (%)
Spring	10	Coprological	8	80	-	-
Summer	10		5	50	-	-
Autumn	10		7	70	-	-
Winter	10		9	90	1	11.1
Total	40		29	72.5	1	3.44

Our investigations conducted in spring showed that 8 out of 10 Chinchilla breed rabbits examined were infected, resulting in an invasion prevalence of 80%. Although the level of Eimeria infection in the untreated experimental group was higher than in rabbits of other breeds (8 individuals), no mortality was observed.

When our investigations were conducted in summer, 5 out of 10 Chinchilla breed rabbits from the unhealthy “Bo‘riboy Mustayev Zamin Nur” farm in Bulung‘ur district were found to be infected with Eimeria oocysts, resulting in an invasion prevalence of 50%. No mortality was observed in this group either.

Our experiments conducted in autumn showed that 7 out of 10 Chinchilla breed rabbits examined were infected with Eimeria pathogens, resulting in an invasion prevalence of 70%. In the untreated autumn experimental group, no mortality was observed among the 7 infected rabbits.

The fourth phase of our study was conducted in winter, during which 9 out of 10 Chinchilla breed rabbits examined were infected with Eimeria pathogens, resulting in an invasion prevalence of 90%. In the untreated winter experimental group, mortality was

observed in 1 of the 9 infected rabbits, representing 11.11%. Although infection and mortality were evident during winter, experiments demonstrated that Chinchilla breed rabbits exhibited considerably higher resistance to eimeriosis compared to Gigant, Chinchilla, and Californian breeds.

According to the results of our investigations conducted on various breeds of rabbits at the unhealthy “Bo‘riboy Mustayev Zamin Nur” farm in Bulung‘ur district, Eimeria oocysts were detected in 108 out of 160 rabbits. In the absence of treatment, 25 of these rabbits died within 10 days. The highest mortality among weaned young rabbits was observed predominantly in spring and winter. Furthermore, our study confirmed that Chinchilla breed rabbits exhibited a higher level of resistance to eimeriosis.

In our study conducted on Californian breed rabbits at the “Halol Quyon Naslli Chorvasi” LLC in Toshloq district, Fergana region, fecal samples from 10 suspected 3-month-old weaned rabbits were collected each season and examined using the coprological method. In spring, Eimeria oocysts were detected in 6 out of 10 rabbits, resulting in an invasion prevalence of 60.0%. No treatment was administered, and after 14 days, 3 of these rabbits died, corresponding to a mortality rate of 50.0%.

In our summer investigations, coprological examination of 10 weaned 3-month-old rabbits revealed Eimeria oocysts in 3 individuals, resulting in an invasion prevalence of 30.0%. In the absence of treatment, 1 rabbit died, corresponding to a mortality rate of 33.3%.

In our autumn investigations, coprological examination of fecal samples from 10 suspected rabbits at the farm revealed Eimeria oocysts in 4 individuals, resulting in an invasion prevalence of 40.0%. In the absence of treatment with eimeriostatic agents, 1 of the infected rabbits died within 14 days, corresponding to a mortality rate of 25.0%.

In our winter investigations, coprological examination of 10 weaned 3-month-old rabbits revealed Eimeria oocysts in 7 individuals, resulting in an invasion prevalence of 70.0%. In the absence of treatment, 4 of these rabbits died, corresponding to a mortality rate of 57.1%.

The results of our year-long study at “Halol Quyon Naslli Chorvasi” LLC indicated that, on average across the seasons, Eimeria oocysts were detected in 20 out of 40 rabbits examined at the farm, corresponding to an invasion prevalence of 50.0%. In the absence of treatment, mortality occurred in 9 of the 20 infected rabbits, resulting in a mortality rate of 45.0% (Table 9).

Table 9. Coprological Examination Results and Seasonal Dynamics of Eimeriosis in Californian Breed Rabbits at “Halol Quyon Naslli Chorvasi” LLC in Toshloq District.

No	Season	Seasonality	Spring	Summer	Autumn	Winter	Total
	Number of rabbits		10	10	10	10	40
1	Examination method	Coprological					
2	Invasion prevalence	Number	6	3	4	7	20
		Percentage (%)	60.0%	30.0%	40.0%	70.0%	50.0%
3	In untreated rabbits, mortality was observed within 10 days	Number	3	1	1	4	9
		Percentage (%)	50.0%	33.3%	25.0%	57.1%	45.0%

In our seasonal investigations of Chinchilla breed rabbits bred at the private enterprise “Maqsudabonu Biznes Servis” in Urgut district, Samarkand region, fecal samples were collected in spring from 20 rabbits suspected of being ill and examined using the

coprological method at the university’s “Zooparasitology” laboratory. *Eimeria* oocysts were detected in 12 of the rabbits, resulting in an invasion prevalence of 60.0%. In the absence of treatment, mortality occurred in 7 of the infected rabbits, corresponding to a mortality rate of 58.3%.

In our summer investigations at the same farm, coprological examination of 20 rabbits suspected of being ill revealed *Eimeria* oocysts in 9 individuals, resulting in an invasion prevalence of 45.0%. In the absence of treatment, mortality occurred in 4 of the infected rabbits, corresponding to a mortality rate of 40.0%.

In our autumn investigations, 20 weaned 3-month-old rabbits suspected of being ill were examined, and coprological analysis revealed *Eimeria* oocysts in 10 individuals, resulting in an invasion prevalence of 50.0%. When the infected rabbits were left untreated for 14 days, mortality occurred in 4 individuals, corresponding to a mortality rate of 40.0%.

According to our winter observations, coprological examination of fecal samples from 20 rabbits at the farm revealed *Eimeria* oocysts in 15 individuals, resulting in an invasion prevalence of 75.0%. In the absence of treatment, mortality occurred in 11 of the 15 infected rabbits, corresponding to a mortality rate of 73.3% (Table 10).

Table 10. Coprological Examination Results and Seasonal Dynamics of Eimeriosis in Chinchilla Breed Rabbits at the Unhealthy “Maqsudabonu Biznes Servis” Private Enterprise in Urgut District.

No	Season	Seasonality	Spring	Summer	Autumn	Winter	Total
	Number of rabbits		20	20	20	20	80
1	Examination method	Coprological					
2	Invasion prevalence	Number	12	9	10	15	46
		Percentage (%)	60.0%	45.0%	50.0%	75.0%	57.5%
3	In untreated rabbits, mortality was observed within 10 days	Number	7	3	4	11	25
		Percentage (%)	58.3%	33.3%	40.0%	73.3%	54.3%

According to the average results of our study at the “Maqsudabonu Biznes Servis” private enterprise, coprological examination of 80 Chinchilla breed rabbits revealed *Eimeria* oocysts in 46 individuals, indicating an invasion prevalence of 57.5% at the farm. When 45 of the infected rabbits were left untreated and observed for 14 days, mortality occurred in 25 individuals, corresponding to a mortality rate of 54.3%.

4 Conclusion

The seasonal dynamics of eimeriosis in rabbit farms specialized in Samarkand and Fergana regions were found to depend on both the zoohygienic conditions of the farms and the climatic characteristics of their locations. Our results also demonstrated that the seasonal dynamics of eimeriosis varied according to the breed of rabbits reared on the farms. Chinchilla and Californian breed rabbits exhibited higher susceptibility to eimeriosis, whereas infection rates were comparatively lower in Gigant and Chinchilla breeds. However, in some cases, although infection rates in Gigant and Chinchilla rabbits were relatively high, mortality was low. This observation can be attributed to the greater resistance and relative immunity of these breeds to eimeriosis.

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