



## COPY RIGHT



**2022 IJIEMR.** Personal use of this material is permitted. Permission from IJIEMR must be obtained for all other uses, in any current or future media, including reprinting/republishing this material for advertising or promotional purposes, creating new collective works, for resale or redistribution to servers or lists, or reuse of any copyrighted component of this work in other works. No Reprint should be done to this paper, all copy right is authenticated to Paper Authors

IJIEMR Transactions, online available on 13<sup>th</sup> June 2022.

Link: <https://ijiemr.org/downloads/Volume-11/Issue-06>

**DOI: 10.48047/IJIEMR/V11/I06/101**

**Title: USE OF POLYAMIDIN-P FOR THE PREVENTION OF PYROPLASMOSIS IN CATTLE**

Volume 11, Issue 06, Pages 1652-1655

Paper Authors: **Bobonazarov Eshmakhmat Ishpulatovich, Mirzoev Zoyir Razhabovich**



USE THIS BARCODE TO ACCESS YOUR ONLINE PAPER

To Secure Your Paper As Per **UGC Guidelines** We Are Providing A Electronic Bar Code

## USE OF POLYAMIDIN-P FOR THE PREVENTION OF PYROPLASMOSIS IN CATTLE

**Bobonazarov Eshmakhamat Ishpulatovich**

**PhD of Samarkand State University of Veterinary Medicine, Animal Husbandry and Biotechnology**

**Mirzoev Zoyir Razhabovich**

**Assistant of Samarkand State University of Veterinary Medicine, Animal Husbandry and Biotechnology**

**ABSTRACT:** In experimental experiments on the prevention of piroplasmosis, it was found that the effectiveness of the use of the drug polyamide-p for every 100 kg of live weight of cattle at the rate of 5.0 ml in farms that are unfavorable from piroplasmosis under production conditions is 99%.

**Keywords:** Piroplasmosis, tick, peripheral vessels, cattle, polyamides-p, infections, ointments, prevention, treatment.

### INTRODUCTION

The disease of cattle with piroplasmosis (theileriosis, piroplasmosis, babesiosis) causes significant economic damage to the development of animal husbandry in our Republic.

The government decree on the development of animal husbandry serves as the main program for the improvement of animal husbandry. Efforts to enforce these decisions are yielding tangible results. This creates an opportunity to increase the number of meaty and productive livestock, and to saturate the consumer market with livestock products.

Based on this, the relevance of the topic is evidenced by the development of methods that meet modern requirements, based on local medicines that guarantee the effectiveness of prevention from piroplasmosis in cattle.

The development of emigration of erythrocytes and leukocytes, the presence of a large number of leukocytes in the blood plasma and exudate around the vein, and a small

number of erythrocytes in the damaged tissue. violation of the location of connective tissue fibers and reticular cells, atrophy

Purpose of the study. Development of effective means and methods of prevention against piroplasmosis that meet modern requirements.

**Materials and research methods.** The research was carried out on the farms of the Ishtikhan district of the Samarkand region under experimental and production conditions.

In cattle suffering from piroplasmosis, body temperature was measured during the experiment, and the condition of the mucous membranes, respiratory, nervous, and circulatory systems were observed. The general condition of the livestock was monitored.

During parasitological studies, samples of peripheral blood vessels were taken and the state of the parasites was examined.

Experiments to study the effectiveness of the drug polyamide-p in the prevention of piroplasmosis were carried out in the territories

of the Ishtikhansky district, which are unfavorable for piroplasmosis. At the same time, for every 100 kg of live weight of cattle, 5.0 ml of the drug was subcutaneously applied every 15 days during the season.

### Research results and analysis

An experimental experiment to study the effectiveness of the drug polyamide-p in the prevention of piroplasmosis in the first 3 heads of cattle ended with a positive result. Experimental experiments to more accurately clarify the effectiveness of the drug polyamide-p in the prevention of piroplasmosis were

carried out in two groups of cattle. In the first group, 5.0 ml of polyamide-p was used subcutaneously for every 100 kg of live weight in 9 cattle, in the second group of cattle, diamidine was used subcutaneously at the rate of 2 mg/kg (4% aqueous solution of diamidine was used for every 100 kg of live weight). mass at the rate of 5.0 ml). 15 days after the application of the drug, both groups of cattle were infected by injecting 20.0 ml of the piroplasmosis strain stored in a cryobank under the skin.

**Table 1**

**The results of the study of the effectiveness of the drug polyamidin-p in the prevention of piroplasmosis in experimental experiments**

Group	Number of goals	The drug and its dosage	Time of infection	Result	Effect %
1 experience	9	Polyamidin-p at a dose of 5.0 ml for each 100 kg of live weight of cattle	15 days after drug administration	Clinical signs of piroplasmosis did not appear. Piroplasmas were not detected in blood smears taken from peripheral blood vessels.	99
2-control	3	Diamidine, 2mg/kg	15 days after drug administration	Symptoms appeared 8-9 days after infection. In blood smears taken from peripheral blood vessels, piroplasms were found	83

On the 8th-9th day after infection, the second group of cattle showed weakness, fever up to 40.5°C, and hemoglobinuria. Parasitological studies of blood smears from peripheral blood vessels have shown that

erythrocytes are infected with piroplasms up to 2-3%. At the same time, the general condition of the cattle of the first group in the experiment did not worsen, and clinical signs of piroplasmosis did not appear. During the parasitological examination of blood smears of

peripheral blood vessels, piroplasms were not observed in them.

Thus, as a result of the experiments, it was found that the effectiveness of the drug polyamide-p, used at 5.0 ml per 100 kg of live weight of cattle in the prevention of piroplasmosis, is up to 15 days.

Studies on the introduction into veterinary practice of the effectiveness of the drug polyamide-p in the prevention of piroplasmosis were carried out on a farm that was unfavorable for piroplasmosis in the Ishtikhan district of the Samarkand region. The drug was applied once every 15 days subcutaneously, 5.0 ml per 100 kg of live weight of cattle. Following each experimental group, cattle in the control group were also administered every 15 days at 5.0 ml (2 mg/kg) per 100 kg of live weight of a 4% aqueous solution of diamidine.

Clinical and parasitological studies have been conducted in cattle showing clinical signs of piroplasmosis.

In the control group, in which the drug polyamide-p was used, in cattle during the season, infection with piroplasmosis was observed at about 0.8-1.0%, while in the group in which diamidine was used, these figures are 6-8 %.

Thus, the effectiveness of the drug, applied every 15 days at the rate of 5.0 ml per 100 kg of live weight of cattle, to prevent piroplasmosis in disadvantaged areas, as well as in the summer season with the active activity of the disease vector of the tick *B. Calcaratus*, averaged 99%, while the use of diamidine every 15 days at the rate of 2.0 mg/kg, this figure was 83%.

## Conclusion

Under experimental conditions, it was found that in cattle infected with piroplasmosis, the effectiveness of using the drug polyamide-p at the rate of 5.0 ml per 100 kg of live weight is 100%.

The effectiveness of the use of the drug polyamide-p in production conditions is 99%.

## References:

1. А.Г. Гафуров и др. Протозойные болезни сельскохозяйственных животных. Биография 2010.-107ср.
2. А.Г. Гафуров и др. Мы должны защитить скот от болезней крови, паразитов. Зооветеринария. 2013,-21-23ср
3. Yakubov Muzafar, Mukhtarov Elmurod, Some hematological indications in fertile cows, Central asian journal of theoretical & applied sciences p 107-110
4. Mukhtorov E.A, Dilmurodov N.B, Changes In The Postnatal Ontogenesis Of Histological Indicators Of The Four-Headed Muscle Number Of Hisori Sheep, NVEO-NATURAL VOLATILES & ESSENTIAL OILS Journal| NVEO. P.15705-15709
5. N Dilmurodov// The Developmental Peculiarities of Tubular Bones of Autopodies of Sheep at Postnatal Ontogenesis in Dependence on Habitat Conditions// Journal of Xinjiang Agricultural University. 2010