

# Improvement Of Chemoprophylaxis Of Chicken Eimeriosis

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**Abstract**. The article provides information about the chick eimeriosis and the effectiveness of eimeriostatics + vitamins in combating it. In the prevention of chick eimeriosis, a local preparation and the addition of vitamins to it are one of the main ways to combat this disease. At the same time, two issues are being addressed: the prevention of diseases and the increase in the immune system of the body of the bird. Good growth, weight gain and increased yields in poultry.

**Keywords**. Poultry, hen, chicken, eimeria, eimeriosis, drug, eimeriostatic, vitamin, epizootic state, efficiency, amprolin-300, amprovet 25%, intrakoks, DD-toltra.

**Introduction.** Currently, both on a global scale and in the Republic of Uzbekistan, special attention is paid to poultry farming, especially meeting the needs of the population for dietary products - chicken meat, eggs, as well as enriching the domestic market with these products and exporting them, which is considered one of the main tasks.

According to our scientists, the widespread spread of chicken eimeriosis in poultry farms, the extent of invasion was 57,4-79,1%, the intensity of 5,2-212,4, which was recorded [3].

High humidity in the poultry house, poor feed quality, violation of the technology of their maintenance, which is caused by the epizootic development of invasion [1;2;6].

In the maintenance of chickens, the consumption of feed and the increase in veterinary costs brings great economic damage and further reduction in the indicators of poultry farming (eggs, meat) to farmers and poultry owners [4;5;7].

**Methods and materials.** The experiments were conducted in a small poultry house of the Samarkand Institute of Veterinary Medicine and the scientific laboratory of the department, clinical, coprological, pathoanatomic indicators were studied. For experimental infection of experimental chickens, an eimeria culture prepared by an eimeria oocyst was used. The indicator of the drug used and its effectiveness is determined by the preservation of chickens at the end of the study, both the live weight of one chicken and its weight gain, and the anti-epidemic index (PKI).

In the conditions of experience, the effectiveness of eimeriostatic and additional vitamins are tested. Eimeriostatics in the composition of intracox (2,5% toltrazuril), amprolin-300 ws in the composition (1,0-300 mg of amprolium hydrochloride), a Dutch drug.

The spread of chicken eimeriosis was studied in several poultry farms of the Samarkand region.

**Results and discussion.** With eimeriosis of chickens, factors affecting the content and feeding technology, age, seasons-all this negatively affects the epizootic process.

The intensity of eimeriosis invasion and the degree of extensivity are relatively common in young chickens from 15-20 days to 3 months old. The seasons play an important role in the spread of eimeriosis, the invasion increases significantly in spring and autumn.

Our study of chicken eimeriosis among young and growing chickens showed its wide spread, and the extent of invasion was noted in 15-56%.

For the experiments, 5 groups of chickens were selected, each with 20 heads of 14-day-old chickens and weighed on a scale (the difference in weight is  $\pm 5$  g), based on this:

The first group was an uninfected control group and received a normal diet without drugs until the end of the experiment. The 2nd group of chickens was infected with eimeria cultures and did not receive eimeriostatics (LD 50-75, E. acervulina-200,000, E. maxima - 15,000, E. tenella - 40,000 pcs. 1 ml3 of suspension) was injected through a syringe with a probe into each chicken with 1 ml.The 3rd group of chickens was also infected with eimeria cultures (LD 50-75) and simultaneously received intracox at a dose of 1 gr. per 1 liter of water and 3 days + rex vital 0,5 per 1 kg of feed throughout the research. Group 4 - for 1 liter of water, 1 ml of DD-toltra and 3 days - biosupervit (1 liter of water, 1 ml, 5 days). Group 5-Amproline 1 liter of water 1 gr 5 days + rex vital per 1 kg of feed 500 mg for 10 days.

During the studies, observations were made and clinical changes in chickens and an increase in live weight were revealed.

The positive result of the tested drugs was evaluated, taking into account the safety of the livestock and the increase in live weight (Table 1).

The study showed that in the 1st group of chickens, which was uninfected, no signs of eimeriosis were detected, and the development and growth were indicative. The safety of this group was 100%. The observation was carried out for 25 days. The daily growth of chickens was 13,7 g, an increase in live weight of 282,2%.

Nº	Name of the group	Name of the preparates	The dose of the drugs used, mg/kg	Number of chickens	Weight of chickens before research (g)	Safety (%)	Weight after studies (g)	Live weight growth, %	PKI 200 (point)
1.	Control (uninfected)	-	-	20	90	100	344	282,2	200
2.	Control (infected)	-	-	20	90	25	280	211,1	104,8
3.	Experienced	Intracox + neovite	1 g/1l of water+0,5 g per 1 kg of	20	90	100	325	261,1	192,5

#### Table No. 1 Aimeriostatic efficacy of the tested drugs

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			feed						
4.	Experienced	DD-toltra + biosupervit	1 g/1l of water+1 g per 1 l of water	20	90	100	320	255,5	190,5
5.	Experienced	Amprolin + rex vital	1 g/1l of water+0,5 g per 1 kg of feed	20	90	100	335	272	198,5

When the corpses of the fallen chickens from the 2nd group (untreated) were opened, pathoanatomic changes of eimeriosis were revealed. At the end of the study, it was revealed that the safety was 25%, the daily increase in live weight was 11,2 g. Chickens of the 3rd group used intracox and neovit, clinical indicators of eimeriosis were detected in some cases, no cases of death were registered in the group. At the end of the studies, the safety was 100%, the daily increase in live weight was 13,0 g, the increase in live weight was 261,1%, the anti-epidemic index was 192,5 points. 4 studies of DD - toltra+biosupervit - eta were revealed to be expressed by a decrease in appetite, ruffled feathers, but no negative indications were found.

At the end of the studies, the safety is 100%, the daily average weight gain is 255,5%, the antiepidemic index is 190,5 points. Group 5-Amprolin+rex vital, clinical signs of eimeriosis were not observed among the chickens, the chickens were fed and developed moderately, the safety is 100%, the average daily growth is 13.4 g. Live weight 272%, PKI 198,5 points.

## Conclusion.

**1.** A wide spread of chicken eimeriosis was noted among chickens from 20 days to 3 months of age, which accounts for 15% to 56 % of the extent of invasion.

**2.** The conducted studies have shown that with eimeriosis of chickens for 1 liter of water amprolin 1 gr 5 days + for 1 kg of feed 500 mg rex vital for 10 days, then the safety is 100%, PKI 198,5 points, this does not interfere with the immunity developed by the body against the disease. The drug is approved for use as a chemoprophylaxis in broiler and chicken farms.

**3.** To prevent eimeriosis of chickens, it is recommended to use eimeriostatics and vitamins in parallel in poultry farms at the age of 7-10 days, for better effectiveness of chemoprophylaxis.

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