Description features of pharmacology of the drug Kufestrol in increasing productivity of broiler chicks

G Kuldoshev[1*], *N* Farmanov[1], *A* Kholikov[1], *M* Isayev[1], *Sh* Omonov[1], *Z* Shodiyeva[1], *S* Mukhammatova[1], and *O* Nematullayev[1]

[1]Samarkand State University of Veterinary Medicine, Livestock and Biotechnologies, Samarkand, Uzbekistan

Abstract. This scientific article presents the effects of kufestrol, a phytoestrogen drug extracted from the Ferula Kuhistanica plant, on the poultry organism. As a result of the use of Kufestrol drug, effects on the live weight, absolute, average daily growth and food consumption of broiler chicks were determined in the experiments. Morphological (erythrocytes, hemoglobin, leukocyte) and biochemical (total protein, albumin, globulin, calcium, phosphorus, glucose) parameters of the blood of chicks treated with the drug were determined. The information that Kufestrol, used through experiments, has a positive effect on the physiological condition of broiler chicks is cited. As a result of the use of the Kufestrol drug in broiler chickens, their viability was 98%, and meat productivity was 25.8% higher than in control groups.

1 Introduction

Poultry production is developing rapidly on a global scale, serdaromad is one of the agricultural sectors. This area allows you to produce environmentally friendly and high-quality poultry, dietary meat products made from it, eggs and feathers for the industry. Today, poultry meat is the second largest in the world in terms of production and consumption of meat products. Poultry meat is rich in various chemical elements in composition, surpassing livestock in terms of light digestion. Therefore, it is of important scientific and practical importance to develop a system of measures aimed at effective use of poultry farms, continuous supply of the population with quality poultry and egg products, increasing the sale of domestic poultry products to domestic and foreign markets.

In order to increase the productivity indicators of agricultural poultry in the countries of the world, complex work is being carried out on the production and use of food additives, vitamins, veterinary drugs. In this regard, there are many studies on the use of various pharmacological drugs in increasing the productivity of poultry. However, the effect of the drug kufestrol on the body and productivity of chickens and chicks is not scientifically substantiated enough. The preparation of inexpensive and effective pharmacological agents made from local raw materials to obtain quality edible meat and egg products from poultry,

* Corresponding author: kuldoshev@ssuv.uz

and the development of methods for their practical application, which do not adversely affect their organism, is one of the pressing issues in the field of Veterinary Medicine.

The development of the livestock industry and its networks for the development of the livestock industry and its networks for 2022-2026 increases food security, increasing the volume of production production, the volume of export-oriented competitive products, as well as modern in this area. The organization of the effective use of information and communication technologies and science and science is tasked. In effective solution to these important tasks, many of the problems in poultry problems are of great obstacles to the development of the industry. The decline in productivity, the increase in nutritional consumption, reducing the resistance to disease residuity provides great economic damage to farms. Therefore, the use of natural, import-substituting biologically active drugs for poultry is one of the priorities.

Law of the Republic of Uzbekistan "On Veterinary Veterinary", "On the President of the Republic of Uzbekistan no. PF-60 for 2022-2026" On the New Uzbekistan", Decrees of April 10, 2019 "On measures to further develop the pharmaceutical industry of the republic," PG-4015, November 13, 2018 "Boulisty is also further "On additional measures for the development", January 29, 2020 On PP-4576 "On additional measures to support the livestock network" And "On additional measures for additional Poultry Development and Poultry Development Lectations", the "On additional measures aimed at strengthening the field of poultry farm", on January 24, 2002, the "state support of the Poultry network" Resolution of the PQ-100 "On Additional Meass" and other normative legal acts serves at certain levels of the dissertation study.

2 Materials and methods

Our research was carried out at "Mironqul Agrozoovetservis scientific and practical center" LLC in Samarkand district. 120 1-day-old ROSS-308 cross broiler chicks were taken for our research. The temperature, ventilation and lighting system, feeding in the poultry house fully meet the zoohygienic requirements of the farm. To conduct experiments, 30 heads in each group were divided into 4 groups. Our experiments lasted 42 days.

Broiler chickens of the first control group were fed on the basis of farm diet and no drugs were added to their food. The second experimental group fed 1 g/100 kg of "Kufestrol" preparation to broiler chickens. The third experimental group fed 1.5 g/100 kg of "Kufestrol" drug to broiler chickens. The fourth experimental group was fed to broiler chickens with the addition of "Kufestrol" drug to the farm ration, mixed with 2 g/100 kg of feed

Morphological indicators of blood were determined using a BIOBASE BK6190 hematological analyzer, and biochemical indicators of blood serum were determined using a Mindray BA-88A hemoanalyzer.

3 Results and Discussion

Adding pharmacological drugs containing biologically active substances to the diet of broiler chickens for the purpose of high utilization of the generated energy and protein in improving the metabolism gives a good result.

It can be seen that when we studied the processes of growing and fattening broiler chicks on an experimental basis, the preservation of broiler chicks was 94% in the first control group, 95% in the second experimental group, and 98% in the third experimental group, in the fourth experimental group was 98%. Compared to broiler chicks in the first control group, the broiler chicks in the third and fourth experimental groups had a higher

maintainability. For gaining 1 kg of additional weight, the consumption of mixed feed was 2.31 kg in the first control group, 2.12 kg in the second experimental group, 1.94 kg in the third experimental group, and 1.85 kg in the fourth experimental group. Compared to the control group, the second experimental group consumed 0.19 kg, the third experimental group 0.37 kg, and the fourth experimental group 0.46 kg less feed (Table 1).

Table 1. Keepability of broiler chicks.

Indicators	Unit of measure	Guruhlar			
		I-control	II-experience	III-experience	IV-experience
Number of heads	head	30	30	30	30
Retention	%	94	95	98	98
Consumption of soft feed per kg of live weight	kg	2.31	2.12	1.94	1.85

Live weight, absolute, average daily growth and hematological indicators of broiler chicks were determined during the experiment. Growth dynamics of live body weight was carried out by individual weekly weighing of broiler chicks in each group before morning feeding on days 1, 7, 14, 21, 28, 35, 42. Broiler chicks were compared according to the equality of live weight, indicators of keeping the number of chicks, effective use of nutrients, the separation of individually developed chicks, and the weight of broiler chicks at slaughter.

Table 2 shows that at the beginning of the experiment, the average live weight of broiler chicks at the age of 1 day in all groups was 43,4 grams. The weight of broiler chicks in the first control group was 156.2 grams at 7 days, 320.9 grams at 14 days, 563.2 grams at 21 days, 1213.3 grams at 28 days, 1854.3 grams at 35 days, 2135.1 grams at 42 days. The weight of broiler chicks in the second experimental group was 164,4 grams at 7 days, 381.3 grams at 14 days, 664.3 grams at 21 days, 1354.8 grams at 28 days, 1939.0 grams at 35 days, 2341.2 grams at 42 days. . The weight of broiler chicks in the third experimental group was 175,2 grams at 7 days, 442.2 grams at 14 days, 785.7 grams at 21 days, 1421.8 grams at 28 days, 2036.7 grams at 35 days, and 2565.0 grams at 42 days. Broiler chicks in the fourth experimental group gained 185.6 grams at 7 days, 462.8 grams at 14 days, 912.2 grams at 21 days, 1469.0 grams at 28 days, 2090.0 grams at 35 days, 2687.4 grams at 42 days organized.

Table 2. Average live weight of broiler chicks (g).

Chick age, day	Groups			
	I-control farm ration	II- experience Kufestrol 1 gr/100 kg	III-experience Kufestrol 1.5 gr/100 kg	IV-experience kufestrol 2 gr/100 kg
1	43.4±0.5			
7	156.2±3.2	164.4±1.49	175.2±3.3	185.6±3.4
14	320.9±11.8	381.3±12.2	442.2±11.8	462.8±10.4
21	563.2±16.3	664.3±16.5	785.7±16.8	912.2±17.5
28	1213.3±20.8	1354.8±20.9	1421.8±21.0	1469.0±20.9
35	1854.3±24.7	1939.0±25.4	2036.7±27.8	2090.0±26.5
42	2135.1±34.0	2341.2±25.4	2565.0±25.0	2687.4±25.4

At the end of the experiment, it was 2135.1 grams in the control group, 2341.2 grams in the second experimental group, 2565.0 grams in the third experimental group, and 2687.4

grams in the fourth experimental group. Compared to the control, the average live weight of broiler chicks in the second experimental group was 206.1 grams (9.6%), in the third experimental group it was 429.9 grams (20,1%), in the fourth experimental group it was 552.3 grams (25.8%) was noted to be high. It can be seen that the average daily growth of broiler chicks increased from 50.8 grams in the control group, 55.7 grams in the second experimental group, 61.0 grams in the third experimental group, and 63.9 grams in the fourth experimental group (Table 2).

It can be seen that in the third and fourth experimental groups, where the kufestrol drug was used in the amount of 1.5-2.0 grams, the daily growth was high.

Studying the effect of the drugs on the physiological state of broiler chickens by determining the morphological and biochemical indicators of blood is widely used as one of the important methods of investigation, because the changes in the blood reflect the changes in the whole organism.

Table 3 shows the results of tests on some morphobiochemical parameters of the blood of broiler chickens in the experiment. The number of erythrocytes was 2.10±0.26 10^{12}/l in the first control group at 16 days, 2.19±0.24 10^{12}/l in the second experimental group, 2.32±0.28 10^{12}/l in the third experimental group, fourth experiment recorded 2.38±0.34 10^{12}/l in the first control group on the 30 th day, 2.20±0.22 10^{12}/l in the second experimental group, 2.23±0.11 10^{12}/l in the third experimental group in the experimental group it was 2.40±0.10 10^{12}/l, in the fourth experimental group it was 2.48±0.16 10^{12}/l. On the 42 nd day of the experiments, 2.35±0.41 10^{12}/l in the first control group, 2.39±0.38 10^{12}/l in the second experimental group, 2.66±0.42 10^{12}/l in the third experimental group, fourth experiment 2.70±0.51 10^{12}/l was determined in the group. On the 16 th day of the experiment, the number of erythrocytes increased by 4,3% in the second experimental group, by 10.4% in the third experimental group, and by 13.3% in the fourth experimental group compared to the control group. The number of erythrocytes on day 30 was higher in the second experimental group by 1.4%, in the third experimental group by 9.1%, and in the fourth experimental group by 12.7%, compared to the control group. At the age of 42 days, compared to the control group, it was found to be higher in the second experimental group by 1.7%, in the third experimental group by 13.1%, and in the fourth experimental group by 14.8%.

Compared to the control group, the amount of hemoglobin increased by 0.1% in the second experimental group, by 0.64% in the third experimental group, by 0.79% in the fourth experimental group, and by 0.76% in the second experimental group compared to the control group on the 30 th day of the experiment. 2.65% higher in the third experimental group, 3.55% higher in the fourth experimental group. At 42 days, compared to the control group, it was 3.60% higher in the second experimental group, 7.87% in the third experimental group and 9.74% in the fourth experimental group.

The number of leukocytes was 39.8±0.72 10^{9}/l in the first control group, 39.40±0.35 10^{9}/l in the second experimental group, 38.10±0.36 10^{9}/l in the third experimental group and 38.10±0.36 10^{9}/l in the fourth it was 38.60±0.38 10^{9}/l in the experimental group, 39.95±0.38 10^{9}/l in the first control group on the 30 th day, 38.12±0.34 10^{9}/l in the second experimental group, and 38.12±0.34 10^{9}/l in the third 37.85±0.35 10^{9}/l in the experimental group, 37,12±0,44 10^{9}/l in the fourth experimental group, and 40.60±0.33 10^{9}/l in the first control group on day 42, second experiment It was 37.78±0.34 10^{9}/l in the third experimental group, 37.69±0.37 10^{9}/l in the fourth experimental group, and 37.09±0.42 10^{9}/l in the fourth experimental group.

On the 16 th day of the experiments, the number of leukocytes compared to the control group was 1.0% in the second experimental group, 4.2% in the third experimental group, 3.0% in the fourth experimental group, and 4.6% in the second experimental group compared to the control group at 30 days. by 5.2% in the third experimental group, by 7.0%

in the fourth experimental group, and by 6.9% in the second experimental group, by 7.1% in the third experimental group, and by 42 days compared to the control group it was found that it decreased by 8.6% in the group (Table 3).

Table 3. Morphological parameters of blood of broiler chickens. n±30.

Indicators	Groups	Age of broiler chicks, days		
		16	30	42
Erythrocytes, 10^{12}/l	I-control	2.10±0.26	2.20±0.22	2.35±0.41
	Experiment II	2.19±0.24	2.23±0.11	2.39±0.38
	Experiment III	2.32±0.28	2.40±0.10	2. 66±0.42
	Experiment IV	2.38±0.34	2.48±0.16	2.70±0.51
Hemoglobin, g/l	I-control	66.58±2.36	71.94±1.45	74.91±0.31
	Experiment II	66.62±1.61	72.49±1.34	77.61±0.85
	Experiment III	67.01±1.45	73.85±1.48	80.81±0.85
	Experiment IV	67.11±1.56	74.50±1.44	82.21±0.89
Leukocytes, 10^{9}/l	I-control	39.8±0.72	39.95±0.38	40.6±0.33
	Experiment II	39.4±0.35	38.12±0.34	37.78±0.34
	Experiment III	38.1±0.36	37.85±0.35	37.69±0.37
	Experiment IV	38.6±0.38	37.12±0.44	37.09±0.42

Total protein content was 40.40±1.0 g/l in the first control group, 41.60±1.1 g/l in the second experimental group and 42.00±1.3 g/l in the third experimental group at 16 days. In the fourth experimental group it was 42.50±1.6 g/l. On the 30 th day, 41.50±1.2 g/l in the first control group, 43.00±1.7 g/l in the second experimental group, 43.70±1.48 g/l in the third experimental group, and 43.70±1.48 g/l in the fourth experiment 44.50±2.0 g/l in the group, and 44.00±1.2 g/l in the first control group, 46.80±1.8 g/l in the second experimental group, and 49.30 in the third experimental group on day 42 ±1.9 g/l, in the fourth experimental group it was 50.10±1.8 g/l.

The amount of total protein increased by 2.9% in the second experimental group compared to the control group on the 16th day of the experiment, by 3.9% in the third experimental group, by 5.1% in the fourth experimental group, and by 30% on the 30 th day of the experiment compared to the control group 6%, 5.3% in the third experimental group, 7.2% in the fourth experimental group. At the age of 42 days, compared to the control group, it was found to be 6.3% higher in the second experimental group, 12% in the third experimental group, and 13.8% in the fourth experimental group.

The amount of albumin was 17.3±0.44% in the first control group, 18.0±0.38% in the second experimental group, 18.2±0.44% in the third experimental group, and 18.94±18.94% in the fourth experimental group. It was 0.45%. On the 30th day, it was 18.1±0.46% in the first control group, 19.3±0.56% in the second experimental group, 19.8±0.54% in the third experimental group, and 20,4±0 in the fourth experimental group, 38%, and on the 42 nd day, 19.7±0.34% in the first control group, 20.4±0.45% in the second experimental group, 22.2±0.46% in the third experimental group, and 22.2±0.46% in the fourth experimental group It was 22.4±0.60%.

The amount of albumin increased by 4.0% in the second experimental group compared to the control group at the 16 th day, 5.2% in the third experimental group, 7.5% in the fourth experimental group, and 6,6% in the second experimental group compared to the control group at the 30 th day. % was higher in the third experimental group by 9.4% and in the fourth experimental group by 12.7%. At the age of 42 days, compared to the control group, it was found to be 3.5% higher in the second experimental group, 12.6% in the third experimental group, and 13.7% in the fourth experimental group.

The amount of globulins was 23.1±0.70% in the first control group, 23.6±0.54% in the second experimental group, 23.8±0.60% in the third experimental group, and 23.9±0.70% in the fourth experimental group. On the 30th day, 23.4±0.65% in the first control group, 23.7±0.62% in the second experimental group, 23.9±0.51% in the third experimental group, 24.1±052% in the fourth experimental group and on the 42nd day it was 24.3±0.62% in the first control group, 26.4±0.25% in the second experimental group, 27.1±0.38% in the third experimental group, and 27.7±0.71% in the fourth experimental group.

On the 16th day of the experiment, the amount of globulins increased by 2.1% in the second experimental group compared to the control group, by 3.0% in the third experimental group, by 3.4% in the fourth experimental group and by 1.3% in the second experimental group compared to the control group on the 30th day. it was higher in the third experimental group by 2.1%, in the fourth experimental group by 3.0%. At the age of 42 days, compared to the control group, it was found to be 8.6% higher in the second experimental group, 11.5% in the third experimental group, and 13.9% in the fourth experimental group.

The amount of calcium was 2.92±0.106 mmol/l in the first control group, 3.12±0.128 mmol/l in the second experimental group, 3.15±0.102 mmol/l in the third experimental group, and 3.19±0.102 mmol/l in the fourth experimental group. was 0.108 mmol/l, on the 30th day it was 3.05±0.151 mmol/l in the first control group, 3.26±0.043 mmol/l in the second experimental group, and 3.36±0.048 mmol/l in the third experimental group, until 3.39±0.053 mmol/l in the fourth experimental group, 2.88±0.083 mmol/l in the first control group on day 42. 2.91±0.068 mmol/l in the second experimental group, 2.92±0.054 mmol/l in the third experimental group It was 2.92±0.068 mmol/l in the fourth experimental group.

On the 16th day of the experiment, the amount of calcium increased by 6.8% in the second experimental group, by 7.8% in the third experimental group, and by 9.2% in the fourth experimental group compared to the control group. 6.8% in the second experimental group, 10.1% in the third experimental group, and 11,1% in the fourth experimental group compared to the control group at 30 days. Compared to the control group at the age of 42 days, it was found to be higher in the second experimental group by 1.0%, in the third experimental group by 1,4%, and in the fourth experimental group by 1.4%.

Phosphorus content was 2.80±0.072 mmol/l in the first control group, 2.79±0.071 mmol/l in the second experimental group, 2.76±0.070 mmol/l in the third experimental group, and 2.75±0.070 mmol/l in the fourth experimental group. was 0.079 mmol/l, on the 30th day it was 3.13±0.005 mmol/l in the first control group, 2.84±0.062 mmol/l in the second experimental group, and 2.91±0.052 mmol/l in the third experimental group, until 2.94±0.082 mmol/l in the fourth experimental group, 2.87±0.074 mmol/l in the first control group on day 42, 2.49±0.012 mmol/l in the second experimental group, 2.39±0.014 mmol/l in the third experimental group It was 2.38±0.018 mmol/l in the fourth experimental group.

On the 16th day of the experiment, the amount of phosphorus decreased by 0.3% in the second experimental group, by 1.4% in the third experimental group, and by 1.7% in the fourth experimental group compared to the control group. 9.2% in the second experimental group, 7.0% in the third experimental group, and 6.0% in the fourth experimental group compared to the control group at 30 days. At 42 days, compared to the control group, it showed a decrease of 13.2% in the second experimental group, 16.7% in the third experimental group, and 17.0% in the fourth experimental group (Table 4).

Table 4. Biochemical parameters of blood of broiler chickens. n±30.

Indicators	Groups	Age of broiler chicks, days		
		16	30	42
Total protein,g/l	I-control	40.40±1.0	41.50±1.2	44.00±1.2
	Experiment II	41.60±1.1	43.00±1.7	46.80±1.8
	Experiment III	42.00±1.3	43.70±1.8	49.30±1.9
	Experiment IV	42.50±1.6	44.50±2.0	50.10±1.8
Albumins, %	I-control	17.3±0.44	18.1±0.46	19.7±0.34
	Experiment II	18.0±0.38	19.3±0.56	20.4±0.45
	Experiment III	18.2±0.44	19.8±0.54	22.2±0.46
	Experiment IV	18.6±0.45	20.4±0.38	22.4±0.60
Globulins, %	I-control	23.1±0.70	23.4±0.65	24.3±0.62
	Experiment II	23.6±0.54	23.7±0.62	26.4±0.25
	Experiment III	23.8±0.60	23.9±0.51	27.1±0.38
	Experiment IV	23.9±0.70	24.1±0.52	27.7±0.71
Calcium, mmol/l	I-control	2.92±0.106	3.05±0.151	2.88±0.083
	Experiment II	3.12±0.128	3.26±0.043	2.91±0.068
	Experiment III	3.15±0.102	3.36±0.048	2.92±0.054
	Experiment IV	3.19±0.108	3.39±0.053	2.92±0.068
Phosphorus, mmol/l	I-control	2.80±0.072	3.13±0.005	2.87±0.074
	Experiment II	2.79±0.071	2.84±0.062	2.49±0.012
	Experiment III	2.76±0.070	2.91±0.052	2.39±0.014
	Experiment IV	2.75±0.079	2.94±0.082	2.38±0.018

The amount of aspartate aminotransferase (AST) was 4.20±0.38 mmol.s.l in the first control group, 4.16±0.14 mmol.s.l in the second experimental group, 4.15±0.15 mmol.s.l in the third experimental group, in the fourth experimental group it was 4.15±0.18 mmol.s.l, on the 30th day it was 4.02±0.21 mmol.s.l in the first control group, and 3.98±0.35 mmol.s.l in the second experimental group, 3.64±0.24 mmol.s.l in the third experimental group, 3.43±0.38 mmol.s.l in the fourth experimental group, 3.84±0.32 mmol.s.l in the first control group on 42 days, 3.84±0.32 mmol.s.l in the second it was 3.25±0.15 mmol.s.l in the experimental group, 2.74±0.18 mmol.s.l in the third experimental group, 2.56±0.25 mmol.s.l in the fourth experimental group.

On the 16th day of the experiments, the amount of aspartate aminotransferase (AST) increased by 0.95% in the second experimental group, 1.19% in the third experimental group, and 1.19% in the fourth experimental group compared to the control group. At 30 days, compared to the control group, it was 0.99% in the second experimental group, 9.4% in the third experimental group, and 14.6% in the fourth experimental group. At 42 days, compared to the control group, it showed a decrease of 15.3% in the second experimental group, 28.6% in the third experimental group, and 33,3% in the fourth experimental group.

The amount of alanine aminotransferase (ALT) was 3.12±0.9 mmol.s.l in the first control group at 16 days, 3.08±0.7 mmol.s.l in the second experimental group, 3.04±0.10 mmol.s.l in the third experimental group, in the fourth experimental group it was 3.03±0.12 mmol.s.l, on the 30th day it was 3.04±0.12 mmol.s.l in the first control group, and 2.87±0.11 mmol.s.l in the second experimental group , 2.25±0.16 mmol.s.l in the third experimental group, 2.20±0.24 mmol.s.l in the fourth experimental group, 3.01±0.18 mmol.s.l in the first control group on day 42, second it was 2.54±0.26 mmol.s.l in the experimental group, 2.14±0.24 mmol.s.l in the third experimental group, 2.08±0.32 mmol.s.l in the fourth experimental group.

On the 16th day of the experiments, the amount of alanine aminotransferase (ALT) increased by 1.28% in the second experimental group, by 2.56% in the third experimental group, and by 2.88% in the fourth experimental group compared to the control group.

5.59% in the second experimental group, 25.9% in the third experimental group, and 27.6% in the fourth experimental group compared to the control group at 30 days. At 42 days, compared to the control group, it decreased by 15.6% in the second experimental group, by 28.9% in the third experimental group, and by 30.8% in the fourth experimental group.

Glucose level was 13.28±0.16 mmol/l in the first control group, 13.28±0.16 mmol/l in the second experimental group, 13.52±0.12 mmol/l in the third experimental group, and 13.52±0.12 mmol/l in the fourth experimental group. in the experimental group it was 13.74±0.26 mmol/l, on the 30th day it was 14.58±0.12 mmol/l in the first control group, 15.02±0.11 mmol/l in the second experimental group, third experiment 15.46±0.14 mmol/l in the experimental group, 15.78±0.22 mmol/l in the fourth experimental group, 15.34±0.11 mmol/l in the first control group on day 42, 15.34±0.11 mmol/l in the second experimental group 15.98±0.17 mmol/l, 16.34±0.14 mmol/l in the third experimental group, 16.62±0.10 mmol/l in the fourth experimental group.

On the 16th day of the experiment, the amount of glucose decreased by 0.8% in the second experimental group, by 1.8% in the third experimental group, and by 3.4% in the fourth experimental group compared to the control group. 3.0% in the second experimental group, 6.0% in the third experimental group, and 8.2% in the fourth experimental group compared to the control group at 30 days. Compared to the control group at the age of 42 days, it was found to be higher in the second experimental group by 4,1%, in the third experimental group by 6.5%, and in the fourth experimental group by 8.3% (Table 5).

Table 5. Biochemical parameters of blood of broiler chickens. n±30.

Indicators	Groups	Age of broiler chicks, days		
		16	30	42
AsAT, mmol.s.l	I-control	4.20±0.38	4.02±0.21	3.84±0.32
	Experiment II	4.16±0.14	3.98±0.35	3.25±0.15
	Experiment III	4.15±0.15	3.64±0.24	2.74±0.18
	Experiment IV	4.15±0.18	3.43±0.38	2.56±0.25
AlAT, mmol.s.l	I-control	3.12±0.9	3.04±0.12	3.01±0.18
	Experiment II	3.08±0.7	2.87±0.11	2.54±0.26
	Experiment III	3.04±0.10	2.25±0.16	2.14±0.24
	Experiment IV	3.03±0.12	2.20±0.24	2.08±0.32
Glucose, mmol/l	I-control	13.28±0.16	14.58±0.12	15.34±0.11
	Experiment II	13.39±0.24	15.02±0.11	15.98±0.17
	Experiment III	13.52±0.12	15.46±0.14	16.34±0.14
	Experiment IV	13.74±0.26	15.78±0.22	16.62±0.10

Based on the data obtained from the analysis of morphological and biochemical indicators of blood, broiler chicks in all groups were clinically healthy, and no pathological processes were detected in the body. It should be noted that the best result was evident in the broiler chickens of the third and fourth experimental groups. It can be seen that kufestrol has a high pharmacostimulant effect on broiler chickens.

4 Conclusion

- When Kufestrol is used, the average daily growth of broiler chicks is 63.9 grams (25.7%), the live weight is 25.8% higher, and the viability of chicks is 98% , provides an average reduction of 0.46 kg of feed consumption for 1 kg of additional weight gain.
- Addition of kufestrol to the diet of broiler chickens increases the number of erythrocytes in the blood of chickens by 14.8%, hemoglobin by 9.74%, total protein by 13.8%, albumins by 13.7%, globulins by 13, It was noted that calcium increased by 1.4%, phosphorus by 17.0%.

- As a result of adding 20 grams of kufestrol to 1 ton of beef feed to increase the growth and meat productivity of broiler chickens, a net profit of 6.56 soums was obtained for 1 soum spent.

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