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The Effect of Chlorella Suspension on the Growth, Development and Blood Parameters of Broiler Chickens



SCIENCE BOX

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Abstract:

In this article, the growth of chlorella suspension of broiler chickens ROS-308 and the effect on their blood parameters have been experimentally studied. The chlorella suspension was found to increase the overall body weight gain of broiler chickens by 20% compared to the control group and have an effective effect on the blood count of the chickens.

Key words: *chlorella, suspension, vitamin, morphological, biochemical, mg / kg.*

Relevance of the topic. Today, as in all countries, the population of our country continues to grow significantly. As a result, the population's demand for food is growing. The main product is the cultivation and production of quality and environmentally friendly food, especially animal products. Accordingly, our government is developing a number of measures to fulfill these tasks.

In particular, the Resolutions of the President of the Republic of Uzbekistan dated November 13, 2018 "On additional measures for the further development of poultry farming" PQ-4015 and PQ-5146 dated June 14, 2021 and the Cabinet of Ministers of the Republic of Uzbekistan dated July 12, 2021 "Livestock, Government Resolution Of the Republic of Uzbekistan "On the procedure for providing subsidies to poultry and fishing for products grown and sold by them" serves as a program for the development of animal husbandry and poultry farming. One of the urgent tasks in our country is the development of poultry farming on a scientific basis and the establishment of the production of quality products with an increase in productivity in this area. Purpose of the study. Experimental study of the effect of chlorella suspension on the growth, development and blood parameters of broiler chickens of the ROS-308 breed in the meat direction.

Object and methods of experiment. The research was carried out on 75 ROS-308 broiler chickens of the Dargom Parranda Faiz poultry farm in the Pastdargom district of the Samarkand region. The daily growth of chickens was carried out on an electronic analytical balance, the determination of blood parameters - on an automatic hemoanalyzer VK-6190. The first *опытная* group received 25 goals daily ROS-308 and daily received a natural solution of chlorella suspension in the diet. Dosage 5-30 ml. [1; 6]

The second experimental group also received 25 head of day old chickens of the same breed, which were added to their daily diet with vitamin supplements. The dose is 1 ml of the vitamin mixture per 1 liter of water. A third 25-head one-day-old broiler chicks made up the control group, which were fed the nutrients indicated in the usual farm diet throughout the experiment. The experiments were carried out for 35 days

Research results and their analysis. In the first experimental group, from the first days, the diurnal development and body weight of each chick head was studied with the provision of voluntary continuous intake of chlorella solution daily. The average weight gain of chickens in this experimental group in the first 10 days was 329 grams, 905 grams at 20 days, 1565 grams at 30 days, and 1695 grams at 35 days. [3:] Experimental chickens receiving the vitamin complex with the second feed had the following increase in live weight. 10-day-old chicks weighed 326 grams, 855 grams at 20 days, 1475 grams at 30 days, and 1565 grams at 35 days. In the third control group, the indicators were 294 grams after 10 days, 735 grams after 20 days, 1245 grams after 30 days and only 1405 grams after 35 days.

Table 1 Control and experimental groups Average weight gain and development of broiler chickens (g / head)

Groups	Feeding days			
	10	20	30	35
Weight gain of chickens in the experimental group fed chlorella suspension with feed	329	905	1565	1695
Weight indices of chickens in the experimental group that received a vitamin supplement with food	326	855	1475	1565
Weight indices of chickens in the control group fed based on the total feed ration	294	735	1245	1405
Number of birds	75	75	75	75

The overall weight gain of chickens treated with chlorella solution was 11% higher than the control group and 20% higher than the control group. [2; 4; 5;]

Also, on the 30th day of the experiment, morphological and biochemical parameters were determined by taking the blood of chickens in each experimental and control group.

Blood indicators	First experimental group	Second experimental group	Control group
	Chlorella suspension has been added to the diet.	A vitamin supplement is added to the diet	The whole farm was fed on the diet.
Erythrocytes 10 ¹² g / l	4.1	3.8	2.9
Erythrocyte sedimentation rate (15 minutes)	0.32	0.30	0.20
Leukocytes 10 ⁹ g / l	38.5	35.3	30.8
Hemoglobin g / %	10.1	9.4	8.2
Bilirubin μmol / l	41.9	18.2	11.2
The activity of alanine amine transferase is mmol / s.l.	28.3	21.3	11.2
The activity of aspartate aminotransferase is mmol / s.l.	24.2	18.4	9.1
Accounting for poultry	3	3	3

Analysis of the blood parameters of broiler chickens from these experiments showed that the chlorella suspension added to the diet, in particular in the chickens of the first experimental group, positively and effectively influenced the blood parameters of the chickens of the second experimental and control groups.

Conclusions

1. Chlorella suspension provides an increase in the total weight of broiler chickens by up to 20%. Accordingly, regular feeding of chlorella in addition to broiler diets provides the basis for economic efficiency in the industry.
2. Chlorella suspension has a positive effect on the morphobiochemical parameters of the blood of broiler chickens.

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