



THE EFFECT OF CERTAIN BIOSTIMULATORS ON THE PHYSIOLOGICAL STATES OF YOUNG CHICKENS AND HENS

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Abstract

The article examines the extent to which the biostimulants Gossipren, Rex Vital and Introvit affect the survival and average live weight growth rates of young chickens, and the egg productivity of adult chickens, as well as vitamin A and carotene in egg yolk

Keywords: Chicken, chicken, gossipren, Rex vital, introvit, premix, egg, vitamin A, caroline, preservative, live weight.

Introduction

Annotatsiya:

Maqolada Gossipren, Reks Vital va Introvit biostimulyatorlari yosh jo‘jalarning saqlanuvchanlik va o‘rtacha tirik vaznining o‘shish foizlariga hamda katta yoshdagi tovuqlarning tuxum mahsuldorligiga, shu bilan birga tuxum sarig‘i tarkibidagi A vitamin, karotin miqdorlariga ta‘sir doiralari o‘rganilgan.

Kalit so‘zlari: Jo‘ja, tovuq, gossipren, Reks Vital, introvit premiks, tuxum, A vitamin, karotin, saqlanuvchanlik, tirik vazn.

Introduction:

In accordance with a number of resolutions adopted by the President of the Republic of Uzbekistan, the most prolific breeds of chickens are imported from foreign countries and bred in poultry farms and private subsidiary farms. However, they are vaccinated against infectious diseases once a week according

to the epizootic plan from the time of one-day chicks to 110-120 days of age, that is, until they are transferred to a group of large chickens. Frequent implementation of such veterinary measures leads to a decrease in the body's immune system, which leads to non-communicable diseases and a decrease in productivity.

To prevent such negative consequences, bioactive substances with immunomodulatory properties, vitamin premixes, and antibiotics are used. Currently, the importance of immunomodulators in veterinary practice is increasing.

Taking into account the above, the application of bioactive substances belonging to various chemical groups to the physiological state of young chicks and the productivity indicators of hens, as well as egg quality, as well as the production process, is considered one of the current problems.

Purpose of the study:

In a period when young chicks and adult chickens are kept in large numbers in confined spaces, under artificial lighting, and due to the poor quality of the feed provided, and the frequent absence of veterinary measures, not only hypovitaminosis, internal non-communicable diseases, but also immunodeficiency are manifested among them, which reduces the productivity of poultry. In this regard, the aim is to improve the prevention of the above-mentioned shortcomings.

Research methods

Scientific research work 100 1-day-old “Lomman LSL classic” chicks were brought from the “Nargiza-parranda” chicken farm to a small chicken coop belonging to the “Veterinary diagnostics and food safety” faculty of the Samarkand University of Veterinary Medicine, Animal Husbandry and Biotechnology, and their live weight was measured on a simple scale at once, and 4 groups were formed from them. Including: 25 chicks of the 1st comparative control group were fed with a farm diet without drugs for 30 days. As soon as 25 chicks of the 2nd experimental group were weighed on the scale, they were given 0.5 mg/kg of the Gossyprene biostimulant in their feed for 30 days. 25 chicks of the 3rd experimental group were given Rex Vital vitamin and mineral premix at a dose of 0.3 mg/kg of feed for 7 days. 25 chicks of the 4th experimental group were given Introvit premix at a dose of 2.5 mg/kg of feed continuously for 30



days. The effectiveness of the drugs was evaluated during the experiment based on the survival rate of chicks and the average percentage of live weight gain per chick. Based on the same table, Gossypren, Rex Vital and Introvit premix drugs were given to 100 adult 300-day-old laying hens of the “Lomann LSL-classic” breed and their effects on egg productivity and quality were studied. The amounts of vitamin A and carotene in eggs were determined by the Maslieva method. The Gossypren biostimulant was synthesized at the Academician S.Yu. Yunusov Scientific Research Institute of Plant Chemistry in Tashkent. Rex Vital vitamin and mineral premix is produced in the Netherlands.

The percentage of live weight gain was determined by the improved method of M.V. Krylov (1969).

Results of the study

The main goal is to improve the quality and reproduction of chicken products and the introduction of new modern technologies, including: adding vitamin premixes, antibiotics, enzyme preparations, probiotics, biostimulants and biologically active substances to the diet, improving the immune system of chicks and hens, and satisfying the population's demand for eggs and egg products.

Taking into account the above, we set ourselves the goal of studying the effects of biostimulant drugs Gossyprene, Rex Vital and Intravit on the physiological state of young chicks. For laboratory experiments of scientific research in this regard, 100 chicks of the 1-day-old “Lomman LSL Classic” breed from the “Nargiza-parranda” chicken farm were brought to the vivarium of the department and placed on bedding. 4 groups were formed from them at once.

In particular: the first, the comparative control group chicks were fed with pure feed during the 30-day experiment. The chicks of the second experimental group were given the Gossypren biostimulant at a rate of 0.5 mg/kg per chick in feed every other day for 20 days. The chicks of the third and fourth experimental groups were given the Rex Vital biostimulant at a rate of 0.3 mg/kg of feed for 7 days and the Introvit premix at a rate of 2.5 mg/kg of feed continuously for 30 days.

The effectiveness of the drugs used was evaluated based on the percentage of chick survival during the 30-day experiment and the percentage of increase in the average live weight of one chick at the end of the experiment.

The results of the 30-day experiment showed that the survival rate of the chicks in the comparative control group was 80.3%, and the live weight of one chick at the end of the experiment was 160.5% (group 1). The results are presented in Table 1.

Table 1 Effect of biostimulants on the physiological state of chicks

№	Group name	Name of drugs	Dosage	Number of chicks	Shelf life (%)	Live weight gain per chick (%)
1	Control group	-	-	25	80,3	160,5
2	Experience	Gossipren	0.5 mg/kg feed for 20 days	25	100	186,4
3	Experience	Reks Vital	0.3 mg/kg daily with food –7 days	25	100	182,3
4	Experience	Introvit premiks	2.5 mg/kg of food	25	100	184,1

When the chicks in the second, third and fourth experimental groups received the premixed biostimulants Gossipren, Rex Vital and Introvit with food and water according to the instructions, the survival rate of the chicks was 100%, and at the end of the experiment the live weight gain of each chick was 186.4-182.3-184.1%.

In order to study the effects of the biostimulants used in laboratory conditions on the egg productivity and quality indicators of laying hens, 100 hens of the 300-day-old "Lomann LSL Classic" breed were separated into 4 groups.

The first of them was a control group of 25 hens, which were continuously fed on the basis of the farm ration for 30 days of the experiment. The second experimental group was given 25 chickens each of Gossypren biostimulant at a dose of 0.5 mg/kg in their feed every other day for 20 days. The third and fourth experimental groups were given Rex Vital biostimulant at a dose of 0.3 mg/kg in their feed for 7 days, and Introvit premix at a dose of 2.5 mg/kg in their feed continuously for 30 days.

When the chickens of the second experimental group received Gossypren biostimulant every other day according to the instructions, the average egg production of the chickens within 20 days was 96.5%, the amount of vitamin A in the egg yolk was 6.2 mg, and the amount of carotene was 14.5 µg. When the chickens of the third experimental group received the Rex Vital biostimulator

according to the instructions for use for 7 days, the egg production rate of the chickens was 95.4%, the content of vitamin A in the egg yolk was 6.0 mg and the content of carotene was 13.4 mcg. When the chickens of the fourth experimental group received the Introvit premix according to the instructions, the egg production rate of the chickens within 30 days was 96.1%, the content of vitamin A in the egg yolk was 6.1% and the content of carotene was 14.2%.

The egg production rate of the chickens in the comparative control group was 84.2% within 30 days, the content of vitamin A in the egg yolk was 5.5 mg and the content of carotene was 11.1 mcg.

Conclusion:

Thus, judging from the results of the laboratory experiments, all biostimulants not only maintain the survival rate of chicks up to 100%, but also increase their live weight gain and improve the egg production and quality indicators of adult hens.

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