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THE INFLUENCE OF INTRODUCTION OF A MIXTURE OF CITRATES OF MINERAL ELEMENTS TO GROWTH, DEVELOPMENT AND MAINTENANCE OF BROILER CHICKENS

I. Kovalchuk[1], M. Tsap[2], O. Koleschuk[1], B. Kurtyak [1], G. Sobko [1], L. Romanovych[1]
[1]Stepan Gzhytskyi National University of Veterinary Medicine and Biotechnologies Lviv, Lviv, Ukraine
[2]Institute of Animal Biology NAAS, Lviv, Ukraine

Introduction

- Currently, one of the most important problems in industrial poultry farming are issues related to the provision of rational mineral nutrition and prevention of diseases of agricultural birds. Providing agricultural birds with high-quality feeds is one of the factors for improving its preservation and productivity. Development of new effective compositions of mineral elements that improve the balance in poultry diet, increase its growth, development and natural resistance of the body are relevant. The prohibition to use in the countries of the European Union of stimulating antibiotics in animal husbandry is a prerequisite for the search for alternative feed supplements. Therefore, the purpose of our research was to study the influence of the mixture I, Se, S citrate in various doses on the body of chicken broilers for introduction with water throughout the full technological cultivation cycle.

Material & Methods

The research was carried out on chickens-broilers of the cross ROSS-308. In the 7-day age, control and two experimental groups were formed, 10 individuals in each. The chickens of all groups received standard feed and drinking water from autodrinker. The vaccination of chickens was carried out in accordance with the schemes adopted and recommendations. Chickens of experimental groups to drinking water were added mixture I, Se, S citrate (I - 50 mg / L, S- 300 mg / L, Se - 60 mg / L) made by nanotechnology method. A mixture of microelement citrates was added additionally to drinking water and by aerosol feed processing without coccidiostatics. The chickens of the control group (C) received standard feed and drinking water. Chickens of E I group together with drinking water were obtained a mixture of citrates I, Se, S in the amount of 1 ml. Chickens of E II group - received feeds are treated with an aerosol mixture of citrate I, Se, S in an amount of 1 ml. Every 7 days (7-, 14-, 21-, 28-, 42- and 46-day) was controlled by body weight by weighting chickens, as well as preservation, morbidity and feed activity - daily.

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Results

Prolonged introduction of a mixture of citrates I, Se and S affects the growth and development of the organism, its resistance and metabolism for 100% preservation of the number of diseases without clinical manifestations. According to the results of the research, it has been established that for 14 days, the body weight of chicken broilers did not significantly change and was at the level of control. In the following age periods chicken-broilers of experimental groups in absolute growth prevailed control group. A similar pattern is noted in chickens broilers and on average daily body weights. In particular, the average daily increase of 1 head over the entire growing period was in E I and - 69.13 g / head, E II - 67.5 g / head. versus 65.15 g / head in the control group. During the experiment weighing poultry 7-, 14-, 21-, 28-, 42- and 46-daily age was carried out. It has been established that at the end of the experiment (46-day broilers), the largest body weight of the chickens of the experimental group. In particular, the body weight amounted to 3260 g against control 3037 g, that is, the body weight of the chickens of this group was greater than 7.34%. The body weight of the chickens of the experimental group was higher by 3% compared to the control group.

Conclusions

Thus, the influence of the complex of citrate of mineral elements on the performance of chicken broilers indicates their high biological effects.