THE INFLUENCE OF THE DIFFERENTIATED FORAGE DIET ON THE HAEMATOLOGICAL, SANGUINE BIOCHEMICAL PARAMETERS AND BIOPRODUCTIVE PARAMETERS IN BROILERS

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SUMMARY

Nutrition in general, represents the factor with a dominant influence on the health, production growth and economic efficiency, correlated to the biological potential of each production category. Concomitantly with the necessity to use the most efficient methods to grow and make profitable animal production it is necessary to know the biological role of the nutrients, the demands of the qualitative and quantitative insurance sources through different energetic, plasmatic and vitamin-mineral nutrient categories, in the complexity of the interrelations for each category and nutrient groups (1, 2, 3).

The goal of the present paper is to highlight the haematological, sanguine biochemical and bioproductive modifications in broilers caused by unbalanced ratios in the microelements.

The researches regarding the modifications of some haematological, sanguine biochemical and bioproductive indicators have been carried out on 48 broilers, the Ross 308 hybrid, divided into 4 batches (one control batch and three experimental batches) for 6 weeks. The chickens from the control batch were fed with standard fodder, whereas the chickens from the experimental batches were administered small quantities of microelements such as: for the first batch it was assured only 75% of the necessary microelements; for the second batch it was assured 50% of the necessary microelements and for the third batch it was assured 25% of the necessary microelements. In order to know how much, the chickens gained in weight they were weighed on the first day of life, then after two weeks of age, four weeks and 6 weeks.

The haematological parameters: haemoglobin (+25%), the HEM (+19.2%), leucocytes (+13.5%) and thrombocytes (+76.5%) are significantly higher (p<0.01) in the control batch in comparison with the experimental batch E₁ where the microelements level has decreased at 75% from the necessary one.

In case of the sanguine biochemical parameters (proteinemia, albuminemia, calcemia, phosphoremia and magnesemia) albuminemia (+21%) and phosphoremia (+5.9%) are significantly increased (p<0.05) in the control batch in comparison with the experimental batch E₁ where the microelements level has decreased at 75% from the necessary one.

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The broilers’ weight from the control lot at the end of the experiment was higher compared to the chickens’ weight from the experimental batches.