MODELING THE BROILER CHICKENS GROWTH PROCESSES USING THE ENRICHMENT OF THE DIET BY NANOMICROELEMENT FEED SUPPLEMENT «MICROSTIMULIN» DURING THEIR FATTENING

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The performance of nanomicroelement feed supplement "Microstimulin" on broiler chickens productivity during their feeding has been analyzed. Using of biocide and nutrients nano-akvahelates of metals: Ag, Cu, Zn, Mg, Co et al., which not only replace antibiotic growth promoters, but also provide significant complex biological-stimulating effect during feeding of broiler chickens. They show a much higher bioavailability trace elements in the poultry in comparison with trace elements, which are made from sulfates or gowns.

The subject of the study – broiler chickens cross Cobb 500, slaughter age – 42 days. Over the life of chickens fed dry complete feed produced by company LLC "Feed life" (basic diet). Broiler chickens from 1-st to 18-th day ate starting feed, from 19-th to 37-th day – feeding feed and after 38-th to the 42-th day – finishing feed.

For research has been used "Microstimulin", produced by LLC "Nanomaterials and Nanotechnology" (Ukraine) according to the Technical requirements of Ukraine, the composition of which has been obtained by Kaplunenko-Kosinov method, at a doses: citrate of Zn of 200,0 mg per 1 liter of solution; citrate of Cu – 100.0 mg per 1 liter; citrate of Ag – 50,0 mg per 1 liter; citrate of Co – 50.0 mg per 1 liter; citrate of Ge – 50.0 mg per 1 liter; and citrate of Mg – 2,4 mg per 1 liter.

To chickens of the first experimental group was added to drinking water "Microstimulin" in concentration 1.0 ml to 1 liter of drinking water for five days in a row, at intervals of five days; chicks of the second experimental group – 10.0 ml per 1 ml; the third group – 20.0 ml to 1 liter. Chickens of the control group received the basic diet. All broilers chickens of both control and experimental groups had free access to the water and feed.

Chickens have been weighed during the whole study period and after slaughter, then the dynamics of body weight's changes in postnatal ontogenesis has been analyzed.

Statistical analysis of the results has been performed using the methods of variation statistics, regression and correlation analysis, and methods of statistical hypotheses testing.

It has been shown that the addition of the "Microstimulin" to the diet at concentrations of about 1 – 10 ml per 1 liter of drinking water leads to essential increase of their body weight. The maximum effect has been obtained at low concentrations of the order 1 ml per liter.

Broiler chickens, nanomicroelement feed supplement "Microstimulin", body weight.