Performance of Broilers as Influenced by Supplementation of Iron and Citric Acid

ABSTRACT

Studies on ‘Performance of Broilers as Influenced by Supplementation of Iron and Citric Acid’ were conducted to evaluate the effects of four different levels of iron (60, 80, 100 and 120 mg.) four different levels of citric acid(0.2, 0.4, 0.6 and 0.8%) and their combination on the growth performance of broiler chicks. There were 24 treatments and control, which contained neither iron nor citric acid. The parameters studied were body weight, weight gain, feed intake and feed conversion ration for five weeks. The results showed that there were no significant differences among the fortified diets and the control. The body weight each week showed non-significance among the treatments but increased body weight as the chicks grew older was just an indication that the chicks had a normal growth rate. This was also reflected in the weight gain, which had no significant differences in all the weeks. Although there were significant differences among the treatments for feed intake up to 2 weeks, the control T₀ was not significantly different from the most consumed treatment. The feed conversion ration showed significant differences among the treatments during the first 3 weeks of growth but at the end, no treatment was superior to each other. Finally, the supplementation of the diets with iron and citric acid may have had a positive effect on the health of the birds, since there was no mortality. It could be considered as a good option to fortify broiler diets in order for farmers to produce healthy broilers.

Keywords: broiler, growth performance, iron, citric acid