

THE IMPACT OF USE OF ORGANIC ACIDS IN BROILER PRODUCTION

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More than 70% of the total cost for rearing poultry is incurred on feed alone. Therefore, different types of growth promoters are used in broiler industry to increase the efficiency of feed utilization. Antibiotic growth promoters are widely used but it creates many limitations. Antibiotic growth promoters have been under scrutiny for many years and have been removed from the market by the regulatory authorities in many countries. As a result, the industry has been actively looking for other alternatives to replace antibiotics. Organic acids appear to offer a promising alternative to antibiotics. The experiment was conducted with day-old broiler chicks to study the effect of organic acids (Lactic acid, Fumaric acid, Citric acid, Formic acid) in broilers. The organic acids (OAs) were evaluated from the age one to 42 days, in an experimental design with two treatments and a control. Four replications of seven birds each were used. Two levels of OAs [0.2ml / 1 liter of drinking water (0.02%) and 0.4ml/ 1 liter of drinking water (0.04%)] were supplied through drinking water. Live weight and feed intake were observed weekly and mortality daily. Live body weight, body weight gain and feed conversion ratio (FCR) were affected ($P < 0.05$) by the inclusion of OAs, but feed intake and mortality were not ($P > 0.05$). The 0.02% level of OAs in the drinking water showed highest live body weight, body weight gain and lowest FCR. The 0.02% level of OAs also contributed to higher profit than 0.04%. The inclusion of 0.02% OAs in the drinking water resulted the better performance than 0.04% level and the untreated birds.

Key words: Antibiotics, Organic acids, Cost, chicken, Performance