

ABSTRACT

M.Sc. Thesis

EFFECTS OF GLYCEROL AS A BY-PRODUCT OF BIODIESEL ADDED TO MIXED FEEDS ON BROILERS

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This study was to be intended to determine the possible effects of crude glycerol on the fattening performance, some blood parameters and the fatty acids content of abdominal fat of broilers. The diets containing 0 (Control), 4 and 8% crude glycerol was prepared in the experiment. The total of 360 Ross 308 broilers was used. The experiment was carried out for 42 days.

In this study, the live weights of groups containing glycerol at the first four weeks of the experiment with the live weight gains containing glycerol at the 1st, 2nd and 4th weeks were found higher than the control group ($P < 0.05$). While the live weights of groups consumed diets with glycerol at the 5th and 6th week were numerically found higher than control group, the live weight gain of control group at the same weeks was also numerically higher than the other treatment groups. During the experiment, only at the 2nd week the feed consumptions of groups containing glycerol were found more important than control group ($P < 0.05$). The best feed conversion ratio of groups containing glycerol only at the 4th week was seen ($P < 0.05$). The different glycerol levels mixed in diets were not statistically affected the blood trygliceride, total glucose and cholesterol of broilers. It was found that only eicosenic acid at the abdominal fat of male broilers and also only saturated fatty acids of females were different ($P < 0.05$). In a result, while the feeds containing 4 and 8% glycerol level positively affected the fattening performance of broilers at the first 4 weeks, the blood parameters and the fatty acids profile of abdominal fat were not statistically significant.

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Key Words:

Broiler, crude glycerol, blood parameters, fatty acids.