

Abstract

This study was performed to investigate the effect of different levels of guar meal in diet of broiler on performance of grower and finisher periods. A total of 160 day- old Ross 308 broiler chicks were randomly distributed among 4 replicates in (10 birds per each) of 4 experimental treatments. The experimental treatments consisted of a control group and 3 levels of guar meal 2.5, 5, 7.5 percent respectively.

At the end of each periods, two randomly-selected birds per replicate were slaughtered to evaluate carcass characteristics. Results showed that using guar meal in diet of broiler significantly increased final body weight and weight gain in experimental group than control group ($P < 0.01$). Feed intake was significantly higher in 2.5 percent guar meal treatment than other groups in grower period ($P < 0.05$). Feed conversion results showed that differences between control group and experimental groups is significant ($P < 0.01$).

At the second treatment with 2.5 percent guar meal carcass weight, the relative weight of breast and thigh weight was increased significantly ($P < 0.01$).

After adding guar meal to finisher diet at 2.5 percent carcass weight significantly increased but the relative weight of the breast at 7.5 percent and the relative weight of the thigh at 2.5 and 5 percent was significant ($P < 0.05$). Although carcass characteristics (relative weight of liver, crop, heart, spleen and pancreas) weren't influenced by experimental treatments. In all experimental groups abdominal fat was lower than control group and it was significant ($P < 0.05$). The present finding suggest that by using guar meal in diets, abdominal fat was decreased but at 2.5 percent differences was significant ($P < 0.01$) in compared with control group in both grower and finisher periods.

Key words: Guar meal, Broiler, Performance, Grower, Finisher



University of Zabol
Graduate school
Faculty of Agriculture
Department of Animal Science

**The Thesis Submitted for Degree of Master of Science
(in the field of Poultry Breeding and Production Management)**

Effect of Different Levels of Guar Meal in Diet on Performance of Broiler Chickens in Grower and Finisher Periods

Supervisor:
Dr. K. Shojaeian

Advisors:
Dr. Gh. Jalilvand
Dr. A.R. Hesabi

By:
M.Fashaei
October 2011