Abstract

A 84-d experiment, utilizing 12 male lambs (average body weight 24 ± 2.4 kg; 190 ± 7 days old), was conducted to study of different levels of clinoptilolite (CL) or (natural zeolite) on performance and carcass characteristics. The dietary treatments were the basal diet (BD) as control, (0% CL) and BD plus 2 and 4% (CL) on dry matter basis. A complete randomized desing was employd in this research. The lambs were fed the total mixed rations (TMR) individually ad-libitum. At the end of experiment, 50 percent of lambs were slaughtered, and carcass physical composition and chemical composition of boneless 10-11-12th ribs were measured. Nutrient digestibility were determined by the *in vivo*. The results showed that ADG (P>0.01), DMI (P>0.05) were significantly improved by clinoptilolite. The lambs which recived the 4 and 0 % clinoptilolite diet had respectively the highest and lowest ADG (163.46 and 152.14) and DMI (1.31 and 1.25). FCR was not affected by dietary treatment, although it tended to be improved by addition of clinoptilolite to the diet. Apparent digestibility of CP (P> 0.01), EE and ADF (P> 0.05) were significantly affected by dietary treatment. Apparent digestibility of DM and NDF improved by addition of clinoptilolite to the diet, but it was not significantly affected by dietary treatment. Carcass weight, dressing percentage were not affected by dietary treatments, although they tended to the be increased by addition of clinoptilolite to the diet. Average CP% (0.01), CP/EE ratio and ash bone 10-11-12th ribs (0.05), increased by clinoptilolite to the diets. These finding indicted that, under the condition of this experiment, the of addition 4% clinoptilolite in diet increased lambs performance and carcass characteristics.

Key words: Clinoptilolite, Performance, Carcass, Finishing lambs, Baluchi sheep

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Effect of Different Levels of Clinoptilolite on Performance and Carcass Characteristics in Finishing Baluchi Male Lambs

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