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## **Effects of Feeding different levels of Fodder Beet on fattening Performance and carcass traits and blood metabolites in Fattening Lambs**

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### **Abstract**

This research, entitled "Effects of Feeding different levels of Fodder Beet on fattening performance and carcass traits and Blood Metabolites in Fattening Lambs", was conducted to provide high-yield and fresh fodder in autumn and winter. In this experiment, a randomized complete block design (RCBD) was used. thirty-two male lambs were divided into four blocks and four dietary treatments based on the initial weight (21.75 to 33.70 kg) with five to six months ages. During 84 days, after seven days habituation to experimental diets, four treatments and four replicates were run per treatment at the research station of Boroujerd Agricultural and Natural Resources Research and education center. Experimental diets with zero replacement rate (control), 10, 20 and 30 percent of fodder beet (based on DM) with a ratio of 60% concentrate and 40% fodder based on TMR was set up and were given to the animals twice a day. Growth of lambs was measured and at the end of the experimental period, 4 lambs from each experimental group were slaughtered for carcasses traits evaluation. The ADG at the end of the third month was not significantly different between the groups, total ADG, in group had 20% fodder beet was less than the other groups, but the other groups were not significantly different from each other. There was no significant difference in feed conversion ratio between the experimental groups. The feed intake for the whole period and the amount of feed intake per day were the lowest in the group that received 30% of fodder beet. There was no significant difference between the slaughter weight and EBW of lambs in different groups. Hot and cold carcass weights as well as dressing percentage did not show significant differences between different groups. There was no significant difference in cooking loss, drip loss, eye muscle area, dorsal fat thickness, biological dressing percentage, commercial dressing percentage, yield grade and KPHF percentage between the experimental groups. With increasing the percentage of fodder beet in the diet, eye muscle area trended to increase. Also, there was no significant difference in the blood urea level of lambs. The amount of triglyceride trended

to decrease with increasing the level of fodder beet in the diet. Using fodder beet increased the hemoglobin of blood. The results of this study showed that fodder beet can be used in the diet of fattening lambs up to 30%, although additional research is needed to determine its optimal level in the diet.

**Keywords:** Fodder Beet - Fattening Male Lambs - Blood Parameters, Growth Performance .