



MINISTRY OF JIHAD-E-AGRICULTURE

Agricultural Research, Education and Extension Organization

Agriculture and Natural Resources Research and Education Center of Ilam

The effect of nutritional supplementation on quantitative and qualitative characteristics of Kurdi sheep's wool of nomadic flock in Ilam province

Research worker: Yahya Abaspour

Abstract

This study was conducted to investigate the effect of supplementary feeding of energy, protein and minerals on reproductive characteristics, quantity and quality traits of wool of nomadic flocks in the Eyvan and Dehloran areas. Dietary treatments of each area were complementary feed and control (without complementary feed) that were compared with t test. The results showed that average fleece weight in the nomadic flock of Dehloran in the supplement and control groups, were 1.91 and 1.56 kg respectively, and in the Eyvan were 2.30 and 1.98 kg that difference between them was significant ($p < 0.05$). The mean of the wool fiber diameter of Dehloran nomadic flock in the supplement and control groups were 30.92 and 30.34 μm , and in the Eyvan were 31.65 and 31.66 μm respectively, that differences between them were not significant. The mean of the wool tenacity of Dehloran nomadic flock in the supplement and control groups were 8.31 and 6.88 grf/tex, and in the Eyvan were 8.01 and 7.31 grf/tex respectively that had significant differences ($p < 0.05$). Wool efficiency of Dehloran nomadic flock in the supplement and control groups were 69.28 and 67.04%, and in the Eyvan were 71.28 and 67.15% respectively, that there was no significant difference between groups. The results of reproductive performance showed that fertility and lambing of animals received dietary supplements in Dehloran region were 100 and 106.67%, and in the control group were 93.33 and 73.32% respectively, that significant difference was observed between two dietary groups ($p < 0.05$). The average of fertility and lambing of animals fed dietary supplement in Eyvan region were 100 and 100%, and in the control group were 93.33 and 86.68% respectively, that significant difference was observed between two groups ($p < 0.05$). The mean of birth weight of lambs in the supplement and control groups for the Dehloran were 4.52 and 4.14 kg, and for Eyvan were 4.16 and 3.80 kg respectively, that difference between two groups was significant ($p < 0.05$). The average of weaning weight of lambs in the supplement and control groups for the Dehloran were 20.99 and 17.87 kg, and for Eyvan were 20.06 and 17.07

kg respectively, that difference between two groups was significant ($p < 0.05$). In general, according to the results of this experiment the use of complementary feed improved reproduction performance and wool characteristics of sheep in the nomadic flocks.

Keywords: sheep wool, quantitative and qualitative traits, reproduction characteristics, nomadic flock.

Title: The effect of nutritional supplementation on quantitative and qualitative characteristics of Kurdi sheep's wool of nomadic flock in Ilam province.

Approved No: 4-39-13-91166

Research Worker: Yahya Abaspour

Research Fellow(S): H. Jafari, S. Varmaghani and A. M.Tehrani.

Research Institute/Center: Agricultural and Natural Resources Research and Education Center of Ilam Province

Publisher: Animal Science Research Institute (ASRI)

Circulation:

Date of Publishing:

This Scientific work has been registered with the registration number of 54817 12/jan/2019 in the Agricultural Information and Scientific Documents center.

All rights reserved. No Part of this Publication may reproduce or transmitted without the original reference.