MINISTRY OF JIHAD-E-AGRICULTURE

Agricultural Research, Education and Extension Organization

Agriculture and Natural Resources Research
And Education Center of Chaharmohal and Bakhtairi Province

The assessment of carcass composition of Lori-Bakhtiari, Romanov ×Lori-Bakhtiari, Pakistan×Lori-Bakhtiari lambs and synthesis between their

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Abstract

This study was conducted to investigate the performance of growth, ultrasonic and needle measurement of soft tissue depth and carcass traits of Lori-Bakhtiari, Romanov × Lori-Bakhtiari, Pakistani × Lori-Bakhtiari, F2 (Romanov × Lori-Bakhtiari) and F1 (Pakistani × Lori-Bakhtiari) × F1 (Romanov × Lori-Bakhtiari) crossbred lambs during four years. Carcass characteristics of Lori-Bakhtiari (n=50), Romanov × Lori-Bakhtiari (n=41) and F2 (Romanov × Lori-Bakhtiari) (n=22) crossbred lambs were used. Lambs were weaned at the age of 90 ± 5 days. Lambs were slaughtered at six month of age. Data were analyzed using GLM procedure of SAS software. The results showed that birth weight in Lori-Bakhtiari (5.12 kg) were significantly (P<0.05) higher than in Romanov (4.81 kg) and Pakistani (4.57 kg) crossing with Lori-Bakhtiari. Weaning weight and body weight in six months were significantly (P<0.05) in Romanov × Lori-Bakhtiari crossbred lambs (30.96 and 42.75, respectively) were significantly (P<0.05) higher than in Lori-Bakhtiari (28.81 and 41.69, respectively) and others genetic compositions. Pakistani × Lori-Bakhtiari crossbred lambs had the lowest weaning weight and body weight in six months (25.49 and 33.69 kg, respectively) than in Lori-Bakhtiari and others genetic compositions and were not significantly different (P>0.05) with F2 (Romanov × Lori-Bakhtiari) and F1 (Pakistani × Lori-Bakhtiari) × F1 (Romanov × Lori-Bakhtiari) crossbred lambs (27.12, 36.87 and 27.37 and 39.22 kg, respectively). Depth of soft tissue from ultrasound and needle in six months in Lori-Bakhtiari lambs (8.29 and 7.54 mm) were significantly (P<0.05) higher than in Romanov × Lori-Bakhtiari (7.90 and 6.93 mm) and F2 (Romanov × Lori-Bakhtiari) lambs (4.88 and 4.38 mm). In constant weight and age, Romanov × Lori-Bakhtiari and F2 (Romanov × Lori-Bakhtiari) crossbred lambs for lean percentage were significantly (P<0.05) higher than in Lori-Bakhtiari lambs. Romanov × Lori-Bakhtiari and F2 (Romanov × Lori-Bakhtiari) lambs had not significantly different (P>0.05) for lean percentage. Weight and percentage of fat-tail and total fat carcass in Lori-Bakhtiari lambs were significantly (P<0.05) higher than in Romanov × Lori-Bakhtiari and F2 (Romanov × Lori-Bakhtiari) lambs in constant weight and age. Weight and percentage of subcutaneous fat carcass in Lori-Bakhtiari lambs were significantly (P<0.05) higher than in Romanov × Lori-Bakhtiari lambs in constant weight, but had not significantly different (P>0.05) between Lori-

Bakhtiari and F2 (Romanov × Lori-Bakhtiari) lambs. While weight and percentage of internal fat in abdominal cavity and intermuscular fat in LoriBakhtiari were significantly (P>0.05) lower than in Romanov × Lori-Bakhtiari and F2 (Romanov × Lori-Bakhtiari) lambs in constant weight. In concluded, crossbreeding between Romanov and Lori-Bakhtiari (F1) improves weaning weight, body weight in six months and carcass composition.