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Evaluate the performance of lambs resulting from Kordi ewes crossed with Baluchi and Karakul rams

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Abstract

The aim of this study was to evaluate the effect of crossbreeding on pre- and post weaning and carcass composition of purebred and crossbred lambs. Thus, two genetical groups such as purebred Kordi lambs (KK) and Kordi*Romanov lambs (KR) were used. The reproductive performance of ewes and preweaning performance of lambs was examined. The fattening of lambs in post weaning period was done for 90 days. Metabolizable energy, chemical composition and dietary components were equalled. The diets were offered to the lambs as total mixed, twice daily and ad libitum. For carcass analysis, six lambs from each group were selected and slaughtered. Data were analyzed with GLM procedure using SAS 9.2. Means were compared via least square means and Duncan test ($P < 0.05$). Results showed that ewes mated with Kordi rams had the highest fertility efficiency (95%). The number of weaned lambs for KK and KR were 95, 45 respectively. Birth and weaning weights of lambs were significantly affected by the genetical groups ($P < 0.05$). KK purebred lambs had the highest and KR crossbred lambs had the lowest birth weight (4.5 vs. 4.1 kg, respectively). According to the results, KR lambs had higher average daily gain than KK purebred lambs ($P < 0.05$). Dry matter intake of KK purebred lambs (1250.9 g/d) compared to KR crossbred lambs (960.7 g/d) were higher ($P < 0.05$). The mean of body live weight of fattening lambs in KK group than KR groups were significantly higher (54.8 vs. 41.5 kg, respectively). The genetical groups had no significant effect on cold and hot carcass weights ($P > 0.05$). The effect of crossbreeding on fat thickness, fat-tail, and leg was significant ($P < 0.05$). Weights of neck, sirloin, flank and shank of lambs were not significantly affected by the genetical groups ($P < 0.05$). Performance of KK group had better than KR genetic groups.

Keyword: Crossbreeding, Kordi sheep, Romanov sheep, Growth, Carcass compositions