

SUMMARY

This study was carried out to investigate the production traits of Akkaraman, Kıvrıkcık x Akkaraman F₁, F₂, B₁ (KAF₁, KAF₂, KAB₁), Sakız (Chios) x Akkaraman F₁, F₂ and B₁ (SAF₁, SAF₂, SAB₁) genotypes reared in Lalahan Livestock Research Institute in Central Anatolian region. The region has continental climate conditions. The study has been conducted between 1997-2000 years.

Fertility results of Akkaraman, SAF₁ and KAF₁ were determined to be 71.43, 69.23 and 65.24 % for birth rates, and 1.29, 1.22 and 1.35 for litter size, respectively. The survival rates of Akkaraman, KAF₂, KAB₁, SAF₂ and SAB₁ lambs at weaning (90 days) were 88.89, 100.00, 96.67, 84.51 and 93.62 %, respectively. The least squares means obtained for Akkaraman, KAF₂, KAB₁, SAF₂ and SAB₁ lambs were 4.36, 4.34, 4.11, 4.17 and 4.05 kg for birth weight, 21.14, 20.31, 19.59, 20.24 and 19.92 kg for weaning weight, 31.94, 29.39, 30.31, 30.49 and 30.11 kg for female lambs at 180 day weight; and for body measurements 55.35, 54.77, 53.15, 55.64 and 56.95 cm for wither heights, 58.47, 56.75, 55.88, 57.33 and 58.82 cm for body lengths, 67.79, 64.17, 64.01, 63.02 and 63.74 cm for chest girths, and 38.27, 25.25, 17.59, 28.27 and 24.49 cm for the widest circumference of the tail at weaning, respectively.

Akkaraman, KAF₂, KAB₁, SAF₂ and SAB₁ ram lambs were fattened from 20 kg to 45 kg live weight. Lambs were fed with alfaalfa hay restrictively and concentrated *ad libitum*. The average of daily live weight gain were found as 299, 286, 289, 292 and 287 g in 1999, and corresponding means for 2000 were 298, 285, 299, 298 and 291 g. Concentrate consumption for 1 kg of live weight gain were found as 4.49, 4.24, 4.21, 4.40 and 4.49 kg in 1999, and corresponding means for 2000 were 4.51, 4.38, 4.36, 4.42 and 4.55 kg, respectively. Lambs were slaughtered at 45 kg live weight for

evaluating carcass characteristics. Cold carcass weight were 22.95, 22.57, 22.29, 22.69 and 21.77 kg, and dressing percentage were 49.28, 48.89, 48.18, 49.15 and 46.79 %, respectively. The ratios of legs were 30.68, 31.64, 31.99, 31.15 and 31.31 %, the ratios of shoulder were 15.94, 16.27, 16.80, 16.25 and 17.91 % and the ratios of loin were 6.30, 8.52, 8.72, 7.41 and 7.39 %, the ratios of lean, fat and bone were 46.36, 13.89 and 21.57 % for Akkaraman, 51.77, 18.63 and 21.21 % for KAF₂, 52.18, 18.17 and 21.62 % for KAB₁, 50.67, 14.72 and 22.57 for SAF₂, 49.60, 16.58 and 24.68 % for SAB₁, respectively.

Daily milk yield, lactation milk yield and lactation length in the first lactation were 340 g, 50.52 kg and 144.8 days for Akkaraman, 302 g, 44.93 kg and 145.4 days for KAF₁, 431 g, 67.83 kg and 154.63 days for SAF₁ ewes, respectively. Differences between genotypes for daily milk yield, and lactation milk yield were statistically significant ($P < 0.05$).

The results of the study showed that crossbred genotypes of K1vircik x Akkaraman and Sakız (Chios) x Akkaraman in Central Anatolian conditions could be used as a female lines for lamb production.