THE ACCUMULATIVE EFFECT OF FINNSHEEP BREEDING IN CROSSBREEDING SCHEMES: GROWTH AND CARCASS TRAITS

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Entire male lambs born in 1980 and 1981 were fed ad libitum for 8 wk a ration of grass and legume silage supplemented with grain mixture. The lambs represented the DLS breed (Dorset-Leicester-Suffolk) and six of its crosses with the Finnsheep rams (F) ranging from 1/8F to 6/8F. The lambs were slaughtered at about 43 kg liveweight and measurements of length, heart girth and circumference of leg were taken on the chilled carcasses. The carcasses were then divided into leg, loin-rack and shoulder cuts and each was expressed as a percentage of the whole weight. Kidney and pelvic fat were separated and weighed. The 12th rib cut was dissected into fat, bone and muscle and the percentage of each was calculated. The area of the two loin-eye muscles of the 12th rib and three measurements of backfat over that muscle were measured and averaged. The percent fat in the loin-eye muscle was determined by ether extraction. Birth weights were heaviest in DLS and 1/8F (P<0.01) and decreased with the increase in the Finn proportion in the cross. At weaning (adjusted for 70 days) the 4/8F cross was the heaviest (23.2 kg) whereas the 6/8F was the lightest (20.2 kg). Little difference was observed between genetic groups in feed conversion. However, 6/8F and 5/8F groups made the fastest gain on test (P<0.01). There was a difference between years in the gain made during the 8-wk feeding test probably as a result of changes in the feeding levels. The differences among genetic groups in age at slaughter were nonsignificant. The Finn crosses had generally longer and deeper carcasses than the DLS which in turn showed more leg development than most crosses. Although dressing percentage increased slightly with the increase in Finn proportion, it was relatively low ranging from 41.2 to 44.1%. DLS and 1/8F lambs had higher percentages of leg and lower percentages of shoulder than crosses with high Finn proportions. These latter had higher percentage of kidney fat. DLS lambs had higher percentages of lean and bone and lower percentages of fat in the 12th rib than the Finn crosses. They also had a larger area of loin-eye than most crosses and thinner backfat than all crosses. The only characters which showed a linear trend with the increase in Finn proportion were those related to body fat deposition.

Key words: Finnsheep crosses, growth, carcass traits, DLS sheep