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## Comparative performance of Friesian-Sahiwal crossbreds and Sahiwal steers on Naivasha star grass in Kenya

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**Key words :** performance ,Friesian-Sahiwal ,star grass ,Kenya

**Introduction** Dual-purpose cattle can be utilised to exploit the production potential of tropical grasslands in Kenya for meat production . Although the Sahiwal is adapted to these grasslands its productivity is low . In order to increase beef productivity , the Sahiwal has been crossed with Friesian to produce Friesian-Sahiwal crossbreds ( McDowell et al . ,1996 ; Muhuyi et al . , 2005) which are adapted to the tropical environment .The objective of this study was to evaluate the performance of the Sahiwal and Friesian-Sahiwal crossbred steers .

**Materials and Methods** Data were obtained from Sahiwal and Friesian-Sahiwal crossbred steers at Naivasha Research Centre . Cattle were grazed on Naivasha star grass ( *Pennisetum plectostachyum* ) .Calves were born throughout the year and birth weight was recorded .Weaning occurred at three months of age at and average weight of 56 kg .Besides milk ,calves were grazed on pastures from the second month after rephrase birth .Performance traits were analysed using GLM ( spell out) procedures (SAS 6 2 ,1998) .

**Results** Birth weight of Friesian-Sahiwal crossbreds was heavier than for the Sahiwal (  $P < 0 .05$  ) ,with mean value of  $25 .82 \pm 3 .49$  and  $20 .50 \pm 2 .88$  ,respectively .Weaning weight was fitted as a covariate of age at weaning and post weaning growth rate . Age at weaning was slightly different (  $P = 0 .094$  ) with mean values of  $113 .09 \pm 20 .31$  and  $145 .50 \pm 47 .13$  days and growth rates from birth to weaning were  $278 .36 \pm 55 .10$  and  $262 .90 \pm 72 .11$  g/day for Friesian-Sahiwal and Sahiwal ,respectively . Growth rate from weaning to slaughter weight was different (  $P < 0 .05$  ) for the two genotypes and they were slightly different in slaughter weight ( Table 1) .

**Table 1** Performance of Friesian-Sahiwal and Sahiwal steers .

Traits	Sahiwal	Friesian-Sahiwal
Growth rate from weaning-slaughter (g/day)	$208 .05 \pm 131 .74$	$345 .02 \pm 52 .37$
Age at slaughter (months)	$43 .42 \pm 5 .95$	$40 .80 \pm 5 .84$
Slaughter weight (kg)	$404 .75 \pm 13 .40$	$431 .50 \pm 28 .37$

**Conclusions** The crossbred genotype showed improved performance for all the traits . Friesian-Sahiwal crossbreds grew faster than the Sahiwal and attained heavier slaughter weight relatively early . Growth rate can be improved by grazing steers on good quality star grass pastures and supplemented with energy ,mineral and protein concentrates so that they can attain slaughter weight early and produce high carcass quality . Since Friesian-Sahiwal crossbreds have high overall productivity ,their utilization is of economic importance in beef production systems in marginal areas of Kenya .

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