

Abstract

A total of 1599 dairy records comprised of 710 calving interval and number of services per conception, and 179 age at first calving records were used to evaluate the performance of dairy cow kept at the University of Nairobi farm, Kanyariri, from 1989 to 2001. The data were analysed using fixed models with breed, year, season, parity and lactational length. The least squares means for the calving interval, number of services per conception and age at first calving were 452 ± 22.4 days, 1.56 ± 0.12 , and 36.2 ± 0.51 months, 444.5 ± 29.3 days, 1.7 ± 0.19 and 33.4 ± 1.5 months and 465 ± 31.1 days, 1.67 ± 0.20 , and 33.6 ± 1.4 months for Friesian, Ayrshire, Guernsey and Jersey, respectively. Year of calving had significant effect on calving interval and number of services per conception, while year of birth and breed significantly affected age at first calving. The phenotypic trends for the traits studied showed undesirable trends, but their respective regressions on year were not significant. The results indicate breed differences in age at first calving and indicate the need to investigate the casual components of the phenotype.