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**LIVESTOCK PRODUCTION AND RURAL
DEVELOPMENT FOR BETTER LIFE IN THE
NINETIES**

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ESTIMATION OF 305-DAY YIELD FROM TOTAL MILK YIELDS IN BUNAJI AND FRIESIAN-BUNAJI CROSSES

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Lactation data of 207 cows comprising 91 Bunaji and 116 Friesian x Bunaji crosses milking for over 305 days were collected and analysed on the basis of the following variables: Average daily yield (ADY), actual 305-day yield (305-Y), total yield (TY) and lactation length (LL). The objective was to fit a suitable equation that would estimate 305-day yield from TY and to develop estimation factors.

The linear regression equations for estimating 305-day yield from TY are $Y = 185.229 + 0.804TY$ ($R^2 = 0.971$) and $Y = 366.176 + 0.775TY$ ($R^2 = 0.827$) for Bunaji and Friesian x Bunaji cows respectively. Various combinations of TY, ADY and LL were used in multiple regressions to estimate 305-day yield with R^2 values of over 90%. Factors for the estimation of weight records at birth, and at 3, 6, 9 and 12 months of age of half Friesian-Bunaji cows that calved over a twenty-three year (1967-1989) were computed. Least squares means \pm S.E. of LL, TLY, 305DY, DDRY, AFC and CI were 250.563 ± 5.8 days, 1988.695 ± 108.7 kg, 2420.756 ± 93.8 kg, 102.333 ± 2.5 days, 35.638 ± 2.3 months and 390.312 ± 3.7 days, respectively. Parity, season and year of calving significantly affected LL, TLY ($P < 0.01$) and 305DY ($P < 0.05$), but not CI. DDRY was only affected by season of calving ($P < 0.01$). Year of birth was highly significant ($P < 0.01$) in affecting body weights at all ages, while month of birth was not. Season of birth was significant ($P < 0.05$) for birth weight and body weights at 3 and 6 months of age.