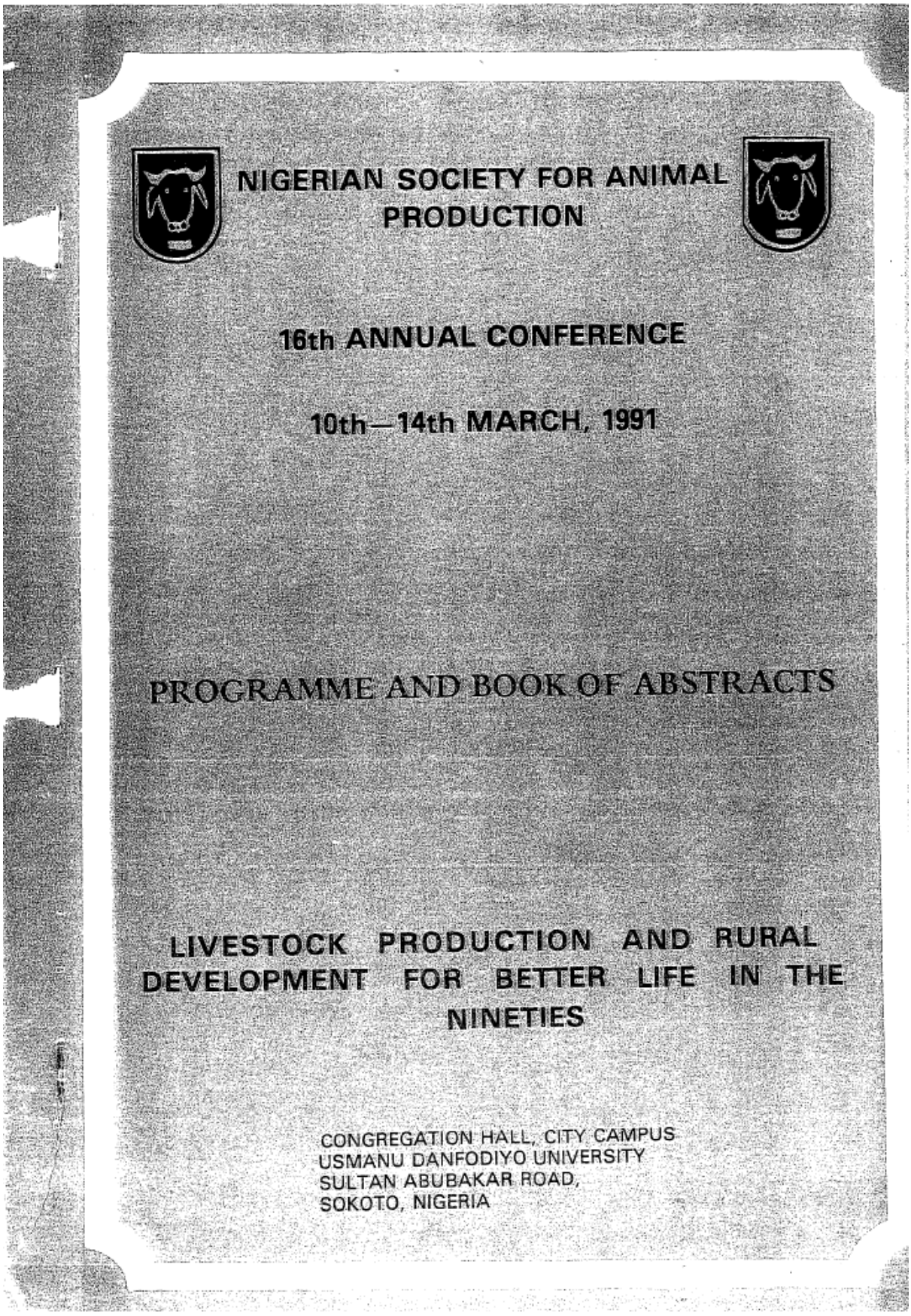
Proceedings of the 16th Annual Conference of the Nigerian Society for Animal Production, 10-14 March 1991, Usmanu Danfodiyo University, Sokoto, Nigeria



NIGERIAN SOCIETY FOR ANIMAL PRODUCTION

16th ANNUAL CONFERENCE

10th—14th MARCH, 1991

PROGRAMME AND BOOK OF ABSTRACTS

LIVESTOCK PRODUCTION AND RURAL DEVELOPMENT FOR BETTER LIFE IN THE NINETIES

CONGREGATION HALL, CITY CAMPUS
USMANU DANFODIYO UNIVERSITY
SULTAN ABUBAKAR ROAD,
SOKOTO, NIGERIA

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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 ± 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.