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PROGRAMME AND ABSTRACTS OF PAPERS

EFFECTS OF SOME ENVIRONMENTAL FACTORS ON BIRTH WEIGHT AND LITTER SIZE IN RED SOKOTO GOATS

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Data on 1014 birth weight and 627 kidding records of Red Sokoto goats under semi-intensive system of management over a period of 5 years (1987-1991) were analysed for the effects of parity, sex, season and year of birth on birth weight (BW) and those of parity, season and year of birth on litter size (LS). The overall least square means \pm S.E. for BW and LS were 1.41 ± 0.02 kg and 1.69 ± 0.05 respectively. BW was significantly affected by parity, sex, season and year of birth ($P < 0.01$). LS was significantly affected by parity ($P < 0.01$) but not by season and year of birth ($P < 0.05$). Kids born in early dry season (Oct-Dec) had the highest BW of 1.48 ± 0.03 kg compared to other seasons ((late dry (Jan-Mar) 1.30 ± 0.03 kg, early wet (Apr-Jun) 1.41 ± 0.03 kg and late wet (Jul-Sep) 1.44 ± 0.03 kg)). Although there was no consistent increase in BW and LS with increasing parity, the highest BW and LS of 1.45 ± 0.08 kg and 1.92 ± 0.13 were respectively obtained for the fifth parity. Male kids had significantly ($P < 0.01$) higher BW than the female kids (1.45 ± 0.03 kg vs 1.37 ± 0.03).