

## Abstract

This study investigated the environmental effects with particular reference to seasonal changes at the Blenheim Sheep Station, in Tobago on lamb birth weights, weaning weights and pre-weaning average daily weight gain, of two breeds of hair sheep, West African type and Barbados Black Belly. The ewes were managed in groups of 30 and exposed to rams during the breeding period and fed fresh cut forage diets in addition to supplements. After parturition, the lambs' birth weights were obtained within 6 to 12 hours. They were then creep fed for 3 weeks with broiler starter, weaned on average at 10 weeks, and weighed at that point. There was no significant breed differences ( $P > 0.05$ ) for birth weights, weaning weights or pre-weaning growth rates. Year, dam weight at breeding, litter size and sex, significantly influenced all three parameters ( $P < 0.05$ ). Season of birth effects were significant ( $P < 0.05$ ) for birth weights, between season of birth and birth weights and average daily weight gain but none on weaning weights ( $P > 0.05$ ). Season of conception had no significant influence on birth weights and pre-weaning average daily gain ( $P > 0.05$ ) but did however have a significant effect on weaning weights ( $P < 0.05$ ). It was concluded that the season of birth and the season of conception of lambs did significantly influence their birth weights, weaning weights and pre-weaning growth rates. *at the station.*

*How data was analysed*