

The Influence of Dry Period on Milk Production, Dystocia and Calf Mortality in Simmental Reared Under European Temperate Condition

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1 ABSTRACT

The main objective of the study was to evaluate the effects of dry period length on milk production related traits, incidence of dystocia and calf mortality in Simmental dual-purpose breed, in order to set up “alarm” thresholds for better designing of it according to the multiple influential factors. Data included 1149 lactation records collected between 2017 and 2019 from 375 Simmental cows. The factorial ANOVA protocol showed that the dry period length had a significant increase over consecutive years. No significant influence was observed according to the seasonal conditions. A linear regression model was employed to evaluate the influence of dry period length on milk production, incidence of dystocia and calf mortality. The regression model used to evaluate the effects of dry period length showed a significant influence on milk, fat, protein, dystocia incidence and calf mortality. Milk yield, protein yield, dystocia incidence and calf mortality were significantly influenced by the 61-80 days dry period, whilst a dry period less than 40 or longer than 80 days induced losses in milk and protein yield, also increasing the incidence of dystocia and mortality in calves. Current results suggest that ensuring a dry period of 61-80 days will translate into increased performance in dual-purpose cows, as well as streamlining the financial cycles of the farms.