ZOOTECNIA BRASIL
Centro de Convenções da PUC-GO | Goiânia-GO
27 a 30 de agosto de 2018

55ª REUNIÃO ANUAL DA SOCIEDADE BRASILEIRA DE ZOOTECNIA

ZOOTEC 28º CONGRESSO BRASILEIRO DE ZOOTECNIA

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

EFFECTS OF COW SIZE AT CALVING ON THEIR MILK PRODUCTION AND DEVELOPMENT OF CALVES

Angélica Pereira dos Santos PINHO[1], Carina Crizel da VARA[2], Magali Floriano SILVEIRA[3], João RESTLE[4], Pablo Tavares COSTA[2], Tiago Albandes FERNANDES[2], Stefani MACARI[2], Ricardo Zambarda VAZ *[2]

*corresponding author: rzvaz@terra.com.br
[1] Universidade Federal do Pampa, Dom Pedrito, RS, Brasil
[2] Universidade Federal de Pelotas, Pelotas, RS, Brasil
[3] Universidade Tecnológica Federal do Paraná, Dois Vizinhos, PR, Brasil
[4] Universidade Federal de Goiás, Goiânia, GO, Brasil

In order to intensify beef cattle production, it is necessary to increase the productive efficiency of cows. For this, one must take into account the adjustment of nutrition to the animal biotype raised. Eighty straightbred Charolais (C) and Nellore (N), and CxN and NxC crossbred cows with 3 to 7 years were divided into three weight groups at calving, Lightweight (332.6 kg), Moderate (385.3 kg) and Heavy (444.6 kg). Groups were formed considering 0.5 standard deviation below and above the mean. Cows and their calves were kept in natural pasture with a stocking rate of 0.6 AU/ha. The weights of cows and calves were taken at calving, 63 days (early weaning), 210 and 365 days. Cow's milk productions were evaluated using the direct manual milking method on three occasions at 21, 42 and 63 days postpartum. The experimental design was completely randomized. The difference observed at birth in cows' weight was maintained during lactation and at 210 days postpartum. The cow weight groups did not show differences (P>0.05) in the daily weight gain during lactation with values of 0.060, 0.080 and 0.044 kg/day, respectively, for Light, Moderate and Heavy cows. Total milk yields were similar between cow weight groups. Calves from Heavy cows were heavier (P<0.05) at birth, 63 days and 210 days compared to calves of Lightweight cows, being also heavier at 63 days in relation to calves from Moderate cows. At 12 months of age the weights were similar (P>0.05). The average daily weight gain of calves from Heavy, Moderate and Light cow's was, respectively, 0.838, 0.742 and 0.745 kg. Heavy cows produce heavier and more developed calves during lactation when compared to Moderate and Light cows, but this superiority is diluted up to twelve months of age of calves, demonstrating the effect of the cows' maternal ability on the development of calves during lactation.

Keywords: efficiency, frame, milk production, weight gain