





CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

## POST-WEANING CONDITIONING AS A TECHNIQUE TO INCREASE GROWTH PERFORMANCE OF BEEF CALVES IN THE DRY SEASON

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Weaning may cause negative effects on growth performance of the weaned calf, mainly if it coincided with the dry season when forage presents low nutritional value. The aim was to evaluate the effect of providing just weaned calves a short term nutritional conditioning on growth during the dry season. Purebred (Senepol and Caracu) and crossbred (Limousin, Angus and Wagyu sires mated Nellore and crossbred cows) calves (n=132, 217 kg body weight (BW), eight-month old, both sexes) were distributed into one of 12 paddocks (4.4 ha, 1.2 animal units ha-1, six paddocks per sex) composed of Marandu grass and supplemented either with a low intake protein-mineral supplement (Control, 35% crude protein (CP), 43% total digestible nutrients (TDN), expected intake = 1g kg<sup>-1</sup> BW) or with concentrate (Conditioned, 23% CP, 70% TDN, 1.0 kg head<sup>-1</sup> d<sup>-1</sup>) for six weeks, with six paddocks per treatment. In both treatments, the protein-mineral supplement was provided ad libitum for the following experimental period. Calves were weighed in the weaning (d0, June 6<sup>th</sup> 2017) and on days 37 (d37), 112 (d112) and 160 (d160). Data were submitted to analysis of variance following a completely randomized block design (sex and genetic group as block factors). Supplement intake during the conditioning period was 140 and 883 g d<sup>-1</sup> head<sup>-1</sup> for control and conditioned groups, respectively (p<0.0001). Conditioned calves presented greater final BW (234 vs 226 kg, p = 0.04) and average daily gain (ADG, 443 vs 299 g d<sup>-1</sup>, p = 0.001) during the conditioning period and greater BW on d112 (245 vs 236 kg, p = 0.04); however, no differences in BW occurred on d160 (259 vs 252 kg, p = 0.12). ADG tended to be greater for conditioned calves between d37 and d112 (241 vs 186 g d<sup>-1</sup> head, p = 0.06) and d112 and d160 (211 vs 135 g d<sup>-1</sup> head, p = 0.10). A short term offer (six weeks) of palatable concentrated to just weaned calves can improve their growth performance throughout the dry season.

**Keywords:** beef cattle, pastures, performance, weaning stress

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