

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

EFFECT OF THE SUPPLEMENTATION OF FUNCTIONAL OIL OR MONENSIN ON THE CARCASS CHARACTERISTICS OF FEEDLOT FED NELLORE BULLS

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Food additives are used as manipulators of ruminal fermentation, minimizing the undesirable effects of diets with high concentrate contents, improving feed efficiency, animal performance and consequently the profitability of the system. However, the safety of chemical additives is constantly questioned and it becomes increasingly interesting to test products of natural origin as potential substitutes. The objective of the present study was to evaluate the effect of the addition of monensin or functional oil on the carcass traits of finishing cattle. Thirty Nellore bulls with initial live weight and age of 409 ± 6.36 kg and 24 months were independently fed to diet with 81% concentrate and 19% low quality *Brachiaria* hay. The diet had 80% TDN, 15.5% CP and 30.8% NDF. The experimental design was completely randomized with ten animals per treatment, where the factors evaluated were monensin (MON, 30 mg / kg DM) or functional oils, a blend of castor oil and cashew nut shell liquid (FO, 500 mg / kg DM, Essential, Oligo Basics, Brazil), added to the diet of Nellore bulls, and compared to the same diet without additives (CTL). The experiment lasted 105 days, the animals were slaughtered in a commercial slaughterhouse and weighed before boarding to determine carcass yield (CY) and gain (GY). The final weight average weight was 521 ± 13.29 kg. The data was analyzed using the MIXED procedure of the SAS, considering the fixed effect of treatment and initial weight as co-variable, the means were evaluated by contrasts with significance of 10%. The use of the MON additive promoted increase in liver weight (5.28 vs 4.91 kg, MON and CTL respectively) and in the empty gastrointestinal tract (9.24 vs 7.81 kg, MON and CTL respectively). The inclusion of FO in the diet had no effect in the carcass characteristics of the animals compared to the CTL treatment, and no statistical differences were observed in the carcass weight (275 vs 291 kg, FO and CTL respectively), CY (55% in both treatments) and GY (81% vs 77%, FO and CTL respectively). The use of MON resulted in undesirable effects on the carcass for the production system, and the use of FO had little, if any, influence on the carcass characteristics.

Keywords: high concentrate diet; ionophores; plant extracts.

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