

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

DIGESTIBILITY OF NUTRIENTS IN NELLORE AND NELLORE x ANGUS STEERS FED WHOLE SHELLED CORN DIETS

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The use of whole shelled corn in finishing diets has been shown to be a good alternative due to the lack of processing, easy storage, and a reduction in the roughage production. In addition, in order to produce better quality meat, the use of crossbreeding between zebu and taurine has intensified. The objective of this study was to evaluate digestibility of nutrients in Nellore and Nellore x Angus steers fed whole shelled corn diets, with or without sugarcane bagasse. Thirty-two animals, with average BW of 353 ± 25.3 kg were housed in individual pens and used in a completely randomized design using a 2×2 factorial arrangement (two breeds and two diets). One diet (WSC) contained 80% whole shelled corn and 20% of a protein-mineral pellet. The other diet (WSCB) had 74% whole shelled corn, 20% protein-mineral pellet, and 6% of sugarcane. Feeding period was 116 d, with 20 d of adaptation period and 96 d of experimental period. The digestibility trial occurred after 65 days of the experimental period, using total feces collection for three days. Feed offered was recorded daily, and the feed remaining on the following day was weighed back to calculate DMI. At the end of the feedlot, steers were slaughtered using cerebral concussion and slitting of the jugular vein. Animal fed WSC had greater digestibility coefficients of DM, OM, TDN, NFC ($P < 0.01$), CP, EE and NFC ($P < 0.05$). Nellore x Angus steers had greater digestibility coefficients of NDF ($P = 0.04$) and tendency for greater digestibility of DM, OM, CP and TDN ($P < 0.10$). There was no breed ($P = 0.29$) and diet ($P = 0.21$) effect on starch digestibility. The activity of α -amylase tended to be greater in Nellore steers ($P = 0.07$). Therefore, the use of WSC diets is indicated because they present higher nutrient digestibility. Nellore x Angus steers has greater performance in WSC diets than Nellore steers because they have a greater capacity for digestion of this diet and its nutrients.

Keywords: *Bos indicus*, *Bos taurus*, feedlot, performance, starch

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