

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

CARCASS TRAITS, EVALUATED BY ULTRASSONOGRAPHY, OF FEEDLOT STEERS UNDER EFFECT OF ENZYMATIC COMPLEX DOSES IN HIGH-ENERGY DIET

André DOCHWAT*¹, Mikael NEUMANN¹, Gabriela Letícia Delai VIGNE², Bryan Durate MUGNOL¹, Fernando de Souza SIDOR¹, Leslei Caroline SANTOS¹, Eduardo Mateus MORESCO¹, Heloisa Godoi BERTAGNON¹

*corresponding author: andre.dochwat@gmail.com

¹Universidade Estadual do Centro-Oeste, Guarapuava, Paraná, Brasil

²Universidade Federal do Paraná, Curitiba, Paraná, Brasil

The use of exogenous enzymes can increase the availability of fiber and improve the fat deposition. However, the enzymes still need to be evaluated for carcass traits when added to high-energy diets. Therefore, the objective of this study was to evaluate the carcass traits of feedlot steers fed a high-energy diet supplemented with doses of an enzyme complex (0, 2.5, 5.0 and 7.5 g animal⁻¹ day⁻¹) by ultrasonography. A completely randomized block design was adopted, consisting of four treatments and four replicates, in which each stall with two animals represented one replicate. Thirty-two ½ Angus and ½ Nellore crossbred steers from the same herd and with an initial average weight of 422 ± 6.2 kg and age of 12 ± 2 months, were kept in 16 stalls and in a feedlot for 77 days. The roughage-free diet was composed of a mixture of whole corn grain and a protein-mineral-vitamin mix at a ratio of 85:15, on a dry matter basis. Both, at the beginning and at the end of the feedlot, loin eye area (LEA), fat thickness at the rump cap (FTRC), subcutaneous fat thickness (SFT), marbling (M) and ratio (R) was evaluated and measured, between the 12th and 13th ribs, transversely to the *Longissimus dorsi* muscle, by an ultrasound machine {ALOKA SSD 500 VET[®], Aloka, Japan) with a 17 cm linear probe, at a frequency of 3.5MHz. Images were interpreted by the laboratory Designer Genes Technology, using "BIA/DGT Brazil" software. Starting from the found values, were estimated the gain of each region through the difference between the final and initial values. Only the SFT gain and FTRC gain parameters presented statistical difference (P<0.05) for enzymatic complex doses. There was a linear increase of 0.07 and 0.04 mm g⁻¹ of the enzymatic complex included the steer's diet, respectively, which can be justified by the higher digestibility of cornstarch. Thus, it was verified that the progressive inclusion of enzymatic complex doses to the high-energy diet, supplemented to feedlot steers, provides greater deposition of subcutaneous fat and rump cap fat.

Keywords: exogenous enzymes, high grain, marbling, starch.

Acknowledgments: Safeeds Nutrição Animal, CNPq and CAPES.

Promoção e Realização:



Apoio Institucional:



Organização:

