

27 a 30 de agosto de 2018





## CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

## INCLUSION OF CHOPPED HAY IN FEEDLOT DIETS BASED ON WHOLE CORN GRAIN

Renan MARMENTINI<sup>1</sup>, Mateus Alan DEMEDA<sup>1</sup>, Daison MAROCCO<sup>1</sup>, Cristiane TOMALUSKI<sup>1</sup>, Clovisnei BASI<sup>2</sup>, Wilson ZACARON<sup>2</sup>, Alan Miranda PRESTES<sup>3</sup>, Claiton André ZOTTI<sup>\*3</sup>

\*corresponding author: claiton.zotti@unoesc.edu.br

<sup>1</sup> Acadêmicos Zootecnia Universidade do Oeste de Santa Catarina, Xanxerê, Brasil

<sup>2</sup> Mestrando Sanidade e Produção Animal, UNOESC – Xanxerê.

<sup>3</sup> Docente da Universidade do Óeste de Santa Catarina, Xanxerê, Santa Catarina, Brasil

Addition of fiber carbohydrate in high-concentrate feedlot diets might promote a healthier ruminal environment, leading to less digestive disturbance and thus improve performance of confined animals. The aim of this study was to assess the effect of chopped hay levels in the feedlot diet based on whole corn grain (WCG) on performance, rumen health, feeding behavior and carcass traits of beef heifers. Eighteen Angus yearling heifers (303.3  $\pm$  11 kg) were randomly distributed to three treatment: 85% WCG + 15% of pelleted supplement (CT), 82% WCG + 15% of pelleted supplement and 3% of Cynodon sp. hay (H3), and 79% WCG + 15% of pelleted supplement and 6% of Cynodon sp. hay (H6) for 112 days. Dry matter intake increased linearly (P = 0.035) by the inclusion of hay, however final body weight (average 426.7 ± 11.7 kg), average daily gain (average 1.18 ± 0.07 kg/day), hot carcass weight (average 221.9 ± 10.2 kg), subcutaneous fat thickness (average 7.17  $\pm$  1.2 mm), and dressing percentage (average 52.24  $\pm$  0.48 %) were not affected by hay levels. The pH of rumen fluid sampled after slaughter was affected positively (P = 0.047) as the hay levels increased. However, no effect was observed in the number of rumen papillae per cm<sup>2</sup> (average 52.64  $\pm$  4.6). Time spent eating (average 105  $\pm$  19 min), laying (average 638  $\pm$  43 min) and standing (average 374  $\pm$  42 min) in idleness and lying ruminating (average  $205 \pm 29$  min) did not differ among treatments, but the time standing ruminating linearly increased (P = 0.0003) by the inclusion of hay. The use of WCG without roughage seems to do not impair performance and carcass traits of beef heifers.

## Keywords: beef heifers, carcass traits, performance

**Acknowledgments:** To the University of West of Santa Catarina – Xanxerê and Konkreta Nutrition Technology for supporting this research.

Promoção e Realização:







Apoio Institucional:





Organização:

