

THEME 9 | RUMINANT NUTRITION AND PRODUCTION

Ultrasound measures of Nellore cattle supplemented of yeast and probiotic in the north of Mato Grosso

Paloma Cristie de Araujo Nunes^{*1}, Scheila Geiele Kamchen², Bruno Fagundes da Rocha²; Fabiana de Moraes Carlos² Isadora Macedo Xavier¹, Angelo Polizel Neto³ Dalton Henrique Pareira⁴, Bruno Carneiro e Pedreira⁵

¹Programa de Pós-Graduação em Zootecnia – UFMT, Sinop, Mato Grosso; ²Universidade Federal de Mato Grosso, Sinop/MT; ³Professor do curso de Medicina Veterinária – UFMT, Rondonópolis, Mato Grosso, Brasil; ⁴Professor do curso de Zootecnia – UFMT, Sinop, Mato Grosso, Brazil; ⁵Embrapa Agrossilvipastoril, Sinop/MT

*Master student – palomacristie92@gmail.com

The search for better results on the performance and carcass traits of cattle under grazing has required efforts in the elaboration of diets that satisfy them both the producer and the consumer; therefore, the supplementation of grazing cattle is one of the main strategies for the intensification of systems. It is important to identify the effects of dietary supplementation on bovine growth through ultrasound imaging, which in addition to being an indication of the carcass composition allows estimation of the thickness of subcutaneous fat, as it helps to protect the carcass cold shortening. The objective of this study was to evaluate bovine carcass alterations, by means of ultrasound images, finished with pasture with additives supplementation. Twenty-eight non-castrated males of the Nellore breed were randomly divided into four supplementation groups (Group 1 = Urea; Group 2 = Urea + Optygen; Group 3 = Group 2 + Yeasts; and Group 4 = Group 3 + Probiotic). The experimental area used was of eight hectares, with *Brachiaria brizantha* cv. BRS Piatã, subdivided into four pens. The experiment lasted for 98 days, with 14 initial days of adaptation and the remainder subdivided into three sub-periods of 28 days, with the performance of ultrasonic readings at the end of each sub-period. For the measurement of the rib eye area (REA) and the subcutaneous fat thickness of loin (SFTL), images were taken between the 12th and 13th ribs, transversal to *Musculus longissimus thoracis*. For fat thickness of the rump (P8), the images were taken at the junction between *M. gluteos medium* and *M biceps femoris*, with the use of vegetable oil as an acoustic coupling. Data were analyzed using the Statistical Analyzes System software in a completely randomized design. The animal of Group 3 showed high ($P < 0.05$) REA and P8 starting of third of sub-period, with means of 82.83 cm² to REA and 5.97 mm to P8, in contrast, means of 80.07, 77.75 and 76.74 cm² and 5.63, 5.47 and 5.44 mm, respectively, of other groups. To SFTL, no difference ($P > 0.05$) was observed among treatments, with general means of 5.53 mm in the end period. It can be concluded that the use of yeasts as an additive in the supplementation of cattle to pasture presented beneficial effects on carcass composition.

Keywords: Carcass, ultrasound, yield