FINISHING HEIFERS STRATEGIES FOR PREMIUM BEEF MARKET: MEAT QUALITY

Lucy Mery Antonia SURITA*¹, Amanda Awumi PERESTRELO², Ricardo FAVERO³, André Luiz Julien FERRAZ², Maria da Graça MORAIS¹, Marjorie Toledo DUARTE¹, Gelson Luiz Dias FEIJÔ⁴, Marina de Nadai BONIN¹

*corresponding author: lucymerysurita@hotmail.com
¹Universidade Federal de Mato Grosso do Sul, Campo Grande, Mato Grosso do Sul, Brasil
²Universidade Estadual de Mato Grosso do Sul, Aquidauana, Mato Grosso do Sul, Brasil
³Universidade Estadual de Londrina, Londrina, Paraná, Brasil
⁴Embrapa Gado de Corte, Campo Grande, Mato Grosso do Sul, Brasil

Meat quality is a crescent demand from consumers that are willing to pay more for Premium beef, with guaranteed sensory qualities, mainly tenderness. Many aspects can influence meat quality, i.e. animal genetics or crosses, age, sex and feed regime. With this in mind, the objective of this study was to evaluate the meat quality of heifers finished in two different finishing systems. A total of 148 crossbred heifers (Angus x Nellore), averaging 13 months and 407.5 ± 29.22 kg of body weight were finished in two systems: feedlot or semi-confinement (pasture plus concentrate). In the feedlot, the animals fed 2.5% of live weight of a diet composed by corn silage, dry corn, soybean meal and minerals. In semi-confinement, heifers were grazed in a pasture of Brachiaria brizantha cv. Marandu and feed supplemented with 2% of live weight of a ration composed by corn grain, soybean meal, cottonseed and minerals. After slaughter, meat samples of longissimus were obtained between 12th and 13th ribs, vacuum packed and aged for zero and seven days. Then evaluated for pH (pH0 and pH7), color (L*0, L*7, C*0, C*7, h*0, h*7) and shear force (SF0 and SF7). The experimental design was completely randomized. The data were analyzed by procedure Univariate of SAS and means compared by the Tukey test. Meat quality from heifers finished in two systems was different (P<0.05) in all ageing periods, except for pH and C*7 (P>0.05). The feedlot-finished and semi-confinement-fished heifers had, respectively, values of L0 = 38.88 and 37.19, L7 = 40.79 and 38.79, C0 = 20.17 and 19.44, h0 = 0.71 and 0.68, h7 = 0.77 and 0.72, SF0 = 7.75 kg and 9.41 kg and SF7 = 5.50 kg and 6.68 kg. Finishing heifers in feedlot can produce meat with better color and tenderness than in semi-confinement system. Meat from heifers feedlot-finished better fit meat quality parameters for Premium beef market in Brazil.

Keywords: color, premium meat, semi-confinement, tenderness

Acknowledgments: Fundect, Embrapa Gado de Corte, UEMS, Vermelho Grill Carnes e Cortes