

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

EXTRUDED UREA LEVELS IN THE DIET FOR FINISHING STEERS IN CONFINEMENT

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The rumen microorganisms are capable of producing microbial protein from ammonia and carbon skeleton, and non-protein nitrogen (NPN) may be one of the sources of ammonia. It was aimed to evaluate diets containing increasing levels of extruded urea on performance, the carcass characteristics of steers finished in confinement. Twenty-four male castrated Nellore steers with age 22 months of age and initial weight of 333.52 kg of body weight (BW), were housed in individual stalls. A completely randomized design was used with four treatments: 50, 60 70 and 80 g 100 kg of BW⁻¹, with 400 g kg⁻¹ of roughage (whole plant corn silage) and 600 g kg⁻¹ of concentrate. At the end of the experimental period of confinement, when the animals presented average body weight of 450 kg, subjected to a 24-hour solids fast and then slaughtered. Immediately after slaughter, the carcasses were identified and weighed and then stored in a cold chamber at 2°C. Measurements were taken between the 12th and 13th ribs of the right half carcass. To determine the carcass yield was calculated by dividing the weight of the carcass by the live weight of the animal and multiplying the result of that division by 100, expressed as a percentage. There were effects of levels (P < 0.05) for the variables final live weight, total weight gain and average daily gain. The use of levels containing 50, 60 and 70 g 100 kg BW⁻¹ were similar without statistically differentiating for the variables final live weight (463.10 g kg⁻¹), total weight gain (130.80 g kg⁻¹) and mean daily gain (1.09 g kg⁻¹), while the treatment with 80 g 100 kg BW⁻¹ was statistically different from the other treatments with a lower value for the final live weight (426.13 g kg⁻¹) weight gain (100.25 g kg⁻¹) and mean daily gain (0.84 g kg⁻¹). There was no effect (P > 0.05) of the levels for the variables carcass yield (CR) with a mean of 53.16% and subcutaneous fat thickness (5.31 mm). The use of up to 70 g 100 kg of BW⁻¹ can be used without impairing the performance and use of extruded urea, does not alter confined beef cattle carcass characteristics.

Keywords: non-protein nitrogen, performance, starea, weight gain

Acknowledgments: CNPq, FUNDECT

Promoção e Realização:



Apoio Institucional:



Organização:

