

Levels of concentrate for grazing Nelore crossbred steers in the dry period of the year in Brazil

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Keywords: pasture supplementation, *Brachiaria brizantha*, dry season, protein supplementation, daily gain

Introduction In Brazil, the fattening of supplemented grazing steers accounts for many finished animals in the dry season. This work had the objective of evaluating the effect of levels of concentrate on the fattening of crossbred Nelore steers grazing *Brachiaria brizantha* pasture in the dry period of the year.

Materials and methods Twenty four crossbred uncastrated Nelore male cattle, averaging 30 months of age and weight of 295 kg were used. During the experimental period, the animals grazed a *Brachiaria brizantha* pasture of 11.50 ha with average forage dry matter (DM) availability of 7, 635 and 3,495 kg/ha at the beginning and the end of the experiment, respectively. The treatments were composed of increasing levels of concentrate fed as a percentage of cattle body live weight (LW) to each steer: T1 - 0; T2 - 0.4; T3 - 0.8; T4 - 1.2%. The experimental design was a randomised complete block with six replicates. The initial LW was the blocking factor. The concentrate was made of coffee husk 44%, soybean meal 10%, cotton meal 3%, wheat meal 15%, and sorghum panicles 28%. The experiment was conducted at the Animal Science Department, UFLA, from June to September, 2001, lasting 114 d. The animals were weighed every week without fasting and *Brachiaria* pasture was sampled every 30 d. Pasture samples were analysed for DM, crude protein, ash, NDF, and ADF. The software SISVAR was used for statistical analysis (Variance Analysis System of Balanced Data).

Results and discussion The steers rejected some of the concentrate and did not consume the intended amounts. The real levels of intake were, T1-0; T2-0.37; T3-0.76 and T4-0.87%. The average final live weight was 319 kg/steer and the daily gain was 0.277 kg/steer. There was a significant effect of the concentrate level on daily live weight gain (DLWG) with a linear relationship ($P < 0.05$) (Figure 1).

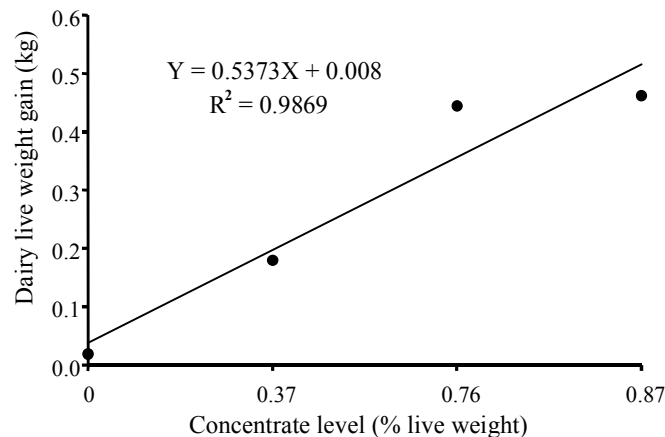


Figure 1 The effect of concentrate levels on daily live weight gain

Conclusions It was concluded that finishing Nelore steers grazing *Brachiaria brizantha* and fed concentrate during the dry season, is technically and economically viable. The highest LWG was at the level of 0.87%, but the better bio-economic performance was with the intake of 0.76% of concentrate.

Acknowledgement Research Project sponsored by: FAPEMIG – Fundação de Amparo à Pesquisa do Estado de Minas Gerais

Reference

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