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Supplementation levels for crossbred steers kept in pastures grazing *Brachiaria brizantha*

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

Introduction The bovine meat production in Brazil stands for 88% of the herds raised on pastures, and the fattening of supplemented grazing steers account for greater number of finished animals in the dry season. This work had the objective of evaluating the effect of levels of supplements on the fattening of crossbred steers grazing *Brachiaria brizantha* pasture in the dry period of the year.

Materials and methods It was used 24 Holstein x Zebu uncastrated crossbred male cattle averaging 30 months of age and weight of 281 kg. During the experimental period, the animals were housed in an 11.5ha *Brachiaria brizantha* pasture and with the average forage availability of 2,685 and 2,260 kg DM ha⁻¹ at the beginning and at the end of the experiment, respectively. The treatments were composed of increasing levels of supplement furnished as a percentage of cattle live weight (LW): T1-0; T2-0.2; T3-0.4; T4-0.6% adjusted every seven days after the weighing of the steers. The experimental design was a randomized complete block, with initial live weight as a blocking factor and composed of 6 blocks and 4 treatments. The concentrate was made of 80% of ground ear corn and 20% of cotton seeds. The experiment was conducted at the Animal Science Department, UFLA, from 02-16-2002 to 03-30-2002 (42 days) as an adaptation period and the experimental period went from 03-30-2002 to 06-30-2002, lasting 84 days. The animals were weighed every week without fastening and *Brachiaria* pasture was sampled every 30 days. The pasture samples were analyzed for dry matter, crude protein, ash, NDF, and ADF. For the data analysis it was used the statistical software SISVAR (Variance Analysis System of Balanced Data).

Results and discussion There was a significant effect of the concentrate levels on DLWG with linear adjustment ($P < 0.05$). The maximum point was at the 0.6% level of supplement intake (Figure 1).

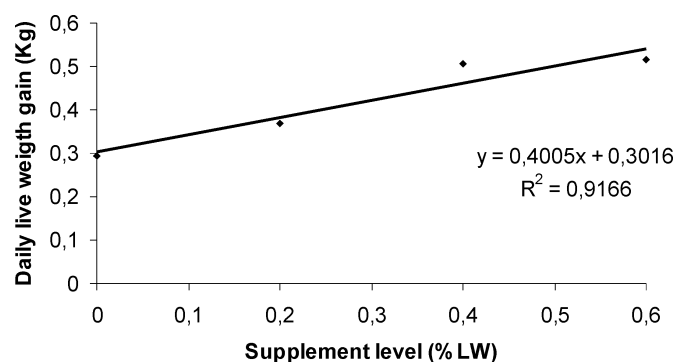


Figure 1 The effect of supplement levels on DLWG.

It was concluded that finishing Holstein x Zebu crossbred uncastrated steers grazing *Brachiaria brizantha* and fed concentrate supplement during the dry season is technically and economically viable, with better results at the level of 0.6%. However, the better bio-economic performance was with the intake of 0.4% of supplement (concentrate).

Reference

Bomfim, M.A.D.; Rezende, C.A.P.; Paiva, P.C.A.; Andrade, I.F.; Muniz, J.A. & Silva, A.R.P. (2001) Níveis de concentrado na terminação de novilhos holandês x zebu suplementados a pasto na estação seca. *Ciência e Agrotecnologia*, v. 25, n. 6, 1457-1466.