

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

SUPPLEMENTATION OF LACTATION CROSSBRED COWS WITH *STYLOSANTHES GUIANENSIS* CV. BRS BELA MANAGED AS ORGANIC FODDER BANK IN THE CERRADO

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The objective of this study was evaluate the protein fodder bank composed of *Stylosanthes guianensis* cv. BRS Bela for supplementation of lactation crossbred cows (H x Z) during 2 years. The bank was established in December-2014 in a clay soil area of 1 ha and evaluations occurred during the dry periods of 2015 at 2016. The soil was corrected with 2 Mg ha⁻¹ of dolomitic lime and 1 Mg ha⁻¹ of gypsum. At planting, it was applied 2 Mg ha⁻¹ of chicken manure (1.9% N, 2.0% P₂O₅ and 2.7% K₂O), 289 kg ha⁻¹ of termophosphate (17% P₂O₅) and 265 kg ha⁻¹ of fonolito (8% K₂O). The experimental design was change-over with three periods (21 days), three treatments and four cows by repetition. Statistical analysis was made using the SAS proc mixed and compared by Tukey-Kramer test (P = 0.05). The treatments were maize silage exclusive-SE; silage and fodder bank access-SFB and silage plus concentrate-SPC (1.6 kg cow⁻¹ day⁻¹). Twelve lactating cows ³/₄ (H x Z) weighting 538 kg were used for evaluations. In each period per year, four cows were conducted every day to the fodder bank between the two daily milking times. The legume crude protein was 7.1% (2015) and 7.5% (2016). Legume forage mass in the bank ranged from 4 to 5 t ha⁻¹ (2015) and 3.4 to 4.7 t ha⁻¹ (2016) during the three periods (July to September). The daily milk production of cows in the years 2015 and 2016 to treatment SFB (9.7 and 9.5 L/day) was superior (P < 0.05) than SE (8.8 and 9.2 L/day), but inferior (P < 0.05) to the SPC treatment (12.5 and 12.0 L/day), respectively. The silage intake of cows per liter of milk produced for treatment SFB (0.67 and 0.63 kg 100 kg LW⁻¹) was similar (P > 0.05) to the SPC (0.70 and 0.58 kg 100 kg LW⁻¹) and inferior (P < 0.05) to SE treatment (0.88 and 0.70 kg 100 kg LW⁻¹) in the years of 2015 and 2016, respectively. The cows with access to the *S. guianensis* fodder bank improve the milk production compared to the cows that consumed exclusive silage. There was a reduction of 12% to 22% in the silage intake per liter of milk produced when cows accessed the fodder bank. Besides the improvement of milk production (6% to 10%) with the utilization of protein fodder bank could be a strategy to reduce concentrate intake and the costs of production in the farm.

Keywords: fertilizer, forage, legume, management, milk

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Apoio Institucional:



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