

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

PRODUCTIVITY OF MASSAI GRASS UNDER WEED INTERFERENCE IN RENEWAL AREA

Marcia DIAS^{*1}, Rodrigo Vanderley MOTA², Fernando José dos Santos DIAS¹, Sidnei Roberto de MARCHI³, Vinicio Araujo NASCIMENTO¹, Beatriz Branco Tiago QUEIROZ³, Priscila Pereira dos Santos e ARAÚJO³, Amalia Andreza Sousa SILVA³

*corresponding author: diasmarcia@yahoo.com.br

¹Universidade Federal de Goiás/Regional Jataí, Goiás, Brasil

²Mestre em Agronomia pela UFG/Regional Jataí, Goiás, Brasil

³UFMT/Campus Universitário do Araguaia, Barra dos Garças, Mato Grosso, Brasil

The objective was to evaluate weed competition on the production of *Panicum maximum* Jack. Massai. An experiment was realized in the UFMT/Barra do Garças in randomized block design with 3x4 m plots in six periods weed coexistence periods: 15, 30, 45, 60, 75, and 90 days after the emergency (DAE) and control (non-coexistence). Was used direct planting with 2 kg ha⁻¹ of seeds and the finale of each period, weeds were eliminated. At 90 DAE the forage cutting was realized close to the ground with coastal brush cutting. Samples were pre-dried (60°C) and milled (1 mm) to analyze the contents of dry matter (DM), organic matter (OM), crude protein (CP), ether extract (EE), neutral detergent fiber corrected for ash (NDFap), hemicellulose (HCEL), lignin (LIG), total carbohydrates (CHO) and non-fiber carbohydrates (NFC) from to determine the production (t ha⁻¹, P) of natural matter (NM) and other variables. The data were evaluated in a mixed model and subdivided plot, the means being compared by orthogonal contrast with regression adjustment. Only the PEE (0.15 ± 0.03 t ha⁻¹) did not (P > 0.05) showed effect of the treatments. The treatment non-coexistence period obtained (P < 0.05) the highest mean of NMP (49 ± 4 t ha⁻¹), DMP (49 ± 1 t ha⁻¹) and MOP (13 ± 1 t ha⁻¹), these results influenced the higher results of NDFapP (10±1 kg ha⁻¹), HCELP (3 ± 0.2 t ha⁻¹), CHOP (11 ± 0.6 t ha⁻¹), NCFP (1 ± 0.03 t ha⁻¹) and LIGP (0.24 ± 0.02 t ha⁻¹). Most of the productions were affected in the first period (15 days of coexistence) with a tendency to decrease the final productivity as the coexistence time increased. This was due to the competition with weeds and the ability of the Massai grass to modify its growth under this situation during the period of coexistence, evidenced in this experiment by the total flowering of the treatment non-coexistence at 90 DAE. Thus, the coexistence with weeds decreases the productivity of the forage.

Keywords: competition, *Panicum maximum*, pasture, weeds control

Acknowledgments: The Coordination for the Improvement of Higher Education Personnel (CAPES) by scholarship the master's degree of the second author. The Foundation for Research Support of the State of Goiás (FAPEG) for support of participation in this event.

Promoção e Realização:



Apoio Institucional:



Organização:

