

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

## LITTER PRODUCTION OF PIATA AND ZURI GRASSES IN SHADING SYSTEM AND SUBMITTED TO FOLIAR FERTILIZATION LEVELS

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The objective was to evaluate the litter production of *Urochloa brizantha* cv. BRS Piata and *Panicum maximum* cv. BRS Zuri grasses in the Eucalyptus shade and submitted to foliar fertilization levels (0, 3, 6 and 9 L ha<sup>-1</sup>) of Quimiorgen Pasto®. The experiment was conducted in the Mato Grosso do Sul State University, Aquidauana's Unit. The experimental period was from August 2017 to February 2018 (divided in two periods). The foliar fertilizer was applied in August and December 2017 for begin, respectively, the first and second periods. The litter samples were collected 83 growth days after fertilization in October 2017 and February 2018, respectively for the first and second periods. So, the samples were collected in 0.0625 m<sup>2</sup> area (with aid of an iron square) at one point per experimental plot. All litter present in the internal area of the square was removed, weighed, dried in a forced circulation oven at 65 °C for 72 h and weighed again to obtain the dry litter mass per hectare. The design used was randomized blocks with a factorial arrangement 4 x 2, three replications and scheme of measures repeated in time. The variables will be evaluated by variance analysis and comparison of means by the t test at 5%. For Piata pastures, litter production was similar (P>0.05) between treatments (mean of 3555.94 kg ha<sup>-1</sup>). For Zuri pastures, litter production was higher (P<0.05) in the foliar fertilization level of 3 L ha<sup>-1</sup> of Quimiorgen Pasto® (4399.33 kg ha<sup>-1</sup>). Litter production was similar (P>0.05) between presence or not of shade for Piata (5080.48 kg ha<sup>-1</sup>) and Zuri pastures (2992.5 kg ha<sup>-1</sup>). In this case, the amount of litter deposited by the Eucalyptus is not sufficient to change litter production in the integrated system. However, the litter production was higher (P<0.05) in February 2018 than October 2017, for both grasses. For Piata, litter production was 2558.60 kg ha<sup>-1</sup> and 4553.27 kg ha<sup>-1</sup> in October 2017 and February 2018, respectively. Already for Zuri, litter production was 2351.73 kg ha<sup>-1</sup> and 3633.27 kg ha<sup>-1</sup> in October 2017 and February 2018, respectively. These results demonstrated that the grasses are adapted to shading because climatic factors such as rainfall and temperature influenced litter production more than the imposition or not of shade on the sward.

**Keywords:** *Brachiaria*, Cerrado-Pantanal transition, full sun, *Panicum*, shading

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