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CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

SWARD HEIGHT AND FORAGE MASS OF PIATA GRASS IN SHADED SYSTEM AND SUBMITTED TO FOLIAR FERTILIZATION LEVELS

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The objective was to evaluate the *Urochloa brizantha* cv. BRS Piata grass development in the Eucalyptus shading and submitted to foliar fertilization levels (0, 3, 6 and 9 L ha^{-1}) of Quimiorgen Pasto®. The experiment was conducted from August to November 2017 in the Mato Grosso do Sul State University, Aquidauana's Unit. The foliar fertilizer was applied in August 2017 and the evaluations occurred every 28 days (28, 55 and 83 growth days after fertilization). Sward height was measured with the aid of graduated ruler in cm. At representative points of the average height, forage samples were cut close to the soil of 0.0625 m² area. These samples were weighed and dried in a forced circulation oven at 65 ºC for 72 h and weighed again to obtain the total dry matter. The design used was randomized blocks with a factorial arrangement 4 x 2, three replications and scheme of measures repeated in time. The results were evaluated by variance analysis and comparison of means by t test at 5%. The sward height was similar ($P>0.05$) between the foliar fertilization levels (32.67 cm mean height) however was higher ($P<0.05$) in shade (34.52 cm) than in full sun (30.82 cm). This behavior shows that, in fact, shaded grasses tend to lengthen their stems, placing the leaves in higher strata to capture light. Stems elongation implies in greater heights of plants. The sward height was also higher ($P<0.05$) on the last day of growth after foliar fertilization. This was expected since the pastures was not subjected to cutting or grazing, allowing free growth until the end of the experimental period. Changes in sward height did not reflect on the forage mass. The values observed for this variable were similar ($P> 0.05$) between treatments, presence or not of shade and days of growth after foliar fertilization (15330.5 kg ha^{-1} mean forage mass). This lack of difference is probably since we are considering the total forage mass and not the different morphological components masses. In addition, it shows that Piata grass produces in both shade and full sun. Considering the foliar fertilizers, we can conclude that the levels and / or the growth days after fertilization tested were not enough to result plant responses.

Keywords: *Brachiaria brizantha* cv. BRS Piatã, Cerrado-Pantanal transition, full sun, shading, structure

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