

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

## PROFILING AND DRY MATTER PRODUCTION OF CAPIM BUFFEL CV. ÁRIDUS WITH DIFFERENT SOURCES OF NITROGEN

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Nitrogen fertilization provides a better development of forage plants, increasing its mass production, nutritional value and its permanence. Enabling the intensification of the use of the pastures improving the zootechnical indexes, increasing the efficiency of the use of the area, consequently a greater animal production. Despite the favorable conditions for forage grasses production, the use of nitrogen fertilization is still scarce, an example and the increase of pastures degraded in the country by the lack of nutrients available in the soil. The objective of this study will be to evaluate the population density and the dry matter production (DM) of Buffel Cv. Austus fertilized with different sources of nitrogen. At the State University of Montes Claros (Unimontes), campus Janaúba - MG, buffel grass cv. Aridus was established in the spring of 2017, divided into plots, according to a randomized block design. The 6 blocks, which consisted of the replications, with spacings of 1.0 m each, and in each block 4 plots, each with a useful area of 7.5 m<sup>2</sup>, spaced 0.50 m apart, containing the four treatments - absence of nitrogen fertilization; nitrogen fertilization in the form of urea; encapsulated urea and ammonium sulfate, receiving a dose of 60 kg of N ha<sup>-1</sup> by evaluative cut, performed every 30 days, beginning in January and extending through March, in a total of two evaluation cuts. The population density of tillers per unit area (m<sup>2</sup>) was performed using a sampling frame of 0.5 m<sup>2</sup> (1.0 x 0.5 m), arranged at a point representative of the average height of the plot. Afterwards, all the plant material contained in the area delimited by the sampling frame was collected at a height of 20 cm from the soil, weighed and then taken to pre-drying in a forced circulation air oven at 55 ° C, for later determination of MS. Statistical and Genetic Analysis System (SAEG) was used to evaluate the results, which were submitted to analysis of variance and "F" test, and the significant characteristics at 5% level were submitted to the Student Newman Keuls test (SNK), also at the 5% level of significance. The dry matter production presented a difference (P <0.05), only when compared to the treatment without fertilization, did not differ in the treatments with nitrogen fertilization. Tiller population density did not differ (P > 0.05) between treatments with and without nitrogen fertilization.

**Keywords:** *Cenchrus ciliaries*, *Urea*, *Ammonium sulphate*

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