

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

## BIOMASS PRODUCTION AND RATES OF PLANT FORAGE OF THE DIGIT GRASS SUBMITTED AT LEVELS POTASSIC FERTILIZATION

Anna Luiza Hora dos SANTOS<sup>1</sup>, Luiz Paulo de Souza SANTOS\*<sup>1</sup>, Pryanka Thuyra Nascimento FONTES<sup>1</sup>, Aron Marcos Correia dos SANTOS<sup>1</sup>, Gilmartins Alves NASCIMENTO<sup>1</sup>, José Ricardo dos SANTOS FILHO<sup>1</sup>, Marcos Felipe dos Santos SOUZA<sup>1</sup>, Jailson Lara FAGUNDES<sup>1</sup>

\*corresponding author: luiz\_p19@hotmail.com

<sup>1</sup>Universidade Federal de Sergipe, São Cristóvão, Sergipe, Brasil

The *Digitaria eriantha* cv. Survenola popularly known as Digit grass is a small, stoloniferous and rhizomatous forage species with good productive potential, little known and with scarce information about its management in the literature, preventing the expansion of its cultivation in Brazil. An experiment was carried out to evaluate the biomass production and forage accumulation rates of the Digit grass submitted to levels of potassium fertilization. The essay was performed by the Federal University of Sergipe at the São Cristóvão Campus. The evaluation time lasted one year, from of September, 2016 to August, 2017. The plant analyzed was *Digitaria eriantha* cv. Survenola. The treatments consisted of five doses of potassium (0, 80, 320, 400, 640 kg ha<sup>-1</sup>). The evaluated characteristics were: biomass production, accumulation rate of total fodder, leaves and stems. The experimental design was a randomized block design with four replications, totaling 20 experimental units of 4.8 m<sup>2</sup>. The data were submitted to analysis of variance with 5% of significance, when the significant results were submitted to a regression analysis PROC REG of the statistical package SAS. The biomass production, the rate of accumulation of total forage, leaves and stems were influenced by potassium fertilization levels, which responded in a quadratic manner. Attaining the point of maximum efficiency for the production of total biomass with the dose of 502 kg ha<sup>-1</sup> of k where it reached the production of 27,137 kg ha<sup>-1</sup> of dry matter. For the other variables 559, 520 and 565 kg ha<sup>-1</sup> of K were obtained, with accumulation rates of 77.52, 30.49, 22.21 kg ha, respectively. Potassium doses around 520 k kg ha<sup>-1</sup> allow the increase of biomass production of the Digit grass, increasing the rates of forage accumulation, allowing a higher rate of animal stocking per area.

**Keywords:** *Digitaria eriantha*, management, pasture, productivity

Promoção e Realização:



Apoio Institucional:



Organização:

