

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

## **NUTRITIVE VALUE OF THE WHOLE PLANT OF UROCHLOA DECUMBENS IN SILVIPASTORIL SYSTEM WITH EUCALYPTUS SP. IN THE PASTURE CYCLES**

Natalia de Avila SOARES<sup>1</sup>, Claudinei Alves SANTOS<sup>1</sup>, Maria Celuta Machado VIANA<sup>2</sup>,  
Elwira Daphinn Silva MOREIRA<sup>1</sup>, Patricia do Rosario RODRIGUES<sup>1</sup>, Lúcio Carlos  
GONÇALVES<sup>1</sup>, Ângela Maria Quintão LANA<sup>1</sup>

\*corresponding author: natalia\_avila@hotmail.com

<sup>1</sup>Department of Animal Science, Federal University of Minas Gerais, Belo Horizonte- MG, Brasil.

<sup>2</sup>Agricultural Research Company of Minas Gerais, Sete Lagoas, Brasil.

The recovery of degraded areas is fundamental for the sustainability of cattle raising in the country. The silvopastoral system has been indicated as an alternative for the recovery of these pasture areas. In this context, the objective was to evaluate the bromatological composition of *Urochloa decumbens* in silvopastoral production system in three grazing cycles (2013/2014 cycle 1, 2014/2015 cycle 2 and 2015/2016 cycle 3). The experiment was conducted at the Santa Rita Experimental Field belonging to the Agricultural Research Company of Minas Gerais (Epamig), located in the municipality of Prudente de Moraes, State of Minas Gerais, Brazil. The randomized block design was used in a sub-subdivided plot, and a comparison of means between the cycles in the SSP by the SNK test was used. Forage harvesting was performed in the agricultural years of 2013/2014 (cycle 1), 2014/2015 (cycle 2) and 2015/2016 (cycle 3), totaling four cuts in each period. The pasture was harvested at 15 cm from the soil, in three random strips that extended from 1 m of the eucalyptus line to the center of the plot when the pasture reached approximately 40 cm. The samples were weighed and dried in a forced air circulation oven at 65 ° C until constant weight was obtained. The content of dry matter (DM), organic matter (OM), mineral matter (MM), crude protein (CP) and ethereal extract (EE), neutral detergent fiber (NDF) and acid detergent fiber (FDA) and lignin (LIG). Lignin was determined by the sequential method. Hemicellulose (HCEL) was calculated by the difference between the NDF and the FDA. The cellulose content (CEL) was estimated by the difference between the FDA and the LIG. The production cycle had an effect on all components evaluated in the whole plant ( $p < 0.05$ ), with the exception of hemicellulose. The levels of NDF, FDA, CEL and LIG were higher in the third agricultural year. During the third cycle, there was a period of rainfall, which is directly related to the nutritional quality and would justify the lower CP and higher levels of the fibrous fraction in the third agricultural year.

**Keywords:** chemical composition, grazing, integrated systems, shading

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