

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

BROMATOLOGICAL COMPOSITION OF *Urochloa decumbens* GRASS IN SILVOPASTORAL SYSTEM

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This study was carried out at the farm of the Ilha Solteira Faculty Engineering, Selvíria, MS. The experimental design was a completely randomized design with two treatments and 10 replicates, in a test area of *Eucalyptus grandis* progenies planted in double rows at a spacing of 2.0 x 2.5 x 4.0 m. The treatments corresponded to the forage below the double lines (High shading) and between the double lines (moderate shading). Ten samples were collected per treatment for determination of crude protein (CP), ethereal extract (EE), ash (Cz) and crude fibre (CF) fractions. The levels of neutral detergent fiber (NDF) and acid detergent fiber (ADF) by ROBERTSON & VAN SOEST (1981), and lignin (LIG) by VAN SOEST et al. (1991). Hemicellulose was determined by difference between the value of NDF and ADF and cellulose the difference between the value of ADF and LIG. The dry matter in vitro digestibility (DMivD), with the method of TILLEY and TERRY (1963). The statistic performed with the R program and the averages compared to 5% probability, by the Tukey test. The ash content (Cz), neutral detergent fiber (NDF), hemicellulose (HEM) and cellulose (CEL) differed ($p < 0.05$) in both treatments, Cz (9.61%), NDF, (81%) and HEM (34.21%), were higher in the treatment with high shading than moderate shading, 8.08, 68.38 and 26.96%, respectively. The CEL contents showed an inverse behavior (32.83% and 30.63%), for the treatments with high and moderate shading, respectively. It can be justified by the higher proportion of leaves in the DM in the highly shaded area, where the NDF and HEM fractions are more concentrated. Contrary results found in relation to CEL levels show that in the moderately shaded area the quality of the DM was lower than that of the highly shaded area, because CEL is part of the less digestible fraction of the cell wall. In the EE and CP fractions, no differences were observed. The fractions of CF, ADF and LIG, for treatment with moderate shading, 34.86; 41.42 and 6.16%, respectively, in relation to treatment with high shading, 31.63; 39.60 and 5.78%, respectively, presented no statistical difference. Dry matter in vitro digestibility (DMivD) did not differ between treatments with moderate shading (57.28%) and high shading (57.27%), a fact associated with no significant difference in CP levels for both. Nutritional values, such as protein fraction and digestibility, do not present variations.

Keywords: digestibility, dry matter, *Eucalyptus grandis*,

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