

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

EVALUATION OF HAY *BRACHIARIA BRIZANTHA* CV. MARANDU WITH DIFFERENT AGES OF REGROWTH

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The main source of feed for grazing animals is forage grasses. However, due to the seasonality of production, during periods of scarcity, it is necessary to use alternatives that are able to meet the animal demand, and the hay making technique is a good option. But for the efficiency of the technique it is necessary to consider the best cutting time of the forage, in order to obtain the right point for dry matter (DM), chemical composition and higher nutritive value. The aim of this study was to determine the best age of *Brachiaria brizantha* cv. Marandu for hay production. Four regrowth ages (21, 35, 49 and 63 days) were evaluated with four replications under yield, chemical composition and *in vitro* digestibility. The DM production was determined by the forage mass in 1m² collected directly to the soil, in a representative manner. The levels of DM, organic matter (OM), neutral detergent fiber (NDF), acid detergent fiber (ADF), crude protein (CP) and lignin were determined according to procedures of Detmann et al. (2012). The *in vitro* digestibility coefficients (IVD) of DM, OM, NDF and ADF were determined according to Ítavo et al. (2015). There was an increasing effect (P <0.05) for total dry matter production as a function of the regrowth ages, varying from 1481.48 to 4256.51 kg ha⁻¹. There was no effect of regrowth age for ADF, with an average content of 466.37 g kg⁻¹ DM. There was linear effect with advancement of the ages on the contents of DM and lignin, and the inverse was observed for the content of CP and IVDDM. The OM, NDF, IVDNDF and IVDADF levels were quadratically influenced (P <0.05) by regrowth age. The minimum OM value was 908.48 g kg⁻¹ DM at 34 days. The maximum values for NDF, IVDNDF and IVDADF were 811.54; 631.94 and 588.20 g kg⁻¹ of MS at 48, 32 and 27 days, respectively. The 35 day regrowth age of *Brachiaria brizantha* cv. Marandu was higher in production, chemical composition and *in vitro* digestibility for hay production.

Keywords: cutting, digestibility, dry matter, dry period, forage conservation

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