

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

FORAGE MASS IN MARANDU PALISADEGRASS PASTURES MANAGED WITH FIXED AND SEASONALLY VARIABLE SWARD HEIGHT

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The seasonality of forage production in pasture systems is a challenge for the production and perennality of the forage plant, since there is a period with environmental conditions restriction (water, light and temperature), called critical period. In this way, we investigated if the use of pasture management strategies with seasonal changes in canopy height can be advantageous in relation to the use of constant heights throughout the year. The experiment was carried at Instituto de Zootecnia (Nova Odessa/SP) in Marandu palisadegrass pastures. Treatments corresponded to canopy height conditions: pasture heights of 15 cm (T1) and 30 cm (T2) maintained continuously throughout the year, and starting with 30 cm during period I (Mar to May/12), reduced to 15 cm during periods II (Jun to Aug/12) and III (Sep to Nov/12), and returning to 30 cm at the start the period IV (Dec/12 to Jan/13) (30-15-30 cm – T3), in a complete randomized block design with five repetitions (paddocks of 1.0 ha) during 15 months. Data were subjected to analysis of variance using the Mixed procedure of SAS® (Statistical Analysis System, version 9.3) using a 5% significance level. The lowering of forage canopy height contributed with greater leaf forage mass in pastures managed with 30-15-30 cm height in relation to those managed with 15 cm in period IV, but with no difference from those managed with 30 cm (1546, 1311 e 1935 kg DM/ha, respectively) after the decrease in height in period II. The stem forage mass followed a similar behavior, with values of 1400, 666 and 1639 kg DM/ha in pastures managed with heights 30-15-30, 15 and 30 cm, respectively. However, dead material mass was similar in pastures managed with 30-15-30 and 15 cm in relation to those managed with 30 cm (1343, 1385 and 3507 kg DM/ha, respectively). Reduction in canopy height in the cold and dry period of the year can be a viable alternative to the management of Marandu palisadegrass pastures, since contributed with lower dead material mass in the period of subsequent growth, which is interesting because of the potential to allow a greater incidence of light in the lower strata of the canopy, possibly contributing with higher tillering and production.

Keywords: *Brachiaria brizantha*, continuous stocking rate, dead material, leaf mass, *Urochloa brizantha*

Acknowledgments: To CNPQ for project funding (Processo 457060/2014-0)

Promoção e Realização:

Apoio Institucional:

Organização: