

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

BOTANICAL COMPOSITION OF GRASS-LEGUME PASTURES SUBMITTED TO DEFOLIATION FREQUENCIES AND SEVERITIES

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The objective of this work was to evaluate the proportion of botanical components in pastures cultivated with palisadegrass *Brachiaria brizantha* cv. Marandu and legume *Macrotyloma axillare* (access NO 279) species managed with rotational grazing. Treatments consisted of two defoliation frequencies (pre-grazing heights of 30 and 40 cm) and two severities (post-grazing heights of 15 and 20 cm) by dairy heifers in 16 experimental units (paddocks) with 300 m² each (n = 4), arranged in a randomized complete block design during two periods of the year (P1: October to November 2017 and P2: December 2017 to January 2018). Forage samples were collected from three random points of 0.25 m² at ground level and botanical and morphological components were separated (grass, legume and dead material) in sub-samples. Sub-samples were oven dried at 65°C for 48 hours and components proportion in the pre-grazing mass was calculated. Analysis of variance was performed using proc mixed (SAS) at 95% confidence level. The pre-grazing height and period interaction was significant for grass proportion (P = 0.0132). The lowest value was observed in pre-grazing height of 30 cm pastures during P1, which increased during P2 (46.7% to 65.2%, respectively). For 40 cm pre-grazing height pastures, no differences were observed between periods (average 63.05%). Similarly, the pre-grazing height and period interaction was significant for legume proportion. Pastures managed with 30 cm pre-grazing height had greater proportion during P1 (14.7%), and a decrease was observed during P2 (6.4%). The proportion of legumes was also significantly different between post-grazing heights (P = 0.0026), with lower values (7.8%) observed under intense defoliation (15 cm) and greater values in less intense grazed pastures (20 cm), with 13.6% of legumes in the pre-grazing forage mass. There was no difference between the proportion of dead material between treatments (on average 29.85%). The defoliation frequencies and severities had influence on legume proportion in the forage mass.

Keywords: *Brachiaria brizantha* cv. Marandu, dairy heifers, *Macrotyloma axillare*, marandu palisadegrass, rotational stocking

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