





CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

DEMOGRAPHIC PATTERNS OF ANDROPOGON GRASS MANAGED AT THREE **HARVEST HEIGHTS**

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The harvest management applied to grasses may influence the appearance and mortality of tillers, and each grass has its optimum harvest-height range. This study was carried out to evaluate the demographic patterns of andropogon grass (Andropogon gayanus Kunth cv. Planaltina) managed under three harvest heights. A completely randomized design with three harvest heights (15, 25, and 35 cm) and eight replicates was adopted, totaling 24 experimental units. The grass was defoliated upon reaching approximately 95% light interception. Two tussocks were chosen per plot to evaluate the tiller appearance (TAR), mortality (TMR), and survival (TSR) rates by counting the live and dead tillers at the end of each evaluation cycle. Three evaluation cycles were adopted. Tiller appearance and survival rates were used to calculate the stability index (SI). All data were subjected to analysis of variance and mean comparison by Tukey's test at the 5% probability level using SAS 9.0 statistical software. A higher TAR was observed when the grass was managed at the harvest heights of 15 and 25 cm (80.83% and 67.40%, respectively). Greater defoliation intensities increased lightness at the base of the canopy, stimulating the emergence of new basal tillers. There was no difference (P>0.05) across the harvest heights for TMR and TSR; i.e., the number of tillers that died and survived was proportional to the number of tillers that appeared. No effect of harvest heights (P>0.05) was detected on SI, which was 1.5, 1.4, and 1.2 for the respective harvest heights of 15, 25, and 35 cm. Pasture stability is achieved with values near 1.0. Therefore, managing andropogon grass at the heights of 15 and 25 cm provides a higher tiller appearance rate.

Keywords: defoliation intensity, perenniality, tillers















