

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

DRY MATTER PRODUCTION AND MORPHOLOGICAL CHARACTERISTICS OF ELEPHANT GRASS GENOTYPES UNDER TWO HARVEST FREQUENCY STRATEGIES

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The elephant grass is a forage with great productive potential and when it is well handled under cut allows several harvests throughout year. However, usually the cutting frequency used by this forage plant follows a fixed period of days and does not consider the physiological age of the plant, which may lead to non-exploitation of the productive and qualitative potential of the forage plant produced. Thus, it is necessary to seek parameters for efficient cutting management. The objective of this work was to evaluate the dry matter production and morphological characteristics of elephantgrass genotypes under two harvest frequency strategies. The experiment was carried out at sugarcane station in Carpina-EECAC / UFRPE, countryside of Pernambuco. The design was randomized in blocks, with factorial arrangement 4x2 and four replications. The treatments were four genotypes of *Pennisetum purpureum* Schum. Elefante B, IRI-381 (high size), Mott and Taiwan A-146 2.37 (low size) under two cutting frequencies: fixed (60 days) and variable (90% light canopy interception). The variables analyzed were dry matter production (DMP), leaf blade / stem (LB / S) plant height (PH), number of basal tillers (NBT), light interception (Li) and leaf area index (LAI). The datas were submitted to analysis of variance and compared by Tukey test at 5% probability. There was significant interaction between genotype and cutoff frequency for DMP, PH, NBT and LI. The variable harvest frequency presented higher PMS per cycle, however with a lower number of cycles. It may be related to the greater progress toward plant development until it achieves the goal established by the harvest (90% LI). Elefante B and IRI-381 genotypes were more modified when compared to Mott and Taiwan A-146 2.37. This can be explained by the longer internodes length. Taiwan A-146 2.37 issued higher NPB in both frequencies. Elefante B and Mott genotypes showed higher IL in fixed harvests. Higher LB / S was observed for Mott grass (1.36). Higher LAI (4.0) was observed for the variable frequency, possibly it is due to the greater development of the plant. The dry matter production and morphological characteristics of elephant grass genotypes are modified according to the adopted harvest frequency strategy.

Keywords: cutting frequency, light interception, *Pennisetum purpureum* Schum.

Promoção e Realização:



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