Abstract

This study aims to evaluate the morphogenetic characteristics of three cultivars of Brachiaria brizantha subjected to nitrogen fertilization. The design was a randomized block in factorial arrangement 4x3; three cultivars of B. brizantha - Marandu, Piatã, Xaraés and four nitrogen levels - 0, 80, 160 and 240 kg/ha, with three replications. The experimental units consisted of plastic pots filled with 5 dm³ of soil. Thereupon the establishment fertilization, varieties were sowed directly in the pots, leaving, after thinning, five plants per pot. Forty-five days after planting, it was done a standardization cut at 10 cm tall. Nitrogen levels were distributed according to the treatments, divided in three applications. The morphogenetic characteristics were evaluated in three tillers per sampling unit and data were submitted to analysis of variance and regression. For all evaluated characteristics there was no interaction between factors cultivar and nitrogen levels, verifying only the effects of nitrogen on the variables leaf appearance rate and phyllochron. The dose 240 kg/ha of N corresponds to the greater leaf appearance rate. Cultivar Marandu shows the higher leaf blade: pseudostem and ratio of leaf elongation rate and elongation pseudostem, which favors higher forage quality.

Keywords