

## **MORPHOLOGICAL AND AGRONOMIC CHARACTERIZATION OF BUFFEL GRASS OF THE GERMPLASM BANK OF CENCHRUS OF THE EMBRAPA TROPICAL SEMI-ARID**

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The objective of this study was to characterize morphological and agronomic buffel grass accesses the germplasm bank of Cenchrus of the Embrapa Tropical Semi-Arid checking the variability and efficiency of characters in carrier two consecutive cuts. We used 30 accesses of buffel grass in randomized blocks with three replications and with plot nine plants per access, taking as the central portion useful plant in the plot. The evaluations were performed after two cuts of the aerial part of Buffel grass; each evaluation was performed 90 days after each cut. The characterization of the accessions was based on 15 quantitative and qualitative morphological descriptors. Quantitative descriptors were submitted to analysis of individual and combined variance, considering the two cuts of treatment and then applied by the Scott and Knott test (5%). Qualitative descriptors were submitted to descriptive analysis. For divergence analyzes both quantitative and qualitative descriptors were grouped using the methods of Tocher and UPGMA from the Mahalanobis distance (D2). In the combined analysis, the effects of access and cutting were significant for almost all the features. This result indicates genetic heterogeneity among the accessions and the felling indicates mainly differences in management culture conditions and growth rate of each access in each mowing season. It was also observed significant effect of genotype x environment interaction ( $p < 0.01$ ) for three descriptors (tillers/shoot, followed by number of inflorescence and color of the seeds) and other descriptors these effects were not significant. The accessions were separated into two groups, the first consisting of 29 accesses and the second composed of the access 138, in which number of tillers/shoot, followed by number of inflorescence and color of the seeds were the characters of greatest importance in the separation of access. A low genetic divergence was observed between the studied accesses.

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