QUIMICAL COMPOSITION OF PASPALUM ACCESSIONS FOR DIVERSIFICATION OF PASTURES

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There is a growing demand for diversification of tropical forages adapted to climate change and that may contribute to the reduction of large monoculture areas. The objective of this project is selecting among of 26 accessions of six groups of genus Paspalum, those have desirable characteristics (high nutritional value, high productive and adaptive capacity) as alternatives to animal production systems. The treatments were corresponded to cut frequencies represented by intervals of 28 and 70 days, according to the rainy (spring and summer) and winter seasons of 2016-2017. The treatments were allocated the experimental units (2.5 m² plots) according to a complete randomized blocks design, with 4 replicates. Each plot is represented by an access and is composed of 5 plants. The cuts had been made a height of 10 cm from the soil and the border plants was discarded and considered the middle (1.5 m²) at as a form of standardization and each cycle was being evaluated the nutritional value. The determinations of the materials were carried out by means of analysis of the dried samples and milled of each cut. Subsequently taken to the laboratory for chemical analyzes: Crude protein (CP) was analyzed by the micro method Kjeldahl, neutral detergent fiber (NDF) by Van Soest. Statistical analysis was performed using the PROC MIXED of the Statistical Analysis System (SAS). The effects of cutting frequency, season of the year and the interaction between them will be considered fixed effects and the random effects are the blocks. Analysis of variance was performed based on the following causes of variation: cut frequency, season of the year and interaction between them. The means of the treatments were estimated using the "LSMEANS" and the comparison between them, when necessary, by means of the "Student" test and 5% probability of error. The results are shown in relation to dry matter and its respective Standard Error (SE). The CP in the seasons had an average of (14.20, 15.18, 14.58% with 0.63% SE) in the spring, summer and winter respectively, with emphasis on group accesses of P. malacophyllum and P. regnellii which had the highest (P<0,05) average between accesses. In the NDF average (68.62, 70.63, 71.95% with 1.58% SE) in the spring, summer and winter with the lowest (P<0,05) content with the group of P. atratum. The quimical compositions results show that Paspalum accessions have potential and alternative to be used in the livestock system as forage.

Keywords: crude protein, genetic variability, neutral fiber detergent