PRODUCTION 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: morphological components, total green forage mass and a sample for nutritional value. The samples were dried in an oven and percentage of dry matter of the sample was obtained and the total dry matter was extrapolated to kg ha^{-1} (TDM). 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 in spring cutting one and cutting two there was no difference (P>0,05) between the studied accessions. In the first cutting and second of summer season the *P. atratum* (BGP-15) had the highest production (P<0,05) among the groups with 4.949 kg ha^{-1} TDM and 0.461 Standard Error (SE) and 5.274 kg ha^{-1} TDM with 0.461 SE respectively. Inside the winter the *P. regnellii* (BGP-341) and *P. regnellii* (BGP-248) had the highest production (P<0,05) among the groups with 6.269 kg ha^{-1} TDM and 6.251 kg ha^{-1} TDM with 0.4616 SE. Concluding that *P. atratum* in the summer and *P. regnellii* in the winter shows forage potential production inside a selection program.

Keywords: herbage mass, genetic variability, grasses, seasons