

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

ANALYSIS OF AGRONOMIC CHARACTERISTICS IN GENOTYPES OF *Panicum maximum* Jacq

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Search for the most productive forages and adapted, that answer requirements of the rural producers and increase the ruminants performance is constant. Therefore, the genetic improvement of forage plants becomes indispensable for achieving these objectives. In this way, the aim was to evaluate the agronomic characteristics in *Panicum maximum* genotypes. 17 genotypes (B57, B53, T97, T104, G56, K5, 309, A78, T110, 217, B46, C12, B11, H64, C53, B55, K214) were evaluated in a randomized block design, with three replicates. The plot area was 2.0 × 2.0 m. Five cuts were made at 20 cm from the soil in any useful area of the plot, with the edges being discarded. After the cuts, the forage was weighed to obtain the green mass production. Sub-samples were removed and separated into leaf blade, stem+sheath and dead material. Later they were dried in a forced circulation oven at 55°C for 72 hours and weighed. In each cut, total dry mass production (TDM), leaf blade dry mass production (LDM), dry matter percentage (%DMP), leaf blade (%LB), stem+sheath (%SS), dead material (%DM) and leaf blade-to-stem ratio (LSR). The data were analyzed in the program GENES - Computational application in genetics and statistics (version 2016.6.0). All genotypes evaluated showed no differences ($P > 0.05$) for the characteristics %DMP, TDM, and LDM. However, in the %LB, %SS, %DM, and LSR, variations were observed among genotypes ($P < 0.05$). Genotype A78 presented greater %LB (0.86) and LSR (17.43) and lower %SS (0.11) and %DM (0.017), genotypes T97 and B46 presented similar results. In contrast, genotypes K214 and K5 showed higher %SS (0.22 and 0.19) and %DM (0.035 and 0.039) and lower %LB (0.73 and 0.76) and LSR (5.23 and 9.29), genotypes 309 and T104 obtained similar values, differing only by %DM (0.016 and 0.010). In conclusion, both the production characteristics and the participation of morphological components are fundamental in the forage selection process, since they are directly related to the mass production and the nutritive value, which will reflect on animal performance.

Keywords: dry matter, forage production, leaf percentage

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