IDENTIFICATION OF DNA CONTENT OF DIFFERENT SPECIES OF *Paspalum*

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Paspalum is a genus with many species of great potential for use as forage or turf. It is known as the most important genus in Gramineae family in America. The Germplasm Bank of *Paspalum* at Embrapa comprises about 350 accessions from 50 species, mainly from the informal group Plicatula. The objective of this study was to identify the DNA content of 300 accessions of *Paspalum* conserved to identify which may be diploid or tetraploid to finally adapt the best methodologies of conservation and use of germplasm. Leaves were collected in the field at Embrapa Southeast Livestock and wrapped in plastic bags with a small piece of moist paper towel and sent to Embrapa Dairy Cattle to perform the flow cytometry analysis. To determine the amount of DNA, approximately 20-30 mg of young leaf tissue for each sample, and the same amount of young leaf tissue of *Raphanus sativus* cv Saxa (internal reference standard with 1,11pg) were prepared. Nuclear suspension was added with propidium iodide and RNase. The analysis was performed on FACSCalibur cytometer, and the histograms were obtained in the Cell Quest software and analyzed in WinMDI software 2.8. From 47 evaluated species, the DNA content ranged from 1.32 pg for one accession of *Paspalum modestum* to 5.42 pg for an accession of *P. pilosum*. There was variation among accessions within species, and among species. Some accessions had already been confirmed, others still need confirmation to be classified as diploid or tetraploid.

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