

GENETIC RELATIONSHIP IN *Paspalum plicatulum* MICHAUX GERMPLASM USING RAPD MARKERS. Regitano Neto A, Batista LAR, Regitano LCA. Embrapa Pecuária Sudeste, São Carlos, SP. amadeu@cppse.embrapa.br

The genus *Paspalum* comprises native forage grasses from the south of South America, highly adapted to the environment of this region, with good agronomic potential which is still unexplored. The germplasm of the genus is quite diverse and comprises several botanical groups. The *Plicatula* group presents valuable genetic resource as alternative to the narrow genetic basis of introduced forage species. Random amplified polymorphic DNA (RAPD) markers were used to assess the genetic relationships and variation among 13 accessions of *Paspalum plicatulum*. Plant materials were obtained from the germplasm bank maintained by Embrapa's Southeast Cattle Research Center at São Carlos, SP, Brazil. The genomic DNA was isolated from fresh young leaves using the CTAB protocol. RAPD-PCR reactions were performed in a 25 μ l final volume, PCR products were separated in 1,7% agarose gels, stained with ethidium bromide, visualized and photographed under UV light. Nine decameric primers (Operon G3, G10, G18, G19, H03, H05, H07, H08, H12) revealed a total 103 bands with 5,5% of monomorphic loci. Similarity coefficients of Sørensen-Dice and Jaccard were calculated and averaged 0,56 and 0,39, respectively. A cophenetic value matrix was computed using the similarity matrix, and goodness of fit for the cluster analysis was evaluate by the cophenetic correlation of 0,73 for Sørensen-Dice and 0,75 for Jaccard's coefficients. Cluster analyses using unweighted pair-group method (UPGMA) were performed and generated similar dendrograms for both similarity coefficients. Consensus (C_{IC}=0,91) dendrogram was constructed and formed two main clusters and a third one consisted by an isolated accession. Group I were of accessions collected in longitudes of 28° and 30° in states of Santa Catarina and Rio Grande do Sul, while group II were formed for accessions from longitudes of 22°, 25° and 30° in states of Mato Grosso do Sul, Parana and Rio Grande do Sul, respectively, indicating a possible migratory route. Órgão Financiador : FAPESP