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GENETIC DIVERSITY IN PASPALUM COMPRESSIFOLIUM SWALLEN GERMPLASM BASED ON RAPD ANALYSIS. Batista LAR, Regitano Neto A e Regitano LCA. Embrapa Pecuária Sudeste, São Carlos, SP. lbatista@cppse.embrapa.br

Paspalum is a quite diverse genus, natural of South America, highly adapted and responsible for a significative portion of forage produced in native grasslands. In much of the highland of Brazil, *Paspalum* grass species are dominant. Comprising various botanical groups, the genus represents valuable genetic resource against the genetic vulnerability represented by exotic grasses and for introduction on degraded environments. Additionally it has an important agronomic potential which is still unexplored. Random amplified polymorphic DNA (RAPD) markers were used to assess the genetic relationships and diversity among 10 accessions of Paspalum compressifolium. 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 reaction were performed in a 25µl final volume, PCR products were separated by electrophoresis on 1,7% agarose gels, run in 1X TBE buffer, 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 104 bands with 14 monomorphic loci. Genetic similarities were calculated between all pairs of accessions based on Sørensen-Dice and Jaccard similarities index and ranged from 0,15 to 0,81 and from 0,26 to 0,89, respectively. Goodness of fit for the cluster analysis was evaluate by the cophenetic correlation of 0,80 for Sørensen-Dice and 0,85 for Jaccard coefficients and estimated stress values of 0,12 and 0,10, respectively, were indications of good efficiency of graphic projection. Cluster analyses using unweighted pair-group method (UPGMA) were performed and generated identical dendrograms for both similarity coefficients. Consensus (CIc=1,00) dendrogram was constructed and divided the accessions into three groups. The grouping of the accessions using RAPD analysis was largely consistent with their geographic origin: group I consisted of accessions from longitudes of 25° in state of Parana; group II contained the accessions from states of Santa Catarina and Rio Grande do Sul in longitudes of 27° and 28°, while group III was formed by an isolated accession collected in longitude of 22° in state of Santa Catarina. Órgão Financiador : FAPESP, Embrapa