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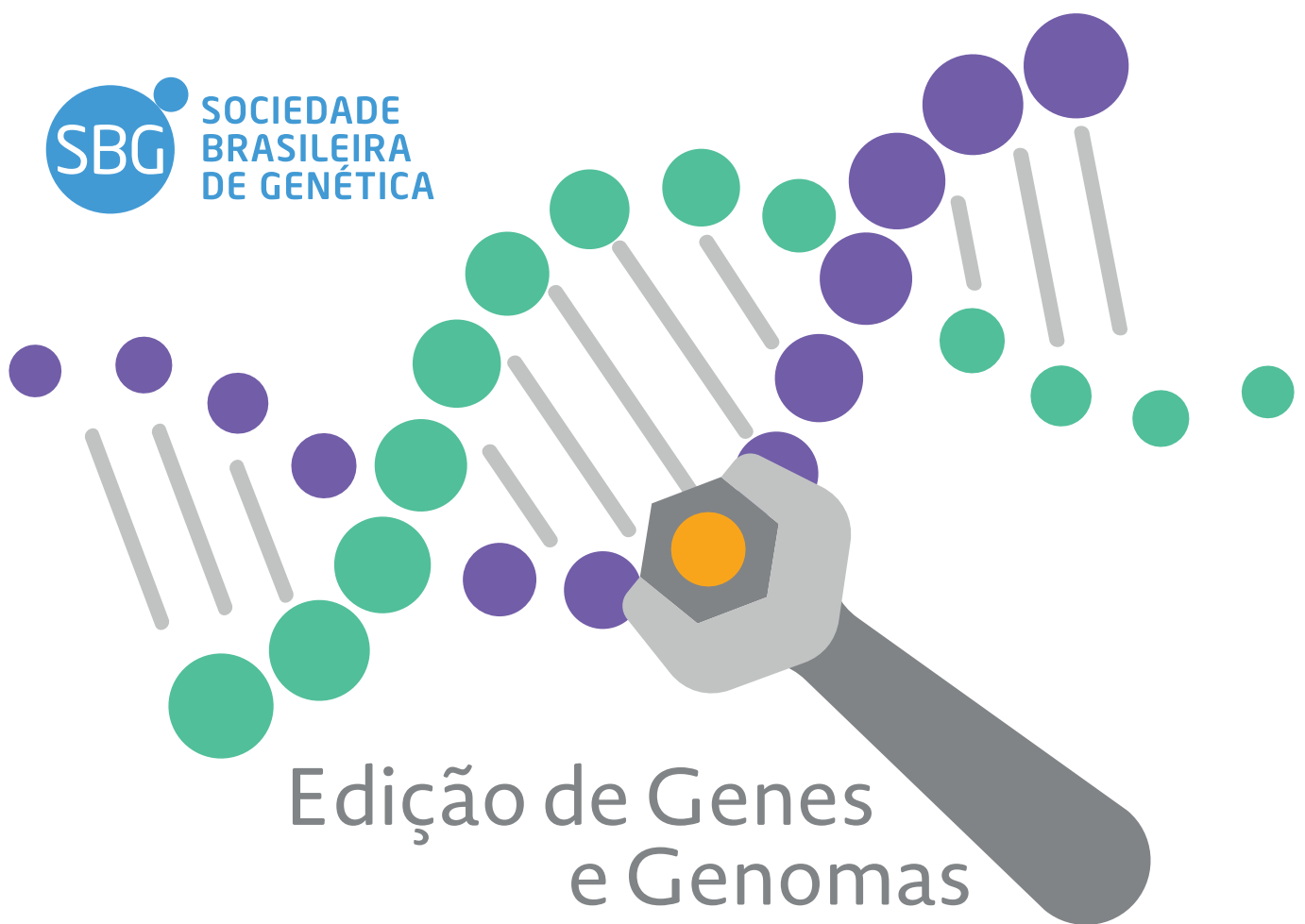
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REPRODUCTIVE CHARACTERIZATION OF ACCESSIONS OF *Paspalum* (PLICATULA INFORMAL GROUP) USING FLOW CYTOMETRY, CYTOEMBRIOLOGICAL ANALYSIS AND MOLECULAR MARKERS

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Belonging to the Poaceae family, the genus *Paspalum* have more than 350 species, many of them with great potential for forage or lawn purposes. The *Paspalum* Germplasm Bank (GB) of Embrapa Pecuária Sudeste has about 450 accessions from 50 species, most of them belonging to the Plicatula group. The majority of the *Paspalum* accessions is tetraploid ($2n = 4x = 40$) and has apomictic behavior, being rare the sexual genotypes. The identification of only apomictic materials in a collection limits the genetic breeding program because there is no possibility of intra and interspecific hybridizations. Diploid and sexual genotypes should be polyploidized and used in intra and interspecific crosses. Thus, the *Paspalum* reproductive characterization allows the identification of sexual genotypes and the choice of parents in breeding programs. The objective of the present study was to characterize reproductively 137 accessions of *Paspalum* belonging to the informal group Plicatula conserved in *Paspalum* GB of Embrapa Pecuária Sudeste based on flow cytometry technique, cytoembryological analysis and molecular markers. Based on flow cytometry data, 49 accessions were considered highly apomictic, 85 were facultative apomictic and one accession (BGP 272 - *P.rojassii*) presented behavior compatible with the sexual reproductive mode. Based on the cytoembryological analysis, three accessions (BGP 281 - *P.lenticulare*, BGP 272 - *P.rojassii* and BGP 380 - *P.compressifolium*) had a sexual behavior and two accessions (BGP 232 - *P.plicatulum*; BGP 178 - *P.compressifolium*) were characterized as highly apomictic and facultative apomictic, respectively. Based on Bulk Segregant Analysis with 78 markers in *P.compressifolium* and *P.lenticulare*, the present study found great polymorphism among samples, however no linkage was observed between the apomixis trait and the molecular markers evaluated. Thus, this study had important results that will be applied in the future at *Paspalum* genetic breeding programs.