

MICROSATELLITE TRANSFERABILITY FROM *Brachiaria ruziziensis* TO *B. humidicola* AND GENETIC SIMILARITY AMONG EVALUATED GENOTYPES

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Species from the genus *Brachiaria* play an important role in tropical pastures. *Brachiaria ruziziensis* presents di and tetraploid cytotypes and *B. humidicola* presents from tetra to heptaploid cytotypes. Although they belong to the same genus, these species belong to different agamic complexes. The aim of the work was to validate microsatellite markers previously developed for diploid *B. ruziziensis* in *B. humidicola*. For the analysis, 16 genotypes from both species were used, being two accessions of *B. ruziziensis* and six hexaploid accessions and eight intraspecific hybrids of *B. humidicola*. PCR was performed and resolved in 6% denaturing polyacrilamide gels stained with silver nitrate. Markers Brz4011-Brz4050 and Brz3050-Brz3067 were evaluated. Heterozigosity and PIC values were estimated with software Jan (2002). The Jaccard's similarity coefficient were calculated and a dendrogram was obtained using software NTSYS v. 2. 1. In total, 27 loci were successfully amplified, from which 13 were transferred to *B. humidicola*. Observed heterozigosity values ranged from 0 (for monomorphic loci) to 0.84. Average PIC value obtained was 0.51, being 63% of the loci with PIC > 0.5, allowing the discriminance of genotypes from each species. Jaccard's similarity coefficient values ranged from 0.09 to 0.93, showing high genetic diversity. Two main groups were identified, one for *B. ruziziensis* accessions and the other for the *B. humidicola* genotypes. The two ruzigrass accessions presented 59% of similarity. In the *B. humidicola* group, the accession H112 was the most genetically divergent and the intraspecific hybrids grouped with its parentes, the accessions H16 and H31. Although from the same genus, it is expected that some of the loci do not amplify in *B. humidicola*. The transferred markers to *B. humidicola* can be used in the genetic breeding of the species and in comparative analysis between the two *Brachiaria* species.

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