



Mitotic behavior in root tips of *Brachiaria* genotypes with meiotic chromosome elimination during microsporogenesis

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Genet. Mol. Res. 7 (2): 336-341 (2008)
Received December 10, 2007
Accepted January 15, 2008
Published April 15, 2008

ABSTRACT. Three accessions of *Brachiaria brizantha*, three of *B. humidicola*, and two interspecific hybrids between *B. ruziziensis* and *B. brizantha* were analyzed with regard to their mitotic behavior in root tips. All these genotypes revealed chromosome elimination or lack of chromosome affinity in previous analyses of microsporogenesis. Analyses of root tips showed a normal mitotic division in all accessions and hybrids, reinforcing the notion that the genetic control of meiosis is totally independent of that of mitosis. The implications of these findings for the *Brachiaria* breeding program are discussed.

Key words: *Brachiaria*; Chromosome elimination; Mitosis; Meiosis