



*Short Communication*

## Genetic variability of *Mahanarva* sp (Hemiptera: Cercopidae) collected from different sites in Brazil

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**ABSTRACT.** Spittlebugs are the leading cause of damage to tall grasses. Annual losses are estimated to reach 2.1 billion dollars in sugarcane crops and grazing land throughout the world. Correct identification of these species is difficult due to similarities in color, body size and male genitalia. Molecular markers have been useful in the identification and assessment of genetic diversity of many species. We investigated the genetic diversity of the spittlebug species *Mahanarva fimbriolata*, *M. spectabilis* and *M. liturata* and looked for markers that could aid in their identification. DNA from 34 spittlebug specimens, collected from six different regions of Brazil (Brasília, Campo Grande, Valença, Presidente Prudente, Juiz de Fora, and Porto Alegre), was analyzed with 29 RAPD primers, generating 501 polymorphic markers. High genetic variability was found among individuals *M. fimbriolata* (0.37), *M. spectabilis* (0.18) and *M. liturata* (0.69). Species-specific molecular RAPD markers were identified for each of the three species; these could be used as auxiliary tools for their correct identification.

**Key words:** Molecular marker; RAPD; Spittlebugs