



# Genetic variability among natural populations of *Zaprionus indianus* (Drosophilidae) in the States of São Paulo and Minas Gerais, Brazil

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**ABSTRACT.** Random amplified polymorphic DNA (RAPD) was used to detect polymorphisms among *Zaprionus indianus* fly populations collected from six municipalities in the States of São Paulo and Minas Gerais, Brazil. This species is an important, recently introduced fruit fly pest of figs and other fruit. Among 21 primers, 16 produced 73 reproducible polymorphic fragments; primer AM-9 produced the greatest number of polymorphic bands (nine), with 52% genetic variability among populations. Genetic divergence analysis of the *Z. indianus* populations demonstrated two major groups, named Western and Eastern groups. There was greater gene flow within than between groups. The correlation coefficient for genetic and geographic distances (Mantel test) was significant, demonstrating isolation by distance.

**Key words:** Drosophilidae; Polymorphisms; *Zaprionus indianus*; Random amplified polymorphic DNA