Title: **Bacteria isolated from Drosophilidae *Zaprionus indianus***

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ABSTRACT

The Cerrado is located in the central highlands of Brazil. With agricultural development there was a reduction of biodiversity and appearance of disease in animals and man, to confront this problem, the use of genetically bioindicators of environmental quality is of most importance. One this is the introduced species of the family Drosophilidae *Zaprionus indianus*. The objective of this study was to identify *Z. indianus* in PEJC and PESCAN ecologicals parks, to isolate bacteria from integument of the *Z. indianus* species collected, to check the resistance of microorganisms to antibiotics, and observe if resistance is from chromosomal or extracromossomal genetic. Collections of *Z. indianus* were performed in four seasons of the two parks, drosophilids were separated and proceeded to dentification of microorganisms. Antibiogram tests were performed, plasmid profile characterization. Results show that 19 bacterial genera were isolated in the PEJC and 15 bacterial genera in PESCAN. Results identify a greater number of cells resistant to antibiotics tested; plasmid profile data show that 60% of antibiotic resistant bacteria have plasmids. The values found show that *Z. indianus* can act as vectors of microorganisms that affect the health of animals and humans and that these organisms may be influenced by the seasons.

Key worlds: Drosophilidae, microorganisms and molecular genetic