



## Effectiveness of extracts of *Furcraea hexapetala* (Jacq.) Urban on *Myzus persicae* Sulzer

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### ABSTRACT

An investigation was carried out during the period 2005-2008 with the objective of determining the technical effectiveness of an extract of *Furcraea hexapetala* (Jacq.) Urban (Maquey) on the insect *Myzus persicae* Sulzer under laboratory and field conditions. Assays to determine the technical effectiveness of natural extracts of *F. hexapetala* on *M. persicae* were carried out in the laboratory by spraying insects raised on potato and pepper leaves in Petri dishes, and in the field by spraying the extract on natural insect populations on potato and pepper crops. In all the cases five variants were studied: the extract of the plant at 12.5%, 25%, 50% and 100% extracted from the juice of leaves, and a control. In addition, an assay was carried out in the Chemical Pharmacy Department of the Central University of Las Villas to determine the technical effectiveness



of the fractions of the extract of *F. hexapetala* that were obtained with different solvents. on the aphid species. The extract of the plant manifested technical effectiveness on the insect higher than 73% "in vitro" and 71% under field conditions in both pepper and potato. After 48 hours of exposure the fraction of the extract of *F. hexapetala* obtained using *n*-butanol showed 100% effectiveness. This result confirmed that the insecticidal effect of the plant is due to the presence of saponins in the ethanol-water extract, which is further concentrated through successive processes in the *n* - butanol solvent.