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CODEN (USA): JCBPAT Research Abstract

Effectiveness of *Lecanicillium lecanii* for Control of *Thrips tabaci* Lindeman on Onion Crop.

H. E. Flores-Moctezuma, C. Luna-Gutiérrez and F. Castrejón-Ayala.

Instituto Politécnico Nacional. Centro de Desarrollo de Productos Bióticos. Departamento Interacciones Planta-Insecto (IPI). Yautepec, Morelos, México. C.P: 62731.

Abstract: Fungi entomopathogenic offers an excellent alternative for the conservation of agro-ecological systems. *Thrips tabaci* reach up to 90% losses in the onion crops in Mexico. The purpose of this study was to evaluate of *Lecanicillium lecanii* as a bioinsecticide to control *T. tabaci* Lind. The experiment was made an onion crop located in the community of Santa Ana Necoxtla, San Juan Epatlán; Puebla, Mexico. Two strains of the fungus *L. lecanii* were provided by the IPI Department, where in previous work dilutions of spores were performed to find the best dose to use in the field. These solutions were sprayed on the leaves where most insects were found. The design was randomized complete block with 2 treatments and a control with 6 replicates each. Experimental (Exp.) plot: 10m, Width (W) x 20m, Length (L); Exp. blocks:11m Lx1m W; Exp. unit 10cm Lx10cm W. After 5 days counting live and dead insects were performed. Analysis of Variance was used at a level of significance α=0.05 and α=0.01 and to establish the differences all procedures with multiple partners (Fisher LSD Method). *L. lecanii* at concentrations 1×10^9 ml conidia/100 mortality achieved between 49 and 54% being the most effective concentration under field conditions.

Keywords: Entomopathogenic fungi, *Allium cepae*, Innocuous.

Corresponding author: H.E. Flores-Moctezuma

* e-mail hfloresm@ipn.mx.