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BIOLOGICAL CONTROL WITH THE FUNGI *PENICILLIUM ROQUEFORTI* AGAINST *CERATITIS CAPITATA* L. (DIPTERA: TEPHRITIDAE)

BACHI KARIMA & ALI AHMED SADOUDI DJAMILA

Laboratoire de Production, Sauvegarde des Espèces Menacées et des Récoltes (PSEMR).

Faculté des Sciences Biologiques et des Sciences Agronomiques. Université Mouloud Mammeri de Tizi Ouzou. Algérie.

ABSTRACT

The fight against pests of fruit crops remains essentially chemical. Currently, we realized that it has harmful effects on the environment and on humans. A new perspective of biological control through the use of biological agents such as fungi gives promising results. In the laboratory, we tested the insecticidal activity of four doses of the conidial suspension of *Penicillium roqueforti* (class of Eurotiomycetes) on the third larval stage of *Ceratitis capitata*. The results reveal that the rate of larval mortality increases after 24 hours of inoculation up to 21.25% at the dose d4 (5.10^6 spores / ml). Similarly, the rate of larvae transformed in pupae has reached 77.5% with dose d3 (4.10^6spores / ml). The rate of malformed pupae, increases to 71.25% for the higher dose represented by d4 (5.10^6 spores / ml). The adult emergence rate of *C. capitata* decreases with increasing dose to be canceled dose d4. This rate decreases for adults formed from larvae placed in the soil contaminated with *P. roqueforti* to 12.5% at the dose d2 ($3,2.\ 10^6$ spores / ml). We conclude that this biological test showed that *P. roqueforti* presents a biopesticidal potential against larvae and pupae of *C.capitata*.

KEYWORDS: *Ceratitis Capitata*, *Penicillium Roqueforti*, larvae, pupae, biopesticide