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رسالة مقدمة من الطالبة

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EFFECT OF SOME ENVIRONMENTALLY SAFETY BIOPESTICIDES ON SOME LAND MOLLUSCS SPECIES IN QALUBIA AND SHARKIA GOVERNORATES

Submitted By

EmanKamelKhidr Hassan

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A thesis submitted in Partial Fulfillment
Of
The Requirement for the Doctor of Philosophy Degree
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Department of Environmental Agricultural Sciences
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ABSTRACT

The present investigation aimed to aim of the study about deploys certain of Qalubia and Sharkia Governorates, the losses for many corps and the evalutate the effect of some Chemical pesticides and Biopesticides has no toxic residues and invironmental friendly. The obtained results could be summarized as follow:

1-*Eobania vermiculata* and *Monacha obstructa* were found widly in crops, Vegetables,and ornamental plants in most districts at Qalubia and Sharkia Governorates.

2-Results of field experiments revealed that *M. obstructa* snails caused a different damage to Guava, Apricot, Peach, Grape, Tomato, Potato, Lettuce, Cabbage, Orange leaves and Tomato fruits. While, *E. vermiculata* snails caused a highly damage on orange leaves.

3-Spinetoram 12%SC, Emamectin benzoate 0.5% EC,Emamectin benzoate 1.92%EC, Lambda-cyhalothrin 10% SC and Methomyl 90%SPused as dipping were estimated against *E. vermiculata*, *M. obstructa* under laboratory conditions.

4-Effect of the tested pesticides on the tested snails under field condition by using of double dose from recommended doses of insecticides (Bio and Chemical pesticides) caused high mortality percent than that the using of recommended doses. we found that the *M. obstructa* was more susceptible than *E. vermiculata.*

5-The effect of tested compounds were on the estimated total protein**,** alkaline and acid phosphatase and acetylcolinesterase in field and laboratory strains of *E. vermiculata* and *M. obstructa* after different periods of treatments. The results showed that Emamectin benzoate 0.5%EC,Emamectin benzoate 1.92%EC and Lambda-cyhalothrin 10%SC

Decreased significantly the total protein content in both field and laboratory strains of *E .vermiculata* and *M. obstructa* the tested species of molluscus after all the periods of treatments. While, Spinetoram 12%SC and Methomyl 90%SP increased significantly the total protein contents in both field and laboratory strain of *E. vermiculata* and *M. obstructa* after all periods of treatment .Alsothe data showed that, Emamectin benzoate 0.5%EC, Emamectin benzoate 1.92%EC, Spinetoram 12%SC, Methomyl 90%SP and Lambda-cyhalothrin 10%SC increased the level of a alkaline phosphatase in both field and laboratory strains of the tested snails after the 48 and 72hr of treatment with the LC_{50} of the cone/ compounds**.**While all compound tested increased the (Acid phosphatase) enzymes levels when used against both snail (laboratory and field strain).ButLambda-cyhalothrin 10%SC, Methomyl 90%SP reduced the (Acid phosphatase) enzymes levels when used against *M. obstructa* field strain after 48hr and increased after 72hr while, Lambda -cyhalothrin10%SC reduced the (Acid phosphatase) enzymes levels when used against *M. obstructa* laboratory strain after 48hr and increased after 72hr.Results showed that all compounds tested reduced the (Acetylcolinesterase) enzymes levels when used against both snail (field and laboratory strain). *M.obstructa* and *E. vermiculata*.

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