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Faculty of Agriculture

Department of Plant Protection

The Thesis Submitted for The Degree of M .Sc

(in The field of Agricultural Entomology)

Supervisor:

Dr. A. Mirshekãr

Advisors:

Dr. A. Khani

By:

Zahra Pourmir

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Abstract

Minced tomato leaf moth, scientifically named Tuta absoluta (Meyrick) (Lep.:Gelechiidae), is a relatively new pest that causes 50 to 100% economic damage to Solanaceae family, especially tomatoes and potatoes. It is of utmost importance. Due to the severe damage to this pest and the high number of generations of Minos butterfly that can produce 15 to 12 generations per year and cause rapid resistance to pesticides, the invention and use of safe alternative pest management methods to control this pest. Inevitably. In this regard, the effective variables on increasing the efficiency of Bacillus thuringiensis products for controlling this pest were investigated. To this end, the effect of different concentrations of pesticide Avicet and Problet on the mortality rate of one larval instar larvae of this moth was investigated with the aim of achieving effective control using the least amount of pesticide. In this regard, experiments were carried out with the recommended concentration of each compound, half the recommended concentration, twice the recommended concentration, and the application of two pesticides at 24 and 72 h with each other. Experiments were conducted in controlled conditions at 25 2 2 ° C 60 ± 10% and 16 Light hours and 8 hours of darkness were evaluated. The results showed that the average mortality rate of larvae aged one and the end of the larval period was 66.7 and 48.0, respectively. Nausea and vomiting due to the use of different concentrations of propellant during 48/43 hours and 43.3 years of age The results showed that there was a significant difference between different concentrations of probiotics after 48 hours and also the mortality rate of 72 days after application of different concentrations of vomit showed 58.3 at age 1 and larval age of 58.3. The mean mortality was 73.3% and the mean mortality rate was 72 hours in the first 72.3 larval instars and 76.1% in the larval instars. Studies showed that there was a significant difference between the different concentrations of oocysts and probolets at different times. Ovovict and Problett's Dosage Mortality with Concentrations of 50 and lc50 during 48 and 72 h at 60.2 and 62.8 at first age, respectively. During 48 hours and during 72 hours in the first larval instar 71.5 and the last 81.1% there was no significant difference between the percentages of mortality at different larval concentrations. Minoz shows tomatoes

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