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#### ABSTRACT

#### APPLICATION OF SOME CONTROLLING METHODS ON TOMATO LEAFMINER MOTH (TUTA ABSOLUTA) IN NORTH AFRICA

Different control programs were conducted on spring and summer seasons, 2013 to determine the effectiveness of these programs against the leafminer, Tuta absoluta (Meyrick) in tomato crop as follow:program A (Chemical+ Pheromone); B (Spinosad+ Trichogramma+ Pheromone): С (Neem+ Trichogramma+ Pheromone): D (BT+*Trichogramma*+ Pheromo): E (Oil+*Trichogramma*+ Pheromone) and F (Control)". Results indicated that highly significant differences between different programs during the two seasons (spring and summer). Program **(B)** "Spinosad+ Trichogramma+ Pheromone" was more efficient than other programs in reduction *T.absoluta* during two seasons. The results obtained that the numbers of catches natural enemies in spring season less than summer season. In addition, program A "Coragen 20%+Pheromone" was more toxic to different species of natural enemies than the other programs compared with control (untreated) on spring and summer seasons. The results obtained that the numbers of catches natural enemies in spring season less than summer season using sweeping net, except catching Coccinellidae in spring more than catching in summer season.Program A "Coragen 20%+Pheromone" was more toxic to different species of natural enemies than the other programs on two seasons. Highest yield production in spring comparison with summer season in all control programs. The maximum yield production in program B "Spinosad+ Trichogramma+ Pheromone), whereas, in summer season the maximum production yield obtained after treated with Spinosad+ Trichogramma+ Pheromone. The maximum weight of 100 fruits after applied program B "Spinosad+ Trichogramma+ Pheromone". But in summer season the maximum weight was found after applied program B "Spinosad+ Trichogramma+ Pheromone".

#### Key words: Integrated pest management- Leafminer mothtomato plants