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Title of Thesis Pests and Predators Inhabiting Tomato, Eggplant and Pepper Plants in Fayoum Governorate

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ABSTRACT

Tomato, eggplant and pepper crops were cultivated in nili and summer plantations during seasons 2011/2012 and 2012/2013 at El- Mandara , Fayoum Gov. All usual agricultural practices were made except for the chemical control.

On tomato ,results indicated the occurrence of three mite species , ninetten insect species and twenty two spider species . Direct count examination show that each of *Tetranychus urticae* , *Bemisia tabaci* , *Nesidiocoris tenuis* and *Tuta absoluta* were the highest numbers of pests.

On eggplant results indicated the exsistance of two mite species , eighteen insect species and twenty one spider species. The highest numbers of pests were *T. urticae* , *B. tabaci* , *Aphis gossypii* , *Empoasca decipiens* and *Thrips tabaci* .

For pepper crop , two mite species , thirteen insect species and twenty four spider species were recorded. The highest numbers of pests were *A. gossypii* and *T. tabaci* .For sweeping net specimens , *E. decipiens* , *N. tenuis* and *Lygus gemellatus* were the highest numbers on tomato and eggplant, while the highest recorded species on eggplant were *E. decipiens* and *Lygus gemellatus*.

For spiders , six species were observed on each of tomato , eggplant and pepper crops , 8 species observed on two plant species and 33 species were recorded on one plant species.

For predaceous insect, three species namely *Coccinella undecimpunctata , Syrphus* sp. and *Orius* sp. were observed on each of tomato , eggplant and pepper crops , two species *Mantis religisa* and *Chrysopa* sp. observed on two plant species and one species namely *Cycloneda sanguine* was recorded on one plant species.

Biological aspects of the spider *Parasteatoda tepidariorum*, (Koch), Fam : Theridiidae were studied under constant conditions 25±2^{0}C &65±5 %R.H. Spiderlings of females and males passed through 4 instars with feeding on *T. absoluta* larvae. Longevity of females ranged from 24.0 - 57.0 days (average 39.6) compared with 15.0 - 45.0 days (average 33.9) for male . Eggs hatched after 12 days . The life span of females was longer than that of males. An average, female lived for 84.83 and male lived for 72.85 , days .

Spiderlings of females consumed, 50.92 prey , while spiderlings of males consumed 36.28 prey . Adult females consumed 58.66 , the total consumption of spiderlings and adults females was 106.66. Adult males consumed 37.78 , the total consumption of spiderlings and adults males was 74.1 prey .

Key words: Tomato, Eggplant, Pepper, Mites , Insects , True spiders, Biology *Parasteatoda tepidariorum*