INTRODUCTION

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Field crops are highly infected by phytophagous mite, *Tetranychus urticae* Koch that causes great damage such as cotton which causing reduction of plant growth and crop production. Mites feed on the leaf undersurface. They suck leaves sap, producing blotched with white or pale yellow spots, which range in size from very small specks to larger areas as the specks coalesce. The damage is visible on both the upper and lower surface of the leaf. Spider mites spin very fine webs over the surface that become prominent as the number of mites per leaf increases. Severe infestation causes defoliation of leaves. Plants may become severely stunted when large mite populations are allowed to feed and the plants may dray.

In Egypt, survey studies of phytophagous and predaceous mites and insects on cotton plants were studied by **El-Massry (1978), El-Maghraby *et al.* (1994), Yassin (1997)** and **Amer (2003)**.

Scientists all over the world have a growing interest in reducing dependence of chemical pesticide as means of controlling pests; natural enemies are considered as the most promising biological control mean pest. Consequently, invertebrate pathology received much attention in the second twenty century of which insect pests had the main interest.

Araneae being completely predatory animals, spiders are important as enemies of other soil inhabitants **(Kuhenlt, 1950)**.

In Egypt, spiders are found to be insect and mites' predators on which cause serious damages for most important economic plants. **Rahil (1988)** studied some ecological and biological aspects of field spiders in Fayoum. Also, **Sallam (2002)** studied ecological, biological, survey and identification of spiders on different orchards in four Governorates, Fayoum, Beni-suef, Qalyubia and Sharkia. However, in recent years, studies on mites pathogens,

mainly concerning with fungi infecting tetranychoid mites, have been growing on them.

Therefore, the aim of this investigation was carried out to broaden the scope upon the following points:

1-1-Survey to the most important mites (Phytophagous and Predacious), predacious insects and spiders which found associated with cotton fields at two governorates; EL-Menofia and El –Fayoum governorates during two seasons 2002 and 2003.

1-2-Population dynamics of spider mites and predators inhabiting cotton plants at El- Menofia and El-Fayoum Governorates.

2-1- Laboratory Experiment:-Study the side effect of different biocides (*Beauveria bassiana, Metarihizium anisoplae* and *Metarihizium vlavoridiae*) on mite pests under laboratory studies.

2-2-Field Experiment:-Study the side effect of different biocides (*Beauveria bassiana, Metarihizium anisopliae* and *Metarihizium Flavovridae*) on mite pests under field studies.

3- Biological studies on the predator spider species *Nurscia albmaculata* (Lucas, 1846) which found associated with pests infesting cotton plants.