I-INTRODUCTION

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Cotton, the most important economic crop in Egypt, is liable to be attacked by different harmful pests. The Sweetpotato whitefly (SPWF), *Bemisia tabaci* (Gennadius) and *Aphis gossypii* (Glover), have become serious pests of cotton and vegetable crops in Egypt. The primary damage to cotton results from honey dew deposits and the reduction of its quality and value. Severe infestation may destroy crop and yield. Feeding may also transmit virus diseases its vegetable corps.

The Egyptian cotton leaf worm *Spodopera littoralis* is considered one of the most severe destructive cotton pests in Egypt. It causes severe damage resulting in loss of several million pounds ***(Abdel – Hafez, 1978)***.

Different control methods as: mechanical, chemical, biological and radiation, were used but the chemical control method was the dominate currently one, although its use lead to emergence of complicated environmental problems such as many health abuses to man and animals, insect resistance, cross resistance, phytotoxicity, unbalance of the natural biotic and environmental pollution resulting from the undesirable chemical residue ***(Abd El-Samea, 1990)***.

In the recent years, new attitudes have investigated to cut down the usage of manufactured insecticides by using the insecticidal components that naturally occur in several plants. They are considered less toxic to man, and mammals, inexpensive and don't pollute the environment. The botanical extracts or the alternative or adjuvant to chemical insecticides may have repellent, insecticidal and antifeedant effects.

The present study was designed to achieve the following purposes :

1- Evaluation of the efficiency of various natural products and insecticides against the laboratory strain of adult whitefly *Bemisia tabaci*, adult and nymphal stages of *Aphis gossypii* and the larvae of *Spodoptera littoralis*.

2- Evaluation of the efficiency of various natural product and insecticides against the field strains of lower and upper Governorates in Egypt.

3- Determine the resistance and cross resistance of some natural products and insecticides.