INTRODUCTION

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Cotton is one of the important economical crops in Egypt, which employed in several industrial productions i.e. ginning, textile, Food oil, soap, furniture and many other industries, as well as a source of foreign coin when exported to another countries.

The pink bollworm, *Pectinophora gossypiella* (Saund.) and the spiny bollworm, *Earias insulana* (Boisd.) are the most destructive pests infested cotton plants in our country. The larvae destroy the squares, reduce bolls value less, eat the content of the seeds and prevent the lint from reaching full development **Khurana and Verma (1990)** and **Douglas Wilson and Cecil (1992).** There are many methods use in controlling bollworms in Egypt.

Unfortunately, the pesticides still the security practic for this valuable economic crop. Many workers studied the effect of insecticidal application for controlling these insects, **Mourad *et al.* (1991).**

The aim of this work was to throw light on effect of some recommended compounds using different sprayers against pink and spiny bollworms .Two of these series pests are the pink and spiny bollworms which attack the floral parts of cotton plants and caused several damage.

Cotton production in Egypt decreased by about 30% in the eighties, as a result of pests, attack and the increased use of chemicals against bollworms, the pink bollworm (PBW) and spiny bollworm (SBW) (**Ellington, 1990).** The cotton plants spray by different sprayers types. This need to much amount of water, the

number of trained mans and their price. The present study is concerned with the effect of certain commonly used insecticides in Egypt representing the different chemical groups i.e. Pyrethroids, Organophosphorus, Carbamates and Benzoyl phenyl urea. This study was conducted not only to evaluate the toxic action of selected compounds, but mainly to study the delayed effects of the selected compounds on the different stages of the pink and spiny bollworms.

Whereas, this present investigation is included the following points:

1-Toxicity of certain pesticides on egg, larval and adult stages of the pink and spiny bollworms.

2- The latent effects of the same pesticides on some biological aspects of the pink and spiny bollworms

3- Effect of use different sprayer types and different recommended insecticides against pink bollworm on cotton fields.

4- Effect of some insect growth regulators, alone, on pink bollworm in cotton fields.