INTRODUCTION

In Egypt, cotton is an important crop being cultivated mainly for its fibers and also for its seeds which are of great value for their oil.

Cotton cultivation's suffer from the infestation with the pink bollworm *Pectinophora gossypiella* (Sounders) and the spiny bollworm *Earias insulana* (Boisd.). The bollworm feed mainly on the cotton bolls and seeds, causing a decrease in the quantity and quality of the cotton production. Therefore, cotton plants must be protected against bollworms infestation.

In Egypt many efforts have been directed to control bollworms throughout the cotton season. El-Gemeiy (1983) recommended the estimation of the rate of natural infection of *P. gossypiella* larvae in the field with diseases and other mortality factors before planning for any program of the pest management to give the highest efficiency.

Also, to control the pink bollworm the daily degree should be assessed and to be related to plant stage for the timing of application, (Metwally et al., 1996). However, daily degree or heat units have proven particularly useful in pest management and predicated seasonal population of cotton pests (Brown, 1989; Beasley & Adams, 1996; Metwally et al., 1996 and Desuky et al., 1996).

The present study is one of many efforts which have been directed to reduce the cotton infestation with bollworms.