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STUDIES ON SOME INSECT PESTS OF APRICOT
TREES AND ASSOCIATED NATURAL ENEMIES
IN FAYOUM GOVERNORATE

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INTRODUCTION

Apricot is one of the most important fruit trees in Egypt. Large areas of this fruit are cultivated in Several Governorates including Fayoum, especially Ibshawai region. The trees of this fruit are subjected to attack with several insect pests such as, the mealy plum aphid, Hyalopterus pruni Geoffroy (Homoptera : Aphididae); the peach twig borer, Anarsia lineatella Zeller (Lepidoptera : Gelechiidae); the coleopterous stem borers, Chrysobothris dorsata Fab. (Buprestidae) and Ptosima undecimmaculata Herbst (Buprestidae); and the shot hole bark beetles, Scolytus amygdali Guer (Scolytidae). These insects were previously described in Egypt and abroad among the most serious insect pests attacking several fruit and ornamental trees and weeds.

Serious damages are caused to the subjected trees and differ according to the insect species as follows:

- The aphid H. pruni cause a direct injury resulting from feeding on the leaves sap, additional to the indirect one as a result of honey dew secretion, on which the dusts are collected and some species of black fungi are grown that causes the reduction of the green surface, i.e., affect on the normal

physiological activity of the trees, producing weeks trees with small fruits (Attia, (1983); Kim et al. (1986) and Mohamed and Al-Mallah (1990).

- A. lineatella bore into the fruits as well as the newly formed twigs causing their partial or completely destruction [El-Gameel, (1975); Saafan, (1977) and Ahmed, (1989)].
- On the other hand, the forementioned stem borers and bark beetle cause serious damages to the trees as a result of attacking the stem and major branches. However, P. undecimmaculata attack the healthy trees, while C. dorsata and S. amygdali were recorded on the week ones [Mote, (1935); Janjua and Smuel, (1941); Mcnelly et al., (1969) and Abd-Allah, (1978)].

Although the previous investigations gave the attention about the economic importance of these insects, the locally studies, especially in Fayoum Governorate are still in lack. Therefore, the present work was contributed towards a better knowledges on the following aspects:

1. Field observations on infestation symptoms and injury caused by the abovementioned insect pests.
2. Population dynamics of such insect pests and associated parasitoids on apricot (additïonal to

the reed plant for the aphid) in relation with the weather factors, (maximum and minimum temperatures and relative humidity). Such studies were carried out in an apricot orchard of 5 feddans at Ibshawai, Fayoum Governorate during the three successive years 1990, 1991 and 1992.

3. Laboratory biological studies on P. undecimmaculata and the two parasitoids, Aphidius sp. and Aphelinus flaviventris that reported in association with the mealy plum aphid, H. pruni.

PART I

STUDIES ON THE STEM BORERS

CHRYSOBOTHRIIS DORSATA FAB AND PTOSIMA
UNDECIMMACULATA HERBST. (BUPRISTIDAE,
COLEOPTERA)