

**STUDIES ON MEDITERRANEAN FRUIT FLY,  
*Ceratitis capitata* (WIED.) AND PEACH FRUIT FLY,  
*Bactrocera zonata* (SAUND.) (ORDER: DIPTERA,  
FAM: TEPHRITIDAE)**

**By**

**BASMA METWAA SABER METWAA**

**B.Sc. Agric. Sci. (Plant Protection), Fac. Agric., Cairo Univ., 2006  
M.Sc. Agric. Sci. (Economic Entomology), Fac. Agric., Cairo Univ., 2014**

**THESIS**

**Submitted in Partial Fulfillment of the  
Requirements for the Degree of**

**DOCTOR OF PHILOSOPHY**

**In**

**Agricultural Sciences  
(Economic Entomology)**

**Department of Economic Entomology and Pesticides  
Faculty of Agriculture  
Cairo University  
EGYPT**

**2019**

**Format Reviewer**

**Vice Dean of Graduate Studies**

**Name of Candidate:** Basma Metwaa Saber Metwaa **Degree:** Ph.D.  
**Title of Thesis:** Studies on Mediterranean Fruit Fly, *Ceratitidis capitata* (Wied.) and Peach Fruit Fly, *Bactrocera zonata* (Saund.) (Order: Diptera, Fam: Tephritidae)  
**Supervisors:** Dr. Ibtisam Abd El-Moneam Hemeida,(Late)  
Dr. Hamdy Abd ElSamad ElShabrawy.  
Dr. Nabil Mohamed Ghanim  
**Department:** Economic Entomology and Pesticides  
**Branch:** Economic Entomology **Date:** 20 / 8 /2019

### ABSTRACT

Fruit flies are serious pests. It causes serious damage due to the laying of eggs and the feeding of larvae on fruits. This study aim to therow light on ecological,biological and enhansecment of protien baits to fruit flies.There was significant numerical superiority of the Peach Friut Fly over the Mediterranean Fruit Fly population in the three crops in which the population were studied and in infested friuts. The (PFF) was existed in pear orchards from the middle of April until the middle of December and peaked in September over the two seasons. In fig orchards it was noticed in mid-May to the end of December and peaked in September in the first season and October in the second season. In mango orchards, the infection began in early February and continued until the end of December and peaked in October in both seasons. A positive correlations were found between the temperature and humidity on the PFF popularion. The correlation in the MFF population was positive with the temperature while the correlation was negative with the humidity. Biological studies showed that Mango fruits were the best suited for rearing peach fruit fly because it have shorten life cycle, lengthen life of whole individuals and lengthen egg laying period, meanwhile the fruits of the fig were not suitable for the rearing insect because it lengthen life cycle,shorten the age of adult insect, lowest fertility and hatching rates and short egg laying period.While rearing insect on the fruits of pear or the artificial diet were more suitable for rearing insect. To evaluate the efficacy of ammonium compounds for enhancing attractability of protien biats for fruit flies, an experiment was conducted, the obtained results showed that mixing of the buminal with the di- ammonium phosphate resulted in a significant increase in the number of insects more than the use of the buminal alone. Agrinal mixing with ammonium acetate (1: 1) or with di- ammonium phosphate (in all ratios) resulted in an increase in the number of insects attracted significantly by the number of insects caught using the agarinal alone. Amadine was mixed with the di-ammonium phosphate (in all ratios) or with ammonium acetate (1: 1), the number of caught insect was significantly more than the number of insects caught using Amadine alone.

**Key words:** *Bactrocera zonata*, *Ceratitidis capitata*, population dynamics, biological studies, protien baits, ammonium compounds.

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