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### جامعة عين شمس

التوثيق الالكتروني والميكروفيلم



نقسم بللله العظيم أن المادة التي تم توثيقها وتسجيلها علي هذه الأفلام قد اعدت دون آية تغيرات



### يجب أن

تحفظ هذه الأفلام بعيداً عن الغبار

في درجة حرارة من 15-20 مئوية ورطوبة نسبية من 20-40 %

To be kept away from dust in dry cool place of 15 – 25c and relative humidity 20-40 %



ثبكة المعلومات الجامعية





Information Netw. " Shams Children Sha شبكة المعلومات الجامعية @ ASUNET بالرسالة صفحات لم ترد بالأص

## TOXICOLOGICAL STUDIES AGAINST CERTAIN DATE PALM INSECT PESTS

#### ΒŸ

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B.Sc. Agricultural Science (Plant protection)
King Faisal University, 1993

A thesis submitted in partial fulfillment of the requirements for the degree of

Master-

in

Agricultural Science
(Pesticides)

Department of Plant Protection
Faculty of Agriculture
Ain Shams University

1997





### بيني ألغ التحرال حيث

﴿ وَعَلَّمَ لَكُ مَالُمُ تَكُن تَعلَمُ وَكُان فَضلُ اللَّهِ عَلَيكَ عَظِيمًا ﴾ وكَان فضلُ اللَّهِ عَلَيكَ عَظِيمًا ﴾

وصدق الله العظيم، سورة النساء آية (١١٢)

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#### APPROVAL SHEET

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#### **ABSTRACT**

Khalid M. AlOtaibi, Toxicological Studies Against Certain Date Palm Insect Pests, unpublished Master of Science, University of Ain Shams, Faculty of Agriculture, Department of Plant Protection, 1997.

This work was mainly directed to conduct certain toxicological studies against 5<sup>th</sup> instar larvae of *Ephestia cautella* (Walk.) and adults stage of *Oryzaephilus surinamensis* (L.) using dry heat and cold temperature at different exposure times. The obtained results proved that *E. cautella* was more susceptible to the high and low temperature. Also, it is clearly evident to notice the positive correlation between the prolongation of exposure time and the mortality rates and vice versa.

Concerning toxicity response of certain insecticides against the tested insects, data indicate that, pirimiphos-methyl 50% EC proved to be the most effective insecticides, followed by fenitrothion 50% EC, cyphenothrin 5% EC, fenitrothion 20% MC and azadirachtin 75% EC. The trend showed that *E.cautella* was in general more susceptible to the tested insecticides compared with *O. surinamensis*.

Regarding the enzyme activity as affected by tested insecticides, the important factors, in determining the activity of studied enzymes are insecticide type, insect species and time after treatment.

The residue levels of some organophosphates on and in dates revealed the important role of insecticide type, formulation and post-treatment period in determining the degradation behavior of tested insecticides when applied on date under laboratory conditions.

with regard to toxicological aspects of studied insecticides liver function, data show the hepatotoxicity of five tested insecticides with concern to SGOT, SGPT, Alkaline phosphatase, cholesterol and Bilirubin. Examination of the obtained results on kidney