شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأفلام قد أعدت دون أية تغيرات

يجب أن

تحفظ هذه الأفلام بعيدا عن الغبار

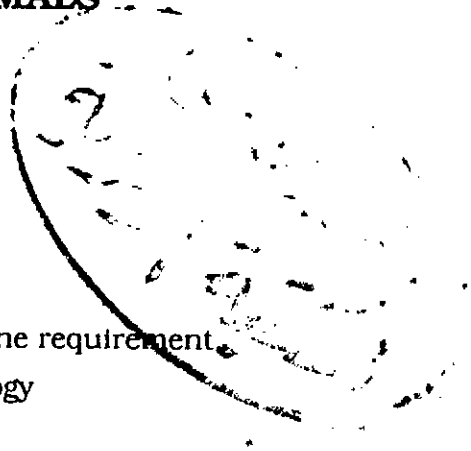
في درجة حرارة من ١٥-٢٥ مئوية ورطوبة نسبية من ٢٠-٤٠%

To be Kept away from Dust in Dry Cool place of 15-25- c and relative humidity 20-40%

بعض الوثائق الاصلية تالفة

بالرسالة صفحات لم ترد بالاصل

BIOCHEMICAL AND PHYSIOLOGICAL STUDIES ON THE TOXICITY OF SOME FOOD CONTAMINANTS IN EXPERIMENTAL ANIMALS



THESIS

Submitted in partial fulfillment for the requirement
of Ph.D. Degree in Zoology
"PHYSIOLOGY"

By

BAHAA EL-DIN KAMAL MOHAMED EL-FIKY
M.Sc. Zoology

ZOOLOGY DEPARTMENT
FACULTY OF SCIENCE
TANTA UNIVERSITY
1996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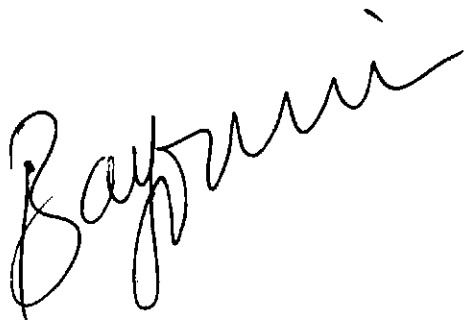

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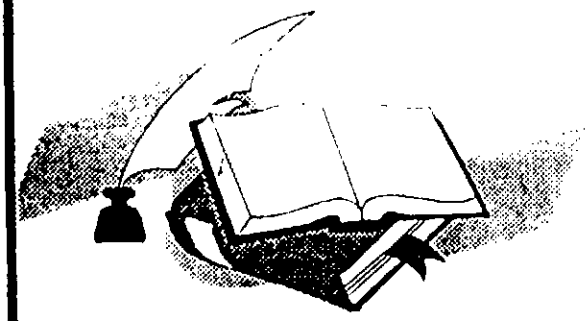

INTRODUCTION

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In Egypt, food production is an objective that takes a great deal of concern. Food industrialization has taken a considerable place on the map of investment projects and plans of development since 1970s. However, with the widespread in such industries, there is an increased likelihood for contamination of food products as a result of either inappropriate canning or the use of impure or low quality ingredient of food additives such as colouring matters, preservatives, flavours, sweetner and antioxidants.

In a study done in our laboratory over three years started from 1989 up to 1991, El-Fiky (1992) evaluated the distribution of a category of food contaminants, namely non-permitted food colouring materials in the food products sold in the local markets in Tanta city. Out of 1589 food products analysed by chromatographic analysis, the author found that four non-permitted food dyes, recognized as injurious to health by the Food and Drug Administration (FAD), were frequently encountered in the food samples collected. The non-permitted food dyes detected were: amaranth, rhodamine-B, orange-II and orange-IV. The total percentages of incidence were found to be 9.4% in 1989, 1.9% in