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 الوثائـــــــق الاصليـــــة تالفـــة

بالرسالة صفحات لم ترد بالاصل

BIOCHEMICAL STUDIES ON THE POTENTIAL ROLE OF HYPERTHYROIDISM IN THE BIOACTIVATION OF PARACETAMOL TO INDUCE HEPATIC LESIONS IN EXPERIMENTAL ANIMALS

Thesis

Submitted to Faculty of Science, Tanta University

as a Requirement for the Degree of Ph.D. in Zoology

"Physiology"

By

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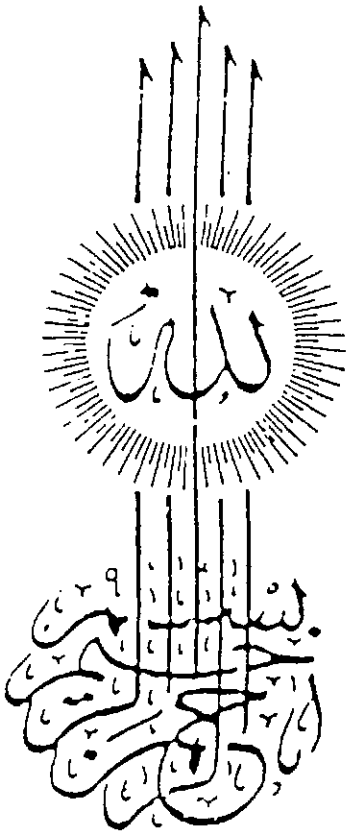
1995



قَالُوا سُبْحَانَكَ لَا عِلْمَ لَنَا إِلَّا مَا
عَلَّمْتَنَا إِنَّكَ أَنْتَ الْعَلِيمُ الْحَكِيمُ .

صَدَقَ اللهُ العَلِيُّ
البقرة - ٣٢ -

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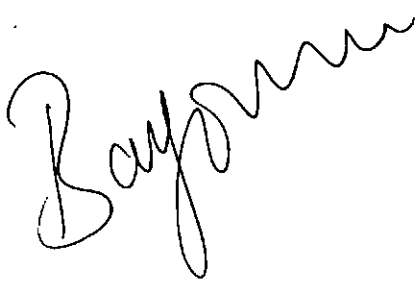

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ACKNOWLEDGEMENT

First and formost all praises are due to God.The candidate is indebted to Prof. Dr. Ibrahim A. El-Elaimy Professor of Physiology and Toxicology, Zoology Department, Faculty of Science, Menoufia University for his suppervision , suggesting the point of research and providing guidance during the paractical work.

Heartily thanks and appreciation are due to Prof. Dr. Ismail M. Al-Sharkawi, Associate Professor of Physiology , Zoology Department, Faculty of Science, Tanta University for invaluable help he has kindly offered, constructive criticism and skillful revision of manescript during the course of this study and for his generous advice and ultimited encourgement.

Cardial thanks and gratitude are expressed to Dr. Mahmoud EL - Naggar , Assistant Professor of Histopathology , Faculty of Medicine , Tanta University for his sincere co-operation throughout preparation of this work and to the staff member in Zoology Department, , Faculty of Science, Tanta University who kindly offered throughout in producing this work. Sincere appreciations are to Dr. M.H. El-Okda for his assistance and to my family for their support and co-operation.

This work was funded by a scholarship from Libyan Jamahiriya and Tanta University , Faculty of Science. This support is gratefully acknowledged .May God bless all of you.

The candidate.

Naji Mussa Laji

CONTENTS

CHAPTER I

INTRODUCTION

INTRODUCTION

Paracetamol (acetaminophen, N-acetyl-para-aminophenol , APAP; Pandol and many other trade names elsewhere)is a derivative of para-aminophenol (Black, 1980) . It was synthesized at Johns Hopkins University in 1877 (Spooner and Harvey, 1986) and well-described in 1894 (Hinsberg and Treupel , 1894) without side-effect in normal use . Paracetamol is a safe and effective analgesic and anti-pyretic when taken in the usually recommended dose for limited periods of time (Batterman and Grossman, 1955 ; Piperon *et al.*, 1978; Black, 1980; Tee *et al.*,1987) but when taken in overdose it produces serious, often irreversible and fatal heptotoxicity, as well as necrosis in other vital organs (Koch-Weser, 1976) in man and experimental animals (Boyd and Bereczky, 1966 ; Davidson and Easthman, 1966 ; Ameer and Greenblatt, 1977;Spooner, 1993). In 1973 there were about 5000 cases of self-poisoning with paracetamol in Britain with 50 deaths. Up to 1976, over 1000 patients with paracetamol overdose were admitted to hospitals in England and Wales every year and about 3% died (Douglas *et al.*, 1976).

Hepatotoxicity of paracetamol is preceded by its metabolic biotransformation by cytochrome P_{450} mixed-function oxidase to reactive intermediate (Jollow *et al.*, 1973; Mitchell *et al.*, 1973 a; Potter *et al.*, 1973; Hinson, 1982). Consequently the severity of the