THE PROTECTIVE EFFECT OF SOME NATURAL COMPOUNDS ON RATS EXPOSED TO GAMMA RADIATION

submitted by

FATMA EDRES IBRAHIM TEAMA

(B.SC.in Agriculture 1981)

For

The Degree of Master in Environmental Science Agriculture Department

Institute of Environmental Studies

and Research

Ain Shams University
1993



THE PROTECTIVE EFFECT OF SOME NATURAL COMPOUNDS ON RATS EXPOSED TO GAMMA RADIATION

SUPERVISORS

Prof.Dr : Mohamed A.El-Ashry Head of Milk Replacers Research Center and Chairman of Animal Production Faculty of Agriculture Ain Shams University elm

Prof.Dr.: Mohamed A.El-Khafif

Associate professor of Biochemistry

Institute of Environmental Studies and Research

Ain Shams University

Dr. :Ahmad I.Abolnaga Lecturer of Animal Physiology Atomic Energy Authority p. I. Aboutnage

THE PROTECTIVE EFFECT OF SOME NATURAL COMPOUNDS ON RATS EXPOSED TO GAMMA RADIATION

Submited by

FATMA EDRES IBRAHEM TEAMA

FOR

The degree of Master in

Environmental Science (Agricultural Department)

Examination Committee

1-Prof.Dr:Mohamed A.El-Ashry Chairman of Animal Production Faculty of Agricultural Ain Shams University

2-Prof.Dr:Hafz A.Elfoly Frcf.of Radiobiology Atomic Energy Authority.

3-Prof.Dr:Rafaat M.Yousry Frof. of Biochemistry Atomic Energy Authority RH. Yousri

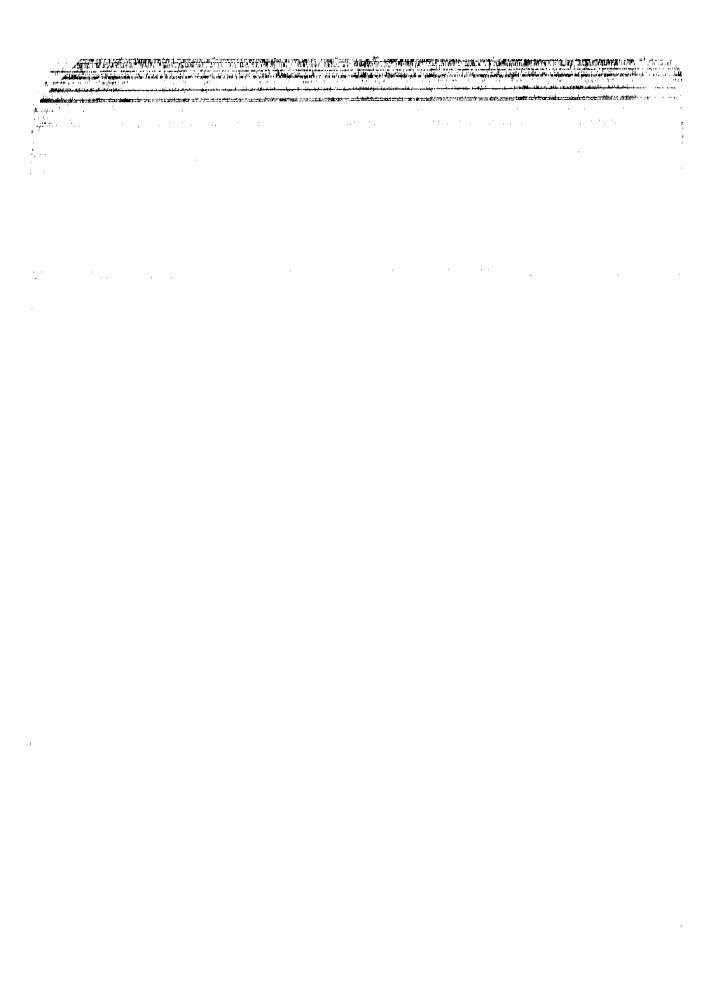
4-Prof. Dr.Mohamed A. El-Khafif
Associate Prof. of Biochemistry
Institute of Environmental Studies and Research
Ain Shams University



·

Central Library - Ain Shams University

المنافق من المنافق ال



ACKNOWLEDGMENTS

I am greatly indebted to professor MOHAMED A. EL-ASHRY
Head of Milk replacers Research center and chairman of Animal
Production Department, Faculty of Agriculture, Ain Shams University, for suggesting, planning and supervising this work,
for his continous encouragement and constructive comments.

- Mark Andrew Andrew

I am also deeply indebted to Dr. MOHAMED A. AL-KHAFIF associate proffessor of biochemistry, institute of environmental studies and research. Ain Shams University, for sincere quidance and careful review of the manuscript.

I am very grateful to **Dr. A AHMAD I. ABOLNAGA**, lecturer of Animal physiology, Atomic Energy Authority, for his interest, Kind help and advice.

And the second of the second o

DEDICATION

TO: MY HUSBAND AND

MY DAUGHTER NADA

LIST OF TABLES

Tab	le	Page
1-	Changes in mean body weight of rat groups after	
	different treatments	. 41
2-	Changes in total proteins in rat groups consumed	
	different daily cysteine doses for 30 days	
	pre-irradiation	44
3-	Changes in serum albumin in rat groups received orally	
	different daily doses of cysteine for 30 days	
	pre-irradiation	. 47
4-	Changes in serum globulin in rat groups received orally	
	different daily doses of cysteine for 30 days	
	pre-irradiation	. 50
5-	Changes in A/G ratio in rat groups received orally	
	different doses of cysteine daily for 30 days	
	pre-irradiation	. 53
6-	Changes in alkaline phosphatase activity in rat groups	
	received orally different doses of cysteine daily for	
	30 days pre-irradiation	. 56
7-	Changes in serum alanine amino transferase activity in	
	rat groups received orally different doses of cysteine	
	for 30 days pre-irradiation	. 59
8-	Changes in aspartate amino transferase in rat groups	
	received orally different doses of cysteine daily	
	pre-irradiation	. 62