

بسم الله الرحمن الرحيم



SALWA AKL



شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



SALWA AKL

جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

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



يجب أن

تحفظ هذه الأقراص المدمجة بعيدا عن الغبار



SALWA AKL



بعض الوثائق الأصلية تالفة



SALWA AKL



بالرسالة صفحات

لم ترد بالأصل



SALWA AKL

B17000

**BIOASSAY STUDIES FOR ASSESSMENT
OF THE EFFECTS OF SOME
PESTICIDES ON *TILAPIA ZILLII*
LIVING IN FRESH AND
SALINE WATER**

THESIS

Submitted For Ph . D. Degree in Biochemistry presented

By

NAHED SHAFIK GAD EISA

Assistant Lecturer, National Institute
of Oceanography and Fisheries

Under Supervision Of

Prof . Dr .

M. E. Sabbagh
Mahmoud Ezz El-Sabbagh
Professor of Biochemistry
Faculty of Science
Ain Shams University

Prof . Dr .

Hamed Hamed Saleh
Professor of Marine Pollution
National Institute of Oceanography
and Fisheries

Prof . Dr

Abd El Samie Abd El hamed Elewa
Professor of Environmental and
Analytical Chemistry National Institute
Of Oceanography and Fisheries

Elewa

Dr .

H. M. El Dessouky
Hala . M . El . Dessouky
Lecturer of Biochemistry
Faculty of Science Ain
Shams University .

Department of Biochemistry

Faculty of Science

Ain Shams University

1999

21

*This thesis has not been submitted to this or any other
University .*

Nahed Shafik Gad

Biography

Date and place of birth : 11-11-1958 , Cairo Egypt
Date of graduation : May 1980
Degree a worded : Ph. D degree in biochemistry
Date of registration : : 1995
Date of appointment : : 1999 .

Supervisors :

- (1) Prof. Dr: Mahmoud Ezz El - Sabbagh .
- (2) Prof Dr : Hamed Hamed Saleh
- (3). Prof Dr : Abd El . Samie Ab El Hamed Elcwa
- (4) Dr : Hala Mahdy EL - Dessouky

Head of biochemistry department

Prof. Dr. Nadia M Abdallah

ACKNOWLEDGEMENTS

Thank God for giving me the will and strength to accomplish this work .

*I would like to express my sincere gratitude and appreciation to **Prof. Dr. Mahmoud Ezz EL-Sabbagh** , professor of Biochemistry , Faculty of Science Ain Shams University , for his guidance, valuable help, kind directions and generous support .*

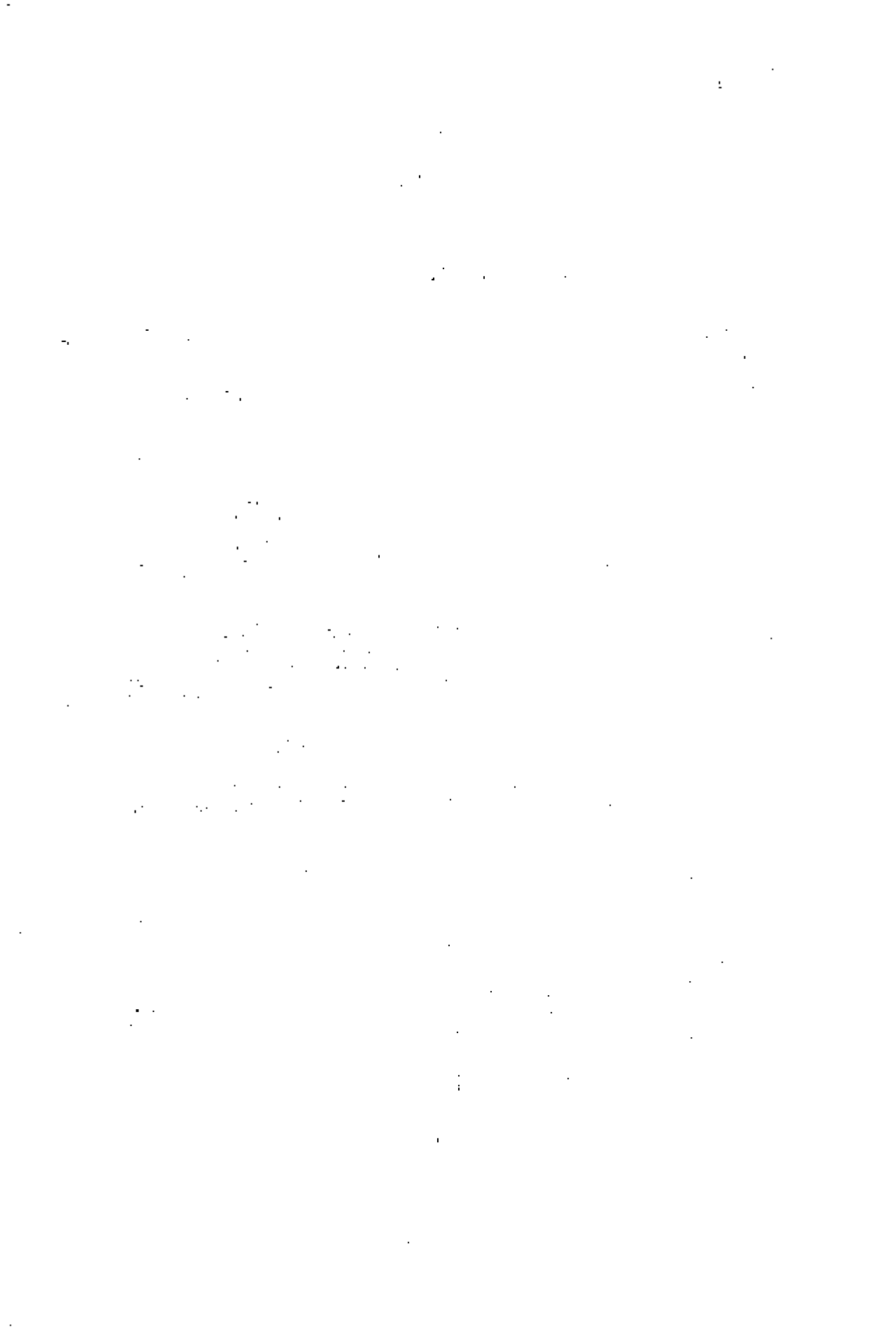
*I wish to express my deepest thanks to **Prof. Dr. Ab del - Samie Elewa** professor of Environmental and analytical Chemistry and Dean of Inland water and lakes Division National Institute of Oceanography and Fisheries for his supervision and help .*

*My Cardial thanks to **Prof. Dr .Hamed Hamed Saleh** professor of marine pollution , National Institute of Oceanography and Fisheries for his continuous guidance and effort during his supervision .*

*I wish also to express my deepest appreciation to **Dr. Hala M. EL Dessouky** lecturer of Biochemistry , Faculty of Science Ain Shams University for her current help-full and guidance throughout all this work .*

More over, I wish to express my deepest appreciation to all members of Inland water and fish culture Branch of the National Institute of Oceanography and Fisheries mainly in Barrage Fish Farm and chemistry department for help me in the water analysis .

Nahed Shafik Gad



LIST OF TABLES

(PART I)

Table No	Contents	Page
1	The physicochemical characteristics of fresh water used in the determination of 96 hrs LC_{50} of Malathion for <i>Tilapia zillii</i> . fishes .	48
2	The physicochemical characteristics of saline water (10‰) used in the determination of 96 hrs. LC_{50} of Malathion for <i>Tilapia zillii</i> . fishes .	50
3	The physicochemical characteristics of saline water (20‰) used in the determination of 96 hrs. LC_{50} of Malathion for <i>Tilapia zillii</i> . fishes .	52
4	The physicochemical characteristics of saline water (30‰) used in the determination of 96 hrs. LC_{50} of Malathion for <i>Tilapia zillii</i> . fishes .	54
5	Determination of LC_{50} of Malathion for <i>Tilapia zillii</i> . living in fresh and saline water (10‰)	56.
6	Determination of LC_{50} of Malathion for <i>Tilapia zillii</i> . living in saline water (20‰)	59.
7	Determination of LC_{50} of Malathion for <i>Tilapia zillii</i> . living in saline water (30‰)	60.

Table No	Contents	Page
8	Concentration of Malathion (PPm)accumulated in intestine , gills and caudal peduncle of Tilapia zillii. fishes living in saline water (10‰, 20‰and 30‰) after 96 hrs. of exposure to (7 , 4 and 1.5 mg /L) of Malathion	63
9	The physicochemical characteristics of fresh water used in the determination of 96 hrs. LC ₅₀ of Lannate for Tilapia zillii. fishes .	65
10	The physicochemical characteristics of saline water (10‰) used in the determination of 96 hrs. LC ₅₀ of Lannate for Tilapia zillii. fishes .	67
11	The physicochemical characteristics of saline water (20‰) used in the determination of 96 hrs. LC ₅₀ of Lannate for Tilapia zillii. fishes .	69
12	The physicochemical characteristics of saline water (30‰) used in the determination of 96 hrs. LC ₅₀ of Lannate for Tilapia zillii. fishes	71
13	Determination of LC ₅₀ of Lannate for Tilapia zillii. living in fresh and saline water (10‰)	73
14	Determination of LC ₅₀ of Lannate for Tilapia zillii. living in saline water (20‰)	76
15	Determination of LC ₅₀ of Lannate for Tilapia zillii. living in saline water (30‰)	77