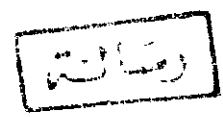


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**AN EXPERIMENTAL STUDY ON THE
NERVOUS SYSTEM OF
CLARIAS LAZERA**

A Thesis Submitted

By



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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

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ABSTRACT

Hala Galal Mohamed EL-Tantawi. "An-Experimental studies on the nervous system of catfish Clarias lazera".

B.SC. Zoolgy department. Ain Shams, University. 1986.

This study aims to reveal the effect of the Herbicide "Diquat which has been used in Egypt to control the water hyacinth. This herb caused many serious environmental problems as obstructing water stream, and consuming large amounts of water, also serves as a good environment for hosts of some parasites. Diquat as a herbicide which has been used to control the aquatic weeds has at the same time harmful effects on the fauna and flora of the Nile river. The present work estimated the LC₅₀ of diquat and describes the gross anatomy of the brain and the spinal cord of Clarias lazera.

The present thesis dealt with the histological and electron microscopic studies of the normal and treated catfishes with the herbicide diquat.

Different doses of the herbicide were applied. Also, the behaviour of the treated fishes was recorded. The findings of the effects of the herbicide on the nervous system were very harmful.

The spinal cord, cerebellum and medulla oblongata were seriously affected, deformed and even degenerated specially at the higher doses.

So, the herbicide diquat represents one of the serious water pollutants, which affects life in the river Nile and consequently the life on the Egyptian land. So, the use of such herbicide should be prohibited from use.

Generally the application of chemicals for controlling weeds, pests, insects etc. form serious environmental problems.

Appreviations

A	= Axon .
BV	= Blood vessel.
CC	= Central canal .
CR	= Cerebellum .
D	= Dendrite .
EC	= Ependyamal cell .
ECH	= Euchromatin .
ER	= Endoplasmic reticulum.
FT	= Fibre tracte .
GM	= Grey matter .
GO	= Golgi Complex .
HC	= Hetero chromatin .
L	= Lysosome.
M	= Myelin .
M	= Microtubules .
MD	= Medulla oblongata .
MN	= Motor neuror .
MO	= Molecular layer .
MT	= Mitochondria .
N	= Nucleus .
NE	= Nuclear envelope
NG	= Neuroglia cell .
NR	= Neurons .
NS	= Nissl substance .
NU	= Nucleolus .
PK	= Purkinje cell
R	= Ribosomes .
S	= Spine .
SC	= Spinal cord .
SY	= Synapse .
V	= Ventricle .
W	= White matter .

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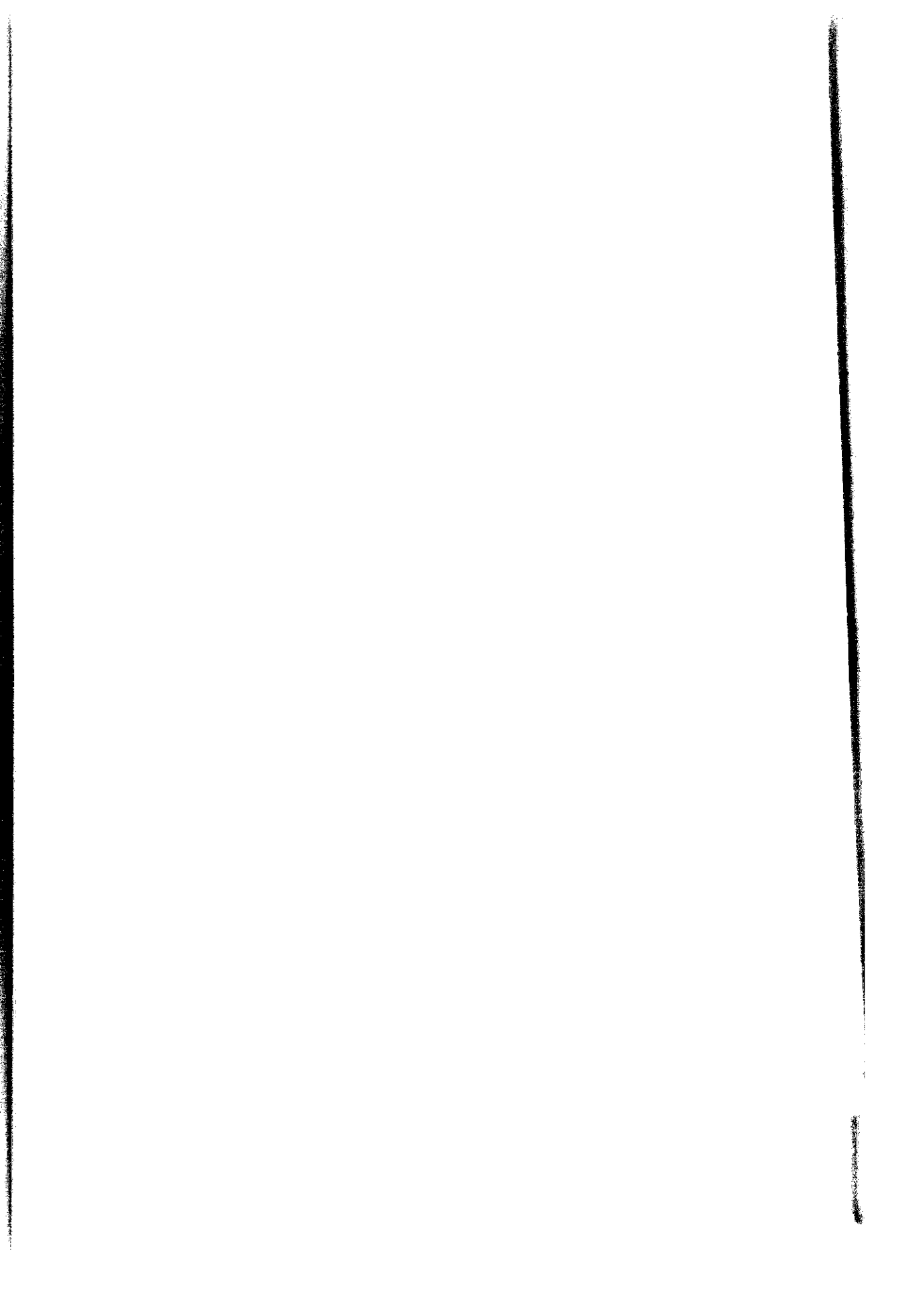
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***INTRODUCTION
AND
AIM OF WORK***

