in Shams University 'aculty of Science oology Department

### Effect of Pollution in Different Localities of River

Nile on Clarias Lazera

Thesis submitted for Ph. D. in Science

 $B_{Y}$ 

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### Effect of Pollution in Different Localities of River Nile on Clarias Lazera

#### Abstract

Amal Mohammed Yacoub

Ph. D. Thesis

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The present investigation deals with the study of the effect of pollution by the raw wastes of the Iron and Steel Factory on the health condition of Clarias lazera fishes by comparing them with those fishes living at El-Kanater El-Khayria. The study included the physicochemical characters of water (temperature, chlorosity, pH, transparency, E.C., D.O., B.O.D., C.O.D., nutrient salts, calcium, magnesium, T.D.S., and heavy metals), the histological ultrastructural changes in the major organs and the accumulation of heavy metals in these organs. The water and fish samples were collected monthly from September, 1995 to August, 1996. The investigation revealed that the different sources of pollution in River Nile induced toxic effects on Clarias lazera.

So, it is recommended to protect the fish yeild of River Nile by the treatment of the raw wastes of the factories which discharge in River Nile. pH: Hydrogen ion concentration

E.C.: Electrical conductivity

D.O.: Dissolved oxygen

B.O.D.: Biological oxygen demand

C.O.D.: Chemical oxygen demand

T.D.S.: Total disolved solids.

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