



شبكة المعلومات الجامعية

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ





شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكرو فيلم

قسم

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15-25- c and relative humidity 20-40%



شبكة المعلومات الجامعية التوثيق الالكتروني والميكرو فيلم



AIN SHAMS UNIVERSITY
FACULTY OF EDUCATION
DEPARTMENT OF BIOLOGICAL
SCIENCES & GEOLOGY

ECOPHYSIOLOGICAL STUDY ON SOME FRESHWATER ALGAE IN SOME POLLUTED REGIONS OF ISMAILIYA CANAL

THESIS

SUBMITTED IN PARTIAL FULFILMENT FOR THE DEGREE OF
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(BOTANY)

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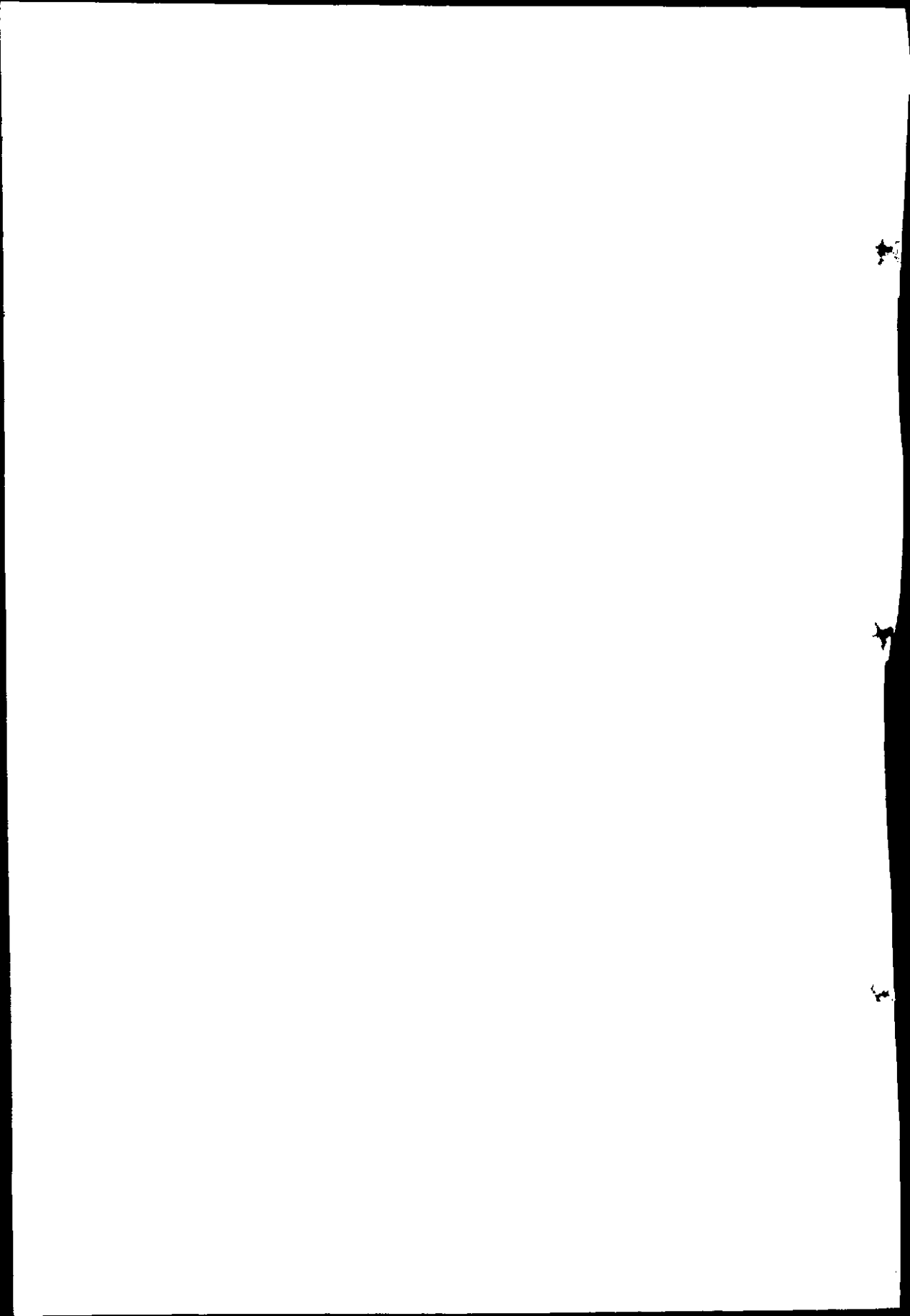
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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

"وما توفيقى الا بالله"

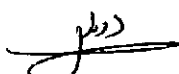
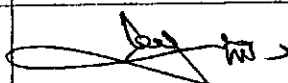
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THESE ARE THE RESULTS OF SOME
RESEARCHES

ECOPHYSIOLOGICAL STUDY ON SOME FRESHWATER ALGAE IN SOME POLLUTED REGIONS OF ISMAILIYA CANAL

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Abstract

The change in physico-chemical characteristics and algal Flora of Ismailiya Canal water at some polluted regions extended from the Gelatine and Colloids Factory near Abboud bridge to the Fertilizers and Chemicals Factory of Abou-Zaabal as regard with control area at El-Mazallat region were studied during the period from September, 1996 to August, 1997. The study showed different fluctuations in both of algal flora and physico-chemical characteristics of water between the polluted and control sites. Nitrate, phosphate, sulphate, silicate and calcium were represented in high values at all polluted sites. The total algal count was remarkably increased in all polluted sites as compared with that of the control. *Chlorella vulgaris*, *Cyclotella ocellata*, *Synedra ulna*, *Melosira granulata* and *Phormidium autumnale* were the most dominant species in all sites. The physiological activities of two selected algal species (*Phormidium autumnale* and *Chlorella vulgaris*) were investigated after being subjected to various levels of some industrial wastes and petroleum. The various concentrations of these wastes and petroleum stimulated the growth and some metabolic activities of the two organisms.

Key words

Abboud bridge - Abou-Zaabal - *Chlorella vulgaris* - Colloids - El-Mazallat - Fertilizers - Gelatine - Moustorod - Petroleum - *Phormidium autumnale* - Pollution.



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