

## بسم الله الرحمن الرحيم





شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



شبكة المعلومات الجامعية

## جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

## قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها على هذه الأفلام قد أعدت دون أية تغيرات



## يجب أن

تحفظ هذه الأفلام بعيدا عن الغبار

في درجة حرارة من ٢٥-١٥ مئوية ورطوية نسبية من ٢٠-١٠ في درجة حرارة من ٢٥-١٥ مئوية ورطوية نسبية من ٢٠-١٤. To be Kept away from Dust in Dry Cool place of 15-25- c and relative humidity 20-40%

بعض الوثائـــق الأصليــة تالفـه

# بالرسالة صفحات لم ترد بالاصل

# THE ROLE OF CERTAIN ANIMALS IN SEWAGE QUALITY TREATMENT

A Thesis Submitted In The Partial Fulfilment Of The Requirments For (M.Sc.) Degree In Zoology

By

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To

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Praise be to God, the cherisher and sustainer of the worlds. It is He who brought us forth from the wombs of our mothers when we knew nothing; and He gave us hearing and sight and intelligence and affections, so my great thanks to God for His mercey and reconcillation to us in this work.

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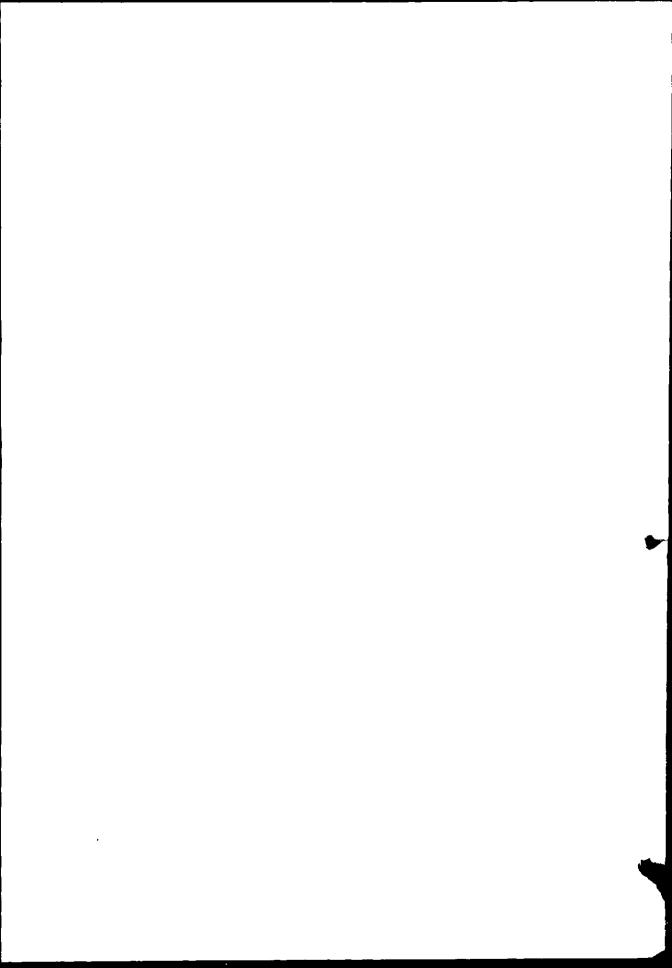
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#### **ABBREVIATIONS**

= Agriculture Research Center ARC - Alexandria Alex - American Pollution Health APHA Assocition = Americium As - April Apr - August Aua - Average Ave = 5 days Biochemical Oxygen BOD; BOD, Demande - Variability Coefficient CV (SD/Ave\*100) = Copper .Cu - Cadmium Cd - Chromium CI - Cobalt Co CN; CN = Cyanide - Chemical Oxygen Demande COD - Dissolved oxygen DO - December Dec = February Feb - Food to microorganism ratio (kg F/M of BOD/kg of aeration solids) - Fixed suspended solids **FSS** = Faculty F = Iron Fe - Gram/capita/day g/capita/d - January Jan = June Jun - Juli Jul kg BOD/kg MLSS/d = Kilogram Biochemical Oxygen Demande per kilogram Mixed-Liquor suspended solids - Kilogram per day Kg/d - Laboratory Lab - Liter per day L/đ = Liter per cubic meter L/m³

iv

M/sec; M/s = Meter per second  $M^3/m/d$ = Cubic metre per meter per day M/min - Meter per minute M³/d/module = Cubic meter per day per module Min = Minute  $M^3/m^2/d$ = Cubic meter per square meter per day - Milligram per liter Mg/lMn = Manganese Mar - March M³/hr/module = Cubic meter per hour per module Nov - November NYSDH = New Yourk State Department of Health Ni - Nickel Oct - October Hq = - log Hydrogen ion concnteration . Pb = Lead - Part per million ppm Þ - Phosphorus PO<sub>4</sub>-3 = Phosphate PSs - Pump stations RAS = Returned Activated Sludge = Rotating Biological Contactor RBC Se = Selenium SVI - Sludge Volume Indix [settled volume of sludge (per cent) after 30 minuts/ suspended solids (per cent)] S-2 = Sulfide Sep - September Sat - Saturday SD = Standard Deviation Soluble-N - Soluble nitrogen Total-N - Total nitrogen TVS - Total Volatile Solids = Total Fixed Solids TFS TDS - Total Dissolved Solids TSS - Total Suspended Solids USA or US - United State of America VSS = Volatile Suspended Solids