

تأثير التلوث على نبات المانجروف (الشوة) على ساحل البحر الأحمر بمصر

رسالة مقدمة من الطالبة

مارينا روجيه نبيه سمعان

بكالوريوس علوم (نبات - كيمياء) كلية العلوم - جامعة عين شمس - 2010

لاستكمال متطلبات الحصول علي درجة الماجستير

في العلوم البيئية

قسم العلوم الأساسية البيئية

معهد الدراسات والبحوث البيئية

جامعة عين شمس

2015

صفحة الموافقة على الرسالة
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**THE IMPACT OF POLLUTION ON MANGROVE PLANT
(*AVICENNIA MARINA*) ON THE RED SEA COAST OF EGYPT**

Submitted By

Marina Rogah Nabih Samaan

B.Sc. of Science (Botany-Chemistry, Faculty of Science, Ain Shams University, 2010)

A thesis submitted in Partial Fulfillment
Of
The Requirement for the Master Degree
In
Environmental Sciences

Department of Environmental Basic Sciences
Institute of Environmental Studies and Research
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APPROVAL SHEET
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List of Abbreviation

FAO	Food and Agriculture Organization
IUCN I-IV	International Union for Conservation of Nature Category IV
GC/MS	Gas chromatography–mass spectrometry
LC/MS	Liquid chromatography–mass spectrometry
PERSGA/GEF	Regional Organization for Conservation of Environment of the Red Sea and Gulf of Aden/ Global Environmental Facility
EEAA	Egyptian Environmental Affairs Agency
SQGs	Sediment Quality Guidelines
BCF	Bio-concentration Factors
BSAFs	Biota-Sediment Accumulation Factor
GAE	Gallic Acid Equivalents
TPC	Total Phenolic Compounds
AAS	Atomic Absorption Spectrometer
APDC	Ammonium Pyrrolidine Di-thiocarbamate
MIBK	Methyl Isobutyl ketone
DDW	Double Distilled Water
TF	Translocation Factor
SPSS	Statistical Package for the Social Sciences
ANOVA	Analysis of Variance
LSD	Least Significant Difference
CAP	Community Analysis Package
TIFF	Tagged Image File Format
DCA	Detrended Correspondence Analysis
OM	Organic Matter
ROS	Reactive Oxygen Species