



بسم الله الرحمن الرحيم

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مسئولية عن محتوى هذه الرسالة.

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The Comparative Effect Of Aqueous Extract Of *Phoenix dactylifera L.* and *Salvadora Persica* In Depression Rat Model

A thesis

***Submitted as a partial fulfillment for requirements of the
master's degree in biochemistry***

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ
وَعَلَّمَكَ اللَّهُ الْكِتَابَ
وَكَانَ أَنْ فَضَّلَ اللَّهُ عَلَيْكَ عَظِيمًا

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Declaration

I declare that this thesis and the work presented in it are my own and has been generated by me as the result of my own original research.

Basma Mohammed Youssef Ali

Dedication

To my family

My Mother

A strong and gentle soul who taught me to trust in Allah, believe in hard work and that so much could be done with little

My Father

For earning an honest living for us and for supporting and encouraging me to believe in myself

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List of Abbreviations

ACHE	<i>Acetyl cholinesterase</i>
ANOVA	Analysis of Variance
Cat	Catalase
cDNA	complementary deoxyribonucleic acid
CH₃COOH	Acetic acid
CHCl₃	Chloroform
CNS	central nervous system
Ct	Cycle threshold obtained from the amplification curve
CUMS	chronic unpredictable mild stress
Date Palm	Phoenix dactylifera L.
DNA	deoxyribonucleic acid
DTNB	5,5'-dithio-bis(2-nitrobenzoic acid)
EPM	elevated plus maze
FC	Folin-Ciocalteu reagent
FeCl₃	Ferric chloride
FST	forced swimming test
GSH	<i>Reduced Glutathione</i>
5-HT	Serotonin
H₂O₂	hydrogen peroxide
H₂SO₄	Sulfuric acid
HCL	Hydrochloric acid
HPLC	High performance liquid chromatography
HRP	horseradish peroxidase
IL-6	Interleukin-6
MDA	malondialdehyde

NADPH	nicotinamide adenine dinucleotide phosphate
NaOH	sodium hydroxide
NH₃	Ammonia
NRC	National Research Centre
OF	open field
OFT	open field test
PBS	phosphate-buffered saline
PFC	Prefrontal cortex
PCs	Phenolic compounds
qRT-PCR	Quantitative real-time polymerase chain reaction
RNA	Ribonucleic acid
ROS	Reactive Oxygen Species
SDS	sodium dodecyl sulphate
SP	<i>Salvadora persica</i>
TAC	Total antioxidant capacity
TBA	Thiobarbituric Acid
TBARS	Thiobarbituric Acid Reactive Substance
TMB	tetramethyl benzidine
TNB	5'-thio-2-nitrobenzoic acid
TPC	total phenolic content