

PHYTOTHERAPEUTIC STUDIES ON BIOPHENOLICS OF GENUS *PISTACIA* FAMILY ANACARDIACEAE CULTIVATED IN EGYPT

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To the Soul of my Father

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ABBREVIATIONS

ABTS	2, 2'-azino-bis (ethylbenzothiozoline-6-sulphonic acid)
aq.	Aqueous
ax.	Axial
b.wt	body weight
BHA	Butylated Hydroxy Anisol
BHT	Butylated hydroxyl Toluene
¹³ C-NMR	¹³ C- Nuclear Magnetic Resonance
CC	Column Chromatography
CEL	Cellulose
CHD	Chronic Heart disease
CI-MS	Chemical Ionization Mass Spectroscopy
Cm	Centimeter
CMC	Carboxy Methyl Cellulose
CMG	Chewing Mastic Gum
CML	Chronic Myelogenous Leukemia
Conc.	Comcentrated
CoPC	Comparative Paper Chromatography
COX	Cyclooxygenase enzyme
δ	Chemical Shift
Dil.	Diluted

DMSO	Dimethylsulfoxide
DNA	Deoxyribonucleic acid
DPPH	Diphenyl picrazyl hydrate
DPP	12-deoxyphorbol-13-phenylacetate
EDTA	Ethylene diamine tetra acetic acid.
EI-MS	Electron Impact Mass Spectroscopy
Eq.	Equatorial
ESI-MS	Electron Spray Ionization Mass Spectrometry
FAB-MS	Fast Atomic Bombardment Mass Spectrometry
FID	Flame Ionization Detector
Fig.	Figure
FRAP	Ferric Reducing Ability of Plasma
g	Gram
GLC	Gas Liquid Chromatography
GC-MS	Gas Chromatography coupled to Mass Spectrometry
GSH	Glutathione
HepG2	Human Hepatoblastoma
¹ H-NMR	Proton Nuclear Magnetic Resonance
HPLC	High Performance Liquid Chromatography
HDL	High Denisty Lipoprotein
hr	Hour
Hz	Hertz
IC ₅₀	Inhibitory concentration at 50%

In.	Inch
IR	Infra red
<i>J</i> value	Coupling constant
Kg	Kilogram
L	Liter
LD ₅₀	Median Lethal Dose
LDL	Low Denisty Lipoprotein
LH20	Lipophylic Hydrophilic ratio
LPS	Lipopolysaccaride
LOX	Lipoxygenase enzyme
LTB ₄	Leukotriene B ₄
MDA	Malondialdehyde
M.P.	Melting Point
M _r	Molecular weight
<i>m/z</i>	Mass to Charge Ratio
mg	Milligram
min.	Minute
ml.	Milliliter
MPO	Myeloperoxidase enzyme
MS	Mass Spectrometry
NA	Not Available
nm	Nanometer
NOAEL	No Observed Adverse Effect Level

NO	Nitric oxide
PC12	Rat Pheochromocytoma cell line
PC	Paper Chromatography
PLA ₂	Phospholipase A ₂
PPC	Preparative Paper chromatography
Ppm	Part per million
R.I.	Retention Index
R _f	Retardation Factor
rpm	Revolution per minute
R _t	Retention time
RNA	Ribonucleic Acid
SE	Standard Error
SC	Subcutaneous
SFA	Saturated Fatty Acid
SGOT	Serum Glutamate Oxaloacetic acid Transaminase
SGPT	Serum Glutamate Pyruvate Transaminase
SOS	DNA Damage Repair System
2-DPC	Two Dimentional Paper Chromatography
TLC	Thin Layer Chromatography
TNF- α	Tumor Necrotic Factor -alpha
TPA	12- <i>O</i> -tetradecanoylphorbol-13-acetate
2D	Two dimentional
TMS	Tetramethylsilane

UV	Ultraviolet
USFA	Unsaturated Fatty Acid
v/v	volume per volume
$[\alpha]_D^{\circ C}$	Specific rotation
λ	Wavelength
XO	Xanthine Oxidase
μ	Micro
μl	Microliter

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