PURIFICATION & BIOCHEMICAL STUDIES OF THE ANTICOAGULANT ACTIVITY OF THE EGYPTIAN SAND VIPER «CERASTES CERASTES» VENOM

Thesis

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By

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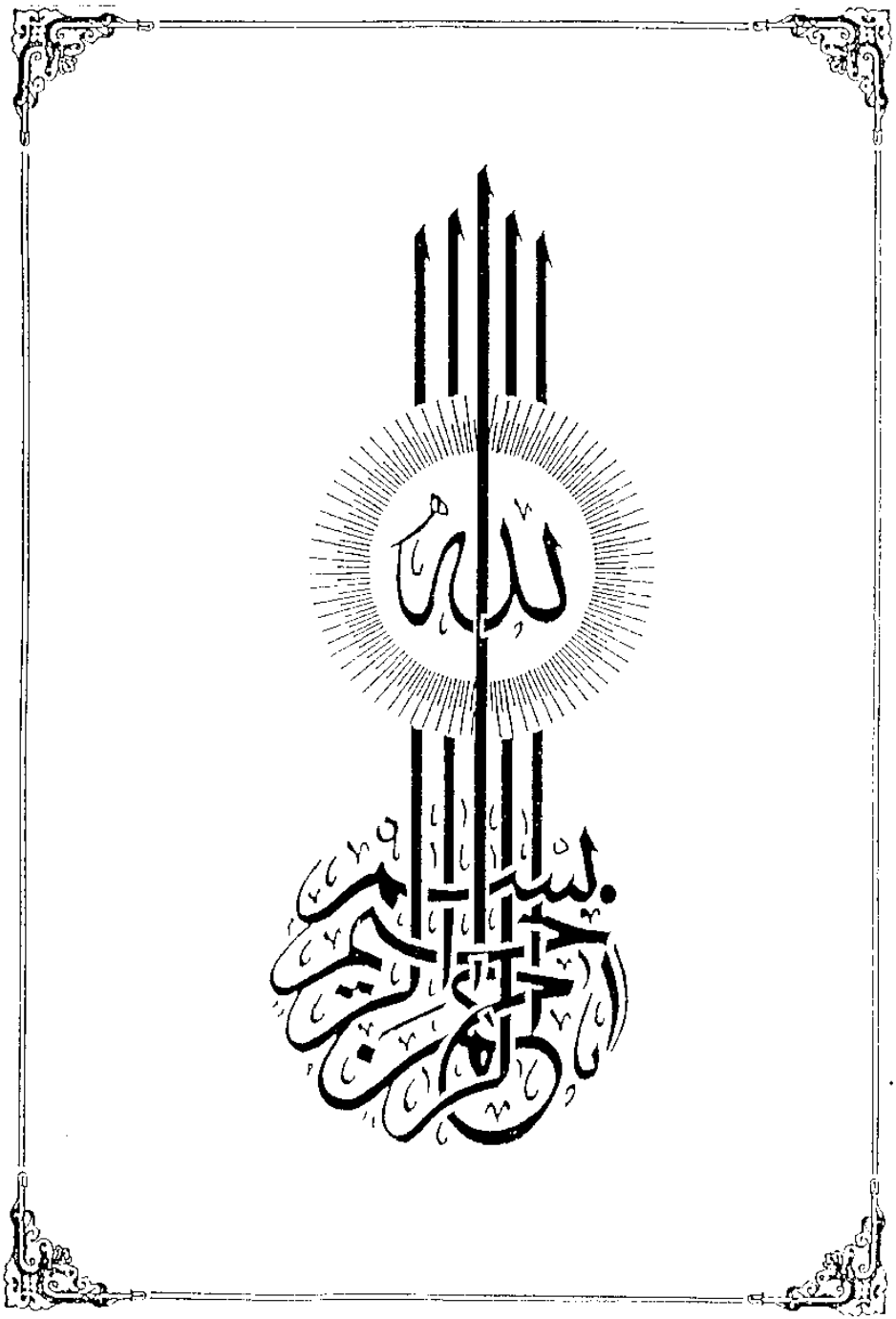
EXAMINERS

First Examiner:

Second Examiner:

Third Examiner :



DEDICATION

To my

father & mother

This work was made possible through the channel program supported by the Peace Fellowship Program for Egypt; FRCU grant No., 840505; Ain Shams University and the Egyptian Ministry of Higher Education.

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LIST OF ABBREVIATIONS

A	: absorbance
A. A.	: amino acid
ACA	: ε -amino caproic acid
ACP	: anticoagulant protein
ATEE	: N-acetyl-L-tyrosine ethyl ester
BAEE	: N-benzoyl-L-arginine ethyl ester
CD	: circular dichroism
DEAE	: diethylamino ethyl
DFP	: diisopropylfluorophosphate
DMSO	: dimethyl sulfoxide
EDTA	: ethylene diamine tetraacetic acid
EGTA	: ethylene glycol-bis(β-amino-ethyl ether) N, N, N', N'-tetra-acetic acid.
FCT	: fibrinogen clotting time
FDP	: fibrinogen degradation products
HEPES	: N-2-hydroxyethyl piperazine-N'-2-ethanesulfonic acid
Hge	: hemorrhage
Hgic	: hemorrhagic
HMW (K)	: high molecular weight (kininogen)
HPLC	: high performance liquid chromatography
HPMC	: hydroxypropanol methyl cellulose

IDC : inductively coupled plasma.

LMW : low molecular weight

MHD : minimal hemorrhagic dose.

MHz : megahertz

M.W. : molecular weight

N.C. : non clottable

NT : not tested

PAG : polyacrylamide gel

PAGE : polyacrylamide gel electrophoresis

pI : isoelectric point

PITC : phenylisothiocyanate

PL : phospholipids

PMSF : phenylmethane-sulfonyl-fluoride

pNA : paranitroanilide

PRT : plasma recalcification time

PTC : phenyl thiocarbamyl

PTH : phenylthiohydantoin

RF : Radio frequency

rpm : revolution per min

S-2238 : H-D-phe-pip-arg-pNA

S-2251 : H-D-val-leu-lys-pNA

S-2302 : H-D-prolyl-L-phenylalanyl-L-arginine-pNA HCl

SDS	: dodecyl-sodium sulfate
TAME	: p-toluenesulfonyl-L-arginine methyl ester
TCA	: trichloroacetic acid
TEMED	: N, N, N', N'-tetramethylethylene
TNBS	: 2, 4, 6 -trinitrobenzene sulfonic acid
Tris	: tris-(hydroxymethyl) aminomethane
UC	: ultra centrifuge
UV	: ultra-violet
ϵ	: molar absorptivity
θ	: ellipticity
θ_{MRW}	: mean residue ellipticity
