Contents

List of Abbreviations

AA : Arachidonic Acid

AR : Acrosome reaction

ART : Assisted reproductive technology

Ba^2 : Barium cation

C. adamanteus : Calloselasma adamanteus snake

C. durissus collilineatus : Crotalus durissus collilineatus snake

C. scutulatus scutulatus **:** Crotalus scutulatus scutulatus snake

C. viridis concolor **:** Crotalus viridis concolor snake

CAPT : Crotoxin acceptor protein from *Torpedo*

$cPLA_2$: Cytosolic phospholipases A_2

CRISPs : Cysteine rich secretory proteins

DEAE Sephadex : Diethyl amino ethyl - sephadex

DEAE-Sephadex : Diethyl amino ethyl-sephadex

E.C. NO : Enzyme classification number

$iPLA_2$: Ca^{2+} independent PLA_2

IVF : In vitro fertilization

lp-PLA_2 : Lipoprotein-associated PLA_2s

m.A : Milliamber

mGX **:** Mouse sperm, group X

MiPLA1 : Micropechis ikaheka PLA1

MMP-2 : Matrix metalloproteinase

nm : Nanometer

OHVA-PLA$_2$: *Ophiophagus hannah* venom acidic PLA$_2$

PAF-AH : Platelet activating factor acetylhydrolase

PAGE : Polyacrylamide gel electrophoresis

p-BPB : P-bromophenyl bromide

pI : Isoelecteric point

PLA$_2$: Phospholipase A$_2$

PLA$_2$s : Phospholipases A$_2$

SDS : Sodium dodecyl sulphate

SDS-PAGE : Sodium dodecyl sulfate

sPLA$_2$: Secreted phospholipase A$_2$

Sr^{2+} : Strontium

Sr^{2+} : Strontium cation

TCBP-49 : Taipoxin-associated Ca^{2+} binding protein

β-Btx : β-bungarotoxin

List of Figures

List of Tables

Aim of the Work

Review of Literature

Materials and Methods

Results

Discussion

Recommendations

Summary

References