

شبكة المعلومات الجامعية التوثيق الإلكتروني والميكروفيلو

# بسم الله الرحمن الرحيم





MONA MAGHRABY



شبكة المعلومات الجامعية التوثيق الإلكتروني والميكروفيلو



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# جامعة عين شمس التوثيق الإلكتروني والميكروفيلم قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات



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MONA MAGHRABY



# Interaction of plant proteinase inhibitors with gut proteinase of cotton leaf worm, *Spodoptera littoralis* (Bosid.)

A Thesis

Submitted for the degree of Master of Science as a Partial fulfillment for requirements of the Master of Science

By

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# Dedication

This thesis is dedicated to my beloved family, husband, friends, supervisors and colleagues.

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#### \_\_\_\_\_

# List of abbreviations

Abbreviation	Meaning
ANOVA	
	Analysis of variance.
BApNA	N-9α-benzoyl-DL-arginine-p-
_	nitroanilide hydrochloride.
BAEE	N- α-benzoyl-L-arginine ethyl
	ester hydrochloride.
<b>BGPIs</b>	Bitter ground protease
	inhibitors.
BgPI	Black gram protease inhibitor.
BmPI	Butea monosperma protease
	inhibitor.
BSA	Bovine serum albumin.
BTEE	N-α-benzoyl-L-tyrosine ethyl
	ester.
BTpNA	N-benzoyl-L-tyrosine p-
	nitroanilide.
CaTI	Cicer arietinum trypsin
	inhibitor.
СВВ	Coomassie brilliant blue dye.
CIA	Chymotrypsin inhibitor
	activity.
CUI	Chymotrypsin unit inhibition.
DMSO	Dimethylsulfoxide.
HGP	Helicoverpa gut proteinases.
LBTI	Limabean trypsin inhibitor.
OD	Optical density.
PAGE	Poly acrylamide gel
	Electrophoresis.
PeTI	Platypodium elegans trypsin
	inhibitor.
PIs	Proteinase inhibitors.
PMSF	phenylmethyl-sulfonyl
	fluoride.

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PPIs	Plant proteinase inhibitors.
PPI	Potato proteinase inhibitor.
RgPI	Red gram protease inhibitor.
SAAPFPNA	Succinyl-alanyl-alanyl-
	propyl-phenyl-alanyl-p
	nitroanilide.
SBBI	Soybean Bowman-Birk
	inhibitor
SBTI	Soybean trypsin inhibitor.
SDS	Sodium dodecylsulphate.
SGP	Spodoptera gut proteinase.
SKTI	Soybean Kunitz trypsin.
	inhibitor.
SPI	Soybean proteinase inhibitor.
SPIF	Soybean proteinase inhibitor
	fraction.
TI	Trypsin inhibitor.
	Trypsin inhibitory activity.
TIA	
TLCK	N-α -p-tosyl-L-lysine
	chloromethyl ketone HCI.
TPCK	L-1-tosylamide-2-phenylethyl
	chloromethyl ketone.
TUI	Trypsin unit inhibition.

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