



Faculty of Science
Zoology Department

Effects of *Clotropis procera* stem extract and iron nanoparticles on *Schistosoma mansoni* and its intermediate host

A Thesis

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By

Lotfia Mohamed Massoud Khalil

M. Sc. Zoology, (2008)

Supervised By

Dr. Mohammad Ibrahim Soliman

Professor of Parasitology
Department of Zoology
Faculty of Science
Ain Shams University

Dr. Hoda Abdel HalimTaha

Professor of Parasitology
Department of Zoology
Faculty of Science
Ain Shams University

Dr. Hatem Abdel Fattah Ibrahim

Associate Professor of Molecular Biology
Entomology Department
Faculty of Science
Ain Shams University

Dr. Ahmed Mohammad Azzam

Researcher of Environmental Chemistry
Department of Environmental
Researches
Theodor Bilharz Research Institute

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

وَفَاكِ
رَبِّ زِدْنِي عِلْمًا

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LIST OF ABBREVIATIONS

AFR	Advanced flow TM reactor
B	Blebs
bp	Base pair
CF	Complete fusion
CR	Cracks
CV	Central vein
CTAB	Cetyl trimethyl ammonium bromide
EDTA	Ethyl endiaminetetrachloro-acid
EP	Eroded parts
F	Fiber
FN	Focal necrosis
Fe₂O₃	Iron (III)oxide
FESEM	Field emission scanning electron microscopy
IC	Inflammatory cells
IF	Incomplete fusion
INPs	Iron oxide nanoparticles
L	Lesion
LC50	Lethal concentration to kill 50% of individuals
LC90	Lethal concentration to kill 90% of individuals
MR	flow micro reactor
NPs	Nanoparticles
nZVI	Nano scale zero valent iron
OS	Oral sucker
OV	Ovum
PE	Perforation
PLGA	Poly (lactic-co-glycolic acid)
PZQ	Praziquantel
P	papilla
PR	Pore
ROS	Reactive Oxygen Species
SEM	Scanning electron microscopy
SL	Sloughing
SP	Swollen parts
SBSP	Schistosoma Biological Supply Program
TBRI	Theodore Bilharz Research Institute
TE	Total number of eggs in liver and intestine tissues

TFW	Total number of female worms
T	Tubercles
UV	Ultraviolet
V	Vacuolation
VS	Ventral sucker
W	wrinkling
XRD	X-ray diffraction
XRF	X-ray fluorescence
WHO	World health organization

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