Ain Shams University
Faculty of Science
Zoology Department

The Possible Protective Role of Curcumin against Radiation Induced Cytogenetic Damages in Mice

A Thesis submitted for
PhD degree of Science
(Zoology)

BY

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"بسم الله الرحمن الرحيم"

" و قل ربي زدني علما"

" صدق الله العظيم"

(سورة "طه" الآية رقم□□□)

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Manal Ramadan Mohammed

Dedication

To

My helpful and
beloved parents,
sisters, brother,
husband and my sons.

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Abbreviations

C.Att.	Centromeric attenuation
C.F.	Centric fusion
Chs.Ab.	Chromosome type aberrations
Cht.Ab.	Chromatid type aberrations
Curc	Curcumin
Del.	Deletion
DMSO	Dimethyle sulphoxide
DNA	Deoxyribonucleic acid
DPTA	Diamine penta -cetic acid
DTNB	5, 5-dithiobis (2-nitrobenzoic acid)
E. to E.	End to end association
EDTA	Ethylene diamine tetra-acetic acid
Endom.	Endomitosis
ESR	Electron spin resonance
F	Fragment
GSH	Glutathione (reduced form).
GSSG	Glutathione disulphide (oxidized form).
IAEA	International Atomic Energy Authority
MDA	Malondialdehyde
N. Ab.	Numerical aberrations
N. Ab. cells	Numerical aberrant cells
NBT	Nitro blue tetrazolium
NCRRT	National Center for Radiation Research and Technology
Poly.	Polyploidy
ROS	Reactive oxygen species
Rpm	Round per minute
SDC	Severe damaged cells
SOD	Superoxide dismutase
St. Ab.	Structural aberrations
St. Ab. cells	Structural aberrant cells
TBA	Thiobarbituric acid
TCA	Trichloroacetic acid
WBC	White blood cells

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