An Evaluation of Antioxidant and Antiviral Actions of Extracts from Certain Plants

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This dissertation has not been previously submitted for any degree at this or at any other university

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list of Abbreviations

ABTS 2,2-azino-bis-3-ethylbenzthiazoline-6-sulphonic acid

AIDS Acquired immunodeficiency syndrome

AOA Antioxidant activity

ASSF Ammonium sulfate saturated fraction

AVP Antiviral protein

CAT Catalase

CM Carboxymethyl

CMV Cucumber mosaic virus

CoQ Coenzyme Q

CVD Cardiovascular disease
DAD Diode-array detection
DEAE Diethylaminoethyl

DPPH Diphenyl picrylhydrazyl radical EAVP Endogenous antiviral protein

EFA Essential fatty acids

FR Free radical

FRAP Ferric reducing-antioxidant power

GAE Gallic acid equivalent

GC-MS Gas chromatography-mass spectrometry

GSH Glutathione

H₂O₂ Hydrogen peroxide HCMV Human cytomegalovirus

HIV Human immunodeficiency virus

HO' Hydroxyl radical

HPLC High-performance liquid chromatography

HSV Herpes simplex virus
IAVP Induced Antiviral Protein
ICRSV Indian citrus ring spot virus
IGI Inhibitors from green island
IVR Inhibitor of virus replication

L.L. Local lesions

MCMV Murine cytomegalovirus

 O_2^{\bullet} superoxide radical PAC Proanthocyanidins

PAP Pokeweed antiviral protein

POD Peroxidase

PRP Pathogenisis related proteins

List of Abbreviations

PVX potato virus x

RIP Ribosome inactivating protein

RM Reactive metabolites

RMN Reactive metabolites of nitrogen RMO Reactive metabolites of oxygen

ROS Reactive oxygen species

RSV Human respiratory syncytial virus

RT Reverse transcriptase

SDS- Sodium dodecyle sulfate- polyacrylamide

PAGE gel electrophoresis
SOD superoxide dismutase
SRV Sunnhemp rosette virus
TAC Total antioxidant capacity

TBARS Thiobarbituric acid reactive substances
TEAC Trolox equivalent antioxidant capacity

TMV Tobacco mosaic virus
TNV Tobacco necrosis virus
TPC Total phenolic contents

TRAP Total radical-trapping antioxidant parameter

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