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Pankaj Sharma

LIST OF ABBREVATIONS

°C: Degree Centigrade

ABC: ATP binding cassettes

abc10: ATP-binding cassette (ABC) transporters 10

abc9: ATP-binding cassette (ABC) transporters 9

ANOVA: Analysis of variance

APEDA: Agricultural and Processed Food Products Export Development

Authority

ATP: Adenosine triphosphate

bp: Base pairs

BP: Biological Process

BUSCO: Benchmarking Universal Single-Copy Orthologs

CarEs: Carboxylesterases

CAS RN: CAS Registry Number

CC: Cellular Component

CDS: CoDing Sequence

cest4: Carboxylesterase

CH₃Br: Methyl bromide

CHS: Chitin synthase

CncC: Cap 'n' collar isoform C

CoA: Coenzyme A

COG: Cluster of orthologous groups

COI: Cytochrome c oxidase I

COX: Cyclooxygenase

CRD: Completely Randomized Design

CRISPR: Clustered regularly interspaced short palindromic repeats

cyp450s: cytochrome P450 monooxygenases

DDT: Dichloro-diphenyl-trichloroethane

DEGs: Differentially expressed genes

DEPC: Diethyl pyrocarbonate

DNA: Deoxyribonucleic acid

DNS/ DNSA: 3,5-Dinitrosalicylic acid

EC: Enzyme Commission

ECM: Extracellular matrix

EPA: Environmental Protection Agency

FDR: False discovery rate

GABA: Gamma-aminobutyric acid

GDP: Gross Domestic Product

GO: Gene ontology

gpx: glutathione peroxidase

GSSG: Glutathione disulfide

gstd2: glutathione S-transferases delta 2

gstd3: glutathione S-transferases delta 3

gsts: glutathione S transferases

H_{Lc50}: High lethal concentration

Hsp: Heat shock proteins

IUPAC: International Union of Pure and Applied Chemistry

JAK-STAT: Janus kinase/signal transducers and activators of transcription

KAAS: KEGG automatic annotation server

Kdr: Kinase insert domain receptor

KEGG: Kyoto encyclopedia of genes and genomes

KOG: Eukaryotic Orthologous Groups of proteins

LAC: Laccase

LC₅₀: Lethal concentration

L_{LC50}: Low lethal concentration

Log: Logarithm

LPO: Lipid peroxidation

Maf: Musculoaponeurotic fibrosarcoma oncogene homolog

MAPK: Mitogen-activated protein kinase

MF: Molecular function

MFOs: Mechanism of detoxification and multifunctional oxidases

MtDNA: Mitochondrial DNA

NADH: Nicotinamide adenine dinucleotide (NAD) + hydrogen (H)

NCBI: National Centre for Biotechnology Information

NGS: Next-generation sequencing

OECD: Organization for Economic Co-operation and Development

OP: Organophosphate

ORFs: Open reading frames

PAPS: Phosphoadenosine 5'-phosphosulfate

PCR: Polymerase chain reaction

pdi: protein disulfide isomerase

P-gp: P-glycoprotein

PH₃: phosphine

ppm: parts per million

PR: Percent repellency

RI: Repellent index

RNA: Ribonucleic acid

RNAi: RNA interference

ROS: Reactive oxygen species

RPM: Revolutions per minute

RT-PCR: Real time PCR

SD: Standard deviations

SEM: Standard error mean

SI: Susceptibility index

SOD: Superoxide dismutase

SULTs: Sulfotransferases

UDP: Uridine diphosphate

UGTs: Uridine 5'-diphospho-glucuronosyltransferase

UN-FAO: United Nation - Food and Agriculture Organisation

VGSC: Voltage-gated sodium channels