

## List of Abbreviations

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A	Absorbance
ABA	Antibacterial activity
ABTS	2,2'-azinobis-(3-ethylbenzothiazoline-6-sulfonic acid)
ABV	Alcohol by volume
ADH	Alcohol dehydrogenases
ADME-Tox	Absorption, distribution, metabolism, excretion and toxicity
AFA	Antifungal activity
AH	<i>A. heterophyllus</i> extract
AM	<i>A. malaccensis</i> extract
ANOVA	Analysis of variance
AOAC	Association of Official Analytical Chemists
APC	Aerobic plate count
ATR	Attenuated total reflectance
ATP	Adenosine triphosphate
BCPBB	Bromo cresol purple broth base
BPA	Baird Parker agar
BHT	3,5-di-tert-4-butylhydroxytoluene
BLAST	Basic local alignment search tool
BSH	Bile salt hydrolase
CAPE	Caffeic acid phenylethyl ester
CAT	Catalase
CE	<i>C. extensa</i> extract
CCD	Central composite design
CCRD	Central composite rotatable design
CD	Crohn's disease
CFU	Colony forming unit
Ch	Cholesterol
CIELAB	Commission Internationale de l'Eclairage L, a and b
CNDB	1-chloro-2,4-dinitrobenzene
CNS	Central nervous system
COX	Cyclooxygenase
DAI	Disease activity index

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DAS	Diacetoxyscirpenol
DBB	Diazonium blue B
DCM	Dichloromethane
DPPH	2-diphenyl-1-picrylhydrazyl
DM	Dry matter
DNA	Deoxyribonucleic acid
DW	Deionised water
EA	Ethyl acetate
EDTA	Ethylenediaminetetraacetic acid
EI	Extremely important
EMB	Eosin Methylene blue
ES	Erythrocyte suspension
EV	Experimental value
EU	European Union
FCE	Fuzzy mathematics comprehensive evaluation
FTC	Ferric thiocyanate
FTIR	Fourier transform infrared spectroscopy
GAE	Gallic acid equivalent
GC-MS	Gas chromatography–mass spectrometry
GGT	$\gamma$ -glutamyltransferase
GRAS	Generally recognized as safe
GST	Glutathione S-transferase
GSHPx	Glutathione peroxidase
H <sub>2</sub> O	Water
Hex	Hexane
HDP	Heavy duty platform
HI	Highly important
HPLC	High-performance liquid chromatography
IAEC	Institutional animal ethical committee
IBD	Inflammatory bowel disease
IGS	Intergenic spacer
IL-6	Interleukin-6
ITS	Internal transcribed spacers
LAB	Lactic acid bacteria

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LC – MS/MS	Liquid chromatography-tandem mass spectrometry
LOX	Lipoxygenase
LSD	Least significant difference
mM	Millimeter
mL	Milliliter
MAP	Mitogen-activated protein
MAPK	Mitogen-activated protein kinase
MATS	Microbial adhesion to solvents
MCL	Maximum composite likelihood
MD	Molecular dynamics
MDA	Malondialdehyde
MeOH	Methanol
MEM	Minimal essential medium
MIC	Minimum inhibitory concentrations
MRS	Media of deMan, Rogosa and Sharpe
MVD	Molegro Virtual Docker 6.01
nm	Nanometer
NADH	Nicotinamide adenine dinucleotide plus Hydrogen
NBT	Nitro blue tetrazoliumchloride
NCCS	National Centre for Cell Science
NIV	Nivalenol
NSAID	Non-steroidal anti-inflammatory drug
OD	Optical density
ppm	Parts per million
PBS	Phosphate buffered saline
PCA	Plate count agar
PCP	Pentachlorophenol
PCR	Polymerase chain reaction
PDA	Potato dextrose agar
PEA	2-Phenylethanol
PL	Phospholipid
PLP	Piecewise linear potential
PMS	Phenazinemethosulfate
PPE	purified phenolic extract

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PUFA	Polyunsaturated fatty acid
PUM	Phosphate urea magnesium
PV	Predicted value
Q <sub>A</sub>	Aroma
Q <sub>T</sub>	Taste
Q <sub>S</sub>	Strength
RAPD	Random amplified polymorphic DNA
RB	Rice beers
RBC	Red blood cells
RBCA	Rose Bengal chloramphenicol agar
RFLP	Restriction fragment length polymorphism
RMSD	Root mean squared deviation
RNA	Ribonucleic acid
ROS	Reactive oxygen species
RSA	Radical scavenging activity
RSC	Reducing sugars content
RSM	Response surface methodology
RV	Residual value
SAPE	Salicylic acid phenylethyl ester
SC	Starter cakes
SD	Standard deviation
SDS - PAGE	Sodium dodecyl sulphate polyacrylamide gel electrophoresis
SEM	Scanning electron microscope
SG	Specific gravity
SOD	Superoxide dismutase
SPE	Surface protein extract
SPSS	Statistical Package for Social Sciences
SS	Sequential sum of square
SSA	Salmonella Shigella agar
TA	Texture analyzer
TBA	Thiobarbituric acid
TBARS	Thiobarbituric acid reactive substances
TCD	Thermal conductivity detector

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TEM	Transmission electron microscopy
TMB	Tetramethylbenzidine
TNF- $\alpha$	Tumor necrosis factor alpha
TPC	Total phenolic compounds
TSS	Total soluble solids
UC	Ulcerative colitis
UCP	Untreated cell pellets
UV	Ultraviolet
VOC	Volatile organic compound
WHO	World Health Organization

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