
List of Abbreviations and Symbols

DM	<i>Diabetes Mellitus</i>
ROS	Reactive Oxygen Species
DMF	N, N Dimethylformamide
HPLC	High-Performance Liquid Chromatography
TLC	Thin-layer chromatography
ESI	Electrospray Ionization
HPTLC	High-performance Thin-layer Chromatography
LC-MS	Liquid Chromatography coupled with Mass Spectroscopy
HPCE	High-Performance Capillary Electrophoresis
TEAC	Total Equivalent Antioxidant Capacity
FRAP	Ferric-Reducing Antioxidant Power assay
DPPH	2,2-Diphenyl-1-picrylhydrazyl
NCIM	National Collection of Industrial Microorganisms
SEM	Scanning electron microscope
ORAC	Oxygen Radical Absorbance Capacity
BSA	Bovine Serum Albumin
MGO	Methylglyoxal

FTIR	Fourier Transform Infrared Spectroscopy
HR-LCMS	High Resonance liquid Chromatography coupled with Mass spectroscopy
NBPGR	National Bureau of Plant Genetic Resources
DNS	3,5-Dinitrosalicylic acid
PDB	Protein Data Bank
RCSB	Research Collaboratory for Structural Bioinformatics
MD	Molecular Dynamics
K _m	Michaelis Menton Constant
V _{max}	Maximum Reaction Velocity
LB	Lineweaver- Burk
RMSD	Root Mean Square Deviation
Cat:α- amylase	Catechin: α- amylase
<i>T1DM</i>	<i>Type I Diabetes Mellitus</i>
<i>T2DM</i>	<i>Type 2 Diabetes Mellitus</i>
pNPG	P-Nitrophenyl-beta-glucoside
PCD	Programmed Cell Death
DAPI	4,6-Diamino-2-phenylindole dihydrochloride
MTT	3-(4,5-Dimethylthiazol-2-yl)- 2,5-diphenyltetrazolium bromide
NCCS	National Centre for Cell Science
Cat:α- glucosidase	Catechin:α- glucosidase
HMDS	Hexamethyldisilazane

FI	Fluorescence Intensity
FBS	Fetal Bovine Serum
ANOVA	Analysis of Variance
S.D	Standard Deviation
AFM.	Atomic Force Microscopy
DCFH-DA	2',7' Dichlorodihydrofluorescein Diacetate
2-NBDG,	2-Deoxy-2-[(7-nitro-2,1,3-benzoxadiazol-4-yl)amino]-D-glucose
PI	Propidium Iodide
FRAP	Ferric Reducing Antioxidant Power Assay
O.D	Optical Density
Gal:Alpha- glucosidase	Gallic acid: Alpha-glucosidase
