

Exploring the potential of *Blumea lacera* (Burm.F.) Dc as an anti-haemorrhoid agent



**Thesis submitted in partial fulfillment
for the Award of Degree
Doctor of Philosophy**

By

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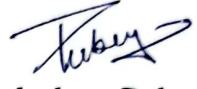
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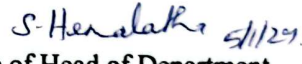

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List of Abbreviations

Abbreviations	Full forms
EBL	Ethanollic extract of <i>Blumea lacera</i> (Burm f.) DC.
Gm	Gram (s)
µg	Microgram
i.p.	Intraperitoneal
mg	Milligram
p.o.	Per oral
Kg	Kilogram
v/v	volume/volume
µl	Microliter
w/v	weight/volume
mL	Milliliter
w/w	weight/weight
SOD	Superoxide Dismutase
M	Molar
OD	Optical density
ANOVA	Analysis of variance
cm	Centimeter
BHT	Butylated hydroxytoluene
m	Meter
H ₂ O ₂	Hydrogen peroxide
Sec (s)	Second
H ₂ SO ₄	Sulphuric acid
HCl	Hydrochloric acid
HNO ₃	Nitric acid
NaOH	Sodium hydroxide

DPPH	1, 1-diphenyl-2-picryl-hydrazil
MDA	Malondialdehyde
ROS	Reactive oxygen species
IC ₅₀	Inhibitory concentration required to kill 50% of the population
ADME	Absorption, Distribution, Metabolism, and Excretion
BBB	Blood-Brain Barrier
CDCl ₃	Deuterated chloroform
DMSO	Deuterated dimethyl sulfoxide
DTNB	5,5'-dithiobis-2-nitrobenzoic acid
HBA	Hydrogen bond acceptor
HBD	Hydrogen bond donor
HRMS	High-resolution mass spectrometry
MW	Molecular weight
MTDLs	Multitarget directed ligands
PAS	Peripheral anionic site
TMS	Tetramethyl silane
PDB	Protein data bank
PBL	Porcine brain lipid
Pe	Permeability
SD	Standard deviation
3D	Three dimensional
TPSA	Topological polar surface area
Min	Minutes
KOH	Potassium hydroxide

Symbols	Meaning
α	Alpha
β	Beta
δ	Delta
$^{\circ}\text{C}$	Degree Celsius
\AA	Angstrom
mg	Milligram
μg	Micro gram
μM	Micromole
mmol	Millimole
mL	Milliliter
μL	Microliter
h	Hour
s	Singlet
nm	Nanometer
μm	Micrometer
mm	Millimeter
cm	Centimeter
ppm	Parts per million
rpm	Revolutions per minute
Kcal	Kilocalories
%	Percent
pH	Potential of hydrogen
<	Less than
>	More than
\pm	Plus, or minus

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