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# LIST OF ABBREVIATIONS

WHO	=	World Health Organization
<sup>1</sup> H NMR	=	Proton Nuclear Magnetic Resonance
<sup>13</sup> C NMR	=	Carbon Nuclear Magnetic Resonance
HSQC	=	Heteronuclear Single Quantum Coherence
HMBC	=	Heteronuclear Multiple Bond Coherence
DQF-COSY	=	Double Quantum Filtered Correlation Spectroscopy
NOESY	=	Nuclear Over Hauser Effect Spectroscopy
Hz	=	Hertz
MHz	=	Mega Hertz
δ	=	Chemical shift value
ppm	=	Parts per million
8	=	Singlet
d	=	Doublet
dd	=	Double doublet
t	=	Triplet
m	=	Multiplet
J	=	Coupling constant
CDCl <sub>3</sub>	=	Deuterated chloroform
methanol-d <sub>4</sub>	=	Deuterated methanol
DMSO-d <sub>6</sub>	=	Deuterated dimethylsulfoxide
FT-IR	=	Fourier Transform Infrared
UV	=	Ultraviolet
Vis	=	Visible
cm <sup>-1</sup>	=	Reciprocal centimeter
NaCl	=	Sodium Chloride
DART-MS	=	Direct analysismeal time Mass Spectroscopy
m/z.	=	mass by charge
HPLC	=	High Performance Liquid chromatography
DCM	=	Dichloromethane

EtOAc	=	Ethyl Acetate
MeOH	=	Methanol
$H_2O$	=	Water
$R_{\rm f}$	=	Retardation factor
v/v	=	volume by volume
°C	=	degree Celsius
%	=	Percentage
g	=	gram
mg	=	milligram
kg	=	kilogram
mp	=	Melting point
$[\alpha]_D^{20}$	=	Specific rotation in degrees
TLC	=	Thin-Layer Chromatography
VLC	=	Vacuum liquid chromatography
GCC	=	Gravitational column chromatography
CC	=	column chromatography
Fig.	=	Figure

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List of Publications :

- T. M. Thant, N. S. Aminah, A. N. Kristanti, R. Ramadhan, P. Phuwapraisirisan, Y. Takaya, 2019, A new pyrano coumarin from *Clausena excavata* roots displaying dual inhibition against α-glucosidase and free radical, Nat. Product research. (Online Published)
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