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LIST OF ABBREVIATIONS

2D NMR	Two Dimensional Nuclear Magnetic Resonance
B[a]P	Carcinogen Benzo[a]pyrene
BC	Human Breast Cancer
CC	Column Chromatography
cm	Centimeter
COSY	Correlation Spectroscopy
CDCl ₃	Deuteriochloroform
CD ₃ OD	Deuteromethanol
DEPT	Distortionless Enhancement by Polarization Transfer
g	Gram
H37Ra	<i>Mycobacterium tuberculosis</i>
HMBC	Heteronuclear Multiple Bond Correlation
HMQC	Heteronuclear Multiple Quantum Coherence
HRESIMS	High Resolution of Electrospray Ionization Mass Spectroscopy
IR	Infrared
kg	Kilogram
mg	Milligram
MHz	Megahertz
mL	Milliliter
mp	Melting Point
nm	Nanometer
NMR	Nuclear Magnetic Resonance
ppm	Part per Million
QCC	Quick Column Chromatography
μg	Microgram
μM	Micromolar
UV	Ultraviolet-Visible

LIST OF ABBREVIATIONS

AChE	Acetylcholinesterase
ASK	Rat Glioma Cell Line
BSL	Brine Shrimp Lethality
Col-2	Human Colon Cancer Cell Line
ED ₅₀	Median Effective Dose
EtOAc	Ethyl Acetate
Hek 293	Noncancerous Human Embryonic Kidney Cell Line
Hep-G2	Human Hepatocellular Liver Carcinoma Cell Line
HSV-1	Herpes Simplex Virus Type 1
HSV-2	Herpes Simplex Virus Type 2
IC ₅₀	The Half Maximal Inhibitory Concentration
KB	Human Epidermoid Carcinoma in the Mouth Cell Line
L1210	Tumor Cell Line, Murine Leukemia
Lu-1	Human Lung Cancer Cell Line
lit.	Literature
MCF-7	Human Breast Cancer Cell Line
MeOH	Methanol
NCI-H187	Human Lung Cancer Cell Line
OAc	O-Acetyl Group
obsc.	Obscure
P-388	Mouse Lymphoid Neoplasma Cell Line
Ph	Phenyl Group
RD	Rhabdosarcoma
T24	Human Urinary Bladder Cancer Cell

LIST OF SYMBOLS

$br\ s$	Broad Singlet
$br\ d$	Broad Doublet
$br\ t$	Broad Triplet
$br\ qud$	Broad Quintet of Doublet
c	Concentration
$^{\circ}C$	Degree Celsius
cm^{-1}	Reciprocal Centimeter (Wave Number)
d	Doublet
dd	Doublet of Doublet
dse	Doublet of Sextet
dt	Doublet of Triplet
J	Coupling Constant
m	Multiplet
m/z	A Value of Mass Divided by Charge
q	Quartet
s	Singlet
t	Triplet
$tsep$	Triplet of Septet
$[\alpha]_D$	Specific Rotation
δ	Chemical Shift Relative to TMS
λ_{max}	Maximum Wavelength
ν	Absorption Frequencies

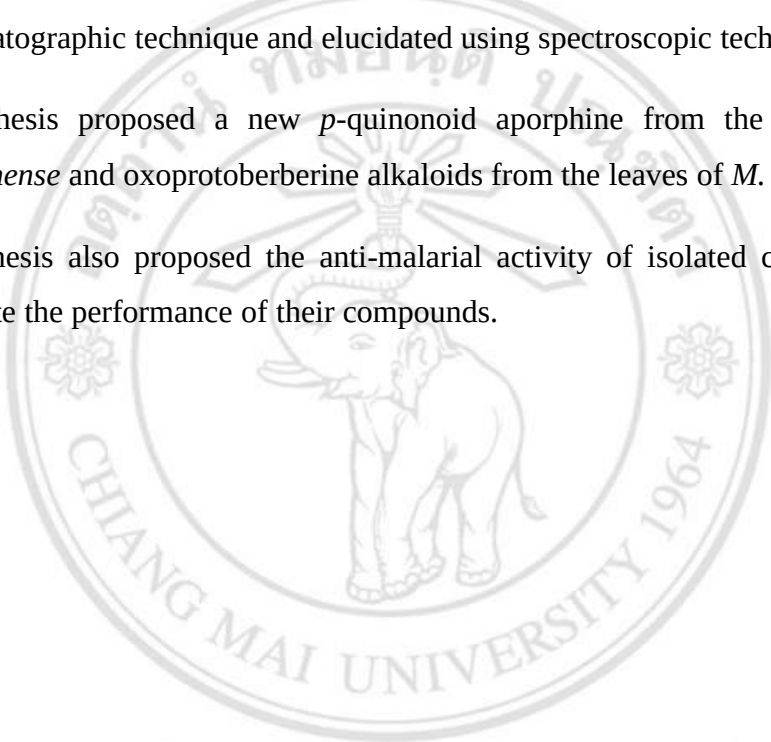
ข้อความแห่งการริเริ่ม

- 1) วิทยานิพนธ์นี้ได้นำเสนอพฤษเคมีของพืชวงศ์ Annonaceae ได้แก่ ต้นบุหงาคอยและต้นระฆังเขียว ซึ่งยังไม่เคยมีการรายงานจากต้นบุหงาคอยขณะที่ต้นระฆังเขียวมีการรายงานเพียงหนึ่งฉบับเท่านั้น การศึกษาจะเน้นการแยกสารให้บริสุทธิ์ด้วยเทคนิคโครมาโทกราฟี และวิเคราะห์โครงสร้างด้วยเทคนิคสเปกโทรสโกปี
- 2) วิทยานิพนธ์นี้ได้นำเสนอสารใหม่ในกลุ่ม *p*-quinonoid aporphine alkaloid จากกิ่งของต้นบุหงาคอยและ oxoprotoberberine alkaloid จากใบของต้นระฆังเขียว
- 3) วิทยานิพนธ์นี้ได้นำเสนอฤทธิ์ต้านเชื้อมาลาเรียของสารบริสุทธิ์ที่แยกได้ เพื่อประเมินศักยภาพของสารบริสุทธิ์ที่แยกได้สำหรับนำไปประยุกต์ใช้เป็นยารักษาโรคมมาลาเรีย

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STATEMENTS OF ORIGINALITY

1. This thesis focused on the phytochemical investigation from Annonaceae family including *Dasymaschalon yunnanense* and *Miliusa cuneata*. There are no reports on isolation and characterization from *D. yunnanense* and only one publication from *M. cuneata*. The structures of compounds were purified by chromatographic technique and elucidated using spectroscopic techniques.
2. This thesis proposed a new *p*-quinonoid aporphine from the twigs of *D. yunnanense* and oxoprotoberberine alkaloids from the leaves of *M. cuneata*.
3. This thesis also proposed the anti-malarial activity of isolated compounds to evaluate the performance of their compounds.



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