

การศึกษาทางพฤกษเคมีของใบ *Aglaiia chittagonga*

นาง ระพีพร เกิดวิชัย



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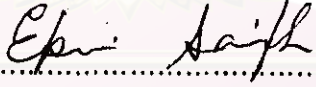
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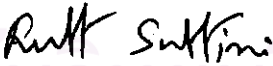
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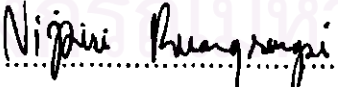
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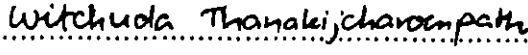
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สามารถแยกสารไตรเทอร์ปีนกลุ่ม Cycloartane ชนิดใหม่จาก ใบ *Aglaia chittagonga* ได้ 2 ชนิดคือ 25 methoxycycloartane-3 β , 24-diol และ 25 methoxyl- 28 norcycloartane -3 β , 24 - diol นอกจากนี้ยังพบสาร lupeol ซึ่งเป็นสาร ไตรเทอร์ปีน ที่มีการค้นพบแล้ว การพิสูจน์โครงสร้างทางเคมี และ relative stereochemistry ของสารทั้ง 3 ชนิดนี้ ทำโดยการวิเคราะห์ข้อมูลทางสเปกโทรสโกปี จาก IR, MS, ¹H และ ¹³C NMR โดยเฉพาะอย่างยิ่ง 1-D และ 2-D NMR ร่วมกับการเปรียบเทียบข้อมูล กับสารอื่นที่มีสูตรโครงสร้างทางเคมีที่สัมพันธ์กัน



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Two novel cycloartane triterpenoid, 25 methoxycycloartane-3 β , 24-
diol and 25 methoxyl-28 norcycloartane -3 β , 24 - diol together with a known
triterpenoid, lupeol were isolated from the leaves of *Aglaia chittagonga*
family meliaceae. The structures and relative stereochemistry of the
compounds were elucidated through extensive analysis of their IR, MS, ^1H and
 ^{13}C NMR spectral data, especially 1-D and 2-D NMR as well as comparison with
those value of known related compounds.

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LIST OF ABBREVIATIONS

brd	=	Broad doublet
brs	=	Broad singlet
°C	=	Degree celsius
CDCl ₃	=	Deuterated chloroform
CHCl ₃	=	Chloroform
cm	=	Centimeter
COSY	=	Correlated Spectroscopy
δ	=	chemical shift
d	=	doublet
dd	=	doublet of doublets
ddd	=	doublet of doublets of doublets
DEPT	=	Distortionless Enhancement by Polarization Transfer
EIMS	=	Electron Impact Mass Spectrum
ev	=	electron volt
g	=	Gram
¹ H NMR	=	Proton nuclear magnetic resonance
HMBC	=	Proton-detected Heteronuclear Multiple Bond Coherence
HMQC	=	Proton-detected Heteronuclear Multiple Quantum Coherence
IR	=	Infrared
J	=	Coupling constant
kg	=	kilogram
l	=	liter
λ	=	wavelength (nm)
mg	=	Milligram
MHz	=	Megahertz
ml	=	Milliliter
m/z	=	Mass to charge ratio

MS	=	Mass spectrometry
NMR	=	Nuclear magnetic resonance
ppm	=	part per million
q	=	quartet
s	=	singlet
t	=	triplet
TLC	=	thin layer chromatography
UV	=	Ultraviolet



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