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CONSTITUENTS OF MICHELIA LONGIFOLIA STEM BARK

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มาลี บริบูรณ์ : สารสำคัญจากเปลือกต้นจําปี (CONSTITUENTS OF MICHELIA LONGIFOLIA STEM BARK) อ. ที่ปรึกษา : รศ. นิจศิริ เรืองรังษี, ๑๔๔ หน้า

จากการตรวจสอบสิ่งสกัดในชั้นคลอโรฟอร์มของเปลือกต้นจําปี (*Michelia longifolia* Blume, Magnoliaceae) พบสารต้านมะเร็ง ๔ ชนิด คือ parthenolide, costunolide, β -sitosterol และ liriodenine ซึ่งได้ศึกษาสูตรโครงสร้างโดยวิธีทางสเปกโตรสโคปี พร้อมทั้งบรรยายการกำหนดสูตรโครงสร้างอย่างละเอียด

ภาควิชา เกษัชเวช
สาขาวิชา เกษัชเวช
ปีการศึกษา ๒๕๓๐

ลายมือชื่อนิสิต *มาลี บริบูรณ์*
ลายมือชื่ออาจารย์ที่ปรึกษา *นิจศิริ เรืองรังษี*

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THESIS ADVISOR : ASSO. PROF. NIJSIRI RUANGRUNGSI, M.Sc. 148 pp.

Examination of the chloroform extract from *Michelia longifolia* Blume (Magnoliaceae) stem bark revealed the presence of four antitumor principles, parthenolide, costunolide, β -sitosterol and liriodenine. Structure elucidations have been established by spectroscopic means. A detail discussion on the elucidation of chemical structures is included.

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สาขาวิชา เกษษเวช
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ลายมือชื่อนิสิต น. น. น.
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ABBREVIATIONS

$^{\circ}\text{C}$	=	degree Celsius
$^1\text{H-NMR}$	=	Proton Nuclear Magnetic Resonance
TMS	=	Tetramethylsilane
IR	=	Infrared
UV	=	Ultraviolet
TLC	=	Thin Layer Chromatography
CC	=	Column Chromatography
hRf	=	Rate of flow in Chromatography multiplied by 100
EIMS	=	Electron Impact Mass Spectrum
$(\alpha)_D^{20}$	=	Optical Rotation at 20 $^{\circ}\text{C}$
ν_{max}	=	The wavelength at maximum absorption
s	=	singlet
d	=	doublet
t	=	triplet
m	=	multiplet
br	=	broad
MHz	=	Mega Hertz
Hz	=	Hertz
ppm	=	part per million
m/z	=	mass to charge ratio
M^+	=	Molecular ion
mm	=	millimeter
ml	=	milliliter

J	=	Coupling Constant
nm	=	nanometer
2D-COSY	=	two dimension correlation spectroscopy