

สารคดีจากรากพิชนาด



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ศูนย์วิทยทรัพยากร

วิทยานิพนธ์นี้ เป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปริญญา เกล็ชศาสตรมหาบัณฑิต

ภาควิชาเคมีเวท

บัณฑิตวิทยาลัย จุฬาลงกรณ์มหาวิทยาลัย

พ.ศ. 2534

ISBN 974-578-761-2

ลิขสิทธิ์ของบัณฑิตวิทยาลัย จุฬาลงกรณ์มหาวิทยาลัย

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CHEMICAL CONSTITUENTS OF *SOPHORA EXIGUA* CRAIB ROOT

Miss Yupynn Chintapakorn

คุณยุพนัน พันธ์ภักดิ์  
A Thesis Submitted in Partial Fulfillment of the Requirements  
for the Degree of Master of Science in Pharmacy

Department of Pharmacognosy

Graduate School

Chulalongkorn University

1991

ISBN 974-578-761-2



Thesis Title      Chemical Constituents of *Sophora exigua* Craib  
Root

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ยุพิน จินตภาก : สารเคมีจากรากพิมนาด (CHEMICAL CONSTITUENTS OF SOPHORA EXIGUA CRAIB ROOT) อ.ที่ปรึกษา : รศ. สุรัตน์ อวนวยผล, 265 หน้า. ISBN 974-578-761-2

จากการใช้รากทางรงค์เลขและการตอกผลึก ทำให้สามารถแยกสารใหม่ในกลุ่มฟลาโนนอยด์ได้ 2 ชนิด จากรากของต้นพิมนาด (*Sophora exigua Craib*) คุณสมบัติทางกายภาพ เคมี และข้อมูลทางสเปกโตรสโคปได้แสดงให้เห็นว่าสารเหล่านี้คือ 8-lavandulyl-5,7,2',6'-tetrahydroxyflavanone และ 8-lavandulyl-5,7,2',4',6'-pentahydroxyflavanone ซึ่งสารทั้งสองนี้ยังไม่เคยมีรายงานการพบมาก่อน ทั้งในธรรมชาติ และโดยการสังเคราะห์



# ศูนย์วิทยาการ ดุษฎงค์มหาวิทยาลัย

ภาควิชา เภสัชเวท  
สาขาวิชา เภสัชเวท  
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ลายมือชื่อนิสิต .....  
ลายมือชื่ออาจารย์ที่ปรึกษา .....  
ลายมือชื่ออาจารย์ที่ปรึกษาร่วม .....

YUPYNN CHINTAPAKORN : CHEMICAL CONSTITUENTS OF *SOPHORA EXIGUA* CRAIB  
ROOT. THESIS ADVISOR : ASSO. PROF. SURATTANA AMNUOYPOL, Ed.D. 265 PP.  
ISBN 974-578-761-2

By means of chromatographic and crystallization techniques, two novel flavonoids were isolated from the roots of *Sophora exigua* Craib. The physical, chemical properties and spectroscopic data of those flavonoids have shown that they are 8-lavandulyl-5,7,2',6'-tetrahydroxyflavanone and 8-lavandulyl-5,7,2',4',6'-pentahydroxyflavanone. Both have not previously been reported elsewhere neither naturally nor synthetically.

ศูนย์วิทยทรัพยากร  
จุฬาลงกรณ์มหาวิทยาลัย

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#### ACKNOWLEDGEMENTS

The author wishes first to express her deep indebtedness and grateful thanks to her advisor, Associate Professor Surattana Amnuoypol, the former Head of the Department of Pharmacognosy, Faculty of Pharmaceutical Sciences, Chulalongkorn University, for her supervision of the research, helpful guidance, keen interest, useful suggestions and continual encouragements throughout the course of this study.

The author wishes to acknowledge her grateful thanks to Dr. Khanit Suwanborirux of the Department of Pharmacognosy, Faculty of Pharmaceutical Sciences, Chulalongkorn University, for his helpful suggestion, and valuable discussions on the characterization and identification of the isolated compounds.

The author is deeply grateful to Associate Professor Dr. Sunibhond Pummangura, the former Head of the Department of Pharmaceutical Chemistry, Faculty of Pharmaceutical Sciences, Chulalongkorn University and Associate Professor Dr. Sophon Roengsamran of the Department of Chemistry, Faculty of Science, Chulalongkorn University, for their valuable suggestions on the identification of the isolated compounds.

The author would like to express her sincere gratitude to Professor Dr. David K. Ho of College of Pharmacy, The Ohio State University, and Mr. Rutt Suttisri of the Department of Pharmaceutical Botany, Faculty of Pharmaceutical Sciences, Chulalongkorn University, for their kindness in determining several nuclear magnetic resonance spectra of the isolated compounds.

The author would further like to express her appreciation to all staff members of the Department of Pharmacognosy, Faculty of Pharmaceutical Sciences, Chulalongkorn University, for their kindness and helps.

The author also wishes to express her deep indebtedness and grateful thanks to her family for their love, understanding and encouragement.

Finally, grateful thanks are due to Chulalongkorn University Graduate School for granting her partial financial support of seven thousand and two hundred baht to conduct this investigation.



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## ABBREVIATIONS

$^{\circ}\text{C}$	=	degree Celsius
$^{13}\text{C-NMR}$	=	carbon-13 nuclear magnetic resonance
cm	=	centimeter
COSY	=	correlation spectroscopy
d	=	doublet
dd	=	doublet of doublet
EIMS	=	electron impact mass spectrometry
eV	=	electron volt
g	=	gram
HETCOR	=	heteronuclear chemical shift correlation
$^1\text{H-NMR}$	=	proton nuclear magnetic resonance
hRf	=	rate of flow in chromatography multiple by 100
Hz	=	hertz
IR	=	infrared
J	=	coupling constant
kg	=	kilogram
$\lambda_{\text{max}}$	=	wave length at maximum absorption
m	=	multiplet
$\text{M}^+$	=	molecular ion
MeOH	=	methanol
mg	=	milligram
MHz	=	mega hertz
ml	=	milliliter
mm	=	millimeter
m/z	=	mass to charge ratio

NaOAc	=	sodium acetate
nm	=	nanometer
ppm	=	parts per million
q	=	quartet
s	=	singlet
t	=	triplet
TLC	=	thin-layer chromatography
TMS	=	tetramethylsilane
UV	=	ultraviolet

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