

ข้อกำหนดทางเภสัชเวชของรากงูเซมา



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PHARMACOGNOSTIC SPECIFICATION OF
CYCLEA BARBATA ROOTS

Miss Sareerarote Sukamolson

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for the Degree of Master of Science Program in Pharmacognosy

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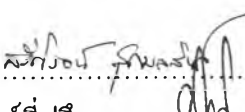
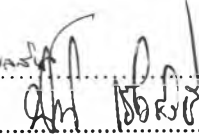
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สรীরโรจน์ สุขมลสันต์: ข้อกำหนดทางเภสัชเวทของรากกรงเขมา. (PHARMACOGNOSTIC SPECIFICATION OF *CYCLEA BARBATA* ROOTS) อ. ที่ปรึกษา: รศ. ดร. นิจศิริ เรืองรังษี, 107 หน้า. ISBN 974-53-2443-4.

การศึกษาลักษณะทางเภสัชเวทของรากกรงเขมา (*Cyclea barbata* (Wall.) Miers) ซึ่งเป็นพืชในวงศ์ Menispermaceae ประกอบด้วยการตรวจเอกลักษณ์ทางมหาทรศน์ ทางจุลทรศน์ และกระสวนขององค์ประกอบทางเคมีบนโครมาโตแกรมฉาบบางของสมุนไพรส่วนราก รวมถึงการหาน้ำหนักที่หายไปเมื่อทำให้แห้ง ปริมาณน้ำ ปริมาณเถ้า และ ปริมาณสิ่งสกัก สามารถนำไปกำหนดมาตรฐานของสมุนไพรชนิดนี้ได้ นอกจากนี้ได้ศึกษาเชิงปริมาณวิเคราะห์โดยการตรวจสอบปริมาณสารสำคัญ (+)-tetrandrine ด้วยวิธี Thin-Layer Chromatographic Densitometry และ Capillary Electrophoresis

ภาควิชา.....เภสัชเวท.....ลายมือชื่อนิสิต .....
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The morphology and histology of the roots of Krung Kha Mao or *Cyclea barbata* (Wall.) Miers (Menispermaceae) were studied and illustrated. Pharmacognostic specifications were performed by studying of chromatographic patterns of chemical constituents, both one-dimensional and two-dimensional TLC, with a view to bring out the diagnostic characters of the drug. Loss on drying, ash content, moisture content and extractive values represent the specification of this particular species. In additional, the quantitative analysis by thin-layer chromatographic densitometry method and capillary electrophoresis method using (+)-tetrandrine as a marker is reported.

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ABBREVIATIONS

δ	=	Chemical shift
μA	=	microampere
μm	=	micrometer
AUC	=	area under curve
BP	=	British Pharmacopoeia
$^{\circ}\text{C}$	=	degree Celsius
Calcd.	=	calculated
cm	=	centimeter
CE	=	Capillary Electrophoresis
d	=	doublet
dd	=	doublet of doublet
EP	=	European Pharmacopoeia
h	=	hour
HPLC	=	High Performance Liquid Chromatography
HPTLC	=	High Performance Thin-Layer Chromatography
kV	=	kilovolt
L	=	liter
M	=	Mole
m	=	multiplet

MHz	=	megahertz
min	=	minute
mg	=	milligram
ml	=	milliliter
mm	=	millimeter
mM	=	millimole
ng	=	nanogram
nm	=	nanometer
NMR	=	Nuclear Magnetic Resonance
ppm	=	part per million
r^2	=	correlation coefficient
RT	=	retention time
s	=	singlet
sec	=	second
SD	=	standard deviation
t	=	triplet
TLC	=	Thin-Layer Chromatography
TP	=	Thai Pharmacopoeia
USP	=	United State Pharmacopoeia
UV	=	ultraviolet light

v = volume

w = weight