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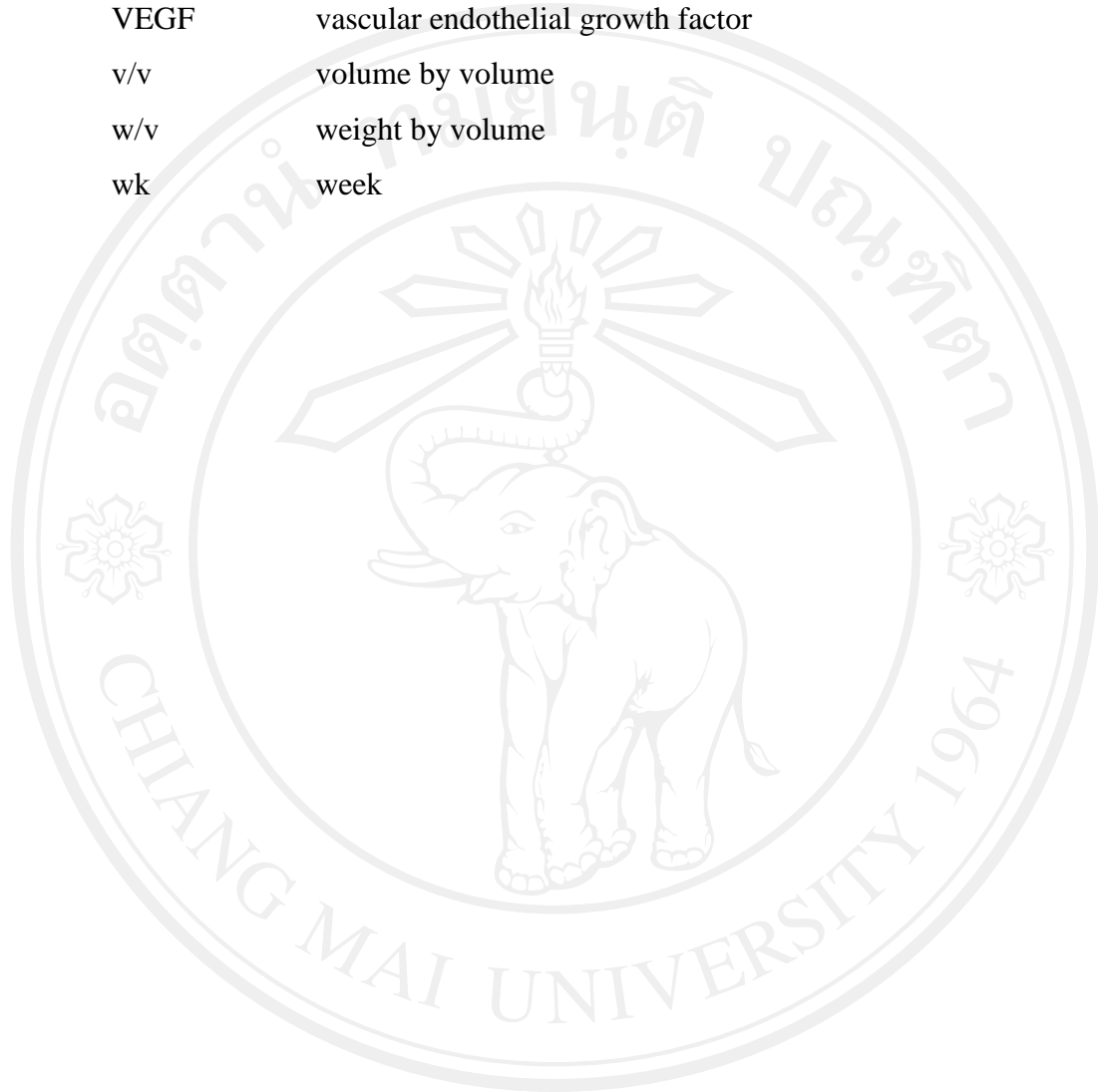
LIST OF ABBREVIATIONS

°C	degree Celsius
%	percent
µg/mL	microgram/ milliliter
µL	microliter
µM	micromolar
ANOVA	one-way analysis of variance
cDNA	complementary DNA
CFA	complete Freund's adjuvant
CHCl ₃	chloroform
CO ₂	carbondioxide
COX	cyclooxygenase
COX-1	cyclooxygenase-1
COX-2	cyclooxygenase-2
DEPC	diethylpyrocarbonate
DI	deionized water
DMARDs	disease-modifying anti-rheumatic drugs
DMEM	dulbecco's modified Eagle's medium
DMSO	dimethyl sulfoxide
DNA	deoxyribonucleic acid
dNTPs	deoxynucleotide triphosphates
DPPH	2, 2'-diphenyl-1-picrylhydrazyl
DW	distilled water
EDTA	ethylenediaminetetraacetic acid
<i>et al</i>	et alii (and others)
EtOH	ethanol
FBS	fetal bovine serum
FeCl ₃	ferric chloride
g	gram

GAE	gallic acid equivalent
GAPDH	glyceraldehyde-3-phosphate dehydrogenase
GM-CSF	granulocyte-macrophage colony-stimulating factor
h	hour
H ₂ SO ₄	sulfuric acid
HCl	hydrochloric acid
HPLC	high performance liquid chromatography
i.e.	id est (that is)
IC ₅₀	inhibitory concentration at 50% growth
ICAM-1	intercellular adhesion molecule-1
IL-17	interleukin-17
IL-1 α	interleukin-1 alpha
IL-1 β	interleukin-1 beta
IL-1Ra	interleukin-1 receptor antagonist
IL-6	interleukin-6
iNOS	inducible nitric oxide synthase
kb	kilobase
KCl	potassium chloride
kg	kilogram
KOH	potassium hydroxide
L	liter
LOX	lipoxygenase
LPS	lipopolysaccharide
LSD	least-significant difference
LT	leukotriene
M	molar
mEq	milliequivalent
mg	milligram
Mg	magnesium
mg/kg	milligram per kilogram body weight
MgCl ₂	magnesium chloride
min	minute

mL	milliliter
mm	millimeter
MMPs	matrix metalloproteinases
mRNA	messenger ribonucleic acid
MW	molecular weight
N	normal
NaCl	sodium chloride
NaOH	sodium hydroxide
NF- κ B	nuclear factor kappa-light-chain-enhancer of activated B cells
NH ₃	ammonia
nm	nanometer
NO	nitric oxide
NSAIDs	non-steroidal anti-inflammatory drugs
OA	osteoarthritis
OD	optical density
PBS	phosphate buffer saline
PG	prostaglandin
PGE ₂	Prostaglandin E ₂
pH	power of Hydrogen ion
PCR	polymerase chain reaction
RA	rheumatoid arthritis
RANK	receptor activator of nuclear factor kappa-B
RANKL	receptor activator of nuclear factor kappa-B ligand
RNA	ribonucleic acid
RNase	ribonuclease
rpm	revolution per minute
RT	room temperature
RT-qPCR	quantitative reverse transcription polymerase chain reaction
S.E.M.	standard error of mean
SRB	sulforhodamine B
TCA	trichloroacetic acid
TLR4	toll-like receptor 4

TNF- α	tumor necrosis factor alpha
TRAF6	TNF receptor-associated factor 6
Tris-base	tris (hydroxymethyl aminomethane)
U	unit
VEGF	vascular endothelial growth factor
v/v	volume by volume
w/v	weight by volume
wk	week



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ข้อความแห่งการริเริ่ม

ไม่กี่ปีมานี้ประเทศไทยมีนโยบายพัฒนาความรู้เกี่ยวกับพืชสมุนไพรเพื่อใช้รักษาโรคต่างๆ พืชสมุนไพรจึงเป็นหนึ่งในทางเลือกในการดูแลสุขภาพ มีการนำหญ้าปักกิ่งมาใช้รักษาโรคหลายๆ อย่างมานานแล้ว มีรายงานว่าสารสกัดเอทานอลจากหญ้าปักกิ่งมีฤทธิ์ด้านการอักเสบที่ไม่เหมือนยาสเตียรอยด์ ระวังปวด และลดไข้ได้ในหนูขาว โดยไม่ทำให้เกิดผลกระเพาะอาหาร ซึ่งคุณสมบัติเช่นนี้เป็นสิ่งที่ต้องการสำหรับการรักษาโรคข้ออักเสบเรื้อรังต่างๆ การพิสูจน์ฤทธิ์ด้านข้ออักเสบของสารสกัดนี้ อาจเป็นทางเลือกหนึ่งสำหรับผู้ป่วยข้ออักเสบที่ต้องใช้ยาต้านข้ออักเสบแผนปัจจุบันที่มีฤทธิ์ข้างเคียงที่รุนแรง การศึกษานี้มีวัตถุประสงค์เพื่อทดสอบหาฤทธิ์ด้านข้ออักเสบและฤทธิ์ปกป้องการเกิดแผลในกระเพาะอาหารของสารสกัดเอทานอลของหญ้าปักกิ่ง ผลที่ได้จากการทดลองอาจจะให้ข้อมูลที่เป็นประโยชน์ในการสนับสนุนการใช้พืชนี้

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STATEMENT OF ORIGINALITY

In recent years, the Thai government has had a policy to develop medicinal plant knowledge to provide remedies for many diseases. Herbal medicines are the particular value in alternative health care. *Murdannia loriformis* has long been used to treat a broad spectrum of disorders. The ethanol extract of this plant was proved to possess non-steroidal anti-inflammatory, analgesic, and antipyretic activities in rats without ulcerogenic effect. These properties are needed for treating chronic arthritic diseases. Proving anti-arthritic activity of this extract might provide an alternative way for arthritic patients taking modern anti-arthritic drugs with serious side effects. This research aims to investigate the anti-arthritic and gastroprotective activities, as well as the mechanisms of actions of the ethanol extract of *M. loriformis*. The results from this study might give useful information in supporting one of its folklore uses.

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