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LIST OF ABBREVIATIONS

cm	Centimeter
CMU	Chiang Mai University
e.g.	For example
et al.	And others
etc.	et cetera
GC	Gas chromatography
h	Hour
L	Liter
LC ₅₀	Median lethal concentration
LD ₅₀	Median lethal dose
M	Mole
mg	Milligram
min	Minute
ml	Milliliter
mm	Millimeter
mmol	Millimole
mM	Millimolar

LIST OF ABBREVIATIONS (continued)

MS	Mass spectrometry
nm	Nanometer
nmol	Nanomole
ng	Nanogram
No	Number
pH	Potential of hydrogen
pmol	Picomole
ppb	Part per billion
ppm	Part per million
SE	Standard errors
spp.	Species
µg	Microgram
µl	Microliter
µmol	Micromole
v/v	Volume per volume
v/w	Volume per weight
w/w	Weight per weight
WHO	World Health Organization

LIST OF SYMBOLS

\pm	Plus minus
$+$	Plus
$=$	Equals
\times	Multiply
\sim	Approximately
$\%$	Percentage
$^{\circ}\text{C}$	Degree Celsius

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ข้อความแห่งการริเริ่ม

1. วิทยานิพนธ์นี้ได้รายงานครั้งแรกถึงฤทธิ์ฆ่ายุงของน้ำมันหอมระเหยจากเทียนเขาวาฬ (*Petroselinum crispum*) ต่อยุงลายสายพันธุ์ที่ไวต่อไพรีทรอยด์ (MCM-S) และดื้อต่อไพรีทรอยด์ (PMD-R และ UPK-R)
2. วิทยานิพนธ์นี้ได้ค้นพบน้ำมันหอมระเหยเทียนเขาวาฬที่มีประสิทธิภาพในการฆ่ายุงในระยะลูกน้ำและตัวเต็มวัยในยุงลายสายพันธุ์ที่ไวและดื้อต่อไพรีทรอยด์
3. วิทยานิพนธ์นี้ได้รายงานบทบาทของน้ำมันหอมระเหยเทียนเขาวาฬต่อการเปลี่ยนแปลงทั้งทางด้านพฤติกรรม สันฐานวิทยาและชีวเคมีในยุงลายสายพันธุ์ที่ไวและดื้อต่อไพรีทรอยด์

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STATEMENTS OF ORIGINALITY

1. In this thesis, the mosquitocidal potential of *Petroselinum crispum* oil was reported for the first time against the pyrethroid susceptible (MCM-S) and resistant (PMD-R and UPK-R) strains of *Aedes aegypti*.
2. In this thesis, *P. crispum* oil was found to be effective in killing mosquitoes, larvae and adults against the pyrethroid susceptible and resistant strains of *Ae. aegypti*.
3. In this thesis, *P. crispum* oil was reported for behavioral response, physical performance, and biochemical constituents of target insects in the pyrethroid susceptible and resistant strains of *Ae. aegypti*.

The seal of Chiang Mai University is a circular emblem. It features a central illustration of an elephant standing and facing left. Above the elephant is a five-pointed star. The entire emblem is encircled by a border containing the university's name in Thai script at the top and 'CHIANG MAI UNIVERSITY 1964' in English at the bottom.

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