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LIST OF ABBREVIATIONS AND SYMBOLS

%	Percentage
°C	Degree Celsius
μl	Microliter
μM	Micromolar
bp	Base pair
cm	Centimeter
COI	Cytochrome <i>c</i> oxidase subunit I
COII	Cytochrome <i>c</i> oxidase subunit II
DNA	Deoxyribonucleic acid
dNTPs	Deoxynucleotide triphosphates
e.g.	Exempli gratia
et al	And others
etc.	Etcetera
i.e.	Id est
ITS2	Second internal transcribed spacer
ml	Milliliter
mM	Millimolar
mtDNA	mitochondrial DNA
PCR	Polymerase chain reaction
pH	Potential of hydrogen
rDNA	ribosomal DNA
U	Unit

ข้อความแห่งการริเริ่ม

1. วิทยานิพนธ์นี้เป็นการศึกษาแรกที่นำอินไมโทคอนเดรียในตำแหน่ง cytochrome *c* oxidase subunit I (COD) มาใช้เป็นดีเอ็นเอบาร์โค้ดในการจำแนกชนิดยุงก้นปล่องที่เป็นสมาชิกในกลุ่มไฮอร์คานัส จำนวน 8 ชนิด ในประเทศไทย ได้แก่ *Anopheles argyropus*, *Anopheles crawfordi*, *Anopheles nigerrimus*, *Anopheles nitidus*, *Anopheles paraliae*, *Anopheles peditaeniatus*, *Anopheles pursati* และ *Anopheles sinensis*
2. วิทยานิพนธ์นี้เป็นการศึกษาแรกที่ทำการศึกษาหาพฤติกรรมผสมพันธุ์ในที่แคบของยุงก้นปล่องกลุ่มไฮอร์คานัสทั้ง 8 ชนิดในประเทศไทย และแสดงให้เห็นถึงการประสบความสำเร็จในการตั้งโคโลนียุงก้นปล่อง *An. peditaeniatus* ที่มีพฤติกรรมผสมพันธุ์ในที่แคบ
3. วิทยานิพนธ์นี้เป็นการศึกษาแรก que แสดงให้เห็นถึงกลไกที่ควบคุมพฤติกรรมผสมพันธุ์ในที่แคบของยุงก้นปล่อง *An. peditaeniatus* ในประเทศไทย

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STATEMENT OF ORIGINALITY

1. This thesis is on the first study to utilize mitochondrial cytochrome *c* oxidase subunit I (COI) gene-based DNA barcoding, for species identification of the eight species, i.e., *Anopheles argyropus*, *Anopheles crawfordi*, *Anopheles nigerrimus*, *Anopheles nitidus*, *Anopheles paraliae*, *Anopheles peditaeniatus*, *Anopheles pursati*, and *Anopheles sinensis*, belonging to the Hyrcanus Group in Thailand.
2. This thesis is on the first study to screen the stenogamous behavior of the eight species belonging to the Hyrcanus Group in Thailand and demonstrate the successful establishment of a stenogamous colony of *An. peditaeniatus*.
3. This thesis is on the first study to demonstrate the mechanisms that control stenogamous behavior of *An. peditaeniatus* in Thailand.

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