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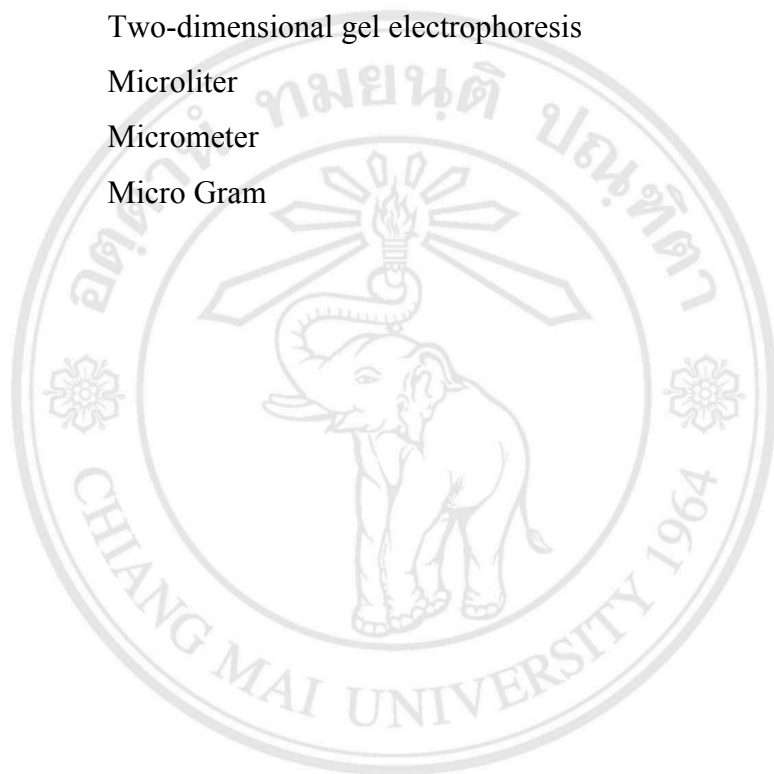
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LIST OF ABBREVIATIONS

cm	Centimeter
CBB	Coomassie Brilliant Blue
CFU	Colony forming units
DNA	Deoxyribonucleic acid
DTT	Dithiothreitol
et al	And other
i.e.	Id est
g	Relative centrifugal force
h	hour
IAA	Iodoacetamide
kDa	Kilo Dalton
LB	Luria-Bertani medium
LC-MS	nano Liquid chromatography-mass spectrometry
mg	Milligram
min	Minute
ml	Milliliter
MS	Mass Spectrometry
OTU	Operational Taxonomic Unit
PBS	Phosphate buffered saline
PCR	Polymerase chain reaction
pH	Potential of hydrogen
pI	Isoelectric points
RER	Rough endoplasmic reticulum
rRNA	Ribosomal ribonucleic acid

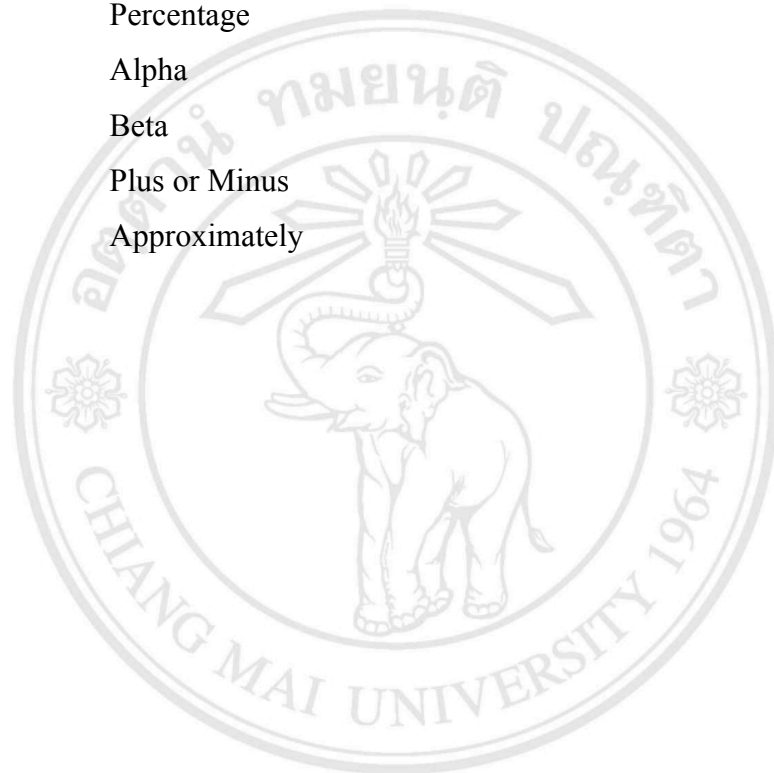
SDS-PAGE	Sodium dodecyl sulphate polyacrylamide gel electrophoresis
SEM	Scanning electron microscope
SER	Smooth endoplasmic reticulum
sec	Second
sp.	Species
TEM	Transmission electron microscope
WHO	World Health Organization
2-DE	Two-dimensional gel electrophoresis
μ l	Microliter
μ m	Micrometer
μ g	Micro Gram



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LIST OF SYMBOLS

M	Molar
mM	Millimolar
°C	Degree Celsius
%	Percentage
α	Alpha
β	Beta
\pm	Plus or Minus
\sim	Approximately



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ข้อความแห่งการริเริ่ม

- 1) วิทยานิพนธ์นี้ได้นำเสนอความรู้พื้นฐานของการเปลี่ยนแปลง ด้านสัณฐานวิทยาของกระเพาะอาหารของยุงก้นปล่อง *An. dissidens* ในช่วงการเจริญเติบโตในระยะตัวเต็มวัย และวงจรตั้งแต่กินเลือดจนถึงวางไข่ และโปรตีนกระเพาะอาหารของยุงชนิดนี้ ข้อมูลเหล่านี้จะช่วยเพิ่มความเข้าใจมากขึ้นถึงอิทธิพลเบื้องต้นของความสามารถการเป็นแมลงพาหะจากความสัมพันธ์ของการเปลี่ยนแปลงภายใต้การเจริญเติบโตในระยะตัวเต็มวัยและการกินเลือด
- 2) วิทยานิพนธ์นี้ได้นำเสนอความรู้เกี่ยวกับการเปลี่ยนแปลงของต่อมน้ำลายของยุงก้นปล่อง *An. dissidens* ทางด้านสัณฐานวิทยา และโปรตีนในช่วงการเจริญเติบโตในระยะตัวเต็มวัยและหลังการกินเลือด และนำเสนอโปรตีนที่น่าจะมีผลต่อการพัฒนาและถ่ายทอดของเชื้อมาลาเรีย
- 3) วิทยานิพนธ์นี้ได้เสนอข้อมูลเบื้องต้นของจุลินทรีย์ในกระเพาะอาหารของยุง *An. dissidens* เพื่อนำไปสู่การศึกษากลยุทธการควบคุม โรคมาลาเรีย โดยวิธี paratransgenesis

STATEMENT OF ORIGINALITY

- 1) This thesis presents fundamental knowledge of morphological changes the *An. dissidens* midgut during adult development and gonotrophic cycle, and the midgut proteins. These data would help better understanding the initial influence on vector competence from correlation of the changes during adult development and blood feeding
- 2) This thesis presents changes of the *An. dissidens* salivary gland morphology and proteins during adult development and after blood feeding, and provides protein candidates that might be involved in the development and transmission of malaria parasites.
- 3) This thesis presents a basis of bacterial diversity in the *An. dissidens* midgut that would lead to further study on a malaria control strategy using paratransgenesis.

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