

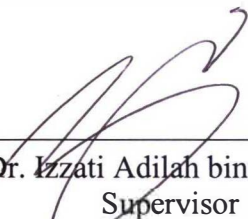
**IDENTIFICATION OF MOSQUITOES FROM UiTM  
KUALA PILAH THROUGH MORPHOLOGICAL  
CHARACTERISTICS AND MOLECULAR APPROACH**

**SYAZA IZZATY BINTI RAHMAT**

**Final Year Project Submitted in  
Partial Fulfillment of the Requirements for the  
Degree of Bachelor of Science (Hons.) Biology  
in the Faculty of Applied Sciences  
Universiti Teknologi MARA**

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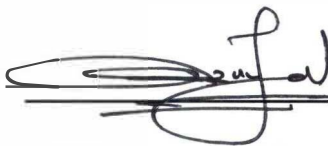
This Final Year Project Report entitled **“Identification of Mosquitoes from UiTM Kuala Pilah Through Morphological Characteristics and Molecular Approach”** was submitted by Syaza Izzaty binti Rahmat, in partial fulfilment of the requirements for the Degree of Bachelor of Science (Hons.) Biology, in the Faculty of Applied Sciences, and was approved by



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Dr. Izzati Adilah binti Azmir  
Supervisor

Faculty of Applied Sciences  
Universiti Teknologi MARA  
Negeri Sembilan, Kampus Kuala Pilah,  
Pekan Parit Tinggi, 72000 Kuala Pilah  
Negeri Sembilan



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Siti Norazura binti Jamal  
Coordinator FSG661 AS201  
Faculty of Applied Sciences  
Universiti Teknologi MARA  
Negeri Sembilan, Kampus Kuala Pilah  
Pekan Parit Tinggi, 72000 Kuala Pilah,  
Negeri Sembilan



---

Dr. Aslizah binti Mohd Aris  
Head of Biology School  
Faculty of Applied Sciences  
Universiti Teknologi MARA  
Negeri Sembilan, Kampus Kuala Pilah  
Pekan Parit Tinggi, 72000 Kuala Pilah,  
Negeri Sembilan

Date: \_\_\_\_\_

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## ABSTRACT

### IDENTIFICATION OF MOSQUITOES FROM UiTM KUALA PILAH THROUGH MORPHOLOGICAL CHARACTERISTICS AND MOLECULAR APPROACH

Mosquitoes are known with the capabilities to cause vector-borne disease. Hence, the correct identification of mosquito become a critical factor in order to implement the most effective vector control strategies. In this study, a comparative method which is the combination of morphology approach and molecular method has been done to characterize the mosquito species of Culicinae subfamily. The physical features of the mosquito which is proboscis, wing, head, thorax, abdomen and leg has been used to identify the mosquitoes. A total of 50 mosquito samples were collected from two different locations, identified through morphological and molecular approach. A total of six morphometric measurement were measured on the sample. The mean of each characteristic were estimated by using Tukey's test with significant value ( $P < 0.05$ ). Both *Aedes albopictus* and *Armigeres subalbatus* display different size of morphometric characters. Cytochrome oxidase subunit 1 (*COI*) has help identify the unidentified samples to species level as *Armigeres* sp. DNA barcoding was also unable to identify *Armigeres* sp. to species level due to inaccurate primer.