

**THE BIODIVERSITY OF LEPIDOPTERAN IN UNIVERSITI
TEKNOLOGI MARA KOTA KINABALU, SABAH**

SAMUEL TIAU

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ABSTRACT

BIODIVERSITY OF LEPIDOPTERAN IN UNIVERSITI TEKNOLOGI MARA KOTA KINABALU, SABAH

This study focused on the biodiversity of Lepidopteran in the forest UiTM Kota Kinabalu with the aim to enrich our knowledge on the diversity of these economically important arthropods in our ecosystem. The study was conducted by five (500 m) line transects to identifying and classifying the Lepidopteran beside determining their species richness by using Shannon-Wiener diversity index and species evenness index. During the study, a total of 74 individuals of Lepidopteran from 19 species was identified that belongs to three families. Species that were identified are *Appias lyncida*, *Catopsilia pomona*, *Catopsilia pyranthe*, *Danaus melanippus*, *Delias hyparete*, *Euploea mulciber*, *Eureme hecabe*, *Hebomia glucippe*, *Idea leuconoe*, *Ideopsis vugaris*, *Junomna almama*, *Lexias pardalis*, *Lyssa zampa*, *Melanitis leda*, *Mycalesis mineus*, *Neptis hylas*, *Parantica melaneus*, *Precis orithya* dan *Ypthima pandocus*. Results showed that the species found only represents 2% of the Borneo species. Shannon-Wiener diversity index is considered moderate with value of $H' = 2.752$ and the evenness index, $E' = 0.9346$ indicates the species are evenly distributed across UiTM Kota Kinabalu with no obvious dominant species. For future studies, it is recommended to identify endangered species, use the Lepidopteran for environmental monitoring. The conservation of UiTM Kota Kinabalu's ecosystem must be restored back after the wildfire.