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**ENTOMOFAUNAL DIVERSITY OF HYMENOPTERA AT HUTAN SIMPANUITM JENGKA, KEM**

SITI KHAIRIYAH MOHD HATTA*, SAIYID JALALUDDIN SAIYID SHAIFUDDIN, NOR DALILA FARHANA OSMAN, NORASHIRENE MOHAMAD JAMIL AND ASMIDA ISMAIL.

School of Biological Sciences, Faculty of Applied Sciences, Universiti Teknologi MARA (UiTM), Shah Alam, 40450 Selangor Darul Ehsan

*Email: sitikhairiyah@salam.uitm.edu.my

## ABSTRACT

A study on abundance and diversity of Hymenoptera was conducted in Hutan Simpan UiTM Jengka Kem Sri Gading to determine the relationship of diversity of Hymenoptera with the environmental gradient .
The sampli
ngs were conducted from November 2013 to April 2014
using Malaise traps. Three malaise traps were installed at the forest fringe and another tree were placed at the inner forest. A total of 286 Hymenopteran comprising of 15 subfamilies and 63 species (morphospecies) were collected. The families identified were Icheneumonidae, Sphecidae, Braconidae, Formicidae, Vespidae, Pompilidae, Apidae, Tiphiidae, Bethylidae, Ampolicidae, Thynnidae, Evaniidae, Gasteruptiidae, Pelecinidae and Rhopalosomatidae. Overall result showed that Ichneumonidae was the most abundant family with 56 individuals while family Gasteruptiidae was the least abundant family with only one individual recorded. Inner forest had the most individual collected with 191 individuals that comprise of 12 families and 48 morphospecies. On the other hand, forest fringe recorded only 95 individuals (11 families and 28 morphospecies). Shannon Weiner Diversity Index (H') showed that each studied plots did not differs significantly (P>0.05) with inner forest having the highest diversity value for Hymenoptera with H'=2.13 while forest fringe recorded H'=2.09. Evenness index for both study sites recorded the same value of E'=0.88. For the Margalef index, inner forest recorded R'=2.09 slight lower than forest fringe with R'=2.19. As a conclusion,
this study suggests
that diversity and abundance of Hymenoptera was higher at inner forest compared to forest fringe. Overall study showed that the diversity and abundance of Hymenoptera in both study sites were low since the value of H' were less than 3.50.

**Keywords**

Diversity, abundance,Hymenoptera, Hutan Simpan UiTM, reserve forest