A PRELIMINARY STUDY OF MOTHS DIVERSITY IN UITM NEGERI SEMBILAN

NURUL WAHEEDA BT MAZLAN NURJIEHAN BT MOHAMAD NOR NURSHYEIDA BT ABU HASSAN NURTIARA AZFIQAH BT ZAINAL SITI SYAZWANI BT SALIM (2011206926) (2011678798) (2011263972) (2011894234) (2011425736)

DIPLOMA IN SCIENCE FACULTY OF APPLIED SCIENCES UNIVERSITI TEXNOLOGI MARA

SEPTEMBER 2013

TABLE OF CONTENTS

	Page
DECLARATION APPROVAL SHEET ACKNOWLEDGEMENTS TABLE OF CONTENTS LIST OF TABLES LIST OF FIGURES LIST OF ABBREVIATIONS ABSTRACT ABSTRAK	i ii iii iv v vi vii viii ix
CHAPTER 1 INTRODUCTION	
1.1 Background of study	1
1.2 Significance of study	2
1.3 Objective of study	2
CHAPTER 2 LITERATURE REVIEW	
2.1 Characteristics of moth	3
2.2 Differentiation of butterfly and moth	4
2.3 Life cycle of a moth	6
CHAPTER 3 MATERIALS AND METH	ODS
3.1 Study site	11
3.2 Research method	13
3.3 Statistical analysis	15
3.4 Taxonomy composition	17
CHAPTER 4 RESULTS AND DISCUSSI	ON 18
4.1 Diversity of moth	27
CHAPTER 5 CONCLUSION	29
REFERENCES	30
APPENDICES	33
CURRICIII IIM VITAF	38

LIST OF TABLES

Table	Caption	Page
4.1	Number for all families collected at UiTM Negeri Sembilan	24
4.2	Number for all genus collected at UiTM Negeri Sembilan	25
4.3	Number for all species collected at UiTM Negeri Sembilan	26
Appendix A	Table of individuals collected at UiTM Negeri Sembilan	33

LIST OF FIGURES

Figure	Caption	Page
1.0	Life cycle of moth	10
2.0	Administration building of UiTM Negeri Sembilan	11
2.1	College area of UiTM Negeri Sembilan	12
2.2	Guard house at the main entrance of UiTM Negeri Sembilan	12
2.3	Location plan of UiTM Negeri Sembilan	13
APPENDIX B	Samples of moth species collected in UiTM Negeri Sembilan	34

ABSTRACT

A PRELIMINARY STUDY OF MOTHS DIVERSITY IN UNIVERSITI TEKNOLOGI MARA NEGERI SEMBILAN

A study on moth's diversity was carried out for one month survey from 1st July 2013 until 31st July 2013 in UiTM Negeri Sembilan. A total of 26 individuals out of 12 species from 5 families were collected during this period. This study was done in order to determine the diversity of moth and to create a checklist of moth diversity in UiTM Negeri Sembilan. This objective was achieved by catching some moths from different areas in study site such as guard house, administration building and college area. The moths must be handling with care by using triangle case envelopes to prevent any damage occur towards the moths. The moths were sorted to their morphological appearance then undergo pinning process. After pinning, identification of moths according to their family, genus and species was done. Labeling process was the final step in our project. Based on the results obtained, the species of moth that found at administration building was Spilosoma lubricipeda and at college area are Abraxas grossulariata, Actias maenas, Ambulyx subocellata. Other than that, Metarranthis duaria, Orthosia cerasi, Daphnis hypothous, Eacles imperialis, Theretra latreillii, Theretra clotho, Orthosia pacifica and Catocola conversa are found at guard house. A Shannon-Weiner Index (H') was used to measure the degree of species composition per unit area which is 0.86. Then 3.38 is the number of species in a sample per unit area according to Richness index (R). For Evenness index (E), 0.8 pattern of distribution of species was determined.