

BUTTERFLY AND DRAGONFLY COMMUNITIES IN  
MANGROVE FOREST TOK BALI KELANTAN  
PENINSULAR MALAYSIA

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BUTTERFLY AND DRAGONFLY COMMUNITIES IN MANGROVE FOREST  
OF TOK BALI, KELANTAN, PENINSULAR MALAYSIA

By

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**JABATAN SAINS BIOLOGI  
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## **LIST OF ABBREVIATIONS**

m	-	metre
SPSS	-	Statistical Package for Social Science

## **LIST OF APPENDICES**

- Appendix A** - Result for One- way ANOVA of butterfly community in Tok Bali Mangrove Forest, Kelantan
- Appendix B** - Result for One- way ANOVA of dragonfly community in Tok Bali Mangrove Forest, Kelantan

## **ABSTRACT**

A study on butterfly and dragonfly communities had been conducted in Tok Bali Mangrove Forest, Kelantan. Significance of this study was to determine composition and distribution of both orders in study area. Apart from that, a new checklist of butterflies and dragonflies in Kelantan state is documented through this study. A total of 29 butterflies had been collected which belong to three families: Lycaenidae, Nymphalidae and Pieridae. Among this three, Pieridae had scored the highest number of individuals. Meanwhile, 77 individuals had successfully collected for dragonflies. All individuals belong to family Coenagrionidae, Libellulidae and Platycnemididae. Libellulidae had become the most dominant family. Their occurrences were influenced by biological factor (seasonal factor and weather) and physical factor (human activity and source of food). Less number of individuals was captured in this study site due to less of food supply, exposure to tide all year through and brackish water. If sampling period was extend, with proper number of sampling and suitable condition, more reliable results were expected.

# **KOMUNITI KUPU-KUPU DAN PEPATUNG DI HUTAN PAYA BAKAU TOK BALI, KELANTAN, SEMENANJUNG MALAYSIA**

## **ABSTRAK**

Kajian mengenai komuniti kupu – kupu dan pepatung telah dijalankan di hutan paya bakau, Tok Bali, Kelantan. Objektif kajian ini dijalankan adalah untuk mengetahui komposisi dan taburan kedua – dua order serangga tersebut di kawasan kajian. Selain daripada itu, data daripada kajian ini digunakan untuk memperbaharui senarai kupu – kupu dan pepatung di negeri Kelantan. Sejumlah 29 individu kupu – kupu telah berjaya ditangkap dan adalah dari famili Lycaenidae, Nymphalidae dan Pieridae. Famili Pieridae telah direkodkan sebagai famili paling dominan. Bagi pepatung pula, 77 individu telah berjaya ditangkap sepanjang tempoh persampelan. Kesemua adalah dari famili Coenagrionidae, Libellulidae dan Platycnemididae. Famili Libellulidae telah merekodkan bilangan individu yang paling banyak. Kewujudan kedua – dua spesies dipengaruhi oleh faktor biologi seperti musim dan cuaca serta faktor fizikal iaitu aktiviti manusia dan jumlah sumber makanan yang wujud. Bilangan individu yang ditangkap di kawasan kajian adalah kurang kerana kekurangan sumber makanan, terdedah kepada arus sepanjang tahun dan keadaan air yang payau. Jika tempoh persampelan dilanjutkan dan dijalankan dalam keadaan yang lebih sesuai, hasil yang lebih memberangsangkan akan diperolehi.