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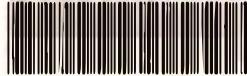
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Composition and abundance of firefly community in Tok Bali mangrove forest and Kampung Tandak, Kelantan / Alesa Zainuddin.



PERPUSTAKAAN

**PERPUSTAKAAN
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COMPOSITION AND ABUNDANCE OF FIREFLY COMMUNITY IN TOK BALI
MANGROVE FOREST AND KAMPUNG TANDAK, KELANTAN.

By

Alesa Zainuddin

Research Report submitted in partial fulfillment of
the requirement for the degree of
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FAKULTI SAINS DAN TEKNOLOGI
KOLEJ UNIVERSITI SAINS DAN TEKNOLOGI MALAYSIA**

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PROJEK PENYELIDIKAN I DAN II**

Adalah ini diakui dan disahkan bahawa laporan penyelidikan bertajuk: COMPOSITION AND ABUNDANCE OF FIREFLY COMMUNITY AT TOK BALI MANGROVE FOREST AND KAMPUNG TANDAK, KELANTAN. oleh Alesa binti Zainuddin, no. matrik: uk 8513 telah diperiksa dan semua pembetulan yang disarankan telah dilakukan. Laporan ini dikemukakan kepada Jabatan Sains Biologi sebagai memenuhi sebahagian daripada keperluan memperolehi Ijazah Sarjana Muda Sains Gunaan (Pemuliharaan dan Pengurusan Biodiversiti) Fakulti Sains dan Teknologi, Kolej Universiti Sains dan Teknologi Malaysia.

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LIST OF ABBREVIATIONS

FRIM	-	Forest Research Institute Malaysia
hrs	-	hours
km	-	Kilometer
KUSTEM	-	Kolej Universiti Sains dan Teknologi Malaysia
m	-	Meter
MNS	-	Malaysian Nature Society
p.m	-	Latin; after meridian; evening
RM	-	Ringgit Malaysia
SSA	-	Study Site A (Tok Bali Mangrove Forest)
SSB	-	Study Site B (Kampung Tandak)
SSA1	-	First sampling
SSA2	-	Second sampling
SSA3	-	Third Sampling

ABSTRACT

A study on the composition and abundance of firefly community was conducted in Tok Bali Mangrove Forest (SSA) and Kampung Tandak (SSB), Kelantan from July 2005 until January 2006. There were two species with different genus recorded inhabiting at the study sites. A total 1037 individuals of *Pteroptyx malaccae* was recorded in Tok Bali Mangrove Forest while 28 individuals of *Lychnuris analis* was recorded in Kampung Tandak. These two species were totally different in terms of their morphological structure, light colour and behaviour. This study also revealed that some factors had affected the result variation on species composition and distribution. Factors detected were different species behaviour and adaptation, tidal, moon light condition, seasonal impact, host plant preference, glowing peak time and other disturbances.

**KOMPOSISI DAN KEPELBAGAIAN KOMUNITI KELIP – KELIP DI HUTAN
PAYA BAKAU TOK BALI DAN KAMPUNG TANDAK, KELANTAN.**

ABSTRAK

Satu kajian mengenai komposisi dan kelimpahan komuniti kelip-kelip telah dijalankan di Hutan Bakau Tok Bali (SSA) dan Kampung Tandak (SSB), bermula daripada Julai 2005 sehingga Januari 2006. Hasil daripada kajian ini menunjukkan terdapat dua spesis daripada genus yang berlainan mendiami kawasan kajian ini. Sejumlah 1037 individu *Pteroptyx malaccae* dijumpai di Hutan Paya Bakau Tok Bali manakala terdapat 28 individu *Lychnuris analis* terdapat di Kampung Tandak. Kedua – dua spesies ini mempunyai perbezaan yang ketara dari segi struktur morfologi, warna lampu yang dihasilkan dan juga kelakuan. Kajian ini juga mendedahkan bahawa terdapat beberapa faktor yang memberi kesan variasi keputusan kajian dari segi komposisi dan taburan spesies. Faktor yang dikenalpasti adalah kelakuan dan adaptasi bagi spesies yang berbeza, pasang surut air, keadaan cahaya bulan, kesan perubahan musim, tumbuhan perumah, waktu kemuncak kerlipan dan lain - lain pengaruh.