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**CHIROPTERAN FAUNA AT COASTAL AREA OF KOLEJ UNIVERSITI SAINS  
DAN TEKNOLOGI MALAYSIA (KUSTEM) TERENGGANU**

**By**

**Hazihani binti Safar**

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**PENGAKUAN DAN PENGESAHAN LAPORAN  
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Adalah ini diakui dan disahkan bahawa laporan penyelidikan bertajuk: CHIROPTERAN FAUNA AT COASTAL AREA OF KOLEJ UNIVERSITI SAINS DAN TEKNOLOGI MALAYSIA (KUSTEM) TERENGGANU oleh Hazihani binti Safar, no. Matrik UK 8144 telah diperiksa dan semua pembetulan yang disarankan telah dilakukan. Laporan ini dikemukakan kepada Jabatan Sains Biologi sebagai memenuhi sebahagian daripada keperluan memperoleh 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

ABBREVIATIONS	MEANING
A	Adult
BCI	Bat Conservation International
F	Female
FA	Forearm
IUCN	International Union for the Conservation of Nature and Natural Resources
J	Juvenile
L	Lactating
M	Male
MBCRU	Malaysia Bat Conservation Research Unit
NR	Non-reproductive
PL	Post lactating
R	Recaptured
Rep	Reproduction
SSC	Species Survival Commission

## LIST OF SYMBOLS

<b>SYMBOLS</b>	<b>MEANS</b>
%	Percentage
g	gram
m	meter
cm	centimeter
mm	millimeter
kg	kilogram
$\Sigma$	sum

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## ABSTRACT

The study on the diversity of chiropteran fauna was conducted at the coastal area of Kolej Universiti Sains dan Teknologi Malaysia (KUSTEM). The main objectives are to study the diversity of bats at the coastal area and to enrich the checklist of bat of KUSTEM. The samplings were carried out in five months starting from September 2005 until January 2006. The bats were captured by using eight mist nets. Measurement of forearm and weight, the determination of sex, maturity status and their reproduction were taken. Bats were released after banding. A total of 42 individuals of bat were captured comprising of two families which is Pteropodidae and Vespertilionidae. The three species from the family of Pteropodidae includes *Cynopterus brachyotis*, *C. horsfieldii* and *Eonycteris spelaea*. Only one species was from the family of Vespertilionidae was captured which was *Kerivoula papillosa*. *C. brachyotis* was most dominant species. The Simpson and Shannon-Weiner index showed that the diversity of bats at this area were very low with 0.4274 and 0.8474 respectively.



**KEPELBAGAIAN HAIWAN CHIROPTERA DI KAWASAN PANTAI KOLEJ  
UNIVERSITI SAINS DAN TEKNOLOGI MALAYSIA (KUSTEM)  
TERENGGANU**

**ABSTRAK**

Kajian ke atas kepelbagaian haiwan Chiroptera telah dijalankan di kawasan pantai di Kolej Universiti Sains dan Teknologi Malaysia (KUSTEM). Objektif utama kajian ini adalah untuk mengkaji kepelbagaian spesies kelawar di kawasan pantai dan untuk memperbanyakkan senarai semak kelawar di KUSTEM. Persampelan telah dijalankan di dalam tempoh lima bulan dari September 2005 sehingga Januari 2006. Kelawar telah ditangkap menggunakan lapan jaring kabus. Pengukuran lengan dan berat, penentuan jantina, status kematangan dan pembiakannya telah diambil. Kelawar telah dilepaskan selepas ditanda. Sejumlah 42 ekor kelawar telah ditangkap terdiri daripada dua famili iaitu Pteropodidae dan Vespertilionidae. Tiga spesies dari famili Pteropodidae termasuklah *Cynopterus brachyotis*, *C. horsfieldii* dan *Eonycteris spelaea*. Hanya seekor kelawar dari famili Vespertilionidae telah ditangkap iaitu *Kerivoula papillosa*. *C. brachyotis* adalah spesies yang dominan. Indeks Simpson dan Shannon-Weiner telah menunjukkan bahawa kepelbagaian kelawar di kawasan ini adalah sangat rendah dengan masing-masing mencatatkan 0.4274 dan 0.8474.