

ECOLOGICAL CONTRIBUTION OF BATS AT COASTAL
AREA OF UNIVERSITI SAINS DAN TEKNOLOGI
MALAYSIA (KUSTERA)

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ECTOPARASITES COMPOSITION ON BATS AT COASTAL AREA OF KOLEJ
UNIVERSITI SAINS DAN TEKNOLOGI MALAYSIA (KUSTEM)

By

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**JABATAN SAINS BIOLOGI
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**PENGAKUAN DAN PENGESAHAN LAPORAN
PROJEK PENYELIDIKAN I DAN II**

Adalah ini diakui dan disahkan bahawa laporan penyelidikan bertajuk: ECTOPARASITES COMPOSITION ON BATS AT COASTAL AREA OF KOLEJ UNIVERSITI SAINS DAN TEKNOLOGI MALAYSIA (KUSTEM) oleh Nursyazana Binti Zakaria, no. Matrik UK 8135 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/SYMBOLS

Abbreviations/Symbols:

KUSTEM	Kolej Universiti Sains dan Teknologi Malaysia
CCD	Camera Colour Digital
%	Percentage
M	Male
F	Female
NP	Non-productive
L	Lactating
PL	Post Lactating
A	Adult
J	Juvenile
R	Recapture
Rep	Reproduction

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ABSTRACT

Ectoparasites compositions on bats study were conducted from September 2005 until January 2006. The objective is to identify and to examine the ectoparasites composition among bats. Forty two bats representing four bats species comprising species of *Cynopterus brachyotis*, *C. horsfieldii*, *Eonycteris spelaea* and *Kerivoula papillosa* were captured at coastal area in Kolej Universiti Sains dan Teknologi Malaysia (KUSTEM). Each bat was captured to examine the presence of ectoparasites. A total of 39 ectoparasites were collected on 26 infested bats, this including *Argas* sp. and *Nycteribia* spp. Study revealed that the most infested bat was *C. brachyotis* with 67.7% of infestation and *Nycteribia* spp. is the most abundant ectoparasites. Male bats hosted higher densities of ectoparasites than female.

**KAJIAN EKTOPARASIT PADA KELAWAR DI KAWASAN PANTAI KOLEJ
UNIVERSITI SAINS DAN TEKNOLOGI MALAYSIA**

ABSTRAK

Satu kajian tentang komposisi ektoparasit pada kelawar telah dijalankan di antara bulan September 2005 sehingga bulan Januari 2006. Matlamat kajian adalah untuk mengenalpasti dan memeriksa komposisi ektoparasit pada spesies kelawar yang berbeza. Sebanyak 42 ekor kelawar daripada empat spesies iaitu *Cynopterus brachyotis*, *C. horsfieldii*, *Eonycteris spelaea* dan *Kerivoula papillosa* telah berjaya ditangkap di sepanjang kawasan pantai Kolej Universiti Sains dan Teknologi Malaysia (KUSTEM). Tujuan setiap satu kelawar ditangkap adalah untuk diperiksa kepelbagaian ektoparasit yang ada. Sebanyak 39 ektoparasit telah dijumpai pada 26 ekor kelawar yang telah dijangkiti dan dikenalpasti sebagai *Argas* sp dan *Nycteribia* spp. *C. brachyotis* adalah spesies kelawar yang paling kerap dijangkiti ektoparasit dengan kadar jangkitan adalah 67.7% dan *Nycteribia* spp. pula adalah yang paling banyak terdapat pada kelawar. Kelawar jantan menunjukkan jangkitan ektoparasit yang paling tinggi daripada kelawar betina.