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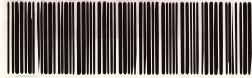
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Ectoparasites composition of bat at residential area of KUSTEM / Aina Mutharah Mohd Yusoff.

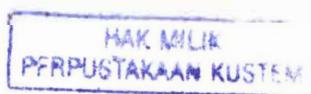


PERPUSTAKAAN

KOLEJ UNIVERSITI SAINS & TEKNOLOGI MALAYSIA
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ECTOPARASITES COMPOSITION OF BAT AT RESIDENTIAL AREA OF KOLEJ
UNIVERSITI SAINS DAN TEKNOLOGI MALAYSIA (KUSTEM)

By

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Research Report submitted in partial fulfillment of
the requirements for the degree of
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JABATAN SAINS BIOLOGI
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KOLEJ UNIVERSITI SAINS DAN TEKNOLOGI MALAYSIA

PENGAKUAN DAN PENGESAHAN LAPORAN
PROJEK PENYELIDIKAN I DAN II

Adalah ini diakui dan disahkan bahawa laporan penyelidikan bertajuk: ECTOPARASITES COMPOSITION OF BATS AT RESIDENTIAL AREA OF KOLEJ UNIVERSITI SAINS DAN TEKNOLOGI MALAYSIA (KUSTEM) oleh Aina Mutharah binti Mohd Yusoff, no. matrik: UK8119 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

Abbreviation/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

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ABSTRACT

The study on the diversity of ectoparasites on bats at residential area of Kolej Universiti Sains dan Teknologi Malaysia (KUSTEM) was conducted for five months, from September 2005 until January 2006, for five days monthly, respectively. The aims of this study are to study the distribution, diversity and examine the ectoparasites composition among different bats species. A total of 24 individuals of bats were captured, which were comprised of four species including *Cynopterus brachyotis*, *Cynopterus horsfieldii*, *Cynopterus sphinx* and *Scotophilus kuhlii*. The most infested bat was *C.sphinx* and *S.kuhlii* with 100% of infection rate. But, *C.brachyotis* had the highest number of bats species that was infested by ectoparasites. Ectoparasites were identified as *Argas* sp., *Nycteribia* sp.1, and *Nycteribia* sp.2. *Nycteribia* sp.1 was the most abundance of ectoparasites .Based on the gender of the host, *Nycteribia* sp.2 showed preference on female, while, *Nycteribia* sp.1 and *Argasid* showed preference on male.

**KOMPOSISI EKTOPARASIT ATAS KELAWAR DI KAWASAN KEDIAMAN
KOLEJ UNIVERSITI SAINS DAN TEKNOLOGI MALAYSIA.**

ABSTRAK

Kajian mengenai kepelbagaian ektoparasit yang terdapat pada kelawar di kawasan kediaman Kolej Universiti Sains dan Teknologi Malaysia(KUSTEM)telah dijalankan selama lima bulan bermula daripada September 2005 hingga Januari 2006, dengan lima hari setiap bulan.Matlamat kajian ini adalah untuk mengkaji taburan,kepelbagaian serta memeriksa komposisi ektoparasit pada spesies kelawar yang berbeza.Sejumlah 24 ekor kelawar telah di tangkap,yang mana merangkumi empat spesies.Ini termasuklah spesies *Cynopterus brachyotis*,*C.horsfieldii*,*C. sphinx* dan *Scotophilus kuhlii*. *C. sphinx* dan *S.kuhlii* merupakan kelawar yang paling tinggi kadar jangkitan oleh ektoparasit dengan kadar jangkitan 100%.Tetapi, *C.brachyotis* merupakan spesies kelawar yang mempunyai bilangan kelawar yang paling banyak dijangkiti.Ektoparasit yang ditangkap dikenalpasti sebagai *Argas* sp,*Nycteribia* sp.1 dan *Nycteribia* sp.2 .*Nycteribia* sp.1 adalah ektoparasit yang paling kerap menjangkiti kelawar.Berdasarkan jantina perumah,*Nycteribia* sp.2 paling kerap menjangkiti kelawar betina,menakala, *Nycteribia* sp.1 dan *Argas* sp. merupakan ektoparasit yang paling kerap menjangkiti kelawar jantan.