

ECTOPARASITE COMPOSITION OF BATS AT FOREST
FRINGE OF SETIU, TERENGGANU

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UNIVERSITI MALAYSIA TERENGGANU
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TERENGGANU

By

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Research Report submitted in partial fulfillment of
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LIST OF ABBREVIATIONS/SYMBOLS

UMT	-Universiti Malaysia Terengganu
SPSS	-Statistical Process for Social Sciences
%	-Percentage
Nr	-Number
M	-Male
F	-Female
NR	-Non-reproductive
P	-Pregnant
L	-Lactating
PL	-Post lactating
LL	-Late lactating
A	-Adult
J	-Juvenile
R	-Recapture
WP	-With pup
*	-Recaptured bats

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ABSTRACT

A six month study was conducted on the ectoparasite composition of bats at forest fringe of Setiu, Terengganu. This study was carried out from August 2006 till January 2007. The objectives of this study were to determine the bat ectoparasite composition in the forest habitat of Setiu Wetlands, to compare prevalence and abundance of ectoparasites among the bat species and to establish a checklist of bat's ectoparasites for further references. Thirteen species of ectoparasites belonging to seven different genera were collected including *Whartonia* sp., *Ornithodoros* spp., *Antricola* sp., *Streblia* spp., *Nycteribia* spp., *Meristapis* sp. and *Ctenocephalides* sp. The highest parasite prevalence index was found on *Eonycteris spelaea* with 87.63% infested with *Nycteribia* spp. respectively. The highest parasite infestation rate was found on *Eonycteris spelaea* with 96.77% respectively. Female bats were accounted for higher prevalence rates than males. Pearson correlation coefficients showed a significant correlation between two factors which is sampling period and temperature ($p > 0.05$).

KAJIAN KOMPOSISI EKTOPARASIT PADA KELAWAR DALAM KAWASAN PINGGIR HUTAN SETIU, TERENGGANU

ABSTRAK

Satu kajian selama enam bulan telah dijalankan untuk mengkaji komposisi ektoparasit pada kelawar dalam kawasan pinggir hutan Setiu, Terengganu. Kajian ini telah dijalankan dari bulan Ogos 2006 hingga Januari 2007. Objektif kajian ini adalah untuk mengkaji komposisi ektoparasit dalam kawasan pinggir hutan Setiu, Terengganu, membandingkan kadar kelaziman ektoparasit dan taburan ektoparasit di kalangan spesies kelawar yang ditangkap dan mewujudkan suatu data ektoparasit untuk rujukan akan datang. Tiga belas spesies ektoparasit daripada tujuh genus yang berbeza telah dikenal pasti iaitu *Whartonia* sp., *Ornithodoros* spp., *Antricola* sp., *Streblia* spp., *Nycteribia* spp., *Meristapis* sp. dan *Ctenocephalides* sp. Spesies kelawar yang mempunyai kadar kelaziman ektoparasit yang paling tinggi ialah *Eonycteris spelaea* dengan 87.63% dihinggapinya *Nycteribia* spp. Taburan ektoparasit dijumpai paling tinggi pada *Eonycteris spelaea* dengan nilai 96.77%. Kelawar betina telah mencatatkan kadar kelaziman yang lebih tinggi berbanding kelawar jantan. Ujian koefisien Pearson telah menunjukkan nilai yang nyata di antara dua faktor iaitu jangka masa kerja lapangan dan suhu ($p > 0.05$).