

ECTOPARASITES COMPOSITION ON SMALL MAMMALS AT
VARIOUS AREAS OF UNIVERSITI MALAYSIA
TERENGGANU

ASUAR MUHAMMAD

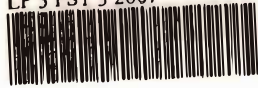
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ECTOPARASITES COMPOSITION ON SMALL MAMMALS AT MANGROVE
AREAS OF UNIVERSITI MALAYSIA TERENGGANU

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Research Report submitted in partial fulfillment of
the requirements for the degree of
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**PENGAKUAN DAN PENGESAHAN LAPORAN
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Adalah ini diakui dan disahkan bahawa laporan penyelidikan bertajuk: ECTOPARASITES COMPOSITION ON SMALL MAMMALS AT MANGROVES AREAS OF UNIVERSITI MALAYSIA TERENGGANU oleh ASUAR AYUNNI ANUAR , no. matrik: UK10406 telah diperiksa dan semua pembedaan yang disarankan telah dilakukan. Laporan ini dikemukakan kepada Jabatan Sains Biologi sebagai memenuhi sebahagian daripada keperluan memperoleh ijazah Sarjana Muda Sains Gunaan (Pemuliharaan and Pengurusan Biodiversiti) , Fakulti Sains dan Teknologi, Universiti Malaysia Terengganu.

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LIST OF ABBREVIATIONS

UMT	= Universiti Malaysia Terengganu
PH	= <i>Paradoxurus hermaphroditus</i>
RTS	= <i>Rattus tiomanicus jalorensis</i>
RTS	= <i>Rattus tiomanicus sabae</i>
RE	= <i>Rattus exulans</i>
RA	= <i>Rattus argentiventer</i>
Sp.	= species
°C	= degree celcius

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ABSTRACT

A study on the ectoparasites composition on small mammals at mangrove areas of Universiti Malaysia Terengganu was carried out from August 2006 until January 2007. The objectives were to determine the ectoparasites composition, to compare the prevalence and abundance of ectoparasites among small mammals species and also to establish a checklist of ectoparasites on small mammals of UMT. A total of 131 individuals were collected from their host, consist of two species from Family Laelaptidae and from Family Polyplacidae. *Laelaps sp. 1* was the dominant group followed up by *Laelaps s.p 2* and *Polyplax sp.* was the least. 25 individuals from five species of small mammals were captured, including *Paradoxurus hermaphroditus*, *Rattus tiomanicus sabae*, *Rattus tiomanicus jalorensis*, *Rattus exulans*, and *Rattus argentiventer*. All species of Muridae were parasitized by Laelaptidae, but Polyplacidae were not parasitized on *P. hermaphroditus* and *R. exulans*. *Laelaps sp. 1* showed the highest prevalence between host species. The ectoparasites were more prevalence on males as compared to females. The abundance of ectoparasites was different for each species. The result shows that the composition of ectoparasites is not associated with climatic factors.

KOMPOSISI EKTOPARASIT PADA MAMALIA KECIL DI KAWASAN PAYA BAKAU DI UNIVERSITI MALAYSIA TERENGGANU

ABSTRAK

Satu kajian mengenai taburan ektoparasit di kawasan hutan bakau telah dilakukan di Universiti Malaysia Terengganu bermula Ogos 2006 hingga Januari 2007. Objektif kajian ini adalah untuk menentukan komposisi ektoparasit, membezakan kelaziman dan kelimpahan ektoparasit pada species mamalia kecil yang ditangkap serta menyediakan senarai semak ektoparasit pada mamalia kecil UMT. Sejumlah 131 individu diperolehi daripada perumah terdiri daripada dua species ektoparasit dari Famili Laelaptidae dan satu dari Famili Polyplacidae. *Laelaps sp. 1* merupakan species paling dominan diikuti *Laelaps sp. 2* dan *Polypax sp.* adalah species paling sedikit. 25 ekor mamalia kecil daripada lima species ditangkap termasuklah species *Paradoxurus hermaphroditus*, *Rattus tiomanicus sabae*, *Rattus tiomanicus jalorensis*, *Rattus exulans*, and *Rattus argentiventer*. Semua species Muridae dijangkiti Laelaptidae, tetapi Polyplacidae tidak menjangkiti *P. hermaphroditus* dan *R. exulans*. *Laelaps sp. 1* adalah species paling tinggi kelazimannya. Ektoparasit lebih tinggi kelazimannya pada perumah jantan berbanding perumah betina. Kelimpahan ektoparasit adalah berbeza pada setiap species. Keputusan mendapati komposisi ektoparasit tidak berkaitan dengan faktor iklim.