

1 SURVEY ON ECTOPARASITES COMPOSITION OF THE
BATS AT NIGHT OF MUSTEK CAMPUS AREA

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A SURVEY ON ECTOPARASITES COMPOSITION OF THE BATS AT
VICINITY OF KUSTEM CAMPUS AREA

By

Zuliha binti Yahya

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Adalah ini diakui dan disahkan bahawa laporan penyelidikan bertajuk: .

Survey Ke Atas Komposisi Ektoparasit Pada Kelawar Di Persekitaran Kawasan KUSTEM Moleh Zuliha binti Yahya, no. matrik: UK7182 telah diperiksa dan semua pembetulan yang disarankan telah dilakukan. Laporan ini dikemukakan kepada Jabatan Sains Biologi sebagai memenuhi sebahagian daripada keperluan memperoleh ijazah ...Bacelor Sains Gunaan (Pemuliharaan dan Pengurusan Biodiversiti), Fakulti Sains dan Teknologi, Kolej Universiti Sains dan Teknologi Malaysia.

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A survey On Ectoparasites Composition Of The Bats At Vicinity Of KUSTEM Campus Area.

ABSTRACT

A study was conducted on the ectoparasites composition of bats at vicinity of KUSTEM campus area. The objectives of this study including examining and comparing the ectoparasites among different species of bats. Sampling sites have been chosen randomly for the placement of mist nets. Mist nets were used to trap the bats. The sampling has been conducted for five days monthly from October 2004 until January 2005 respectively. Overall, 67 individuals of *Cynopterus brachyotis* and 12 individuals of *Cynopterus horsfieldii* were caught during the four months of sampling. From the 79 individuals of the fruit bats that have been recorded, there were 47 individuals of ectoparasites comprised by 36 individuals of *Nycteribia sp* and 11 individuals of *Ctenocephalides sp* were collected. *Cynopterus brachyotis* showed the higher percentage of infected bats while *Cynopterus horsfieldii* showed the higher prevalence value. *Nycteribia sp* composition was commonly found on *Cynopterus brachyotis* while *Ctenocephalides sp* composition was on *Cynopterus horsfieldii*. The Shannon-Weiner index value is 0.5442 while Simpson index value is 0.3585. In conclusions of the present study indicate that ectoparasites found on bats influenced by the gender and of bats and also the seasons.

Survey Ke Atas Komposisi Ektoparasit pada Kelawar di Persekitaran Kawasan KUSTEM

ABSTRAK

Kajian ini telah dijalankan untuk mengkaji komposisi ektoparasit pada kelawar di persekitaran kawasan KUSTEM. Objektif kajian ini termasuklah mengkaji dan membandingkan ektoparasit-ektoparasit yang terdapat pada kelawar yang berlainan spesies. Kawasan persampelan telah dipilih secara rawak untuk pemasangan jaring kabus. Jaring kabus telah digunakan untuk menangkap kelawar. Persampelan ini telah dijalankan selama 5 hari pada setiap bulan dari Oktober 2004 hingga Januari 2005 masing-masing. Secara keseluruhannya, 67 individu *Cynopterus brachyotis* dan 12 individu *Cynopterus horsfieldii* telah ditangkap selama empat bulan persampelan. Daripada 79 individu kelawar buah ini, 47 ektoparasit yang terdiri daripada 36 individu *Nycteribia sp* dan 11 individu *Ctenocephalides sp* telah dikumpulkan. *Cynopterus brachyotis* menunjukkan nilai peratusan kelawar yang dijangkiti lebih tinggi manakala *Cynopterus horsfieldii* menunjukkan nilai kelaziman yang lebih tinggi. Komposisi *Nycteribia sp* biasanya adalah pada *Cynopterus brachyotis* manakala komposisi *Ctenocephalides sp* adalah pada *Cynopterus horsfieldii*. Nilai index Shannon-Weiner ialah 0.5442 manakala nilai bagi index Simpson ialah 0.3585. Kesimpulannya, kajian ini menunjukkan bahawa ektoparasit yang dijumpai pada kelawar dipengaruhi oleh jantina dan habitat kelawar dan juga musim.