DIVERSITY, ABUNDANCE AND DISTRIBUTION OF SPIDERS
ALONG HEADWATER STREAM OF SUNGAI PERAS,
SELANGOR, WEST MALAYSIA

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Diversity, abundance and distribution of spiders along headwat sream of Sungai Peres, Sekayu, Hulu Terengganu / Effarina Mohd Faizal Abdullah.

DIVERSITY, ABUNDANCE AND DISTRIBUTION OF SPIDERS ALONG HEADWATER STREAM OF SUNGAI PERES, SEKAYU, HULU TERENGGANU

By:

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Research Report submitted in partial fulfillment of
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PENGAKUAN DAN PENGESAHAN LAPORAN
PROJEK PENYELIDIKAN I DAN II
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Adalah ini diakui dan disahkan bahawa laporan penyelidikan bertajuk: DIVERSITY, ABUNDANCE AND DISTRIBUTION OF SPIDERS ALONG HEADWATER STREAMS OF SUNGAI PERES, SEKAYU, HULU TERENGGANU, oleh EFFARINA BINTI MOHD FAIZAL ABDULLAH, no. matrik: UK 10414 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,Universiti Malaysia Terengganu.

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E	-	evenness index
H	-	diversity index
H'	-	Shannon-Weiner index
LS	-	lower stream
MBU	-	Makmal Biologi Umum
MS	-	middle stream
R	-	richness index
R1	-	Margalef's index
SPSS	-	Statistical Package for Social Science
US	-	upper stream

ABSTRACT

Little is known about the diversity and distribution of spider community in headwater ecosystems. Spider species diversity, abundance and its distribution along the headwater stream of Sungai Peres were studied from June to September 2006. Three different sites namely upper stream (US), middle stream (MS) and lower stream (LS) were sampled monthly using three techniques: sweeping, beating and active searching. A total collection of 697 individuals representing 106 morphospecies from 23 families have been successfully sampled and identified. Pisauridae was the most dominant family (24%) followed by Araneidae (23%) and Salticidae (20%). *Polybeae vulpina* (family Pisauridae) was the most abundance species recorded in this study. There were significant differences in the family ($p = 0.015$) and morphospecies ($p = 0.022$) composition between LS-MS and MS-US. Some families are being widespread and abundant while others were restricted to a single site. All sites have unique morphospecies composition and overall diversity, richness and evenness of spiders were high.

KEPELBAGAIAN, KELIMPAHAN DAN TABURAN LABAH-LABAH DI SEPANJANG HULU SUNGAI PERES, SEKAYU, HULU TERENGGANU.

ABSTRAK

Tidak banyak yang diketahui mengenai kepelbagaian dan taburan komuniti labah-labah di ekosistem hulu sungai. Kepelbagaian, kelimpahan dan taburan labah-labah di sepanjang hulu Sungai Peres di kaji. Tiga teknik penangkapan labah-labah iaitu mengayun, menggoncang dan penangkapan aktif dilakukan di tiga lokasi kajian yang ditetapkan sebagai bahagian atas sungai (US), bahagian tengah sungai (MS) dan bahagian bawah sungai (LS). Sejumlah 697 individu daripada 106 morfospesis yang diwakili oleh 23 famili telah berjaya direkodkan di sepanjang Sungai Peres. Famili yang diketahui paling dominan di kawasan kajian ini ialah Pisauridae (24%), diikuti oleh Araneidae (23%) dan Salticidae (20%). *Polybeae vulpina* (famili Pisauridae) merupakan spesis yang paling banyak (24%) direkodkan sepanjang kajian ini. Terdapat perbezaan yang nyata didalam komposisi famili ($p = 0.015$) dan morfospesis ($p = 0.022$) antara LS-MS dan MS-US. Sesetengah famili mempunyai taburan yang luas, manakala ada famili yang terhad pada satu-satu kawasan kajian sahaja. Semua kawasan kajian mempunyai komposisi morfospesis yang unik dan keseluruhan kepelbagaian, kelimpahan dan taburan labah-labah adalah tinggi.