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Composition and abundance of odonates (insecta:Odonata) community and their microhabitat preferences in Sekayu recreational forest Terengganu / Julia Johari.

Lihat sebelah

COMPOSITION AND ABUNDANCE OF ODONATES (INSECTA: ODONATA) COMMUNITY AND THEIR MICROHABITAT PREFERENCES IN SEKAYU RECREATIONAL FOREST, TERENGGANU

By

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Research Report submitted in partial fulfillment of
the requirements for the degree of
Bachelor of Applied Science (Biodiversity Conservation and Management)

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PENGAKUAN DAN PENGESAHAN LAPORAN
PROJEK PENYELIDIKAN I DAN II

Adalah ini diakui dan disahkan bahawa laporan penyelidikan bertajuk: COMPOSITION AND ABUNDANCE OF ODONATES (INSECTA: ODONATA) COMMUNITY AND THEIR MICROHABITAT PREFERENCES IN SEKAYU RECREATIONAL FOREST, TERENGGANU. Oleh Julia Binti Johari no. matrik: UK 7988 telah diperiksa dan semua pembetulan yang disarankan telah dilakukan. Laporan ini dikemukakan kepada Jabatan Sains Biologi sebagai memenuhi sebahagian daripada keperluan memperolehi ljazah SARJANA MUDA SAINS GUNAAN - PEMULIHARAAN DAN PENGURUSAN BIODIVERSITI, Fakulti Sains dan Teknologi, Kolej Universiti Sains dan Teknologi Malaysia.

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ANOVA	-	analysis of variance
E	-	evenness index
H	-	diversity index
H'	-	Shannon-Weiner index
KUSTEM	-	Kolej Universiti Sains dan Teknologi Malaysia
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

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ABSTRACT

A rich collection of 593 individuals belonging to 49 species representing by 11 families of odonates fauna were successfully identified for Sekayu Recreational Forest, Terengganu. Zygoptera was more abundance than Anisoptera. Nevertheless Libellulidae (Anisoptera) was the most dominant family followed by Chlorocyphidae (Zygoptera). *Euphaea ochracea* and *Rhinocypha perforata limbata* were found to be the most abundance species recorded in this study. The assemblages of odonates were strongly associated to heterogeneity of microhabitats and natural biotopes structure in relation to the presence of vegetation and concentration of light. Generally, Anisoptera were more attracted to perch at open area while Zygoptera were commonly found in the shaded area, strictly to flowing water but less active in open areas or hotter times. Interestingly, most of odonates strongly preferred overhanging vegetation except Gomphidae and Aeshnidae.

KOMPOSISI DAN KELIMPAHAN KOMUNITI PEPATUNG (INSECTA: ODONATA) DAN PEMILIHAN MIKROHABITATNYA DI HUTAN REKREASI SEKAYU, TERENGGANU

ABSTRAK

Sejumlah 593 individu pepatung daripada 49 spesies yang diwakili oleh 11 famili telah berjaya direkodkan bagi Hutan Rekreasi Sekayu, Terengganu. Kelimpahan Zygoptera adalah lebih tinggi berbanding Anisoptera. Walau bagaimanapun, Libellulidae (Anisoptera) merupakan famili dominan diikuti oleh Chlorocyphidae (Zygoptera). *Euphaea ochracea* dan *Rhinocypha perforata limbata* merupakan spesies yang paling banyak direkodkan dalam kajian ini. Perhimpunan pepatung adalah dipengaruhi dengan kuat berdasarkan kepada kepelbagaian mikrohabitat dan keadaan stuktur 'biotope' yang semulajadi di samping kehadiran tumbuhan dan keamatan cahaya. Secara umumnya, Anisoptera lebih tertarik kepada kawasan terbuka manakala Zygoptera biasanya dijumpai di kawasan teduh, berdekatan dengan pergerakan air tetapi kurang aktif di kawasan terbuka atau pada waktu panas. Menariknya, kebanyakkan pepatung menunjukkan minat yang kuat terhadap tumbuhan berjuntai kecuali Gomphidae dan Aeshnidae.