Environmental biology and ecology of butterfly lizard (Leiolep Belliana gray) / Siti Rahimah Abd Rahim.

Lihat sebelah

ENVIRONMENTAL BIOLOGY AND ECOLOGY OF BUTTERFLY LIZARD *(LEIOLEPIS BELLIANA* Gray*)*

By

Siti Rahimah binti Abd Rahim

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the requirements of the degree of
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PENGAKUAN DAN PENGESAHAN LAPORAN
PROJEK PENYELIDIKAN I DAN II

Adalah ini diakui dan disahkan bahawa laporan penyelidikan bertajuk:
ENVIRONMENTAL BIOLOGY AND ECOLOGY OF BUTTERFLY LIZARD (*LEIOLEPIS BELLIANA* GRAY).
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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS/SYMBOLS

g	-	Gram
mm	-	Milimeter
a.m	-	*ante meridian* (Latin); between midnight and noon
p.m	-	*post meridian* (Latin); between noon and midnight
FST	-	Faculty Science and Technology
KUSTEM	-	Kolej Universiti Sains dan Teknologi Malaysia
SVL	-	Snout- vent length
FL	-	Forelimb
HL	-	Hindlimb
HW	-	Head width
TL	-	Tail length
BD	-	Burrow diameter

LIST OF APPENDICES

Appendix

ABSTRACT

A study on some aspect of environmental ecology and biology of butterfly lizard (*Leiolepis* sp.) was carried out in September to December 2005 at Kolej Universiti Sains dan Teknologi Malaysia (KUSTEM), Terengganu. The objectives of this study is to confirm the identity of butterfly lizard at the campus and to study the basic environmental biology and ecology of butterfly lizard. This study was conducted for four months starting in September until December 2005. Eight samplings have been done in five different plots. A total of 40 individual butterfly lizards were captured, and identified as *Leiolepis belliana* Gray composed of 31 females and nine males. The highest captured was September with 21 individual (18 females and three males). Plot 1 shown the highest captured with 16 individual (15 females and one male). The t-test result showed those males and females butterfly lizards are not significantly different in all morphological measurements ($P > 0.05$). Butterfly lizard showed the highest level of activity between 1000h to 1200h and lowest between 0100h to 0200h but two ways ANOVA did not showed significantly different between months and plots ($P > 0.05$). Population before rain are higher than after rain based on individual captured but number of burrows after rain are higher than before rain.

PERSEKITARAN BIOLOGI DAN EKOLOGI BIAWAK PASIR (*LEIOLEPIS BELLIANA* Gray)

ABSTRAK

Kajian ke atas persekitaran biologi dan ekologi biawak pasir telah dijalankan di kawasan Kolej Universiti Sains dan Teknologi Malaysia (KUSTEM). Objektif utama kajian ini adalah untuk mengesahkan identiti spesies biawak pasir dan mempelajari persekitaran biologi dan ekologi spesies ini. Kajian ini dijalankan selama empat bulan bermula dari bulan September hingga bulan Disember 2005. Sebanyak lapan kali persampelan telah dijalankan di lima plot yang berbeza. Setiap biawak pasir yang ditangkap akan diukur sebelum dilepaskan. Sejumlah 40 ekor biawak pasir berjaya ditangkap. Hasil tangkapan merekodkan 31 ekor betina dan sembilan ekor jantan. Tangkapan tertinggi dicatatkan pada bulan September melalui 21 ekor tangkapan (18 ekor betina dan tiga ekor jantan). Plot 1 mencatatkan hasil tangkapan yang tertinggi iaitu sebanyak 16 ekor (15 ekor betina dan seekor jantan). Ujian t-test menunjukkan tidak terdapat perbezaan morfologi di antara biawak pasir jantan dan betina ($P > 0.05$). Biawak pasir aktif pada waktu 1000h hingga 1200h dan kurang aktif pada waktu 0100h hingga 0200h. Ujian ANOVA dua hala menunjukkan tidak terdapat perbezaan antara bulan dan plot ($P > 0.05$). Populasi biawak pasir sebelum hujan adalah lebih tinggi daripada selepas hujan berdasarkan tangkapan individu tetapi bilangan bagi lubang selepas hujan adalah lebih tinggi daripada sebelum hujan.