

DIVERSITY OF ORTHOPTERA OF BUKIT BAKI FOREST
KEDAH, MALAYSIA

ABDUL MUSLIMAH BT JAMALI @ MOHAMMAD

INSTITUT SAINS DAN TEKNOLOGI
UNIVERSITI MALAYSIA, TERENGGANU
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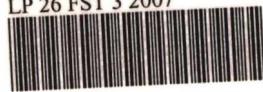
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Diversity of orthoptera of Bukit Bauk Forest Reserve,
Terengganu / Noor Muslihah Mamat@Mohammad.

PERPUSTAKAAN
UNIVERSITI MALAYSIA TERENGGANU (UMT)
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DIVERSITY OF ORTHOPTERA OF BUKIT BAUK FOREST RESERVE
TERENGGANU

By:

Noor Muslihah bt Mamat@Mohammad

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

Department of Biological Science
Faculty of Science and Technology
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1100051216



JABATAN SAINS BIOLOGI
FAKULTI SAINS DAN TEKNOLOGI
UNIVERSITI MALAYSIA TERENGGANU

**PENGAKUAN DAN PENGESAHAN LAPORAN
PROJEK PENYELIDIKAN I DAN II
RESEARCH REPORT VERIFICATION**

Adalah ini diakui dan disahkan bahawa laporan penyelidikan bertajuk: DIVERSITY OF ORTHOPTERA OF BUKIT BAUK FOREST RESERVE, TERENGGANU oleh NOOR MUSLIHAH BT MAMAT@MOHAMMAD, no. matrik: UK 10510 telah diperiksa dan semua pembetulan yang disarankan telah dilakukan. Laporan ini dikemukakan kepada Jabatan Sains Biologi sebagai memenuhi sebahagian daripada keperluan memperolehi ijazah BACHELOR OF APPLIED SCIENCE IN BIODIVERSITY CONSERVATION AND MANAGEMENT, Fakulti Sains dan Teknologi, Universiti Malaysia Terengganu.

Disahkan oleh: / Verified by:

Penyelia Utama / Main Supervisor
JAMILAH MOHD SALIM @ HALIM
Nama: Pensyarah
Cop Rasmi: Jabatan Sains Biologi
Fakulti Sains dan Teknologi
Universiti Malaysia Terengganu
21030 Kuala Terengganu.

Tarikh: 8/5/07

.....
Penyelia Kedua (jika ada) / Co-Supervisor (if applicable)

Nama: **WONG CHEE HO**
Pensyarah
Cop Rasmi: Jabatan Sains Biologi
Fakulti Sains dan Teknologi
Universiti Malaysia Terengganu
21030 Kuala Terengganu.

.....
Tarikh: 2/5/07

.....
Ketua Jabatan Sains Biologi / Head, Department of Biological Sciences

Nama:
Cop Rasmi: **DR. AZIZ BIN AHMAD**
Ketua
Jabatan Sains Biologi
Fakulti Sains dan Teknologi
Universiti Malaysia Terengganu
21030 Kuala Terengganu

.....
Tarikh: 7/5/07

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LIST OF ABBREVIATIONS

ANOVA	-	analysis of variance
asl	-	above sea level
E	-	evenness index
H	-	diversity index
H'	-	Shannon-Weiner index
MVSP	-	Multivariate Statistical Package
R	-	richness index
R1	-	Margalef's index
RH	-	relative humidity
SPSS	-	Statistical Package for Social Science
UPGMA	-	Unweighted Pair Group Methods using Arithematic Averages

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ABSTRACT

Bukit Bauk Forest Reserve, Terengganu noted for its richness in the flora and fauna with high degree of endemicity for some species. The study was conducted at Bukit Bauk Forest Reserve, Terengganu to examine and compare the diversity of Orthoptera. From this study, a total of 106 specimens of Orthoptera have been documented and identified, representing 9 species from 5 families of Orthoptera. Suborder Caelifera found out to be more abundant than Ensifera, with *Tettigidea lateralis* (Tetrigidae) and *Gryllus bimaculata* (Gryllidae) being most abundant species recorded. Physical factors measured (light intensity, temperature and relative humidity) were not differed between elevations. The abundance of Orthopterans was not associated with elevations within the study site. More extensive study should be conducted to provide clearer evidence of taxonomical status of Orthopteran in the study site. Factors that may contribute to Orthoptera diversity and abundance are also discussed.

KEPELBAGAIAN ORTHOPTERA DI HUTAN SIMPAN BUKIT BAUK, TERENGGANU

ABSTRAK

Hutan Simpan Bukit Bauk, Terengganu dikenali dengan kekayaan hidupan flora dan fauna serta ketinggian darjah untuk sesetengah spesies. Kajian ini telah dijalankan di Hutan Simpan Bukit Bauk untuk meneliti dan membandingkan kepelbagaian Orthoptera. Daripada kajian ini, sejumlah 106 spesimen Orthoptera telah dikenalpasti dan didokumentasi, mewakilli 9 spesies daripada 5 famili Orthoptera. Kelimpahan suborder Caelifera didapati lebih tinggi berbanding Ensifera di mana *Tettigidea lateralis* (Tetrigidae) dan *Gryllus bimaculata* (Gryllidae) menunjukkan kelimpahan paling tinggi. Faktor-faktor fizikal (keamatan cahaya, suhu dan kelembapan) yang dicatatkan tidak berbeza antara ketinggian. Kelimpahan Orthoptera tidak berkorelasi dengan ketinggian. Kajian yang lebih meluas perlu dijalankan untuk memberikan gambaran yang lebih jelas mengenai status taksonomi Orthoptera kawasan kajian. Faktor-faktor yang berkemungkinan mempengaruhi kepelbagaian dan kelimpahan Orthoptera turut dibincangkan.