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Fern of riparian vegetation at Nyatoh and Toman River, Merang
Setiu, Terengganu / Zuraidah Mohd Nor.

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FERNS OF RIPARIAN VEGETATION AT NYATOH AND TOMAN RIVER,
MERANG, SETIU, TERENGGANU

By:

Zuraidah Binti Mohd Nor

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

Department of Biological Sciences
Faculty of Science and Technology
UNIVERSITI MALAYSIA TERENGGANU
2007

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**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: FERN OF VEGETATION AT NYATOH AND TOMAN RIVER, MERANG, SETIU, TERENGGANU oleh Zuraidah binti Mohd Nor, no. matrik: Uk 10506 telah diperiksa dan semua pembedaan yang disarankan telah dilakukan. Laporan ini dikemukakan kepada Jabatan Sains Biologi sebagai memenuhi sebahagian daripada keperluan memperoleh ijazah Sarjana Muda Sains Gunaan (Pemuliharaan Dan Pengurusan Biodiversiti), Fakulti Sains dan Teknologi, Universiti Terengganu Malaysia.

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LIST OF ABBREVIATIONS

PAR - photosynthesis active radiation

ABSTRACT

Plant communities along the river margins (riparian), characterized by hydrophilic plants including ferns. In this study, population abundance and diversity of ferns species at Nyatoh River and Toman River, Merang, Setiu Terengganu were determined. In total of fern species in three plots at Nyatoh River has three species (42 individuals) are *Lygodium microphyllum* (ribu-ribu), *Acrosticum aureum* (piai raya), and *Stenochlaena palustris* (paku miding). Toman River has 4 species (32 individuals) which includes three species above and species of *Pteris*. At Nyatoh River, species of fern of *Stenochlaena palustris* was abundance at this study site and no value of fern species of *Pteris*. While, species of *Pteris* more abundance at Toman River compare to *Stenochlaena palustris* is lowers value at this site. Based on this study, the significant value of comparing of both study sites with individual is not significant (0.58) in their abundance sites. While, the analysis of comparing the abundance of fern species with three plots in both study sites of Nyatoh and Toman River also not significant (0.255) with plot in study sites means abundance of fern species are similar by plots.

PAKU PAKIS DI SEKITAR RIPARIAN DI SUNGAI NYATOH DAN SUNGAI TOMAN, MERANG, SETIU, TERENGGANU

ABSTRAK

Komuniti tumbuhan disepanjang tepi sungai (tumbuhan riparian), dikategori dengan tumbuhan hidrofilik termasuk tumbuhan paku-pakis. Dalam kajian ini, kepelbagaian dan kelimpahan populasi spesies paku pakis ditentukan. Sebanyak tiga spesies paku-pakis dijumpai di tiga plot yang terdapat di Sungai Nyatoh dengan jumlah 42 individu termasuk *Lygodium microphyllum* (ribu-ribu), *Acrosticum aureum* (piaai raya), dan *Stenochlaena palustris* (paku miding). Manakala 4 spesies dijumpai di Sungai Toman dengan 32 individu yang mana terdiri daripada tiga spesies di atas dan juga spesies paku-pakis *Pteris*. Spesis *Stenochlaena palustris* adalah spesies yang paling banyak di Sungai Nyatoh tetapi tiada spesies *Pteris*. Manakala, spesies *Pteris* paling banyak di Sungai Toman berbanding dengan spesies *Stenochlaena palustris* yang sedikit di sini. Berdasarkan kajian ini, perbandingan di antara kedua-dua kawasan kajian dengan individu memberi nilai yang tidak bererti (0.58). Manakala, analisis perbandingan di antara kelimpahan spesies paku pakis dengan tiga plot dalam kedua-dua kawasan kajian juga menunjukkan nilai yang tidak bererti (0.255).