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**SEASONAL DISTRIBUTION OF PHOSPHORUS IN THE WATER OF
SUNGAI COMO, TASIK KENYIR**

**By
Nor Azwa Binti Zawawi**

**Research report submitted in partial fulfillment of
the requirement for the degree of
Bachelor of Agrotechnology Science (Aquaculture)**

**Department of Fishery and Aquaculture
FACULTY OF AGROTECHNOLOGY AND FOOD SCIENCE
UNIVERSITI MALAYSIA TERENGGANU
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Borang Pengakuan dan Pengesahan Laporan Akhir Projek Ilmiah I dan II

BORANG PITA 8



**FAKULTI AGROTEKNOLOGI DAN SAINS MAKANAN
UNIVERSITI MALAYSIA TERENGGANU**

PENGAKUAN DAN PENGESAHAN LAPORAN PROJEK ILMIAH I DAN II

Adalah ini diakui dan disahkan bahawa laporan ilmiah bertajuk:

SEASONAL DISTRIBUTION OF PHOSPHORUS IN THE WATER OF TASIK KENYIR oleh **NOR AZWA BT ZAWAWI**, No.Matrik **UK 13046** telah diperiksa dan semua pembetulan yang disarankan telah dilakukan. Laporan ini dikemukakan kepada Jabatan **PERIKANAN DAN AKUAKULTUR** sebagai memenuhi sebahagian daripada keperluan memperolehi Ijazah Sarjana Muda **AGROTEKNOLOGI (AKUAKULTUR)** Fakulti Agroteknologi dan Sains Makanan, Universiti Malaysia Terengganu.

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Tarikh: **28 May 2009**

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DECLARATION

I hereby declare that the work in this thesis is my own except
of quotations and summaries which have been duly
acknowledged

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Date : 1 MEI 2009

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ABSTRACT

Sungai Como is located in Tasik Kenyir. Sungai Como received high total rainfall at north east monsoon and low at south west monsoon. Distributions of phosphorus in Sungai Como were assessed in October 2008 and December 2008. Ranges of total phosphorus for October and December were 0.09 – 2.36 μM . Basically, DOP was dominant phosphorus species in the water. The value for total phosphorus during non monsoon was higher than value during monsoon. This was because the concentration of phosphorus was diluted by total rainfall. Primary sources of phosphorus maybe come from soil runoff from land, microbial conversion of phosphate to DOP in the environment, reservoir phosphorus from jungle, cage cultures, recreation activity, sedimentation mechanism and logging of land. The level of total phosphorus in Sungai Como was lower than logging of land. The studied of BOD level is still considered as safe. It concluded that there is no much organic waste present in the water of Sungai Como.

ABSTRAK

Sungai Como terletak di Tasik Kenyir. Sungai Como menerima jumlah hujan yang tinggi pada monsun angin tenggara tetapi sedikit pada musim angin barat daya. Taburan fosforus di sungai telah dikaji pada bulan Oktober 2008 dan Disember 2008. Julat bagi TP bagi bulan Oktober dan Disember ialah , $0.09 - 2.36 \mu\text{M}$. Biasanya, DOP ialah spesis fosforus dominan di dalam air. Nilai bagi jumlah fosforus didapati lebih tinggi pada musim monsoon barat daya berbanding pada musim monsun tenggara. Ini disebabkan oleh jumlah air hujan yang terkumpul di Sungai Como akan mencairkan kepekatan fosforus dalam air. Sumber utama phosphorus kemungkinan datang daripada larian tanah, penukaran fosfat kepada DOP oleh bakteria di persekitaran, takungan fosforus dari hutan, sangkar ternakan, aktiviti rekreasi, mekanisma mendapan dan penebangan pokok-pokok. Kepekatan jumlah fosforus di Sungai Como adalah lebih rendah daripada kualiti air piawai yang ditetapkan. Kajian menunjukkan paras BOD masih ditakat selamat. Ini menunjukan tidak banyak bahan organik di Sungai Como yang boleh menyumbang kepada BOD yang tinggi.