

THE STUDY OF ECTOPARASITE
ON *Pangasius nasutus* AND
Pangasius hypophthalmus

By
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**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:

*The Study of Ectoparasites on *Pangasius nasutus* and *Pangasius hypophthalmus**

oleh..... **Mohd Hafizi Bin Yahaya**, No.Matrik ... **UK 14116** .. telah diperiksa dan semua pembetulan yang disarankan telah dilakukan. Laporan ini dikemukakan kepada Jabatan **Sains Perikanan dan Akuakultur** sebagai memenuhi sebahagian daripada keperluan memperoleh Ijazah Sarjana Muda Sains Agroteknologi (Akuakultur), Fakulti Agroteknologi dan Sains Makanan, Universiti Malaysia Terengganu.

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DECLARATION

I hereby declared that the work in this thesis was my own except for quotations and summaries which had been duly acknowledged.

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ABSTRACT

The study on ectoparasites of *Pangasius nasutus* and *Pangasius hypophthalmus* were conducted at Pusat Pengembangan Akuakultur, Perlok, Jerantut, Pahang on the 15th August 2008 and 4th Sept 2008. Skins and gills smears of 30 *Pangasius hypophthalmus* were examined for ectoparasites and the only parasite found was *Trichodina* sp. The mean intensity was 2850 for the gills and 25 for the skins while the prevalence was 100% for both skin and gills. As for *Pangasius nasutus* the study on the level of infections of *Trichodina* sp and *Argulus* sp before and after treatments was done. Besides that, the site specificity of the parasites was also determined. 13 sites were chosen based on the whole surface of the fish body of 30 *Pangasius nasutus*. The mean intensity was 39 for *Trichodina* sp before treatment and 3 after treatment while for *Argulus* sp, before and after treatment was 1. The results showed no significant difference of *Trichodina* sp infection between parts of the fish body by using Duncan multiple range tests. The infestation of parasites on *Pangasius nasutus* and *Pangasius hypophthalmus* were probably due to low dissolve oxygen level during sampling.

ABSTRAK

Kajian ektoparasit ke atas *Pangasius nasutus* dan *Pangasius hypophthalmus* telah dijalankan di Pusat Pengembangan Akuakultur , Perlok, Jerantut , Pahang pada 15 Ogos 2008 dan 4 September 2008. Lumuran pada kulit dan insang 30 sampel *Pangasius hypophthalmus* telah dikaji dan hanya *Trichodina* sp dijumpai. Kepadatan purata (mean intensity) adalah 2850 pada insang dan 25 pada kulit dan lazimnya (prevalence) kulit dan insang bagi kesemua sampel ikan adalah dijangkiti. Untuk *Pangasius nasutus*, kajian ke atas jangkitan *Trichodina* sp dan *Argulus* sp telah dijalankan sebelum dan selepas rawatan. Di samping itu, kajian ke atas pengkhususan bahagian badan ikan turut dijalankan. 13 bahagian telah ditetapkan meliputi keseluruhan badan bagi setiap 30 sampel *Pangasius nasutus*. Kepadatan purata *Trichodina* sp (mean intensity) sebelum rawatan adalah 39 dan berkurang kepada 3 selepas rawatan manakala untuk *Argulus* sp, kepadatan puratanya adalah 1 sebelum dan selepas rawatan. Kajian ini menunjukkan, jangkitan *Trichodina* sp ke atas bahagian badan yang dikhususkan tidak menunjukkan sebarang perbezaan beerti berdasarkan ujian Duncan. Besar kemungkinan, jangkitan parasit ke atas *Pangasius nasutus* dan *Pangasius hypophthalmus* adalah berkait rapat dengan kadar keterlarutan oksigen yang rendah semasa kajian dilakukan.