A STUDY ON ECTOPARASITES OF POND CULTURED CROSSBRED FRESHWATER FISH, KERAI LAMPAM AT PUSAT PERIKANAN PERLOK JERANTUT PAHANG

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2009

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Research Report submitted in partial fulfillment of
the requirements for the degree of
Bachelor of Agrotechnology Science (Aquaculture)

Department of Fisheries Science and Aquaculture
FACULTY OF AGROTECHNOLOGY AND FOOD SCIENCE
UNIVERSITI MALAYSIA TERENGGANU
2009

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: **A study on ectoparasites of pond cultured crossbred freshwater fish, Kerai Lampam at Pusat Perikanan Perlok.**
Oleh **Mohd Saiful Fadli Bin Maidin,** No.Matrik **UK14289** telah diperiksa dan semua pembetulan yang disarankan telah dilakukan. Laporan ini dikemukakan kepada **Jabatan Sains Perikanan dan Akuakultur** sebagai memenuhi sebahagian daripada keperluan memperolehi **Ijazah Sarjana Muda Sains Agroteknologi (Akuakultur)** Fakulti Agroteknologi dan Sains Makanan, Universiti Malaysia Terengganu.

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This thesis should be cited as:

Maidin, S.F.M., 2009. A study on ectoparasites of pond cultured crossbred freshwater fish, Kerai Lampam at Pusat Perikanan Perlok Jerantut Pahang. Undergraduate thesis, Bachelor of Science in Agrotechnology (Aquaculture), Faculty of Agrotechnology and Food Science, University Malaysia Terengganu, Terengganu.

DECLARATION

I hereby declare that the work in thesis is my own except for quotations and summaries which have been duly acknowledgement

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Date : 03 APRIL 2009

ACKNOWLEDGEMENT

Alhamdulillah, firstly, I would like to thank to my supervisor, Prof. Dr. Faizah Bt. Shaharom for her supervision, assistance, comments and guidance that enable this project to run smoothly. Thanks also to my coordinator Dr. Asma bt. Ariffin. and Pn. Kartini, Assistant Lab who helped me in conducting doing my project smoothly and completely. Not forget to my families who gave me supported and money to keep working in doing final year project. Appreciations are extended to my friends especially Abdul Rauf Bin Abdullah, all my housemate and my parasite team in giving me spiritual support. I also want to thank to all staffs of Pusat Perikanan Perlok, Jerantut Pahang for providing the sample of fish and giving all cooperate to my study. Lastly, my appreciation goes to those who have contributed to this project in order me to fulfillment of the requirements for the degree of Bachelor of Agrotechnology Science (Aquaculture), Universiti Malaysia Terengganu (UMT).

ABSTRACT

This is a study of ectoparasites on crossbred fish, Kerai Lampam, a crossbred between a female *Hyspibarbus peirrei* (Sauvages, 1880) Kerai kunyit and male *Barbonymus gonionotus* (Bleeker, 1850) Lampam Jawa. The objectives of the study were to identify the ectoparasites and to calculate the prevalence and mean intensity of the infection. Samples were collected and examined at Pusat Perikanan Perlok Pahang and analyzed in Biodiversity lab UMT. 3 categories of fishes, broodstock or big fish, juveniles or medium and fingerlings were diagnosed. 8 parasites identified were ie *Piscinoodinium pillulare, Dactylogyrus sp. , Trichodina sp., Lernea sp.*, copepode (Lernea stage), *Saprolegnea sp.*, Metacercaria and unidentified mites. Results showed that, there was a high infection of *Lernea sp.* on big fish, while fingerlings were heavily infested with *Piscinoodinium pillulare* . Micrographs of gills filament infested by adult *P. pillulare* showed clear hyperplastic changes and appeared stunted viewed under SEM (JEOL JSM6360 LA). Micrograph of adult *P. pillulare* called trophont appear rounded from dorsal view and ovoid from lateral view. The basal attachment of trophont known as rhizoid and hyperplasia were clearly seen in histological section under light microscope.

ABSTRAK

Kajian ini dijalankan untuk mengkaji ektoparasit pada ikan Kerai Lampam kacukan antara Kerai kunyit betina, *Hyspibarbus peirrei* (Sauvages, 1880) dan Lampam Jawa jantan, *Barbonymus gonionotus* (Bleeker, 1850). Objektif kajian ini adalah untuk mengenalpasti ektoparasit dan mengira prevalence dan mean intensity jangkitan tersebut. Sampel dikutip dan diuji di Pusat Perikanan Perlok Pahang dan dianalisis di Makmal Biodiversiti UMT. 3 kategori ikan, ikan besar atau induk, juveniles atau pertengahan dan fingerling diagnosis. 8 parasit telah dikenalpasti iaitu *Piscinoodinium pillulare, Dactylogyrus sp., Trichodina sp., Lernea sp.*, copepode (Lernea stage), *Saprolegnea sp.*, Metacercaria dan mite yang tidak dikenalpasti. Keputusan menunjukkan bahawa terdapat jangkitan *Lernea sp.* yang sangat tinggi terhadap ikan besar, manakala fingerlings pula banyak dijangkiti oleh *Piscinoodinium pillulare* . Micrographs filament insang dijangkiti oleh *P. pillulare* matang menunjukkan bahawa perubahan clear hyperplastic dan hadir pada stunted viewed di bawah SEM (JEOL JSM6360 LA). Micrograph *P. pillulare* matang menunjukkan trophont berbentuk bulat dari pandangan dorsal dan ovoid dari pandangan lateral. Pautan basal trophont dikenali sebagai rhizoid dan hyperplasia dapat dilihat secara jelas pada histological section dibawah mikroskop cahaya..