

IDENTIFICATION, PREVALENCE AND MEAN INTENSITY OF
MONOGENEAN PARASITE FROM CAGE CULTURED
RED HYBRID TILAPIA (*Oreochromis sp.*)
IN SUNGAI MANIR, TERENGGANU

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MASTER OF SCIENCE
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Lihat sebelah

Abstract of thesis presented to the Senate of University Malaysia Terengganu in fulfillment of the requirement for the degree of Master of Science (Aquaculture)

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SHADIAH BINTI MOHAMAD

November 2010

Supervisor : Prof. Dr. Faizah Binti Shaharom

Faculty : Institute of Tropical Aquaculture

This study was carried out to determine the monogenean parasite from cultured red hybrid tilapia. The purpose of this study was also to determine the prevalence and mean intensity of monogenean parasite from the samples. A total of 60 samples of farmed red hybrid tilapia were obtained from a farm in Kg. Pulau Manis, Manir. The fishes were brought back to AKUATROP laboratory for immediate examination. The water parameters such as dissolved oxygen, pH and temperature were measured *in situ* while the ammonia content was measured in AKUATROP laboratory. Since the monogenea is an ectoparasite, only external part of the fishes were examined for parasite. The examination begins with the skin and fins smear followed by the gill smear. One monogenea species was identified from this study. The monogenea found was identified as *Cichlidogyrus halli* Price and Kirk, 1967. The identification of this parasite was based on the morphological features and the measurement. Genus was identified based on haptor morphology and species was identified based on morphology of copulatory organ and measurement of haptor, body length and width as well as the measurement of copulatory organ. The prevalence of infection was 100% and mean intensity was 105.72.

Abstrak tesis yang dikemukakan kepada senat Universiti Malaysia Terengganu
sebagai memenuhi keperluan untuk ijazah Master Sains
(Akuakultur)

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Fakulti : Institut Akuakultur Tropika

Kajian ini dijalankan untuk mengenalpasti parasit monogenea daripada ikan tilapia merah hibrid yang dikultur. Selain itu, kajian ini dijalankan untuk menentukan prevalen dan min keamatan parasit monogenea daripada sampel-sampel tersebut. Sejumlah 60 sampel ikan tilapia merah hibrid yang diternak diperolehi dari satu ladang di Kg. Pulau Manis, Manir. Ikan-ikan tersebut dibawa balik ke makmal AKUATROP untuk pemeriksaan segera. Parameter air seperti oksigen terlarut, pH dan suhu diukur *in situ* manakala kandungan ammonia diukur di makmal AKUATROP. Memandangkan monogenea adalah ektoparasit, maka hanya bahagian luaran ikan sahaja diperiksa. Pemeriksaan bermula dengan memeriksa kulit dan sirip-sirip, kemudian diikuti dengan pemeriksaan pada bahagian insang. Satu spesis monogenea telah dikenalpasti daripada kajian ini. Monogenea yang dijumpai dikenalpasti sebagai *Cichlidogyrus halli* Price and Kirk, 1967. Pengenal pastian parasit ini adalah berdasarkan kepada ciri-ciri morfologi dan ukuran-ukuran pada parasit tersebut. Pengecaman genus adalah berdasarkan kepada morfologi cangkuk manakala pengecaman spesis adalah berdasarkan kepada morfologi organ pembiakan jantan serta ukuran-ukuran cangkuk, panjang dan lebar badan serta ukuran organ pembiakan jantan. Prevalen jangkitan adalah 100% manakala min keamatan adalah 105.72.