

THE MORPHOLOGICAL STUDY OF DIGENEA ON MYSTUS
NUMERUS IN CAGE CULTURE FROM
SUNGAI TERENGGANU

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THE MORPHOLOGICAL STUDY OF DIGENEA ON *Mystus niger*
IN CAGE CULTURE FROM SUNGAI TERENGGANU

by

Nurul Huda binti Abdullah

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the requirement of the degree of
Bachelor of Science in Agrotechnology (Aquaculture)

Department of Fishery Science and Aquaculture
FACULTY OF AGROTECHNOLOGY AND FOOD SCIENCE
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**FAKULTI AGROTEKNOLOGI DAN SAINS MAKANAN
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**PENGAKUAN DAN PENGESAHAN LAPORAN
PROJEK ILMIAH I DAN II**

Adalah dengan ini diakui dan disahkan bahawa laporan ilmiah bertajuk:

Study of digenea parasites on internal organ of *Mystus nemurus* cultured in Terengganu River oleh Nurul Huda bt Abdullah, No.Matrik UK14540 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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DECLARATION

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

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ABSTRACT

The *Mystus nemurus* and also known as River Catfish were cultured in cages at Sungai Terengganu. The parasites that infected this species of fish are Platyhelminthes or flatworms, subclass the Digenea of the class Trematode. The digenea is an endoparasites that have complex life-cycle and can infect fish as intermediate host or definitive host. 30 of River Catfish were examined and the investigated organs were stomach and intestine. This is because the parasite can be found in large number in the intestine and rectum of the fish. The digenean that infected the *Mystus nemurus* was studied and the morphology was examined to determine the family of the digenean and identify up to genus. The order is Plagiorchiida, superfamily is Opisthorchioidea, family is Heterophyidae, and the genus is Euhaplorchis. The prevalence of River Catfish that infected by these species are 93.33% and the mean intensity are 14.07. The infection of this species influence by many factors such as age of the host, season and population size of the host.

ABSTRAK

Mystus nemurus dan juga dikenali sebagai Baung diternak di dalam sangkar terapung di Sungai Terengganu. Parasit yang menjangkiti spesis ikan ini ialah Platyhelminthes atau dikenali sebagai cacing pipih, subclass adalah Digenea daripada class Trematoda. Digenea ini adalah endoparasit yang mempunyai kitar hidup yang kompleks dan boleh menjangkiti ikan sebagai perumah perantaraan atau sebagai perumah akhir. 30 ekor ikan Baung telah dikaji dan organ yang diperiksa ialah perut dan usus. Ini kerana spesis parasit ini boleh dijumpai dalam jumlah yang banyak di usus dan rektum ikan. Digenea yang menjangkiti *Mystus nemurus* dikaji dan morfologi dikenalpasti untuk menentukan famili dan genus digenea tersebut. Order bagi digenea tersebut adalah Plagiorchiida manakala superfamili adalah Opisthorchioidea, dari famili Heterophyidae, dan genus Euhaplorchis. Peratus ikan yang dijangkiti oleh spesis parasit ini ialah 93.33%. manakala purata kepadatan parasit adalah 14.07. Jangkitan parasit ini dipengaruhi oleh pelbagai faktor seperti umur, saiz populasi perumah dan musim.