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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: A Study on Prevalence and Mean Intensity of Trypanorhynch Cestodes in Selar Kuning (*Selaroides leptolepis*) from South China Sea Oleh Siti Hawa Bt. Mohamad Ali, No.Matrik UK14354 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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**A STUDY ON PREVALENCE AND MEAN INTENSITY OF TRYPANORHYNCH
CESTODES IN SELAR KUNING (*Selaroides leptolepis*) FROM
SOUTH CHINA SEA**

**By
Siti Hawa Binti Mohamad Ali**

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

**Department of Fisheries Science and Aquaculture
FACULTY OF AGROTECHNOLOGY AND FOOD SCIENCE
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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

Results of a study on Trypanorhynch cestodes of a commercial marine fish, Selar Kuning (*Selaroides leptolepis*) from South China Sea are presented. This study was conducted at Biodiversity laboratory, Universiti Malaysia Terengganu. A total of 40 samples were diagnosed for Trypanorhynch cestodes, while other endoparasites found were also recorded. Organs such as heart, liver and stomach, were cut and placed on the glass slide. Then the piece of the organs was pressed using cover slips to get a thin layer. After that, the observation was done under compound microscope. Worms present were collected and fixed in 70% alcohol for further procedure. Diagnosis process was started from 27th August 2008 and finished on 22nd December 2008. Out of 40 samples diagnosed, 34 samples (85%) showed the presence of parasites. The result of prevalence for Trypanorhyncha plerocercoids was 25%, where it is the second highest after the prevalence of Nematode, while the result of mean intensity was 1.3, the lowest mean intensity among four species of endoparasites found in Selar Kuning. Trypanorhyncha plerocercoids were successfully identified up to genus level: *Mixomybelinia* sp. All specimens studied belonged to the same genus.

ABSTRAK

Kajian ke atas Trypanorhyncha cestoda daripada ikan marin komersial, Selar Kuning (*Selaroides leptolepis*) dipersembahkan. Kajian ini telah dijalankan di Makmal Biodiversiti, Universiti Malaysia Terengganu. Diagnosis telah dijalankan ke atas 40 sampel ikan untuk kajian Trypanorhyncha cestoda, manakala endoparasit lain yang dijumpai turut direkodkan. Organ dalaman seperti jantung, hati dan perut telah dipotong dan diletakkan di atas slaid kaca. Potongan organ tersebut kemudiannya ditekan menggunakan penutup slaid untuk mendapatkan lapisan nipis. Selepas itu, pemeriksaan dijalankan menggunakan mikroskop cahaya. Parasit yang dijumpai telah dikutip dan diawet di dalam 70% alcohol. Proses diagnosis telah bermula pada 27 Ogos 2008 dan tamat pada 22 Disember 2008. Daripada 40 sampel ikan yang telah dijalankan diagnosis, 34 sampel (85%) menunjukkan jangkitan parasit. Keputusan ke atas prevalen Trypanorhyncha cestoda adalah 25% ,iaitu kedua tertinggi selepas nematoda, manakala keputusan untuk purata intensity adalah 1.3, yang terendah di antara 4 spesis parasit yang telah dijumpai pada ikan Selar Kuning. Trypanorhyncha pleroserkoid telah berjaya dikenal pasti sehingga peringkat genus: *Mixonybelinia* sp. Semua spesimen Trypanorhyncha pleroserkoid tergolong di bawah genus yang sama.