

PRELIMINARY STUDIES ON FEEDING AND GASTRIC EVACUATION
IN LOCAL SEA BASS (*Lates calcarifer* Bloch)
FINGERLINGS

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SERDANG, SELANGOR
1994

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Preliminary studies on feeding and gastric evacuation in local sea bass (*Lates calcarifer* Bloch) fingerlings / Lim Soon Theng.



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PSF 499 - PROJEK DAN SEMINAR

BORANG PENGESAHAN DAN KELULUSAN LAPORAN AKHIR PROJEK

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Tajuk Projek : Preliminary Studies On Feeding And Gastric Evacuation
In Local Sea Bass (*Lates calcarifer* Bloch)
Fingerlings

Dengan ini disahkan bahawa saya telah menyemak laporan akhir projek ini dan

- (i) semua pembetulan yang disarankan oleh pemeriksa-pemeriksa telah dibuat, dan
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TERENGGANU

PRELIMINARY STUDIES ON FEEDING AND GASTRIC EVACUATION IN LOCAL
SEA BASS (*Lates calcarifer* Bloch) FINGERLINGS

BY

LIM SOON THENG

A research project report submitted in partial fulfillment of
the requirement for the degree of Bachelor of Fisheries Science

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April 1994

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Dedicated to the fish people of Telok Bahang,
past and present.

ACKNOWLEDGEMENTS

The author have benefited greatly from the help and assistance from many people towards the completion of this study.

My supervisor, Dr. Abdul Manan Mat Jais had been most supportive and accomodating throughout the study. His guidance and comments had improved the author's work.

Mr. Yap Khiam Leong had been most generous in contributing hundreds of fish for preliminary studies. En. Shariff had assisted in taking X-rays pictures of the fishes.

The Marine Finfish Production & Research Centre in Tanjong Demong had provided their facility and fishes for this study. Encik Zulkifli Talib had been most friendly in providing accomodation for the author. Pak Abu had also generously donated two hundred fish, bracing rains and storms to bring the fish from Pulau Perhentian to the mainland.

Chew Huck Boon, Tee Liang Hai, Ooi Soo Tuck and Lim Kean Pah have assisted the author in computer works. To the Faculty of Fisheries & Marine Science and to Universiti Pertanian Malaysia.

I'm deeply indebted to all of them and thank you.

ABSTRACT

This study were conducted to assess the relative differences in feeding and gastric evacuation pattern of 0.1555—7.4150gm sea bass fingerlings using serial slaughter method. Treatment 01 consisted of 4.82995gm fish (mean weight), Treatment 03 and 05 utilized 0.22278gm fish while Treatment 02 and 04 consisted of 0.25413gm and 0.21789gm fish respectively. The diet used for treatment 04 were minced fish meat and the rest were fed with minced whole fish. All treatments were conducted at dawn except treatment 05 which were conducted at dusk. The fishes were satiated within 20—25 minutes of food provision in all conditions tested. Nevertheless, great intraspecific variation in satiation amount and gastric evacuation time were observed in all treatments. In fish fed minced whole fish, retention of bony fragments of the diet were prolonged; especially in the smaller fish. Such phenomena explained the differences in gastric evacuation patterns and best fit regressions models. Retention of bony fragments were related to gut development and natural feeding habits of this fish. Nevertheless, minced fish meat were consumed in greater quantity and evacuated faster. The fish also consumed a bigger meal at dusk relative to dawn. Gastric evacuation rate were also higher at dark. The above findings were discussed in relation to fish husbandary and feeding strategy.

ABSTRAK

Kajian ini dijalankan bagi mengkaji perbezaan corak pemakanan dan penghadaman dalam ikan siakap bersaiz antara 0.1555—7.4150gm melalui kaedah 'pembunuhan bersiri'. Rawatan 01 menggunakan ikan bersaiz 4.82995gm (berat min), Rawatan 03 dan 05 menggunakan ikan bersaiz 0.22278gm, Rawatan 02 terdiri dari ikan 0.25413gm dan Rawatan 04 terdiri dari ikan 0.21789gm. Daging ikan yang dicincang diberikan kepada rawatan 04 dan ikan cincang diberikan kepada rawatan yang lain. Semua rawatan dijalankan pada sebelah pagi kecuali rawatan 03 yang dijalankan pada sebelah petang. Dalam semua keadaan yang dikaji, ikan siakap kenyang dalam masa 20—25 minit pemberian makanan. Terdapat perbezaan intraspesifik yang ketara antara ikan dalam jumlah makanan yang dimakan dan masa yang diambil untuk mengosongkan perut dalam satu-satu kumpulan. Dalam ikan yang diberi makan ikan cincang, pecahan tulang dibendung lebih lama dalam perut, terutamanya dalam ikan-ikan yang lebih kecil. Faktor ini menerangkan perbezaan dalam corak penghadaman dan model regresi yang sesuai untuk menerangkan corak penghadaman tersebut. Pembendungan tulang dalam perut ikan dikaitkan dengan perkembangan perut ikan dan tabiat pemakanan semulajadi ikan ini. Daging ikan cincang sebaliknya lebih banyak dimakan dan dihadam dengan lebih cepat. Ikan ini juga mengambil lebih makanan pada sebelah petang berbanding dengan masa pagi. Kadar penghadaman juga lebih tinggi dalam

keadaan gelap. Penemuan ini dibincangkan dengan aspek penjagaan ikan dan strategi pemberian makanan.