

VARIABILITY IN MATURITY AND GROWTH IN A  
HEAVILY EXPLOITED FISH; GENUIN (*Megalaspis*)  
*oxirostris*) IN SOUTH CHINA SEA WATERS

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2005

FACULTY OF AGROTECHNOLOGY AND FOOD SCIENCE  
UNIVERSITI SAINS DAN TEKNOLOGI MALAYSIA

2005



VARIABILITY IN MATURITY AND GROWTH IN A HEAVILY EXPLOITED  
STOCK; CENCARU ( *Megalaspis cordyla*) IN SOUTH CHINA SEA WATERS

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This project report is submitted in partial fulfilment of the requirement of the degree  
of Bachelor of Applied Science  
(Fisheries Science)

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KOLEJ UNIVERSITI SAINS DAN TEKNOLOGI MALAYSIA  
2005

1100042366

This project report should be cited as:

Amy Halimah, R. 2005. Variability in maturity and growth in a heavily exploited stock; Cencaru (*Megalaspis cordyla*) in South China Sea waters. Undergraduate thesis, Bachelor of Applied Science (Fisheries Science), Faculty of Agrotechnology and Food Science, Kolej Universiti Sains dan Teknologi Malaysia, Terengganu. 42p.

## ACKNOWLEDGEMENTS

First of all, I am very grateful to Allah s.w.t. because of His will this project is completed successfully. I also would like to give the appreciation to my supervisor, Tuan Haji Mohamad Zaidi bin Zakaria for his great assistance and supervision throughout the study period. I also would like to thank him for giving me guidance and comments that really important in helping me to finish this study.

Besides, I would like to thank all lecturers in Faculty of Agrotechnology and Food Science, for giving their comments and ideas that help to enable this study run smoothly. Not forgotten, to all the laboratory assistants, sincere thanks to all of them for their cooperation and permission to use the laboratory facilities.

I also would like to give my deepest appreciation to all my family, friends and roommates for their spiritual support. Especially to Alif Asraf for his willingness in helping me, and to my other friends, Fatehah, Maslina, Siti Rahmah, Valarie, Gladys, Nurfazila, Haiyanti and Elvira. Thanks to my parents, Mr. Rajae Rasdi and Mrs. Tamah bt. Haji Lek for always supporting me and giving me spirits to move on. Finally, I would like to thank to those who have contributed to this study and make it a success.

Wassalam.

*Amy Halimah*

## ABSTRACT

Cencaru or its scientific name, *Megalaspis cordyla* which belongs to the Carangidae family is one of the heavily exploited species in this country landed by purse-seines and trawl nets. A study on its variability in maturity and growth in the South China Sea of Terengganu waters has been carried out from August until December 2004. The length-weight relationship that has been determined from this study is  $W=0.013L^{2.9095}$ . The b value obtained from the length-weight relationship shows a value of 2.9095 which is very close to the recommended value 3.0. Meanwhile, growth coefficient, K shows a low value which is 0.4 per year whilst  $t_0$  is equal to -0.62 year. The spawning season for *Megalaspis cordyla* is in December 2004, where the spawning season could be under influence of the rainy season brought by the north east monsoon wind, during end of the year. This is due to the high value of GSI during this month if differ to others throughout the study period. The GSI for females is always higher than males for every month of sampling. For maturity stages, most of the mature samples belong to the length-class 31-35 cm.



## ABSTRAK

Ikan Cencaru, atau nama saintifiknya, *Megalaspis cordyla* yang tergolong dalam keluarga Carangidae merupakan salah satu spesies yang ditangkap dengan banyaknya di negara ini dengan menggunakan pukat jerut dan pukat tunda. Kajian mengenai kepelbagaian dalam kematangan dan pertumbuhan spesies ini telah dijalankan di Laut China Selatan sekitar perairan Terengganu bermula dari bulan Ogos hingga Disember 2004. Hubungan panjang berat yang telah diperolehi daripada kajian ini ialah  $W=0.013 L^{2.9095}$ . Nilai b yang diperolehi daripada persamaan panjang-berat ini ialah 2.9095 di mana ia adalah sangat hampir dengan nilai yang disyorkan yakni 3.0. Di samping itu, kadar pertumbuhan, K menunjukkan nilai yang rendah iaitu 0.4 setahun manakala nilai  $t_0$  adalah bersamaan -0.62 tahun. Musim pembiakan untuk *Megalaspis cordyla* adalah pada bulan Disember 2004, di mana musim pembiakan adalah berkemungkinan dipengaruhi oleh faktor musim hujan yang dibawa oleh angin monsun timur laut pada hujung tahun. Ini ditunjukkan oleh nilai GSI yang tinggi pada bulan tersebut jika dibandingkan dengan bulan-bulan yang lain sepanjang tempoh kajian dijalankan. Nilai GSI untuk ikan betina adalah senantiasa lebih tinggi daripada ikan jantan untuk setiap bulan yang dikaji. Untuk peringkat kematangan, kebanyakan ikan yang sudah mencapai tahap matang berada dalam selang kelas 31-35 cm.