RECRUITMENT PATTERN AND EARLY GROWTH OF Crassostrea iredalei IN SETIU LAGGON, TERENGGANU

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RECRUITMENT PATTERN AND EARLY GROWTH OF Crassostrea iredalei IN SETIU LAGOON, TERENGGANU

By

Siti Nurul Shahida Binti Sahdan

Research Report submitted in partial fulfillment Of the requirements for the degree of Bachelor Science of Marine Biology

Department Of Marine Science
Faculty of Maritime Study and Marine Science

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PENGAKUAN DAN PENGESAHAN LAPORAN PROJEK PENYELIDIKAN I DAN II

Adalah ini diakui dan disahkan bahawa laporan penyelidikan bertajuk 'Recruitment Pattern and Early Growth of Crassostrea iredalei in Setiu Lagoon, Terengganu' oleh Siti Nurul Shahida Binti Sahdan, No. Matrik UK 10593 telah diperiksa dan semua pembetulan yang disarankan telah dilakukan. Laporan ini dikemukakan kepada Jabatan Sains Marin sebagai memenuhi sebahagian daripada keperluan memperolehi Ijazah Sarjana Muda Sains (Biologi Marin), Fakulti Pengajian Maritim dan Sains Marin, Universiti Malaysia Terengganu.

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ABBREVIATION

° C

: degree Celsius

ANOVA

: Analysis of Variances

cm

: centimeter

DO

: dissolved oxygen

e.g.

: For example

F-Test

: ratio of two sample variances

g

: gram

g C m⁻² year⁻¹: gram carbon per meter square per year

Ind/m²

: individual per metre square

kg.

: kampung

Mg/l

: milligram per liter

 m^2

: metre square

mm

: millimetre

Ppt

: parts per thousand

P-Value

: value factor

ABSTRACT

The cup oyster, *Crassostrea iredalei* was abundant naturally in Setiu Lagoon, Terengganu. There is no study done on recruitment and growth of *Crassostrea iredalei* in Setiu Lagoon. Two designs of culture methods are presently to determine the significant difference of growth rate between natural spats (bottom tray) and natural culture (hanging rope). Growth was determined by measuring the width and length of spat every month (September 2006 to February 2007). The mean number of spat was found greatly on hanging rope rather than in sediment. Hanging collector has the variables spat number for each month. Growth rate (width and length per month) have shown significant different for both techniques. Tray spat were significantly slower growing than spat on rope collector. Mortality rates were higher in bottom tray where all the spats died on February. The mean spat sized was achieved to 1.833 cm \pm 0.115 (width) and 2.2 cm \pm 0.6083 (length). Width and length increase was exponential for hanging spat. The final growth of spat has reached up to sized 3.5283 cm \pm 0.863 (width) and 3.175 cm \pm 0.7765 (length). The range width and length of the spat on shell collector after six month is 2.1 x 3.0 cm to 6.4 x 2.6 cm.