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**SEDIMENTOLOGY & SEDIMENT ACCRETION RATE IN SELECTED MANGROVE
FOREST OF THE KELANTAN DELTA**

By

FARIZATUAKMA BINTI SABTU

**Research Report submitted in partial fulfillment of
The requirements for the degree of
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Faculty of Maritime Studies and Marine Science
UNIVERSITI MALAYSIA TERENGGANU
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LAPORAN PROJEK PENYELIDIKAN I DAN II**

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**SEDIMENTOLOGY & SEDIMENT ACCRETION RATE IN SELECTED MANGROVE
FOREST OF THE KELANTAN DELTA**

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telah diperiksa dan semua pembetulan yang disarankan telah dilakukan. Laporan ini dikemukakan kepada Jabatan Sains Marin sebagai memenuhi sebahagian daripada keperluan memperoleh ijazah **S.M.SAINS (BIOLOGI MARIN)** Fakulti Pengajian Maritim dan Sains Marin, Universiti Malaysia Terengganu.

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LIST OF SYMBOL

Symbol

1	μm	micrometer
2	B	Back zone
3	E	East
4	F	Front zone
5	GPS	Global Positioning System
6	ha	hectares
7	M	Middle zone
8	m^{-1}	per month
9	N	North
10	P.CM	Pulau Che Minah
11	P.K	Pulau Kambing
12	P.L	Pulau Layang-layang
13	ppt	part per thousand
14	PSA	Particle Size Analyzer
15	Sp.	species
16	α	alpha

ABSTRACT

Study on accretion rate was done on Pulau Layang-layang, Pulau Kambing and Pulau Che Minah in the Kelantan Delta. They were chosen as sampling areas based on the density of vegetation. The sediment deposits were collected and accretion markers made of Perspex were buried on September 2006. Samples were collected based on transect lines was set-up with 3 m intervals sampling points and transects line was set-up to determine the accretion rate for January and February 2007. Sediment samples were analyzing for sedimentological characteristic using laser diffractometer (MALVERN Master Sizer 2000). This study found that the accretion rate for January and February is significantly different. The average accretion rate for Pulau Che Minah is 1.61cm m^{-1} , Pulau Layang-layang with 1.29cm m^{-1} and Pulau Kambing with 0.44cm m^{-1} . For February, the average accretion rate is 1.11cm m^{-1} , is 0.30cm m^{-1} and 1.13cm m^{-1} for Pulau Layang-layang, Pulau Kambing and Pulau Che Minah respectively. Characteristic of surface sediment at three sampling sites are dominated by fine silt, poorly sorted, with varied of skewness but very leptokurtic.