

BENTHOIC COPEPODS IN EAST COAST OF PENINSULAR MALAYSIA

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BENTHIC COPEPODS IN EAST COAST OF PENINSULAR MALAYSIA

BY

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This project report is submitted in partial fulfillment of
the requirement for the Degree of
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JABATAN SAINS SAMUDERA
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LIST OF ABBREVIATIONS

Ind. m ⁻²	Individu per meter square
TR	Terengganu
PH	Pahang
JR	Johor
m ²	Meter square
mm	Millimeter
km	Kilometer
µm	Micrometer
ml	Mililiter
%	Percentage
ø	Phi

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ABSTRACT

A study on the biodiversity of benthic harpacticoid copepods in East Coast of Peninsular Malaysia was carried out in three phases; 2003 (Terengganu), 2004 (Pahang), 2005 (Johor) which covered an area of 60 km off the coastline. Samples were taken by using Smith McIntyre grab with 0.0768 m^2 surface areas. A total of 12 dominant species of meiobenthic harpacticoid copepods were identified from eight families and ten genera. *Amphiascus cinctus* was found to be the most common species in East Coast of Peninsular Malaysia followed by *Brianola stebleri*. In Terengganu and Johor coast harpacticoid copepods showed least density compared to Pahang coast. Generally, mean density of harpacticoid copepods in studied area change as station moved towards the open sea. Kruskal-Wallis analysis showed a significant different among station and coasts in the study area ($p < 0.05$). In relation to monsoon season, T-test analysis showed no significant different for pre-monsoon and post-monsoon of Terengganu ($T = 0.06$, $p > 0.05$; one-tail) while Pahang *vice versa*. Cluster analysis showed similarity between Terengganu and Johor coast but different from Pahang coast.

COPEPODA BENTIK DI PERAIRAN PANTAI TIMUR SEMENANJUNG MALAYSIA

ABSTRAK

Satu kajian ke atas biodiversiti copepoda harpacticoida bentik telah dijalankan di perairan pantai Timur Semenanjung Malaysia yang meliputi tiga fasa iaitu tahun 2003 (Terengganu), 2004 (Pahang) dan 2005 (Johor) pada transek-transek berjarak 60 km dari pantai ke tengah laut. Sampel diambil menggunakan pencakup (grab) Smith McIntyre dengan luas bukaan 0.0768 m^2 . Sejumlah 12 spesis harpacticoida yang dominan yang mewakili lapan famili dan sepuluh genera telah dikenalpasti. *Amphiascus cinctus* merupakan spesis yang paling tinggi kepadatannya dijumpai pada ketiga-tiga kawasan persampelan diikuti oleh *Brianola stebleri*. Min kepadatan copepoda harpacticoida di perairan Terengganu dan Johor didapati adalah lebih rendah berbanding perairan Pahang. Kajian ini menunjukkan ada perbezaan bererti ($p < 0.05$) melalui analisis Kruskal-Wallis bagi kepadatan copepoda harpacticoida di antara stesen dan perairan di kawasan kajian. Ujian-t satu hala pula menunjukkan tiada perbezaan bererti bagi kepadatan copepoda harpacticoida di perairan Terengganu antara monsun ($T = 0.06$, $p > 0.05$) manakala Pahang pula adalah sebaliknya. Bagi analisis Cluster pula menunjukkan persamaan antara perairan Terengganu dan Johor tetapi berbeza dari perairan Pahang.