COMPARISON OF ZOOPLANKTON ABUNDANCE AND SIZE COMPOSITION AT REEF AND OPEN WATER HABITATS OF BIDONG ISLAND, TERANGGANU

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Comparison of zooplankton abundance and size composition at reef and open water habitats of Bidong Island, Terengganu / Rajasegar Maruthamuthu Nadarajah.

Lihat Sebelah

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By

Rajasegar A/L Maruthamuthu Nadarajah

Research report submitted in partial fulfillment of

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DEPARTMENT OF MARINE SCIENCE
FACULTY OF MARITIME STUDIES AND MARINE SCIENCE
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DECLARATION AND VERIFICATION REPORT

FINAL YEAR RESEARCH PROJECT

It is hereby declared and verified that this research report entitled:

COMPARISON OF ZOOPLAKTON ABUNDANCE AND SIZE COMPOSITION AT REEF AND OPEN WATER HABITATS OF BIDONG ISLAND, TERENGGANU by Rajasegar A/L Maruthamuthu Nadarajah, Matric No. UK 22425, have been examined and all errors identified have been corrected. This report is submitted to the Department of Marine Science as partial fulfillment towards obtaining the Degree of Bachelor of Science (Marine Biology) Faculty of Maritime Studies and Marine Science, University Malaysia Terengganu.

Verified by:

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ABSTRACT

A study to compare the abundance of zooplankton between the reef habitat and open water habitat using horizontal and vertical towing and 100μm and 250μm size fraction was carried out. The samples were collected from reef habitat, mid water and lastly at the open water of Bidong Island, Terengganu. Generally, the vertical abundance of zooplankton increased from reef habitat (coastal) towards the open water habitat. On the other hand, the horizontal abundance decreases from reef habitat to open water. The vertical abundance of zooplankton was higher than the horizontal abundance. 100μm size fractions give rise to the zooplankton abundance in vertical abundance. No much variation was found in horizontal abundance in the both size fractions. Copepods were the major zooplankton group in all stations.

Kajian Tentang Perbezaan Kepadatan Zooplankton Dan Struktur Komuniti Zooplankton Di Habitat Batu Karang Dan Habitat Laut Terbuka

ABSTRAK

Kajian ini mengambarkan perbezaan kepadatan zooplankton di kawasan batu karang dan laut terbuka. Zooplankton telah ditapis dari 3 kawasan, iaitu kawasan batu karang, kawasan pertengahan laut dan akhirnya di kawasan laut terbuka dengan menggunakan jarring yang bersaiz 100µm dan 250µm dengan cara penapisan secara mendatar dan menegak. Secara keseluruhanya komposisi zooplankton banyak diwakili oleh kopepod dan zooplankton lain mempunyai kepadatan yang kurang berbanding dengan kopepod di kesemua stesen. Kepadatan zooplankton secara menegak banyak di kawasan laut terbuka dan sedikit di kawasan batu karang. Kepadatan zooplankton secara mendatar pula banyak di kawasan batu karang berbanding laut terbuka. Dalam zooplankton yang ditapis secara menegak, kebanyakkanya adalah bersaiz 100µm. Zooplankton yang ditapis mendatar pula tidak menunjukkan perbezaan yang begitu ketara seperti yang ditunjukkan dalam saiz 100µm.