

COLONIZATION OF MEIOBENTHOS ON ARTIFICIAL SUBSTRATES  
INTRODUCED TO BOTTOM SEDIMENT OF UMT CREEK

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COLONIZATION OF MEIOBENTHOS ON ARTIFICIAL SUBSTRATES  
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By

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DEPARTMENT OF MARINE SCIENCE

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UNIVERSITY MALAYSIA TERENGGANU

DECLARATION AND VERIFICATION REPORT

RESEARCH PROJECT I AND II

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

Colonization of Meiobenthos on Artificial Substrates Introduced to Bottom Sediment of UMT Creek by Mohd Hariri bin Lukman, Matric No. UK 16899 has 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 Bachelor of Science Marine Biology, Faculty of Maritime Studies and Marine Science, Universiti Malaysia Terengganu.

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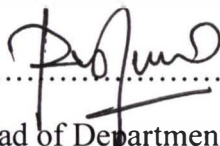
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### Abbreviations

ind/ bottle	individual per bottle (density)
LOI	Loss on Ignition
mg/L	milligram per liter
psu	Practical salinity unit
μm	micrometer
°C	degree Celcius
%	percent

Colonization of Meiobenthos on Artificial Substrates Introduced to Bottom Sediment of  
UMT Creek

**ABSTRACT**

This project was done to study the colonization rate of different taxa of meiobenthos towards the artificial substrates that will be introduced to their natural habitat. Besides that, this project was also aimed to study on the dynamics of meiofauna and their environments. This study was conducted at the creek of Universiti Malaysia Terengganu. Three types of artificial substrates were prepared which are the control treatment, the mixture of sediment and oatmeal treatment and the mixture of sediment and carrot pieces treatment. The artificial substrates were introduced to the bottom sediment of UMT creek. Samples were collected every five days of sampling and those samples were brought back to the laboratory for analysis. The meiobenthos that has been sorted out from the artificial substrates were counted and identified until its taxa. The most dominant meiobenthic fauna found in this project is from the Copepoda taxa. The most preferred artificial substrates colonized by meiobenthos in UMT Creek is the artificial substrates of mixture of sediment with carrot pieces treatment.

Kolonisasi Oleh Hidupan Meiobenthos Ke Atas Tanah Buatan Yang Didedahkan Ke  
Dasar Tanah Muara UMT

**ABSTRAK**

Kajian ini mengenai kadar kolonisasi oleh taksa-taksa meiobenthos yg berbeza terhadap tanah buatan yang disediakan dan didedahkan kepada habitat semula jadi mereka. Selain itu, kajian ini juga bermatlamat untuk mengkaji dinamik meiobenthos terhadap alam sekelilingnya. Kajian ini telah dijalankan di kawasan muara yang terletak di dalam kawasan Universiti Malaysia Terengganu. Sebanyak tiga jenis tanah buatan yang disediakan iaitu rawatan kawalan, rawatan yang mengandungi campuran tanah dan oatmeal, dan rawatan yang mengandungi tanah dan cebisan lobak. Kesemua jenis tanah buatan ditanam di dasar muara UMT ketika air surut. Sampel- sampel diperoleh sepanjang lima hari persampelan dan sampel-sampel dibawa ke makmal untuk dianalisis. Sampel meiobenthos yang telah diasingkan telah dikira dan dikenalpasti sehingga kelas taksa masing-masing. Hidupan meiobenthos yang paling dominan yang diperoleh adalah daripada taksa Copepoda dan rawatan tanah buatan yang paling dikolonisasi oleh meiobenthos adalah rawatan yang mengandungi campuran tanah dan cebisan lobak.