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Early growth of some marine harpacticoid species in laboratory condition / Busra Ibrahim.

PERPUSTAKAAN SULTANAH NUR ZAHIRAH  
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HAK MILIK  
PERPUSTAKAAN SULTANAH NUR ZAHIRAH UMT

**EARLY GROWTH OF SOME MARINE HARPACTICOID SPECIES IN  
LABORATORY CONDITION**

**By**

**Busra binti Ibrahim**

**Research Report submitted in partial fulfillment of  
the requirement for the degree of  
Bachelor of Science (Marine Biology)**

**Department of Marine Science  
Faculty of Maritime Studies and Marine Science  
UNIVERSITI MALAYSIA TERENGGANU  
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JABATAN SAINS MARIN  
FAKULTI PENGAJIAN MARITIM DAN SAINS MARIN  
UNIVERSITI MALAYSIA TERENGGANU

PENGAKUAN DAN PENGESAHAN LAPORAN  
PROJEK PENYELIDIKAN I DAN II

Adalah ini diakui dan disahkan bahawa laporan penyelidikan bertajuk:

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## LIST OF ABBREVIATIONS

g/L	Gram per liter
ml	Mililiter
mm	Milimeter
$\mu\text{m}$	Mikrometer
$\mu\text{mol m}^{-2} \text{s}^{-2}$	Mikromol per meter per second
$^{\circ}\text{C}$	Degree Celsius
ppt	Part per thousand
%	Percent

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## ABSTRACT

This study was conducted to compare the growth of three harpacticoid species which are *Schizopera knabeni*, *Paradactylopodia oculata*, and *Robertsonia knoxi* cultured in laboratory condition and also to observe their generation time and morphology changes (nauplii, copepodite, and adult). These harpacticoid copepods were obtained from seagrass patch at Merchang estuaries and cultured under laboratory controlled with temperature ranging between 24-27 °C and salinity around 16-26 ppt for 40 days. Copepods cultures were fed with 0.1 ml of baker's yeast (0.02 g/ L) daily. For population growth, *P. oculata* showed the highest population growth and the growth was more stable, while, *S. knabeni* showed the lowest population growth. The duration in their morphology changes was different for each species where *S. knabeni* showed the shorter generation time of life cycle that was 7 – 14 days than *R. knoxi* and *P. oculata*. The generation time for morphology changes of *R. knoxi* was between 9 – 19 days. Meanwhile, generation time of *P. oculata* was longer compared to two other species that was 14 – 21 days. Thus, high population growths of harpacticoid species are not strongly depending on the generation time of their life cycle.