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 Malaysian Applied Biology
 Volume 43, Issue 1, June 2014, Pages 31-39

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 Fatty acid profiling of benthic harpacticoid (*Pararobertsonia* sp.) exposed to environmental stresses (Article)

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Abstract

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Effect of various environmental stresses on the fatty acid (FA) profile of benthic harpacticoid copepod (*Pararobertsonia* sp.) was checked *In vitro*. Samples were exposed to different pH (5, 7 and 9) and salinity (15, 20, 25, 30 and 35 ppt) at constant temperature 25°C for 30 days. After the treatment, different fatty acid levels were determined using Gas Chromatography and Mass Spectrometry (GC-MS). Results clearly indicated the positive influence of the combined effect of environmental parameters on the fatty acid content in experimental samples. The detected FAs were ranging from C₅₋₂₄. Palmetic and oleic acids were in higher percentage in all the experiments. Results clearly indicated that pH7:25ppt & 35ppt at 25°C ambient water temperature would help in producing copepods (*Pararobertsonia* sp.) that expresses rich fatty acid profile with high EPA/DHA ratio.

Author keywords

 Environmental stress Fatty acid Harpacticoid copepod *Pararobertsonia* sp.

ISSN: 01268643

Source Type: Journal

Original language: English

Document Type: Article

Publisher: Malaysian Society of Applied Biology

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- 1 Ajiboye, O., Yakubu, A.F., Adams, T.E., Olaji, E.D., Nwogu, N.A.
 A review of the use of copepods in marine fish larviculture

 (2011) *Reviews in Fish Biology and Fisheries*, 21 (2), pp. 225-246. Cited 34 times.
 doi: 10.1007/s11160-010-9169-3
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 (2013) *Crustaceana*

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 (1999) *Aquaculture*
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