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## Trend of Meiobenthos Density and Composition in Karah Island, South China Sea

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### Abstract

Meiobenthos in Bidong Archipelago in coastal water of the South China Sea is hypothesised to have a certain trend of distribution particularly in the island ecosystem where it is usually having different type of sea bottom. Nonetheless, since it is located in a tropical area, the trend at the sub-tidal could be less obvious due to absent of clear season. Meiobenthic sampling was carried out in Karah Island, an island in Bidong Archipelago, from the intertidal, towards the sub-tidal zone covering the coral and non-coral area to see the trend in the density and composition. A transparent hand core was used to collect benthos samples. Nematoda and harpacticoid copepods dominated the intertidal and sub-tidal zone respectively. Harpacticoid copepods were higher in density in the non-coral sediment than the coral area. This could be due to the high content of silt and clay in the coral area (2.98% of silt and clay). The 2-dimension MDS analysis on the density data indicated the highest degree of scattering and an over-lapping condition for those intertidal and sub-tidal samples respectively. ANOSIM result showed that the degree of similarity was lower at the intertidal (70%) than the subtidal (reaching 90%) in the first sampling before both became no significant different in the second sampling. It could indicate the stable condition in the subtidal than the intertidal ecosystem. The comparatively low density of meiobenthos could indicate their response towards the environmental condition in the area which will only be confirmed by long term ecological study.

### Keywords

**Author Keywords:** Harpacticoid; island; meiobenthos; nematoda; South China Sea  
**Keywords Plus:** HARPACTICOID COPEPODS; VARIABILITY; MEIOFAUNA; REEF; COMMUNITIES; ABUNDANCE; MALAYSIA; ALGAE; FAUNA

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## Abstract

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## Author keywords

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