

Degradation process of organic matter by benthic communities at the oxygen minimum zone of the Arabian Sea

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Benthic foraminifera are major components among deep-sea benthic ecosystems and are known as major consumers of phyto-detritus, especially in low-oxygen areas. In an oxygen minimum zone where characterized by high organic matter inputs and subsequent hypoxic/dysoxic conditions, benthic foraminifera should play major role in the carbon cycling at the sediment-water interface. Here, we carried out both on board and *in situ* incubation experiments using manned submersible SHINKAI 6500. We try to clarify the foraminiferal feeding (carbon uptake) and respiration (mineralization) activities associate with oxygen gradients both across-sites and across-sediment-water interface.