

Microbiological material cycling in natural environments

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Keywords		Microorganisms, environment, material cycling, sulfur, methane				
Technical Support Skills		• Detection, identification and quantification of microorganisms using molecular biological techniques				

Research Contents

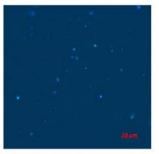
- Detection, identification and quantification of specific microorganisms using molecular biological techniques (e.g. cloning analysis, catalyzed reporter-deposition fluorescence *in situ* hybridization [CARD-FISH]).
- Research on microbiological material cycling in natural environments.
- Cultivation and isolation of novel microorganisms.
- Visualization of uncultivated microorganisms and their distribution pattern.

Recent research topics:

Detection and cultivation of anaerobic oil degrading microorganisms in estuaries Cultivation of biodegradable plastic producing bacteria Methane producing/oxidizing microorganisms in rice paddy soil



Rice paddies – a major source of methane.



DAPI stained microbes in lake water.



Organic matter tends to accumulate in estuary.



Sampling of sediments and cultivation.

Available Facilities and Equipment