Metadata Details

Title

Community analysis of Meiobenthos and Genetic diversity of major functional groups in Arctic Kongsfjorden

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Science Keywords

Category	Oceans
Topic	Marine Biology
Expedition Year	2015-2016
ISO Topic	Oceanography

Summary

Abstract

This proposal aims to evaluate the meiobenthic organisms for its community function and dynamics, genetic variability of the major meiofaunal functional groups like Harpacticoids, Ostracods, Polychaetes, Oligochaetes,, Kinorhyncha, Gastrotrichs, Nematodes, Foraminiferans etc. and its role in trophic processes specific to organic production-mineralization and carbon turnover rate . A suitable community structure based model of meiobenthic community would be evolved that would give an insight on the benthic processes in relation to the functional groups in Kongsfjord. Meiofauna in general, are the dominant taxon, affect detrital decomposition and carbon transformation. Even though preliminary studies suggests the abundance and diversity of macrobenthic fauna and meiobenthic nematodes in Kongsfjorden system (Bijoy Nandan et al., 2013 & Krishna Priya et al 2013), a comprehensive and in depth scientific information is greatly lacking on the meiobenthic component, specific to the community.

Purpose

This proposal aims to evaluate the meiobenthic organisms for its community function and dynamics, genetic variability of the major meiofaunal functional groups like Harpacticoids, Ostracods, Polychaetes, Oligochaetes,, Kinorhyncha, Gastrotrichs, Nematodes, Foraminiferans etc. and its role in trophic processes specific to organic production-mineralization and carbon turnover rate . A suitable community structure based model of meiobenthic community would be evolved that would give an insight on the benthic processes in relation to the functional groups in Kongsfjord. Meiofauna in general, are the dominant taxon, affect detrital decomposition and carbon transformation. Even though preliminary studies suggests the abundance and diversity of macrobenthic fauna and meiobenthic nematodes in Kongsfjorden system (Bijoy Nandan et al., 2013 & Krishna Priya et al 2013), a comprehensive and in depth scientific information is greatly lacking on the meiobenthic component, specific to the community.

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