

Metadata Details

Title

Investigation of cyanobacterial communities in microhabitats in Kongsfjorden with reference to water fluctuation and quality

Science Keywords

Category	Oceans
Topic	Marine Biology
Expedition Year	2017-2018
ISO Topic	Oceanography

Summary

Abstract

1. Documenting and enlisting various natural cyanobacterial communities present along Kongsfjorden in different specialized habitats 2. Assessment of physicochemical characteristics of various habitats in congruence with both spatial and temporal scales 3. Evaluate the effects of water fluctuation and quality in terms of the presence/absence/dominance of various cyanobacterial communities in microhabitats with focus being to measure the changes at the onset of the summer season and onset of the winter season 4. Phylogenetic and Evonumeric evaluation of purified cyanobacteria using sequences from 16S rRNA genes, folding of 16S-23S rRNA ITS region, rpoC1 gene, PC-IGS operon, psbA gene, rbcL gene and nifD gene. 5. Assess the overall effects of changing climate with respect to the effects of water fluctuations and quality on cyanobacterial communities of the microhabitats in Kongsfjorden.

Purpose

1. Documenting and enlisting various natural cyanobacterial communities present along Kongsfjorden in different specialized habitats 2. Assessment of physicochemical characteristics of various habitats in congruence with both spatial and temporal scales 3. Evaluate the effects of water fluctuation and quality in terms of the presence/absence/dominance of various cyanobacterial communities in microhabitats with focus being to measure the changes at the onset of the summer season and onset of the winter season 4. Phylogenetic and Evonumeric evaluation of purified cyanobacteria using sequences from 16S rRNA genes, folding of 16S-23S rRNA ITS region, rpoC1 gene, PC-IGS operon, psbA gene, rbcL gene and nifD gene. 5. Assess the overall effects of changing climate with respect to the effects of water fluctuations and quality on cyanobacterial communities of the microhabitats in Kongsfjorden.

Data Center