環境指標としての微生物

Microorganisms as Environmental Markers

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Abstract

Aquatic microorganisms are thought to indicate environmental conditions of their habitats. Both microbial biomass (standing stock) and microfloral composition are closely related to the degree of aquatic pollution such as eutrophication, and to the trophic structure of aquatic biological communities. This article briefly reviews the use of microorganisms as environmental markers to characterize thier natural habitats, taking examples from: (1) eutrophication gradients in coastal waters; (2) hydrothermal plumes; and (3) a deep-sea biological community associated with whale skeleton. Among the microbial environmental markers, the applicability of fatty acid analysis that suggests the possible *in situ* microbial activity is discussed.