

Diatom 15: 85-101 (英文)

濁川明男・長谷川康雄：福島県松川浦の底質表層軟泥中の珪藻遺骸群集と環境の変化

Akio Nigorikawa and Yasuo Hasegawa : Changes in the environment and diatom thanatocoenoses from superficial oozes from the bottom of Matsukawaura Lagoon, Fukushima Prefecture, northeast Japan

Abstract

Matsukawaura Lagoon in Fukushima Prefecture is known to be a brackish-water lagoon with a small entrance to the Pacific Ocean. Diatoms from superficial oozes from the bottom of this lagoon have been reported by Kosuge (1972). Since then, the lagoon has been dredged and shore protection constructed with concrete. In 1998 we investigated this lagoon again and analyzed the diatom assemblages.

In this paper we have attempted to compare the diatom assemblages and water environments of the two investigations (1966 and 1998). The results are as follows :

- (1) The taxa found in this area belong to 52 genera and comprise 136 species, 13 varieties and 1 forma.
- (2) In 1966 the lagoon was composed of seawater, polyhaline-water and mesohaline-water, but in 1998 it had changed to mostly seawater and narrow polyhaline-water.
- (3) Of the diatom assemblages, freshwater and freshwater~oligohaline species show a decrease of 10-20%, whilst marine and marine~polyhaline species have remarkably increased since 1966.
- (4) Small crustaceans that had inhabited the tidal sand beach disappeared because of dredging and of the construction of the concrete sea bank.

Key index words

brackish water, diatom assemblages, Matsukawaura Lagoon.