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濁川明男・長谷川康雄：青森県鷹架沼の珪藻遺骸群集と水環境

Akio Nigorikawa and Yasuo Hasegawa : Diatom thanatocenoses and aquatic environments of Lake Takahoko, Aomori Prefecture, Northeast Japan

Abstract

Lake Takahoko in Aomori Prefecture is known to be a brackish-water lake leading to the Pacific Ocean by a narrow waterway. Diatom thanatocenoses from surficial sediments and water properties such as temperature, DO, salinity, conductivity, turbidity and pH were investigated.

The results are as follows :

- (1) Most of the lake water is mesohaline, although oligohaline water exists partially in the innermost part of the lake.
- (2) Bottom sediments, from deeper than 2m water depth, are composed of black surficial ooze smelling strongly of H₂S.
- (3) A total 137 taxa, belonging to 40 genera and comprising 128 species and 9 varieties, were found in the surficial sediments. Diatom assemblages are composed of fresh and fresh-brackish water species (46.3-83.5%), brackish water species (6.5-25.0%), and marine and marine-brackish water species (10.0-36.0%).

Key index words

aquatic environments, brackish water, diatom thanatocenoses, Lake Takahoko