

Diatom 21: 107-118 (英文)

濁川明男<sup>1</sup>・長谷川康雄<sup>2</sup> : 青森県尾駸沼の珪藻群集

Akio Nigorikawa and Yasuo Hasegawa : Diatom assemblages of Lake Obuchi-numa, Aomori Prefecture, northeast Japan

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#### Abstract

Lake Obuchi-numa is located in Aomori Prefecture, northeast Japan and is known as a brackish-water lake, connected to the Pacific Ocean by a narrow water channel. The water qualities, i.e. pH, conductivity, turbidity, DO, temperature and salinity, were measured in 1997. At the same time surface layer oozes and epiphytic samples from aquatic plants or stakes were collected to analyze the diatom assemblages. In this paper the diatom assemblages from these samples and the hydrological conditions are reported. The results are as follows : 1) Most areas are contain polyhaline water, although mesohaline water partially exists in the innermost part of the lake. It is thought that the present water condition is caused by the extension of the water channel and dredging of the lake bottom. 2) The 99 taxa belonging to 42 genera and 32 taxa to 17 genera were found from the oozes and the epiphytic samples respectively. 3) The dominant species in the oozes were *Melosira moniliformis* and *Cocconeis scutellum*. On the other hand, the epiphytic samples were characterized by *Melosira moniliformis* and *M. nummuloides*.

Key index words : brackish water, diatom assemblage, Lake Obuchi-numa