

Diatom 27: 79-85 (和文)

渡辺 剛・上田晶子・赤星雄大・片野 登：秋田県の珪藻 5—八郎潟干拓地の支線排水路 (LD-G1) における珪藻群集

Tsuyoshi Watanabe, Akiko Ueda, Yudai Akaboshi and Noboru Katano: Diatoms in Akita Prefecture, northern part of Japan, part 5- Diatom assemblage from a drainage waterway (LD-G1) in Hachirogata polder

Abstract

A diatom assemblage in a drainage waterway (LD-G1) of the Hachirogata polder in Akita Prefecture was investigated. The waterway receives spring water with high concentrations of phosphate, and salinity load from the soils of paddy fields. The assemblage comprised 18 genera and 27 taxa, dominated by *Navicula gregaria* (48%) , and followed by *Navicula slesvicensis* (22%) , *Navicula salinarum* (12%) , *Nitzschia tubicola* (7%) and *Navicula lanceolata* (7%) . The most abundant taxa are eutrphentic or indifferent to saprobity, and circumneutral to alkaliphilous. Moreover, *N. salinarum* and *N. tubicola* usually grow in brackish water. Our results suggest that the high concentrations of phosphate, nitrogen and salinity in the LD-G1 water have an influence on the diatom composition.

Key index words: Akita Prefecture, diatom assemblage, drainage waterway, Hachirogata polder, phosphate