

Diatom 8: 7-10 (英文)

村上哲生・糟谷真宏：高度に汚染された水路にみられた *Gomphonema parvulum* Kützing の奇型

Tetuo Murakami and Masahiro Kasuya : Teratological variations of *Gomphonema parvulum* Kützing in a heavily polluted drainage channel

Abstract

Teratological variations of *Gomphonema parvulum* Kützing were observed in a paddy drainage channel with effluent of domestic sewage. More than 40% of the valves of *G. parvulum* were abnormal in winter. Abnormal frustules, including interrupted patterns of striations, irregularly directed striae and abnormal stigma, were of “Janus” type. The frequency of teratological forms was size-dependent. As valves decreased in length, the proportion of valves with abnormal striation increased. The senile change characterized by size reduction after rapid reproduction under high nutrient loading condition may cause those teratological variations.

Key index words

cell size reduction, *Gomphonema parvulum* Kützing, teratological variation, water pollution.