

Diatom 10: 1-7 (英文)

渡辺仁治・浅井一視：日本最強アルカリ温泉 (pH10.1) に出現した環境開拓者としての珪藻群集

Toshiharu Watanabe and Kazumi Asai : Diatom assemblage occurred as an environmental frontier community in a spa (pH10.1) which is the most alkaline hot spring in Japan

Abstract

The diatom assemblage in an alkaline hot spring which is the most alkaline spring in Japan with 10.1 in pH value was investigated. A total of 20 taxa belonging to 9 genera were recorded.

Among them, we paid an attention to the occurrence of unexpected two taxa e. g. *Tabellaria flocculosa* and *Achnanthes minutissima* var. *minutissima*. The former has been regarded as an acidophilous taxon by many investigators and the latter has occurred abundantly not also in various water environments with pH value above 5, but also in waters affected by the mining effluent.

We would like to call such the taxon as above mentioned and the community which occurred near the ends of environmental gradient as “environmental frontier species” and “environmental frontier community” respectively.

Key index words

alkalibiontic, alkaline spring, *Tabellaria flocculosa*, *Achnanthes minutissima* var. *minutissima*, environmental frontier species, environmental frontier community.