Diatom 1: 21-31 (英文)

渡辺仁治:無機酸性,無機アルカリ湖へ耐性をもつ珪藻と珪藻進化への考察

Toshiharu Watanabe : Tolerant diatoms to inorganic acid and alkaline lakes and some

evolutionary considerations

Abstract

The present research pursues to discuss the origin and evolution of freshwater diatoms based on the data obtained by the surveys for the inorganic acid lakes in Japan and alkaline lakes in Africa.

From this research, next two ideas were assumed.

- 1. The families included many acidophilous and acidobiontic taxa appeared at early phase in the process of diatom evolution, whereas these included many alkaliphilous and alkalibiontic taxa appeared at late phase in both the centric diatoms and the pennate.
- 2. Freshwater diatoms appared in earlier phase of the Earth's history than the marine.

Key index words

acidophilous diatoms, acidobiontic diatoms, alkaliphilous diatoms, evolution of the freshwater diatoms.