

Diatom 17: 47-58 (英文)

Janice L. Pappas and Eugene F. Stoermer : *Asterionella* Hassall (Heterokontophyta, Bacillariophyceae) taxonomic history and quantitative methods as an aid to valve shape differentiation

#### Abstract

The taxonomic history of the diatom genus *Asterionella* is sketchy at best. At present, delimitation of the genus, and species within it, are unclear. This is presented in a compilation of the taxonomy of *Asterionella*. In regard to species determination, valve shape variation is important. With the proliferation of splitting diatom taxa at the species level, the need for revision of *Asterionella* is apparent. We have provided some initial results concerning application of quantitative methods to valve shape variation in *Asterionella*. Seven shape variants may be present in the Great Lakes.

Key index words

*Asterionella*, diatoms, morphology, shape variation, taxonomy