

Diatom 18: 1-12 (英文)

福島 博・吉武佐紀子・小林艶子：日本の強酸性水域産, *Pinnularia* の新珪藻 3 種

Hiroshi Fukushima, Sakiko Yoshitake and Tsuyako Ko-Bayashi : Three new diatoms
Pinnularia from acid waters in Japan

Abstract

We investigated the taxonomic classifications of three of diatoms growing in inorganic, strongly acidic waters in Japan, and obtained the following results. The undulation of both margins of *Pinnularia braunii* var. *undulata* is observed in large individuals only, whereas in small individuals both margins are often swollen and resembles *Pinnularia braunii* in shape, though the valve breadth of *P. braunii* is narrower and consequently the status of *P. braunii* var. *undulata* should be changed.

The next taxon we investigated is often found growing together with *P. braunii*. The valve shape closely resembles that of *P. braunii*, but the valve breadth of this taxon is 4.5-6 mm, against 7.3-8.5 for *P. braunii*. Since the breadth is clearly smaller, it would seem appropriate to treat this as a new taxon, *P. gracilivalvis*.

We try to compare the photos of the lectotypes taxon, *P. acoricola* with specimens with equal valve length which is treated as *P. acoricola* by many Japanese researcher. the breadth is smaller in all Japanese specimens. Moreover, the valve shape of most of them is elliptical, whereas that in most *P. acoricola* in Japan is accepted as a new taxon, *P. osoresanensis*.

Key index words

acid waters, diatom, new taxa, *Pinnularia*, taxonomy