Diatom 10: 35-47 (英文)

Abstract
Species components of 1240 epilithic diatom assemblages were used for statistical studies on organic water pollution. The coexistence index of each pair of epilithic diatom species based on the order of tolerance index to organic water pollution was examined and compared (Asai 1995). As a result of the study, 709 epilithic diatom species were classified into three ecological groups (saprophilous species, indifferent species and saproxenous species) by the new method which was more reasonable from ecological viewpoint comparing with the old method (Watanabe et al. 1986). In this paper, we show all taxa with synonyms belonging to saprophilous and saproxenous species groups. The number of species belonging to the two groups increased and their ecological groups in some species changed. Almost all diatom taxa belonging to the two groups were cosmopolitans in the world. The diatom assemblage index to organic water pollution (DAIpo) can also be estimated more reasonably by using relative abundances of both saprophilous and saproxenous taxa which were listed in this paper, in each sample.

Key index words
DAIpo, saprophilous, taxa, saproxenous taxa, water pollution.