

Diatom 2: 9-18 (英文)

墨田 勉彰：付着珪藻群集による北陸河川汚濁の数量的評価（Ⅱ）調査河川の数量的総合評価点（RPId）

Michiaki Sumita : A numerical water quality assessment of rivers in Hokuriku district using epilithic diatom assemblage in river bed as biological indicator (Ⅱ). The values of RPId in surveyed rivers

Abstract

Water quality charts were made on 28 rivers in Hokuriku District using the DAIPo values developed by Watanabe and others (1984).

In these charts, sampling stations were established, considering pollution sources or tributaries, so as to obtain the present condition of water pollution exactly in each water system.

These charts can be said to be numerical assessment charts. From these numerical assessment charts, the River Pollution Index (RPId) proposed by Sumita and Watanabe (1983) were already obtained.

Judging from the values obtained, in the rivers in this district the values of DAIPo even in polluted stations are lower and the values of RPId in the whole water systems are higher than those values in the rivers in Kinki District. It is true that those rivers have polluted water areas, but they are only limited to local spots no wide range of water pollution can be found in their water systems.

The rivers of Tadori-gawa Water System and some tributaries of the River Kakehashi-gawa showed high values of RPId, because they either flow, in their upper and middle stream between mountains, or are mountain torrents.

Even the rivers in Kuzuryū-gawa Water System, the River Asano-gawa and the River Sai-gawa which flow near towns and cities in flat land show relatively high values of RPId comparable to the values of RPId comparable to the values in representative clean rivers in Kinki District. In the rivers of Noto peninsula contrary to the common expectation, the values of RPId were comparatively low except those in several rivers.

And the present conditions of water pollution were compared with those of 1974 in two rivers e. g. the River Daishoji-gawa and the River Iburibashi-gawa using values of RPId.

Key index words

numerical water quality assessment, river pollution index (RPId), organic water pollution, epilithic diatom assemblage.