

Diatom 4: 73-80 (英文)

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#### Abstract

The Ca-content of the inlandwaters of Japan is in general so poor that it is merely about one tenth of that of european and american inland-waters. But, around the limestone regions of our native land, there are a few inlandwaters which contain a considerable amount of calcium. It is to be regretted that the diatom vegetation of those waters is hitherto completely unknown.

The River Seri (Seri-kawa), located in the eastern side of Lake Biwa, Shiga Prefecture, was chosen for our investigation. Its total length along the axis is about 19 km. It takes its souce in the midslope of Mt. Ryozen (1084 m above the sea), which stands nearly on the prefectural boundary between Shia and Gifu, and is made up of limestone and schalstein. Its water is rich in lime (Ca 30~43 mg/l), alkaline (pH 8.1~8.4), and has the pretty high electric conductivity (180~214  $\mu$ s/cm). The whole course of the river receives no appreciable pollutants, although the river passes through the urban district of Hikone-City in its lower course and flows into Lake Biwa (the First Section).

The diatom flora of the River Seri is composed of 34 forms belonging to 20 genera, as shown in the Second Section. The diatom communities of seven selected stations are as described in the Third Section.

Key index words: river in limestone region, Japan, Ca-content of river-water, diatom flora, diatom community.