

Diatom 29: 24-41

Periphytic diatom flora of Koyama-ike pond, Tottori Prefecture, Japan

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Abstract

We studied the diatom flora of the Koyama-ike pond located in Tottori Prefecture in western Honshu, Japan. The pond is a closed lagoon facing the Japan Sea. Diatoms were collected monthly from a cedar board set at four stations near the pond shore from February 2010 to January 2011. The water was fresh to slightly brackish during the sampling period. A total of 225 diatom species belonging to 67 genera were found. These were all illustrated and identified except 18 unidentified ones. The predominant genera were *Navicula*, *Nitzschia* and *Gomphonema* represented by 27, 24 and 18 species, respectively. Our diatom flora is sometimes different to those of past studies in the 1960s, even though the pond salinity was mostly the same as during our sampling period. This difference may be partly attributed to the eutrophication.

Key index words: diatom flora, *Gomphonema*, Koyama-ike pond, *Navicula*, *Nitzschia*