

Diatom 30: 75-85

High sea-level event indicated by marine diatom fossils found in the Kameyama Formation, Tokai group, Tsu City, Mie Prefecture, central Japan

Yuichi MORI, Toru USAMI and Megumi SAITO-KATO

Abstract

Diatom assemblages in the Kameyama Formation of the Mid-Pliocene Tokai Group and distributed in Tsu City, Mie Prefecture, central Japan are investigated. They consist of 109 taxa in 49 genera, and are characterized by an mixture of both freshwater and marine diatoms. Among them, freshwater planktonic species *Aulacoseira praeislandica* (including *A. praeislandica* f. *curvata*) is predominant, and the marine species *Schuetzia annulata* is subordinate. The mixed flora may suggest that the Kameyama Formation was deposited in a lake-like condition, which was invaded intermittently by seawater in the Mid-Pliocene. This marine invasion may be caused by both local and global settings: this area was located at the southernmost end of the Tokai Group sedimentary basin, and the global climate at this time was warm and the sea level was high.

Key index words: *Aulacoseira praeislandica*, diatom, high sea level event, Mid-Pliocene, *Schuetzia annulata*, Tokai Group