

Diatom 8: 51-62 (英文)

柳沢幸夫：新潟堆積盆地の七谷層および寺泊層相当層の炭酸塩団塊から産出した中期中新世珪藻化石群

Yukio Yanagisawa : Middle Miocene fossil diatom assemblages from carbonate concretions in the Nanatani Formation and a formation equivalent to the Teradomari Formation in the Neogene Niigata sedimentary basin of Japan

#### Abstract

Middle Miocene fossil diatom assemblages were reported from the Nanatani and Minamiimogawa Formations in the Neogene Niigata sedimentary basin, central Japan. The diatoms in calcareous concretions from the upper part of the Nanatani Formation are completely pyritized and correlated to the upper part of the early Middle Miocene *Denticulopsis hyalina* Zone (NPD 4B) of Akiba (1986). The diatom flora in calcareous concretions from the upper part of the Minamiimogawa Formation are correlative with the latest Middle Miocene *Thalassiosira yabei* Zone (NPD 5C), and indicates that this formation is equivalent to the Teradomari Formation, one of the standard Middle Miocene stratigraphic units in the Niigata basin. The diatom floras from the two formations are composed of mixtures of abundant cold water species and rare warm water species, suggesting that the paleoceanographic environment of the Nanatani and Minamiimogawa Formations was influenced by cold water current, and to a lesser extent by warm water current.

Key index words

diatom, fossil, pyrite, Miocene, diatom biostratigraphy, Nanatani Formation, Japan