A new fossil *Thalassiosira* species, *T. mizunamiensis* Yanagisawa sp. nov., is described from the early Middle Miocene Oidawara Formation in Mizunami area, central Japan. This species is characterized by a subcentral fultoportula in the middle of the radius, a single rimoportula located at margin, decreasing areolae size toward the margin and distinctly ribbed fairy broad rim. *T. mizunamiensis* occurs from several early Middle Miocene sequences in Japan, ranging in age from the upper part of the *Denticulopsis praelauta* Zone (NPD 3B) to the lower part of the *D. lauta* Zone (NPD 4A) of Akiba's (1986) Neogene North Pacific diatom zonation. It is of potential biostratigraphic value in this stratigraphic interval.

**Key index words**

diatom, fossil, Japan, marine, Miocene, *Thalassiosira*. 

Yukio Yanagisawa: *Thalassiosira mizunamiensis* Yanagisawa sp. nov., a new fossil *Thalassiosira* species from the early Middle Miocene Oidawara Formation in Mizunami area, central Japan