Abstract
The diatom *Fragilaria striatula* was not known in Japan before the summer of 1983. In October of the year, this diatom was found in seawater collected from the coast of Kushiro in Hokkaido. After the discovery of this diatom in northern Japanese waters, this pelagic species has been known as common in neritic waters from the Straits of Tsugaru to the east coast of Hokkaido, especially in autumn and winter.

Key index words
*Fragilaria striatula*, the Straits of Tsugaru, Kushiro, Akkeshi, neritic diatom.