

Diatom 26: 17-39 (和文)

後藤敏一・窪田英夫：金鱗湖（大分県湯布院町）の珪藻

Toshikazu Gotoh and Hideo Kubota: Diatoms from Lake Kinrin in the Yufuin Town, Oita Prefecture, Japan

Abstract

Lake Kinrin, a small and shallow lake in Yufuin Town, Oita Prefecture receives two kinds of groundwater inflow. One is high-temperature water of 32-35°C from a hot spring and the other is relatively low-temperature water of 15-20°C from springs in the bottom and around the periphery of the lake. The diatom flora in the lake influenced by high-temperature water was compared with that of two sites lacking such influence. In total, 147 diatom taxa belonging to 46 genera were recorded. At the site influenced by the hot spring, *Achnanthes exigua* and *Nitzschia amphibia* were dominant, and *Pinnularia jocolata* was a characteristic species in the community. At the other sites, *Nitzschia fonticola*, *Fragilaria neoproducta*, *Planothidium lanceolatum*, *Martyana martyi*, and *Staurosira elliptica* were the dominant species.

Key index words : *Achnanthes exigua*, diatom flora, hot spring, Lake Kinrin, *Nitzschia amphibia*, *Pinnularia jocolata*