

三河湾の浚渫窪地周辺海域における底生生物群集の消長

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Abstract

Abundance of macrobenthos relative to dissolved oxygen was investigated at weekly intervals during summer, when the water temperature is high, in a sea area around subaqueous borrow pits in the north-eastern part of Mikawa Bay, central Japan. The concentrations of dissolved oxygen remained at almost 0 % in the borrow pit during summer. In contrast, these concentrations varied frequently over short periods in the shallower area around the borrow pits such that an oxygen-deficient environment did not remain for a long period. Very few species were found in the borrow pit although a few macrobenthos species, such as *Paraprionospio* sp. type A, occurred. Moreover, the densities and biomass of macrobenthos were also very low in the borrow pit. On the other hand, arthropoda, mollusca, cnidaria and annelida inhabited the shallower area around the borrow pits. The densities and biomass of arthropoda and mollusca immediately decreased as the concentration of dissolved oxygen decreased in early summer, and then gradually increased as the concentration recovered. In contrast, cnidaria and annelida hardly decreased in the oxygen-deficient environment. Macrobenthos, particularly arthropoda and mollusca, are greatly influenced by dissolved oxygen in a sea area around the borrow pits in Mikawa Bay.