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## **Abstract**

The possibility of using the fragment of tile was investigated in the present study, because in the near future of Japan, it may become more difficult to obtain marine sand on a massive scale. This study was conducted at a Tidal Flat Mesocosm System. The effect of the fragment of tile was assessed on the basis of the structure of benthic community, and larval settlement, post-settlement survival of the Japanese littleneck clam (*Ruditapes philippinarum*). The effects were compared to the dam bank sand (sand accumulated at Yahagi Dam). There was no remarkable difference in the benthic community such as meiobenthos, macrobenthos and the larval settlement, post-settlement survival of Japanese littleneck clam between the fragment of tile and dam bank sand. From these results, the possibility to using the fragment of tile as an alternative material to marine sand was suggested.