O76. LONG-TERM CHANGES IN ESTABLISHED ZOSTERA BED INSIDE OF THE BREAKWATER

Kenji Sugimoto¹

¹National Institute of Technology, Ube College, Japan
k-sugimoto@ube-k.ac.jp

The breakwater was constructed in 2000 on the coast of Shimokamagari Island in the Seto Inland Sea, Japan. A transplantation of eelgrass has been carried out in anticipation of the calming of the waves in 1999. The eelgrass distribution was expanded in 2002 after about two years of transplanted eelgrass. The purpose of this study is, if you have passed more than 10 years, distribution of eelgrass, reveal a change in the eelgrass beds growing environment. Reduces the seed supply from near the breakwater, it revealed a change in the genetic diversity of eelgrass. The distribution range of eelgrass in the breakwater has been extended to 2003, immediately after the transplanted eelgrass, gradually decreasing, in 2015 was narrower than the transplant range. In addition, benthic organisms and eelgrass leaves on the organism in eelgrass bed inside of the breakwater was less than the surrounding natural eelgrass beds outside breakwater. The wave reduction result in due to the increase in sediment deposition on leaves. The diversity of eelgrass gene in 2015 were analyzed by microsatellite method was lower than in 2006.