P43. SEASONAL VARIATION OF TRANSPORTATION OF ASARI CLAM, *RUDITAPES PHILIPPINARUM*, LARVAE IN HIROSHIMA BAY

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Hiroshima Bay is located in western part of the Seto Inland Sea, and there is high productivity of Asari clam. However, the landings amount of the clam was rapidly decreased and production areas came to be limited in the northern part (bay head). Here, the clam has the planktonic larval stage. Then, it is important to reveal the transportation process of larvae to clarify the habitat connectivity of the clam. Therefore, in this study, we try to clarify the transportation process of the clam larvae in the Hiroshima Bay by numerical model experiments. As a result of model experiments, in June (rainy and heating season), the larvae are transported to southward in western area of Hiroshima Bay. In November (dry and cooling season), distribution of larvae is limited in the northern area of Hiroshima Bay. These results are corresponding to the field observation results. In the Seto Inland Sea, it is said that there is spawning time of the clam twice a year (spring and autumn). However, in a recent Hiroshima Bay, the density of the larva in spring is very low than that in autumn. These facts suggest that the production of the clam is limited in the northern area of Hiroshima Bay because the density of the larva is low in spring when the larvae can extend to the south.