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National Research Program of Korean MEDHO research group : Development of the methods for controlling and managing marine ecological disturbance-causing and harmful organisms (MEDHO)

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Korean government defined 13 marine species as "marine ecological disturbance-causing and harmful organisms (MEDHO)" by the law. That 13 species is including toxic and harmful planktons, jellyfishes, starfishes, see mosses and macroalgaes. As considerable damage in the marine ecosystem was detected continuously, Korean government developed the research program on the MEDHO for developing the method for control and manage of them.The ultimate goals of the research program are to conduct taxonomy of the marine ecological disturbance-causing and harmful organisms (MEDHO), to reveal the outbreak mechanisms of MEDHO by understanding their distribution, ecophysiology and dispersal ability, to develop methods of effectively controlling and managing MEDHO, and to develop a forecast system for the origin and movement of MEDHO, restoring damaged marine ecosystems and maintaining healthy marine ecosystems.The scope of research is (1) Taxonomy and distribution of MEDHO; new MEDHO candidate species; ecophysiology, development, dispersal of the EDHO using diverse techniques (2) development of specific DNA primer for rapid identification of each species (3) methods of controlling the outbreak; a forecast system for the origin and movement (4) make a manual on identifying and managing MEDHO and (5) recommendations to governments for improving rules, law, and/or policy.When this research successfully achieves goals, the results will contribute to (1) suggest the new MEDHO species, to (2) control the MEDHO, (3) improve the quality of marine environments, and (4) minimize losses in fisheries, tourism, dinning industries. In addition, (5) the results will provide information and/or materials for fishery industry. Furthermore, (6) the manual will be used for managing effectively the MEDHO.

Biography

Jaeyeon Park has completed her PhD at Seoul National University at 2003. She is senior researcher and the director of Marine Ecology and Resource Convergence Center, Advanced Institutes of Convergence Technology. She is the one of research manager of MEDHO research group, chief in toxic and harmful plankton department.

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