

Preface

The 41st Joint Meeting of the UJNR Aquaculture Panel was conducted from October 2013 (October 9th - 13th at Sapporo and Hakodate, Hokkaido) through December 2013 (December 10th - 13th at Yokohama, Kanagawa and Miyako, Iwate). Through the long history of UJNR, Aquaculture Panel has contributed to development of aquaculture researches of both countries by means of various cooperative activities, i.e. the exchange of scientists, the exchange of literatures and promoting joint research projects. It is understood that the Aquaculture Panel is one of the most active UJNR Panels by both countries. Further positive action is expected to the UJNR Aquaculture Panel for a solution of the varied problems presenting in aquaculture of both countries.

The present special issue of Bulletin of Fisheries Research Agency is the proceedings of the 41st UJNR Aquaculture Panel Symposium "Advanced Aquaculture Technologies". This Symposium was a venue to exchange original, high-quality research on new and developing technologies that give promise to improve or revolutionize aquaculture, based on the key bottleneck issues identified at the 39th Scientific Symposium "The Present and Future of the Aquaculture Industry".

Further development of aquaculture is highly desired as a production source of important foods for human being all over the world. Stable supplies of safe and economical feed ingredients are requisite for the sustainable development of aquaculture. Nevertheless, in recent years we recognized some serious problems, which threatened the use of important feed ingredients like fish meal and oil. It is my great pleasure that the present UJNR proceedings containing high quality papers of the selected American and Japanese aquaculture scientists will help integrating aquaculture and fisheries technologies to optimize value from coastal resources, zoning for aquaculture, use of biotechnology in aquaculture and effects on natural population, and improvement of public perception.

Finally I would like to express my sincere gratitude to the colleagues involved in the UJNR Aquaculture Panel for their efforts to prepare and organize the symposium. I also would like to deeply thank the editorial board members for publishing the proceedings.

Fuminari Ito
Chair of UJNR Aquaculture Panel
Executive Director
Incorporated Administrative Agency,
Fisheries Research Agency