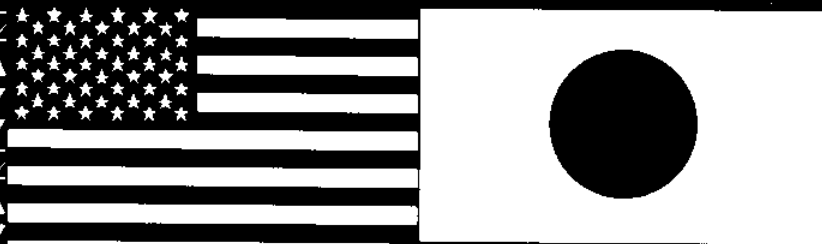


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Spawning and Maturation of Aquaculture Species



PROCEEDINGS OF THE TWENTY-EIGHTH
US-JAPAN NATURAL RESOURCES
AQUACULTURE PANEL

HAWAII

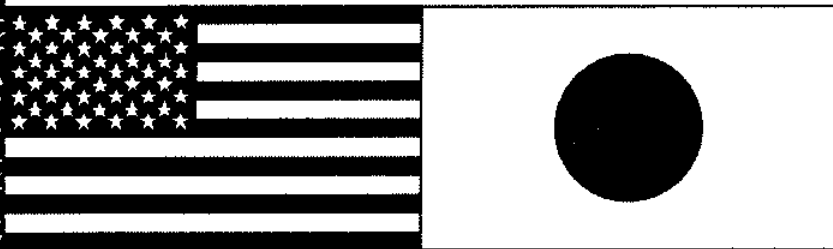
Edited by C.C.-T. Tamaru, C.S. Tamaru,
J.P. McVey, and K. Ikuta

UJNR Technical Report No. 28



Spawning and Maturation of Aquaculture Species

Kihei, Hawai'i U.S.A.
10-12 November 1999



Edited by Christine C.-T. Tamaru, Clyde S. Tamaru,
James P. McVey, and Kazumasa Ikuta

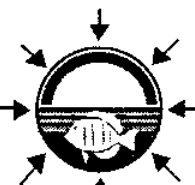
Panel Chairmen: Dr. James P. McVey, United States
Dr. Kunihiko Fukusho (acting for Dr. Mamoru Kato),
Japan

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PREFACE

The United States and Japanese counterpart panels on Aquaculture were formed in 1969 under the United States-Japan Cooperative Program in Natural Resources (UJNR). The UJNR-Aquaculture panels currently include specialists drawn from the government and academic departments most concerned with aquaculture. Charged with exploring and developing bilateral cooperation, the panels have focused their efforts on exchanging information related to aquaculture that could be of benefit to both countries.

The UJNR was begun during the Third Cabinet Level Meeting of the Joint United States-Japan Committee on Trade and Economic Affairs in January 1964. In addition to aquaculture, current subjects in the program include toxic microorganisms, air pollution, energy, forage crops, national park management, mycoplasmosis, wind and seismic effects, protein resources, forestry, and several joint panels and committees in marine resource research, development, and utilization.

Accomplishments of the Aquaculture panels include: increased communication and cooperation among technical specialists; exchanges of scientists and students; focusing of efforts to issues of major international concerns such as disease transmission and stock enhancement; exchanges of information, data, and research findings; annual meetings of the panel, a policy-coordinating body; administrative staff meetings; exchanges of equipment, materials, and samples; several major technical conferences; and beneficial effects of international relations.

The 28th U.S.-Japan Aquaculture Panel Business Meeting, two Symposia, and several field trips were held from 7-16 November 1999 on the islands of O'ahu, Maui, and Hawai'i. The primary Symposium was held in Kihei, Maui, from 10-12 November and was organized by program chair Dr. Charles E. Helsley, Sea Grant Director and Dr. Clyde S. Tamaru, Sea Grant Extension Aquaculture Specialist at the University of Hawai'i at Manoa. The mini-symposium was held on O'ahu covering current aquaculture research activity in the State of Hawai'i.



Participants in the 28th UJNR Aquaculture Panel Symposium, held in Kihei, Hawai'i, U.S.A., November 10-12, 1999.



Dr. Clyde Tamaru calling the meeting to order.
Photo courtesy of Dr. H. Ohta.

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