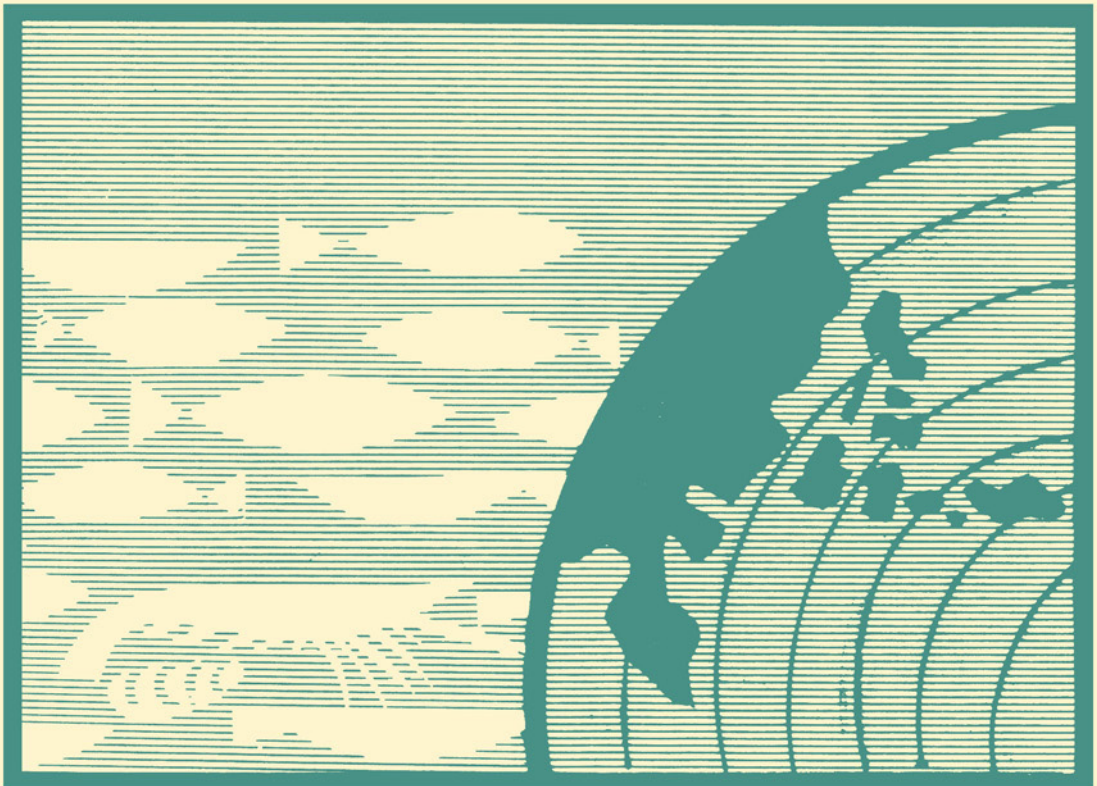


# Perspectives in Aquaculture Development in Southeast Asia and Japan

---

Contribution of the SEAFDEC  
Aquaculture Department



Perspectives in  
Aquaculture Development in  
Southeast Asia and Japan

---

# Perspectives in Aquaculture Development in Southeast Asia and Japan

---

## **Contributions of the SEAFDEC Aquaculture Department**

Proceedings of the Seminar on Aquaculture  
Development in Southeast Asia  
Iloilo City, Philippines  
8-12 September 1987

Organized jointly by  
SEAFDEC Aquaculture Department  
and  
the Government of Japan

Editors:  
J.V. Juario  
L.V. Benitez

AQUACULTURE DEPARTMENT  
SOUTHEAST ASIAN FISHERIES DEVELOPMENT CENTER  
Tigbauan, Iloilo, Philippines

1988

Copyright © 1988 by the Aquaculture Department of the Southeast Asian Fisheries Development Center

**ISBN 971-8511-13-X**

**AQUACULTURE DEPARTMENT  
SOUTHEAST ASIAN FISHERIES DEVELOPMENT CENTER**

*Mailing Address:*

P.O. Box 256  
Iloilo City 5000  
Philippines

or

Tigbauan, Iloilo 5021  
Philippines

Cable : **SEAFDEC Iloilo**  
Tel : **7-66-42**

*Manila Liaison Office:*

Suite 901, State Financing Center Bldg.  
Ortigas Ave., Mandaluyong 1501  
Metro Manila, Philippines

Tel. : **721-57-68 to 70**  
Cable : **SEAFDEC Manila**  
Telex : **29078 SEAFDC PH**  
Telefax : **7211342**

# CONTENTS

	Page
• Foreword	1
• Development of Aquaculture Industry in Southeast Asia: An Overview — Herminio R. Rabanal	3
• Aquaculture Development in Japan — Satoshi Mito and Osamu Fukuhara	39
• Aquaculture Development in Malaysia — Pit Chong Liong, Hambal Bin Hanafi, Zuridah Osman Merican, Gopinath Nagaraj	73
• The Philippine Aquaculture Industry — Arsenio S. Camacho and Natividad Macalincag-Lagua	91
• Aquaculture Development in Singapore — Leslie Cheong	117
• Aquaculture Development in Thailand — Boonsong Sirikul, Somsak Luanprida, Kanit Chaiyakam, Revadee Sriprasert	129
• Broodstock Management and Seed Production of <i>Penaeus monodon</i> (Fabricius) — F. Parado-Estepa and J. Honculada-Primavera	149
• Broodstock Management and Seed Production of Milkfish — Clarissa L. Marte	169
• Broodstock Management and Seed Production of the Rabbitfish <i>Siganus guttatus</i> (Bloch) and the Sea Bass <i>Lates calcarifer</i> (Bloch) — Marietta N. Duray and Jesus V. Juario	195
• Broodstock Management and Seed Production of Tilapia and Carp — Armando C. Fermin	211
• Farming of Mussels and Oysters — Hermenegildo S. Sitoy	231

• Nursery and Grow-out Operation and Management of <i>Penaeus monodon</i> (Fabricius) — Kaylin G. Corre	<b>249</b>
• Nursery and Grow-Out Operation and Management of Milkfish — I. Bombeo-Tuburan and Dante D. Gerochi	<b>269</b>
• Nursery and Grow-Out Operations for Tilapia and Carp — Manuel H. Carlos and Corazon B. Santiago	<b>281</b>
• Training Programs of SEAFDEC Aquaculture Department — J. Honculada-Primavera	<b>293</b>
• Summary of Workshop Recommendations	<b>303</b>
• List of Participants	<b>309</b>
• List of Guests	<b>314</b>