

JOURNAL OF THE  
WORLD AQUACULTURE SOCIETY

Volume 43

December 2012

No. 6

Review Article

- Nematodes as Live Food in Larviculture – A Review. Jens Brüggemann..... 739–763

Research Articles

- Effect of Macroalgae Protein Levels on Some Reproductive Aspects and Physiological Parameters for the Abalone, *Haliotis tuberculata coccinea* (Reeve 1846). Amaia Bilbao, Iker Uriarte, María del Pino Viera, Beatriz Sosa, Hipólito Fernández-Palacios, and Carmen M. Hernández-Cruz ..... 764–777
- Comparative Analysis of Different Fish Polyculture Systems. Leonardo J. G. Barcellos, Rosmari M. Quevedo, Luiz Carlos Kreutz, Filipe Ritter, Adalberto Pandolfo, Marcelo Hemkemeier, Luciane Colla, Leonardo B. Silva, Gessi Koakoski, and João G. S. da Rosa ..... 778–789
- Effects of Biofloc Reduction on Microbial Dynamics in Minimal-exchange, Superintensive Shrimp, *Litopenaeus vannamei*, Culture Systems. Andrew J. Ray, Gloria Seaborn, Luis Vinatea, Craig L. Browdy, and John W. Leffler..... 790–801
- Growth, Reproductive Performances, and Brood Quality of Long Snout Seahorse, *Hippocampus guttulatus*, Fed Enriched Shrimp Diets. Jorge Palma, José P. Andrade, and Dominique P. Bureau ..... 802–813
- Enhancement Effects of Dietary Wheat Distiller's Dried Grains with Solubles on Growth, Immunity, and Resistance to *Edwardsiella ictaluri* Challenge of Channel Catfish, *Ictalurus punctatus*. Erchao Li, Chhorn Lim, Phillip Klesius, and Chunfang Cai ..... 814–827
- Effects of Arginine-Deficient and Replete Diets on Growth Performance, Digestive Enzyme Activities and Genes Expression of Black Sea Bream, *Acanthopagrus schlegelii*, Juveniles. Fan Zhou, Jing Zhou, Qingjun Shao, Yue Wang, Hui Li, Song Gao, and Ying Hua..... 828–839
- Feed Intake, Feed Efficiency, Growth, Body Composition, and Blood Chemistry in Reciprocal Crosses of Wild and Farmed Olive Flounder, *Paralichthys olivaceus*. Jong-Hyun Kim, Hyun C. Kim, Jeong-Ho Lee, Jae K. Noh, Jung-Ha Kang, Kyung-Kil Kim, and Sang-Min Lee..... 840–847
- Progression of Blind-Side Hypermelanosis after Metamorphosis in Cultured Flounder, *Paralichthys olivaceus*. Duk-Young Kang and Hyo-Chan Kim..... 848–858
- An Anaerobic Slurry Module for Solids Digestion and Denitrification in Recirculating Minimal Discharge Marine Fish Culture Systems. Amir Neori and Dominick Mendola ..... 859–868
- Swimming Characteristics and Fertilizing Capacity of Meiogynogenetic Summer Flounder, *Paralichthys dentatus*, Spermatozoa. Ryan T. Brown, Heidi R. Colburn, David L. Berlinsky, Alex Ziolkowski, and George C. Nardi..... 869–877
- Divergent Selection for Shell Length in the Manila Clam, *Ruditapes philippinarum*. Liqiang Zhao, Xiwu Yan, Zhongming Huo, Feng Yang, and Guofan Zhang..... 878–884
- Comparison of Phenate and Salicylate Methods for Determination of Total Ammonia Nitrogen in Freshwater and Saline Water. Phuong Thuy T. Le and C. E. Boyd..... 885–889
- Research Note
- Settlement, Survival, and Post-Larval Growth of Red Abalone, *Haliotis rufescens*, on Polycarbonate Plates Treated with Germlings of *Ulva* sp. Pamela Muñoz, Rattcliff Ambler, and Cristian Bulboa ..... 890–895
- Communication
- Anesthesia and Transport of Brazilian Flounder, *Paralichthys orbignyanus*, with Essential Oils of *Aloysia gratissima* and *Ocimum gratissimum*. Simone Cristina Benovit, Luciane Tourem Gressler, Lenise de Lima Silva, Luciano de Oliveira Garcia, Marcelo Hideo Okamoto, Janaina dos Santos Pedron, Luis André Sampaio, Ricardo Vieira Rodrigues, Berta Maria Heinzmann, and Bernardo Baldisserotto ..... 896–900