

- 16 *Vibrio* Control In Shrimp Farming – Part I. Hatcheries
Stephen G. Newman, Ph.D.
- 18 Stress-*Vibrio* Dynamics During High-Density, Zero-Exchange Production Of White Shrimp
Tzachi M. Samocha, Ph.D.; David I. Prangnell, Ph.D.; Leandro F. Castro, M.S.; Susan Laramore, Ph.D.
- 22 **The Bottom Line**
Feed Trays – The Good, The Bad, The Ugly
Thomas R. Zeigler, Ph.D.; Scott E. Horton, M.S.
- 25 **Sustainable Aquaculture Practices**
Embodied Resource Use In Feed-Based Aquaculture
Claude E. Boyd, Ph.D.; Aaron McNevin, Ph.D.
- 28 **Soy-Fed Fish News**
Soybeans: Truly Sustainable Feed Ingredient?
Part II. Non-GMO Alternatives, Sustainability Certification
Kelly Coleman
- 30 Diets Affect Abalone Meat Quality, Shell Color
Zhi Yong Ju, Ph.D.; Cecilia Viljoen
- 32 Parasitism Enhances Tilapia Susceptibility To *Flavobacterium columnare*
De-Hai Xu, Ph.D.; Craig Shoemaker, Ph.D.; Benjamin LaFrentz, Ph.D.
- 34 National Broodstock Improvement Network – Concept For Breaking Inbreeding/Disease Feedback Loop
Roger W. Doyle, Ph.D.; Cherdak Virapat, Ph.D.; Wongpathom Kamonrat, Ph.D.
- 36 Plankton Communities In Shrimp Monoculture, Integrated Biofloc System
Dr. Alfredo Olivera Gálvez, Clarissa Vilela Figueiredo da Silva Campos, Ítala Gabriela Sobral dos Santos, Yllana Ferreira Marinho, Dr. Luis Vinatea, Luis Otavio Brito
- 40 Study Seeks Candidates For Blue Shrimp Polyculture In New Caledonia
Dr. Trung Cong Luong, Dr. Sébastien Hochard, Florence Royer, Dr. Hugues Lemonnier, Pr. Yves Letourneur
- 42 Coastal Aquaculture Must Adapt To Climate Change In Bangladesh
Nesar Ahmed, Ph.D.
- 44 Certified Clarity In Aquaculture – Defined Tiers Could Provide Clearer Framework
Michael Thusty, Ph.D.; Øisten Thorsen, M.S.
- 46 FAO Fish Indices Enhance Global Seafood Price Evaluations
Dr. Frank Asche, Dr. Sigbjørn L. Tveterås
- 50 **Seafood and Health**
Nutrition, Food Security Take Center Stage
Roy D. Palmer, FAICD
- 52 **Food Safety And Technology**
Human Enteric Viruses In Shellfish
Part I. Rotaviruses
George J. Flick, Jr., Ph.D.; David D. Kuhn, Ph.D.
- 54 **U.S. Seafood Markets**
Paul Brown, Jr.; Janice Schreiber; Angel Rubio
- 58 Real-Time PCR Offers Sensitivity, Specificity In Detecting AHPND Plasmid
Jee Eun Han, DVM, Ph.D.; Kathy Tang, Ph.D.; Carlos Pantoja, Ph.D.; Brenda White; Donald Lightner, Ph.D.
- 62 Peracetic Acid Products Expand Sanitizing, Organic Water Treatment Options
Lars-Flemming Pedersen, Ph.D.; Alfred Jokumsen; Villy Juul Larsen; Niels Henrik Henriksen
- 64 **Aquaculture Engineering**
TAN, Other Water Quality Factors Affect Nitrification Rates In Biofilters
Thomas M. Losordo, Ph.D.; Dennis P. DeLong, MSM; Todd C. Guerdat, Ph.D.
- 66 Emerging Trends In Salmoid RAS
Part II. System Enhancements
Steven Summerfelt, Ph.D.; John Davidson, M.S.; Travis May; Christopher Good, DVM, Ph.D.; Brian Vinci, Ph.D.
- 68 Liposomes Open New Doors In Larval Fish Nutrition
Matt Hawkyard, Ph.D. Candidate; Chris Landgon, Ph.D.; Mark Drawbridge, M.S.; Kevin Stuart, M.S.
- 72 Aquaculture Effluent Partially Replaces Growing Mix For Plant Production
Jason Danaber, Ph.D.; Jeremy Pickens; Jeffrey Sibley, Ph.D.; Jesse Chappell, Ph.D.; Terrill Hanson, Ph.D.