



WORLD AQUACULTURE 2015

Aquaculture For Healthy People, Planet and Profit

May 26-30, 2015
Jeju Exhibition & Convention Center
Jeju, Korea

THE ANNUAL INTERNATIONAL CONFERENCE & EXPOSITION OF
WORLD AQUACULTURE SOCIETY
ASIAN-PACIFIC CHAPTER, WAS
KOREAN CHAPTER, WAS

HOSTED BY
Korean Society of Fisheries and Aquatic Science
Jeju Special Self-governing Province
Jeju Special Self-governing Provincial Council
Jeju Fish-Culture Fisheries Cooperatives




ASSOCIATE SPONSORS
Aquaculture Engineering Society
International Association of Aquaculture Economics & Management



PREFACE

World Aquaculture 2015

Welcome to World Aquaculture 2015, the annual international conference and exposition of the World Aquaculture Society (WAS). This year's annual meeting is co-organised with the Asian-Pacific Chapter of the WAS and the Korean Chapter of the WAS. On behalf of the World Aquaculture Society, its chapters and our co-hosts: the Korean Society of Fisheries and Aquatic Science, the Jeju Special Self-governing Province, the Jeju Special-governing Provincial Council, and the Jeju Fish-Culture Fisheries Cooperative, it is my pleasure to welcome you Jeju, Korea. We hope you enjoy and benefit from the conference, the trade show, and all the history and culture that Jeju has to offer.

This year's conference theme, *Aquaculture For Healthy People, Planet and Profit*, highlights the importance of aquaculture in global seafood production, recognizes that aquaculture products form a healthy and nutritious component of our diet, and is a sustainable and economically important sector, especially in many rural and coastal areas of the world.

To support this theme, we have three plenary speakers: **Dr. Kang-sen Mai**, Professor of aquaculture nutrition, Ocean University of China, Qingdao, China, **Shakuntala Haraksingh Thilsted**, Senior Nutrition Adviser at WorldFish Center in Bangladesh, and **Dr. Young-hoon Jung**, Head of Fisheries Policy Department, Ministry of Oceans and Fisheries, who will speak to aspects related this year's theme at the Plenary session. As well, we have organised the 1st AquaForum, which has been specifically created to benefit industry professionals with a full day of industry-focussed presentations. The trade show features over 150 exhibitors. And lastly, the main scientific program at the conference features 56 sessions over four days, covering a diverse array of aquaculture-related topics and speakers, as well as a dedicated poster session.

There will of course be many social events (welcome reception, student reception, President's reception, happy hours) that are important occasions to network with new and familiar colleagues. As well, there are farm tours and visits to regional site of interests that offer up a flavour of the diverse culture and scenery that exists in this special UNESCO World Natural Heritage site.

We want to thank and recognize the many people who have helped to organise and sponsor this event and to also acknowledge Jeju Special Self-Governing Province Governor, **Mr. Won, Heeryong**, Chairperson of Jeju Special Self-Governing Provincial Council, **Mr. Koo, Sung-Ji**, and Director General of Marine and Fisheries Bureau of Jeju Provincial Government, **Mr. Lee, Saeng-Gi**. As you walk the trade show, mingle in the hallways, and attend presentations, please remember to recognize the important contribution of the conference sponsors and all the people that work tirelessly and volunteer some long hours to prepare and organize this annual event.

Again on behalf of the World Aquaculture Society, our conference organising team, and our co-hosts, welcome to World Aquaculture 2015 and Jeju. We do hope you profit from the occasion!

G. Jay Parsons, PhD, International Chair WA'15 Steering Committee
Albert Choi, PhD., Co-Chair WA'15 Steering Committee
Roy Palmer, International Chair WA'15 Program Committee
S. Charles Bai, PhD, Co-Chair WA'15 Program Committee

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WA 2015 JEJU

World Aquaculture 2015 Jeju

ABSTRACTS

CHARACTERIZATION OF THE OUTER MEMBRANE PROTEIN (OMP) OF *Vibrio alginolyticus* AND *Vibrio vulnificus* ISOLATED FROM DISEASED GROUPER (*Ephinephelus* sp)

A.R. Mohd-Jolharry *, N.Y. Nik Haiha, M. Zamri-Saad A. Siti Zahrah and M., Nur-Nazifah.

Faculty of Science,
Universiti Putra Malaysia,
43400 Serdang, Malaysia
jolharryrazak@gmail.com

Vibrio alginolyticus and *Vibrio vulnificus* have been identified as the causative agents for vibriosis in groupers resulting in high mortality. For this reason, a study was conducted to characterize the outer membrane proteins (OMPs) and to determine the most antigenic protein of both *Vibrio* species for potential vaccine candidate. OMP characterization and identification were determined using the Sodium Dodecyl Sulfate-Polyacrylamide Gel Electrophoresis (SDS-PAGE) while the antigenicity was determined using the Western immunoblot technique. The results revealed that the OMP of *V. alginolyticus* and *V. vulnificus* were located at 33kDa and 50kDa and at 33kDa, 40kDa, 48kDa and 75kDa, respectively.

Further study by western immunodetection showed that the most antigenic protein of *V. alginolyticus* was the 33kDa while *V. vulnificus* were the 33kDa and 75kDa. The 33kDa of both *V. alginolyticus* and *V. vulnificus* showed cross-reaction. The antigenic 33kDa protein band can be a potential vaccine candidate against both species.

FIGURE 1: Western immunodetection for *V. alginolyticus*

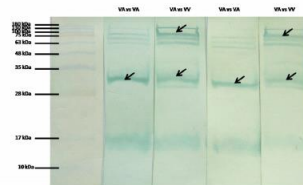
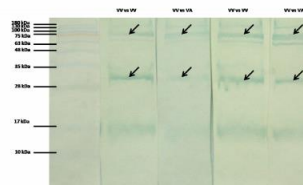


FIGURE 2: Western immunodetection for *V. vulnificus*

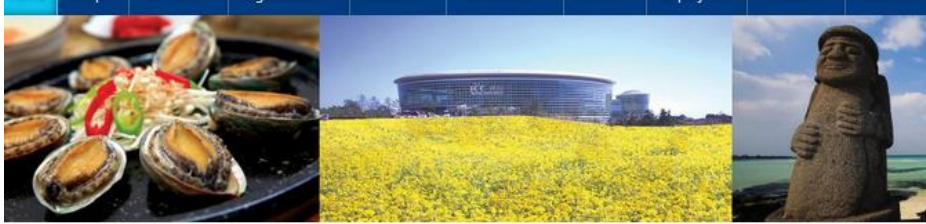




World Aquaculture 2015
Jeju, Korea

Diseases, Histology, Drugs & Chemotherapeutics - continued

Thursday, May 28, 2015 09:00 - 16:30 Samda Hall B	
Chair: K. Pani Prasad, Olivier Decamp, M D Heo, M J Oh, M S Heo, K H Park, Woojai Lee	
9:00	<p>Sung-Hyun Kim Abstract Text</p> <p>L PROTEIN DETERMINES THE TEMPERATURE SENSITIVITY IN VITRO OF TWO STRAINS OF VIRAL HEMORRHAGIC SEPTICEMIA VIRUS (VHSV) GENOTYPE IV</p>
9:20	<p>Seung-Hyeon Kim Abstract Text</p> <p>Seasonal variation in kinetoplastid parasite Azumiobodo hoyamushi infection in benthic organisms on the southern coast of Korea</p>
9:40	<p>Suparat Taengchaiyaphum Abstract Text</p> <p>EVALUATION OF CALIBRIN®-Z AGAINST <i>Vibrio</i> parahaemolyticus TOXINS THAT CAUSE EARLY MORTALITY SYNDROME EMS IN WHITE SHRIMP <i>Litopenaeus vannamei</i></p>
10:00	<p> Nathinee Munkongwongsiri Abstract Text</p> <p>EFFECTS OF POSTLARVAL QUALITY ON THE OCCURRENCE OF EARLY MORTALITY SYNDROME IN FARM-RAISED PACIFIC WHITE SHRIMP <i>Litopenaeus vannamei</i> IN THAILAND</p>
10:20	<p>Tae Ho Lee Abstract Text</p> <p>ANESTHETIC AND PHYSIOLOGICAL EFFECT OF CLOVE OIL AND LIDOCAINE-HCL ON THE GRASS PUFFER, <i>Takifugu niphobles</i></p>
11:10	<p>Tirawat Rairat Abstract Text</p> <p>EFFECT OF <i>Macleaya cordata</i> EXTRACT ON PREVENTION OF <i>Vibrio harveyi</i> INFECTION IN PACIFIC WHITE SHRIMP <i>Litopenaeus vannamei</i></p>
11:30	<p>Pajaree Jueliang Abstract Text</p> <p>EFFECTS OF PROBIOTICS ON GROWTH, SURVIVAL, TOTAL <i>Vibrio</i> spp. IN INTESTINE AND SURVIVAL RATE AFTER CHALLENGE WITH <i>V. harveyi</i> OF PACIFIC WHITE SHRIMP <i>Litopenaeus vannamei</i> REARING</p>
11:50	<p>Muhammad Muhammad Abstract Text</p> <p>PREVALENCE AND INFECTIVITY OF White spot syndrome virus IN THE DAGGERBLADE GRASS SHRIMP <i>Palaemonetes pugio</i></p>
12:10	<p> Wansadaj Jaroenram Abstract Text</p> <p>ONE BASE PAIR DELETION IS ASSOCIATED WITH REDUCTION OF VIRULENCE IN AUSTRALIAN <i>Penaeus stylirostris</i> DENSOVIRUS</p>
12:30	<p>Gias U. Ahmed Abstract Text</p> <p>TESTING EFFICACY OF STIMUVITS ON PANGASIU (Pangasianodon hypophthalmus) CULTURE IN BANGLADESH</p>
14:30	<p>Dung Tu Abstract Text</p> <p>COMMON DISEASES IN GROW OUT STAGE OF RED TILAPIA CULTURED IN THE MEKONG DELTA, VIETNAM</p>
14:50	<p>Young Ghan Cho Abstract Text</p> <p>SEQUENCE POLYMORPHISM IN ITS (INTERNAL TRANSCRIBED SPACER) AND 18S rDNA OF <i>Perkinsus olseni</i> ISOLATES FROM MANILA CLAM <i>Ruditapes philippinarum</i> IN KOREAN WATER</p>
15:10	<p>Ki-Woong Nam Abstract Text</p> <p>Temperature-dependent development of the soft tunic syndrome in the ascidian <i>Halocynthia roretzi</i></p>
15:30	<p>Abdul Razak Mohd-Joharry Abstract Text</p> <p>CHARACTERIZATION OF THE OUTER MEMBRANE PROTEIN (OMP) OF <i>Vibrio alginolyticus</i> AND <i>Vibrio vulnificus</i> ISOLATED FROM DISEASED GROUPER (<i>Epinephelus</i> sp)</p>
15:50	<p>K. Pani Prasad Abstract Text</p> <p>NANOTECHNOLOGY IN FISH HEALTH MANAGEMENT</p>



World Aquaculture 2015 - Meeting Abstract

Add to Calendar

CHARACTERIZATION OF THE OUTER MEMBRANE PROTEIN (OMP) OF *Vibrio alginolyticus* AND *Vibrio vulnificus* ISOLATED FROM DISEASED GROUPER (*Ephinephelus sp*)

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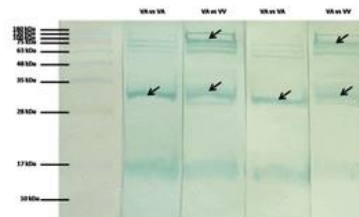


FIGURE 2: Western immunodetection for *V. vulnificus*

