The University of Arizona

Inter-laboratory Calibration (Ring test)

Disease Diagnosis in Marine Shrimp Culture through the use of PCR/RT-PCR

Organized by the Aquaculture Pathology Laboratory (UAZ-APL), School of Animal and Comparative Biomedical Sciences, University of Arizona, Tucson, AZ 85721 USA.

Mission:
As an OIE Reference Laboratory and an USDA-APHIS approved laboratory for crustacean pathogens, the University of Arizona’s Aquaculture Pathology Laboratory has been routinely implementing Ring Tests for diagnostic laboratories since 2005. The Ring Test services are specifically offered to laboratories involved in detection of shrimp pathogens by the use of molecular methods such as PCR. The purpose of the Ring Test is not only to determine proficiency, but also to help improve performance and to determine if the test methods in use are reliable and reproducible. This process helps assure the clinician, regulatory officials or the public, that the results provided are accurate, sensitive and specific.

History:
UAZ-APL embarked on this project in 2005 at the request of the Mexican government that recognized the crucial role aquaculture PCR laboratories play in controlling and managing disease outbreaks. Since then, the list of participating countries has been growing to include Belize, Brazil, Brunei, Colombia, Costa Rica, Ecuador, India, Madagascar, Nicaragua, Panama, Philippines, Saudi Arabia, Singapore, Thailand, Vietnam and the USA.

Benefits of Participating:
- Knowing the level of proficiency of your PCR laboratory.
- Getting expert advice to improve proficiency on the use of PCR/RT-PCR.
- Confidentiality. Each laboratory is assigned a code letter, so the results are completely confidential.
- Although a certification is not provided, our reports have been used to prove competency and apply for certification.
Strategy:

- The Ring test service is offered twice a year, during the months of February and August. A laboratory may choose to participate in either one or both ring tests.
- Each laboratory is provided a panel of 10 coded tissue samples fixed in 95% ethanol.
- The following pathogens are represented in the panel: WSSV, IHHNV, NHP, TSV, YHV and IMNV. A specific pathogen free (SPF) tissue is also included. $PrNV$ can be included for an additional cost.
- There are no specifically required procedures, so there is no need to change or implement new techniques. Each laboratory uses their routine methods to analyze the Ring test samples.
- Laboratories have 7 working days, from receipt of the sample panel, to return the results of the testing to the UAZ-APL.
- UAZ-APL provides a report that includes: evaluation of results and, if necessary, suggestions for improving proficiency.

Participation:

Participation is limited. Participation requests are taken one month prior to the scheduled Ring Testing. A call for Ring test is sent out early on January and July.

Cost:

The fee for the Ring Test is $1,000.00 USD for the panel of WSSV, IHHNV, NHP, TSV, YHV and IMNV. (Plus shipping & Handling)
For the panel including $PrNV$ the fee is $1,170.00 USD (Plus shipping & Handling).

To Apply:

Complete the following application form. Be sure to indicate the panel you wish to analyze. Email the application form to: cpantoja@email.arizona.edu and solangel@email.arizona.edu

Need more information?
Contact: Dr. Carlos R. Pantoja
The University of Arizona
Department of Veterinary Science & Microbiology
Aquaculture Pathology Laboratory
1117 E. Lowell St., Room 106
Tucson, AZ 85721
Phone: (520) 621-4438
Fax: (520) 621-4899
Email: cpantoja@email.arizona.edu
## RING TEST FOR PCR LABORATORIES

Please fill in the right column and return to:

cpantoja@u.arizona.edu

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<thead>
<tr>
<th>I wish to participate in the</th>
<th>□ February Ring Test</th>
<th>□ August Ring Test</th>
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### INVOICING INFORMATION

- Contact Name: 
- Company/Laboratory name: 
- E-mail address: 
- Mailing address: 
- Phone number: 
- Method of Payment: □ Credit card □ Wire transfer □ Check
- Optional: RFC# or Tax ID#

### SAMPLE SHIPPING INFORMATION

- Contact name: 
- Company/Laboratory name: 
- Shipping Address: 
- Phone number (required): 
- FEDEX account number (or) 
- DHL account number

### FINAL REPORT INFORMATION

- Contact name: 
- Company/Laboratory name: 
- E-mail address: 
- Mailing address: 
- Phone number: