WOAH Reference Laboratory Reports Activities 2023
Activities in 2023
This report has been submitted : 7 juin 2024 04:49

Laboratory Information

Name of disease (or topic) for which you are a designated WOAH Reference Laboratory: Infection with white spot syndrome virus

Address of laboratory: Chinese Academy of Fishery Sciences 106 Nanjing Road, Qingdao Shandong 266071

Tel: +86 532 858 230 62 ext 812

E-mail address: zhangql@ysfri.ac.cn

Website:

Name (including Title of Head of Laboratory (Responsible Official): Dr. Qingli Zhang, Senior Researcher

Name (including Title and Position) of WOAH Reference Expert: Dr. Qingli Zhang, Senior Researcher

Which of the following defines your laboratory? Check all that apply: Research agency Academic institution

TOR1: DIAGNOSTIC METHODS

1. Did your laboratory perform diagnostic tests for the specified disease/topic for purposes such as disease diagnosis, screening of animals for export, surveillance, etc.? (Not for quality control, proficiency testing or staff training)

Yes

<table>
<thead>
<tr>
<th>Diagnostic Test</th>
<th>Indicated in WOAH Manual (Yes/No)</th>
<th>Total number of test performed last year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Nationally</td>
</tr>
<tr>
<td>Indirect diagnostic tests</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PCR</td>
<td>(Yes)</td>
<td>210</td>
</tr>
<tr>
<td>Real-time PCR</td>
<td>(Yes)</td>
<td>657</td>
</tr>
<tr>
<td>Histopathology</td>
<td>(Yes)</td>
<td>10</td>
</tr>
<tr>
<td>Direct diagnostic tests</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TOR2: REFERENCE MATERIAL

2. Did your laboratory produce or supply imported standard reference reagents officially recognised by WOAH?

No

3. Did your laboratory supply standard reference reagents (nonWOAH-approved) and/or other diagnostic reagents to WOAH Members?

Yes

<table>
<thead>
<tr>
<th>TYPE OF REAGENT AVAILABLE</th>
<th>RELATED DIAGNOSTIC TEST</th>
<th>PRODUCED/ PROVIDE</th>
<th>AMOUNT SUPPLIED NATIONALLY (ML, MG)</th>
<th>AMOUNT SUPPLIED INTERNATIONALLY (ML, MG)</th>
<th>NO. OF RECIPIENT WOAH MEMBER COUNTRIES</th>
<th>COUNTRY OF RECIPIENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>WSSV nucleic acid</td>
<td>Real-time PCR</td>
<td>provide</td>
<td>100000 reaction</td>
<td>0</td>
<td>1</td>
<td>AUSTRALIA, CHINA (PEOPLE’S REP OF), HONG KONG, INDIA, INDONESIA, MALAYSIA, PAKISTAN, PHILIPPINES, SINGAPORE,</td>
</tr>
</tbody>
</table>
4. Did your laboratory produce vaccines?
No

5. Did your laboratory supply vaccines to WOAH Members?
No

**TOR3: NEW PROCEDURES**

6. Did your laboratory develop new diagnostic methods for the designated pathogen or disease?
No

7. Did your laboratory validate diagnostic methods according to WOAH Standards for the designated pathogen or disease?
No

8. Did your laboratory develop new vaccines for the designated pathogen or disease?
No

9. Did your laboratory validate vaccines according to WOAH Standards for the designated pathogen or disease?
No

**TOR4: DIAGNOSTIC TESTING FACILITIES**

10. Did your laboratory carry out diagnostic testing for other WOAH Members?
No

11. Did your laboratory provide expert advice in technical consultancies on the request of an WOAH Member?
Yes

<table>
<thead>
<tr>
<th>NAME OF THE WOAH MEMBER COUNTRY RECEIVING A TECHNICAL CONSULTANCY</th>
<th>PURPOSE</th>
<th>HOW THE ADVICE WAS PROVIDED</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHINA (PEOPLE’S REP. OF) INDIA ITALY UNITED STATES OF AMERICA</td>
<td>Aquaculture biosecurity technology, especially the progressive management pathway (PMP/AB) advocated by FAO and WOAH, has shown extraordinary effect in reducing the incidence rate and AMR of aquaculture. It is an efficient technical approach to address the challenges of major and new diseases in aquaculture and the excessive use its implementation can improve the production and quality of aquaculture, reduce the safety risk of aquaculture food, and contribute to the realization of “One Health” and Blue Transformation.</td>
<td>Launching event of the FAO Reference Centers for Antimicrobial Resistance (AMR) and Aquaculture Biosecurity. 26-27 June, 2023 Rome, Italy</td>
</tr>
<tr>
<td>CHINA (PEOPLE’S REP. OF)</td>
<td>Aiming to further enhance the industry’s understanding of the importance of antibiotic resistance of pathogenic microorganisms in aquaculture, strengthen the work of microbial resistance in aquaculture, including crustacean aquaculture, continuously promote the reduction of drug use in aquaculture, and assist in the green and healthy development of aquaculture.</td>
<td>The “2023 Week for Enhancing Antibiotic Resistance” special lecture Online Activity 17 November, 2023, Qingdao, China</td>
</tr>
</tbody>
</table>

**TOR5: COLLABORATIVE SCIENTIFIC AND TECHNICAL STUDIES**

12. Did your laboratory participate in international scientific studies in collaboration with WOAH Members other than the own?
No

13. In exercising your activities, have you identified any regulatory research needs* relevant for WOAH?

TOR6: EPIZOOLOGICAL DATA

14. Did your Laboratory collect epidemiological data relevant to international disease control?
Yes

IF THE ANSWER IS YES, PLEASE PROVIDE DETAILS OF THE DATA COLLECTED:

The surveillance area for WSD involved in 10 provinces of China. The major surveillance target species were shrimp. In total, WSSV was detected in samples with an average (within batch) positive rate of 3.8%.

15. Did your laboratory disseminate epidemiological data that had been processed and analysed?
Yes

IF THE ANSWER IS YES, PLEASE PROVIDE DETAILS OF THE DATA COLLECTED:

We submitted the data to Bureau of Fisheries, Ministry of Agriculture and Rural Affairs, P.R. China.

16. What method of dissemination of information is most often used by your laboratory? (Indicate in the appropriate box the number by category and list the details in the box)

a) Articles published in peer-reviewed journals:

1

b) International conferences:

1
Qingli Zhang. launching event of the FAO Reference Centers for Antimicrobial Resistance (AMR) and Aquaculture Biosecurity. 26-27 June 2023, Rome, Italy.

c) National conferences:

3
(1) Qingli Zhang, Bing Yang. The “2023 Week for Enhancing Antibiotic Resistance” special lecture Online Activity. 17 November, 2023, Qingdao, China

d) Other (Provide website address or link to appropriate information):

0

TOR7: SCIENTIFIC AND TECHNICAL TRAINING

17. Did your laboratory provide scientific and technical training to laboratory personnel from other WOAH Members?
Yes

a) Technical visit : 0
b) Seminars : 1

c) Hands-on training courses: 0
d) Internships (>1 month) 0

| Type of technical training provided (a, b, c or d) | Country of origin of the expert(s) provided with training | No. participants from the corresponding country |
**TOR 8: QUALITY ASSURANCE**

18. Does your laboratory have a Quality Management System?
   Yes

<table>
<thead>
<tr>
<th>Quality management system adopted</th>
<th>Certificate scan (PDF, JPG, PNG format)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISO 17025</td>
<td>PDF</td>
</tr>
</tbody>
</table>

19. Is your quality management system accredited?
   Yes

<table>
<thead>
<tr>
<th>Test for which your laboratory is accredited</th>
<th>Accreditation body</th>
</tr>
</thead>
<tbody>
<tr>
<td>White spot virus: Diagnostic protocols for white spot disease Part2: Nested PCR method GB/T 28630.2-2012; Manual of Diagnostic Tests for Aquatic Animals (WOAH, 2023) Chapter 2.2.8 White spot disease</td>
<td>China National Accreditation Service for Conformity Assessment, CNAS</td>
</tr>
</tbody>
</table>

20. Does your laboratory maintain a “biorisk management system” for the pathogen and the disease concerned?
   Yes

   P2 laboratory certification and laboratory related management system

**TOR 9: SCIENTIFIC MEETINGS**

21. Did your laboratory organise scientific meetings related to the pathogen in question on behalf of WOAH?
   Yes

<table>
<thead>
<tr>
<th>NATIONAL/INTERNATIONAL</th>
<th>TITLE OF EVENT</th>
<th>CO-ORGANISER</th>
<th>DATE (MM/YY)</th>
<th>LOCATION</th>
<th>NO. PARTICIPANTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>International</td>
<td>The meeting of Coordinating Ministry for Maritime Affairs and Investment and YSFRI, China</td>
<td>China and Indonesia</td>
<td>2023-05-19</td>
<td>Qingdao, China</td>
<td>25</td>
</tr>
</tbody>
</table>

22. Did your laboratory participate in scientific meetings related to the pathogen in question on behalf of WOAH?
   No

**TOR 10: NETWORK WITH WOAH REFERENCE LABORATORIES**

23. Did your laboratory exchange information with other WOAH Reference Laboratories designated for the same pathogen or disease?
   Yes

24. Do you network (collaborate or share information) with other WOAH Reference Laboratories designated for the same pathogen?
   No

25. Did you organise or participate in inter-laboratory proficiency tests with WOAH Reference Laboratories designated for the same pathogen?
   No

26. Did your laboratory collaborate with other WOAH Reference Laboratories for the same disease on scientific research projects for the diagnosis or control of the pathogen of interest?
   No

**TOR 11: OTHER INTERLABORATORY PROFICIENCY TESTING**

27. Did your laboratory organise or participate in inter-laboratory proficiency tests with laboratories other than WOAH Reference Laboratories for the same pathogen?
   Yes

<table>
<thead>
<tr>
<th>Purpose for inter-laboratory test comparisons</th>
<th>Role of your reference laboratory (organizer/participant)</th>
<th>No. participating laboratories</th>
<th>Name of the Test</th>
<th>WOAH Member Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>
To participate in Asia-Pacific Laboratory Proficiency Testing Program

To organize National Testing Programme for Aquatic Animal Disease Laboratories in Aquatic Animal Epidemic Prevention System of China. To provide testing standards and samples for WSSV, and to analyze the results from the inter laboratory test comparisons

**TOR12: EXPERT CONSULTANTS**

28. Did your laboratory place expert consultants at the disposal of WOAH?
Yes

<table>
<thead>
<tr>
<th>KIND OF CONSULTANCY</th>
<th>Location</th>
<th>SUBJECT (FACULTATIVE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contributing to updating Chapter 2.2.8. Infection with white spot syndrome virus for the tenth edition of the WOAH Manual of Diagnostic Tests for Aquatic Animals</td>
<td>WOAH (Paris, France); Qingdao, China</td>
<td>The chapter was adopted by resolution of the WOAH Assembly of Delegates at the General Session in May 2023</td>
</tr>
</tbody>
</table>

29. Additional comments regarding your report:
No