

WOAH Reference Laboratory Reports Activities 2022

Activities in 2022

This report has been submitted : 25 avril 2023 13:20

Laboratory Information

| | |
|--|---|
| Name of disease (or topic) for which you are a designated WOA Reference Laboratory: | Infection with infectious hypodermal and haematopoietic necrosis virus |
| Address of laboratory: | Chinese Academy of Fishery Sciences 106 Nanjing Road, Qingdao Shandong 266071 CHINA (PEOPLES REP. OF) |
| Tel.: | +86 532 85823062 |
| E-mail address: | yangbing@ysfri.ac.cn |
| Website: | |
| Name (including Title) of Head of Laboratory (Responsible Official): | Dr. Qingli Zhang, Senior Researcher |
| Name (including Title and Position) of WOA Reference Expert: | Bing Yang, Senior Researcher |
| Which of the following defines your laboratory? Check all that apply: | 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

| Diagnostic Test | Indicated in WOA Manual (Yes/No) | Total number of test performed last year | |
|---------------------------|----------------------------------|--|-----------------|
| Indirect diagnostic tests | | Nationally | Internationally |
| PCR | Yes | 120 | 0 |
| Real-time PCR | Yes | 456 | 0 |
| Histopathology | Yes | 12 | 0 |
| Direct diagnostic tests | | Nationally | Internationally |
| | | | |

TOR2: REFERENCE MATERIAL

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

No

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

Yes

| TYPE OF REAGENT AVAILABLE | RELATED DIAGNOSTIC TEST | PRODUCED/ PROVIDE | AMOUNT SUPPLIED NATIONALLY (ML, MG) | AMOUNT SUPPLIED INTERNATIONALLY (ML, MG) | NO. OF RECIPIENT WOAHA MEMBER COUNTRIES | COUNTRY OF RECIPIENTS |
|---------------------------|-------------------------|-------------------|-------------------------------------|--|---|-----------------------|
| IHHNV nucleic acid | PCR and real-time PCR | provide | 10 ⁴ reaction | 0 | 1 | Asia and Pacific |

4. Did your laboratory produce vaccines?

Not applicable

5. Did your laboratory supply vaccines to WOAHA Members?

Not applicable

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 WOAHA 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 WOAHA Standards for the designated pathogen or disease?

No

TOR4: DIAGNOSTIC TESTING FACILITIES

10. Did your laboratory carry out diagnostic testing for other WOAHA Members?

No

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

Yes

| NAME OF THE WOAHA MEMBER COUNTRY RECEIVING A TECHNICAL CONSULTANCY | PURPOSE | HOW THE ADVICE WAS PROVIDED |
|--|---|-----------------------------|
| ITALY | It is proposed to pay attention to the disease risk of transboundary aquatic animals in the practice of national and regional PMP/AB. | Meeting communication |

TOR5: COLLABORATIVE SCIENTIFIC AND TECHNICAL STUDIES

12. Did your laboratory participate in international scientific studies in collaboration with WOAH Members other than the own?

Yes

| Title of the study | Duration | PURPOSE OF THE STUDY | PARTNERS (INSTITUTIONS) | WOAH MEMBER COUNTRIES INVOLVED OTHER THAN YOUR COUNTRY |
|--|---------------------|--|-------------------------|--|
| OIE Regional Proficiency Testing Provider Training | 21-25 February 2022 | 1. To provide information that enable participants to develop and operate PT programme that meet the needs of participating laboratories and fulfill the requirements of ISO/IEC 17043 2. To provide information that enable participants to coordinate national and sub-regional inter-laboratory comparisons | WOAH, ACDP | AUSTRALIA |

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 IHHN involved in 9 provinces of China. The major surveillance target species were shrimp. In total, IHHNV was detected of samples with an average (within batch) positive rate of 11.9%

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:

0

b) International conferences:

4

(1) Bing Yang, Implementation of proficiency testing on aquatic animal pathogen in China. OIE Regional Proficiency Testing Provider Training. 21-25 February 2022. Tokyo, Qingdao, Australia

(2) Qingli Zhang, Host. 2022 Network science publicity activities to improve the understanding of drug resistance of aquaculture microorganisms. 24 November 2022. Qingdao, China.

(3) Qingli Zhang, The scientific research progress and industrial contribution of Yellow Sea Fishery Research Institute and China in prevention and control technology of mariculture diseases. FAO Aquaculture Antimicrobial Drug Resistance (AMR) and Biosecurity Reference Center Network Conference. 30 November 2022. Roma, Italy, Qingdao, China.

(4) Qingli Zhang, Aquaculture biosecurity practice and demonstration in China. (FAO) Technical Working Group Meeting on Progressive Management Approach to Aquaculture Biosafety (PMP/AB). 28 June-1 July 2022. Gaeta, Italy, Qingdao, China.

c) National conferences:

2

(1) Yang B, Li C. Report for IHNV testing in the National Laboratory Proficiency Testing 2022 Ministry of Agriculture and Rural Affairs, PRC

(2) Yang B. Comments on the report of the Aquatic Animal Health Standards. Session of OIE Aquatic Animal Health Code and WOA Manual of Diagnostic Tests for Aquatic Animals. 2 June 2022 and 23 November 2022, Qingdao, China.

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

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(1) Quarterly Aquatic Animal Disease Report of the Maricultural Organism Disease Control and Molecular Pathology Laboratory, Yellow Sea Fisheries Research Institute, Chinese Academy of Fishery Sciences to the Ministry of Agriculture of China, the first quarter of 2022.

(2) Quarterly Aquatic Animal Disease Report of the Maricultural Organism Disease Control and Molecular Pathology Laboratory, Yellow Sea Fisheries Research Institute, Chinese Academy of Fishery Sciences to the Ministry of Agriculture of China, the second quarter of 2022.

(3) Quarterly Aquatic Animal Disease Report of the Maricultural Organism Disease Control and Molecular Pathology Laboratory, Yellow Sea Fisheries Research Institute, Chinese Academy of Fishery Sciences to the Ministry of Agriculture of China, the third quarter of 2022.

(4) Quarterly Aquatic Animal Disease Report of the Maricultural Organism Disease Control and Molecular Pathology Laboratory, Yellow Sea Fisheries Research Institute, Chinese Academy of Fishery Sciences to the Ministry of Agriculture of China, the forth quarter of 2022.

TOR7: SCIENTIFIC AND TECHNICAL TRAINING

17. Did your laboratory provide scientific and technical training to laboratory personnel from other WOA 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 |
|--|---|---|
| b | 80 countries | 400 |

TOR8: QUALITY ASSURANCE

18. Does your laboratory have a Quality Management System?

Yes

| Quality management system adopted | Certificate scan (PDF, JPG, PNG format) | |
|-----------------------------------|---|---|
| ISO 17025 | PDF | 认可决定书(2020.7.31)英文CNAS laboratory accreditation certificate.pdf |

19. Is your quality management system accredited?

Yes

| Test for which your laboratory is accredited | Accreditation body |
|--|--|
| Infectious hypodermal and hematopoietic necrosis virus: Polymerase chain reaction (PCR) method for infectious hypodermal and hematopoietic necrosis virus (IHHNV) GB/T 25878-2010; Manual of Diagnostic Tests for Aquatic Animals (OIE, 2022) Chapter 2.2.4 Infectious hypodermal and hematopoietic necrosis 4.3.1.2 | China National Accreditation Service for Conformity Assessment, CNAS |

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.

TOR9: SCIENTIFIC MEETINGS

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

Yes

| NATIONAL/ INTERNATIONAL | TITLE OF EVENT | CO-ORGANISER | DATE (MM/YY) | LOCATION | NO. PARTICIPANTS |
|----------------------------|--|--------------|--------------|----------------|------------------|
| National | Network science publicity activities to improve the understanding of drug resistance of aquaculture microorganisms | FAO | 2022-11-24 | Qingdao, China | 2000 |

22. Did your laboratory participate in scientific meetings related to the pathogen in question on behalf of WOA?H?

Yes

| Title of event | Date (mm/yy) | Location | Role (speaker, presenting poster, short communications) | Title of the work presented |
|---|--------------|-----------------|---|-----------------------------|
| 2022 Network science publicity activities to improve the understanding of drug resistance of aquaculture microorganisms | 2022-11-24 | Qinagdao, China | Host | Host |
| | | | | he scientific research |

| | | | | |
|--|------------|------------------------------|---------|---|
| FAO Aquaculture Antimicrobial Drug Resistance (AMR) and Biosecurity Reference Center Network Conference | 2022-11-30 | Roma, Italy, Qingdao, China | Speaker | progress and industrial contribution of Yellow Sea Fishery Research Institute and China in prevention and control technology of mariculture diseases. |
| (FAO) Technical Working Group Meeting on Progressive Management Approach to Aquaculture Biosafety (PMP/AB) | 2022-06-28 | Gaeta, Italy, Qingdao, China | Speaker | Aquaculture biosecurity practice and demonstration in China |

TOR10: NETWORK WITH WOAHP REFERENCE LABORATORIES

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

Yes

24. Are you a member of a network of WOAHP Reference Laboratories designated for the same pathogen?

Not applicable (Only WOAHP Reference Laboratory designated for the disease)

25. Did you organise or participate in inter-laboratory proficiency tests with WOAHP Reference Laboratories designated for the same pathogen?

Yes

| PURPOSE OF THE PROFICIENCY TESTS: 1 | ROLE OF YOUR REFERENCE LABORATORY (ORGANISER/ PARTICIPANT) | NO. PARTICIPANTS | PARTICIPATING WOAHP REF. LABS/ ORGANISING WOAHP REF. LAB. |
|---|--|------------------|--|
| Asia-Pacific Laboratory Proficiency Testing Program | Participant | 26 | P.R.China, Burnei Darussalam, India, Indonesia, Iran, Malaysia, New Caledonia, Philippines, Sri Lanka, Thailand, Vietnam |

26. Did your laboratory collaborate with other WOAHP Reference Laboratories for the same disease on scientific research projects for the diagnosis or control of the pathogen of interest?

No

TOR11: OTHER INTERLABORATORY PROFICIENCY TESTING

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

Yes

| Purpose for inter-laboratory test comparisons ¹ | Role of your reference laboratory (organizer/participant) | No. participating laboratories | Region(s) of participating WOAHP Member Countries |
|---|---|--------------------------------|---|
| To participate in Asia-Pacific Laboratory Proficiency Testing Program | participant | 26 | Asia and Pacific |
| 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 IHHNV, and to analyze the results from the inter-laboratory test comparisons

organizer

112

Asia and Pacific

TOR12: EXPERT CONSULTANTS

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

Yes

| KIND OF CONSULTANCY | Location | SUBJECT (FACULTATIVE) |
|--|--------------------------------------|---|
| Feedback on the updated for Manual of Diagnostic Tests for Aquatic Animals Chapter2.2.4 Infection with infectious hypodermal and haematopoietic necrosis virus WOA (Paris, France); Qingdao, China | WOAH (Paris, France); Qingdao, China | Comments on the updated Chapter2.2.4 to WOA |

29. Additional comments regarding your report:

No