WOAH Reference Laboratory Reports Activities 2023

Activities in 2023

This report has been submitted: 7 juin 2024 04:33

Laboratory Information

Name of disease (or topic) for which you are a designated WOAH Reference Laboratory:	Infectious hypodermal and haematopoietic necrosis
Address of laboratory:	Chinese Academy of Fishery Sciences 106 Nanjing Road, Qingdao Shandong 266071 CHINA (PEOPLES REP. OF)
Tel.:	+86 532 858 230 62
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 WOAH 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 WOAH Manual (Yes/No)	Total number of test performed last year	
Indirect diagnostic tests		Nationally	Internationally
PCR		200	0
Real-time PCR		649	0
Histopathology		20	0
Direct diagnostic tests		Nationally	Internationally
No		0	0

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

TYPE OF REAGENT AVAILABLE	RELATED DIAGNOSTIC TEST	PRODUCED/ PROVIDE	AMOUNT SUPPLIED NATIONALLY (ML, MG)	AMOUNT SUPPLIED INTERNATIONALLY (ML, MG)	NO. OF RECIPIENT WOAH MEMBER COUNTRIES	COUNTRY OF RECIPIENTS
IHHNV nucleic acid	Real-time PCR	provide	10^5 reaction	0	1	CHINA (PEOPLE'S REP. OF),

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?

Nο

8. Did your laboratory develop new vaccines for the designated pathogen or disease?

Νo

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?

Nο

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

Yes

Yes	DIIDDOCE	LIOW THE A DVICE WAS DROVIDED
NAME OF THE WOAH MEMBER COUNTRY RECEIVING A TECHNICAL CONSULTANCY CHINA (PEOPLE'S REP. OF) INDIA ITALY UNITED KINGDOM UNITED STATES OF AMERICA	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.	Centers for Antimicrobial Resistance
CHINA (PEOPLE'S REP. OF)	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.	The "2023 Week for Enhancing Antibiotic Resistance" special lecture Online Activity 17 November, 2023, Qingdao, China

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?

No

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 10 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 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

- Lü Ruoxuan, Wang Xiuhua, Li Chen, Lian Xinyu, Yang Bing*. Application of the Environmental DNA in Aquatic Animal Disease Monitoring. China Animal Health Inspection. 2023 40(3):79-84
- 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
- (2) Bing Yang. Report for IHHNV testing in the National Laboratory Proficiency Testing 2023. Ministry of Agriculture and Rural Affairs, PRC
- (3) Bing Yang. Comments on the report of the Aquatic Animal Health Standards. Session of WOAH Aquatic Animal Health Code and WOAH Manual of Diagnostic Tests for Aquatic Animals. 2 June 2023 and 22 November 2023.
- d) Other (Provide website address or link to appropriate information):

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	
С	INDONESIA	25	

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	4. CNAS认可证书(中英文)(有效期:2024-03-05至2030- 03-04).pdf

19. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
Infectious hypodermal and hematopoietic 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 (WOAH, 2023) Chapter 2.2.4 Infectious hypodermal and hematopoietic necrosis	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 WOAH?

Yes

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

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

No

TOR10: NETWORK WITH WOAH REFERENCE LABORATORIES

 $23. \ Did \ your \ laborator y \ exchange \ information \ with \ other \ WOAH \ Reference \ Laborator ies \ designated \ for \ the \ same \ pathogen \ or \ disease?$

Yes

24. Do you network (collaborate or share information) with other WOAH Reference Laboratories designated for the same pathogen?

Nο

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

TOR11: 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

Purpose for inter-laboratory test comparisons1 Role of your reference laboratory (organizer/participant)	No. participating laboratories	Name of the Test	WOAH Member Countries
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AUSTRALIA, CHINA (PEOPLE'S REP. OF). HONG KONG, INDIA

To participate in Asia-Pacific Laboratory Proficiency Testing Program	Participant	11	Proficiency Testing Program	INDONESIA, MALAYSIA, PAKISTAN, PHILIPPINES, SINGAPORE, SRI LANKA, THAILAND, VIETNAM,
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	Organiser	129	National Testing Programme for Aquatic Animal Disease Laboratories in Aquatic	CHINA (PEOPLE'S REP. OF),

TOR12: EXPERT CONSULTANTS

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

Yes

KIND OF CONSULTANCY	Location	SUBJECT (FACULTATIVE)
Contributing to updating Chapter 2.2.4. Infection with infectious hypodermal and haematopoietic necrosis virus for the tenth edition of the WOAH Manual of Diagnostic Tests for Aquatic Animals.	WOAH (Paris, France);Qingdao, China	The chapter was adopted by resolution of the WOAH Assembly of Delegates at the General Session in May 2023

29. Additional comments regarding your report:

No