World Organisation for Animal Health

Takafumi Ito - - JAPAN

# WOAH Reference Laboratory Reports Activities 2025

**This report has been submitted: 21 janvier 2026 07:23**

## LABORATORY INFORMATION

| | |
|---|---|
| ***Name of disease (or topic) for which you are a designated WOAH Reference Laboratory:** | Koi herpesvirus disease |
| ***Address of laboratory:** | |
| ***Tel:** | +81599661872 |
| ***E-mail address:** | 00000599@fra.go.jp |
| **Website:** | https://nria.fra.affrc.go.jp/e/DTC.html |
| ***Name (including Title) of Head of Laboratory (Responsible Official):** | Takafumi Ito (PhD), Director of Pathology division |
| ***Name (including Title and Position) of WOAH Reference Expert:** | Takafumi Ito (PhD), Director of Pathology division |
| ***Which of the following defines your laboratory? Check all that apply:** | Governmental |

## 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 |
| ELISA | No | 0 | 0 |
| Direct diagnostic tests | | Nationally | Internationally |
| PCR with Sph primer | Yes | 4 | 0 |
| PCR with TK primer | Yes | 4 | 3 |

## 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 |
|---|---|---|---|---|---|---|
| Positive control DNA for PCR | PCR | Produced | 0.2mL | 0 | 0 | JAPAN, |
| Positive control DNA for qPCR | qPCR | Produced | 8.0mL | 0 | 0 | JAPAN, |

4. Did your laboratory produce vaccines?

No

5. Did your laboratory supply vaccines to WOAH Members?

# 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?

Yes

| Name of the new test or diagnostic method developed | Description and References (Publication, website, etc.) |
|---|---|
| KHV qPCR (Ring Test) | [Completed] we performed a Ring Test for KHV qPCR assay with other KHVD Reference Laboratory. Reference: Clouthier et al. 2017. Diagnostic validation of three test methods for detection of cyprinid herpesvirus 3 (CyHV-3). Dis Aqua Org. 123: 101-122. |

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

9. Did your laboratory validate vaccines according to WOAH Standards for the designated pathogen or disease?

# 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

| Name of the WOAH Member Country receiving a technical consultancy | Purpose | How the advice was provided |
|---|---|---|
| THAILAND | Technical consultancies for qPCR | Technical consultancies for qPCR |

# 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 |
|---|---|---|---|---|
| KHV qPCR Ring Test | March 2024 through March 2025 | To validate reproducibility of qPCR assay for KHV (Ring Test) | Friedrich-Loeffler-Institut, Germany | GERMANY |

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: |
|---|
| We collected epidemiological data for a novel cyprinid herpesvirus, which is called 'KHV variant'. |

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

No

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:

*2*

*Inada M, Yuasa K, Kurobe T, Kishihara T, Matoyama H, Nagai T, Itagaki N, Kitamura S, Ito T :Molecular epidemiological survey of carp edema virus genogroup II from koi Cyprinus carpio in Japan. Fish Pathology, (2025) 60: 113-129*

*Umeda K, Takano T, Matsuyama T, Ito T :Virucidal activity of commonly used disinfectants against Japanese eel endothelial cells-infecting virus (JEECV) . Fish Pathology, in press*

b) International conferences:

*0*

c) National conferences:

*1*

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?

No

# 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 | ISO certificate of accreditation.pdf | |

19. Is your quality management system accredited?

Yes

| Test for which your laboratory is accredited | Accreditation body |
|---|---|
| PCR | Perry Johnson Laboratory Accreditation, Inc. |

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

Yes

Access to the laboratory is restricted. Personnel uses PPEs and follows basic laboratory procedures to avoid accidental exposure to the pathogen. All contaminated lab supplies (e.g., dissecting tools) are autoclaved to prevent the pathogen from releasing into the environment.

# TOR9: SCIENTIFIC MEETINGS

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

No

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 laboratory exchange information with other WOAH Reference Laboratories designated for the same pathogen or disease?

Yes

24. Are you a member of a network of 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 during the past 2 years?

Yes

| Purpose of the proficiency test: | Role of your Reference Laboratory (organiser/ participant) | No. participating Laboratories | Participating WOAH Ref. Labs/ organising WOAH Ref Lab |
|---|---|---|---|
| Determining a laboratory's capability to conduct specific diagnostic tests (EU ring test) | Participant | 43 | National Institute for Aquatic Resources , Technical University of Denmark |

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 during the past 2 years?

Yes

| Purpose for inter-laboratory test comparisons1 | Role of your reference laboratory (organizer/participant) | No. participating laboratories | Name of the test | WOAH Member Countries |
|---|---|---|---|---|
| Determining a laboratory's capability to conduct specific diagnostic tests | Organiser | 13 | National ring test of KHVD | JAPAN, |

# TOR12: EXPERT CONSULTANTS

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

No

29. Additional comments regarding your report: