

# WOAH Reference Laboratory Reports Activities 2024

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## LABORATORY INFORMATION

<b>*Name of disease (or topic) for which you are a designated WOA Reference Laboratory:</b>	Koi herpesvirus disease
<b>*Address of laboratory:</b>	Friedrich-Loeffler Institut, Federal Research Institute for Animal Health
<b>*Tel:</b>	+493835171254
<b>*E-mail address:</b>	heike.schuetze@fli.de
<b>Website:</b>	
<b>*Name (including Title) of Head of Laboratory (Responsible Official):</b>	Dr. Heike Schütze (Head of NRL for IHN, VHS, ISA, EHN)
<b>*Name (including Title and Position) of WOA Reference Expert:</b>	Dr. Heike Schütze (WOAH RL for KHV-I)
<b>*Which of the following defines your laboratory? Check all that apply:</b>	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 WOA 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 (Engelsma et al. 2013)	Yes	12	0

## TOR2: REFERENCE MATERIAL

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

No

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

No

4. Did your laboratory produce vaccines?

Not applicable

5. Did your laboratory supply vaccines to WOAHP 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 WOAHP 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 WOAHP Standards for the designated pathogen or disease?

No

## **TOR4: DIAGNOSTIC TESTING FACILITIES**

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

No

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

No

## **TOR5: COLLABORATIVE SCIENTIFIC AND TECHNICAL STUDIES**

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

No

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

Yes

### **Research need : 1**

**Please type the Research need:** Some KHV "variants" are not detected by qPCR according to Gilad et al 2004. Therefore, PCR according to Engelsma et al. (2013) followed by sequencing should always be used for monitoring and diagnosis of negative qPCR in animals suspected of having KHV-I. PS: Within the scope of the current EU Diagnostic Manual, CyHV-3 isolates of KHV-I to be controlled are defined as alloherpesviruses with  $\geq 99\%$  identity to the viral DNA polymerase gene and/or the major capsid protein gene of CyHV-3 strains KHV/J, KHV/U and KHV/I (Aoki et al. 2007; Genbank accession numbers AP008984, DQ657948 and DQ177346).

**Relevance for WOA** Disease Control, Animal Welfare,

**Relevance for the Code or Manual** Manual,

**Field** Diagnostics,

**Animal Category** Aquatic,

**Disease:**

Infection with koi herpesvirus

**Kind of disease (Zoonosis, Transboundary diseases)**

**If any, please specify relevance for Codes or Manual, chapter and title**

(e.g. Terrestrial Manual Chapter 2.3.5 - Minimum requirements for aseptic production in vaccine manufacture)

*Answer:* Chapter 2.3.6

**Notes:**

*Answer:*

## TOR6: EPIZOOLOGICAL DATA

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

No

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:

b) International conferences:

c) National conferences:

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 WOAHA 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)	
DIN EN ISO/IEC 17025:201	Akkreditierungsurkunde.pdf	Akkreditierungsurkunde.pdf

19. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
(RT)-PCR, (RT)-qPCR, virus isolation, cell culture, immunofluorescence assay, ELISA, sequencing, genotyping etc	all fish diseases listed in the EU: KHV-I, IHN, VHS, ISA, EHN

20. Does your laboratory maintain a "bio-risk management system" for the pathogen and the disease concerned?

Yes

The FLI has laboratory facilities ranging from S2/L2 to S4/L4. All previous work with KHV has been carried out under S2/L2 conditions.

## TOR9: SCIENTIFIC MEETINGS

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

No

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

No

## TOR10: NETWORK WITH WOAHA REFERENCE LABORATORIES

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

No

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

Yes

NETWORK/DISEASE	ROLE OF YOUR LABORATORY (PARTICIPANT, ORGANISER, ETC)	NO. PARTICIPANTS	PARTICIPATING WOAHA REF. LABS
KHV-I	Participant	6	WOAHA Reference Labs: CEFAS (UK), FRA (Japan) and FLI (Germany)

25. Did you organise or participate in inter-laboratory proficiency tests with WOAHA Reference Laboratories designated for the same pathogen during the past 2 years?

## Heike Schutze - - GERMANY

Yes

Purpose of the proficiency test:	Role of your Reference Laboratory (organiser/ participant)	No. participating Laboratories	Participating WOAHP Ref. Labs/ organising WOAHP Ref Lab
validation of qPCR (Gilad et al. 2004) with TaqMan Universal PCR Master Mix (Applied Biosystems)	participant	total number unknown, from FLI independently PCR analyses by three colleagues	yes

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 during the past 2 years?

Yes

Purpose for inter-laboratory test comparisons <sup>1</sup>	Role of your reference laboratory (organizer/participant)	No. participating laboratories	Name of the test	WOAHP Member Countries
Identification of IHN, VHSV, EHN, SVCV, IPNV, KHV, ISAV, SAV	participants as NRL for IHN, VHS, ISA, EHN, KHV-I	30	EU RL Inter-Laboratory Proficiency Test 2024	GERMANY,

## TOR12: EXPERT CONSULTANTS

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

No

29. Additional comments regarding your report:

Yes

*Participation in a number of WOAHP surveys, involvement in WOAHP documents at the national level.*