

WOAH Reference Laboratory Reports Activities 2023

Activities in 2023

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Laboratory Information

Name of disease (or topic) for which you are a designated WOAHO Reference Laboratory:	Koi herpesvirus disease
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Name (including Title) of Head of Laboratory (Responsible Official):	Dr Rachel Hartnell, Science Director
Name (including Title and Position) of WOAHO Reference Expert:	Dr Irene Cano Cejas, Senior Virologist and Immunologist
Which of the following defines your laboratory? Check all that apply:	Governmental Research agency

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 WOAHO Manual (Yes/No)	Total number of test performed last year	
		Nationally	Internationally
Indirect diagnostic tests			
Histopathology		0	0
Direct diagnostic tests			
Conventional PCR and nested PCR		67	0
Amplicon sequencing		45	0
Real-time PCR		45	0
LAMP		0	0
Cell culture (CCB cells)		26	0

TOR2: REFERENCE MATERIAL

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

No

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

Yes

TYPE OF REAGENT AVAILABLE	RELATED DIAGNOSTIC TEST	PRODUCED/ PROVIDE	AMOUNT SUPPLIED NATIONALLY (ML, MG)	AMOUNT SUPPLIED INTERNATIONALLY (ML, MG)	NO. OF RECIPIENT WOAHO MEMBER COUNTRIES	COUNTRY OF RECIPIENTS
	Plasmid CyHV-3 suitable to use with					

KHV positive material consisting of two plasmid DNA	conventional PCR (Marc Y. Engelsma et al 2013) + Plasmid KHV suitable to sue with conventional PCR (Bercovier et al 2005)	Produced and provided	0	Each plasmid DNA containing 105 copies of the PCR target KHV gene	1	SRI LANKA,
KHV positive material	Heat inactivated KHV to be used for any PCR assay listed on the manual	Produced and provided	0	500 µL of heat-inactivated KHV	1	SRI LANKA,

4. Did your laboratory produce vaccines?

No

5. Did your laboratory supply vaccines to WOAHA 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 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
DENMARK	Advice on methods to discriminate between wild type and KHV vaccine using VNTRs	Email correspondence

TOR5: COLLABORATIVE SCIENTIFIC AND TECHNICAL STUDIES

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

No

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

Yes

Research need : 1

Please type the Research need: KHV variants genome and pathogenicity remains uncharacterized

Relevance for WOAHA Capacity Building,

Relevance for the Codes or Manual

Field Epidemiology and Surveillance, 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:

Notes:

Answer: There is a need to sequence KHV genomes from different geographical areas to understand KHV genetic variability as well as generate sequencing data from fastidious KHV variants. We are trying to develop methods for KHV sequencing based on long reads (ONT) and/or VNTR.

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 routine national surveillance program includes testing to retain freedom in approved compartments, ad hoc testing programme of susceptible ornamental imports and course fish testing on suspicion.

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 keep an up-to-date record of relevant published data on KHV. There have been no major changes in the distribution or severity of KHV.

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:

1

Networking 21st International Conference on Diseases of Fish and Shellfish, Aberdeen, UK

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 WOA H Members?

Yes

a) Technical visit : 0

b) Seminars : 0

c) Hands-on training courses: 1

d) Internships (>1 month) 0

Type of technical training

Country of origin of the expert(s)

No. participants from the

provided (a, b, c or d)	provided with training	corresponding country
C	CHILE	20

TOR8: QUALITY ASSURANCE

18. Does your laboratory have a Quality Management System?

Yes

Quality management system adopted	Certificate scan (PDF, JPG, PNG format)	
ISO17025	PDF	2293Testing-Single Weymouth UKAS Accred ISO17025 cert 2024.pdf
ISO9001	PDF	11 102147 HSEQ CORP Quality ISO 9001 certificate.PDF_2.pdf

19. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
Detection and confirmation of Koi herpesvirus (KHV) DNA by PCR	UKAS
Detection and confirmation of CyHV-3 (KHV) DNA by PCR	UKAS

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

Yes

Cefas Biorisk management system includes a range of practices and procedures to ensure biosecurity, biosafety, and biocontainment of infectious agents including security measures for laboratories, from standard operating procedures to physical measures to individual practices in the laboratory. This includes a dedicated Biosafety and Biosecurity Committee with lead and deputy officers and an internally published laboratory Biosecurity Handbook.

TOR9: SCIENTIFIC MEETINGS

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

No

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
EFSA panel on Animal Health and Welfare (AHAW)	2023-10-02	online	Invited expert	Assessment of listing and categorisation of animal diseases within the framework of the Animal Health Law (Regulation (EU) 2016/429)
WOAH Training of National Focal Points for Aquatic Animal Health (Cycle IV), invited expert, facilitator	2023-10-02	Kigali, Rwanda	Invited expert, facilitator	Reporting guidelines and tools - International regulatory information systems – UK And Cefas: Aquatic animal health work in Ghana and Zambia
WOAH Launch of the Regional Aquatic Animal Health Laboratory Network for Africa (RAAHLN-AF)	2023-12-04	Pretoria, South Africa	Invited expert, facilitators	International reference Laboratories; facilities, services and challenges encountered in assisting Members - views from Designated Expert and Contact Point

TOR10: NETWORK WITH WOA?H REFERENCE LABORATORIES

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

Yes

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

Yes

NETWORK/DISEASE	ROLE OF YOUR LABORATORY (PARTICIPANT, ORGANISER, ETC)	NO. PARTICIPANTS	PARTICIPATING WOAHP REF. LABS
Infection with Koi herpesvirus	participant	3	email correspondence with WHOA ref labs

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

No

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	Name of the Test	WOAHP Member Countries
EURL annual Comparative test of diagnostic procedures for EU listed fish diseases	Participant	40	Each country selected several tests recommended on the manual	CZECH REPUBLIC, DENMARK, FRANCE, GERMANY, GREECE, NORWAY, POLAND, ROMANIA, SERBIA, SLOVAKIA, SLOVENIA, SWEDEN, SWITZERLAND, UNITED KINGDOM,
Validation of diagnostic protocols	Participant	13	o validate and confirm the presence of KHV in positive material used for an interlaboratory proficiency test by conventional PCR and Sanger seq	UNITED KINGDOM,