

# WOAH Reference Laboratory Reports Activities 2023

## Activities in 2023

This report has been submitted : 1 juillet 2024 11:03

### Laboratory Information

<b>Name of disease (or topic) for which you are a designated WOAHO Reference Laboratory:</b>	Decapod Iridescent Virus 1
<b>Address of laboratory:</b>	376 Chung-Cheng Rd.Tansui 251, New Taipei City Taiwan, Republic of China
<b>Tel.:</b>	+886226212111
<b>E-mail address:</b>	ctu@mail.nvri.gov.tw
<b>Website:</b>	www.nvri.gov.tw
<b>Name (including Title) of Head of Laboratory (Responsible Official):</b>	Yu-Ju Lin, Head of DIV1 RL
<b>Name (including Title and Position) of WOAHO Reference Expert:</b>	Chien Tu, Senior Consultant
<b>Which of the following defines your laboratory? Check all that apply:</b>	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		Nationally	Internationally
Direct diagnostic tests		Nationally	Internationally
1. Real-Time PCR 2. PCR + sequencing		185	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 (nonWOAHO-approved) and/or other diagnostic reagents to WOAHO Members?

No

4. Did your laboratory produce vaccines?

No

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

No

#### **TOR4: DIAGNOSTIC TESTING FACILITIES**

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

No

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

No

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

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

No

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

No

#### **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?

Yes

IF THE ANSWER IS YES, PLEASE PROVIDE DETAILS OF THE DATA COLLECTED:

Due to the stamping-out control strategy in Taiwan 2020, the farm DIV1 positive rate of the redclaw crayfish has been reduced from 36.17% in 2020 (17/47) to 13.95% (6/43) in 2021 and 0% (0/5) in 2022. During 2021-2022, one whiteleg shrimp farm and one giant freshwater prawn farm were still detected positive. We also found the presence of the DIV1 pathogen in the surrounding environmental samples from DIV1 occurrence sites 2020. The emergence of DIV1 signals a warning to the shrimp aquaculture industry worldwide. Enhanced biosecurity in shrimp farms should be implemented to prevent the introduction, persistence, and spread of DIV1.

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

"Emergence of decapod iridescent virus 1 in cultured shrimp from Taiwan in 2020" in *Veterinary Medicine and Science* <https://doi.org/10.1002/vms3.1216>

b) International conferences:

1

"Diagnosis and identification of decapod iridescent virus 1 in Taiwan during 2020-2022" in *World Veterinary Association Congress 2023, Taipei Taiwan*

c) National conferences:

1

*Training of diagnosis and lab proficiency test on DIV1 for local Animal Disease Control Centers*

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 WOAHO 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/IEC 17025:2017; CNS17025:2018	Certificate of Accreditation	325715.jpg
ISO/IEC 17025:2017; CNS17025:2018	Tests accredited	325716.jpg
ISO/IEC 17025:2017; CNS17025:2018	Tests accredited	325717.jpg

19. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
1. Identification of Salmonella spp. 2. Identification of Mycobacterium spp. 3. Test of Brucellosis serum antibodies 4. Nervous Necrosis Virus Nucleic Acid Detection 5. Red Sea Bream Iridoviral Disease Nucleic Acid Detection 6. Koi Herpesvirus Nucleic Acid Detection 7. Spring Viremia Carp Virus Nucleic Acid Detection 8. White Spot Disease Virus Nucleic Acid Detection 9. Perkinsus olseni Nucleic Acid Detection	Taiwan Accreditation Foundation (TAF)

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

Yes

1. Our Institute has deployed risk analysis according to the WOAHO Terrestrial Animal Health Code and WOAHO Aquatic Animal Health Code for many years. 2. We established a biological risk communication process, including biohazard identification, biorisk assessment, and management. Relative documents have been combined in Lab's ISO 17025 quality management system. 3. We have set up a VRI (Vetrinary research institute) Institutional Biosafety Committee (IBC) to review and permit the use of infectious biosafety materials and kept all laboratories working excellently with the risk management system.

## TOR9: SCIENTIFIC MEETINGS

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

No

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

No

## TOR10: NETWORK WITH WOAHO REFERENCE LABORATORIES

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

Not applicable (only WOAHO Reference Laboratory designated for the disease)

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

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

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

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

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

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

## TOR11: OTHER INTERLABORATORY PROFICIENCY TESTING

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

Yes

Purpose for inter-laboratory test comparisons <sup>1</sup>	Role of your reference laboratory (organizer/participant)	No. participating laboratories	Name of the Test	WOAH Member Countries
1. Determining a laboratory's capability to conduct specific diagnostic tests. 2. Harmonising existing test methods. 3. Assigning values and ranges to standard materials. 4. Resolving interlaboratory differences.	Organizer/Participant between two ISO 17025-accredited test Lab	2	DIV1 neucleic acid test	CHINESE TAIPEI,

## TOR12: EXPERT CONSULTANTS

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

No

29. Additional comments regarding your report:

No