OIE Reference Laboratory Reports Activities

Activities in 2021

This report has been submitted : 2022-01-05 08:10:55

Name of disease (or topic) for which you are a designated OIE Reference Laboratory:	Spring viraemia of carp
Address of laboratory:	Building 1011 of Fuqiang Road, Futianqu Shenzhen, Guangdong Province, 518045 CHINA (PEOPLES REP. OF)
Tel.:	+86-755 25 58 84 10
Fax:	+86-755 25 55 56 30
E-mail address:	709274714@qq.com
Website:	
Name (including Title) of Head of Laboratory (Responsible Official):	Bing Chen, head of the laboratory of virology and immunology, Animal and Plant Inspection and Quarantine Laboratory, Shenzhen Customs District, Genereal Administration of Customs, P. R. China
Name (including Title and Position) of OIE Reference Expert:	Hong Liu, Dr.,Prof.
Which of the following defines your laboratory? Check all that apply:	Governmental

ToR 1: To use, promote and disseminate diagnostic methods validated according to OIE Standards

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 OIE Manual (Yes/No)	Total number of test performed last year	
Indirect diagnostic tests		Nationally	Internationally
angigen captured ELISA	Yes	48	0
Direct diagnostic tests		Nationally	Internationally
virus isolation	yes	63	0
RT-PCR	Yes	139	0
Real-time RT-PCR	Yes	139	0

ToR 2: To develop reference material in accordance with OIE requirements, and implement and promote the application of OIE Standards.
To store and distribute to national laboratories biological reference products and any other reagents used in the diagnosis and control of the designated pathogens or disease.

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

No

3. Did your laboratory supply standard reference reagents (non OIE-approved) and/or other diagnostic reagents to OIE Member Countries?

No

4. Did your laboratory produce vaccines?

No

5. Did your laboratory supply vaccines to OIE Member Countries?

No

ToR 3: To develop, standardise and validate, according to OIE Standards, new procedures for diagnosis and control of the designated pathogens or diseases

6. Did your laboratory develop new diagnostic methods validated according to OIE Standards for the designated pathogen or disease?

Yes

7. Did your laboratory develop new vaccines according to OIE Standards for the designated pathogen or disease?

No

Name of the new test or diagnostic method or vaccine developed	Description and References (Publication, website, etc.)
Recombinase Polymerase Amplification on SVCV	Chengcheng Tian, Wensheng Lan, Shigen Ye, 2021. Development and evaluation of RPA test on the necleic acid of Sping Viraemia of Carp. Animal Quarantine of China, 37(2):106-113

ToR 4: To provide diagnostic testing facilities, and, where appropriate, scientific and technical advice on disease control measures to OIE Member Countries

8. Did your laboratory carry out diagnostic testing for other OIE Member Countries?

No

9. Did your laboratory provide expert advice in technical consultancies on the request of an OIE Member Country?

No

ToR 5: To carry out and/or coordinate scientific and technical studies in collaboration with other laboratories, centres or organisations

10. Did your laboratory participate in international scientific studies in collaboration with OIE Member Countries other than the own?

Yes

Title of the study	Duration	Purpose of the study	Partners (Institutions)	OIE Member Countries involved other than your country
Comparative Virulence of Spring Viremia of Carp Virus (SVCV) Genotypes in Two Koi Varieties	2015-2021	to compare the virulence of different genotype Spring Viremia of Carp Virus (SVCV) in Two Koi Varieties	USGS Western Fisheries research center, USA	UNITED STATES OF AMERICA
Carp edema virus--the primary causative agent of the endemic disease of the virus-associated carp acute gill rot in Henan, Chin	2017-2022	to identify the primary causative agent of the endemic disease in China	Centre for Envirument & Aquaculture Science	UNITED STATES OF AMERICA
universal SVCV real time PCR development	2021-2023	to establish a new universal real-time PCR for SVCV	Centre for Envirument & Aquaculture Science	UNITED KINGDOM
hylogenetic Analysis of carp edema virus in China	2020-2023	to analyze the molecular epidemiological characters of carp edema virus in China	Centre for Envirument & Aquaculture Science	UNITED KINGDOM
updated nested PCR for CEV	2021-2023	to establish a nested PCR for detecting all of CEV genotypes	Centre for Envirument & Aquaculture Science	UNITED KINGDOM

ToR 6: To collect, process, analyse, publish and disseminate epizootiological data relevant to the designated pathogens or diseases

11. Did your Laboratory collect epizootiological data relevant to international disease control?

Yes

If the answer is yes, please provide details of the data collected:
a. some positive infection of SVCV in Northern China b.

12. Did your laboratory disseminate epizootiological data that had been processed and analysed?

No

If the answer is no, please provide a brief explanation of the situation:
There is no website or notification pathway to distribute the information.

13. What method of dissemination of information is most often used by your laboratory? (Indicate in the appropriate box the number by category)

a) Articles published in peer-reviewed journals: 3
Eveline J. Emmenegger1, Emma K. Bueren1, Peng Jia, Noble Hendrix and Hong, 2021 Liu, Comparative virulence of spring viremia of carp virus 1 (SVCV) genotypes in two koi varieties,Dis. Aquatic. Org. 05: 10

Zhiqing Wen, Jiang Wu and Junqiang He et al., Identification of Subgenogroup-IIb Carp Edema Virus in a Fish Farm in China. Chinese Journal of Virology, 37(4): 933-940

Lingmei Wu, Zhiqing Wen, Xurbing Yang et al, 2020. Clinical signs and Identificaiotn of the pathogens of infected common carp with acute rotted gill in the farms in Zheng zhou. Agricultral Science of Jiangsu, 48(24): 167-172

b) International conferences: 0

c) National conferences: 3
Domestic surveillence of main aquatic animal diseases of 2022, March, 2021, Beijing.

Import and export surveillence of aquatic animal diseaes of 2022, June, 2021, Vidro conference

National conference of aquatic animal diseaes prevention and control of 2022, November, 2021, Beijing

d) Other:
(Provide website address or link to appropriate information) 0

ToR 7: To provide scientific and technical training for personnel from OIE Member Countries
To recommend the prescribed and alternative tests or vaccines as OIE Standards

14. Did your laboratory provide scientific and technical training to laboratory personnel from other OIE Member Countries?

No

ToR 8: To maintain a system of quality assurance, biosafety and biosecurity relevant for the pathogen and the disease concerned

15. Does your laboratory have a Quality Management System?

Yes

Quality management system adopted	Certificate scan (PDF, JPG, PNG format)
ISO 17025	ISO 17025 certificate.pdf
CNAS CL05	BSL-2 certificate.png

16. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
ISO 17025	China National Accreditation Service for Conformity Assessment
CNAS CL05 (Biosecurity accreditation)	China National Accreditation Service for Conformity Assessment

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

Yes

(See Manual of Diagnostic Tests and Vaccines for Terrestrial Animals, Chapter 1.1.4)

ToR 9: To organise and participate in scientific meetings on behalf of the OIE

18. Did your laboratory organise scientific meetings on behalf of the OIE?

No

19. Did your laboratory participate in scientific meetings on behalf of the OIE?

Yes

Title of event	Date (mm/yy)	Location	Role (speaker, presenting poster, short communications)	Title of the work presented
3rd meeting of ad hoc Steering Committee of the Regional Collaboration Framework on Aquatic Animal Health in Asia and the Pacific	Dec/2021	Tokyo (ZOOM meeting)	speaker	Introduction of Emerging disease-EHP

ToR 10: To establish and maintain a network with other OIE Reference Laboratories designated for the same pathogen or disease and organise regular inter-laboratory proficiency testing to ensure comparability of results

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

Yes

21. Was your laboratory involved in maintaining a network with OIE Reference Laboratories designated for the same pathogen or disease by organising or participating in proficiency tests?

Yes

Purpose of the proficiency tests: [1]	Role of your Reference Laboratory (organiser/ participant)	No. participants	Participating OIE Ref. Labs/ organising OIE Ref. Lab.
Improve the capbility of testing on aquatic animal pathogens	Participant	22	unknown

[1] *validation of a diagnostic protocol: specify the test; quality control of vaccines: specify the vaccine type, etc.*

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

Yes

Title of the project or contract	Scope	Name(s) of relevant OIE Reference Laboratories
Study on a specific fragment of nucleic acid of SVCV isolates	Etiology of SVCV	CEFAS, UK
Comparing and evaluating on the rea-time RT-PCR tests on SVCV in published literatures	Diagnostic methods of SVCV	CEFAS, UK

ToR 11: To organise inter-laboratory proficiency testing with laboratories other than OIE Reference Laboratories for the same pathogens and diseases to ensure equivalence of results

23. Did your laboratory organise or participate in inter-laboratory proficiency tests with laboratories other than OIE Reference Laboratories for the same disease?

Yes

Note: See Interlaboratory test comparisons in: Laboratory Proficiency Testing at: http://www.oie.int/en/our-scientific-expertise/reference-laboratories/proficiency-testing see point 1.3

Purpose for inter-laboratory test comparisons[1]	No. participating laboratories	Region(s) of participating OIE Member Countries
Proficient tests of virus isolation and identification of SVCV	50	☐Africa ☐Americas ☒Asia and Pacific ☐Europe ☐Middle East

ToR 12: To place expert consultants at the disposal of the OIE

24. Did your laboratory place expert consultants at the disposal of the OIE?

Yes

Kind of consultancy	Location	Subject (facultative)
Commenting on OIE manual SVCV chapter	/	updating the SVCV chapter in OIE aquatic manual with the new template

25. Additional comments regarding your report:

Stable and persistent financial support is very necessary and urgent for the reference labotory. The pandemic of COVID-19 sometimes made the sampling in the fieds was quite difficult.