

WOAH Reference Laboratory Reports Activities 2024

This report has been submitted: 28 janvier 2025 00:51

LABORATORY INFORMATION

*Name of disease (or topic) for which you are a designated WOAH Reference Laboratory:	Peste des petits ruminants
*Address of laboratory:	21 Aodongnan Road, Qingdao, Shandong, China
*Tel:	+86-532 85.63.91.66
*E-mail address:	zlwang111@163.com
Website:	
*Name (including Title) of Head of Laboratory (Responsible Official):	Zhiliang Wang (Dr., Deputy Director-in-General of China Animal Health and Epidemiology Center)
*Name (including Title and Position) of WOAH Reference Expert:	Zhiliang Wang (Dr., Deputy Director-in-General of China Animal Health and Epidemiology Center)
*Which of the following defines your laboratory? Check all that apply:	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 WOAH Manual (Yes/No)	Total number of test performed last year	
Indirect diagnostic tests		Nationally	Internationally
ELISA	Yes	17127	0
Direct diagnostic tests		Nationally	Internationally
Real-time RT-PCR	Yes	17251	0

TOR2: REFERENCE MATERIAL

Zhiliang Wang - - CHINA_(PEOPLE'S_REP_OF)

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?

Yes

Type of reagent available	Related diagnostic test	Produced/ provide	Amount supplied nationally (ml, mg)	Amount supplied internationally (ml, mg)	No. of recipient WOAHP Member Countries	Country of recipients
PPRV N -mAb	ELISA	Produced and provide	6ml	0	1	CHINA (PEOPLE'S REP. OF),
PPRV N antigen	ELISA	Produced and provide	50mg	0	1	CHINA (PEOPLE'S REP. OF),

4. Did your laboratory produce vaccines?

No

5. Did your laboratory supply vaccines to WOAHP Members?

No

TOR3: NEW PROCEDURES

6. Did your laboratory develop new diagnostic methods for the designated pathogen or disease?

Yes

7. Did your laboratory validate diagnostic methods according to WOAHP Standards for the designated pathogen or disease?

Yes

Name of the new test or diagnostic method developed	Description and References (Publication, website, etc.)
PPRV RAA CRISPER/Cas12a	Xu J, Wang Y, Zhang Y, et al. Establishment of a RAA-CRISPR Cas12a based diagnostic method for peste des petits ruminants virus N gene and M gene. J Virol Methods. 2024 Sep;329:114971.

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?

Yes

Name of the WOAHP Member Country receiving a technical consultancy	Purpose	How the advice was provided
BANGLADESH BHUTAN IRAN LAOS MALDIVES MONGOLIA	Advices were given on vaccination programmes, diagnostics,	Advices were given in local during the WOAHP Regional Workshop on

Zhiliang Wang - - CHINA_(PEOPLE'S_REP_OF)

MYANMAR NEPAL PAKISTAN SRI LANKA THAILAND

surveillance strategy

PPR in Asia and the Pacific from
18 to 20 June 2024

TOR5: COLLABORATIVE SCIENTIFIC AND TECHNICAL STUDIES

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

No

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

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:

Global Distribution and Genetic Characterization of PPRV, sourced from WAHIS, EMPRES-i, Published research paper, international meetings, etc.

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:

Global Distribution and Genetic Characterization of PPRV, disseminated by MARA website, CAHEC website, Research paper, international/national meetings, Wechat official account.

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

Xu J, Qu Z, Wang Y, et al. *Wildlife Infection of Peste des Petits Ruminants Detected in China*, 2024. *Vet Sci.* 2024 Oct 9;11(10):489.

b) International conferences:

5

[1] WOA Regional Workshop on PPR in Asia and the Pacific, Jun 18-20, 2024

[2] 7th meeting of the Peste des Petits Ruminants Global Research and Expertise Network (PPR-GREN), Jan 20–23, 2025

[3] 7th Peste des Petits Ruminants Advisory Committee (PPR AC), Jun 27-28, 2024

[4] 4th Annual workshop of the WOA reference laboratory network for PPR, Dec 5, 2024

[5] PPR RL Network secretary meeting(WOA)

c) National conferences:

3

[1] National conference for major animal diseases vaccination technologies, Mar 13, 2024

[2] National conference for major animal diseases epidemiological investigation, Mar 27-28, 2024

[3] National conference for major exotic animal diseases surveillance and epidemiological investigation, Mar 22, 2024

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

3

[1] <http://www.xmsyj.moa.gov.cn/yqfb/>

[2] <https://www.cahec.cn>

[3] WeChat Official Account

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 : 1

c) Hands-on training courses: 0

d) Internships (>1 month) 0

Type of technical training provided (a, b, c or d)	Country of origin of the expert(s) provided with training	No. participants from the corresponding country
B	BHUTAN	1
B	BANGLADESH	1
B	IRAN	1
B	MONGOLIA	1
B	NEPAL	1
B	PAKISTAN	1
B	THAILAND	1
B	LAOS	1
B	MALDIVES	1
B	MYANMAR	1
B	SRI LANKA	1

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	1	17025认可证书有效期至2030年.pdf

19. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
PPRV RT-PCR	China National Accreditation Service for Conformity Assessment (ilac-MRA, APLAC-MRA)
PPRV qRT-PCR	China National Accreditation Service for Conformity Assessment (ilac-MRA, APLAC-MRA)
PPR block-ELISA	China National Accreditation Service for Conformity Assessment (ilac-MRA, APLAC-MRA)
PPRV virus isolation	China National Accreditation Service for Conformity Assessment (ilac-MRA, APLAC-MRA)

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

Yes

The experiments related to PPRV are conducted in ABSL-3 laboratory(CNAS BL0008,CNAS-CL 05:2009)

TOR9: SCIENTIFIC MEETINGS

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

Yes

National/ International	Title of event	Co-organiser	Date	location	No. Participants
International	WOAH Regional Workshop on PPR in Asia and the Pacific	WOAH RRAP	2024-06-17	Qingdao, China	35

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

Yes

Title of event	Date	location	Role (speaker, presenting poster, short communications)	Title of the work presented
7th Peste des Petits Ruminants Advisory Committee (PPR AC)	2024-06-26	Italy	Speaker	PPR national situation of China
7th meeting of the Peste				

Zhiliang Wang - - CHINA_(PEOPLE'S_REP_OF)

des 4th Annual workshop of the WOA reference laboratory network for PPR	2024-12-04	Virtually	Speaker	Update on WOA PPR ref lab activities of CAHEC
---	------------	-----------	---------	---

TOR10: NETWORK WITH WOA REFERENCE LABORATORIES

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

Yes

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

Yes

NETWORK/DISEASE	ROLE OF YOUR LABORATORY (PARTICIPANT, ORGANISER, ETC)	NO. PARTICIPANTS	PARTICIPATING WOA REF. LABS
WOA PPR RL network	Co-organiser	14	CIRAD, PIRBRIGHT, ICAR-NIVEDI

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

No

no

26. Did your laboratory collaborate with other WOA 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 WOA Reference Laboratories for the same pathogen during the past 2 years?

Yes

Purpose for inter-laboratory test comparisons ¹	Role of your reference laboratory (organizer/participant)	No. participating laboratories	Name of the test	WOA Member Countries
Harmonising existing test methods	Organizer	5	Real-time RT-PCR for PPRV	CHINA (PEOPLE'S REP. OF),
Harmonising existing test methods	Organizer	5	ELISA for PPRV antibody detection	CHINA (PEOPLE'S REP. OF),

TOR12: EXPERT CONSULTANTS

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

Yes

--	--	--

Zhiliang Wang - - CHINA_(PEOPLE'S_REP_OF)

Kind of consultancy	Location	Subject (facultative)
Attendance at WOAHA ad hoc Group meeting on PPR	Virtually	Work on selected issues under Chapter 14.7. 'Infection with peste des petits ruminants visus' of the Terrestrial Animal Health Code.

29. Additional comments regarding your report:

No