World Organisation for Animal Health

Xiaojun Wang - - CHINA_(PEOPLE'S_REP_OF)

WOAH Reference Laboratory Reports Activities 2024

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LABORATORY INFORMATION

***Name of disease (or topic) for which you are a designated WOAH Reference Laboratory:**	Equine infectious anaemia
***Address of laboratory:**	678 Haping Road，Harbin，P. R. China
***Tel:**	+86-451-51051749
***E-mail address:**	wangxiaojun@caas.cn
Website:	
***Name (including Title) of Head of Laboratory (Responsible Official):**	Xiaojun Wang
***Name (including Title and Position) of WOAH Reference Expert:**	Xiaojun Wang
***Which of the following defines your laboratory? Check all that apply:**	Academic institution

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
cELISA	Yes	4323	0
AGID	Yes	0	0
Colloidal gold strip test	Yes	54	0
Direct diagnostic tests		Nationally	Internationally
qRT-PCR	Yes	29	

			0

TOR2: REFERENCE MATERIAL

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

No

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

No

4. Did your laboratory produce vaccines?

Not applicable

5. Did your laboratory supply vaccines to WOAH Members?

Not applicable

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 WOAH Standards for the designated pathogen or disease?

Yes

Name of the new test or diagnostic method developed	Description and References (Publication, website, etc.)
Development and evaluation of a test strip for the rapid detection of antibody against equine infectious anemia virus	In this study, we designed and developed a colloidal gold immunochromatographic (GICG) test strip to detect antibodies against EIAV based on the double-antigen sandwich. Both the p26 and gp45 proteins were used as the capture antigens, which may help to improve the positive detection rate of the strip. We found that the sensitivity of the test strip was 8 to 16 times higher than those of two commercially available ELISA tests and 128 to 256 times higher than AGID, but 8 to 16 times lower than that of western blotting. The strip has good specifcity and stability. Zenan Zhang, Kui Guo, Xiaoyu Chu, Mingru Liu, Cheng Du, Zhe Hu*, Xiaojun Wang*. Development and evaluation of a test strip for the rapid detection of antibody against equine infectious anemia virus. Applied microbiology and biotechnology vol. 2024 Jan 8; 108(1):85.

8. Did your laboratory develop new vaccines for the designated pathogen or disease?

No

9. Did your laboratory validate vaccines according to WOAH Standards for the designated pathogen or disease?

No

TOR4: DIAGNOSTIC TESTING FACILITIES

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

No

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

Yes

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Name of the WOAH Member Country receiving a technical consultancy	Purpose	How the advice was provided
KAZAKHSTAN	Assist KATRU in enhancing its international cooperation on building capabilities of international communication and in establishing a standardized diagnostic technology system for EIA.	Onsite and online. The KATRU and our lab jiontly applied for WOAH TWINNING project.

TOR5: COLLABORATIVE SCIENTIFIC AND TECHNICAL STUDIES

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

Yes

Title of the study	Duration	Purpose of the study	Partners (Institutions)	WOAH Member Countries involved other than your country
Diagnostic performance of a rapid immunochromatographic test for the simultaneous detection of antibodies to Theileria equi and Babesia caballi in horses and donkeys	2023-2024	A rapid immunochromatographic test for the simultaneous detec- tion of antibodies to T. equi and B. caballi was evaluated using samples from horses and donkeys collected in Greece, Israel, and Italy.	a rapid immunochromatographic test for the simultaneous detec- tion of antibodies to T. equi and B. caballi was evaluated using samples from horses and donkeys collected in Greece, Israel, and Italy.	

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

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:
Data were collected form internet and scitific conferences including: 1. International equine infectious diseases conference, Deauville, France. 30th September – 4th October 2024. 2. Webinar on Equine Infectious Anaemia,Wednesday, 5.6.2024,4 – 6.15 pm, Tokyo time. 3. Regional Workshop on laboratory expertise for equine diseases in Asia and the Pacific, 17-18 September 2024, Tokyo, Japan

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:
Data collected from WOAH website and the papers publishes in peer reviewed journals.

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
Zenan Zhang, Kui Guo, Xiaoyu Chu, Mingru Liu, Cheng Du, Zhe Hu, Xiaojun Wang*. Development and evaluation of a test strip for the rapid detection of antibody against equine infectious anemia virus. Applied microbiology and biotechnology vol. 2024 Jan 8; 108(1):85.*

b) International conferences:

3
1. International equine infectious diseases conference, Deauville, France. 30th September – 4th October 2024.
2. Webinar on Equine Infectious Anaemia,Wednesday, 5.6.2024,4 – 6.15 pm, Tokyo time.
3. Regional Workshop on laboratory expertise for equine diseases in Asia and the Pacific, 17-18 September 2024, Tokyo, Japan

c) National conferences:

0

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

0

TOR7: SCIENTIFIC AND TECHNICAL TRAINING

17. Did your laboratory provide scientific and technical training to laboratory personnel from other WOAH 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)	
17025	CNAS	CNAS-2029-English.jpg

19. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
AGID	China National Accreditation Service for Conformity Assessment
ELISA	China National Accreditation Service for Conformity Assessment

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

Yes

We maintain a BSL2 laborotory for EIA.

TOR9: SCIENTIFIC MEETINGS

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

No

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

Yes

Title of event	Date	location	Role (speaker, presenting poster, short communications)	Title of the work presented
Regional Workshop on laboratory expertise for equine diseases in Asia and the Pacific (17-18 September 2024, Tokyo, Japan)	2024-09-16	Tokyo, Japan	Speaker	EIA: recommended diagnostic tests (WOAH Manual) and novel diagnostics tests
Webinar on Equine Infectious Anaemia Wednesday, 5.6.2024	2024-06-04	online	Speaker	Epidemiology, clinical signs, geographical distribution of EIA

TOR10: NETWORK WITH WOAH REFERENCE LABORATORIES

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

Yes

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

Yes

NETWORK/DISEASE	ROLE OF YOUR LABORATORY (PARTICIPANT, ORGANISER, ETC)	NO. PARTICIPANTS	PARTICIPATING WOAH REF. LABS
EIA	PARTICIPANT	2	EIA REF. LAB in Italy

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

No

We are organising and participate inter-laboratoray proficieny tests in 2025.

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

No

none.

TOR12: EXPERT CONSULTANTS

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

Yes

Kind of consultancy	Location	Subject (facultative)
review of WOAH Standards	remote	EIA manual update

29. Additional comments regarding your report:

Yes

We were preparing international profiecency tests in 2024. We met some difficulties in shiping the sara samples and recieveing samples during customs clearance.