

WOAH Reference Laboratory Reports Activities 2024

This report has been submitted: 30 janvier 2025 18:18

LABORATORY INFORMATION

*Name of disease (or topic) for which you are a designated WOAH Reference Laboratory:	Sheep pox and goat pox
*Address of laboratory:	Ash road
*Tel:	+44-1483 23.24.41
*E-mail address:	georgina.limon-vega@pirbright.ac.uk
Website:	https://www.pirbright.ac.uk/our-science/non-vesicular-reference-laboratory
*Name (including Title) of Head of Laboratory (Responsible Official):	Prof Bryan Charleston, Institute Director
*Name (including Title and Position) of WOAH Reference Expert:	Dr Georgina Limon-Vega, Group Leader
*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	11	0
Direct diagnostic tests		Nationally	Internationally
Capripox Real-time PCR	Yes	11	4
Differentiation PCR	Yes	0	4

Georgina Limon-Vega - - UNITED_KINGDOM

Capripox virus isolation	Yes	0	4
--------------------------	-----	---	---

TOR2: REFERENCE MATERIAL

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

No

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

Yes

Type of reagent available	Related diagnostic test	Produced/ provide	Amount supplied nationally (ml, mg)	Amount supplied internationally (ml, mg)	No. of recipient WOA Member Countries	Country of recipients
Sheep pox nucleic acid	PCR	Provide	0	100ul	1	KOREA (REP. OF),
Goat pox nucleic acid	PCR	Provide	0	100ul	1	KOREA (REP. OF),
Sheep pox virus	PCR	Provide	0	1ml	1	CZECH REPUBLIC,

4. Did your laboratory produce vaccines?

Not applicable

5. Did your laboratory supply vaccines to WOA Members?

Not applicable

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 WOA 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 WOA Standards for the designated pathogen or disease?

No

TOR4: DIAGNOSTIC TESTING FACILITIES

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

Yes

Name of WOA Member Country seeking assistance	Date	Which diagnostic test used	No. samples received for provision of diagnostic support	No. samples received for provision of confirmatory diagnoses
MONGOLIA	2024-04-25	Real-time PCR	4	0

Georgina Limon-Vega - - UNITED_KINGDOM

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

Yes

Name of the WOA Member Country receiving a technical consultancy	Purpose	How the advice was provided
SOUTH AFRICA	Discuss reagent supply	email
MONGOLIA	Advise on sheep pox vaccine choice, Virus isolation SOPs and tissue culture techniques.	email

TOR5: COLLABORATIVE SCIENTIFIC AND TECHNICAL STUDIES

12. Did your laboratory participate in international scientific studies in collaboration with WOA 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
Controlling transboundary animal diseases spread in livestock markets: A pilot intervention study	6 months	Pilot informed interventions at livestock markets for control of transboundary animal diseases	National Veterinary Research Institute (NVRI), Nigeria	NIGERIA

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:

Environmental samples as part of a longitudinal study in Northern Nigeria.
Sheep pox samples from Mongolia have been full genome sequenced – publication in preparation

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:

Brown, E., Ehizibolo, D., Dogonyaro, B.B., Wungak, Y., Oyekan, O., Adedjeji, A., Ijeoma, S., Atai, R., Oguiche, M., Samson, M., Rosso, F., Ludi, A.B., Limon, G., Shaw, A.E., Colenutt, C., Gubbins, S. (2024). Environmental sampling for the detection of capripox viruses and peste des petits ruminants virus in households and livestock markets in Plateau State, Nigeria. Access Microbiology <https://doi:10.1099/acmi.0.000872.v3>

Georgina Limon-Vega - - UNITED_KINGDOM

Presentations given at the International Symposium of Veterinary Epidemiology and Economics (ISVEE - Sydney, November 2024) and EuFMD open session (Madrid, October 2024):

- Impact of Sheep and Goat Pox and Peste des Petits Ruminants co-infection in Northern Nigeria.
- The structure and trade patterns in selected livestock markets in Northern Nigeria and their potential role for transmission of transboundary animal diseases

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

Brown, E., Ehizibolo, D., Dogonyaro, B.B., Wungak, Y., Oyekan, O., Adediji, A., Ijeoma, S., Atai, R., Oguiche, M., Samson, M., Rosso, F., Ludi, A.B., Limon, G., Shaw, A.E., Colenutt, C., Gubbins, S. (2024). *Environmental sampling for the detection of capripox viruses and peste des petits ruminants virus in households and livestock markets in Plateau State, Nigeria*. *Access Microbiology*
<https://doi.org/10.1099/acmi.0.000872.v3>

b) International conferences:

2

Presentations given at the International Symposium of Veterinary Epidemiology and Economics (ISVEE - Sydney, November 2024) and EuFMD open session (Madrid, October 2024):

- *Impact of Sheep and Goat Pox and Peste des Petits Ruminants co-infection in Northern Nigeria.*
- *The structure and trade patterns in selected livestock markets in Northern Nigeria and their potential role for transmission of transboundary animal Diseases*

c) National conferences:

0

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

0

Workshops with representatives from local government, farmers association and livestock markets actors (sellers, buyers, middlemen) in Northern Nigeria – May 2024

TOR7: SCIENTIFIC AND TECHNICAL TRAINING

17. Did your laboratory provide scientific and technical training to laboratory personnel from other WOA 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 17025	UKAS accreditation (PDF)	UKAS accreditation for Pirbright 2024.pdf

19. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
ELISA	UKAS
Real-time PCR (Bowden et al)	UKAS

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

Yes

All our management systems are built around UK legislation, some is based on WHO and WOAHA, but not directly translatable as it's updated into UK law before it's applied. All facilities have their operational risk assessment and specific activity risk assessments where required. We have a process in place for reporting incidents relating to biorisk, including an investigation process and lessons learned. There is also an inspection and audit programme which monitors compliance with Biorisk related legislation including SAPO, COSHH (where it relates to human pathogens), and GM (contained use). We are inspected by the HSE as part of a proactive intervention plan, where parts of our biorisk management system are scrutinised and sampled to check compliance and we are also visited and inspected by the National Counter Terrorism Security Office (NaCTSO) to ensure any 'dual-use' materials are being held securely.

TOR9: SCIENTIFIC MEETINGS

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

No

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

No

TOR10: NETWORK WITH WOAHA REFERENCE LABORATORIES

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

Yes

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

No

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

Yes

Purpose of the proficiency test:	Role of your Reference Laboratory (organiser/	No. participating Laboratories	Participating WOAHA Ref. Labs/
----------------------------------	---	--------------------------------	--------------------------------

WOAHA Reference Laboratory Reports Activities 2024

Georgina Limon-Vega - - UNITED_KINGDOM

	participant)		organising WOA Ref Lab
The aim of this PT was to evaluate the ability of the participating laboratories to identify the absence or presence of antibodies to capripox (CAPX) viruses in serum of ruminants and/or to assess the ability of the participating laboratories to detect CAPX virus DNA in different matrices	Participant	11	Organiser - Sciensano, Belgium

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	WOAH Member Countries
--	---	--------------------------------	------------------	-----------------------

The aim of this PT was to evaluate the ability of the participating laboratories to identify the absence or presence of antibodies to capripox (CAPX) viruses in serum of ruminants and/or to assess the ability of the participating laboratories to detect CAPX virus DNA in different matrices

Participant

11

ELISA and PCR

AUSTRIA, GERMANY, INDONESIA, KOREA (REP. OF), MALAYSIA, SWITZERLAND, THAILAND, UNITED KINGDOM, VIETNAM,

TOR12: EXPERT CONSULTANTS

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

Yes

Kind of consultancy	Location	Subject (facultative)
Review of WOA chapter	remote	Diagnostic manual -second round of comments.

29. Additional comments regarding your report:

Yes

There has been little sheep and goat pox activity this year, hence the low level of diagnostic submissions. Countries affected in Europe are obliged to use the EURL for diagnostic support and due to the cost of shipping infectious material I would expect affected countries from endemic regions in Africa to reach out to the WOAHA reference laboratory in South Africa.

We continue to take enquiries for reagents, which we supply as soon as all import permits etc are in place.