

WOAH Reference Laboratory Reports Activities 2023

Activities in 2023

This report has been submitted : 13 juin 2024 10:52

Laboratory Information

Name of disease (or topic) for which you are a designated WOAHO Reference Laboratory:	Contagious Bovine Pleuropneumonia
Address of laboratory:	Via Campo Boario 64100 Teramo
Tel.:	+390-861 33 24 05
E-mail address:	m.scacchia@izs.it
Website:	www.izs.it
Name (including Title) of Head of Laboratory (Responsible Official):	Nicola D'Alterio
Name (including Title and Position) of WOAHO Reference Expert:	Massimo Scacchia, DVO, Veterinary Officer at IZS Teramo
Which of the following defines your laboratory? Check all that apply:	Governmental

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			
c ELISA		1	1
CFT		21	1
Direct diagnostic tests			
Isolation		1	1
PCR-RFLP		1	1

TOR2: REFERENCE MATERIAL

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

Yes

TYPE OF REAGENT AVAILABLE	RELATED DIAGNOSTIC TESTING	PRODUCED/ IMPORTED	QUANTITY SUPPLIED NATIONWIDE (ML, MG)	QUANTITY SUPPLIED AT INTERNATIONAL LEVEL (ML, MG)	NAME OF BENEFICIARY WOAHO MEMBER COUNTRIES

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

Yes

TYPE OF REAGENT AVAILABLE	RELATED DIAGNOSTIC TEST	PRODUCED/ PROVIDE	AMOUNT SUPPLIED NATIONALLY (ML, MG)	AMOUNT SUPPLIED INTERNATIONALLY (ML, MG)	NO. OF RECIPIENT WOAHO MEMBER COUNTRIES	COUNTRY OF RECIPIENTS
Antigen	CFT	IZSTE	0	300	1	ZAMBIA,

Positive serum	CFT	IZSTE	0	5	1	ZAMBIA,
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4. Did your laboratory produce vaccines?

No

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

No

TOR4: DIAGNOSTIC TESTING FACILITIES

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

No

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

Yes

NAME OF THE WOAHA MEMBER COUNTRY RECEIVING A TECHNICAL CONSULTANCY	PURPOSE	HOW THE ADVICE WAS PROVIDED
BOTSWANA	Networking on CBPP, with CBPP WOAHA Reference Laboratory in Botswana and African Veterinary Institutions in order to; Improve diagnostic activities, carry out technical training and stimulate scientific research.	ERFAN - Enhancing Research for Africa Network; 1. CBPP Working Group online and in presence, and training course on CBPP CFT Antigen production at BNVL-Botswana 2. CBPP Fora: 7 events, online training course, With participation of 284 Africans, European and Asian veterinarians .
ZAMBIA	Networking on CBPP, with CBPP WOAHA Reference Laboratory in Botswana and African Veterinary Institutions in order to; Improve diagnostic activities, carry out technical training and stimulate scientific research.	ERFAN - Enhancing Research for Africa Network; 1. CBPP Working Group online and in presence, and training course on CBPP CFT Antigen production at BNVL-Botswana 2. CBPP Fora: 7 events, online training course, With participation of 284 Africans, European and Asian veterinarians .
NAMIBIA	Networking on CBPP, with CBPP WOAHA Reference Laboratory in Botswana and African Veterinary Institutions in order to; Improve diagnostic activities, carry out technical training and stimulate scientific research.	ERFAN - Enhancing Research for Africa Network; 1. CBPP Working Group online and in presence, and training course on CBPP CFT Antigen production at BNVL-Botswana 2. CBPP Fora: 7 events, online training course, With participation of 284 Africans, European and Asian veterinarians .
TANZANIA	Networking on CBPP, with CBPP WOAHA Reference Laboratory in Botswana and African Veterinary Institutions in order to; Improve diagnostic activities, carry out technical training and stimulate scientific research.	ERFAN - Enhancing Research for Africa Network; 1. CBPP Working Group online and in presence, and training course on CBPP CFT Antigen production at BNVL-Botswana 2. CBPP Fora: 7 events, online training course, With participation of 284 Africans, European and Asian veterinarians .
	Networking on CBPP, with CBPP WOAHA Reference Laboratory in	ERFAN - Enhancing Research for Africa Network; 1. CBPP Working Group

SENEGAL	Botswana and African Veterinary Institutions in order to; Improve diagnostic activities, carry out technical training and stimulate scientific research.	online and in presence, and training course on CBPP CFT Antigen production at BNVL-Botswana 2. CBPP Fora: 7 events, online training course, With participation of 284 Africans, European and Asian veterinarians .
MAURITANIA	Networking on CBPP, with CBPP WOAHA Reference Laboratory in Botswana and African Veterinary Institutions in order to; Improve diagnostic activities, carry out technical training and stimulate scientific research.	ERFAN - Enhancing Research for Africa Network; 1. CBPP Working Group online and in presence, and training course on CBPP CFT Antigen production at BNVL-Botswana 2. CBPP Fora: 7 events, online training course, With participation of 284 Africans, European and Asian veterinarians .
ETHIOPIA	Networking on CBPP, with CBPP WOAHA Reference Laboratory in Botswana and African Veterinary Institutions in order to; Improve diagnostic activities, carry out technical training and stimulate scientific research.	ERFAN - Enhancing Research for Africa Network; 1. CBPP Working Group online and in presence, and training course on CBPP CFT Antigen production at BNVL-Botswana 2. CBPP Fora: 7 events, online training course, With participation of 284 Africans, European and Asian veterinarians .
ANGOLA	Networking on CBPP, with CBPP WOAHA Reference Laboratory in Botswana and African Veterinary Institutions in order to; Improve diagnostic activities, carry out technical training and stimulate scientific research.	ERFAN - Enhancing Research for Africa Network; 1. CBPP Working Group online and in presence, and training course on CBPP CFT Antigen production at BNVL-Botswana 2. CBPP Fora: 7 events, online training course, With participation of 284 Africans, European and Asian veterinarians .

TOR5: COLLABORATIVE SCIENTIFIC AND TECHNICAL STUDIES

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

Yes

Title of the study	Duration	PURPOSE OF THE STUDY	PARTNERS (INSTITUTIONS)	WOAHA MEMBER COUNTRIES INVOLVED OTHER THAN YOUR COUNTRY
AMR in Mmm strains. Master Research study	2 years	Study of AMR in strains of Mmm isolated in Tanzania	BNVL Gaborone, Veterinary School of Pretoria ZAR, Tanzanian Veterinary Laboratory Agency	BOTSWANA

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

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:

The WOAHA Reference Laboratory for CBPP in Teramo has always supported WOAHA member countries with epidemiological studies, analysing data on the prevalence and incidence of CBPP in their countries. No such epidemiological support was requested in 2023.

15. Did your laboratory disseminate epidemiological data that had been processed and analysed?

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:

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Francis, M., Raji, M. A., Kwanashie, C. N., Adamu, J., Allam, L., Ameh, J. A., Egwu, G. O., Zilli, K., Sacchini, F., & Scacchia, M. (2023). Identification of *Mycoplasma mycoides* subspecies *mycoides* from slaughtered cattle in two transboundary states of North eastern Nigeria. *Veterinaria Italiana*, 58(3). <https://doi.org/10.12834/VetIt.2331.16051.3>

Teshome D, Tessema T, Kumssa S, Muluneh B, Sacchini F, Kumbe A. Sero-prevalence of contagious bovine pleuropneumonia in dryland of Borana, southern Oromia, Ethiopia. *Res Vet Sci*. 2024 Jan;166:105100. doi: 10.1016/j.rvsc.2023.105100. Epub 2023 Nov 22. PMID: 38016217.

b) International conferences:

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1. In-person training course on: Contagious Bovine Pleuropneumonia, delivered to Paraguayan veterinarians, hosted at IZS Teramo, January 2023;
2. In-person training course on: Contagious Bovine Pleuropneumonia, delivered to Algerian Veterinarians, guests at IZS Teramo, February 2023;
3. Online lecture on: Is CBPP a health threat for North Africa? Delivered as part of the ERFAN Training Course on Mycoplasmosis organised by IZS Sicily, February 2023;
4. Invited speaker at 25th Conference of the WOAHA Regional Commission for Africa, Gaborone-Botswana, 20 - 24 February 2023, entitled: Twinning Project as a tool for promoting scientific expertise/excellence, Gaborone-Botswana, 23 February 2023;
5. Presentation on: CBPP WOAHA Twinning Project, Audit Visit; Carried out as part of the WOAHA Twinning Project Audit Visit for CBPP, Sebeta Ethiopia, February 2023;
6. Online invited speaker: Presentation of the Regional Network of CBPP Laboratories: ERFAN, carried out as part of event organised by GF-TADs Africa, 8 June 2023;
7. Online invited speaker: Challenges and aspirations in the control of CBPP: abattoir surveillance, made as part of event organised by GF-TADs Africa, 13 June 2023;
8. Invited speaker: Contagious Bovine Pleuro-pneumoniae; Pathology, carried out as part of event: Gap analysis workshop on Contagious Bovine Pleuropneumonia (CBPP), June 26th-28th, 2023 at the Wellcome-Sanger Institute, Hinxton, UK, organised by USDA Star-Idaz, June 28, 2023;
9. Invited speaker: ERFAN: support to veterinary laboratories' research and diagnosis in Africa, delivered as part of event: VETLAB Network Coordination Meeting with Directors of African and Asian Veterinary Laboratories, 21-25 August 2023, IAEA Headquarters, Vienna, Austria, 23 August 2023;
10. Online lecture on: Contagious Bovine Pleuro-pneumoniae; Pathology, delivered as part of the Course of the Visit of Indian Pathologists to IZS Sicily, 25 September 2023;
11. Presentation on: CBPP WOAHA Twinning Project IZSTE-AHI; Parent lab report and the way forward, made as part of the CBPP International Meeting organised at the Animal Health Institute, Sebeta, 30 November-1 December 2023;
12. Online lecture on: CBPP pathology, delivered as part of the ERFAN International CBPP Fora, 13 December 2023.
13. Online lecture on: CBPP Abattoir surveillance and Telediagnosis, delivered as part of the ERFAN International CBPP Fora, 13 December 2023.

c) National conferences:

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

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ERFAN Website www.erfan.it ; ERFAN Facebook; ERFAN Instagram

TOR7: SCIENTIFIC AND TECHNICAL TRAINING

17. Did your laboratory provide scientific and technical training to laboratory personnel from other WOAHA Members?

Yes

a) Technical visit : 2

b) Seminars : 1

c) Hands-on training courses: 6

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
C	ETHIOPIA	4
A	PARAGUAY	2
C	ALGERIA	2
B	INDIA	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	pdf	Certificato Accredia ISO17025_202001.pdf

19. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
CFT	ILAC-ACCREDIA
PCR-RFLP	ILAC-ACCREDIA

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

Yes

At IZS in Teramo there is in place a Bio-risk management system. Samples and strains are managed in BSL-2 facilities and Mmm strains are stored in a biobank located in a restricted area with controlled access.

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 (MM/YY)	LOCATION	NO. PARTICIPANTS
International	CBPP ERFAN Working Group meeting	BNVL-WOAH RL Botswana	2023-06-06	Gaborone - Botswana	13

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

Yes

Title of event	Date (mm/yy)	Location	Role (speaker, presenting poster, short communications)	Title of the work presented
25th Conference of the WOAHP Regional Commission for Africa	2023-02-20	Gaborone	Invited Speaker	Twinning Project as a tool for promoting scientific expertise/excellence
GF-TADs Africa	2023-06-06	Online	Invited Speaker	Presentation of the Regional Network of CBPP Laboratories: ERFAN
GF-TADs Africa	2023-06-13	Online	Invited Speaker	Challenges and aspirations in the control of CBPP: abattoir surveillance
Gap analysis workshop on Contagious Bovine Pleuropneumonia (CBPP), organised by USDA Star-Idaz	2023-06-26	Hinxton, UK	Invited Speaker	Contagious Bovine Pleuropneumonia; Pathology
VETLAB Network Coordination Meeting with Directors of African and Asian Veterinary Laboratories	2023-08-21	Vienna, Austria	Invited Speaker	ERFAN: support to veterinary laboratories' research and diagnosis in Africa
ERFAN International CBPP Fora	2023-12-07	Online	Invited Speaker	CBPP pathology
ERFAN International CBPP Fora	2023-12-14	Online	Invited Speaker	CBPP Abattoir surveillance and Telediagnosis

TOR10: NETWORK WITH WOAHP REFERENCE LABORATORIES

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

Yes

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

Yes

NETWORK/DISEASE	ROLE OF YOUR LABORATORY (PARTICIPANT, ORGANISER, ETC)	NO. PARTICIPANTS	PARTICIPATING WOAHP REF. LABS
	Collaboration with CBPP WOAHP RL in		

CBPP	Gaborone and CIRAD	3	meetings online
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25. Did you organise or participate in inter-laboratory proficiency tests with WOA Reference Laboratories designated for the same pathogen?

Yes

PURPOSE OF THE PROFICIENCY TESTS: 1	ROLE OF YOUR REFERENCE LABORATORY (ORGANISER/ PARTICIPANT)	NO. PARTICIPANTS	PARTICIPATING WOA REF. LABS/ ORGANISING WOA REF. LAB.
CFT	Participant and co-organiser (support for statistical analyses of PT results)	5	BNVL Gaborone (organizing) IZSAM Teramo (participating/co-organizing)

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?

Yes

TITLE OF THE PROJECT OR CONTRACT	SCOPE	NAME(S) OF RELEVANT WOA REFERENCE LABORATORIES
ERFAN	Networking on CBPP, with CBPP WOA Reference Laboratories and African Veterinary Institutions in order to; Improve diagnostic activities, carry out technical training and stimulate scientific research.	CBPP WOA RL in Gaborone
CBPP Fora	Training on CBPP	BNVL, Gaborone, Botswana CIRAD, France
Discontools CBPP https://www.discontools.eu/database/39-contagious-bovine-pleuro-pneumonia.html	Updating knowledge and gaps on CBPP diagnosis and control	CIRAD, France

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?

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
CFT	Participant and co-organiser (support for statistical analyses of PT results)	6	CFT	BOTSWANA, ETHIOPIA, ITALY, MAURITANIA, NAMIBIA, SENEGAL, ZAMBIA,

TOR12: EXPERT CONSULTANTS

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

Yes

KIND OF CONSULTANCY	Location	SUBJECT (FACULTATIVE)
CBPP ad hoc group meeting (5-7 Dec 2023)	online	Evaluation of Contagious Bovine Pleuropneumonia Status of Members

29. Additional comments regarding your report:

Yes

ERFAN Project

Nr. 37 partners; nr. 5 WOA RL and 2 WOA CC involved; nr. 20 countries involved.

2019-2023: 50 Online WG meetings, 301 participants ;20 On site WG meetings, 250 participants; 47 SOPs and Working Schemes shared between partners. Reference materials produced by ERFAN partners for CBPP and Brucellosis diagnosis. 3 Proficiency tests organised: Brucella CVL Harare, CBPP BNVL Gaborone, WND IZS Teramo. 1 General meeting and 7 Regional Meetings. 13 Working group meetings. 44 Online Training Courses organized; 23 Scientific topics touched; 144 Training days; 483 Hours; 109 Teachers; 2869 Participants from 30 Countries;22 Online Dialogues delivered in asynchronous mode; 8 On-the job Trainings; 86 Participants, a total of 60 Institutions and 36 Countries. 2 online Fora on RVF and CBPP. 5 onsite training course, 83 participants; 3 on the job training, 4 participants.

WOA Twinning Project on CBPP with the Animal Health Institute in Sebeta: Carried out the following activities:

nr. 2 WOA experts Audit visit at the AHI, February 2023 and December 2023;

nr. 2 Study visits by AHI epidemiologists to the WOA Reference Laboratory in Teramo, May 2023;

nr. 1 International meeting, final event of WOA Twinning Project at the AHI, Sebeta, Ethiopia, December 2023.