

# WOAH Reference Laboratory Reports Activities 2024

This report has been submitted: 31 janvier 2025 15:52

## LABORATORY INFORMATION

<b>*Name of disease (or topic) for which you are a designated WOAH Reference Laboratory:</b>	Bluetongue
<b>*Address of laboratory:</b>	No. 100 Old Soutpan Road, Onderstepoort, 0110, Gauteng Province, South Africa
<b>*Tel:</b>	+27-12 529 91 17
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<b>Website:</b>	<a href="https://www.arc.agric.za/">https://www.arc.agric.za/</a>
<b>*Name (including Title) of Head of Laboratory (Responsible Official):</b>	Dr. Baratang Alison Lubisi - Acting Senior Manager Research: Animal Health and Protection
<b>*Name (including Title and Position) of WOAH Reference Expert:</b>	Dr. Baratang Alison Lubisi - Research Team Manager: Diagnostic Services
<b>*Which of the following defines your laboratory? Check all that apply:</b>	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 WOAH Manual (Yes/No)	Total number of test performed last year	
Indirect diagnostic tests		Nationally	Internationally
1109	Yes	1107	2
Direct diagnostic tests		Nationally	Internationally
Real time RT-PCR	Yes	804	604

## 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?

No

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
NAMIBIA	2024-01-22	Real time RT-PCR	0	5
NAMIBIA	2024-01-31	cELISA	1	0
NAMIBIA	2024-02-08	cELISA	1	0
NAMIBIA	2024-02-22	Real time RT-PCR	0	21
NAMIBIA	2024-03-12	Real time RT-PCR	0	77
NAMIBIA	2024-04-18	Real time RT-PCR	0	5
NAMIBIA	2024-04-22	Real time RT-PCR	0	34
NAMIBIA	2024-05-21	Real time RT-PCR	0	27
NAMIBIA	2024-07-12	Real time RT-PCR	0	21
NAMIBIA	2024-07-26	Real time RT-PCR	0	93
NAMIBIA	2024-08-02	Real time RT-PCR	0	71
NAMIBIA	2024-09-11	Real time RT-PCR	0	122
NAMIBIA	2024-10-09	Real time RT-PCR	0	110

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

No

## 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:

The laboratory performed diagnostic tests and issued reports. The information therein contained adds to the body of knowledge regarding the epidemiological situation of Bluetongue in the country/countries.

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:

Our laboratory was part of a PhD study done through the University of Warwick, UK< where we provided Culicoides data from our Culicoides database which she used to build epidemiological models for AHS and BT.

DE KLERK, J., TILDESLEY, M., LABUSCHAGNE, K. GORSICH, E. 2024. Modelling bluetongue and African horse sickness vector (Culicoides spp.) distribution in the Western Cape in South Africa using random forest machine learning. Parasites Vectors 17, 354 (2024).  
<https://doi.org/10.1186/s13071-024-06446-8> Published: August 21, 2024

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

DE KLERK, J., TILDESLEY, M., LABUSCHAGNE, K. GORSICH, E. 2024. Modelling bluetongue and African horse sickness vector (Culicoides spp.) distribution in the Western Cape in South Africa using random forest machine learning. Parasites Vectors 17, 354 (2024).  
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b) International conferences:

c) National conferences:

0

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

*We have 3 scientific articles in draft format which will be sent for publication in the first quarter of 2025.  
Parts of the work will be presented at at least 3 conferences in 2025.*

## 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)	
ISO17025	The laboratory is SANAS accredited for several tests, including Bluetongue.	V0001-06-2022 signed.pdf

19. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
SANAS	SANAS (South African National Accreditation System)

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

Yes

The laboratory adheres to strict biosecurity procedures and follows the ISO 35001 standard.

## TOR9: SCIENTIFIC MEETINGS

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

No

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

No

## 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
Bluetongue	Share information on testing semen for Bluetongue using PCR.	4	Istituto Zooprofilattico Sperimentale dell'Abruzzo e del Molise "G. Caporale"; Pirbright

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

No

*Our laboratory participates with the EU Reference Laboratory for African horse sickness and Bluetongue.*

*Talks are underway for a possible interlaboratory comparison on PCR with other WOAHP reference laboratories.*

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

Yes

Purpose for inter-laboratory test comparisons <sup>1</sup>	Role of your reference laboratory (organizer/participant)	No. participating laboratories	Name of the test	WOAHP Member Countries
Method harmonisation	Participant	48	ELISA	SOUTH AFRICA, SPAIN, UNITED KINGDOM,
Method harmonisation	Participant	10	PCR	SPAIN, UNITED KINGDOM,

## TOR12: EXPERT CONSULTANTS

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

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Yes

Kind of consultancy	Location	Subject (facultative)
Meeting	On-line	A meeting of the Regional Commission for Africa was held before the 91st WOAHA General Session. Stakeholders were given an update on WOAHA activities in the region. Voting on which area of animal disease control and welfare to focus on for the next year was conducted.

29. Additional comments regarding your report:

*The 2024 Bluetongue Reference Laboratory Activity Report was sent to WOAHA on 1 July 2024.*

*A WOAHA twinning project on Bluetongue (BT), Sheep and Goat Pox (SGP) and Brucellosis was signed by WOAHA, ARC-OVR, and the Tanzania Veterinary Laboratories Agency (TVLA). The ARC signed on 24 July 2024.*

*The laboratory was part of a meeting convened by the International Wool Textile Organisation (IWTO), the global authority for standards in the wool textile industry. The meeting involved role players in the field of Bluetongue (BT) research, diagnostics and vaccine production, include WOAHA Reference Laboratories, to discuss the assistance they needed with diagnostics and vaccines, in light of the outbreaks that were ongoing in Europe.*