

# WOAH Reference Laboratory Reports Activities 2024

This report has been submitted: 22 janvier 2025 06:50

# LABORATORY INFORMATION

*Name of disease (or topic) for which you are a designated WOAH Reference Laboratory:	Theileriosis
*Address of laboratory:	Agricultural Research Council - Onderstepoort Veterinary Research, 100 Soutpan Road, Onderstepoort, 0110, South Africa
*Tel:	+27125299200
*E-mail address:	mansb@arc.agric.za
Website:	https://www.arc.agric.za/arc-ovi/Pages/Parasites,-vectors-andvector-bourne- diseases.aspx
*Name (including Title) of Head of Laboratory (Responsible Official):	Dr. Alison Lubisi
*Name (including Title and Position) of WOAH Reference Expert:	Dr. Ben J. Mans
*Which of the following defines your laboratory? Check all that apply:	Governmental 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)

Y	é	s

Diagnostic Test	Indicated in WOAH Manual (Yes/No)	Total number of test performed last year	
Indirect diagnostic tests		Nationally	Internationally
Theileria parva IFAT	Yes	3117	0
Theileria equi	Yes	175	0

WOAH Reference Laboratory Reports Activities 2024



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Direct diagnostic tests		Nationally	Internationally
Theileria parva PCR	Yes	3108	0
Equine piroplasmosis PCR	Yes	76	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?

4. Did your laboratory produce vaccines?

No

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

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?

No

# **TOR5: COLLABORATIVE SCIENTIFIC AND TECHNICAL STUDIES**

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

No

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

No

# TOR6: EPIZOOLOGICAL DATA



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14. Did your Laboratory collect epidemiological data relevant to international disease control?

No

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 regarding the epidemiological carrier state of Theileria parva at the live stock/game interface in KwaZulu-Natal was published. It specifically reported on the absence of a carrier state in cattle as compared to the related disease, East Coast fever in East Africa.

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

Yes

Mbizeni S, Mans BJ, Mukaratirwa S, Peba B, Maboko BB, Pienaar R, Magampa H, Marumo RD, Josemans A, Troskie C, Latif AA. 2024. Molecular and serological prevalence of corridor disease (buffalo associated Theileria parva infection) in cattle populations at the livestock/game interface of KwaZulu-Natal province, South Africa. Vet Parasitol Reg Stud Reports 47, 100963. doi: 10.1016/j.vprsr.2023.100963.

b) International conferences:

c) National conferences:

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

# **TOR8: QUALITY ASSURANCE**

18. Does your laboratory have a Quality Management System?

Quality management system adopted	Certificate scan (PDF, JPG, PNG format)	
ISO/IEC 17025:2017	pdf	SANAS_certificate_V0017.pdf



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19. Is your quality management system accredited?

Yes	
Test for which your laboratory is accredited	Accreditation body
Theileria parva IFAT cattle serum Theileria equi IFAT horse serum	
Theileria parva Hybrid II real-time PCR test for Buffalo and Cattle	South African National Accreditation System (SANAS)
whole blood	

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

Theileriosis is not zoonotic and only transmissible by ticks infected with sporozoites. Risk of direct infection from biological material is therefore minimal. Irrespectively, diagnostic samples are treated as potentially infectious and inactivated and destroyed using oncampus incineration. When using ticks for tick-transmission studies, all work is performed within a quarantined stable area approved by the Department of Agriculture.

# **TOR10: NETWORK WITH WOAH REFERENCE LABORATORIES**

23. Did your laboratory exchange information with other WOAH Reference Laboratories designated for the same pathogen or disease?
Not applicable (only WOAH Reference Laboratory designated for the disease
24. Do you network (collaborate or share information) with other WOAH Reference Laboratories designated for the same pathogen?
Not applicable (only WOAH Reference Laboratory designated for the disease
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?
Not applicable (Only WOAH Reference Laboratory designated for the disease) *No other WOAH Reference Laboratories exist for Theileria parva.*

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?

Not applicable (only WOAH Reference Laboratory designated for the disease

### **TOR12: EXPERT CONSULTANTS**

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

Kind of consultancy	Location	Subject (facultative)
Review of WOAH standards and manual	Remote	Theileriosis chapters

29. Additional comments regarding your report:

Yes

We are currently the only Reference Laboratory for Theileriosis. Once the Reference Laboratory for Italy has been confirmed as Reference Laboratory, the laboratory will be engaged to investigate areas of collaboration and whether it will be possible to set up proficiency testing schemes for Theileriosis.

We did not receive any requests from member countries for assistance related to WOAH Reference Laboratory activities in the last year.

WOAH Reference Laboratory Reports Activities 2024