

WOAH Reference Laboratory Reports Activities 2022

Activities in 2022

This report has been submitted : 10 février 2023 16:14

Laboratory Information

Name of disease (or topic) for which you are a designated WOA Reference Laboratory:	Theileriosis
Address of laboratory:	Istituto Zooprofilattico Sperimentale della Sicilia (IZSSi), via Gino Marinuzzi 3, 90129, Palermo ITALY
Tel.:	+39-091 656.5230
E-mail address:	alessandra.torina@izssicilia.it
Website:	www.izssicilia.it
Name (including Title) of Head of Laboratory (Responsible Official):	Dr. Salvatore Seminara, General manager Istituto Zooprofilattico Sperimentale della Sicilia
Name (including Title and Position) of WOA Reference Expert:	Alessandra Torina, PhD, Director of Serological Diagnostic Area
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 WOA Manual (Yes/No)	Total number of test performed last year	
Indirect diagnostic tests		Nationally	Internationally
Theileria annulata IFI	yes	44	0

Theileria equi IFI	yes	28	32
Theileria equi ELISA	yes	28	32
Direct diagnostic tests		Nationally	Internationally
PCR Theileria annulata (30kDa surface antigen gene)	yes	78	0
PCR real time Theileria annulata (gene 18S rRNA)	yes	0	0
PCR Theileria ovis (SSU rRNA gene)	yes	13	0
PCR Theileria equi (merozoite antigen 1)	yes	4	32
Theileria spp. blood smears	yes	188	0
PCR Theileria spp (gene 18S rRNA)	yes	188	77
Babesia/Theileria Reverse Line Blot	yes	12	77

TOR2: REFERENCE MATERIAL

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

No

3. Did your laboratory supply standard reference reagents (nonWOAH-approved) and/or other diagnostic reagents to WOA?H 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?H MEMBER COUNTRIES	COUNTRY OF RECIPIENTS
Theileria annulata Positive Serum	IFI	Produced				
Theileria equi positive serum	IFI ELISA	Provide		4 ML	1	MiddleEast
Theileria ovis positive control	PCR	Produced				
Theileria equi positive control	PCR	provide		8 ML	1	Europe
Theileria annulata positive control	PCR	Produced				
Theileria annulata negative serum	IFI	Produced				
Theileria annulata negative control	PCR	Produced				
Theileria equi negative control	PCR	Provide		28 ML	1	Europe
Theileria spp positive control	PCR	Produced				
Theileria spp negative control	PCR	Produced				

Theileria equi negative serum	IFI ELISA	Provide		28 ML	1	Europe
Theileria ovis negative control	PCR	Produced				

4. Did your laboratory produce vaccines?

No

5. Did your laboratory supply vaccines to WOA H Members?

No

TOR3: NEW PROCEDURES

6. Did your laboratory develop new diagnostic methods for the designated pathogen or disease?

Yes

NAME OF THE NEW TEST OR DIAGNOSTIC METHOD DEVELOPED	DESCRIPTION AND REFERENCES (PUBLICATION, WEBSITE, ETC.)
RLB Equine Theileriosis	Report Italian Ministry of Health RC IZSSI 07/18

7. Did your laboratory validate diagnostic methods according to WOA H 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 H Standards for the designated pathogen or disease?

No

TOR4: DIAGNOSTIC TESTING FACILITIES

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

Yes

NAME OF WOA H 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
MALAWI	2022-02-25	RLB	77	77
MALAWI	2022-02-25	PCR	77	77
THE NETHERLANDS	2022-11-29	IFI	32	32
THE NETHERLANDS	2022-11-29	ELISA	32	32
THE NETHERLANDS	2022-11-29	PCR	32	32

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

Yes

NAME OF THE WOA H MEMBER COUNTRY RECEIVING A TECHNICAL CONSULTANCY	PURPOSE	HOW THE ADVICE WAS PROVIDED
SOUTH AFRICA	Sharing diagnostic tools and proficiency test	e-mail and in presence

ZIMBABWE	Sharing diagnostic tools	e-mail and in presence
AUSTRIA	sharing protocol for in-vitro culture of Theileria	e-mail
CROATIA	Sharing DNA controls	e- mail

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
Validation rapid test for Theileria equi	24	Validation	TBD International BV	THE NETHERLANDS
Monitoring TBD	12	Epidemiological investigation	African Union Centre for Tick and Tick borne disease	MALAWI
TBP in Hyalomma Ticks	12	Tick ecology	Instituto Nacional de Investigación y Tecnología Agraria y Alimentaria (INIA- CSIC)	SPAIN
Immune response TBP	12	Study of immune response	SaBio. Instituto de Investigación en Recursos Cinegéticos, IREC (CSIC, UCLM, JCCM)	SPAIN
Immune response TBP	12	Study of immune response	Department of Veterinary Pathobiology, Center for Veterinary Health Sciences Oklahoma State University,	UNITED STATES OF AMERICA
Immune response TBP	12	Study of immune response	Biochemistry Section, Regional Centre for Biomedical Research (CRIB), Faculty of Science and Chemical Technologies, University of Castilla-La Mancha, Toledo	SPAIN

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:

Disease hazards in cattle in South of Italy (Sicily)
 Malawi prevalence of TBP in animals and animals .
 TBP in Parma province

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:

Disease hazards in cattle in South of Italy (Sicily)
Malawi prevalence of TBP in ticks and animals

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:

b) International conferences:

2

Investigation of disease hazards in cattle in South of Italy (Sicily 31st World Buiatrics Congress
Piroplasmosis in Cattle 31st World Buiatrics Congress

c) National conferences:

1

National Buiatric Congress ANAPLASMA MARGINALE: STUDIO DI UN FOCOLAIO IN PROVINCIA DI PARMA Theileria was also investigated

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

TOR7: SCIENTIFIC AND TECHNICAL TRAINING

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

Yes

a) Technical visit : 2

b) Seminars :

c) Hands-on training courses: 5

d) Internships (>1 month) 2

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

a	The Neatherlands	1
a	Zimbabwe	1
c	Germany	5
d	Spain	1
d	Argentina	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		Certificato di Accreditamento n. 0246.pdf

19. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
PCR Theileria annulata	ACCREDIA
IFI Theileria equi	ACCREDIA
PCR Theileria equi	ACCREDIA
Theileria spp smears	ACCREDIA
ELISA Theileria equi	ACCREDIA

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

Yes

D.lgs 81/2008 "Testo unico in materia di salute e sicurezza nei luoghi di lavoro".

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?

Yes

Title of event	Date (mm/yy)	Location	Role (speaker, presenting poster, short communications)	Title of the work presented
30th Regional Conference for Europe WOA	2022-10-04	Catania	Presenting poster	Investigation of zoonotic hazards in Sicilian cattle farms (South of Italy)
31st World Buiatrics Congress	2022-09-08	Madrid	Speaker	Piroplasmosis of cattle
Webinar European College				THEILERIOSIS IN SHEEP

of Small Ruminant Health Management (ECSRHM).	2022-12-07	Webinar	Speaker	AND GOATS
LA MALATTIA DI LYME: FOCUS SULLE COINFEZIONI	2022-05-28	LIVE WEBINAR ECM	Speaker	Ecologia delle zecche e drivers d'infezione
89th General Session -	2022-05-23	Live webcast	attendance	

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. Are you a member of a network of WOAHP Reference Laboratories designated for the same pathogen?

No

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

No

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?

No

TOR12: EXPERT CONSULTANTS

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

Yes

KIND OF CONSULTANCY	Location	SUBJECT (FACULTATIVE)
WOAHP Terrestrial Manual: new chapter	Palermo	Theileriosis in sheep and goats (infection with Theileria lestoquardi, T. luwenshuni and T. uilenbergi)
WOAHP Biological Standards Commission	Palermo	Code point 4 of Article 14.X.5

29. Additional comments regarding your report:

Yes

Due to the COVID19 pandemic, some activities have been reduced .