

WOAH Reference Laboratory Reports Activities 2022

Activities in 2022

This report has been submitted : 26 avril 2023 10:56

Laboratory Information

Name of disease (or topic) for which you are a designated WOA Reference Laboratory:	Leishmaniosis
Address of laboratory:	Istituto Zooprofilattico Sperimentale della Sicilia (IZSSi), National Reference Centre for Leishmaniosis (C.Re.Na.L.), via Gino Marinuzzi 3, 90129, Palermo ITALY
Tel.:	+39 0916565368
E-mail address:	fabrizio.vitale@izssicilia.it
Website:	https://crenal.izssicilia.it/
Name (including Title) of Head of Laboratory (Responsible Official):	Dr. Salvatore Seminara, Official Manager
Name (including Title and Position) of WOA Reference Expert:	Dr. Fabrizio Vitale, Molecular Biology Dept. Director, National Reference Center for Leishmaniosis (C.Re.Na.L.).
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
Immunofluorescence test (IFAT)	yes	4174	150
Direct diagnostic tests		Nationally	Internationally
Leishmania culture	yes	27	

			14
Real Time RT-PCR	yes	623	

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
positive dog control serum	IFAT	PRODUCED	71	1	6	Africa Europe MiddleEast
negative dog control serum	IFAT	PRODUCED	71	1	6	Africa Europe MiddleEast
Slide antigens KIT	IFAT	PRODUCED	1846	21	6	Africa Europe MiddleEast
immunofluorescent dog conjugate	IFAT	PROVIDE	29	0,84	6	Africa Europe MiddleEast
positive cat control serum	IFAT	PRODUCED	1,36	0	1	Europe
negative cat control serum	IFAT	PRODUCED	1,36	0	1	Europe
immunofluorescent cat conjugate	IFAT	PROVIDE	1,40	0	1	Europe
Leishmania infantum DNA	REAL TIME PCR	PROVIDE	1,2	0	1	Europe
Leishmania infantum strain	Culture	PRODUCED	34	0	1	Europe

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?

No

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

Yes

NAME OF THE NEW TEST OR DIAGNOSTIC METHOD DEVELOPED	DESCRIPTION AND REFERENCES (PUBLICATION, WEBSITE, ETC.)
PCR REAL TIME	Castelli G, Bruno F, Reale S, Catanzaro S, Valenza V, Vitale F. Molecular Diagnosis of Leishmaniasis: Quantification of Parasite Load by a Real-Time PCR Assay with High Sensitivity. Pathogens. 2021 Jul 9;10(7):865. doi: 10.3390/pathogens10070865. PMID: 34358015; PMCID: PMC8308825.

8. Did your laboratory develop new vaccines for the designated pathogen or disease?

No

9. Did your laboratory validate vaccines according to WOAHP Standards for the designated pathogen or disease?

No

TOR4: DIAGNOSTIC TESTING FACILITIES

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

Yes

NAME OF WOAHP 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
GREECE	2022-02-01	IFAT	30	30
SOUTH AFRICA	2022-09-27	IFAT	30	30
GREECE	2022-10-18	IFAT	30	30
NORTH MACEDONIA (REP. OF)	2022-10-18	IFAT	30	30
SPAIN	2022-11-29	IFAT	30	30

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

Yes

NAME OF THE WOAHP MEMBER COUNTRY RECEIVING A TECHNICAL CONSULTANCY	PURPOSE	HOW THE ADVICE WAS PROVIDED
GREECE	Quality assurance	IFAT Proficiency test and Reference Material
SPAIN	Quality assurance	IFAT Proficiency test and Reference Material
NORTH MACEDONIA (REP. OF)	Quality assurance	IFAT Proficiency test and Reference Material
SOUTH AFRICA	Quality assurance	IFAT Proficiency test and Reference Material
ITALY	Quality assurance	IFAT Proficiency test and Reference Material

TOR5: COLLABORATIVE SCIENTIFIC AND TECHNICAL STUDIES

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

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:

national epizootiological report 2022 provided to the ministry of health of Italy

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:

October 2022

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:

7

<https://doi.org/10.3390/microorganisms10091704>, <https://doi.org/10.1186/s12917-022-03359-5>, <https://doi.org/10.3390/vetsci9090482>,
<https://doi.org/10.3390/vetsci9090508>, <https://doi.org/10.1186/s13071-022-05230-w>, <https://doi.org/10.3390/vetsci9110631>,
<https://doi.org/10.3390/v14122691>.

b) International conferences:

1

CONGRES ALIVE, MALAGA 2022

c) National conferences:

4

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 : 4

b) Seminars : 0

c) Hands-on training courses: 4

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
a	Italy	8

TOR8: QUALITY ASSURANCE

18. Does your laboratory have a Quality Management System?

Yes

Quality management system adopted	Certificate scan (PDF, JPG, PNG format)	
ISO 1725	PDF	Certificato di Accreditamento n. 0246.pdf

19. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
IFAT TEST	ACCREDIA
REAL TIME PCR	ACCREDIA
LEISHMANIA ISOLATION	ACCREDIA

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

Yes

See Manual of Diagnostic Tests and Vaccines for Terrestrial Animals, Chapter 1.1.4

TOR9: SCIENTIFIC MEETINGS

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

No

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

Yes

Title of event	Date (mm/yy)	Location	Role (speaker, presenting poster, short communications)	Title of the work presented
conference for Veterinarians for the Leishmania	2022-04-09	Cypro	Speaker	'Laboratory diagnosis, direct and indirect parasite detection method'

TOR10: NETWORK WITH WOA H REFERENCE LABORATORIES

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

Not applicable (only WOA Reference Laboratory designated for the disease)

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

Not applicable (Only WOA Reference Laboratory designated for the disease)

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

Not applicable (Only WOA Reference Laboratory designated for the disease)

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?

Not applicable (Only WOA Reference Laboratory designated for the disease)

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	Region(s) of participating WOA Member Countries
IFAT	ORGANIZER	15	Africa Europe
REAL TIME PCR	ORGANIZER	1	Europe

TOR12: EXPERT CONSULTANTS

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

Yes

KIND OF CONSULTANCY	Location	SUBJECT (FACULTATIVE)
diagnosis, screening of animals for leishmaniosis	Italy	• Tiziana Merlato - Laboratorio Analisi Veterinarie Merlato, Siracusa
Leishmania diagnosis	Italy	• Claudio de Martinis DVM PhD Dirigente Veterinario , U.O.S. Exotic and Vector Borne Diseases U.O.C. Virology Istituto Zooprofilattico Sperimentale del Mezzogiorno - Portici (NA)
diagnosis, screening of animals for leishmaniosis and surveillance	Italy	Laboratorio BioGene
diagnosis, screening of animals for leishmaniosis	France	• Stéphane AUDHUY, BIO VETO TEST, 285 avenue de Rome, 83500 La Seyne sur mer, FRANCE
Leishmania diagnosis	England	• Dr. Ludovic Ebert, Technical Sales & Marketing, Xpedito Diagnostics GmbH

29. Additional comments regarding your report:

No