WOAH Reference Laboratory Reports Activities2022

Activities in 2022

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Laboratory Information

Name of disease (or topic) for which you are a designated WOAH Reference Laboratory:	MYXOMATOSIS
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Website:	https://www.izsler.it/chi-siamo/per-chi-e-con-chi-lavoriamo/centri-di- referenza/internazionali/oie-reference-laboratory-for-myxomatosis-of-rabbits/
Name (including Title) of Head of Laboratory (Responsible Official):	Dr. Piero FRAZZI (DVM, General Director)
Name (including Title and Position) of WOAH Reference Expert:	Dr. Antonio Lavazza (DVM, MSc, Director Department Animal Health and Welfare)
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 WOAH Manual (Yes/No)	Total number of test performed last year	
Indirect diagnostic tests		Nationally	Internationally
c-ELISA	YES	553	621
Direct diagnostic tests		Nationally	Internationally

REAL-TIME PCR	YES	1	0
PCR	YES	160	0
EM	YES	3	0
CELL CULTURE ISOLATION	YES	4	0
IMMUNOFLUORESCENCE	YES	4	0
IMMUNOPEROXIDASE	YES	0	0
HISTOPATHOLOGY & IHC	YES	0	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?

Yes

TYPE OF REAGENT AVAILABLE	RELATED DIAGNOSTIC TEST	PRODUCED/ PROVIDE	AMOUNT SUPPLIED NATIONALLY (ML, MG)	AMOUNT SUPPLIED INTERNATIONALLY (ML, MG)	NO. OF RECIPIENT WOAH MEMBER COUNTRIES	COUNTRY OF RECIPIENTS
Serological kit	C-ELISA	produced	0	4 kits (300 sera each)	1	Europe
DNA Positive control	PCR	provided	0	1ml		America

4. Did your laboratory produce vaccines?

No

5. Did your laboratory supply vaccines to WOAH Members?

Νo

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?

No

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?

Yes

NAME OF WOAH 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
SPAIN	2022-10-20	c-ELISA		621

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

Yes

NAME OF THE WOAH MEMBER COUNTRY RECEIVING A TECHNICAL CONSULTANCY	PURPOSE	HOW THE ADVICE WAS PROVIDED
SWITZERLAND	Suppose to the interpretation of PCR results in a vaccinated rabbit	remote (by email)
COLOMBIA	Technical support for PCR developemnt and validation	remote(by transferring protocols)

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
Improvement of preventive actions to emerging LAGoviruses in the MEDiterranean basin: development and optimisation of methodologies for pathogen detection and control(LAGMED)	3 years (extended)	i) To monitor RHD epidemiology in the Mediterranean basin and perform a genomic characterization of circulating strains, ii) To test and apply biosecurity measures to prevent outbreaks and better contain the disease in the field and in rabbit- production systems, particularly in countries located south to the Mediterranean basin. iii) To advise and train stakeholders and partners in Africa on disease diagnosis and prophylaxis, and technical management.		TUNISIA

TOR6: EPIZOOLOGICAL DATA

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

Yes

The outbreaks of myxomatosis worldwide are extremely rare. Indeed, the disease is still observed in those countries where rabbit farming is developed and where rabbits are present as wild animals. More recent data come from the Iberian peninsula regarding the occurrence of the disease in iberian hares. Indeed, few cases of myxomatous in farmed animals evolving in the amyxomatous, respiratory form have been observed

15. Did your laboratory disseminate epidemiological data that had been processed and analysed?
No
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:
0
b) International conferences:
1
ID 384. Pathological changes and viral antigen distribution in tissues of Iberian hare (Lepus granatensis) infected with myxoma virus
Irene Agulló-Ros, Ignacio García-bocanegra, Débora Jiménez-Martín, Leonor Camacho-Sillero, Christian Gortázar, Lorenzo Capucci, David Cano-Terriza, Félix Gómez-Guillamón, Irene Zorrilla, Antonio
Lavazza, Maria A. Risalde. Proceeedins. CEWDA Conference, Cuenca, spain. 31 August - 2 September 2021
c) National conferences:
0
d) Other (Provide website address or link to appropriate information):
0
TOR7: SCIENTIFIC AND TECHNICAL TRAINING

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

Yes

a) Technical visit: 2

b) Seminars: 0

c) Hands-on training courses: 0

d) Internships (>1 month) 1

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	TUNISIA	1
a	ALGERIA	3
d	PORTUGAL/SPAIN	1

TOR8: QUALITY ASSURANCE

18. Does your laboratory have a Quality Management System?

Yes

Quality management system adopted	Certificate scan (PDF, JPG, PNG format)	
UNI CEI ENISO/IEC 17025	pdf	CERTIFICATO-DI-ACCREDITMENTO-2.pdf

19. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
PCR/RT-PCR	ILAC MRA - ACCREDIA
Serological Competitive MAb ELISA (c-ELISA)	ILAC MRA - ACCREDIA
Histopathology/Immunohistochemistry	ILAC MRA - ACCREDIA
EM negative staining methods	ILAC MRA - ACCREDIA

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

Yes

The laboratory works according to the Manual of Diagnostic Tests and Vaccines for Terrestrial Animals, Chapter 1.1.4 and the WHO Laboratory Biosafety Manual. A risk analysis approach was adopted to manage the biological risks of specific agents aimed at biosecurity in veterinary laboratories and animal facilities. As a result of this process, the assignment of Myxomavirus to the risk group (BLS2) relevant to the country was defined and the consequent steps were taken to work in laboratory facilities defined by containment levels appropriate to the types of risks identified.

TOR9: SCIENTIFIC MEETINGS

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

No

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

No

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. Are you a member of a network of 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?

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

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)

TOR11: OTHER INTERLABORATORY PROFICIENCY TESTING

27. Did your laboratory organise or participate in inter-laboratory proficiency tests with laboratories other than WOAH Reference Laboratories for the same pathogen?

Yes

Purpose for inter-	Role of your reference	No. participating laboratories	Region(s) of
laboratory test	laboratory		participating WOAH
comparisons1	(organizer/participant)		Member Countries
To assess performances of PCR methods	Partecipant	1	Europe

TOR12: EXPERT CONSULTANTS

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

Yes

KIND OF CONSULTANCY	Location	SUBJECT (FACULTATIVE)
Review of OIE Standards	on site	Last review of the the chapter of the Manual was completed on 2020 and published on 2021.

29. Additional comments regarding your report:

Yes

Myxomatosis is a well-known disease, which is still present, often endemically, in some countries. However, its occurrence is very rarely reported also because its notification is not compulsory in most countries. European laws (reg EU 429/2016) did not declare any rabbit disease notifiable.

Therefore the available epidemiological data are scarce, also due to the fact that the clinical aspects and distribution patterns are the same since its original appearance, making the diagnosis often based only on clinical signs. Thus, the request for testing samples and for scientific advice are equally rare.

The attention for this disease has just little increased in Europe due to the occurrence of a mutated strain typically affecting Iberian hares. Some request for specific reagents, especially for serological surveys and pathological studies were asked from Spain and Portugal, the sole apparently affected by this new variant strain.