

# OIE Reference Laboratory Reports Activities in 2012

**(the Centre has been officially recognised  
during OIE General Session on May 2012)**

<b>Name of disease (or topic) for which you are a designated OIE Reference Laboratory:</b>	RABBIT MYXOMATOSIS
<b>Address of laboratory</b>	Istituto Zooprofilattico Sperimentale della Lombardia e dell'Emilia Romagna, Via Bianchi 9. 25124 Brescia - Italy
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<b>Name (including Title) of Head of Laboratory (Responsible Official):</b>	Prof. Stefano Cinotti – IZSLER General Manager
<b>Name (including Title and Position) of OIE Reference Expert:</b>	Antonio Lavazza – DVM – Responsible Electron Microscopy Lab., Deputy Head Virology Dept.
<b>Date of submission to the OIE</b>	25 Jan 2013

## Instructions

This form should be used by an OIE Reference Laboratory to report activities that took place from January through December of the past year (2012), unless otherwise stated, and must be submitted by the end of January every year.

Only those activities that concern the disease (or topic) for which the laboratory is recognised by the OIE should be mentioned. The questionnaire structure follows the Terms of Reference (ToRs) for OIE Reference Laboratories, available at:

<http://www.oie.int/en/our-scientific-expertise/reference-laboratories/introduction/>

Each ToR (blue italicised text) has been placed as a heading covering the group of questions related to it.

Please note the red italicised text is given as guidance and should be deleted from your report and substitute with your data. Examples are based on past Annual Reports or have been invented.

The questionnaire represents a means of gathering information on activities carried out by OIE Reference Laboratories and making it available to OIE Member Countries and to the OIE Reference Laboratory network.

This annual report will remain available for consultation on the OIE web site:

(<http://www.oie.int/en/our-scientific-expertise/reference-laboratories/annual-reports/>):

*ToR: To use, promote and disseminate diagnostic methods validated according to OIE Standards*

Test recommended by the OIE	Total number of test performed last year	
	Nationally	Internationally
<b>Indirect diagnostic tests</b>		
c-ELISA	774	0
<b>Direct diagnostic tests</b>		
Negative staining EM	44	2
Cell culture isolation	2	1
ELISA	0	0
Immunofluorescence	0	0
Immunoperoxidase	0	1
RT-PCR	93	1
Genomic sequencing	6	1

*ToR: To develop reference material in accordance with OIE requirements, and implement and promote the application of OIE Standards.*

*To store and distribute to national laboratories biological reference products and any other reagents used in the diagnosis and control of the designated pathogens or disease.*

2. Did your laboratory produce or store imported standard reference reagents officially recognised by the OIE or other international bodies?

Yes

No

3. Did your laboratory supply standard reference reagents to OIE Member Countries?

Yes

No

Type of reagent available	Related diagnostic test	Produced/ stored	Amount supplied nationally (ml, mg)	Amount supplied internationally (ml, mg)	Name of recipient OIE Member Countries and of institutions
Serological kit	c-ELISA	Produced	N° 2 kit (total 660 tests with 4 dilutions)		Italy, IIZZSS network

4. Did your laboratory produce diagnostic reagents other than the OIE-approved standard reference reagents?

 Yes

 No

5. Did your laboratory produce vaccines?

 Yes

 No

6. Did your laboratory supply vaccines to OIE Member Countries?

 Yes

 No

Vaccine name	Amount supplied nationally (ml, mg) (including for own use)	Amount supplied to other countries (ml, mg)	Name of recipient OIE Member Countries

*ToR: To develop, standardise and validate, according to OIE Standards, new procedures for diagnosis and control of the designated pathogens or diseases*

7. Did your laboratory develop new diagnostic methods validated according to OIE Standards for the designated pathogen or disease?

 Yes

 No

8. Did your laboratory develop new vaccines according to OIE Standards for the designated pathogen or disease?

 Yes

 No

Name of the new test or diagnostic method or vaccine developed	Description and References (Publication, website, etc.)
RT_PCR for detecting vaccinal and wild strains	See List of publications a1) & b2)
Ab detection cELISA	LAVAZZA A., GRAZIANI M., TRANQUILLO V. M., BOTTI G., PALOTTA C., CERIOLI M., CAPUCCI L. (2004) Serological evaluation of the immunity induced in commercial rabbits by vaccination for Myxomatosis and RHD. Proceeding of the 8th Congress of World Veterinary Rabbit Association (WRSA), Puebla, Mexico. 7-11 September 2004. pp. 569-575.

*ToR: To provide diagnostic testing facilities, and, where appropriate, scientific and technical advice on disease control measures to OIE Member Countries*

9. Did your laboratory carry out diagnostic testing for other OIE Member Countries?

 Yes

 No

Name of OIE Member Country seeking assistance	Date (dd/mm)	No. samples received for provision of diagnostic support (i.e. from surveillance campaign)	No. samples received for provision of confirmatory diagnoses
Chile	15 June		1

10. Did your laboratory provide expert advice in technical consultancies on the request of an OIE Member Country?

Yes

No

Name of the OIE Member Country receiving a technical consultancy	Purpose	How the advice was provided
Unidad de Virología Ministerio de Agricultura CHILE	Laboratory approach to diagnose myxomatosis	Remote assistance
Veterinary University of Bucarest ROMANIA	Characterization of myxomatosis vaccinal strains	PhD fellowship (6mo)

*ToR: To carry out and/or coordinate scientific and technical studies in collaboration with other laboratories, centres or organisations*

11. Did your laboratory participate in international scientific studies in collaboration with OIE Member Countries other than the own?

Yes

No

Title of the study	Duration	Purpose of the study	Partners (Institutions)	OIE Member Countries involved other than your country
none	not defined	Use of Monoclonal Antibodies by using ELISA and Histological methods for the characterization of Myxomavirus strains	University of Florida	USA

*ToR: To collect, process, analyse, publish and disseminate epizootiological data relevant to the designated pathogens or diseases*

12. Did your Laboratory collect epizootiological data relevant to international disease control?

Yes

No

13. Did your laboratory disseminate epizootiological data that had been processed and analysed?

Yes

No

14. What method of dissemination of information is most often used by your laboratory? (Indicate in the appropriate box the number by category)

- a) Articles published in peer-reviewed journals: ..... 1
- b) International conferences: ..... 3
- c) National conferences: ..... 1
- d) Other: ..... 1

*List of publications*

- a1) CAVADINI P., BOTTI G., BARBIERI I., LAVAZZA A., CAPUCCI L. (2010). Molecular characterization of SG33 and Borghi vaccines used against Myxomatosis. *Vaccine* 28 (33), 5414-5420.
- b1) LAVAZZA A, CHIARI M, CAVADINI P, GIOIA E, BARBIERI I, GRILLI G, FERRAZZI V, ZANONI M, CAPUCCI L. (2011) Surveillance program on the eastern cottontail (*Sylvilagus floridanus*) as reservoir of hares pathogens and definition of its natural susceptibility to the European Brown Hare Syndrome OIE Global Conference on Wildlife: animal health and biodiversity: preparing for the future: Paris, France 23-25 February 2011: abstract book - Paris. World Organisation for Animal Health (OIE), p 67.
- b2) CAVADINI P., BOTTI G., BARBIERI I., LAVAZZA A.; CAPUCCI L. (2010). Molecular characterization of SG33 and Borghi vaccines used against Myxomatosis. 1st biennial congress European Association Of Veterinary Laboratory Diagnosticians (EAVLD), Lelystad, The Netherlands, 15 - 17 September 2010.
- b3) CHIARI M., BIANCHI A., SALA G., ZANONI M.G., LAVAZZA A., GAFFURI A.. The harmonized monitoring program of selected zoonotic diseases of wildlife in Lombardy, northern Italy. Proceedings joint 61st WDA /10th Biennial EWDA Conference “Convergence in wildlife health”. Lyon 23-27 July 2012. P.116
- c1) CAPUCCI L., CAVADINI P., BOTTI G., BRIVIO R., GRILLI G., LAVAZZA A. (2011) Myxomatosi del coniglio: il contributo del laboratorio diagnostico alla gestione e controllo della malattia sul territorio. Atti delle Giornate di Coniglicoltura ASIC 2011, Fiera di Forlì, 8-9 aprile 2011, pp.127-129.
- d1) Veterinary Faculty - Thesis Disseration “Approccio diagnostico integrato finalizzato al risanamento di un allevamento commerciale di conigli infetto da Myxomatosi” Tesi del Corso di Laurea In Scienze e Tecnologie delle Produzioni Animali, Università degli Studi di Milano Facoltà di Medicina Veterinaria - Anno Accademico 2010 / 2011

*ToR: To provide scientific and technical training for personnel from OIE Member Countries*

*To recommend the prescribed and alternative tests or vaccines as OIE Standards*

**15. Did your laboratory provide scientific and technical training to laboratory personnel from other OIE Member Countries?**

Yes

No

**If the answer is yes, please provide the total number of trained persons for each of the following categories:**

- a) Technical visits: .....
- b) Seminars: .....
- c) Hands-on training courses: .....
- 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
d	Romania	1

*ToR: To maintain a system of quality assurance, biosafety and biosecurity relevant for the pathogen and the disease concerned*

16. Does your laboratory have a Quality Management System certified according to an International Standard?

Yes

No

Quality management system adopted
ISO 17025

17. Is your laboratory accredited by an international accreditation body?

Yes

No

Test for which your laboratory is accredited	Accreditation body
Antigen detection - Immunohistochemistry	ACCREDIA (n.148) ILAC-MRA
Antibody detection – competition ELISA	ACCREDIA (n.148) ILAC-MRA
Antigen detection electron-microscopy	ACCREDIA (n.148) ILAC-MRA
RT-PCR	ACCREDIA (n.148) ILAC-MRA

18. Does your laboratory maintain a “biorisk management system” for the pathogen and the disease concerned? (See *Manual of Diagnostic Tests and Vaccines for Terrestrial Animals 2012*, Chapter 1.1.3 or *Manual of Diagnostic Tests for Aquatic Animals 2012*, Chapter 1.1.1)

Yes

No

*ToR: To organise and participate in scientific meetings on behalf of the OIE*

19. Did your laboratory organise scientific meetings on behalf of the OIE?

Yes

No

National/ International	Title of event	Co-organiser	Date (mm/yy)	Location	No. Participants

20. Did your laboratory participate in scientific meetings on behalf of the OIE?

Yes

No

Title of event	Date (mm/yy)	Location	Role (speaker, presenting poster, short)	Title of the work presented

			communications)	
4th World Lagomorph Conference	23-27, July 2012	Vienna, Austria	Participant	-
61st WDA /10th Biennial EWDA Conference	23-27 July 2012	Lyon, France	Poster presentation	See b3) in list of publications

*ToR: To establish and maintain a network with other OIE Reference Laboratories designated for the same pathogen or disease and organise regular inter-laboratory proficiency testing to ensure comparability of results*

- 21. Did your laboratory exchange information with other OIE Reference Laboratories designated for the same pathogen or disease?**

Yes

No

*Not applicable (this is the sole OIE laboratory for RHD existing)*

- 22. Was your laboratory involved in maintaining a network with OIE Reference Laboratories designated for the same pathogen or disease by organising or participating in proficiency tests?**

Yes

No

*Not applicable (this is the sole OIE laboratory for RHD existing)*

Purpose of the proficiency tests: (validation of a diagnostic protocol: specify the test; quality control of vaccines: specify the vaccine type, etc.)	Role of your Reference Laboratory (organiser/ participant)	No. participants	Participating OIE Ref. Labs/ organising OIE Ref. Lab.

- 23. Did your laboratory collaborate with other OIE Reference Laboratories for the same disease on scientific research projects for the diagnosis or control of the pathogen of interest?**

Yes

No

*Not applicable (this is the sole OIE laboratory for RHD existing)*

Title of the project or contact	Scope	Name(s) of relevant OIE Reference Laboratories

*ToR: To organise inter-laboratory proficiency testing with laboratories other than OIE Reference Laboratories for the same pathogens and diseases to ensure equivalence of results.*

24. Did your laboratory organise or participate in inter-laboratory proficiency tests with laboratories other than OIE Reference Laboratories for the same disease?

Yes

Purpose for inter-laboratory test comparisons <sup>1</sup>	No. participating laboratories	Participating OIE Member Countries
EM detection and identification of viral particles	103	29 countries

*ToR: To place expert consultants at the disposal of the OIE*

25. Did your laboratory place expert consultants at the disposal of the OIE?

Yes

No

Kind of consultancy	Location	Subject (facultative )

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1 See Interlaboratory test comparisons in: Laboratory Proficiency Testing at: [www.oie.int/en/our-scientific-expertise/reference-laboratories/proficiency-testing](http://www.oie.int/en/our-scientific-expertise/reference-laboratories/proficiency-testing) see point 1.3