OIE Reference Laboratory Reports Activities

Activities in 2015

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Name of disease (or topic) for which you are a designated OIE Reference Laboratory:	Brucellosis (Brucella abortus, B. melitensis, B. suis)
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Name (including Title) of Head of Laboratory (Responsible Official):	Prof. Dr. Heinrich Neubauer
Name (including Title and Position) of OIE Reference Expert:	Prof. Dr. Heinrich Neubauer, Head of Institute of Bacterial Infections and Zoonoses
Which of the following defines your laboratory? Check all that apply:	Governmental Research

ToR 1: To use, promote and disseminate diagnostic methods validated according to OIE Standards

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 OIE Manual (Yes/No)	Total number of test performed last year	
Indirect diagnostic tests		Nationally	Internationally
RBT	Yes	184	1150
CFT	Yes	164	132
SAT	Yes	183	132
ELISA	Yes	264	2086
FPA	Yes	0	290
Direct diagnostic tests		Nationally	Internationally
bacterial isolation	Yes	16	74
PCR (also real time)	Yes	63	1540

ToR 2: 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 supply imported standard reference reagents officially recognised by the OIE?

No

3. Did your laboratory supply standard reference reagents (non OIE-approved) and/or other diagnostic reagents to OIE Member Countries?

Yes

Type of reagent available	Related diagnostic test	Produced/ provide	Amount supplied nationally (ml, mg)	Amount supplied internationally (ml, mg)	No. of recipient OIE Member Countries	Region of recipients
DNA	PCR	provided	2 µg	4 µg	2	☒Africa ☐Americas ☒Asia and Pacific ☐Europe ☐Middle East
control sera	CFT, SAT, RBT	provided	20 ml	0		☐Africa ☐Americas ☐Asia and Pacific ☐Europe ☐Middle East

4. Did your laboratory produce vaccines?

No

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

No

ToR 3: To develop, standardise and validate, according to OIE Standards, new procedures for diagnosis and control of the designated pathogens or diseases

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

Yes

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

No

Name of the new test or diagnostic method or vaccine developed	Description and References (Publication, website, etc.)
real-time PCR for Brucella suis	Hänsel C, C. Hänsel, K. Mertens, M. C. Elschner, F. Melzer, 2015: Novel real-time PCR detection assay for Brucella suis. Vet Rec Open 2015;2:e000084. doi:10.1136/vetreco-2014-000084

ToR 4: To provide diagnostic testing facilities, and, where appropriate, scientific and technical advice on disease control measures to OIE Member Countries

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

Yes

Name of OIE Member Country seeking assistance	Date (month)	No. samples received for provision of diagnostic support	No. samples received for provision of confirmatory diagnoses
UNITED ARAB EMIRATES	December	2	2

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

No

ToR 5: To carry out and/or coordinate scientific and technical studies in collaboration with other laboratories, centres or organisations

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

Yes

Title of the study	Duration	Purpose of the study	Partners (Institutions)
Seroprevalence of brucellosis in Pakistan	2015	epidemiological data	National College of Veterinary and Animal Sciences, Jhang, Pakistan
seroprevalence of brucellosis in Egypt	2015	epidemiological data	Mansoura University, Mansoura, Egypt
Brucellosis in Bangladesh	2015	epidemiological data	Department of Medicine, Faculty of Veterinary Science, Bangladesh Agricultural University, Mymensingh 2202, Bangladesh.

ToR 6: To collect, process, analyse, publish and disseminate epizootiological data relevant to the designated pathogens or diseases

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

Yes

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

Yes

13. 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
Ali, S., S. Akhter, H. Neubauer, F. Melzer, I. Khan, Q. Ali and M. Irfan. "Serological, Cultural, and Molecular Evidence of Brucella Infection in Small Ruminants in Pakistan." J Infect Dev Ctries 9, no. 5 (2015): 470-5.

Wareth, G., F. Melzer, H. Tomaso, U. Roesler and H. Neubauer. "Detection of Brucella Abortus DNA in Aborted Goats and Sheep in Egypt by Real-Time Pcr." BMC Res Notes 8, (2015): 212.

b) International conferences: 2
Wareth G., Melzer F., Roesler U; Sprague LD and Neubauer H., 2015. Investigation and molecular typing of Brucella isolated from dairy cattle herd immunized with Brucella abortus RB51 vaccine in Egypt. 3rd international congress of bacteriology and infectious disease, August 4-6, Valencia, Spain (Oral Presentation).

c) National conferences: 3
El-Adawy, H., I. Khan, F. Melzer, H. Neubauer. "Brucellose in Pakistan" 34. Tagung der DVG-Fachgruppe AVID Veterinärmedizinische Infektionsdiagnostik, Schwerpunkt Bakteriologie, (2015): 69

d) Other:
(Provide website address or link to appropriate information) 4

ToR 7: To provide scientific and technical training for personnel from OIE Member Countries
To recommend the prescribed and alternative tests or vaccines as OIE Standards

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

Yes

a) Technical visits: 0
b) Seminars: 0
c) Hands-on training courses: 5
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
c	Pakistan	2
c	Egypt	2
c	Bangladesh	1
d	Egypt	1

ToR 8: To maintain a system of quality assurance, biosafety and biosecurity relevant for the pathogen and the disease concerned

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

Yes

Quality management system adopted	Certificate scan (PDF, JPG, PNG format)
ISO/IEC 17025	Akkreditierungsurkunde_FLI_Riems-Jena-2015.pdf

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

Yes

Test for which your laboratory is accredited	Accreditation body
Microbiological, molecularbiological and serological investigations to	Deutsche Akkreditierungsstelle

17. 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 2014, Chapter 1.1.3a)

ToR 9: To organise and participate in scientific meetings on behalf of the OIE

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

No

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

Yes

Title of event	Date (mm/yy)	Location	Role (speaker, presenting poster, short communications)	Title of the work presented
OIE Global Conference on Biological Threat Reduction	06/15	Paris	-	-

ToR 10: 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

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

Yes

21. 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

Purpose of the proficiency tests: [1]	Role of your Reference Laboratory (organiser/ participant)	No. participants	Participating OIE Ref. Labs/ organising OIE Ref. Lab.
EU Brucellosis Bovine Milk Proficiency Ring Trial 2015	participant	20	OIE Ref. Labs: Teramo, Italy; Weybridge, UK organising: ANSES
Brucellosis biological control – Rose Bengal antigen control inter-laboratory proficiency trial	participant	25	OIE Ref. Labs: Teramo, Italy; Weybridge, UK organising: ANSES

[1] *validation of a diagnostic protocol: specify the test; quality control of vaccines: specify the vaccine type, etc.*

22. 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?

No

ToR 11: To organise inter-laboratory proficiency testing with laboratories other than OIE Reference Laboratories for the same pathogens and diseases to ensure equivalence of results

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

Yes

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

Purpose for inter-laboratory test comparisons[1]	No. participating laboratories	Region(s) of participating OIE Member Countries
Brucellosis Serology Ring Trial	21	☐Africa ☐Americas ☐Asia and Pacific ☒Europe ☐Middle East
Brucellosis biological control – Rose Bengal antigen control inter-laboratory proficiency trial	25	☐Africa ☐Americas ☐Asia and Pacific ☒Europe ☐Middle East
EU Brucellosis Bovine Milk Proficiency Ring	20	☐Africa ☐Americas ☐Asia and Pacific ☒Europe ☐Middle East

ToR 12: To place expert consultants at the disposal of the OIE

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

Yes

Kind of consultancy	Location	Subject (facultative)
technical papers	FLI	Update of Brucella Code-Chapter

25. Additional comments regarding your report:

this report includes B.abortus, B.melitensis and B.suis