OIE Reference Laboratory Reports Activities

Activities in 2018

This report has been submitted: 2019-01-16 08:13:34

| Name of disease (or topic) for which you are a designated OIE Reference Laboratory: | Contagious bovine pleuropneumonia |
| Address of laboratory: | Private Bag 0035 Gaborone BOTSWANA |
| Tel.: | +267 392 88 16 |
| Fax: | +267 392 89 56 |
| E-mail address: | cmarobela-raborokgwe@gov.bw |
| Website: | |
| Name (including Title) of Head of Laboratory (Responsible Official): | Dr Chandapiwa Marobela-Raborokgwe |
| Name (including Title and Position) of OIE Reference Expert: | Dr Chandapiwa Marobela-Raborokgwe Deputy Director |
| Which of the following defines your laboratory? Check all that apply: | Governmental |
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

<table>
<thead>
<tr>
<th>Diagnostic Test</th>
<th>Indicated in OIE Manual (Yes/No)</th>
<th>Total number of test performed last year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indirect tests</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CFT</td>
<td>Yes</td>
<td>1827 (Nationally) 10 (Internationally)</td>
</tr>
<tr>
<td>Direct tests</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PCR</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

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
<table>
<thead>
<tr>
<th>Type of reagent available</th>
<th>Related diagnostic test</th>
<th>Produced/ provide</th>
<th>Amount supplied nationally (ml, mg)</th>
<th>Amount supplied internationally (ml, mg)</th>
<th>No. of recipient OIE Member Countries</th>
<th>Region of recipients</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBPP antigen</td>
<td>CFT</td>
<td>Provided</td>
<td>8ml</td>
<td>18ml</td>
<td>3</td>
<td>Africa Americas Asia and Pacific Europe Middle East</td>
</tr>
</tbody>
</table>

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?
No

7. Did your laboratory develop new vaccines according to OIE Standards for the designated pathogen or disease?
No

*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

<table>
<thead>
<tr>
<th>Name of OIE Member Country seeking assistance</th>
<th>Date (month)</th>
<th>No. samples received for provision of diagnostic support</th>
<th>No. samples received for provision of confirmatory diagnoses</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAMIBIA</td>
<td>May</td>
<td>10</td>
<td>0</td>
</tr>
</tbody>
</table>
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

<table>
<thead>
<tr>
<th>Title of the study</th>
<th>Duration</th>
<th>Purpose of the study</th>
<th>Partners (Institutions)</th>
<th>OIE Member Countries involved other than your country</th>
</tr>
</thead>
</table>
| Development of a molecular epidemiology approach to support Contagious Bovine Pleuropneumonia control strategies in Sub-Saharan Africa | 3 years  | - To characterise Mycoplasma mycoides mycoides (Mmm) strains using last generation molecular techniques and link them to a defined geographical region  
- To retrieve all the relevant information related to the epidemiology of CBPP in the different regions considered  
- To generate a comprehensive Mmm genome database containing all the relevant epidemiological information related to the region where the strain originated  
- To combine genetic and epidemiological information related to the region where the strain originated  
- To combine genetic and epidemiological information to generate a CBPP distribution map and to develop a molecular epidemiology approach able to identify the most relevant risk factors and predict the most likely source of infection | Istituto Zooprofilattico Sperimentale dell' Abruzzo a del Molise "G. Caporale" (IZS A&M) - Italy  
Università degli studi di Teramo (University of Teramo) - Italy | ANGOLA  
NAMIBIA  
TANZANIA  
ZAMBIA |

**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
The experience of Contagious bovine pleuropneumonia ring trials in Botswana published in the Scientific and Technical review of the OIE

b) International conferences: 1

c) National conferences: 0

d) Other:
(Provide website address or link to appropriate information) 0

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: 0
d) Internships (>1 month): 1

<table>
<thead>
<tr>
<th>Type of technical training provided (a, b, c or d)</th>
<th>Country of origin of the expert(s) provided with training</th>
<th>No. participants from the corresponding country</th>
</tr>
</thead>
<tbody>
<tr>
<td>d</td>
<td>Malawi</td>
<td>1</td>
</tr>
</tbody>
</table>

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

Yes

<table>
<thead>
<tr>
<th>Test for which your laboratory is accredited</th>
<th>Accreditation body</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complement Fixation Tests (CFT)</td>
<td>SADCAS</td>
</tr>
</tbody>
</table>

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, Chapter 1.1.4)*

**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?

No

**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?

No

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?
**Title of the project or contract** | **Scope** | **Name(s) of relevant OIE Reference Laboratories**
--- | --- | ---
Development of a molecular epidemiology approach to support Contagious Bovine Pleuropneumonia control strategies in Sub-Saharan Africa | To integrate genomic and epidemiological data in order to generate a predictive model to identify sources of CBPP infection based on the sequence of the Mmm strain isolated in the field | Istituto Zooprofilattico Sperimentale dell’Abruzzo e del Molise “G. Caporale” (IZS A&M)

**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](http://www.oie.int/en/our-scientific-expertise/reference-laboratories/proficiency-testing) see point 1.3*

<table>
<thead>
<tr>
<th>Purpose for inter-laboratory test comparisons</th>
<th>No. participating laboratories</th>
<th>Region(s) of participating OIE Member Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality assurance of diagnostic tests (CFT)</td>
<td>1</td>
<td>□Africa □Americas □Asia and Pacific □Europe □Middle East</td>
</tr>
</tbody>
</table>

**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

<table>
<thead>
<tr>
<th>Kind of consultancy</th>
<th>Location</th>
<th>Subject (facultative)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ad hoc Group meeting</td>
<td>Paris, France</td>
<td>Review of OIE member country applications for freedom status for CBPP</td>
</tr>
</tbody>
</table>
25. Additional comments regarding your report:

The accreditation certificate is attached separately