WOAH Reference Laboratory Reports Activities 2022

Activities in 2022

This report has been submitted: 3 avril 2023 04:50

**Laboratory Information**

<table>
<thead>
<tr>
<th>Name of disease (or topic) for which you are a designated WOAH Reference Laboratory:</th>
<th>Sheep pox and goat pox</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address of laboratory:</td>
<td>No. 100 Old Soutpan Road (M35), Onderstepoort</td>
</tr>
<tr>
<td>Tel.:</td>
<td>(+2712) 529 - 9233/9117/9465</td>
</tr>
<tr>
<td>E-mail address:</td>
<td><a href="mailto:LubisiA@arc.agric.za">LubisiA@arc.agric.za</a></td>
</tr>
<tr>
<td>Website:</td>
<td><a href="https://www.arc.agric.za">https://www.arc.agric.za</a></td>
</tr>
<tr>
<td>Name (including Title of Head of Laboratory (Responsible Official)):</td>
<td>Dr. Misheck Mulumba</td>
</tr>
<tr>
<td>Name (including Title and Position of WOAH Reference Expert):</td>
<td>Dr. Baratang Alison Lubisi</td>
</tr>
<tr>
<td>Which of the following defines your laboratory? Check all that apply:</td>
<td>Governmental</td>
</tr>
</tbody>
</table>

**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)
   - No

**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?
   - No

4. Did your laboratory produce vaccines?
   - No
5. Did your laboratory supply vaccines to WOAH Members?
Not applicable

**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?
No
11. Did your laboratory provide expert advice in technical consultancies on the request of an WOAH Member?
No

**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

<table>
<thead>
<tr>
<th>Title of the study</th>
<th>Duration</th>
<th>PURPOSE OF THE STUDY</th>
<th>PARTNERS (INSTITUTIONS)</th>
<th>WOAH MEMBER COUNTRIES INVOLVED OTHER THAN YOUR COUNTRY</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Development of a Real-Time PCR Assay for Specific Detection of the NISKHI Sheep Pox Vaccine Virus Strain DNA</td>
<td>3 months</td>
<td>Development of a Real-Time PCR Assay for Specific Detection of the NISKHI Sheep Pox Vaccine Virus Strain DNA</td>
<td>Federal Center for Animal Health, Vladimir; Department of Food Safety, Veterinary Specialized Institute Kraljevo, Zicka , Kraljevo</td>
<td>RUSSIA SERBIA</td>
</tr>
</tbody>
</table>

**TOR6: EPIZOOLOGICAL DATA**

14. Did your Laboratory collect epidemiological data relevant to international disease control?
No
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:

1

b) International conferences:

0

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?
No

TOR8: QUALITY ASSURANCE

18. Does your laboratory have a Quality Management System?
Yes

<table>
<thead>
<tr>
<th>Quality management system adopted</th>
<th>Certificate scan (PDF, JPG, PNG format)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISO17025</td>
<td>PDF</td>
</tr>
<tr>
<td></td>
<td>V0001-06-2022 signed.pdf</td>
</tr>
</tbody>
</table>

19. Is your quality management system accredited?
Yes

<table>
<thead>
<tr>
<th>Test for which your laboratory is accredited</th>
<th>Accreditation body</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not accredited for any sheep pox and goat pox</td>
<td></td>
</tr>
</tbody>
</table>

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

The ARC-OVR has a Biosafety and Biosecurity Committee which manages all biological risks on, or which may potentially affect operations on campus. Personnel also attend refresher courses on an annual basis. Dr. Lubisi attended ABSA International’s 2nd
Biosecurity Hybrid Symposium which was held between 01 and 08 May 2022, at the Renaissance Minneapolis Hotel, The Depot, 225 Third Avenue South, Minneapolis, MN 55401, United States of America. Whilst there, she attended a development course on the 3rd of May 2022 titled: Biosecurity for uncertain situations: Challenges and solutions. The course used case studies and guided exercises to assess security risks and describe challenges, lessons learned and opportunities for protecting biological materials, especially in situations where information, resources and support are scarce.

**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?
No

24. Are you a member of a network of WOAH Reference Laboratories designated for the same pathogen?
No

25. Did you organise or participate in inter-laboratory proficiency tests with WOAH Reference Laboratories designated for the same pathogen?
No

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?
No

**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?
No

**TOR12: EXPERT CONSULTANTS**

28. Did your laboratory place expert consultants at the disposal of WOAH?
No

29. Additional comments regarding your report:
South Africa is free of sheep pox and goat pox, and the laboratory is experiencing challenges with receiving samples from other countries. However, the laboratory is taking the following measures to improve and increase sheep and goat pox related activities (sample submission, diagnostics, research collaborations, proficiency test scheme (PTS)/interlaboratory tests (ILT), and training):
1. Funding has been sourced and secured to implement PTS/ILT and the process of contacting member countries to invite them to participate. Sheep and goat pox will be among the priority diseases.
2. A revised twinning project proposal with China Animal Health and Epidemiology Centre (CAHEC) is under development. China is endemic for sheeppox and goatpox, and the twinning will be used as an opportunity to exchange information and expertise related to...
these diseases as well.

3. The ARC-OVR researchers collaborated with colleagues in Russia (Federal Center for Animal Health, Vladimir), Serbia (Department of Food Safety, Veterinary Specialized Institute Kraljevo, Zicka, Kraljevo) and South Africa (Department of Biotechnology, University of the Western Cape) on the development of a real-time PCR assay for the detection of a sheeppox vaccine strain:


Endeavours will be made to increase the number of collaborative research projects, to include WOAH Reference Laboratories.

4. Two researchers at ARC-OVR are dedicated to continually adapting and improving the molecular diagnostic tests for Lumpy Skin Disease (LSD), which are applicable to sheeppox and goatpox.