## WOAH Reference Laboratory Reports Activities 2022

### Activities in 2022

**This report has been submitted: 25 avril 2023 16:50**

### Laboratory Information

<table>
<thead>
<tr>
<th>Name of disease (or topic) for which you are a designated WOAH Reference Laboratory:</th>
<th>Infestation of honey bees with Aethina tumida (small hive beetle)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address of laboratory:</td>
<td>National Reference Laboratory for Bee Diseases Friedrich-Loeffler-Institut Federal Research Institute for Animal Health Institute of Infectology Südufer 10 17493 Greifswald – Insel Riems GERMANY</td>
</tr>
<tr>
<td>Tel.:</td>
<td>+49-38351 7 1246</td>
</tr>
<tr>
<td>E-mail address:</td>
<td><a href="mailto:marc.schaefer@fli.de">marc.schaefer@fli.de</a></td>
</tr>
<tr>
<td>Name (including Title) of Head of Laboratory (Responsible Official):</td>
<td>Dr. phil. nat. Marc O. Schäfer, head of the NRL for bee diseases</td>
</tr>
<tr>
<td>Name (including Title and Position) of WOAH Reference Expert:</td>
<td>Dr. phil. nat. Marc O. Schäfer, head of the NRL for bee diseases</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)

   Yes

<table>
<thead>
<tr>
<th>Diagnostic Test</th>
<th>Indicated in WOAH Manual (Yes/No)</th>
<th>Total number of test performed last year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indirect diagnostic tests</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct diagnostic tests</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**WOAH Reference Laboratory Reports Activities 2022**

1
visual identification | yes | 0 | 30
identification by PCR | yes | 0 | 7

**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?
No

**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></td>
<td></td>
<td></td>
<td>Universiteit Gent, Stichting Wageningen Research, BeeSources di Raffaele</td>
<td></td>
</tr>
</tbody>
</table>
B-GOOD - Giving beekeeping guidance by computational-assisted decision making

June 2019 - May 2023

B-GOOD has the overall goal to provide guidance to beekeepers and help them make better and more informed decisions.

Dall’Olio, Pensoft Publishers, Institut National de la Recherche Agronomique, Martin-Luther-Universität Halle-Wittenberg, Università di Stiinte Agricole si Medicina Veterinara Cluj Napoca, Aarhus Universitet, Universidade de Comibia, The Nottingham Trent University, Universität Bern, Stichting BEEP, Suomen Mehiläishoitajain liitto SML ry, Uniwersytet Jagiellonski, Sciensano, SCIPROM Sari

BELGIUM

BULGARIA

FINLAND

FRANCE

ITALY

POLAND

PORTUGAL

ROMANIA

SWITZERLAND

THE NETHERLANDS

UNITED KINGDOM

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:

2
Veterinary Sciences, 2022: Molecular detection of Malpighamoeba mellifica in honey bees; Marc O. Schäfer, Juliane Horenk, Claudia Wylezich

b) International conferences:

2
7th B-GOOD consortium meeting, Soesterberg, The Netherlands, 2022: WP1: Task 1.3: Laboratory analyses; Severine Matthijs, Marc O. Schäfer
The first North African meeting for honey bee diseases (online), March 2022: American foulbrood; Marc O. Schäfer

c) National conferences:

3
69. Jahrestagung der Arbeitsgemeinschaft der Institute für Bienenforschung e.V., Bad Überkingen-Oberböhringen, 2022 (2 Presentations): 1.: Two novel diagnostic tools for the detection of American foulbrood (AFB) including a genotype differentiation of the AFB causing agent Paenibacillus larvae; Sandra Ehrenberg, Lukas Rüttinger, Friedrich Scholz, Marc O. Schäfer, Robert Kammerer; 2.: Molecular detection of Malpighamoeba mellificae; Marc O. Schäfer, Juliane Horenk, Claudia Wylezich

DVG Vet-Congress, Berlin, Germany, 2022: Anpassung der amtlichen Methoden an das Animal Health Law; Marc O. Schäfer

Junior Scientist Symposium, Greifswald, Germany, 2022: Challenges of keeping honey bees healthy change over time; Marc O. Schäfer

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

1

Member of the Advisory Board of the project “Best Practices and Innovations for A Sustainable Beekeeping - B-Thenet” funded by the Horizon Europe Program of the European Commission: HORIZON-CL6-2021-GOVERNANCE-01-28- Grant Agreement number: 101059812 for its duration (from 01/09/2022 to 31/08/2026); https://www.bthenet.eu/

**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>
<th></th>
</tr>
</thead>
</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>Identification of Aethina tumida (visual)</td>
<td>Deutsche Akkreditierungsstelle GmbH (DAkkS)</td>
</tr>
<tr>
<td>Identification of Aethina tumida by PCR</td>
<td>Deutsche Akkreditierungsstelle GmbH (DAkkS)</td>
</tr>
</tbody>
</table>

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

Yes

**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:  
No