**WOAH Reference Laboratory Reports Activities 2023**

**Activities in 2023**

This report has been submitted: 28 mai 2024 09:47

**Laboratory Information**

| Name of disease (or topic) for which you are a designated WOAH Reference Laboratory: | classical swine fever |
| Address of laboratory: | No.376 Zhongzheng Rd., Tamsui Dist., New Taipei city, Taiwan 251018 |
| Tel: | +886226212111 |
| E-mail address: | ylhuang@mail.nvri.gov.tw |
| Website: | http://eng.nvri.gov.tw/ |
| Name (including Title) of Head of Laboratory (Responsible Official): | Yu-Liang Huang: Associate Researcher |
| Name (including Title and Position) of WOAH Reference Expert: | Dr. Yu-Liang Huang |
| Which of the following defines your laboratory? Check all that apply: | Governmental |

**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>Nationally Internationally</td>
</tr>
<tr>
<td>CSF Virus neutralization test</td>
<td>Yes</td>
<td>10275 0</td>
</tr>
<tr>
<td>Direct diagnostic tests</td>
<td></td>
<td>Nationally Internationally</td>
</tr>
<tr>
<td>CSF Virus isolation</td>
<td></td>
<td>414 0</td>
</tr>
<tr>
<td>CSF Real-time RT-PCR</td>
<td></td>
<td>28665 0</td>
</tr>
</tbody>
</table>

**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>The collaboration of the development of the agriculture and food industry in Japan and Taiwan</td>
<td>2020-2025</td>
<td>To strategically cooperate for fostering the development of agricultural and food science and technology</td>
<td>National Institute of Animal Health, NARO</td>
<td>JAPAN</td>
</tr>
</tbody>
</table>

13. In exercising your activities, have you identified any regulatory research needs* relevant for WOAH?
No

**TOR6: EPIZOOLOGICAL DATA**

14. Did your Laboratory collect epidemiological data relevant to international disease control?
Yes

**IF THE ANSWER IS YES, PLEASE PROVIDE DETAILS OF THE DATA COLLECTED:**

The antigen and antibody surveillance of CSFV in domestic pigs and wild boars in Taiwan

15. Did your laboratory disseminate epidemiological data that had been processed and analysed?
Yes

**IF THE ANSWER IS YES, PLEASE PROVIDE DETAILS OF THE DATA COLLECTED:**

The antigen and antibody surveillance of CSFV in domestic pigs and wild boars in Taiwan

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:

4


b) International conferences:

7
38th World Veterinary Association Congress 2023. Taiwan. 26 Apr - 29 Apr 2023
1. Yu-Liang Huang. Classical swine fever surveillance in domestic pigs of Taiwan between 2021 and 2022 (keynote speaker)

10th Asian Pig Veterinary Society (APVS) Congress. Taiwan. 30th July to 2nd Aug 2023
1. Yu-Liang Huang. Transmission of classical swine fever virus in cohabitation piglets of various immune statuses with attenuated live vaccine. (oral)
3. Yu-Liang Huang, Ming-Chung Deng, Chwei-Jang Chiau, Chun Wang Genetic characterization of porcine circovirus 3 in Taiwan. (Poster)

The third Joint Meeting of Veterinary Science in East Asia. Taiwan. 2023 May 1-2.
1. Yu-Liang Huang, C Chang1, Ming-Chung Deng, Kuo-Jung Tsai. The molecular detection of atypical porcine pestivirus in weaned pigs in Taiwan. (keynote speaker)

c) National conferences:

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

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>2023年新興傳染病組之TAF證書.pdf</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISO 17025</td>
<td>PDF</td>
<td>2023年新興傳染病組之TAF證書.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>CSF Virus neutralization test</td>
<td>ILAC-TAF</td>
</tr>
<tr>
<td>CSF Virus isolation</td>
<td>ILAC-TAF</td>
</tr>
<tr>
<td>CSF Real-time RT-PCR</td>
<td>ILAC-TAF</td>
</tr>
</tbody>
</table>

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

1. SOP of National exotic animal disease laboratory 2. Emergence plant of National exotic animal disease laboratory 3. Biosecurity of National exotic animal disease laboratory

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?
Yes

24. Do you network (collaborate or share information) with other WOAH Reference Laboratories designated for the same pathogen?
No applicable (Only WOAH Reference Laboratory designated for the disease)

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?
Yes

<table>
<thead>
<tr>
<th>TITLE OF THE PROJECT OR CONTRACT</th>
<th>SCOPE</th>
<th>NAME(S) OF RELEVANT WOAH REFERENCE LABORATORIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Characterization of monoclonal antibodies against Pestiviruses</td>
<td>Testing of novel monoclonal antibodies against Classical Swine fever Virus using different pestivirus strains (including various genotypes of CSFV)</td>
<td>University of Veterinary Medicine Hannover, Institute of Virology EU and OIE Reference Laboratory for CSF</td>
</tr>
<tr>
<td>Epitope mapping of the structural protein E2 of pestiviruses</td>
<td>Target epitope characterization of monoclonals targeting pestiviruses E2 glycoprotein</td>
<td>Animal &amp; Plant Health Agency, United Kingdom</td>
</tr>
</tbody>
</table>

**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?
Yes

<table>
<thead>
<tr>
<th>Purpose for inter-laboratory test comparisons¹</th>
<th>Role of your reference laboratory (organizer/participant)</th>
<th>No. participating laboratories</th>
<th>Name of the Test</th>
<th>WOAH Member Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asia-Pacific Terrestrial Proficiency Test Program 2023</td>
<td>PARTICIPANT</td>
<td>15</td>
<td>Swine diseases PCR</td>
<td>CHINESE TAIPEI,</td>
</tr>
</tbody>
</table>

**TOR12: EXPERT CONSULTANTS**

28. Did your laboratory place expert consultants at the disposal of WOAH?
Yes

<table>
<thead>
<tr>
<th>KIND OF CONSULTANCY</th>
<th>Location</th>
<th>SUBJECT (FACULTATIVE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>To provide a consensus document of the WOAH Terrestrial Manual, chapter on classical swine fever</td>
<td>by email</td>
<td>Update the Terrestrial Manual, chapter on classical swine fever</td>
</tr>
</tbody>
</table>

29. Additional comments regarding your report:
No