### OIE Reference Laboratory Reports Activities

#### Activities in 2018

This report has been submitted: 2019-01-16 03:53:34

| Name of disease (or topic) for which you are a designated OIE Reference Laboratory: | Infectious bursal disease (Gumboro disease) |
| Address of laboratory: | Division of Avian Immunosuppressive Disease Harbin Veterinary Research Institute (HVRI) Chinese Academy of Agricultural Sciences (CAAS) 678 Haping Road Xiangfang District Harbin 150069 CHINA (PEOPLES REP. OF) |
| Tel.: | +86-451 51 05 16 90 |
| Fax: | +86-451 51 99 71 66 |
| E-mail address: | wangxiaomei@caas.cn |
| Website: | |
| Name (including Title) of Head of Laboratory (Responsible Official): | Dr. Zhigao Bu, the director of HVRI, CAAS |
| Name (including Title and Position) of OIE Reference Expert: | Dr. Xiaomei Wang, Head of State key laboratory of veterinary biotechnology of China, Head of OIE Reference Laboratory for IBD |
| Which of the following defines your laboratory? Check all that apply: | Research Academic |
**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 diagnostic tests</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ELISA Ab detection</td>
<td>Yes</td>
<td>2024</td>
</tr>
<tr>
<td>Direct diagnostic tests</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partial amplification of IBDV genome (RT-PCR for VP2 or VP1)</td>
<td>Yes</td>
<td>271</td>
</tr>
<tr>
<td>Virus isolation or titration in eggs</td>
<td>Yes</td>
<td>4</td>
</tr>
<tr>
<td>Preparation of virus stocks from infected bursae</td>
<td>Yes</td>
<td>4</td>
</tr>
<tr>
<td>Virus gene sequencing of VP2 or VP1</td>
<td>No</td>
<td>50</td>
</tr>
<tr>
<td>Complete virus genome sequencing</td>
<td>No</td>
<td>6</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?

   No

4. Did your laboratory produce vaccines?
Infectious bursal disease (Gumboro disease) - Xiaomei Wang - China (Peoples Rep. of)

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?
Yes

<table>
<thead>
<tr>
<th>Name of the new test or diagnostic method or vaccine developed</th>
<th>Description and References (Publication, website, etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGID kit for IBD detection</td>
<td>It can be used to detect Ab or Ag of IBDV. We are applying for the certification from the Ministry of Agriculture of China.</td>
</tr>
<tr>
<td>The Recombinant live Vaccine of IBDV</td>
<td>It was developed by reverse genetics technique. We are applying for the permission of the clinical trail in China.</td>
</tr>
<tr>
<td>The recombinant MDV vaccine expressed VP2 of IBDV</td>
<td>We are applying for the GMO safety certificates.</td>
</tr>
</tbody>
</table>

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>PAKISTAN</td>
<td>03/2018</td>
<td>0</td>
<td>44</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>
<tbody>
<tr>
<td>the National Key Research and Development Program of China: Study on avian major infectious diseases prevention and control and the development of international scientific and technological cooperation platform</td>
<td>3 years</td>
<td>see title</td>
<td>University of Veterinary and Animal Sciences, Lahore</td>
<td>PAKISTAN</td>
</tr>
<tr>
<td>the National Key Research and Development Program of China: Study on avian major infectious diseases prevention and control and the development of international scientific and technological cooperation platform</td>
<td>3 years</td>
<td>see title</td>
<td>University of Udayana</td>
<td>INDONESIA</td>
</tr>
<tr>
<td>Epidemiology of IBDV in Pakistan (PhD thesis)</td>
<td>3 years</td>
<td>see title</td>
<td>University of Veterinary and Animal Sciences, Lahore</td>
<td>PAKISTAN</td>
</tr>
</tbody>
</table>

**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?

No

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

Li Gao, Kai Li, Xiaole Qi, Yulong Gao, Yongqiang Wang, Honglei Gao, Xiaomei Wang. N-terminal domain of the RNA polymerase of very virulent infectious bursal disease virus contributes to viral replication and virulence. SCIENCE CHINA-Life Sciences. 2018 Sep;61(9):1127-1129.
b) International conferences: 6
"Epidemiological characteristics and prevention technology researches of Infectious Bursal Disease (IBD)" by Xiaole Qi. Keynote presentation. EMERGING AND RE-EMERGING VIRAL DISEASES International Collaboration for Control \ Hurghada, Egypt \ 2018.11.27-30.
"Studies on the prevention and control of Infectious Bursal Disease (IBD)" by Xiaole Qi. Keynote presentation. Poultry Science Conference in Pakistan \ Lahore, Pakistan \ 2018.9.27-29.
"Studies on the prevention and control of Infectious Bursal Disease (IBD)" by Xiaole Qi. Keynote presentation. Seminar on Poultry Disease Diagnosis and Prevention \ Faisalabad, Pakistan \ 2018.10.1.

b) International conferences: 6
"Epidemiological characteristics and prevention technology researches of Infectious Bursal Disease (IBD)" by Xiaole Qi. Keynote presentation. EMERGING AND RE-EMERGING VIRAL DISEASES International Collaboration for Control \ Hurghada, Egypt \ 2018.11.27-30.
"Studies on the prevention and control of Infectious Bursal Disease (IBD)" by Xiaole Qi. Keynote presentation. Poultry Science Conference in Pakistan \ Lahore, Pakistan \ 2018.9.27-29.
"Studies on the prevention and control of Infectious Bursal Disease (IBD)" by Xiaole Qi. Keynote presentation. Seminar on Poultry Disease Diagnosis and Prevention \ Faisalabad, Pakistan \ 2018.10.1.
"Prevention and Control Technology for Avian Immunosuppressive Disease in China" by Yulong Gao. Keynote presentation. Avian disease synthetical prevention and its quality control training course \ Harbin, China \ 2018.1.8.

c) National conferences: 3
"Novel reverse genetics vaccine of Infectious Bursal Disease (IBD)" by Xiaole Qi. Oral presentation. The 7th China veterinary drug congress \ Wuhan, China \ 2018.9.15.

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): 5

<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>Pakistan</td>
<td>5</td>
</tr>
</tbody>
</table>

ToR 8: To maintain a system of quality assurance, biosafety and biosecurity
Infectious bursal disease (Gumboro disease) - Xiaomei Wang - china (peoples rep. of)

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

<table>
<thead>
<tr>
<th>Quality management system adopted</th>
<th>Certificate scan (PDF, JPG, PNG format)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNAS</td>
<td>CNAS.jpg</td>
</tr>
</tbody>
</table>

16. Is your laboratory accredited by an international accreditation body?
No

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?
No

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?

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?

No

*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*

**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?

No

25. Additional comments regarding your report: