OIE Reference Laboratory Reports ActivitiesActivities in 2021

This report has been submitted: 2021-12-21 08:07:32

| Name of disease (or topic) for which you are a designated OIE Reference Laboratory: | Ovine theileriosis |
|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Address of laboratory: | Lanzhou Veterinary Research Institute, Chinese Academy of Agricultural Sciences (CAAS) Vector and Vector and Vector-borne Diseases Control Laboratory (VVBDC) Xujiaping 1, Chengguan District, Lanzhou, Gansu Province 730046 CHINA (PEOPLES REP. OF) |
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| E-mail address: | yinhong@caas.net.cn |
| Website: | http://lvri.caas.cn/en/referencelaboratories/108692.htm |
| Name (including Title) of Head of Laboratory (Responsible Official): | Professor Hong Yin |
| Name (including Title and Position) of OIE Reference Expert: | Hong Yin |
| Which of the following defines your laboratory? Check all that apply: | 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

| Diagnostic Test | Indicated in OIE Manual (Yes/No) | Total number of test performed last year | |
|---------------------------|-------------------------------------|------------------------------------------|-----------------|
| Indirect diagnostic tests | | Nationally | Internationally |
| No | No | No | No |
| Direct diagnostic tests | | Nationally | Internationally |
| PCR | No | 157 | No |

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

| Type of reagent available | Related diagnostic test | Produced/ provide | Amount supplied nationally (ml, mg) | Amount supplied internationally (ml, mg) | No. of recipient OIE Member Countries | Region of recipients |
|----------------------------|-------------------------------|----------------------|----------------------------------------------|---------------------------------------------------|---------------------------------------------------|----------------------------------------------------------|
| Positive DNA control | PCR | Produced | 0.1ml | No | 1 | □Africa □Americas □Asia and Pacific □Europe □Middle East |
| Negative DNA control | PCR | Produced | 0.1ml | No | 1 | □Africa □Americas □Asia and Pacific □Europe □Middle East |

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?

No

9. Did your laboratory provide expert advice in technical consultancies on the request of an OIE Member Country?

Yes

| Name of the OIE Member Country receiving a technical consultancy | Purpose | How the advice was provided |
|------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-----------------------------|
| CHINA (PEOPLE'S REP. OF) | To training staffs of veterinarian about detection and prevention technology of ovine theileriosis | Through a class |

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?

No

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

If the answer is yes, please provide details of the data collected:

We collected the epizootiological data about ovine theileriosis from the website and the publications. In 2021, seven contries including China, South Korea, Thailand, Turkey, Myanmar, Iraq and India did research on ovine theileriosis detection and epidemiological investigation.

12. Did your laboratory disseminate epizootiological data that had been processed and analysed?

Yes

If the answer is yes, please provide details of the data collected:

We mainly disseminate the epizootiological data through national conference and publish the papers.

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: 2
- 1.Molecular Survey of Tick-Borne Pathogens Reveals Diversity and Novel Organisms With Veterinary and Public Health Significance in Wildlife From a National Nature Reserve of China
- 2. Mitochondrial genome of Theileria uilenbergi endemic in sheep and goats in China
- b) International conferences: 1

The 3rd OIE Regional Meeting for OIE Reference Centres in Asia and the Pacific

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?

No

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?

Yes

| Quality management system adopted | Certificate scan (PDF, JPG, PNG format) |
|-----------------------------------|-----------------------------------------|
| ISO/IEC 17025:2005 | 17025-EN.pdf |

16. Is your quality management system accredited?

Yes

| Test for which your laboratory is accredited | Accreditation body |
|----------------------------------------------|---------------------------------------------------------------|
| Center for Diagnosis and Testing | China National Accrediation Service for Conformity Assessment |

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?

Yes

| Title of event | Date (mm/yy) | Location | Role (speaker, presenting poster, short communications) | Title of the work presented |
|-----------------------|-----------------|-------------------|---------------------------------------------------------------|----------------------------------------------------------|
| virtual NC Meeting | 02/24-25 | Online Meeting | Group discussion | Introduction of our laboratory and recent research |

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?

Not applicable (Only OIE Reference Lab. designated for disease)

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?

Not applicable (Only OIE Reference Lab. designated for disease)

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?

Not applicable (Only OIE Reference Lab. designated for disease)

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 see point 1.3

| Purpose for inter-laboratory test comparisons ¹ | No. participating laboratories | Region(s) of participating OIE Member Countries |
|--------------------------------------------------------------------------------------------|-----------------------------------|----------------------------------------------------------|
| To test the quality of the PCR method used for T. lunwenshuni and T. uilenbergi detection. | 3 | □Africa □Americas ⊠Asia and Pacific □Europe □Middle East |

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:

For persistent epidemic of COVID-19 all kinds of off-line activities were limited, but we'll pay close attention to epizootiological data relevant to international disease control, and spent more energy on basic research of theileria sp. Our laboratory established a new national standard of ovine theileriosis detection this year. We expect to participate in more cooperation and communication organize by OIE