

OIE Reference Laboratory Reports Activities

Activities in 2019

This report has been submitted : 2019-12-12 03:32:46

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|--|--|
| Name of disease (or topic) for which you are a designated OIE Reference Laboratory: | Cysticercosis |
| Address of laboratory: | Helminthosis Laboratory 1 Xujiaping Yanchangbu Lanzhou 730046 Gansu Province CHINA (PEOPLES REP. OF) |
| Tel.: | +86-931 8342716,8323 |
| Fax: | +86-931 8340977 |
| E-mail address: | caixp@vip.163.com |
| Website: | |
| Name (including Title) of Head of Laboratory (Responsible Official): | Professor Xuepeng Cai |
| Name (including Title and Position) of OIE Reference Expert: | Professor Xuepeng Cai |
| 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 | |
|---------------------------|----------------------------------|--|-----------------|
| | | Nationally | Internationally |
| Indirect diagnostic tests | | Nationally | Internationally |
| indirect ELISA | Yes | 30 | 0 |
| dot-ABC-ELISA | No | 10 | 0 |
| Direct diagnostic tests | | Nationally | Internationally |
| PCR | Yes | 4 | 0 |
| multi-PCR | No | 6 | 0 |
| microscope detection | Yes | 2 | 0 |

**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?

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?

Yes

7. Did your laboratory develop new vaccines according to OIE Standards for the designated pathogen or disease?

Yes

| Name of the new test or diagnostic method or vaccine developed | Description and References (Publication, website, etc.) |
|--|---|
| ELISA based on recombinant 18kD antigen. | Prokaryotic Expression and Purification of Recombinant TS-CC18 Antigen from <i>Cysticercus Cellulosae</i> and Identification of Its Antigenicity [J] Chin J Nat Med. 2009, 11(3):161-164. DOI:10.16505/j.2095-0136.2009.03.001 (in chinese) |
| recombinant TSOL18 vaccines | Effective Production and Purification of the Glycosylated TSOL18 Antigen, Which Is Protective against Pig Cysticercosis Xuepeng Cai, Gailing Yuan, Yadong Zheng, Xuenong Luo, Shaohua Zhang, Juntao Ding, Zhizhong Jing, Chengping Lu Infect Immun. 2008 Feb; 76(2): 767-770. |

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?

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?

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: |
| serum prevalence in porcines and human cases for NCC and taeniasis. |

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

No

| |
|---|
| If the answer is no, please provide a brief explanation of the situation: |
| just collect the epizootiological data in other countries. |

**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: 4

Liang P, Mao L, Zhang S, Guo X, Liu G, Wang L, Hou J, Zheng Y, Luo X. Identification and molecular characterization of exosome-like vesicles derived from the *Taenia asiatica* adult worm. *Acta Trop.* 2019, 198:105036.

Guo A, Wang L, Zhang S, Zheng Y, Georgiev BB, Luo X, Huang S, Cai X. Mitochondrial genome of *Paruterina candelabaria* (Cestoda: Paruterinidae), with implications for the relationships between the genera *Cladotaenia* and *Paruterina*. *Acta Trop.* 2019, 189:1-5.

Zhang S. Comparative Transcriptomic Analysis of the Larval and Adult Stages of *Taenia pisiformis*. *Genes (Basel)*. 2019, 10(7). pii: E507.

Zhang S. Screening and verification for proteins that interact with leucine aminopeptidase of *Taenia pisiformis* using a yeast two-hybrid system. *Parasitol Res.* 2019, 118(12): 3387-3398.

b) International conferences: 2

c) National conferences: 6

d) Other:

(Provide website address or link to appropriate information) 1

<http://lvri.caas.cn/>

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) |
|-----------------------------------|---|
| ISO17025 | □□□□□□□□.jpg |

16. Is your quality management system accredited?

Yes

| Test for which your laboratory is accredited | Accreditation body |
|--|--|
| Microscope test | China National Accreditation Service for Conformity Assessment(CNAS) |
| ELISA | China National Accreditation Service for Conformity Assessment(CNAS) |

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?

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?

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:

there are rarely natural infection cases for porcine cysticercosis.