

WOAH Reference Laboratory Reports Activities 2022

Activities in 2022

This report has been submitted : 26 avril 2023 12:02

Laboratory Information

Name of disease (or topic) for which you are a designated WOA Reference Laboratory:	Brucellosis (Brucella abortus, Brucella melitensis)
Address of laboratory:	National Institute of Animal Health, Department of Livestock Development (DLD) 50/2 Phahonyothin Road (Kasetklang), Ladyao, Chatuchak, Bangkok 10900 THAILAND
Tel.:	+662579290814
E-mail address:	monayae@dld.go.th
Website:	www.niah.dld.go.th
Name (including Title) of Head of Laboratory (Responsible Official):	Dr. Lertchai Jintapitaksakul, (Director of the National Institute of Animal Health, DLD), Dr. Reka Kanitpun, Chief of Immunology Section (Brucellosis Laboratory)
Name (including Title and Position) of WOA Reference Expert:	Dr. Monaya Ekgatat, Brucellosis Advisor to DLD, National Institute of Animal Health, Department of Livestock Development
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

Diagnostic Test	Indicated in WOA Manual (Yes/No)	Total number of test performed last year	
Indirect diagnostic tests		Nationally	Internationally
RBT	Yes	46,762	-
SAT	Yes	0	-
CFT	Yes	705	-

I-ELISA (bovine serum)	Yes	626	-
I-ELISA (bovine milk)	Yes	11,160	-
I-ELISA (caprine/ovine serum)	Yes	858	-
I-ELISA (other)	No	39	-
FPA	Yes	108	-
Milk Ring Test	Yes	5,078	-
B. canis RSAT/LFIA	No	0	-
Direct diagnostic tests		Nationally	Internationally
Culture (milk/organ/swab-fluid)	Yes	285/32/0	-
Brucella spp. PCR/Real time PCR (Specimens)	Yes	50/0	-
Brucella molecular typing	Yes	50	-
Control of diagnostic batches	Yes	11 (RBT antigen-in house)	-

TOR2: REFERENCE MATERIAL

2. Did your laboratory produce or supply imported standard reference reagents officially recognised by WOA?H?

No

3. Did your laboratory supply standard reference reagents (nonWOAH-approved) and/or other diagnostic reagents to WOA?H Members?

Yes

TYPE OF REAGENT AVAILABLE	RELATED DIAGNOSTIC TEST	PRODUCED/ PROVIDE	AMOUNT SUPPLIED NATIONALLY (ML, MG)	AMOUNT SUPPLIED INTERNATIONALLY (ML, MG)	NO. OF RECIPIENT WOA?H MEMBER COUNTRIES	COUNTRY OF RECIPIENTS
National positive control serum	Diagnostic reagents control	Produced/provided	40 tubes (40x3.0 ml)	-	-	Asia and Pacific
National negative control serum	Diagnostic reagents control	Produced/provided	40 tubes (40x3.0 ml)	-	-	Asia and Pacific
RBT antigen	Diagnostic reagent	provided	1,199 bottles (1,199x10 ml)	-	-	Asia and Pacific
I-ELISA inhouse kit (NIAH)	Diagnostic reagent	Produced/provided	4,400 test	-	-	Asia and Pacific

4. Did your laboratory produce vaccines?

Not applicable

5. Did your laboratory supply vaccines to WOA?H Members?

Not applicable

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 WOAHS 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 WOAHS Standards for the designated pathogen or disease?

No

TOR4: DIAGNOSTIC TESTING FACILITIES

10. Did your laboratory carry out diagnostic testing for other WOAHS Members?

No

11. Did your laboratory provide expert advice in technical consultancies on the request of an WOAHS Member?

Yes

NAME OF THE WOAHS MEMBER COUNTRY RECEIVING A TECHNICAL CONSULTANCY	PURPOSE	HOW THE ADVICE WAS PROVIDED
BHUTAN	CFT Diagnostic	Remote assistance through email communication
CHINESE TAIPEI	RBT Diagnostic	Remote assistance through email communication
SINGAPORE	ILPT	Remote assistance through email communication
HONG KONG	ILPT	Remote assistance through email communication

TOR5: COLLABORATIVE SCIENTIFIC AND TECHNICAL STUDIES

12. Did your laboratory participate in international scientific studies in collaboration with WOAHS Members other than the own?

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:

Compiled laboratory surveillance from Regional Veterinary Research and Development Centers (8 labs) and submitted through Bureau of Disease Control and Veterinary Services to Department of Livestock Development

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:

Presentation at national and international conference/ meeting

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:

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The seroprevalence rates and approach management of brucellosis in Thailand, Vol 56 (12):1530-1536, December 2022, Indian Journal of Animal Research (Kanitpun et al)

b) International conferences:

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1. *Building a bridge between Science and Policy in animal health, R-FETPV and China FETPV, 12 Jan 2022 -online*
2. *The Ninth ASEAN Laboratory Directors' Forum (9th ALDF) Meeting, 23 March 2022, Virtual Meeting, Myanmar (Reka Kanitpun)*
3. *Poster presentation: Applying One Health Approach to Outbreak Investigation and Control in Human Brucellosis, Nakhon Ratchasima, Thailand, 2019, Charuttaporn Jitpeera and Monaya Ekgatat*
4. *Participation: The 45th International Conference on Emerging Infectious Diseases (ICEID), 7-10 August, 2022, Atlanta, Georgia, US (Online presentation)*
4. *Participation: The 45th International Conference on Veterinary Science 2022 (ICVS Thailand 2022) 23-25 Nov 2022, Building, IMPACT Exhibition and Convention Center, Thailand*
5. *Virtual Workshop on Brucellosis Control in the Asia Pacific Region, December 15, 2022*
Participation and presentation: Monaya Ekgatat, Reka Kanitpun
6. *Participation: "Animal Disease Outbreak Investigations" Accomplishment of R-FETPV 2nd Module (12th batch of 2021), November 16th, 2022, Chinamon Hotel, Bangkok, Thailand*
7. *Participation: "Surveillance Data/Animal Health Situation Analysis" Accomplishment of R-FETPV 1st Module (13th batch of 2022), November 17, 2022, Chinamon Hotel, Bangkok, Thailand*

c) National conferences:

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1. *ISO 17034: 2016, General requirements for the competence of reference material producers National Institute of Metrology (Thailand), 11-12 Jan 2022*
2. *Selection, Use and Interpretation of "Proficiency Testing (PT)" Schemes, Axo Chemicals and Sciences Co. Ltd., 26 Jan 2022*
3. *ISO 13528 :2015, Statistic for Laboratory Proficiency test, National Institute of Animal Health, 8-10 February 2022*
4. *ISO Guide 35: 2017 – Reference material - Guidance for characterization and assessment of homogeneity and stability, National Institute of Metrology (Thailand), 22-23 February 2022*
5. *Data Analytics and Visualization with Microsoft Power BI, Depart of Live stock Development (Thailand), 21-23 March 2022*
6. *Weighing compliance to Standard Regulation, Mettler Toledo (Thailand), 12 May 2022*
7. *Interpretation Calibration Certificate, Metrological Center SCG, 25 October 2022*

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 WOA Members?

No

TOR8: QUALITY ASSURANCE

18. Does your laboratory have a Quality Management System?

Yes

Quality management system adopted	Certificate scan (PDF, JPG, PNG format)	
ISO/IEC 17025	ISO 17025.pdf	ISO IEC 17025 ENG NIAH_25 Aug 2022 - 25 Aug 2026.pdf

19. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
Rose Bengal test (RBT)	ILAC-MRA by Bureau of Laboratory Quality Standard, Department of Medical Science
Complement Fixation test (CFT)	ILAC-MRA by Bureau of Laboratory Quality Standard, Department of Medical Science
I-ELISA	ILAC-MRA by Bureau of Laboratory Quality Standard, Department of Medical Science

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

Yes

There are risk assessments evaluation to identify the hazardous in the laboratory process. The risk analysis will be informed to the lab manager and the data will be provided to the biosafety committee and biosafety officers of NIAH. To mitigating risk, the lab staffs will be trained for the biosafety and biosecurity program, including, in use of PPE and facility, incident and accident response plans. Standard Operating Procedures are also implemented in the lab and will be followed by all lab staffs. The hazardous which may occur can be minimized by working in separated room with biosafety cabinets and other appropriate equipment.

TOR9: SCIENTIFIC MEETINGS

21. Did your laboratory organise scientific meetings related to the pathogen in question on behalf of WOA?

No

22. Did your laboratory participate in scientific meetings related to the pathogen in question on behalf of WOA?

Yes

Title of event	Date (mm/yy)	Location	Role (speaker, presenting poster, short communications)	Title of the work presented
Virtual Workshop on Brucellosis Control in the Asia Pacific Region	2022-12-15	Virtual Workshop	Participation and presentation	An Overview of Brucellosis in animals and capacity building on brucellosis diagnosis in the Asia Pacific Region

TOR10: NETWORK WITH WOAHP REFERENCE LABORATORIES

23. Did your laboratory exchange information with other WOAHP Reference Laboratories designated for the same pathogen or disease?

Yes

24. Are you a member of a network of WOAHP Reference Laboratories designated for the same pathogen?

No

25. Did you organise or participate in inter-laboratory proficiency tests with WOAHP Reference Laboratories designated for the same pathogen?

No

26. Did your laboratory collaborate with other WOAHP 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 WOAHP Reference Laboratories for the same pathogen?

Yes

Purpose for inter-laboratory test comparisons ¹	Role of your reference laboratory (organizer/participant)	No. participating laboratories	Region(s) of participating WOAHP Member Countries
Interlaboratory proficiency test on serological tests on RBT, CFT and I-ELISA	Organizer and participant	51	Asia and Pacific

TOR12: EXPERT CONSULTANTS

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

No

29. Additional comments regarding your report:

No