

WOAH Reference Laboratory Reports Activities 2023

Activities in 2023

This report has been submitted : 15 juillet 2024 14:29

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 KasetkangLadyaoChatuchakBangkok 10900 THAILAND
Tel.:	+66-2579 8908
E-mail address:	monayae@dld.go.th
Website:	
Name (including Title) of Head of Laboratory (Responsible Official):	Dr. Lerdchai Chintapitaksakul, DVM, (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	
		Nationally	Internationally
Indirect diagnostic tests			
RBT		30646	0
SAT		0	0
CFT		1084	0
I-ELISA (bovine serum)		2909	0
I-ELISA (bovine milk)		31490	0
I-ELISA (caprine/ovine serum)		536	0
I-ELISA (other)		5	0
FPA		0	0
Milk Ring Test		144	0
Direct diagnostic tests			
Culture (milk/organ/swab-fluid)		118	0
Brucella spp. PCR/Real time PCR (Specimens)		12	0

Brucella molecular typing		0	0
Control of diagnostic batches		2	0

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	34 bottles (34x3.0 ml)	-	1	THAILAND,
National negative control serum	Diagnostic reagents control	Produced/provided	33 bottles (33x3.0 ml)	-	1	THAILAND,
RBT antigen	Diagnostic reagent	provided	1,122 bottles (1,122x10 ml)	-	1	THAILAND,
I-ELISA inhouse kit (NIAH)	Diagnostic reagent	Produced/provided	1600 tests	-	1	THAILAND,

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 WOA?H 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 WOA?H Standards for the designated pathogen or disease?

No

TOR4: DIAGNOSTIC TESTING FACILITIES

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

No

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

Yes

NAME OF THE WOA?H MEMBER COUNTRY RECEIVING A TECHNICAL CONSULTANCY	PURPOSE	HOW THE ADVICE WAS PROVIDED
BHUTAN	Sero-diagnosis	Remote assistance through email communication
MALAYSIA	CFT and I-ELISA	Remote assistance through email communication
MONGOLIA	Milk ring test	Remote assistance through email communication
NEPAL	Brucellosis (Training)	Remote assistance through email communication
SINGAPORE	Molecular	Remote assistance through email communication
CHINESE TAIPEI	Sero-diagnosis	Remote assistance through email

TOR5: COLLABORATIVE SCIENTIFIC AND TECHNICAL STUDIES

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

No

13. In exercising your activities, have you identified any regulatory research needs* relevant for WOA?

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 brucellosis sero-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:

2

1. *Prevalence and risk factors of brucellosis and dairy farmers' KAP in 2 townships, Myanmar; Veterinary Integrative Sciences 2023; 21(2): 439 - 456 DOI; 10.12982/VIS.2023.031, ISSN; 2629-9968 (online), Website; www.vet.cmu.ac.th/cmrv (Hlaing Win, Suwicha Kasemsuwan, Hnin Thidar Myint, Monaya Ekgat and Waraphon Phimpraphai)*

2. *Risk Factors Associated with Brucellosis Seropositivity in Goat Farms of Sing Buri Province, Thailand, World Vet J, 13(1): 191-199, March 25, ISSN 2322-4568, DOI: <https://dx.doi.org/10.54203/scil.2023.wvj20> Nattanan Thuamsuwan, Karoon Chanachai, Monaya Ekgat, Prakrit Srisai, Tippawon Prarakamawongsa, and Theera Rukkamsuk*

b) International conferences:

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1. *Presentation: The 3rd International Symposium on Brucellosis, 10-11 January 2023, Beijing, China. Topic: Implementation milk assay for brucellosis elimination and diagnostic quality control in Thailand (Monaya Ekgat and Reka Kanitpun) Presentation time is scheduled for 15:10-15:30 p.m. Beijing time on 11 January 2023*

2. *Participation: Integrated Quality Laboratory Services: Webinar on "General Management Skills" Feb 16, 2023 (15:00-16:30 ICT) by Division of Global Health Protection, CDC, Thailand and Integrated Quality Laboratory Services, Villeurbanne, France*

3. *Participation: Integrated Quality Laboratory Services: Webinar on "People Management " Apr 20, 2023 (15:00-16:30 ICT) by Division of Global Health Protection, CDC, Thailand and Integrated Quality Laboratory Services, Villeurbanne, France*

4. *Presentation and participation: World Organisation of Animal Health (WOAH) Sub- Regional Representation for South-East Asia: One Health Laboratory Network Core Group Consultation Meeting, 27 June 2023 at Eastin Grand Hotel Phayathai, Bangkok, Thailand Presentation on topic: WOA Reference Laboratory for Brucellosis.*

5. *Participation: Webinar, Document and record management, November 9, 2023, 15:00-16:30 ICT) by Division of Global Health Protection, CDC, Thailand and Integrated Quality Laboratory Services, Villeurbanne, France*

6. Presentation and participation: SEA GLLP Participant Training Session: 2 (Competency 2: Leadership), Department of Medical sciences, Thailand Date: 20-24 November 2023 (5 days)

Presentation on topic: Partnership and coalition buildings "Shared Experiences": WOH Reference Laboratory for Brucellosis

c) National conferences:

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1. Participation: Thailand Proficiency Testing Program "Development of PT and PT provider to International Level, 15 Feb 2023, 09:00-12:00 National Institute of Metrology (Thailand)

2. Organization and presentation: Bovine Brucellosis Interlaboratory Proficiency Test 2022 round, Thailand, 29 Mar 2023 National Institute of Animal Health (Brucellosis Laboratory) :Virtual meeting

3. Participation: Uncertainty measurement Dec20, 2023, 09:00-12:00 National Institute of Metrology (Thailand)

4. Participation: BSL-3, 5-7 July 2023, 09:00-16:00 The Biosafety Association (Thailand)

5. Participation: Biosafety and Biosecurity, 14-15 December 2023, 09:00-16:00 Chulalongkorn University (Thailand)

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 WOH Members?

Yes

a) Technical visit : 4

b) Seminars : 0

c) Hands-on training courses: 1

d) Internships (>1 month) 0

Type of technical training provided (a, b, c or d)	Country of origin of the expert(s) provided with training	No. participants from the corresponding country
A	THAILAND	1
A	THAILAND	6
A	THAILAND	4
A	THAILAND	8
C	THAILAND	10

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 17025:2017	ISO IEC 17025 ENG.pdf	ISO IEC 17025 ENG.pdf
ISO 9001: 2015	9001eng.jpg	certificate ISO 9001_NIAH.pdf
ISO/IEC 17043:2010	ISO 17043.pdf	ISO 17043.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
	ILAC-MRA by Bureau of Laboratory Quality Standard, Department of Medical

Complement Fixation test (CFT)	Science
I-ELISA	ILAC-MRA by Bureau of Laboratory Quality Standard, Department of Medical Science
PT provider: Brucellosis (Serological Tests)	Bureau of Laboratory Accreditation, Department of Science Service, Ministry of Higher Education, Science, Research and Innovation

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 WOAHP?

No

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

No

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. Do you network (collaborate or share information) with other 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	Name of the Test	WOAHP Member Countries
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Laboratory proficiency testing (PT) was organized to develop the efficiency of Brucella testing for the same standard.

ORGANIZER

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Brucellosis Bovine Serum Laboratory Proficiency test

THAILAND,

TOR12: EXPERT CONSULTANTS

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

No

29. Additional comments regarding your report:

No