WOAH Reference Laboratory Reports Activities 2022

Activities in 2022

This report has been submitted : 25 avril 2023 12:41

Laboratory Information

Name of disease (or topic) for which you are a designated WOAH Reference Laboratory:	African swine fever
Address of laboratory:	1015, Arlington Street
Tel.:	2047892089
E-mail address:	Aruna.Ambagala@inspection.gc.ca
Website:	https://inspection.canada.ca/science-and-research/our-laboratories/ncfad-winnipeg/eng/1549576575939/1549576643836
Name (including Title) of Head of Laboratory (Responsible Official):	Kathleen Hooper-McGrevy
Name (including Title and Position) of WOAH Reference Expert:	Aruna Ambagala
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 WOAH Manual (Yes/No)	Total number of test performed last year	
Indirect diagnostic tests		Nationally	Internationally
ELISA	YES	9	
Direct diagnostic tests		Nationally	Internationally

PCR	YES	270	48
Virus Isolation	Yes	0	48

TOR2: REFERENCE MATERIAL

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

No

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

No

4. Did your laboratory produce vaccines?

No

5. Did your laboratory supply vaccines to WOAH Members?

No

TOR3: NEW PROCEDURES

6. Did your laboratory develop new diagnostic methods for the designated pathogen or disease?

Yes

NAME OF THE NEW TEST OR DIAGNOSTIC METHOD DEVELOPED	DESCRIPTION AND REFERENCES (PUBLICATION, WEBSITE, ETC.)
Superficial Inguinal Lymph Nodes for Screening Dead Pigs for African Swine Fever	Goonewardene KB, Onyilagha C, Goolia M, Le VP, Blome S, Ambagala A. Superficial Inguinal Lymph Nodes for Screening Dead Pigs for African Swine Fever. Viruses. 2022 Jan 4;14(1):83.

7. Did your laboratory validate diagnostic methods according to WOAH 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 WOAH Standards for the designated pathogen or disease?

No

TOR4: DIAGNOSTIC TESTING FACILITIES

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

Yes

NAME OF WOAH MEMBER COUNTRY SEEKING ASSISTANCE	DATE	WHICH DIAGNOSTIC TEST USED	NO. SAMPLES RECEIVED FOR PROVISION OF DIAGNOSTIC SUPPORT	NO. SAMPLES RECEIVED FOR PROVISION OF CONFIRMATORY DIAGNOSES
GHANA	2022-03-17	ASF PCR, isolation and sequencing		26
GHANA	2022-07-07	ASF PCR, isolation and sequencing		22

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

Yes

NAME OF THE WOAH MEMBER COUNTRY RECEIVING A TECHNICAL CONSULTANCY	PURPOSE	HOW THE ADVICE WAS PROVIDED
GUATEMALA	Set up ASF Diagnostic capability at the LARRSA Laboratory	Through Teams meetings and emails
VIETNAM	Genotyping ASFV	Through Teams meetings and emails
GHANA	ASF Laboratory diagnostics	Through Teams meetings and emails

TOR5: COLLABORATIVE SCIENTIFIC AND TECHNICAL STUDIES

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

Yes

Title of the study	Duration	PURPOSE OF THE STUDY	PARTNERS (INSTITUTIONS)	WOAH MEMBER COUNTRIES INVOLVED OTHER THAN YOUR COUNTRY
Field evaluation of oral fluids as a convenient, aggregate sample for early detection of African swine fever	On going	Field validation	Vietnam National University of Agriculture	VIETNAM
Full validation of two commercial ELISA assays for the detection of antibodies to African swine fever	On going	Full Validation	Biostone Animal Health, LLC, Texas, USA	UNITED STATES OF AMERICA
Evaluate commercially available lateral flow assay for rapid detection of ASF	12 months	Evaluation of a commercial product	Virology Division, National Veterinary Research, NIgeria; Accra Laboratory, Veterinary Services Directorate, Ghana.	GHANA NIGERIA
Molecular epidemiology of African swine fever virus in Vietnam	12 months	Study African swine fever virus variants circulating in Vietnam.	Vietnam National University of Agriculture, Hanoi, Vietnam.	VIETNAM

TOR6: EPIZOOLOGICAL DATA

14. Did your Laboratory collect epidemiological data relevant to international disease control?

No

15. Did your laboratory disseminate epidemiological data that had been processed and analysed?

No

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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Nguyen VT, Cho KH, Mai NTA, Park JY, Trinh TBN, Jang MK, Nguyen TTH, Vu XD, Nguyen TL, Nguyen VD, Ambagala A, Kim YJ, Le VP. Multiple variants of African swine fever virus circulating in Vietnam. Arch Virol. 2022 Apr;167(4):1137-1140.

Mai NTA, Trinh TBN, Nguyen VT, Lai TNH, Le NP, Nguyen TTH, Nguyen TL, Ambagala A, Do DL, Le VP. Estimation of basic reproduction number (R0) of African swine fever (ASF) in mid-size commercial pig farms in Vietnam. Front Vet Sci. 2022 Sep 29;9:918438.

Goonewardene KB, Onyilagha C, Goolia M, Le VP, Blome S, Ambagala A. Superficial Inguinal Lymph Nodes for Screening Dead Pigs for African Swine Fever. Viruses. 2022 Jan 4;14(1):83.

Onyilagha C, Nguyen K, Luka PD, Hussaini U, Adedeji A, Odoom T, Ambagala A. Evaluation of a Lateral Flow Assay for Rapid Detection of African Swine Fever Virus in Multiple Sample Types. Pathogens. 2022 Jan 24;11(2):138.

b) International conferences:

3
EPIZONE, 14th annual meeting, 18-20 May 2022. Virtual Attendance

GARA 2022 Scientific Meeting May 24-27, 2022 | Punta Cana, Dominican Republic - In person

Plum Island 68th Anniversary Symposium, 8-9 November 2022

c) National conferences:

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 WOAH Members?

Yes

a) Technical visit : ASF molecular and serological laboratory diagnostics

b) Seminars :

c) Hands-on training courses: ASF molecular and serological laboratory diagnostics

d) Internships (>1 month)

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	Guatemala	2

TOR8: QUALITY ASSURANCE

18. Does your laboratory have a Quality Management System?

Yes

Quality management system adopted	Certificate scan (PDF, JPG, PNG format)	
ISO 17025	pdf	ASB_CTF_15579-CFIA-Certificate_v1_2021-04-27.pdf

19. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
RT-PCR	Standards Council of Canada
ELISA	Standards Council of Canada
Virus isolation	Standards Council of Canada
Sequencing	Standards Council of Canada

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

Yes

All ASFV related activities are done in HPTA (Human Pathogens and Toxins act) licensed BSL3 laboratory which is operated under Canadian Biosafety Standard

TOR9: SCIENTIFIC MEETINGS

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

No

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

Yes

Title of event	Date (mm/yy)	Location	Role (speaker, presenting poster, short communications)	Title of the work presented
Webinar on WOAH standards, trade and African swine fever	2022-11-22	Webinar	Speaker	ASF virus characteristics and epidemiology, importance for trade of live pigs and pig products

TOR10: NETWORK WITH WOAH REFERENCE LABORATORIES

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

Yes

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

Yes

PURPOSE OF THE PROFICIENCY	ROLE OF YOUR REFERENCE		PARTICIPATING WOAH REF.

TESTS: 1	LABORATORY (ORGANISER/ PARTICIPANT)	NO. PARTICIPANTS	LABS/ ORGANISING WOAH REF. LAB.

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

Yes

PURPOSE OF THE PROFICIENCY TESTS: 1	ROLE OF YOUR REFERENCE LABORATORY (ORGANISER/ PARTICIPANT)	NO. PARTICIPANTS	PARTICIPATING WOAH REF. LABS/ ORGANISING WOAH REF. LAB.
Inter laboratory comparison	A Participant		CReSA- RTA

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

No

TOR12: EXPERT CONSULTANTS

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

No

29. Additional comments regarding your report: