WOAH Reference Laboratory Reports Activities 2023

Activities in 2023

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Laboratory Information

Name of disease (or topic) for which you are a designated WOAH Reference Laboratory:	American foulbrood
Address of laboratory:	
Tel.:	+33 (0)4 92 94 37 00
E-mail address:	marie-pierre.chauzat@anses.fr
Website:	
Name (including Title) of Head of Laboratory (Responsible Official):	Dr. Richard Thiéry (Head of the Anses Sophia Antipolis Laboratory)
Name (including Title and Position) of WOAH Reference Expert:	Dr Marie-Pierre CHAUZAT (WOAH expert for Nosemosis, American foulbrood; European foulbrood, varroosis and nosemosis; Head the European laboratory for honeybee health)
Which of the following defines your laboratory? Check all that apply:	Research agency

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
none		0	0
Direct diagnostic tests		Nationally	Internationally
Recherche de la loque américaine par examen bactérioscopique		7	0
Isolement et culture de Paenibacillus larvae (agent de la loque américaine)		0	0

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?

Yes

TYPE OF REAGENT AVAILABLE	RELATED DIAGNOSTIC TEST	PRODUCED/ PROVIDE	AMOUNT SUPPLIED NATIONALLY (ML, MG)	AMOUNT SUPPLIED INTERNATIONALLY (ML, MG)	NO. OF RECIPIENT WOAH MEMBER COUNTRIES	COUNTRY OF RECIPIENTS
Contrôle positif	Culture bactérienne	Souche de référence P. larvae	0.1 ml	2 x 0.1 ml	2	HUNGARY, KOSOVO,

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?

Nο

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

Nο

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?

No

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
BRAZIL	Implémentation de tests diagnostic par PCR temps réel	Conseils à distance par voie de courriers électroniques : 1/ Discussions sur la méthode 2/ Corrections de runs de PCR sur photos
SPAIN	Amélioration de la caractérisation de souches de P. larvae : Implémentation de la méthode de typage par MLVA	Conseils à distance par voie de courrier électroniques: 1/ Discussions sur la méthode. 2/ Organisation d'un essai MLVA bilatéral 3/ Envoi de matériel de référence pour le typage 4/ Corrections de runs de PCR sur photos
THE NETHERLANDS	Demande d'informations sur la règlementation concernant la loque américaine en France et la gestion de cas positifs	Conseils à distance par voie de courrier électroniques

TOR5: COLLABORATIVE SCIENTIFIC AND TECHNICAL STUDIES

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

No

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

No

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:

- b) International conferences:
- c) National conferences:
- d) Other (Provide website address or link to appropriate information):

2

Le laboratoire diffuse, selon le besoin et/ou la situation, des informations sur la loque américaine sur les sites Internet :

- Page web du laboratoire de Sophia Antipolis : https://www.anses.fr/fr/portails/1807/content/150751
- Site Internet du LRUE: https://eurl-bee.anses.fr/en/minisite/abeilles/welcome-website-eu-rl-bee-health

TOR7: SCIENTIFIC AND TECHNICAL TRAINING

17. Did your laboratory provide scientific and technical training to laboratory personnel from other WOAH 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 17025	pdf	ANSES_Cofrac.pdf

19. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
Recherche de la loque américaine par examen bactérioscopique	cofrac
Identification de Paenibacillus Iarvae agent de la loque américaine par PCR conventionnelle	cofrac
Identification de Paenibacillus larvae agent de la loque américaine par PCR temps réel	cofrac

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

Yes

Au sein du laboratoire, différentes mesures de biosécurité et de biosûreté sont mises en place pour gérer le risque biologique de façon générale (gestion des déchets, nettoyage/désinfection, contrôle des accès aux locaux et au système informatique, procédures techniques pour la réception des échantillons et les analyses, formation et habilitation des personnels...). En outre, des locaux distincts sont affectés aux essais immunosérologiques, à la biologie moléculaire, aux manipulations en microbiologie et à la culture des cellules saines ainsi qu'aux contaminants chimiques. Toutes ces procédures/mesures sont inscrites dans le système de management de la qualité du laboratoire.

TOR9: SCIENTIFIC MEETINGS

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

Yes

NATIONAL/ INTERNATIONAL	TITLE OF EVENT	CO-ORGANISER	DATE (MM/YY)	LOCATION	NO. PARTICIPANTS
International	Les diagnostiques et les travaux sur la loque américaine	none	2023-12-14	Teams	3

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
Vaccin contre la loque américaine	2023-10-23	Teams	Echanges scientifiques	Présentation de la société Dalan
Discussion avec Nigel Swift	2023-11-17	Sophia	Echanges scientifiques	Vaccin contre la loque américaine
Meeting with Dalan Animal Health	2023-12-08	Zoom	Echanges scientifiques	Bee Vaccine for AFB organised by F. Diaz

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. Do you network (collaborate or share information) with other WOAH Reference Laboratories designated for the same pathogen?

Yes

NETWORK/DISEASE	ROLE OF YOUR LABORATORY (PARTICIPANT, ORGANISER, ETC)	NO. PARTICIPANTS	PARTICIPATING WOAH REF. LABS
AFB	participant	3	discussions

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.
Detection of Paenibacillus larvae / Melissococcus plutonius, agents of American / European foulbrood, in crushed bee larvae by: Microscopy, PCR, Culture	Organisateur	1	Organisateur OMSA

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?

Yes

Purpose for inter-laboratory test comparisons1	Role of your reference laboratory (organizer/participant)	No. participating laboratories	Name of the Test	WOAH Member Countries
Detection of Paenibacillus larvae / Melissococcus plutonius, agents of American / European foulbrood, in crushed bee larvae by: Microscopy, PCR, Culture	Organisateur	23	Detection of Paenibacillus larvae / Melissococcus plutonius, agents of American / European foulbrood, in crushed bee larvae by: Microscopy, PCR, Culture	AUSTRIA, BELGIUM, BULGARIA, CROATIA, CZECH REPUBLIC, ESTONIA, FINLAND, GERMANY, GREECE, HUNGARY, IRELAND, ITALY, KOSOVO, LATVIA, NORWAY, POLAND, ROMANIA, SLOVAKIA, SLOVENIA, SPAIN, SWEDEN, SWITZERLAND, THE NETHERLANDS,
Bilateral assay on the detection of Paenibacillus larvae, agent of American foulbrood, in crushed bee larvae by PCR	Organisateur	1	Bilateral assay on the detection of Paenibacillus larvae, agent of American foulbrood, in crushed bee larvae by PCR	THE NETHERLANDS - ARUBA,
Bilateral assay on the detection			Bilateral assay on the detection	

of Paenibacillus larvae / of Paenibacillus larvae / Melissococcus plutonius, agents Melissococcus plutonius, agents TURKEY, Organisateur 1 of American / European of American / European foulbrood, in crushed bee larvae foulbrood, in crushed bee larvae by Microscopy by Microscopy Bilateral assay on the MLVA Bilateral assay on the MLVA genotyping of Paenibacillus genotyping of Paenibacillus SPAIN. Organisateur larvae, agent of American larvae, agent of American foulbrood foulbrood

TOR12: EXPERT CONSULTANTS

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

No

29. Additional comments regarding your report:

Yes

The Anses Sophia Antipolis laboratory has been working for several years on the development and validation of quality diagnostic methods for the detection and/or identification of American and European foulbrood agents.

Most of the methods used by Anses Sophia Antipolis derive from those described in the Manual of diagnostic tests and vaccines for terrestrial animals. WHOA Member States have easy access to the Manual and often demonstrate that they are autonomous in their uses. In addition, for both diseases, the clinical characteristics and diagnostic approaches are well-documented; or even quite well known; and the diagnostic methods are easy to implement. As a result, the Anses Sophia Antipolis laboratory remains very little requested in terms of diagnostics at the international level.

Most often, the questions we receive concern details of the implementation of methods but mainly relate to the supply of reference materials (MRs), organization of proficiency tests (PTs) and sometimes provision of training. The latter topics are subject to a number of administrative and budgetary constraints. Indeed, apart from sending DNAs, sending MRs for microscopy and/or culture diagnosis; or for the participation in PTs require obtaining pathogen import permits and shipping under UN3373 conditions. These formalities are time consuming and most of the time the cost can be prohibitive, including for certain European countries. Concerning training requests, the auestion of financina those remains relevant.

Consequently, the interactions that Anses Sophia Antipolis may have with the requesting laboratories are found to be limited only to exchanges and/or discussions on the pathogens or the methods used by email or Visio call.