## WOAH Collaborative Centre Reports Activities 2023

### Activities in 2023

This report has been submitted: 11 juin 2024 15:45

### Centre Information

<table>
<thead>
<tr>
<th>Title of WOAH Collaborating Centre</th>
<th>Food-Borne Zoonotic Parasites Europa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address of WOAH Collaborating Centre</td>
<td>14 rue Pierre et Marie Curie</td>
</tr>
<tr>
<td>Tel:</td>
<td>0149772816</td>
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<tr>
<td>E-mail address:</td>
<td><a href="mailto:isabelle.vallee@anses.fr">isabelle.vallee@anses.fr</a></td>
</tr>
<tr>
<td>Website:</td>
<td><a href="http://www.anses.fr">www.anses.fr</a></td>
</tr>
<tr>
<td>Name Director of Institute (Responsible Official):</td>
<td>Pr Benoit Vallet</td>
</tr>
<tr>
<td>Name (including Title and Position) of Head of the Collaborating Centre (WOAH Contact Point):</td>
<td>Dr Isabelle Vallée</td>
</tr>
<tr>
<td>Name of the writer:</td>
<td>Isabelle Vallée</td>
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</table>

### TOR1 AND 2: SERVICES PROVIDED

1. Activities as a centre of research, expertise, standardisation and dissemination of techniques within the remit of the mandate given by WOAH

<table>
<thead>
<tr>
<th>Category</th>
<th>Title of activity</th>
<th>Scope</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disease control (true)</td>
<td>1/ Confirmation of diagnosis 2/ Scientific advises</td>
<td>1/ Activity of confirmation regarding official control of meat for Trichinella spp muscle larvae 2/ Scientists provide advices or expertise at the request of: - the Ministry of Agriculture for regulatory aspects; - Anses for drafting of opinions; - Accreditation body for quality assurance; - routine labs for their accreditation; - EFSA, for writing annual reports on foodborne parasitic zoonosis such as Trichinella and Toxoplasma.</td>
</tr>
<tr>
<td>Epidemiology, surveillance, risk assessment, (true)</td>
<td>1/ Surveillance of Trichinella circulation within livestock, domestic animals and wildlife 2/ Risk assessment analysis for Toxoplasmosis prevention</td>
<td>1/ Official test by artificial digestion of meat allows the monitoring of the parasite circulation in pigs, horses and wildboars. A passive surveillance is also carried out through the control of some wild animals such as wolves or foxes. 2/ Participation to EU research program for detection of Toxoplasma oocysts in fresh &amp; ready to eat vegetables and participation to risk assessment analysis.</td>
</tr>
<tr>
<td></td>
<td>1/ A training session was organized on site to train technical staff to detect Trichinella larvae in meat (ISO 18743) 2/ Laboratories' performance was evaluated for Trichinella detection in meat.</td>
<td></td>
</tr>
</tbody>
</table>
### Training, capacity building (true)

1. Training courses for Trichinella detection in meat
2. Organisation of a ring trial for Trichinella detection in meat in French labs
3. Organisation of an international ring trial for Trichinella detection in meat
4. Provision of reference samples

Successful results allowed laboratories to get their agreement and accreditation delivered by competent authorities according to the ISO 17025 and ISO18743. This ring test was organised at the request of private or public laboratories in Europe region for the validation of their staff’s qualifications. Proficiency samples for Trichinella test habilitation of analysts were provided upon request to laboratories in Europe and the WOAH CC in Canada. These samples allowed analysts to practice the official tests, to evaluate their individual performance and maintain their habilitation.

### Zoonoses (true)

1. Research programs for improvement of foodborne parasites detection or control
2. Research programs for innovative and natural treatments

1. Development of tools for a/ detection of foodborne parasites (Trichinella, Toxoplasma, Cryptosporidium, Giardia) in different matrices; b/ vaccination of pigs against Trichinella. 2. Development of new therapeutic approaches to control Cryptosporidium or Giardia in animals.

### Wildlife (true)

Epidemiological investigations

Passive collection of data regarding the circulation of Trichinella spp, Toxoplasma gondii, Toxocara spp in wildlife such as wild boars, foxes, raccoon dogs.

### Diagnosis, biotechnology and laboratory (true)

1. Diagnosis of Foodborne zoonotic parasites
2. Reference and expertise activities on foodborne zoonotic parasites

1. Identification and confirmation analysis of free parasites or within different matrices (meat, serum, feces) by direct methods, serological or molecular typing (Trichinella spp, Anisakidae, Toxoplasma gondii, Cryptosporidium spp, Giardia). 2. Development of new tools to detect and control parasites (Trichinella spp, Toxocara spp, Toxoplasma gondii, Cryptosporidium spp, Giardia duodenalis).

### Vaccines (true)

Development of vaccines to protect target animal species

Research programs are underway to develop vaccines against Trichinella in pigs and Toxoplasma gondii in cats.

### Food security (true)

Foodborne protozoan detection on fresh vegetables

Ongoing research programs for improvement of protozoan detection on food matrices such as fresh green leaf salads (ready to eat).

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**TOR3: HARMONISATION OF STANDARDS**

2. Proposal or development of any procedure that will facilitate harmonisation of international regulations applicable to the main fucus area for which you were designated

<table>
<thead>
<tr>
<th>Proposal title</th>
<th>Scope/Content</th>
<th>Applicable area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development of tests to detect Trichinella infected animals</td>
<td>Improvement of reliable serological tests to detect infected pigs are needed for surveillance of indoors pigs reared in officially recognised holdings applying controlled housing conditions.</td>
<td>Laboratory expertise health management Animal production</td>
</tr>
</tbody>
</table>

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

No

4. Did your Collaborating Centre maintain a network with other WOAH Collaborating Centres (CC), Reference Laboratories (RL), or organisations designated for the same specialty, to coordinate scientific and technical studies?

Yes

<table>
<thead>
<tr>
<th>Name of WOAH CC/RL/other</th>
<th>Region of</th>
</tr>
</thead>
</table>
### TOR4 AND 5: NETWORKING AND COLLABORATION

5. Did your Collaborating Centre maintain a network with other WOAH Collaborating Centres, Reference laboratories, or organisations in other disciplines, to coordinate scientific and technical studies?

Yes

<table>
<thead>
<tr>
<th>Name of WOAH CC/RL/other organisation(s)</th>
<th>Location</th>
<th>Region of networking Centre</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>WHO Collaborating Centre for Host - Schistosoma Interactions</td>
<td>Perpignan, France</td>
<td>Europe</td>
<td>Scientific research collaborations on biology of schistosoma hybrides, circulating in Africa and emerging in Corsica (France).</td>
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</table>

### TOR6: EXPERT CONSULTANTS

6. Did your Collaborating Centre place expert consultants at the disposal of WOAH?

No

### TOR7: SCIENTIFIC AND TECHNICAL TRAINING

7. Did your Collaborating Centre provide advice/services to requests from Members in your main focus area?

Yes

We provided reference materials regarding Trichinella detection to several european countries: proficiency samples, and antigens.
8. Did your Collaborating Centre provide scientific and technical training, within the remit of the mandate given by WOAH, to personnel from WOAH Members?

Yes

a) Technical visit : 1
b) Seminars : 1
c) Hands-on training courses: 0
d) Internships (> 1 month) : 0

<table>
<thead>
<tr>
<th>TYPE OF TECHNICAL TRAINING PROVIDED (A, B, C OR D)</th>
<th>CONTENT</th>
<th>COUNTRY OF ORIGIN OF THE EXPERT(S) PROVIDED WITH TRAINING</th>
<th>NO. PARTICIPANTS FROM THE CORRESPONDING COUNTRY</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Training on Toxoplasma detection</td>
<td>Romania</td>
<td>1</td>
</tr>
<tr>
<td>B</td>
<td>Circulation of Toxoplasma and trichinella in Romania</td>
<td>Romania</td>
<td>1</td>
</tr>
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</table>

TOR8: SCIENTIFIC MEETINGS

9. Did your Collaborating Centre organise or participate in the organisation of scientific meetings related to your main focus area on behalf of WOAH?

Yes

<table>
<thead>
<tr>
<th>NATIONAL/INTERNATIONAL</th>
<th>TITLE OF EVENT</th>
<th>CO-ORGANISER</th>
<th>DATE (MM/YY)</th>
<th>LOCATION</th>
<th>NO. PARTICIPANTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>International</td>
<td>2nd Internal meeting of the Foodborne Zoonotic Parasites OIE Collaborating Centres</td>
<td>WOAH CC for Foodborne zoonotic parasites : Canada and RP China</td>
<td>2023-12-20</td>
<td>Virtual</td>
<td>25</td>
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</tbody>
</table>

TOR9: DATA AND INFORMATION DISSEMINATION

10. Publication and dissemination of any information within the remit of the mandate given by WOAH that may be useful to Members of WOAH

a) Articles published in peer-reviewed journals:

b) International conferences:


11. What have you done in the past year to advance your area of focus, e.g. updated technology?

*Develop new research expertise on extracellular vesicles as a new tool to a better understanding host-parasites interactions as well as a future tool for sero-detection of infected animals.*

12. Additional comments regarding your report: