This report has been submitted: 2016-02-05 15:27:43

<table>
<thead>
<tr>
<th>Name of disease (or topic) for which you are a designated OIE Reference Laboratory:</th>
<th>Crayfish plague</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address of laboratory:</td>
<td>Evira Kuopio P.O. Box 92 70701 Kuopio FINLAND</td>
</tr>
<tr>
<td>Tel.:</td>
<td>+358 207.72.49.62</td>
</tr>
<tr>
<td>Fax:</td>
<td>+358 207.72.49.70</td>
</tr>
<tr>
<td>E-mail address:</td>
<td><a href="mailto:satu.viljamaa-dirks@evira.fi">satu.viljamaa-dirks@evira.fi</a></td>
</tr>
<tr>
<td>Website:</td>
<td></td>
</tr>
<tr>
<td>Name (including Title) of Head of Laboratory (Responsible Official):</td>
<td>Prof. Sinikka Pelkonen</td>
</tr>
<tr>
<td>Name (including Title and Position) of OIE Reference Expert:</td>
<td>DVM Satu Viljamaa-Dirks</td>
</tr>
<tr>
<td>Which of the following defines your laboratory? Check all that apply:</td>
<td>Governmental</td>
</tr>
</tbody>
</table>
ToR 1: To use, promote and disseminate diagnostic methods validated according to OIE Standards

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

<table>
<thead>
<tr>
<th>Diagnostic Test</th>
<th>Indicated in OIE Manual (Yes/No)</th>
<th>Total number of test performed last year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nationally</td>
<td>Internationally</td>
</tr>
<tr>
<td>Indirect diagnostic tests</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct diagnostic tests</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Culture</td>
<td>yes</td>
<td>21</td>
</tr>
<tr>
<td>real time PCR</td>
<td>yes</td>
<td>23</td>
</tr>
</tbody>
</table>

ToR 2: To develop reference material in accordance with OIE requirements, and implement and promote the application of OIE Standards. To store and distribute to national laboratories biological reference products and any other reagents used in the diagnosis and control of the designated pathogens or disease.

2. Did your laboratory produce or supply imported standard reference reagents officially recognised by the OIE?
   No

3. Did your laboratory supply standard reference reagents (non OIE-approved) and/or other diagnostic reagents to OIE Member Countries?
   No

4. Did your laboratory produce vaccines?
   No

5. Did your laboratory supply vaccines to OIE Member Countries?
   No
ToR 3: To develop, standardise and validate, according to OIE Standards, new procedures for diagnosis and control of the designated pathogens or diseases

6. Did your laboratory develop new diagnostic methods validated according to OIE Standards for the designated pathogen or disease?

No

7. Did your laboratory develop new vaccines according to OIE Standards for the designated pathogen or disease?

No

ToR 4: To provide diagnostic testing facilities, and, where appropriate, scientific and technical advice on disease control measures to OIE Member Countries

8. Did your laboratory carry out diagnostic testing for other OIE Member Countries?

No

9. Did your laboratory provide expert advice in technical consultancies on the request of an OIE Member Country?

Yes

<table>
<thead>
<tr>
<th>Name of the OIE Member Country receiving a technical consultancy</th>
<th>Purpose</th>
<th>How the advice was provided</th>
</tr>
</thead>
<tbody>
<tr>
<td>IRELAND</td>
<td>consultancy in the diagnosis and management of crayfish plague epidemic</td>
<td>by email</td>
</tr>
</tbody>
</table>

ToR 5: To carry out and/or coordinate scientific and technical studies in collaboration with other laboratories, centres or organisations

10. Did your laboratory participate in international scientific studies in collaboration with OIE Member Countries other than the own?

Yes

<table>
<thead>
<tr>
<th>Title of the study</th>
<th>Duration</th>
<th>Purpose of the study</th>
<th>Partners (Institutions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TARGET (Targeted strategies for safeguarding the noble crayfish against alien and emerging threats)</td>
<td>2015-2018</td>
<td>crayfish and crayfish disease diagnosis and management</td>
<td>NVI, NIVA, NINA, SLU, Evira, Charles University</td>
</tr>
</tbody>
</table>
**ToR 6: To collect, process, analyse, publish and disseminate epizootiological data relevant to the designated pathogens or diseases**

11. Did your Laboratory collect epizootiological data relevant to international disease control?

Yes

12. Did your laboratory disseminate epizootiological data that had been processed and analysed?

Yes

13. **What method of dissemination of information is most often used by your laboratory?** (Indicate in the appropriate box the number by category)

   a) Articles published in peer-reviewed journals: 2
   Effect of experimental exposure to differently virulent Aphanomyces astaci strains on the immune response of the noble crayfish Astacus astacus.
   Journal of Invertebrate Pathology 2015: Vol 132, p. 1115 - 1124

   S Viljamaa-Dirks, S Heinikainen, A-M K Virtala, H Torssonen and S Pelkonen
   Variation in the hyphal growth rate and the virulence of two genotypes of the crayfish plague organism Aphanomyces astaci.
   Journal of Fish diseases, 2015 DOI: 10.1111/jfd.12407

   b) International conferences: 1
   Viljamaa-Dirks, S.
   The complex issue of crayfish plague in Finland.
   International symposium on conservation of native European freshwater crayfish, 23. - 25.9.2015
   Olot, Girona, Spain

   c) National conferences: 1
   Viljamaa-Dirks, S.
   Crayfish and crayfish diseases: the Finnish situation.
   EAFP Finnish branch annual meeting, 11.-12.3.2015 Kuopio

   d) Other:
   (Provide website address or link to appropriate information) 0

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**ToR 7: To provide scientific and technical training for personnel from OIE Member Countries**

**To recommend the prescribed and alternative tests or vaccines as OIE Standards**

14. Did your laboratory provide scientific and technical training to laboratory personnel from other OIE Member Countries?

No
**ToR 8: To maintain a system of quality assurance, biosafety and biosecurity relevant for the pathogen and the disease concerned**

15. Does your laboratory have a Quality Management System certified according to an International Standard?

Yes

<table>
<thead>
<tr>
<th>Quality management system adopted</th>
<th>Certificate scan (PDF, JPG, PNG format)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISO17025</td>
<td>T014_M32_2015_04.pdf</td>
</tr>
</tbody>
</table>

16. Is your laboratory accredited by an international accreditation body?

Yes

<table>
<thead>
<tr>
<th>Test for which your laboratory is accredited</th>
<th>Accreditation body</th>
</tr>
</thead>
<tbody>
<tr>
<td>culture method for isolation of A. astaci</td>
<td>the Finnish Accreditation Service FINAS</td>
</tr>
</tbody>
</table>

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

No

*(See Manual of Diagnostic Tests and Vaccines for Terrestrial Animals 2014, Chapter 1.1.3a)*

**ToR 9: To organise and participate in scientific meetings on behalf of the OIE**

18. Did your laboratory organise scientific meetings on behalf of the OIE?

No

19. Did your laboratory participate in scientific meetings on behalf of the OIE?

No

**ToR 10: To establish and maintain a network with other OIE Reference Laboratories designated for the same pathogen or disease and organise regular inter-laboratory proficiency testing to ensure comparability of results**

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

Yes
21. Was your laboratory involved in maintaining a network with OIE Reference Laboratories designated for the same pathogen or disease by organising or participating in proficiency tests?

No

22. Did your laboratory collaborate with other OIE Reference Laboratories for the same disease on scientific research projects for the diagnosis or control of the pathogen of interest?

No

ToR 11: To organise inter-laboratory proficiency testing with laboratories other than OIE Reference Laboratories for the same pathogens and diseases to ensure equivalence of results

23. Did your laboratory organise or participate in inter-laboratory proficiency tests with laboratories other than OIE Reference Laboratories for the same disease?

No

Note: See Interlaboratory test comparisons in: Laboratory Proficiency Testing at: http://www.oie.int/en/our-scientific-expertise/reference-laboratories/proficiency-testing see point 1.3

ToR 12: To place expert consultants at the disposal of the OIE

24. Did your laboratory place expert consultants at the disposal of the OIE?

No

25. Additional comments regarding your report: