OIE Reference Laboratory Reports Activities in (year)

Name of disease (or topic) for which you are a designated OIE Reference Laboratory:	Crayfish plague (Infection with <i>Aphanomyces astaci</i>)
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Name (including Title) of Head of Laboratory (Responsible Official):	Prof. Sinikka Pelkonen
Name (including Title and Position) of OIE Reference Expert:	Researcher DVM Satu Viljamaa-Dirks
Date of submission to the OIE	28.1.2013

Instructions

This form should be used by an OIE Reference Laboratory to report activities that took place from January through December of the <u>past year (2012)</u>, unless otherwise stated, and must be submitted by the end of January every year.

Only those activities that concern the disease (or topic) for which the laboratory is recognised by the OIE should be mentioned. The questionnaire structure follows the Terms of Reference (ToRs) for OIE Reference Laboratories, available at:

http://www.oie.int/en/our-scientific-expertise/reference-laboratories/introduction/

Each ToR (blue italicised text) has been placed as a heading covering the group of questions related to it.

Please note the red italicised text is given as guidance and should be deleted from your report and substitute with your data. Examples are based on past Annual Reports or have been invented.

The questionnaire represents a means of gathering information on activities carried out by OIE Reference Laboratories and making it available to OIE Member Countries and to the OIE Reference Laboratory network.

This annual report will remain available for consultation on the OIE web site:

(http://www.oie.int/en/our-scientific-expertise/reference-laboratories/annual-reports/):

ToR: To use, promote and disseminate diagnostic methods validated according to OIE Standards

Test recommended by the OIE	Total number of test performed last year	
Indirect diagnostic tests	Nationally Internationally	
0	0	0
Direct diagnostic tests	Nationally	Internationally
Culture	5	0
Real-time PCR	161	0

ToR: 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 store imported standard reference reagents officially recognised by the OIE or other international bodies?

Yes

3. Did your laboratory supply standard reference reagents to OIE Member Countries?

🗌 Yes

🛛 No

Type of reagent available	Related diagnostic test	Produced/ stored	Amount supplied nationally (ml, mg)	Amount supplied internationally (ml, mg)	Name of recipient OIE Member Countries and of institutions

4. Did your laboratory produce diagnostic reagents other than the OIE-approved standard reference reagents?

🔀 Yes

🗌 No

5. Did your laboratory produce vaccines?

		Yes	🖂 No	
6.	Did your laboratory supply vaccines to OIE Member Countries?			
		Yes	🔀 No	
ToR:			alidate, according to OIE Stando signated pathogens or diseases	
7.	-	tory develop new d logen or disease?	iagnostic methods validated accord	ing to OIE Standards for the
		Yes	🖂 No	
8.	Did your laboratory develop new vaccines according to OIE Standards for the designated pathogen or disease?			
		Yes	🖂 No	
ToR:	R: To provide diagnostic testing facilities, and, where appropriate, scientific and technical advice on disease control measures to OIE Member Countries			
9.	Did your laborat	tory carry out diagno	ostic testing for other OIE Member Co	ountries?
		Yes	No	
Me	Name of OIE mber Country king assistance	Date (dd/mm)	No. samples received for provision of diagnostic support (i.e. from surveillance campaign)	No. samples received for provision of confirmatory diagnoses
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10. Did your laboratory provide expert advice in technical consultancies on the request of an OIE Member Country?

🛛 Yes

🗌 No

Name of the OIE Member Country receiving a technical consultancy	Purpose	How the advice was provided
Charles University, Prague, Czech Republic	consultancy in pathological changes of crayfish plague in resistant species, maintenance of strains	remote assistance, maintenance of strains
Carinthian Institute for Vet. Dis., Austria	consultancy in infection model and sporulation	remote assistance, material assistance

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

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

🔀 Yes

🗌 No

If the answer is yes, please provide details using the suggested table

Title of the study	Duration	Purpose of the study	Partners (Institutions)	OIE Member Countries involved other than your country
Monitoring of crayfish plague in water sources	2 years	To study the possibilities to detect crayfish plague spores from water	Norwegian Veterinary Institute, Swedish Board of Fisheries, University of Eastern Finland	Norway, Sweden
Isolation of microsatellite markers in Aphanomyces astaci	ongoing	Identification of the pathogen strains in infected crayfish	University of Poitiers, Norwegian Veterinary Institute, Charles University	France, Norway, Czech republic

ToR: To collect, process, analyse, publish and disseminate epizootiological data relevant to the designated pathogens or diseases

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

X Yes

No No

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

imes	Yes
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		No
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14. 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:	1
b)	International conferences:	2
c)	National conferences:	1
d)	Other:	internet

Please attach a list of publications to this questionnaire

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

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

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

	Yes
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🔀 No

If the answer is yes, please provide the total number of trained persons for each of the following categories:

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

- ToR: To maintain a system of quality assurance, biosafety and biosecurity relevant for the pathogen and the disease concerned
- 16. Does your laboratory have a Quality Management System certified according to an International Standard?

\boxtimes	Yes	
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Quality management system adopted
ISO 17025

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

Yes

🔀 No

Test for which your laboratory is accredited	Accreditation body

16. Does your laboratory maintain a "biorisk management system" for the pathogen and the disease concerned? (See Manual of Diagnostic Tests and Vaccines for Terrestrial Animals 2012, Chapter 1.1.3 or Manual of Diagnostic Tests for Aquatic Animals 2012, Chapter 1.1.1)

🛛 Yes

🗌 No

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

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

Yes

🖂 No

National/ International	Title of event	Co-organiser	Date (mm/yy)	Location	No. Participants

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

🗌 Yes

🖂 No

Title of event	Date (mm/yy)	Location	Role (speaker, presenting poster, short communications)	Title of the work presented

- ToR: 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
- **19.** Did your laboratory exchange information with other OIE Reference Laboratories designated for the same pathogen or disease?

🔀 Yes

🗌 No

20. 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?

Yes	\boxtimes	No	
Purpose of the proficiency tests: (validation of a diagnostic protocol: specify the test; quality control of vaccines: specify the vaccine type, etc.)	Role of your Reference Laboratory (organiser/ participant)	No. participants	Participating OIE Ref. Labs/ organising OIE Ref. Lab.

21. 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?

Yes		
Title of the project or contact	Scope	Name(s) of relevant OIE

	Reference Laboratories

- ToR: To organise inter-laboratory proficiency testing with laboratories other than OIE Reference Laboratories for the same pathogens and diseases to ensure equivalence of results.
- 22. Did your laboratory organise or participate in inter-laboratory proficiency tests <u>with</u> <u>laboratories other than OIE Reference Laboratories for the same disease</u>?

Yes	\triangleright	No
Purpose for inter-laboratory test comparisons ¹	No. participating laboratories	Participating OIE Member Countries

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

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

Yes		No
Kind of consultancy	Location	Subject (facultative)

List of publications:

Grandjean F., Jelic, M., Mangombi J., Delaunay C., Filipová L., Kozubíková E., Viljamaa-Dirks S., Vrålstad T., Diéguez-Uribeondo J., Petrusek A. 2012. Isolation of microsatellite markers in *Aphanomyces astaci*: new perspectives for the identification of pathogen strains in infected crayfish. International Association of Astacology IAA 19th Symposium 26-31.8.2012 Innsbruck, Austria. Abstract for oral contribution. Book of abstracts p. 24

Strand D., Jussila J., Viljamaa-Dirks S., Kokko H., Makkonen J., Holst-Jensen A., Viljugrein H., Vrålstad T. 2012. Monitoring the spore dynamics of *Aphanomyces astaci* in the ambient water of latent carrier crayfish. Veterinary Microbiology 160(1-2):99-107 http://dx.doi.org/10.1016/j.vetmic.2012.05.008

¹ See Interlaboratory test comparisons in: Laboratory Proficiency Testing at: <u>www.oie.int/en/our-scientific-expertise/reference-laboratories/proficiency-testing see point 1.3</u>

Strand D., Jussila J., Viljamaa-Dirks S., Kokko H., Makkonen J., Holst-Jensen A., Viljugrein H., Vrålstad T. 2012. Aphanomyces astaci spore dynamics in the ambient water of latent carrier crayfish revealed using qPCR. International Association of Astacology IAA 19th Symposium 26-31.8.2012 Innsbruck, Austria. Abstract for oral contribution. Abstract for oral contribution. Book of abstracts p. 52

Viljamaa-Dirks S. 2012. How to minimize the risk of the plague in crayfish population management. EIFAAC 2012 Symposium 22.-24.10.2012 Hämeenlinna, Finland. Abtract for oral contribution. Working papers of the Finnish Game and Fisheries Institute 18/2012, p. 47-48

Viljamaa-Dirks S., Pursiainen M., Heinikainen, S., Mattila J., Rajala, J., Laakkonen, M., Pelkonen S. 2012. Surveying noble crayfish (*Astacus astacus*) populations for the presence of crayfish plague infection. International Association of Astacology IAA 19th Symposium 26-31.8.2012 Innsbruck, Austria. Abstract for oral contribution. Book of abstracts p. 53

Vrålstad T., Strand D., Edsman L., Edvardsen B., Engdahl F., Fristad R., Holst-Jensen A., Johnsen S., Jussila J., Klaveness D., Kokko H., Makkonen J., Viljamaa-Dirks S., Viljugrein H. 2012. Hunting the crayfish plague disease agent in water sources- challenges and possibilities. International Association of Astacology IAA 19th Symposium 26-31.8.2012 Innsbruck, Austria. Abstract for oral contribution. Book of abstracts p. 54