



European Union Reference Laboratory for Fish and Crustacean Diseases

NATIONAL INSTITUTE OF AQUATIC RESOURCES, TECHNICAL UNIVERSITY OF DENMARK

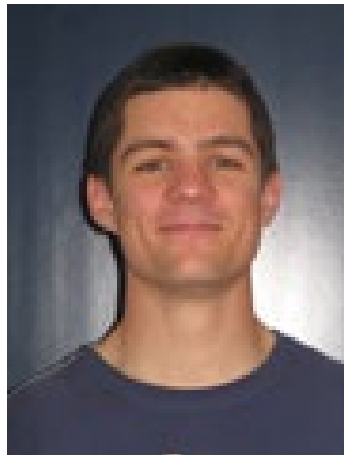
EURL-Crustacean work done in 2021

*Morten Schiøtt ,
Argelia Cuenca, Teena V. Klinge, Niccoló Vendramin,
Niels Jørgen Olesen*





Niels Jørgen
Olesen



Niccoló
Vendramin



Argelia Cuenca



Tine Iburg



Lone Madsen



Morten Schiøtt
Senior scientist and
Coordinator



Teena Klinge

1-1 Organise and prepare for the 12th Annual Workshop



Report of the 12th Annual Workshop of the National Reference Laboratories for Crustacean Diseases

Kgs. Lyngby, Denmark

June 2nd 2021



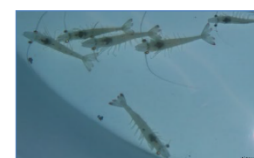
Organized by the European Union Reference Laboratory for Fish and Crustacean Diseases,
National Institute of Aquatic Resources, Technical University of Denmark, Kgs. Lyngby



Report of Special session for NRL's on new Animal Health Law

31st of May 2021

National Institute of Aquatic Resources
Technical University of Denmark
2800 Kgs. Lyngby, Denmark



Organized by the European Union Reference Laboratory for Fish and Crustacean Diseases,
National Institute of Aquatic Resources, Technical University of Denmark, Kgs. Lyngby

1-2 Organise scientific working group meetings

Working groups reports on listing susceptible species to infection with listed fish and crustacean diseases, respectively were updated

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SCIENTIFIC OPINIONS AND RECOMMENDATIONS FOR
LISTING FISH SPECIES SUSCEPTIBLE TO
INFECTION WITH LIST A, C AND E DISEASES
ACCORDING TO EU/2018/1882

Expert group on listing species susceptible or vectors for EU listed Aquatic Animal diseases

MEMBERS OF THE EXPERT GROUP

Niels Jørgen Olsen Professor Public Sector Consultancy Unit for Fish and Shellfish Diseases EU Reference Laboratory for Fish and Crustacean Diseases OIE Reference laboratory for VHS – Denmark njol@aqu.dtu.dk	Niccolò Vendramin Coordinator of the EURL for fish and crustacean diseases Myndighedsbetjeningssekretariat DTU Aqua - Denmark nv@aqu.dtu.dk	Edmund Peeler MSc PhD MRCVS Epidemiologist Aquatic Pests and Pathogens, Barrack Road, Weymouth, Dorset, DT4 8UB - UK ed.peeler@cefas.co.uk
Anna Toffan, DVM PhD National Reference Laboratory for Fish Diseases Istituto Zooprofilattico Sperimentale delle Venezie Viale dell'Università 10, 35020 Legnaro (Padova) - Italy atoffan@izsvenezia.it	Thierry MORIN Unit Viral Fish Diseases, National Reference Laboratory for listed Fish Diseases, French Agency for Food, Environmental and Occupational Health & Safety - France Thierry.MORIN@anses.fr	Atle Lillehaug Senior scientist Research Section – Biosafety and New Diseases Norwegian Veterinary Institute Oslo - Norway atle.lillehaug@veterinst.no

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EXPERT GROUP REPORT

ON ASSESSMENT OF CRUSTACEAN SPECIES SUSCEPTIBLE TO
INFECTION WITH LIST A AND C DISEASES ACCORDING TO
EU/2018/1882

1-2 Organise scientific working group meetings

Working group on Diagnostic manual for WSSV


Participants:

- **EURL: (Morten Schiøtt, Argelia Cuenca and Niels Jørgen Olesen)**
- **IZSVe (Tobia Pretto)**
- **CEFAS (Kelly Bateman and Grant Stentiford)**
- **AAHL, Geelong ACDP (Nick Moody and Peter Mohr)**


1-3 Organise Proficiency tests

PT21 WSSV: 26 laboratories in 18 EU Member States

PT21 TSV & YHV: 17 laboratories in 12 EU Member States




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Inter-laboratory proficiency test 2021
Detection of White Spot Syndrome Virus in
Shrimp Pleopods

Organised by the
European Union Reference Laboratory for Fish and Crustacean Diseases,
National Institute of Aquatic Resources,
Technical University of Denmark,
Copenhagen, Denmark

Distribution Date:	17/06/2021
Report Date:	24/09/2021
Report compiled by:	Morten Schiøtt



European Union Reference Laboratory for Fish and Crustacean Diseases
NATIONAL INSTITUTE OF AQUATIC RESOURCES, TECHNICAL UNIVERSITY OF DENMARK



Inter-laboratory proficiency test 2021
Detection of Taura Syndrome Virus (TSV) and
Yellow Head Virus 1 (YHV1) on FTA cards

Organised by the
European Union Reference Laboratory for Fish and Crustacean Diseases,
National Institute of Aquatic Resources,
Technical University of Denmark,
Copenhagen, Denmark

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1-4 Novel molecular methods

For the EURL to have molecular diagnostic methods of the highest scientific standards and to be able to provide these methods to all Member State NRLs.

In 2021 the following new diagnostic PCR methods were introduced in the laboratory:

RT-qPCR for IMNV

qPCR for IHNV

qPCR for AHPND

2-1 Training:

Facilitate and provide training in laboratory diagnosis:

**EURL training courses Kgs. Lyngby,
October 18th – 22nd 2021**

**Course 2: Introduction to
histopathology in fish and
crustacean diseases**



European Union Reference Laboratory for Fish and Crustacean Diseases
NATIONAL INSTITUTE OF AQUATIC RESOURCES, TECHNICAL UNIVERSITY OF DENMARK

**EURL Training Course on
Introduction to histopathology in fish and
crustacean diseases**

Copenhagen, October 18th - 22th 2021

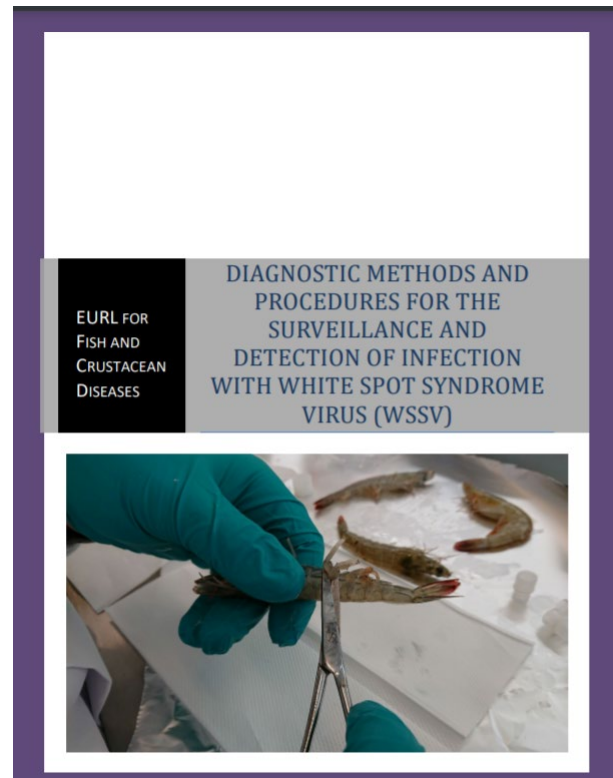
Hosted by the European Union Reference Laboratory for Fish and
Crustacean Diseases

**The course is accredited to grant ECTS at
PhD level to the participants.**

3. TO PROVIDE SCIENTIFIC AND TECHNICAL ASSISTANCE TO THE EUROPEAN COMMISSION AND OTHER ORGANISATIONS

3.1. Diagnostic manuals.

To have updated diagnostic manuals for all listed crustacean diseases available for Member State NRLs on the EURL website www.eurl-fish-crustacean.eu.



3.2. Survey and diagnosis. "collate and forward information on exotic and endemic diseases, that are potentially emerging in Community"

Surveillance and diagnostics of
crustacean diseases in Europe

Morten Schiøtt

4.1. Pathogen library. For the EURL for fish and crustacean diseases to have an updated library of crustacean pathogens relevant for the EURL and Member State NRLs.

Please help us updating the repositories, in order to maintain an EU wide repository of Fish and Crustacean pathogen isolates.

Country	Name	Institute	Date of receipt	Material	Amount	Protocol No.	Purpose
Norway	Espen Rimstad	Norwegian University of Life Sciences (NMBU)	09.01.2020	Fish - hole	2	20-356	Research
Northern Ireland	Paul Savage	Agri-food and Biosciences Institute	15.01.2020	Fishskin	6	20-518	Confirmation of MLO by Q-PCR
Croatia	Suzanna Zmic	"Croatian Veterinary Institute Laboratory for Fish and Molluscs diseases"	12.05.2020	Cellsupernatant Homogenat Cellsupernatant 1st pass	2 vials 2 tubes 2 tubes	20-3660	Confirmation of IHN
Norway	Mona Gjessing	Norwegian Veterinary Institute Section for Fish Health and Biosecurity	26.05.2020	Gill Kidney	1 tube 1 tube	20-4093	Confirmation KHV (and CEV)
Norway	Hanne Nielson	Norwegian Veterinary Institute Fish diseases bacteriology and pathology	19.06.2020	Gill in RNAlater	4 tubes	20-4943	To be tested for CEV
Norway	Mona Gjessing	Norwegian Veterinary Institute Section for Fish Health and Biosecurity	01.09.2020	Skin Gill Kidney	1 tube 1 tube 1 tube	20-7026	To be tested for CEV and KHV
Norway	Torfinn Moldal	Norwegian Veterinary Institute Virology	29.09.2020	Purified DNA/RNA	2 tubes	20-7863	Confirmation of KHV and CEV
Republic of North Macedonia	Alaksandar Trajchovski	Faculty of veterinary medicine - Skopje (FVMS) Biology and Pathology of Fish, Honey Bees and Wildlife	05.10.2020	RBT fry (whole)	11 tubes	20-8107	Confirmation of IHN
Italy	Anna Toffan	Istituto Zooprofilattico Sperimentale delle Venezie	10.11.2020	Organ in RNAlater	4 tubes	20-9358	Research VHS vaccination PRV-3 Q-PCR + BKD
Italy	Anna Toffan	Istituto Zooprofilattico Sperimentale delle Venezie	10.11.2020	Organ in RNAlater	3 tubes	20-9359	Research VHS vaccination PRV-3 Q-PCR
France	Nadege Hochart	Copelis Industrie	02.07.2020	Fish feed	4 samples	20-5706	To be tested for WSSV

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EURL Workplan 2021-2022

1. **PT 21 and PT22:** Accomplished. Included all 3 listed pathogens WSSV, TSV and YHV1.
2. **Annual Workshop 2021:** virtual access only!. **AW 2022** Combined virtual Face to face
3. **Training course 2022:** a course will be held in wk 42 on histopathology.
4. **Accreditation of TSV and YHV1** diagnostic PCR methods will be obtained.
5. **Scientific assessment of the effect of pooling samples for surveillance and diagnostics by PCR and provision of guidelines on how to pool.**
6. **Establishment of facility** for maintaining permanent stock of shrimp.
7. **Diagnostic Manuals** will be prepared and made ready for upload on www.eurl-fish-crustacean.eu:
 - i. Infection with WSSV, done.
 - ii. Infection with TSV will be updated and aligned with the OIE Aquatic Manual, pending.
 - iii. Infection with YHV will be updated and aligned with the OIE Aquatic Manual, Pending.

EURL Workplan 2023-2024

2-year program

1. **PT23 and 24: T2:** No major changes for listed diseases expected. *Aphanomyces astaci* may be included.
2. **Annual Workshop 2023:** Virtual? face to face? or a combination?.
3. **Training course(s) 2023:** New topics for training courses? E.g. in epidemiology?
4. **Quality assurance:** provide help for implementing in NRL's (SOPs, visits etc.)
5. **Diagnostic methods:** Implementation of additional diagnostic methods of crustacean diseases
6. **Scientific assessment of the effect of pooling samples for surveillance and diagnostics by PCR and provision of guidelines on how to pool.**
7. **Upgrade facility for maintaining permanent stock of shrimp (and other crustaceans?).**
8. **Further update of Diagnostic manuals**
9. **Proposals for topics are VERY welcome!**

14th Annual workshop 2023?

1/2 31st May + 1st June 2023 at DTU Aqua in Lyngby, (Wednesday and Thursday) Denmark. Face to face and virtual or a combination?

Three workshops back to back, on fish and crustacean diseases, respectively and a closed session for the NRLs in EU and EFTA.



End of 13th Annual workshop of NRL's for Crustacean Diseases 2022

Important! Please give us feed back as soon as possible by filling the evaluation scheme send to all of you.

Upon request we will send you a signed certificate of participation.

Thank you for all the excellent presentations, valuable questions and contributions and for participating in this workshop

We are looking forward seeing you soon again
Hopefully face to face 😊 !

