

European Union Reference Laboratory for Fish and Crustacean Diseases



NATIONAL INSTITUTE OF AQUATIC RESOURCES, TECHNICAL UNIVERSITY OF DENMARK

The proficiency test 2019

Argelia Cuenca, Camilla Priess, Niccolo Vendramin, Jacob Schmidt, Lone Madsen, Niels Jørgen Olesen





The Proficiency Test 2019

- The EURL organizes an annual inter-laboratory proficiency test for the NRLs.
- Aim: to assess the ability of participating laboratories to identify the non-exotic diseases listed in Council Directive 2006/88/EC Annex IV part II for Crustacean.
- This year the proficiency test will focus in the ability of participant laboratories to detect the presence of White Spot Syndrome virus
- We have followed protocols kindly provided by Kelly Bateman from CEFAS

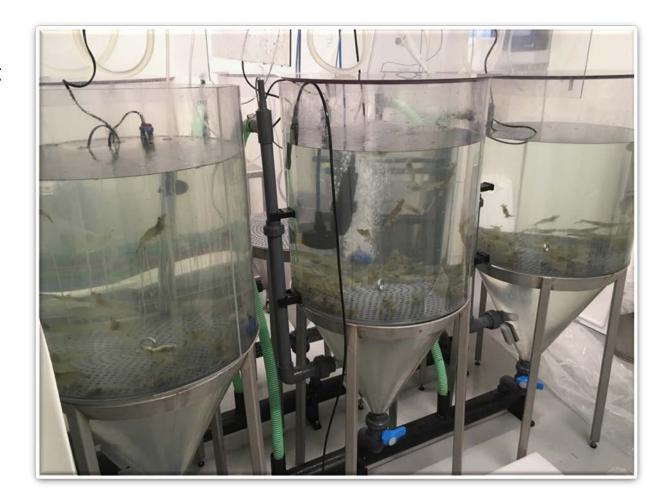




Preparation of material for PT – shrimps

 Shrimps (Panaeus vannamei) were obtained from a farm in Kiel, transported at DTU and placed at our tank facility

 Obtained shrimps were tested for WSSV, Taura Syndrome Virus, and Yellowhead virus







Preparation of material for PT – inoculum

- Positive material for WSSV was transferred from CEFAS to DTU in the autumn 2018
- A WSSV positive shrimp was homogenised in sterile saline, and centrifuged to pellet down tissue debris
- Supernatant was sterile filtrated and viral load was estimated by qPCR







Inoculation in naïve shrimp (Panaeus vannamei)



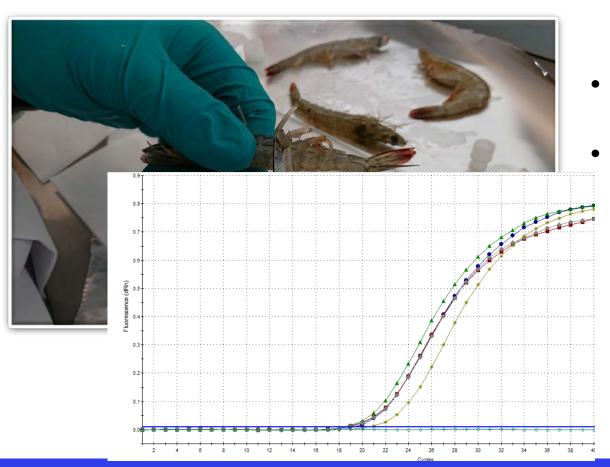


- Positive WSSV tissue homogenised supernatant was used to inoculate naïve shrimp
- 77 shrimps were inoculated by injection
- Controls were inoculated with sterile saline
- All shrimp died within 48 hrs, with no mortality in control group

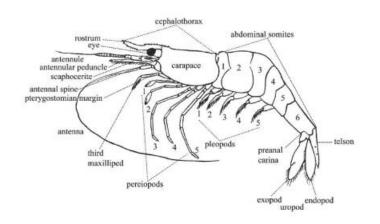




Testing of material for PT



- A set of pleopods of each shrimp used was tested for the presence of WSSV by qPCR
- This was done for both infected and control group
- We tested all set of pleopods for one shrimp





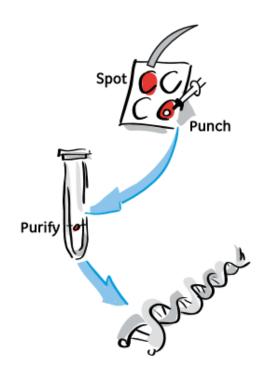


Testing of FTA cards

Testing the use of Whatman FTA cards for virus preservation and shipment

- Virus stability in FTA® card at different temperatures
- Optimization of protocols for virus recovery









Shipment of proficiency test

- PT will be shipped in the fall 2019
- It will consist in pleopods in ethanol to be tested for the presence of WSSV



Thanks