





Rapid PCR test for shellfish diseases in development

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By Responsible Seafood Advocate

University of Edinburgh's Roslin Institute will build a validated testing system for Bonamia ostreae

Researchers in Scotland are developing a method to rapidly detect the presence of a range of diseases and biofouling species affecting shellfish production.

With roughly £200,000 from the Seafood Innovation Fund and the Sustainable Aquaculture Innovation Centre (SAIC), the University of Edinburgh's Roslin Institute will, over a 15-month period, build a validated polymerase chain reaction (PCR) system to detect *Bonamia ostreae*, a common and potentially fatal disease.

Bonamia ostreae is difficult to detect and cannot be eliminated from farm sites once it is established. The researchers believe a rapid, cheap and pre-emptive test will help farmers make more informed decisions to protect their inventory and prevent the spread of the disease.

"Our project will tip the way we currently diagnose diseases that affect oysters on its head – taking a pre-emptive rather than reactive approach," said Dr. Tim Bean, career track fellow at the Roslin Institute. "We are bringing together the right technology with the right people to solve some of the shellfish sector's biggest health challenges and potentially make significant improvements to oyster health."



Researchers in Scotland are developing a test to rapidly detect a range of shellfish diseases and biofouling species affecting production.

The system will also detect the oyster herpes virus and Vibrio bacteria, along with biofouling species like tube worms.

"Tube worm casts, while benign in terms of mussel quality, are difficult to remove and can interfere with packaging and presentation. Equally, Scotland has retained a disease-free status for oyster herpes virus, which causes losses of young shellfish," said Dr. Nick Lake, CEO of the Association of Scottish

Shellfish Growers. "With improved detection methods, we would continue to seek to sustain this position, giving us advantages over shellfish production in surrounding countries. The industry is pleased to support this further development of techniques that will support our climate change resilience in the coming years."

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