Crustacean fisheries and shrimp aquaculture







 Cefas has expertise in crustacean health and disease diagnosis. © Thinkstock
 Shrimp farming sucess depends on healthy stock.

3 Hematodinium parasite in crab haemolymph, viewed under the microscope.



A healthy future

Crustacean fisheries and shrimp aquaculture production are undergoing a significant global expansion, but their growth is not without problems. Many farms have experienced disease outbreaks and catastrophic production losses, often through newly emerging pathogens.

A better understanding of crustacean stress and disease issues, within the wider context of aquaculture, is central to the sustainability of natural stocks and to the success of farmed commodities. Our aim is to control and prevent the spread of disease in order to ensure healthy stock.

An integrated approach

We have specific expertise in the diagnosis of infection and disease in crustaceans from aquaculture and wild environments. This is part of our extensive experience in the diagnosis, monitoring and control of a range of diseases in aquaculture settings.

Cefas brings a unique array of capabilities within one organisation to the fields of crustacean fisheries and aquaculture. We provide the specialist expertise to solve practical problems faced by our clients. We draw from a large pool of research scientists and project managers with experience in a wide range of aquaculture applications. Cefas is globally recognised as a provider of world-class aquatic research.

Advanced research facilities

We apply histopathology, electron microscopy and molecular biology as frontline tools for the diagnosis of existing and emerging pathogens (from viruses to parasites). Bioinformatics and epidemiology are employed to provide monitoring and risk assessment-based solutions for disease control.

Our in-house specialist facilities include a large, automated and biosecure aquarium facility of over 200 tanks (from freshwater to seawater, temperate to tropical studies), cell and tissue culture laboratories, microbiological laboratories, specialist viral identification and pathogenesis units, histopathology and electron microscopy, stress and welfare specialists, analytical chemistry facilities, remote sensing, epidemiology and risk assessment expertise.

Cefas is committed to quality assurance and participates in a number of schemes. Vaccine and veterinary medicine investigations are compliant with Good Laboratory Practice (GLP). The sampling and diagnosis of a number of fin fish diseases is covered by ISO 17025. In addition, much of the research within the laboratory operates to the Code of Practice laid down for research funded by the British Government.



Contact us

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4 Tropical shrimp virus Baculovirus infection in hepatopancreas.
5 Haemolymph parasites in lobster.
6 Haplosporidian infection of crab.

About us

Cefas is a multidisciplinary scientific research and consultancy centre providing a comprehensive range of services in fisheries management, environmental monitoring and assessment, and aquaculture to a large number of clients worldwide. We have more than 500 staff based in 3 laboratories, our own ocean going research vessel, and over 100 years of fisheries experience.

We have a long and successful track record in delivering high quality services to clients in a confidential and impartial manner. (www.cefas.co.uk)

Cefas Technology Limited (CTL) is a wholly owned subsidiary of Cefas specialising in the application of Cefas technology to specific customer needs in a cost effective and focussed manner. CTL systems are developed by teams that are experienced in fisheries and environmental management and of working closely with clients to ensure that their needs are fully met. (www.cefastechnology.co.uk)

Customer focus

Our unique facilities and breadth of expertise in environmental and fisheries management enable us to rapidly put together multi-disciplinary teams of experienced specialists, fully supported by our comprehensive in-house resources.

Our existing customers are drawn from a broad spectrum with wide ranging interests. Clients include:

- international and UK government departments
- the European Commission
- the World Bank
- United Nations Food and Agriculture Organisation (UNFAO)
- oil, water, chemical, pharmaceutical, agro-chemical, aggregate and marine industries
- non-governmental and environmental organisations
- regulators and enforcement agencies
- local authorities and other public bodies

We also work successfully with other organisations through partnerships, international consortia, and joint ventures commercialising our intellectual property.